## AIP

# **AERONAUTICAL INFORMATION PUBLICATION UNITED STATES OF AMERICA**

TWENTY-SEVENTH EDITION DATED 19 MAY 2022

**AMENDMENT 3** 

5 OCT 2023

**CONSULT NOTAM FOR LATEST INFORMATION** 

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

### AIP Amendment 3 Page Control Chart 5 OCTOBER 2023

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TBL GEN 0.1-2 AIRAC System Effective Dates

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**4.1** In the compilation of the AIP, care has been taken to ensure that the information contained therein is accurate and complete. Any errors and omissions which may be detected, as well as any correspondence concerning the Aeronautical Information Publication, should be referred to:

FAA National Headquarters (FOB–10B) Publications and Administration (AJV–P12) Attn: AIP Editor, Room 5E41NS 600 Independence Avenue, SW. Washington, DC 20597

To submit comments electronically, please email: 9-AJV-P-HQ-Correspondence@faa.gov

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https://public.govdelivery.com/accounts/USAFAA/subscriber/new?topic\_id=USAFAA\_39.

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GEN 0.5 List of Hand Amendments to the AIP - Not applicable

### GEN 1.6 Summary of National Regulations and International Agreements/Conventions

### 1. Summary of National Regulations

**1.1** Air regulations for the U.S. and areas under its jurisdiction are published in Title 14 of the U.S. Code of Federal Regulations (CFR) Parts 1–199, entitled the Federal Aviation Administration, Department of Transportation. It is essential that persons engaged in air operations in the U.S. airspace be acquainted with the relevant regulations. Copies of the 14 CFR parts may be purchased from the:

Superintendent of Documents U.S. Government Publishing Office Attn: New Orders P.O. Box 979050 St. Louis, MO 63197–9000 Telephone: 202–512–1800

1.2 Title 14, Chapter I, of the CFR is available electronically at: https://www.ecfr.gov/current/title-14/chapter-I.

Chapter 6 Reference 6.4.2.6.1	Routine electrocardiography for applicants for FAA third-class airman (private pilot) medical certification is not required unless clinically indicated.
Chapter 6 Reference 6.4.3.4	The demonstration of compliance with the visual requirements to be made with only one pair of corrective lenses is not specifically required.
Chapter 6 Reference 6.4.3.4.1	A requirement that a second pair of near-correction spectacles be kept available when exercising the privileges of the license is not established.
Chapter 6 Reference 6.5.1	The United States has not established a specific medical assessment standard for the remote pilot license, therefore a U.S. remote pilot would not undergo specific medical examination unless U.S. regulations are adopted by 2022.
Chapter 6 Reference 6.5.1.2	The United States has not established a specific medical assessment standard for the remote pilot license.
Chapter 6 Reference 6.5.2.6	Electrocardiography is required for FAA air traffic controllers at first issue but not for non-FAA ATCs unless clinically indicated.
Chapter 6 Reference 6.5.2.6.1	Electrocardiography is required for FAA ATCs but not for non-FAA ATCs unless clinically indicated.
Chapter 6 Reference 6.5.3.2 (b)	A specific requirement that a [spare] set of suitable correcting spectacles be kept readily available when exercising the privileges of the license is not established.
Chapter 6 Reference 6.5.3.2.1 (c)	A specific requirement that a set of suitable correcting spectacles be kept readily available when exercising the privileges of the license [with contact lenses] is not established.
Chapter 6 Reference 6.5.3.2.3	The demonstration of compliance with visual acuity by providing a full ophthalmic report is not required.
Chapter 6 Reference 6.5.3.4	The demonstration of compliance with the visual requirements to be made with only pair of corrective lenses is not specifically required.
Chapter 6 Reference 6.5.3.4.1	A requirement that a second pair of near-correction spectacles be kept available when exercising the privileges of the license is not established.
Chapter 6 Reference 6.5.4.1.1	Applicants are not required to demonstrate normal hearing against a background noise that reproduces or simulates an air traffic control working environment.
Chapter 6 Reference 6.5.4.1.2	Applicants are not required to take a practical hearing test.

ANNEX 2 – RULES OF THE AIR			
Chapter 1	Definitions		
Advisory Airspace	Advisory service is provided in terminal radar areas and the outer areas associated with Class C and Class E airspace areas.		
Aerodrome Traffic Zone	There are no more Control Zones (Airport Traffic Zones) or Airport Traffic Areas (ATA). In the 7110.65, PCG, Controlled Airspace covers the defined dimensions of airspace. Class D was formerly the ATA (normally a 5NM radius around the airport). The old Control Zones were extensions of the ATA to encompass (ILS) Approach Paths.		
Airborne Collision Avoidance System (ACAS)	The U.S. uses "traffic alert collision avoidance system (TCAS)." TCAS is an airborne collision avoidance system based on radar beacon signals and operates independent of ground – based equipment. TCAS – I generates traffic advisories only. TCAS – II generates traffic advisories and resolution (collision avoidance) advisories in the vertical plane.		
Air-taxiing	The U.S. uses "hover taxi" for this maneuver above 100 feet above ground level (AGL) and "air taxi" below 100 feet AGL.		
Area control centre	The U.S. equivalent facility for an Area Control Centre (ACC) is an Air Route Traffic Control Center (ARTCC).		
Area control service	The U.S. does not use the term "area control service" to indicate controlled flight in controlled areas.		
Danger area	The term "danger area" is not used within the U.S. or any of its possessions or territories.		
Flight information centre	The U.S. does not operate flight information centers (FICs). In the U.S., the services provided by FICs are performed by air traffic control (ATC) facilities, flight service stations (FSSs), and rescue coordination centers (RCCs).		
Level	The U.S. uses "altitude" or "flight level" rather than "level" and "cruising altitude" rather than "cruising level." The term "level" is not used to mean "height," "altitude," or "flight level."		
Movement area	In the U.S., the term "movement area" means "the runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing, hover taxiing, air-taxiing, take-off and landing of aircraft, exclusive of loading ramps and parking areas. At those airport/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC."		
	The U.S. does not use an all-inclusive term to denote the movement area plus loading ramps and parking areas of an airport, nor does the U.S. use the term "maneuvering area" in any related context.		
Repetitive flight plan (RPL)	The U.S. uses the term "stored flight plan" for domestic operations.		
Transition altitude	In U.S. domestic airspace, "transition altitude," "layer" and "level" are not used; however, in the U.S., flight levels begin at FL 180 where the reference datum of 29.92 inches of mercury is used as the constant atmospheric pressure. Below FL 180, altitudes are based on barometric pressure readings. QNH and QFE altimeter settings are not provided in domestic U.S. airspace.		
Visibility	The U.S. defines Visibility as: The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night. Visibility is reported as statute miles, hundreds of feet, or meters. The U.S. identifies the following classes of visibility: Flight Visibility, Ground Visibility, Prevailing Visibility, Runway Visibility Value, and Runway Visual Range.		
Chapter 3	General Rules		
3.1.8	In addition, aircraft shall not be flown in formation flight when passengers are carried for hire.		

### INTERV O

3.1.10	<ul> <li>14 CFR part 101 prescribes rules governing the operation in the United States, of any unmanned free balloon that—</li> <li>(i) Carries a payload package that weighs more than four pounds and has a weight/size ratio of more than three ounces per square inch on any surface of the package, determined by dividing the total weight in ounces of the payload package by the area in square inches of its smallest surface;</li> <li>(ii) Carries a payload package that weighs more than six pounds;</li> <li>(iii) Carries a payload, of two or more packages, that weighs more than 12 pounds; or</li> <li>(iv) Uses a rope or other device for suspension of the payload that requires an impact force of more than 50 pounds to separate the suspended payload from the balloon.</li> </ul>
3.2 Note	See difference under "Movement area."
3.2.3.2 d)	The U.S. national regulations do not require aircraft on the movement area of an airport, whose engines are running, to display lights which indicate that fact from sunset to sunrise.
3.2.5	Unless otherwise authorized or required by ATC, no person may operate an aircraft within a Class B, C, or D surface area except for the purpose of landing at, or taking off from, an airport within that area.
	In addition, in the case of a helicopter approaching to land, avoid the flow of fixed-wing aircraft.
	In addition, no person may, within a Class B, C, or D surface area operate an aircraft to, from, or on an airport having a control tower operated by the U.S. unless two–way radio communications are maintained between that aircraft and the control tower.
3.3.1.2	In the U.S., ATC flight plans are not required for VFR flight in Class C, D, or E airspace.
3.3.1.2 e)	Requirements pertaining to filing flight plans for flights operating across U.S. borders and for identification purposes are described in 14 CFR Part 91 (Section 91.84) and Part 99.
3.6.2.2	The United States requires pilots to report changes in the average true airspeed (at cruising altitude) when it varies by 5 percent or 10 knots (whichever is greater) from that filed in the flight plan. However, 14 CFR 91.703 requires pilots to abide by Annex 2 when flying over the high seas. In addition, when complying with speed adjustment assignments, the United States requires pilots to maintain an indicated airspeed within plus or minus 10 knots or 0.02 Mach number of the specified speed.
3.6.2.4	When meteorological conditions fall below the minimum specified for en route VFR flights, the pilot of the aircraft shall not continue his/her flight in such conditions, except in emergency, beyond the extent necessary to return to his/her departure point or to the nearest suitable landing point.
3.6.5.2 (Communicati on Failure)	Two-way Radio Communications Failure a. It is virtually impossible to provide regulations and procedures applicable to all possible situations associated with two-way radio communications failure. During two-way radio communications failure, when confronted by a situation not covered in the regulation, pilots are expected to exercise good judgment in whatever action they elect to take. Should the situation so dictate they should not be reluctant to use the emergency action contained in 14 CFR Section 91.3(b) b. Whether two-way communications failure constitutes an emergency depends on the circumstances, and in any event, it is a determination made by the pilot. 14 CFR Section 91.3(b) authorizes a pilot to deviate from any rule in Subparts A and B to the extent required to meet an emergency. c. In the event of two-way radio communications failure, ATC service will be provided on the basis that the pilot is operating in accordance with 14 CFR Section 91.185. A pilot experiencing two-way communications failure should (unless emergency authority is exercised) comply with 14 CFR Section 91.185 quoted below 1. General. Unless otherwise authorized by ATC, each pilot who has two-way radio communications failure when operating under IFR shall comply with the rules of this section.

3.6.5.2.2	In the event of two-way communications failure in the U.S., ATC service is predicated on pilot compliance with the provisions of 14 CFR Part 91 (Section 91.185). If the failure occurs in IMC, or if VFR cannot be complied with, each pilot is to continue the flight according to the following: Route
	a) By the route assigned in the last ATC clearance received;
	<ul><li>b) If being radar vectored, by the direct route from the point of failure to the fix, route, or airway specified in the vector clearance;</li></ul>
	c) In the absence of an assigned route, by the route that ATC has advised may be expected in a
	further clearance; or
	d) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.
	<u>Altitude</u> – At the <b>HIGHEST</b> of the following altitudes or flight levels <b>FOR THE ROUTE</b> <b>SEGMENT BEING FLOWN:</b>
	a) The altitude or flight level assigned in the last ATC clearance received;
	b) The minimum altitude/flight level as prescribed for IFR operations; or
	c) The altitude or flight level ATC has advised may be expected in a further clearance.
	<u>IFR conditions</u> – If the failure occurs in IFR conditions, or if subparagraph 2 above cannot be complied with, each pilot shall continue the flight according to the following:
	(a) Route.
	(1) By the route assigned in the last ATC clearance received;
	(2) If being radar vectored, by the direct route from the point of radio failure to the fix, route, or airway specified in the vector clearance;
	(3) In the absence of an assigned route, by the route that ATC has advised may be
	expected in a further clearance; or
	(4) In the absence of an assigned route of a route that ATC has advised may be expected in a further clearance by the route filed in the flight plan.
	(b) Altitude. At the HIGHEST of the following altitudes or flight levels FOR THE ROUTE
	SEGMENT BEING FLOWN:
	(1) The altitude or flight level assigned in the last ATC clearance received; (2) The minimum altitude (converted if appropriate) to minimum flight level or
	(2) The minimum altitude (converted, if appropriate) to minimum flight level as prescribed in 14 CFR Section 91.121(c) for IFR operations; or
	(3) The altitude or flight level ATC has advised may be expected in a further clearance.

3.6.5.2.2 a)	Annex 2 references maintaining last assigned speed, level, or minimum flight altitude for a specified amount of time depending on radar coverage. 91.185 does not require last assigned speeds and altitudes be maintained for specified amounts of time.
3.9	There is no Class F airspace in the U.S. Basic VFR weather minimums are listed in the table below.
	Except as otherwise authorized by the appropriate air traffic control unit for special VFR flights within Class B, C, D, or E surface areas, no person may operate an aircraft under VFR when the flight visibility is less, or at a distance from clouds that is less than that prescribed for the corresponding altitude and class of airspace in the table below.
	<ul> <li>Class G Airspace: Notwithstanding the provisions of paragraph a) of this section, the following operations may be conducted in Class G airspace below 1,200 feet above the surface:</li> <li>1) Helicopter. A helicopter may be operated clear of clouds if operated at a speed that allows the pilot adequate opportunity to see any air traffic or obstruction in time to avoid collision.</li> <li>2) Airplane. When the visibility is less than 3 statute miles but not less than 1 statute mile during night hours, an airplane may be operated clear of clouds if operated in an airport traffic pattern within one-half mile of the runway.</li> </ul>
	Except as provided in 4.2, no person may operate an aircraft under VFR within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport when the ceiling is less than 1,000 feet.
	Except as provided in 4.2, no person may take–off or land an aircraft, or enter the traffic pattern area of an airport under VFR, within the lateral boundaries of the surface area of Class B, Class C, Class D, or Class E airspace designed for an airport:
	<ol> <li>unless ground visibility at that airport is at least 3 statute miles; or</li> <li>if ground visibility is not reported at that airport, unless flight visibility during landing or takeoff, or while operating in the traffic pattern is at least 3 statute miles</li> </ol>

#### **Basic VFR Weather Minimums**

Airspace	Flight Visibility	Distance from Clouds
Class A	Not Applicable	Not Applicable
Class B	3 statute miles	Clear of Clouds
Class C	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
Class D	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
Class E Less than 10,000 feet MSL	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
At or above 10,000 feet MSL	5 statute miles	1,000 feet below 1,000 feet above 1 statute mile horizontal
Class G 1,200 feet or less above the surface (regardless of MSL altitude).		
For aircraft other than helicopters:		
Day, except as provided in §91.155(b)	1 statute mile	Clear of clouds
Night, except as provided in §91.155(b)	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
For helicopters:		
Day	1/2 statute mile	Clear of clouds
Night, except as provided in §91.155(b)	1 statute mile	Clear of clouds
More than 1,200 feet above the surface but less than 10,000 feet MSL.		
Day	1 statute mile	500 feet below 1,000 feet above 2,000 feet horizontal
Night	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
More than 1,200 feet above the surface and at or above 10,000 feet MSL.	5 statute miles	1,000 feet below 1,000 feet above 1 statute mile horizontal

Chapter 4	Visual Flight Rules
4.2	In the U.S., no person may operate an aircraft beneath the ceiling under VFR within the lateral boundaries of controlled airspace designated to the surface for an airport when the ceiling is less than 1,000 feet. No person may take-off or land an aircraft (other than a helicopter) under special VFR (SVFR) unless ground visibility is at least 1 statute mile or if ground visibility is not reported, unless flight visibility is at least 1 statute mile. The U.S. restricts the ceiling to 1,000 ft. and ground visibility of 3 miles and greater.
4.3	The U.S. does not prohibit VFR flight between sunset and sunrise.

otherwise authorized by ATC.           In the U.S., an ATC clearance is needed for VFR flight only in Class B airspace area.           The U.S. limits VFR flights up to FL 180.           4.5         The U.S. limits VFR flights up to FL 180.           4.7         In addition, grid tracks are not used to determine cruising altitudes in polar areas. True tracused to determine cruising altitudes in polar areas. True tracused to determine cruising levels above FL 230 in the area north of Alaska bounded by the North Pole to 72°00'00"N, 141°00'00"W to 72°00'00"N, 158°00'00"W to 68°00'00" 108°58'23"W; to point of beginning. The U.S. has named this area the Anchorage Arctic O for national reference purposes.           4.8         In U.S. Class C and D airspace/areas, an ATC clearance is not required for VFR flights.           Chapter 5         Instrument Flight Rules           5.1.2         In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle with horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the ob flown in non-mountainous terrain.           5.2.2         See difference under paragraph 4.7.           5.3.1         See difference under paragraph 4.7.           Further         1) The regulations covering the selection and use of alternate airports in respect to ceiling in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate airport, the callen and visibility at that		
The U.S. limits VFR flights up to FL 180.         4.5       The U.S. limits VFR flights up to FL 180.         4.7       In addition, grid tracks are not used to determine cruising altitudes in polar areas. True tractures used to determine cruising levels above FL 230 in the area north of Alaska bounded by the North Pole to 72°00'00"N, 141°000"W in 05°800'00"W in 05°800'00"W in 05°800'00" how to 168°58'23"W: to point of beginning. The U.S. has named this area the Anchorage Arctic C for national reference purposes.         4.8       In U.S. Class C and D airspace/areas, an ATC clearance is not required for VFR flights.         Chapter 5       Instrument Flight Rules         5.1.2       In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain.         5.2.2       See difference under paragraph 4.7.         5.3.1       See difference under paragraph 4.7.         fact that the Annex contains no comparable parational, require that:       Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasis indicate that, at the estimated time of the fact that the Annex contains or a practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.         2) Operation under IFR in Class A, B, C, D, or E airspace       a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspa	4.4	In the U.S., VFR flight is not permitted within Class A airspace designated in 14 CFR Part 71 unless otherwise authorized by ATC.
<ul> <li>4.5 The U.S. limits VFR flights up to FL 180.</li> <li>4.7 In addition, grid tracks are not used to determine cruising altitudes in polar areas. True trac used to determine cruising altitudes in polar areas. True trac used to determine cruising levels above FL 230 in the area north of Alaska bounded by the North Pole to 72'00'00'N, 141'00'00'W, to 72'00'00'N, 158'00'00'W, to 68'00'00'Y 168'58'23'W, to point of beginning. The U.S. has named this area the Anchorage Arctic C for national reference purposes.</li> <li>4.8 In U.S. Class C and D airspace/areas, an ATC clearance is not required for VFR flights.</li> <li>Chapter 5 Instrument Flight Rules</li> <li>5.1.2 In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle with horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from to be flown in non-mountainous terrain.</li> <li>5.2.2 See difference under paragraph 4.7.</li> <li>Further differences under paragraph 4.7.</li> <li>1) The regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that:</li> <li>Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.</li> <li>2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports:         <ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace and avoid other aircraft.</li> <li>b) In each report the pilot-in-command shall include:             <ol> <li>a) The pilot-in-command shall include:</li> <li>b) eigent as soon as practical to ATC any malfunctions on top,</li></ol></li></ul></li></ul>		In the U.S., an ATC clearance is needed for VFR flight only in Class B airspace area.
<ul> <li>4.7</li> <li>In addition, grid tracks are not used to determine cruising altitudes in polar areas. True trac used to determine cruising levels above FL 230 in the area north of Alaska bounded by the North Pole to 72°00'0" N, 143 *00'00" N; to 72°0'00" N, 158°0'00" N; 168°58'23' W; to point of beginning. The U.S. has named this area the Anchorage Arctic C for national reference purposes.</li> <li>4.8</li> <li>In U.S. Class C and D airspace/areas, an ATC clearance is not required for VFR flights.</li> <li>Chapter 5</li> <li>Instrument Flight Rules</li> <li>5.1.2</li> <li>In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle with a horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from to be flown in non-mountainous terrain.</li> <li>5.2.2</li> <li>See difference under paragraph 4.7.</li> <li>5.3.1</li> <li>Further difference under paragraph 4.7.</li> <li>Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate in an IFR flight Plan unless current weather forecasts indicate that, at the estimated time of IFR shall report as soon as practical to ATC any maffunctions of navigational, approach, or communication equipment occurring in flight.</li> <li>O poeration under IFR in Class A, B, C, D, or E airspace malfunction eports:</li> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace to fly at an appropriate VFR altitude, comply with VFR cond</li></ul>		The U.S. limits VFR flights up to FL 180.
<ul> <li>used to determine cruising levels above FL 230 in the area north of Aliaska bounded by the North Pole to 72°00'00"N; to 58°00'00"N; to 68°00'00"N 168°58'23"W; to point of beginning. The U.S. has named this area the Anchorage Arctic C for national reference purposes.</li> <li>In U.S. Class C and D airspace/areas, an ATC clearance is not required for VFR flights.</li> <li>Chapter 5</li> <li>Instrument Flight Rules</li> <li>5.1.2</li> <li>In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle with horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain.</li> <li>5.2.2</li> <li>See difference under paragraph 4.7.</li> <li>5.3.1</li> <li>See difference under paragraph 4.7.</li> <li>5.3.1</li> <li>See difference under paragraph 4.7.</li> <li>1) The regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that:</li> <li>Unless otherwise authorized by the FAA Administrator, no person may include an alternate airport, the estimate airport will be at or above the alternate airport, the estimate airport will be at or above the alternate airport, the alternate airport, the ceiling and visibility at that airport will be at or above the alternate aregulations.</li> <li>2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports:         <ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace (and 4) nature and extent of assistance desired from ATC.</li> <li>b) In each report the pilot-in-command shall include:                 <ul> <li>b) aircraft identification.</li> <li>c) equipment affected.</li> <li>d) degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and</li> <li>d) an appropriate VFR altitude, comply with VFR visibility and distance fro</li></ul></li></ul></li></ul>	4.5	The U.S. limits VFR flights up to FL 180.
Chapter 5         Instrument Flight Rules           5.1.2         In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle with horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain a 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the obstacle within a horizontal distance of 4 nautical miles from to be flown in non-mountainous terrain.           5.2.2         See difference under paragraph 4.7.           5.3.1         See difference under paragraph 4.7.           Further differences         1) The regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that:           Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.           2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports:         a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.           b) In each report the pilot-in-command shall include:         1) aircraft identification.           c) equipment affected.         3) degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and           d) Alter an appropriate VFR altitude, comply with VFR visibility and distance from cloud and to be vigila	4.7	In addition, grid tracks are not used to determine cruising altitudes in polar areas. True tracks are used to determine cruising levels above FL 230 in the area north of Alaska bounded by the true North Pole to 72°00′00″N, 141°00′00″W; to 72°00′00″N, 158°00′00″W; to 68°00′00″N, 168°58′23″W; to point of beginning. The U.S. has named this area the Anchorage Arctic CTA/FIR for national reference purposes.
5.1.2       In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle with horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain a 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from to to be flown in non-mountainous terrain.         5.2.2       See difference under paragraph 4.7.         5.3.1       See difference under paragraph 4.7.         1)       The regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that:         1)       The regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that:         10       The regulations covering the selection and use of alternate airports in respect to ceiling visibility at that airport will be at or above the alternate airon, an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.         2)       Operation under IFR in Class A, B, C, D, or E airspace malfunction reports: <ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace regulations.</li> <li>b) In each report the pilot-in-command shall include:                 <ul> <li>b) aircraft identification.</li> <li>c) equipment affected.</li></ul></li></ul>	4.8	In U.S. Class C and D airspace/areas, an ATC clearance is not required for VFR flights.
<ul> <li>horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain a 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from it to be flown in non-mountainous terrain.</li> <li>5.2.2 See difference under paragraph 4.7.</li> <li>5.3.1 See difference under paragraph 4.7.</li> <li>Further differences which exist by virtue of the fact that the Annex contains regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that:</li> <li>Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.</li> <li>2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports:         <ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace the pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace malfunction reports:</li> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace malfunction equipment affected.</li> <li>b) In each report the pilot-in-command shall include:                 <ol> <li>a) aircraft identification.</li> <li>equipment affected.</li> <li>degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and</li></ol></li></ul></li></ul>	Chapter 5	Instrument Flight Rules
<ul> <li>5.3.1 See difference under paragraph 4.7.</li> <li>Further differences which exist by virtue of the fact that the esumate of the alternate airport, the regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that: Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.</li> <li>2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports: <ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace regulations.</li> <li>b) In each report the pilot-in-command shall include: <ol> <li>a) The pilot-in-command of easistance desired from ATC.</li> <li>b) In each report the pilot-in-command shall include: <ol> <li>a) degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and</li> <li>a) nature and extent of assistance desired from ATC.</li> </ol> </li> <li>3) When an aircraft has been cleared to maintain "VFR conditions on top," the pilot is rest to fly at an appropriate VFR altitude, comply with VFR visibility and distance from cloud and to be vigilant so as to see and avoid other aircraft.</li> <li>4) Aircraft speed: <ol> <li>a) Unless otherwise authorized by the FAA Administrator, no person may operate an abelow 10,000 feet MSL at an indicated airspeed of more than 250 kt (238 m.p.h.).</li> <li>b) Unless otherwise authorized or required by ATC, no person may operate an aircraft paragraph 4b) does not apply to operations within Class B airspace. Such operations shall ow with paragraph 4b) of this section.</li> <li>c) No person may operate an aircraft in the airspace underlying Class B airspace, or</li> </ol></li></ol></li></ul> </li> </ul>	5.1.2	In the U.S., minimum altitudes for IFR flights are 2,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown in mountainous terrain and 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown in non-mountainous terrain.
Further differences which exist by virtue of the fact that the Annex contains no comparable standards for the U.S. national regulations.       1) The regulations covering the selection and use of alternate airports in respect to ceiling visibility minima, require that: Unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.         2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports: a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.         b) In each report the pilot-in-command shall include: 1) aircraft identification. 2) equipment affected. 3) degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and 4) nature and extent of assistance desired from ATC.         3) When an aircraft has been cleared to maintain "VFR conditions on top," the pilot is rest to fly at an appropriate VFR altitude, comply with VFR visibility and distance from cloud and to be vigilant so as to see and avoid other aircraft.         4) Aircraft speed: a) Unless otherwise authorized or required by ATC, no person may operate an below 10,000 feet MSL at an indicated airspeed of more than 200 kt (230 m.p.h.). Thi paragraph 4a) does not apply to operations within Class B airspace. Such operations shall of with paragraph 4a) of this section. c) No person may operate an aircraft in the airspace underlying Class B airspace, or	5.2.2	
<ul> <li>differences</li> <li>wisibility minima, require that:</li> <li>visibility minima, require that:</li> <li>unless otherwise authorized by the FAA Administrator, no person may include an alternate in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.</li> <li>2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports: <ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace</li> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace</li> <li>iFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.</li> <li>b) In each report the pilot-in-command shall include: <ol> <li>a) the each report the pilot-in-command shall include: <ol> <li>a) degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and <ol> <li>and</li> <li>and propriate VFR altitude, comply with VFR conditions on top," the pilot is rest to fly at an appropriate VFR altitude, comply with VFR visibility and distance from cloud and to be vigilant so as to see and avoid other aircraft.</li> </ol> </li> <li>4) Aircraft speed: <ul> <li>a) Unless otherwise authorized by the FAA Administrator, no person may operate an aircraft Class B, C, or D surface area at an indicated airspeed of more than 250 kt (288 m.p.h.).</li> <li>b) Unless otherwise authorized or required by ATC, no person may operate an aircraft Class B, C, or D surface area at an indicated airspeed of more than 200 kt (230 m.p.h.). Thi paragraph 4a) of this section.</li> <li>c) No person may operate an aircraft in the airspace underlying Class B airspace, or</li> </ul> </li> </ol></li></ol></li></ul></li></ul>	5.3.1	
<ul> <li>virtue of the fact that the Annex contains in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of the alternate airport, the ceiling and visibility at that airport will be at or above the alternate weather minima.</li> <li>2) Operation under IFR in Class A, B, C, D, or E airspace malfunction reports: <ol> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace malfunction reports:</li> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.</li> <li>b) In each report the pilot-in-command shall include: <ol> <li>a) equipment affected.</li> <li>d) egree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and</li> <li>an aircraft has been cleared to maintain "VFR conditions on top," the pilot is rest to fly at an appropriate VFR altitude, comply with VFR visibility and distance from cloud and to be vigilant so as to see and avoid other aircraft.</li> </ol> </li> <li>4) Aircraft speed: <ol> <li>a) Unless otherwise authorized by the FAA Administrator, no person may operate an below 10,000 feet MSL at an indicated airspeed of more than 250 kt (288 m.p.h.).</li> <li>b) Unless otherwise authorized or required by ATC, no person may operate an aircraft Class B, C, or D surface area at an indicated airspeed of more than 200 kt (230 m.p.h.). Thi paragraph 4b) does not apply to operations within Class B airspace. Such operations shall or with paragraph 4a) of this section.</li> </ol> </li> </ol></li></ul>	differences	1) The regulations covering the selection and use of alternate airports in respect to ceiling and visibility minima, require that:
<ul> <li>a) The pilot-in-command of each aircraft operated in Class A, B, C, D or E airspace are are are are are art an indicated airspeed of more than 200 kt (230 m.p.h.). Thiparagraph 4a) of this section.</li> <li>c) No person may operate an aircraft in the airspace underlying Class B airspace, or commany operate an aircraft in the airspace of the airspace. Such operations shall of this section.</li> </ul>	virtue of the fact that the Annex contains	
national regulations.       IFR shall report as soon as practical to ATC any mafunctions of navigational, approach, or communication equipment occurring in flight.         b) In each report the pilot—in—command shall include: <ol> <li>aircraft identification.</li> <li>equipment affected.</li> <li>degree to which the capability of the pilot to operate under IFR in the ATC sy impaired; and</li> <li>nature and extent of assistance desired from ATC.</li> </ol> <li>When an aircraft has been cleared to maintain "VFR conditions on top," the pilot is rest to fly at an appropriate VFR altitude, comply with VFR visibility and distance from cloud and to be vigilant so as to see and avoid other aircraft.</li> <li>Aircraft speed:         <ol> <li>Unless otherwise authorized by the FAA Administrator, no person may operate an below 10,000 feet MSL at an indicated airspeed of more than 250 kt (288 m.p.h.).</li> <li>Unless otherwise authorized or required by ATC, no person may operate an aircraft Class B, C, or D surface area at an indicated airspeed of more than 200 kt (230 m.p.h.). Thi paragraph 4b) does not apply to operations within Class B airspace. Such operations shall of with paragraph 4a) of this section.</li> <li>No person may operate an aircraft in the airspace underlying Class B airspace, or</li> </ol> </li>		
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		b) Unless otherwise authorized or required by ATC, no person may operate an aircraft within Class B, C, or D surface area at an indicated airspeed of more than 200 kt (230 m.p.h.). This paragraph 4b) does not apply to operations within Class B airspace. Such operations shall comply with paragraph 4a) of this section.
(230 m.p.h.).		c) No person may operate an aircraft in the airspace underlying Class B airspace, or in a VFR corridor designated through Class B airspace, at an indicated airspeed of more than 200 kt (230 m.p.h.).
d) If the minimum safe airspeed for any operation is greater than the maximum spee prescribed in this section, the aircraft may be operated at that minimum speed.		d) If the minimum safe airspeed for any operation is greater than the maximum speed prescribed in this section, the aircraft may be operated at that minimum speed.

5) Operating rules and pilot and equipment requirements for flight in Class B airspace. a) Operating rules. No person may operate an aircraft within Class B airspace except in compliance with the following rules: 1) No person may operate an aircraft within Class B airspace unless that person has received an appropriate authorization from ATC prior to operation of that aircraft in that area. 2) Unless otherwise authorized by ATC, each person operating a large turbine engine-powered airplane to or from a primary airport shall operate at or above the designated floors while within the lateral limits of the Class B airspace. 3) Any person conducting pilot training operations at an airport within Class B airspace shall comply with any procedures established by ATC for such operations in Class B airspace. b) Pilot requirements. No person may take off or land a civil aircraft at an airport within Class B airspace or operate a civil aircraft within Class B airspace unless: 1) The pilot-in-command holds at least a private pilot certificate; or 2) The aircraft is operated by a student pilot who has met the requirements (14 CFR Part 61 (Section 61.95)). c) Communications and navigation requirements. Unless otherwise authorized by ATC, no person may operate an aircraft within Class B airspace unless that aircraft is equipped with: 1) For IFR operations, an operable VOR or TACAN receiver, and 2) For all operations, an operable two-way radio capable of communications with ATC on appropriate frequencies for that Class B airspace. d) Transponder requirements. No person may operate an aircraft in Class B airspace unless the aircraft is equipped with the applicable operating transponder and automatic altitude reporting equipment. 6) Operating rules and pilot and equipment requirements for operating in Class C airspace. a) General. For the purpose of this section, the primary airport is the airport designated in 14 CFR Part 71, for which the Class C airspace is designated. A satellite airport is any other airport within the Class C airspace. b) Deviations. An operator may deviate from any provisions of this section under the provisions of an ATC authorization issued by the ATC facility giving jurisdiction of the Class C airspace. ATC may authorize a deviation on a continuing basis or for an individual flight, as appropriate. c) Arrivals and overflights. No person may operate an aircraft in Class C airspace unless two-way radio communication is established with the ATC facility having jurisdiction over the Class C airspace prior to entering that area and is thereafter maintained with the ATC facility having jurisdiction over the Class C airspace while within that area. d) Departures. No person may operate an aircraft within Class C airspace except as follows: 1) From the primary airport or satellite airport with an operating control tower, unless two-way radio communication is established and maintained with the control tower, and thereafter as instructed by ATC while operating in the Class C airspace. 2) From a satellite airport without an operating control tower, unless two-way radio communication is established as soon as practical after departing and thereafter maintained with the ATC facility having jurisdiction over the Class C airspace. e) Traffic patterns. No person may take off or land an aircraft at a satellite airport within Class C airspace except in compliance with FAA arrival and departure traffic patterns. f) Equipment requirements. Unless otherwise authorized by the ATC facility having jurisdiction over the Class C airspace, no person may operate an aircraft within Class C airspace unless that aircraft is equipped with the applicable equipment specified in 14 CFR Part 91 (Section 91.215).

	7) Except for persons operating gliders below the floor of Class A airspace, no person may operate an aircraft in Class B, C, D, or E airspace of the 48 contiguous States and the District of Columbia above 10,000 feet MSL, excluding that airspace at and below 2,500 feet AGL, unless that aircraft is equipped with an operable radar beacon transponder having at least a Mode 3/A 4096–code capability, replying to Mode 3/A interrogation with the code specified by ATC, and automatic altitude reporting equipment having a Mode C capability that automatically replies to Mode C interrogations by transmitting pressure altitude information in 100–foot increments.
	<ul> <li>8) Compliance with ATC clearances and instructions:</li> <li>a) When an ATC clearance has been obtained, no pilot-in-command may deviate from that clearance, except in an emergency, unless an amended clearance is obtained. A pilot-in-command may cancel an IFR flight plan if that pilot is operating in VFR weather conditions outside of Class A airspace. If a pilot is uncertain of the meaning of an ATC clearance, the pilot shall immediately request clarification from ATC.</li> </ul>
	<ul> <li>b) Except in an emergency, no person may operate an aircraft contrary to an ATC instruction in an area in which ATC is exercised.</li> <li>c) Each pilot-in-command who, in an emergency, deviates from an ATC clearance or instruction shall notify ATC of that deviation as soon as possible.</li> <li>d) Each pilot-in-command who is given priority by ATC in an emergency shall submit a detailed report of that emergency within 48 hours to the manager of that ATC facility, if requested</li> </ul>
	<ul> <li>by ATC.</li> <li>e) Unless otherwise authorized by ATC, no person operating an aircraft may operate that aircraft according to any clearance or instruction that has been issued to the pilot of another aircraft for radar ATC purposes.</li> </ul>
Appendix 1	SIGNALS
4.1.1	The flashing white signal to aircraft in flight, meaning "land at this aerodrome and proceed to apron" is not used in the United States. In addition, the alternating red and green signal to aircraft on the ground or in flight means exercise extreme caution.
Appendix 5	UNMANNED FREE BALLOONS (Note.—See Chapter 3, 3.1.10 of the Annex)
1.	<ul> <li>14 CFR part 101 prescribes rules governing the operation in the United States, of any unmanned free balloon that— <ul> <li>(i) Carries a payload package that weighs more than four pounds and has a weight/size ratio of more than three ounces per square inch on any surface of the package, determined by dividing the total weight in ounces of the payload package by the area in square inches of its smallest surface;</li> <li>(ii) Carries a payload package that weighs more than six pounds;</li> <li>(iii) Carries a payload, of two or more packages, that weighs more than 12 pounds; or</li> <li>(iv) Uses a rope or other device for suspension of the payload that requires an impact force of more than 50 pounds to separate the suspended payload from the balloon.</li> </ul> </li> </ul>

CHAPTER 1	4444 16 <sup>th</sup> Edition DEFINITIONS
Advisory Air- space	The U.S. does not define, it refers to Advisory Service.
Advisory Route	The U.S. does not define, it refers to Advisory Service.
Aerodrome Traffic	The U.S. does not define.
Air Traffic Ad- visory Service	In the U.S., "Advisory Service" is intended for IFR and VFR aircraft.
Airborne Colli- sion Avoidance System	The U.S. uses traffic alert and collision avoidance system (TCAS).
Aircraft	U.S. uses "Aircraft" to mean the airframe, crew members, or both.
AIRMET	In the U.S., AIRMET stands for Airmen's Meteorological Information which is a concise description of an occurrence or expected occurrence of specified en route weather phenomena that may affect the safety of aircraft operations, but at intensities lower than those that require the issuance of a SIGMET. An AIRMET may be issued when moderate turbulence, low-level wind shear, strong surface winds greater than 30 knots, moderate icing, freezing level, mountain obscuration, or IFR conditions are occurring or are expected to occur.
Air-report	The U.S. does not normally use the term "air-report." Pilot weather reports (PIREPs), position, and operational reports are used. PIREPs include reports of strong frontal activity, squall lines, thun- derstorms, light to severe icing, wind shear and turbulence (including clear air turbulence) of mod- erate or greater intensity, volcanic eruptions and volcanic ash clouds, and other conditions pertin- ent to flight safety. They may include information on ceilings, visibility, thunderstorms, icing of light degree or greater, wind shear and its effect on airspeed, or volcanic ash clouds, but do not usually include air temperature.
Air-taxiing	In the U.S., the term "hover taxi" is sometimes used to indicate the ICAO term "air-taxiing." In the U.S., air-taxiing is the preferred method for helicopter movements on airports provided ground operations/conditions permit. Additionally, in the U.S., air taxi is used to indicate certain commercial aircraft operations. For those operations, usually a special call sign is used, or the prefix "Tango" is added to the aircraft call sign.
Air Traffic Flow Manage- ment	U.S. defines as Air Traffic Control System Command Center.
Altitude	U.S. uses "Altitude" to mean indicated altitude mean sea level (MSL), flight level (FL), or both.
Approval Re- quest	U. S. uses "APREQ."
Area control service	The U.S. does not use the term "area control service" to indicate controlled flight in controlled areas.
ATS route	In U.S. domestic airspace, the term "ATS route" is not used. Routes in the U.S. include VOR airways, jet routes, substitute routes, off-airway routes, RNAV routes and colored airways. The U.S. also uses instrument departure procedures (DPs), and standard terminal arrivals (STARs).
Control zone	The U.S. uses "surface area" in place of the ICAO term "control zone." Surface area is defined as the airspace contained by the lateral boundary of the Class B, C, D or E airspace designated for an airport that begins at the surface and extends upward.
Controlled air- space	The U.S. uses the following definition of controlled airspace found in 14 CFR Section 1.1: "Con- trolled airspace means an airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification."
Course, bear- ing, azimuth, heading, and wind direction	U.S. uses "Course, bearing, azimuth, heading, and wind direction" information and it shall always be magnetic unless specifically stated otherwise.

Cruising level	The U.S. uses the term "cruising altitude."
Decision alti- tude	Approach with vertical guidance (VNAV).
Emergency Phase	The U.S. does not utilize classification system of emergency phases
Expedite	U.S. uses <b>"EXPEDITE"</b> by ATC when <b>prompt compliance</b> is required to avoid the development of an imminent situation. Expedite climb/descent normally indicates to a pilot that the approximate best rate of climb/descent should be used without requiring an exceptional change in aircraft hand-ling characteristics.
Flight informa- tion centre	In the U.S., the services provided by flight information centers (FICs) are conducted by air traffic control (ATC) facilities, flight service stations (FSSs), and rescue coordination centers (RCCs).
Ground Effect	The U.S. does not define, but is referred to in "Hover Taxi."
Holding procedure	In the U.S., a hold procedure is also used during ground operations to keep aircraft within a spe- cified area or at a specified point while awaiting further clearance from air traffic control.
Hot Spot	This is a known term, but not specifically defined in 7110.65.
Level	The U.S. uses "altitude" or "flight level" rather than "level."
Miles	U.S. uses "Miles" to mean nautical miles unless otherwise specified, and means statute miles in conjunction with visibility.
Minute	U.S. uses "minute plus 30 seconds", except when time checks are given to the nearest quarter minute.
Movement area	In the U.S., the "movement area" is equivalent to the ICAO "maneuvering area" which does not include parking areas.
Near Parallel Runways	In the U.S., these are not defined as non-intersecting runways aligned 15 degrees or less apart
Position Sym- bol	The U.S. definition differs in that it refers to mode of tracking, rather than position of an aircraft or vehicle
Procedural Control	The U.S. does not define this as method to provide ATC service without data from an ATS surveil- lance system.
Procedural Sep- aration	The U.S. does not define as separation used when providing "Procedural Control."
Runway Incur- sion	This is a well-known term in NAS, but is not defined in the 7110.65
Standard instru- ment arrival (STAR)	The U.S. uses the acronym STAR to define a standard terminal arrival.
Standard instru- ment departure (SID)	The U.S. uses the term departure procedure (DP) in lieu of SID.
Stopway	The U.S. does not define a "stopway" as a rectangular area.
Taxiway	Ref (a), the US does not define as "portion of an apron designated as a taxiway intended to provide
a) Aircraft stand taxilane	access to aircraft stands only." Ref (b), the US does not define as "portion of a taxiway system located on an apron, providing taxi
b) Apron taxi- way c) Rapid exit taxiway	route across an apron." Ref (c), the US defines as High Speed Taxiway.
Terminal con- trol area	In the U.S., the term "terminal control area" has been replaced by "Class B airspace." Standard IFR services should be provided to IFR aircraft operating in Class B airspace.

Transition altitude, transition layer, and transition level	In U.S. domestic airspace, transition altitude, layer, and level are not used. U.S. flight levels begin at FL 180 where a barometric altimeter setting of 29.92 inches of mercury is used as the constant atmospheric pressure. Below FL 180, altitudes are based on barometric pressure readings.
Uncertainty Phase	The U.S. does not utilize emergency phase classifications.
Visibility	Definitions are different.
Visual Ap- proach	In the U.S., aircrews may execute visual approaches when the pilot has either the airport or the preceding aircraft in sight and is instructed to follow it.
Will	U.S. uses "Will" means futurity, not a requirement for the application of a procedure.
CHAPTER 4	GENERAL PROVISIONS FOR AIR TRAFFIC SERVICES
4.2	In the U.S., flight information and alerting services are provided by ATC facilities, FSSs, and RCCs.
4.3.2.1.1	Transfer of control points vary depending on numerous factors.
4.3.2.1.3	Transfer of control varies.
4.3.2.1	Transfer of control points vary depending on numerous factors.
4.3.3.1	Transfer of control varies.
4.3.3.1a/ b	The U.S. does not "release" aircraft. Handoff is used.
4.4.1	In the U.S., flight information and alerting services are provided by ATC facilities, FSSs, and RCCs.
4.4.1.3	The U.S. uses a flight plan format different from the ICAO model discussed in Appendix 2. The U.S. ATS facilities will transmit ICAO repetitive flight plans (RPLs) even though a different format is used for stored flight plans.
4.4.2.1.1	The U.S. accepts flight plans up to 24 hours prior to Estimated Off –Block Time (EOBT).
4.5.6.2	U.S. ATS controllers do not normally include clearance for transonic acceleration in their ATC clearances.
4.5.7.3 and 4.10.4	In U.S. domestic airspace, transition altitude, layer, and level are not used. U.S. flight levels begin at FL180 where a barometric altimeter setting of 29.92 inches of mercury is used as the constant atmospheric pressure. Below FL 180, altitudes are based on barometric pressure readings. QNH and QFE altimeter settings are not provided in domestic U.S. airspace.
4.5.7.5	The flight crew shall read back to the air traffic controller safety-related parts of ATC clearances.
4.6.1.5	The U.S. allows speed adjustments to be assigned in 5 knot increments.
4.6.3.2	The U.S. uses different speed control phraseologies. Specifically, Doc 4444 uses "Maximum Speed" whereas the US uses "Maximum Forward Speed". Doc 4444 uses "Minimum Clean Speed" whereas the US uses "Slowest Practical Speed."
4.6.3.7	In the US, speed control is not to be assigned inside Final Approach Fix or 5 NM from runway end.
4.8.2	U.S. Controller phraseology differs slightly and does not include a time check.
4.8.3	ATS units are not required to advise a pilot who has canceled an IFR flight plan that IMC conditions are likely to be encountered along the route of flight; however, if a pilot informs a controller of a desire to change from <b>IFR</b> to VFR, the controller will request that the pilot contact the appropriate FSS.
4.9.1.1	FAA uses different wake turbulence categories and weight groups for wake turbulence separation minimums.
4.9.1.2	FAA uses different wake turbulence categories and weight groups for wake turbulence separation minimums.
	Not all FAA facilities are authorized to use the provisions of FAA JO 7110.126.

4.9.2	In the U.S., the word "heavy" is <b>used in all communications</b> with or about heavy jet aircraft in the terminal environment. In the en route environment, "heavy" is used in all communications with or about heavy jet aircraft with a terminal facility, when the en route center is providing approach control service, when the separation from a following aircraft may become less than five miles by approved procedure, and when issuing traffic advisories.
4.10.1.1, 4.10.1.2, 4.10.4.6	Flight levels (at or above 18,000msl, except oceanic) and in feet below 18,000 ft MSL, including around airports (vs. ICAO QFE – height above field/threshold when near airports).
4.11.2.2 4.11.3 d)	Reporting the assigned speed with each frequency change by pilots is not a requirement. Control- lers are required to forward this information to the next controller.
4.11.4	The U.S. has not yet published ATS procedures for the use of Automatic Dependent Surveillance- Contract (ADS-C).
4.11.1.1	The U.S. has different criteria to make position reports. FAA Order JO 7110.65, 5–1–12. Position Reporting.
4.11.1.3	After an aircraft receives the statement "radar contact" from ATC, it discontinues reporting over compulsory reporting points.
4.12.2 and 4.12.3	The U.S. does not normally use the term "air-report." Pilot weather reports (PIREPs), position, and operational reports are used. PIREPs include reports of strong frontal activity, squall lines, thun- derstorms, light to severe icing, wind shear and turbulence (including clear air turbulence) of mod- erate or greater intensity, volcanic eruptions and volcanic ash clouds, and other conditions pertin- ent to flight safety. They may include information on ceilings, visibility, thunderstorms, icing of light degree or greater, wind shear and its effect on airspeed, or volcanic ash clouds, but do not usually include air temperature.
4.13.4	The difference is the length of time for retention.
CHAPTER 5	SEPARATION METHODS AND MINIMA
5.2.1	In U.S. airspace, only conflict resolution (not separation) is provided between IFR and VFR opera- tions. Separation is provided between IFR and Special VFR (SVFR) aircraft only within the lateral boundaries of Class B, C, D, or E control zones (the U.S. term is surface areas) below 10,000 feet MSL.
5.2.1.1	In U.S. Class A and B airspace, separation is provided for all aircraft. In U.S. Class C airspace, separation is provided between IFR and SVFR aircraft; conflict resolution is provided between IFR and VFR operations.
5.3.1 and 5.3.4	U.S. rules allow assignment of altitude to second aircraft after first aircraft has been issued climb/ descent and is observed or reports leaving that altitude. 7110.65, paragraph 6-6-1, APPLICATION, 6-6-2, EXCEPTIONS.
5.4.1.2.1.2	U.S. Lateral separation criteria and minima values differ somewhat.
5.4.2.2.1.1 c/ d	The U.S. uses 22 kt instead of 20 kt and 44 kt instead of 40 kt.
5.4.2.4.1	FAA uses Mach number technique for application of longitudinal separation with turbojet aircraft only.
5.4.2.5.1	FAA uses Mach number technique for application of longitudinal separation with turbojet aircraft only.
5.4.2.7.3.2 d)2).	The FAA's Advanced Technologies and Oceanic Procedures (ATOP) automation platform is de- signed to ensure that separation will not decrease below required minima for same track aircraft should either the reference or maneuvering aircraft turn during the ITP. This allows the controller to issue a clearance to perform an ADS–B ITP climb/descent maneuver if required separation is maintained or increased and either the reference or maneuvering aircraft has a turn in its flight plan.
5.5.2	Whenever the other aircraft concerned are within 5 minutes flying time of the holding area.
5.6	U.S. Allows 2 minute separation standard when courses diverge within 5 minutes after departure.
5.7	U.S. Requires departing aircraft to be established on a course diverging by at least 45 degrees from the reciprocal of the final approach course.

5.8.2.1	FAA uses different wake turbulence categories and differing minima.
	FAA requires 3 minutes separation for a Large or Heavy aircraft landing behind a Super aircraft.
5.8.3.1	FAA uses different wake turbulence categories and differing minima.
	For Heavy, Large, or Small aircraft departing behind a Super aircraft, taking off from the same runway or a parallel runway separated by less than 2,500 feet, FAA requires that takeoff clearance may not be issued to following aircraft until 3 minutes after the preceding aircraft begins takeoff roll.
5.8.3.2	FAA Consolidated Wake Turbulence (CWT) is based on nine weight groups. FAA time-based wake turbulence separation minima differs from ICAO standards.
5.8.3.4	FAA Consolidated Wake Turbulence (CWT) is based on nine weight groups. FAA time-based wake turbulence separation minima differs from ICAO standards.
5.8.4.1	The U.S. includes B757 in heavy category for wake turbulence purposes. DOC 4444 does not stipulate.
	For Heavy, Large, or Small aircraft taking off behind a departing Super aircraft on an intersecting runway or nonintersecting runway if flight paths will cross; FAA requires 3 minutes wake turbulence separation.
5.8.4.2	FAA Consolidated Wake Turbulence (CWT) is based on nine weight groups. FAA time-based wake turbulence separation minima differs from ICAO standards.
5.8.4.3	FAA Consolidated Wake Turbulence (CWT) is based on nine weight groups. FAA time-based wake turbulence separation minima differs from ICAO standards.
5.8.5.2	FAA Consolidated Wake Turbulence (CWT) is based on nine weight groups. FAA time-based wake turbulence separation minima differs from ICAO standards.
CHAPTER 6	SEPARATION IN THE VICINITY OF AERODROMES
6.3.2.4	<ul> <li>In the U.S.:</li> <li>a) An altitude to maintain is not normally issued in conjunction with a climb via clearance. If no altitude is assigned, pilots should climb to the "Top Altitude" depicted on the SID. ATC will assign an altitude when the "Top Altitude" is identified as "Assigned by ATC";</li> <li>b) While on a climb via clearance, if a new clearance is issued to an altitude to maintain (for example, "Climb and maintain flight level one eight zero"), all published altitude restrictions on the SID are cancelled;</li> <li>c) A clearance to "climb via SID except maintain" cancels all remaining published altitudes on the SID that are above the cleared altitude;</li> <li>d) A clearance to "climb via SID except cross" instructs pilots to comply with the issued crossing restriction and all other restrictions on the SID;</li> </ul>
	<ul><li>e) The phraseology "climb unrestricted" is not used. A climb and maintain (altitude) authorizes the pilot to climb unrestricted to the assigned altitude.</li></ul>

6.3.2.5	In the U.S., if the communications failure occurs in IFR conditions, or if VFR cannot be complied with, each pilot shall continue the flight according to the following requirements:
	Route
	a) By the route assigned in the last ATC clearance received;
	b) If being radar vectored, by the direct route from the point of failure to the fix, route, or airway
	specified in the vector clearance;
	c) In the absence of an assigned route, by the route that ATC has advised may be expected in a
	further clearance; or
	d) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.
	Altitude - At the highest of the following altitudes or flight levels for the route segment being flown:
	a) The altitude or flight level assigned in the last ATC clearance received;
	b) The minimum altitude as prescribed in 14 CFR Part 91 (Section 91.121(c)) for IFR operations;
	or
	c) The altitude or flight level ATC has advised may be expected in a further clearance.
6.3.3.3	Arriving aircraft – delay of 10 minutes or more.
6.5.2.4	In the U.S.:
	a) A descend via clearance authorizes pilots to descend at pilot discretion to meet published
	restrictions on a STAR. Pilots are not authorized to descend without being issued an altitude;
	b) An altitude to maintain is not normally issued in conjunction with a descend via clearance. If no altitude is issued, the pilot is expected to descend to the lowest published altitude on the STAR;
	c) While on a descend via clearance, if a new clearance is issued to an altitude to maintain (for
	example, "Descend and maintain flight level two eight zero"), all published altitude restrictions on
	the STAR are cancelled;
	d) A clearance to "descend via STAR except maintain" cancels all remaining published altitudes
	on the STAR that are below the cleared altitude;
	e) A clearance to "descend via STAR except cross" instructs pilots to comply with the issued
	crossing restriction and all other restrictions on the STAR;
	f) The phraseology "descend unrestricted" is not used. A descend and maintain (altitude)
(521	authorizes the pilot to descend unrestricted to the assigned altitude.
6.5.3.1	The 7110.65 does not stipulate flight crew concurrence of Controller initiated Visual Approach.
6.5.3.5	U.S. requires ATC to inform following aircraft behind Heavy/B757 aircraft of manufacturer and model information.
6.5.5.2	Onward clearance time. 7110.65 PG EXPECT FURTHER CLEARANCE (TIME)- The time a
	pilot can expect to receive clearance beyond a clearance limit.
6.7.3.1.2	U.S. has no criteria for separate radar controllers in conducting Parallel approaches.
6.7.3.2.1 a)	When conducting Dual and Triple Simultaneous Independent Approaches using High Update Rate
Table 6–1	Surveillance, the FAA allows the minimum distance between runway centerlines to be 3100 feet.
6.7.3.2.1 b)	The U.S. has adopted procedures allowing RNAV equipped aircraft to conduct Independent Paral- lel Approaches.
6.7.3.2.10	U.S. has no parallel approach obstacle assessment surfaces (PAOAS) Criteria.
6.7.3.2.10	The U.S. has no criteria for a "45 degree track".
6.7.3.2.11 (a)	The U.S. has no criteria for both controllers to be advised when visual separation is applied.
6.7.3.4.1 (d)	The U.S. has adopted procedures allowing RNAV equipped aircraft to conduct Dependent Parallel approaches.
6.7.3.4.1 (f)	The U.S. requires that adjacent missed approach procedures do not conflict.
6.7.3.6.3 (b)	The U.S. has no surveillance radar approach (SRA).
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6.7.3.6.3 (c)	In the U.S., aircrews may execute visual approaches when the pilot has either the airport or the
	preceding aircraft in sight and is instructed to follow it. A contact approach is one wherein an air-
	craft on an IFR flight plan, having an air traffic control authorization, operating clear of clouds
	with at least 1 mile flight visibility and a reasonable expectation of continuing to the destination airport by visual reference in those conditions, may deviate from the instrument approach proced-
	ure and proceed to the destination airport by visual reference to the surface. This approach will
	only be authorized when requested by the pilot and the reported ground visibility at the destination
	airport is at least 1 statute mile.
CHAPTER 7	PROCEDURES FOR AERODROME CONTROL SERVICE
7.4.1.1	U.S. has no start up procedures, taxi clearance.
7.4.1.2.1 (f)	U.S. does not require time check prior to taxi.
7.6.3.2.3.2	In the U.S., for movements of other than aircraft traffic (i.e., vehicles, equipment, and personnel),
	steady green means cleared to cross, proceed, go; flashing green is not applicable; flashing white
	means return to starting point on airport; and alternating red and green means a general warning
	signal to exercise extreme caution.
7.6.3.2.3.3	U.S. controllers do not flash runway or taxiway lights to instruct aircraft to "vacate the runway and observe the tower for light signal."
7.10.2	In the U.S., landing clearance to a succeeding aircraft in a landing sequence need not be withheld
	if the controller observes the positions of the aircraft and determines that prescribed runway separ- ation will exist when the aircraft crosses the landing threshold. Controllers issue traffic information
	to the succeeding aircraft if it has not previously been reported.
7.11.4 and	U.S. category 1, 2, & 3 (SRS) aircraft weights differ. Separation standards are greater, due to in-
7.11.6	creased size and weight categories.
7.13.1.1.2	U.S. does not specify separation standards on taxiways.
7.15	Special VFR operations may be conducted in the U.S. under the following weather minimums and
	requirements below 10,000 feet MSL within the airspace contained by the upward extension of the
	lateral boundaries of the controlled airspace designated to the surface for an airport. These minimums and requirements are found in 14 CFR Section 91.157.
	Special VFR operations may only be conducted:
	(1) With an ATC clearance;
	(2) Clear of clouds;
	<ul><li>(3) Except for helicopters, when flight visibility is at least 1 statute mile; and</li><li>(4) Except for helicopters, between sunrise and sunset (or in Alaska, when the sun is 6 degrees or</li></ul>
	more below the horizon) unless:
	(i) The person being granted the ATC clearance meets the applicable requirements for instrument
	flight; and
	(ii) The aircraft is equipped as required in 14 CFR Sec. 91.205(d).
7.15	No person may take off or land an aircraft (other than a helicopter) under special VFR: (1) Unless ground visibility is at least 1 statute mile; or
	(2) If ground visibility is not reported, unless flight visibility is at least 1 statute mile.
CHAPTER 8	ATS SURVEILLANCE SERVICES
8.5.5.1	U.S. validation of mode C readouts allow up to 300 feet variance from pilot reported altitudes.
8.6.5.2	The U.S. has not implemented cold temperature corrections to the radar minimum vectoring alti-
	tude.
8.7.3.2 (b)	The U.S. only allows visual observance of runway turn-off points.
8.7.3.4	Separate a Heavy aircraft operating directly behind a Super aircraft or following a Super aircraft
	conducting an instrument approach by 6 miles unless the Super aircraft is operating above FL 240 and above 250 knots.
	Consider parallel runways less than 2,500 feet apart as a single runway because of the possible
	-1 Consider parallel filmways less inan 7 bull leel apart as a sindle filmway because of the possible

8.7.3.5	FAA Consolidated Wake Turbulence (CWT) is based on nine weight groups. FAA distance-based wake turbulence separation minima differs from ICAO standards.
8.7.3.6	Separate a Heavy aircraft operating directly behind a Super aircraft or following a Super aircraft conducting an instrument approach by 6 miles unless the Super aircraft is operating above FL 240 and above 250 knots.
	Consider parallel runways less than 2,500 feet apart as a single runway because of the possible effects of wake.
8.8.3.2	In the U.S., if the communications failure occurs in IFR conditions, or if VFR cannot be complied with, each pilot shall continue the flight according to the following requirements:
	Route
	a) By the route assigned in the last ATC clearance received;
	b) If being radar vectored, by the direct route from the point of failure to the fix, route, or airway specified in the vector clearance;
	c) In the absence of an assigned route, by the route that ATC has advised may be expected in a further clearance; or
	d) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.
	Altitude – At the highest of the following altitudes or flight levels for the route segment being flown:
	a) The altitude or flight level assigned in the last ATC clearance received;
	b) The minimum altitude as prescribed in 14 CFR Part 91 (Section 91.121(c)) for IFR operations; or
	c) The altitude or flight level ATC has advised may be expected in a further clearance.
8.8.4.2	The U.S. does not specify that applicable separation can be utilized during emergency situations.
8.9.3.6	U.S. specifies maximum intercept angle of 30 degrees for fixed wing aircraft vectored to final
	approach course.
CHAPTER 9	FLIGHT INFORMATION SERVICE AND ALERTING SERVICE
9.1.3.2.1	ATC facilities in the CONUS will no longer receive AIRMET advisories to broadcast and will therefore not broadcast AIRMETs; operators have other methods, such as the G–AIRMET, of receiving AIRMET information over the CONUS.
9.1.3.7	The U.S. does not have special procedures for the transmission of information to supersonic air- craft.
9.1.4.1.1	Class F airspace is not used in the U.S. Traffic advisories are provided in Class C airspace and, workload permitting, in Class D, Class E, and Class G airspace.
9.2.1.2	The U.S. does not use "operations normal" or "QRU" messages. U.S. controllers are not normally familiar with the term "uncertainty phase."
CHAPTER 10	COORDINATION
10.1.3.1	Except for a VFR aircraft practicing an instrument approach, an IFR approach clearance in the U.S. automatically authorizes the aircraft to execute the missed approach procedure depicted for the instrument approach being flown. No additional coordination is normally needed between the approach and en route controllers. Once an aircraft commences a missed approach, it may be radar vectored.
10.1.4.2.2	U.S. does not require ETA to be forwarded at least 15 minutes prior to ETA.
CHAPTER 11	AIR TRAFFIC SERVICES MESSAGES
11.1.2	U.S. uses different emergency messages. FAA Order JO 7110.10, Chapter 3, Emergency Services.
11.4.2.3.6	The existing U.S. ATS automation system does not process logical acknowledgment messages (LAMs).

CHAPTER 12	PHRASEOLOGIES
12.2.7	US ATC does not allow conditional clearances described for example: "SAS 941, BEHIND DC9 ON SHORT FINAL, LINE UP BEHIND."
	Note – This implies the need for the aircraft receiving the conditional clearance to identify the aircraft or vehicle causing the conditional clearance.
12.3.1.2 m) General to require action when conveni- ent m) WHEN READY ( <i>in-struction</i> );	U.S. does not use this phraseology. 7110.65 4-5-7. ALTITUDE INFORMATION PHRASEO- LOGY CLIMB/ DESCEND AT PILOT'S DISCRETION 1. The pilot is expected to commence descent upon receipt of the clearance and to descend at the suggested rates specified in the AIM, 4-4-9, Adherence to Clearance, until reaching FL 280. At that point, the pilot is authorized to con- tinue descent to FL 240 within the context of the term "at pilot's discretion" as described in the AIM. f. When the "pilot's discretion" portion of a climb/descent clearance is being canceled by assigning a new altitude, inform the pilot that the new altitude is an "amended altitude." EX- AMPLE- "American Eighty Three, amend altitude, descend and maintain Flight Level two six zero."
12.3.1.2 (n) MAINTAIN OWN SEPAR- ATION AND VMC [FROM (level)] [TO (level)]; and (o) MAINTAIN OWN SEPAR- ATION AND VMC ABOVE (or BELOW, or TO) (level);	U.S. does not use "maintain own separation and VMC 'from,' 'above,' or 'below'," U.S. con- trollers say "maintain visual separation 'from' that traffic." Meteorological conditions are expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.
12.3.1.2 aa) Clearance to cancel level re- striction(s) of the vertical pro- file of a SID during climb." (z) CLIMB TO ( <i>level</i> ) [LEVEL RESTRIC- TION(S) ( <i>SID</i> <i>designator</i> ) CANCELLED ( <i>or</i> ) LEVEL RESTRIC- TION(S) ( <i>SID designat- or</i> ) AT ( <i>point</i> ) CAN- CELLED];	The U.S. does not have specific phraseology examples that cover this issue. However, phraseology contained in the 7110.65 covers how to change altitudes and altitude restriction in a SID.

12.3.1.2 ff) Clearance to cancel level re- striction(s) of the vertical pro- file of a STAR during descent. gg) DESCEND TO (level) [LEVEL RE- STRICTION(S) (STAR designator) CANCELLED (or) LEVEL RESTRIC- TION(S) (STAR designat- or) AT (point) CAN- CELLED].	The U.S. does not have specific phraseology examples that cover this issue. However, phraseology contained in the 7110.65 covers how to amend or cancel altitude restrictions.
12.3.1.2 a) 2) TO AND MAINTAIN BLOCK (level) TO (level);	U.S. uses "MAINTAIN BLOCK (altitude) THROUGH (altitude)." 7110.65, Para 4-5-7. g. ALTITUDE INFORMATION
12.3.1.6 CHANGE OF CALL SIGN	U.S. has no phraseology or approved procedure to advise aircraft to change call signs. The U.S. has procedures for a duplicate aircraft identification watch and notification to airline operators but does not publish national procedures for on-the-spot temporary changes to aircraft call signs in accordance with ICAO guidelines.
12.3.1.7 TRAFFIC IN- FORMATION	The U.S. requires issuance of azimuth, distance, direction, type, and altitude.
12.3.1.8 b) METEOROLO- GICAL CON- DITIONS	In the U.S., the criterion for a variable wind is: wind speed greater than 6 kt and direction varies by 60 degrees or more. If the wind is >1 kt but <6 kt, the wind direction may be replaced by "VRB" followed by the speed or reported as observed. "VRB" would be spoken as "wind variable at <speed>."</speed>
12.3.1.8 d), e), and f) METEOROLO- GICAL CON- DITIONS	U.S. controllers do not give wind speed, visibility, or RVR values in metric terms. RVR values are given in 100- or 200-foot increments while RW values are given in Venule increments.
12.3.1.8 j)	U.S. controllers do not use the term "CAVOK." However, the ceiling/sky condition, visibility, and obstructions to vision may be omitted if the ceiling is above 5,000 feet and the visibility is more than 5 miles.
12.3.1.8 l) and m)	In the US, controllers and pilots exchange altimeter setting by reference to inches Hg. ICAO de- scribes altimeter setting by reference to millibars, QNH or QFE. (where QNH – above mean sea level and QFE – height above aerodrome)
12.3.1.11 g)	U.S. use BRAKING ACTION terms "good," "fair," "poor," "nil," or combination of these terms. "Braking action fair to poor, reported by a heavy D-C Ten.". 7110.65, Para 3-3-4.

12.3.2.2 INDICATION OF ROUTE AND CLEAR- ANCE LIMIT	U.S. will issue a clearance "direct" to a point on the previously issued route. PHRASEOLOGY CLEARED DIRECT (fix). NOTE Clearances authorizing "direct" to a point on a previously issued route do not require the phrase "rest of route unchanged." However, it must be understood where the previously cleared route is resumed. When necessary, "rest of route unchanged" may be used to clarify routing. 7110.65, paragraph 4–4–1. ROUTE USE & 4–2–5. ROUTE OR ALTI-TUDE AMENDMENTS 3.
12.3.2.4 Specification of Cruise Levels, (c) Cruise climb between. ( <i>levels</i> ) or above ( <i>level</i> )	The U.S. does not have equivalent cruise climb between levels/altitudes. However, in ICAO regions for supersonic flight 8- 8-3a(1), U.S. has adopted ICAO phraseology.
12.3.2.5	U.S. has no phraseology or instruction for emergency descent:
12.3.2.8, Separ- ation Instruc- tions (b) ADVISE IF ABLE TO CROSS (signi- ficant point) AT (time or level)	U.S. has no phraseology for "ADVISE IF ABLE." U.S. does have phraseology "Advise if unable"
12.3.4.7, Taxi procedures, after landing (n), (o), & (p)	U.S. has no phraseology using "BACKTRACK." U.S. does use BACK-TAXI (7110.65) – A term used by air traffic controllers to taxi an aircraft on the runway opposite to the traffic flow. The aircraft may be instructed to back-taxi to the beginning of the runway or at some point before reaching the runway end for the purpose of departure or to exit the runway.
12.3.4.11 TAKE-OFF CLEARANCE when take-off clearance has not been com- plied with c) Vacate 12.3.4.20 RUN- WAY VACAT- ING AND	<ul> <li>U.S. uses CLEAR OF THE RUNWAY</li> <li>a. Taxiing aircraft, which is approaching a runway, is clear of the runway when all parts of the U.S. uses aircraft are held short of the applicable runway holding position marking.</li> <li>b. A pilot or controller may consider an aircraft, which is exiting or crossing a runway, to be clear of the runway when all parts of the aircraft are beyond the runway edge and there are no restrictions to its continued movement beyond the applicable runway holding position marking.</li> <li>c. Pilots and controllers shall exercise good judgment to ensure that adequate separation exists between all aircraft on runways and taxiways at airports with inadequate runway edge lines or holding position markings.</li> </ul>
b)	

12.3.4.11 (e) HOLD POSI-	U.S. uses different phraseology to cancel a take off.
TION, CAN-	3-9-10. CANCELLATION OF TAKEOFF CLEARANCE PHRASEOLOGY
CEL TAKE-	If circumstances require, cancel a previously issued take-off clearance and, when appropriate, in-
OFF I SAY	form the aircraft of the reason.
AGAIN CAN-	
CEL TAKE-	PHRASEOLOGY
OFF (reasons);	CANCEL TAKEOFF CLEARANCE (reason)
12.3.5.7	U.S. has no phraseology to expedite clearance.
a) EXPEDITE	0.5. has no phraseology to expectite clearance.
CLEARANCE	
(aircraft call	
sign) EXPEC-	
TED	
DEPARTURE	
FROM (place)	
AT (time);	
b) EXPEDITE	
CLEARANCE	
(aircraft call	
sign) [ESTIM-	
ATED]	
OVER (place)	
AT (time) RE-	
QUESTS (level	
or route, etc.).	
12.3.5.6 HAN-	U.S. does not use radar handover. 7110.65, Para 5-4-3. METHODS PHRASEOLOGY HAN-
DOVER	DOFF/ POINT OUT/TRAFFIC (aircraft position) (aircraft ID),or (discrete beacon code point out only) (altitude, restrictions, and other appropriate information, if applicable). c. When receiving a handoff, point out, or traffic restrictions, respond to the transferring controller as follows: PHRAS- EOLOGY- (Aircraft ID) (restrictions, if applicable) RADAR CONTACT, or (aircraft ID or discrete beacon code) (restrictions, if applicable) POINT OUT APPROVED, or TRAFFIC OBSERVED,
12.4.1.1	U.S. controllers do not say "will shortly lose identification" or "identification lost." 7110.65, Para
IDENTIFICA-	5-3-7
TION OF AIR-	5-3-7. IDENTIFICATION STATUS
CRAFT f)	a. Inform an aircraft of radar contact when: 1. Initial radar identification in the ATC system is es-
	tablished.
	2. Subsequent to loss of radar contact or terminating radar service, radar identification is re-estab- lished.
	PHRASEOLOGY
	RADAR CONTACT (position if required).
	b. Inform an aircraft when radar contact is lost.
	PHRASEOLOGY
	RADAR CONTACT LOST (alternative instructions when required).
	relative contract hour loost (unchange instructions which required).

12.4.2.1 VECTORING FOR AP- PROACH (b)	U.S. would use "airport or runway" rather than "field." 7-4-2. VECTORS FOR VISUAL AP- PROACH PHRASEOLOGY- (ACID) FLY HEADING OR TURN RIGHT/LEFT HEADING (de- grees) VECTOR FOR VISUAL APPROACH TO (airport name). 7110.65, Para 5-11-2, VISUAL REFERENCE REPORT: Aircraft may be requested to report the runway, approach/runway lights, or airport in sight. Heli- copters making a "point-in-space" approach may be requested to report when able to proceed to the landing area by visual reference to a prescribed surface route. <i>PHRASEOLOGY</i> <i>REPORT</i> ( <i>runway, approach/runway lights or airport</i> ) <i>IN SIGHT.</i> <i>REPORT WHEN ABLE TO PROCEED VISUALLY TO AIRPORT/HELIPORT</i> .
12.4.2.4.2 a) COMMENCE DESCENT NOW [TO MAINTAIN A ( <i>number</i> ) DE- GREE GLIDE PATH]	The U.S uses only "begin descent" and does not speak to "Maintain a (number) Degree Glide Path."
12.4.2.5.1 PAR APPROACH	U.S. controllers say "this will be a P-A-R/surveillance approach to runway (number) or airport/ runway (number) or airport/heliport." U.S. controllers do not say "approach completed." U.S. con- trollers say "your missed approach procedure is (missed approach procedure)" and, if needed, "ex- ecute missed approach." For PAR approaches, U.S. controllers say "begin descent" and for surveil- lance approaches, U.S. controllers say "descend to your minimum descent altitude." 7110.65, Para 5-12-8. APPROACH GUIDANCE TERMINATION lights in sight and requested to or advised that he/she will proceed visually, and has been instructed to proceed visually, all PAR approach proced- ures shall be discontinued. d. Continue to monitor final approach and frequency. Pilots shall re- main on final controller's frequency until touchdown or otherwise instructed. 5-12-9. COMMU- NICATION TRANSFER PHRASEOLOGY CONTACT (terminal control function) (frequency, if required) AFTER LANDING
12.4.2.4.4 CHECKS; (a)	U.S. uses "CHECK WHEELS DOWN". 7110.65, Par 2-1-24. WHEELS DOWN CHECK PHRASEOLOGY
12.4.2.5.8 MISSED APPROACH a)	US ATC does not allow conditional clearances described.
12.4.3.12 and 12.4.3.13	U.S., for aircraft above FL 180, U.S. controllers would say, "confirm using two niner niner two as your altimeter setting, verify altitude" or "stop altitude squawk" "stop altitude squawk; altitude differs by (number) feet." U.S. controllers would not say "stop squawk Charlie." 7110.6, Para 5-2-22. BEACON TERMINATION Inform an aircraft when you want it to turn off its transponder.
12.3.4.13 - ENTERING AN AERO- DROME TRAFFIC CIRCUIT b) 12.4.3.14	<ul> <li>U.S. uses PHRASEOLOGY: ENTER LEFT/RIGHT BASE. STRAIGHT-IN. MAKE</li> <li>STRAIGHT-IN. STRAIGHT-IN APPROVED. RIGHT TRAFFIC. MAKE RIGHT TRAFFIC.</li> <li>RIGHT TRAFFIC APPROVED. CONTINUE. b. Runway in use. c. Surface wind. d. Altimeter</li> <li>setting. REFERENCE FAA Order 7110.65, Current Settings, Para 2-7-1. e. Any supplementary</li> <li>information. f. Clearance to land. g. Requests for additional position reports. Use prominent geo-</li> <li>graphical fixes which can be easily recognized from the air, preferably those depicted on sectional</li> <li>charts. This does not preclude the use of the legs of the traffic pattern as reporting points.</li> <li>U.S. controllers would say "verify at (altitude)" and/or "verify assigned altitude." 7110.65 Para,</li> </ul>
12.6.1 Alerting	<ul> <li>5-2-17. 1. Issue the correct altimeter setting and confirm the pilot has accurately reported the altitude. PHRASEOLOGY- (Location) ALTIMETER (appropriate altimeter), VERIFY ALTITUDE.</li> <li>U.S. controllers would issue MEA/MVA/MOCA/MIA instead of QNH. 7110.65.</li> </ul>
phraseologies	

CHAPTER 15	PROCEDURES RELATED TO EMERGENICES, COMMUNICATION FAILURE AND CONTINGENCIES
15.1.3	U.S. has difference updated. 5–2–13, Code Monitor Note 1. & 2. "10–2–6 HIJACKED AIR-
Unlawful inter- ference and air- craft bomb threat	CRAFT 10–2–6. HIJACKED AIRCRAFT Hijack attempts or actual events are a matter of national security and require special handling. Pol- icy and procedures for hijack situations are detailed in FAA Order JO 7610.4, Special Operations. FAA Order JO 7610.4 describes reporting requirements, air crew procedures, air traffic procedures and escort or interceptor procedures for hijack situations.
	REFERENCE: FAA Order JO 7610.4, Hijacked/Suspicious Aircraft Reporting and Procedures, Chapter 7. FAA Order 7110.65, Code Monitor, paragraph 5–2–13.
15.3.3 b) 1, 2	7110.65 defers to the AIM for what to expect an aircraft to do when loss of two-way communica- tion has been encountered. The expectations in the AIM differ from what a pilot is expected to do in accordance with PANS-ATM 15.3.3 b) 1 and 2.
	The U.S. does not specify a time that an aircraft would maintain its last assigned heading, speed, or altitude. PANS-ATM uses 20 min. in a non-radar environment and 7 min. in a radar environment.
15.3.10	When neither communications nor radar contact can be established for 30 minutes (or prior, if appropriate), U.S. controllers will consider an aircraft overdue and will initiate overdue aircraft procedures including reporting to the ARTCC or FSS.
15.4.1	U.S. does not use the terms "strayed" or "unidentified" aircraft. 7110.65, paragraph 10-3-1. OVERDUE AIRCRAFT
15.5.3.2	Separate known aircraft from the aircraft dumping fuel as follows:
	a. IFR aircraft by one of the following:
	<ol> <li>1. 1,000 feet above it; or in accordance with paragraph 4-5-1, Vertical Separation Minima, whichever is greater.</li> <li>2. 2,000 feet below it.</li> <li>3. 5 miles radar.</li> <li>4. 5 miles laterally.</li> </ol>
	b. VFR radar-identified aircraft by 5 miles and in accordance with paragraph 5–6–1, Application.
15.7.1.1	The PANS-ATM states: "If, during an emergency situation, it is not possible to ensure that the applicable horizontal separation can be maintained, emergency separation of half the applicable ver- tical separation minimum may be used" Pilots must be advised that emergency separation is being applied and traffic information must be given.
	There is no equivalent emergency separation procedure in the U.S.
APPENDIX 1	INSTRUCTIONS FOR AIR-REPORTING BY VOICE COMMUNICATIONS
AIREP Form of Air-report	U.S. uses Pilot Reports (UAs), or Urgent Pilot Reports (UUAs).
APPENDIX 2	FLIGHT PLAN
ITEM 9	ICAO aircraft wake turbulence categories (heavy, medium, light) and FAA weight classes (heavy, large, small) differ. Also, for landing aircraft, wake turbulence separation is defined differently. The U.S. makes special provisions for any aircraft landing behind a B-757 (4 miles for a large aircraft behind or 5 miles for a small aircraft behind).
ITEM 15	U.S. ATS units do not accept cruising speeds nor filed altitudes/flight levels in metric terms. The U.S. accepts filed Mach Number expressed as M followed by 3 figures.
ITEM 18	The U.S. accepts the non-standard indicator IRMK/in filed flight plans.

APPENDIX 3	AIR TRAFFIC SERVICES MESSAGES
1.1.1	See Part XI, ATS Messages, 1.3.
	1.3 Composition of the standard types of message.
	The composition of each standard type of message, expressed as a standardized sequence of fields
	of data, shall be as prescribed in the reference table on page A3–33. Each message shall contain all the fields prescribed.
1.6.2	See Part XII, Phraseologies, 2.8.
1.8.1 (Field	See Appendix 2, Flight Plan, 2.2 (Item 15) and 2.2 (Item 18).
Type 3), (Field	
Type 15), and	
(Field Type 18).	
2.1, 2.4.5, 2.5	See Part XI, ATS Messages 1.3.
APPENDIX 4	AIR TRAFFIC INCIDENT REPORT
Appendix 4	U.S. has their accident/incident report in FAA Order JO 8020.16C.
APPENDIX 6	ATS INTERFACILITY DATA COMMUNICATIONS (AIDC) MESSAGES
1. INTRODUC-	7110.65; 8-2-3. AIR TRAFFIC SERVICES
TION	INTERFACILITY DATA COMMUNICATIONS
1.1 General	(AIDC)
	Where interfacility data communications capability has been implemented, its use for ATC co-
	ordination should be accomplished in accordance with regional Interface Control Documents, and supported by letters of agreement between the facilities concerned.

PART I (Core SARPs)		
Chapter 2	General Provisions	
2.2	The U.S. has implemented a quality management system (QMS) for the majority of the meteorological information supplied to users. WAFC Washington and MWO Kansas City (a.k.a. Aviation Weather Center) are ISO 9000. MWOs Anchorage and Honolulu and all 122 Weather Forecast Offices have a QMS that is governed under the following National Weather Service (NWS) directives: NWS Instruction 10–1601 (Verification), NWS Instruction 10–1602 (Service Evaluation), NWS Instruction 10–1606 (Service Assessment), NWS Instruction 10–1607 (Office Evaluation), and NWS Instruction 10–815 (Aviation Meteorologist Training and Competencies). No QMS is in place for the augmentation of the surface observing program.	
Chapter 3	World Area Forecast System and Meteorological Offices	
3.2.1	SIGWX forecasts are not disseminated in IWXXM form (Appendix 2, 1.2.1.3).	
3.7 b)	Tropical Cyclone Advisories issued by Miami and Honolulu TCACs differ from Table A2–2 in Appendix 2 as they contain forecasts valid at 3–, 9–, 15– 21– and 27–hours instead of 6–, 12–, 18–, and 24–hours.	
3.8.1 a) 2)	Space weather advisories are not issued for communication via satellite (SATCOM).	
Chapter 4	Meteorological Observations and Reports	
4.3.2 a)	The U.S. does not issue local routine reports or local special reports. This difference is applicable to subsequent paragraphs that relate to the provision of local routine and special reports in Annex 3. The U.S. provides METAR to departing and arriving aircraft and provides wind and altimeter information in accordance with Federal Aviation Administration (FAA) Order JO 7110.65Y Section 9 (3–9–1) and Section 10 (3–10–1).	
4.5.1 d)	This field is also used to denote a correction to the METAR/SPECI by "COR."	
4.6.2.1	The U.S. reports visibility in statute miles.	
4.6.3.3	RVR values in the METAR/SPECI code forms are reported in feet.	
4.6.4.1	The U.S. automated surface observing systems (ASOS, AWOS) do not generate an automated report for the occurrence of drizzle or freezing drizzle. The ASOS does allow the manual augmentation of these elements to the observations.	
4.6.7	The U.S. provides atmospheric pressure in inches of mercury. METAR and SPECI contains an Altimeter Setting (A) instead of QNH, for example, A3010 for 30.10 inches of mercury. The U.S. does not provide QFE.	
Chapter 5	Aircraft observations and reports	
5.5	Urgent Pilot Reports (UUA) are used in lieu of Special Aircraft Observations, to include Hail, Low Level Wind Shear (within 2,000 ft of surface), severe icing, severe and extreme turbulence, tornado, funnel cloud or waterspout, and volcanic eruption and/or volcanic ash. In addition, Pilot Reports (UA) and UAA identify the location of the weather phenomenon by NAVAIDS. Pilot Reports are used in lieu of Special Aircraft Observations, to include moderate turbulence and	
	moderate icing. Braking action may be included in the remarks section of the UUA/UA, but is reported to air traffic control when worse than reported.	
Chapter 6	Forecasts	
6.3.1	Landing forecasts are provided by the TAF.	
6.3.3	The U.S. does not provide trend forecasts.	
6.5	The U.S. provides an Area Forecast (FA) and Graphical Forecast for Aviation (GFA) in place of a GAMET. The FA is provided by MWOs Anchorage and Honolulu while the GFA is provided by WFO Kansas City. The format and content of the FA and GFA differs from the GAMET.	
	The FA and GFA are valid from the surface up to FL450. The GFA is a web-based interactive information service.	

## ANNEX 3 - METEOROLOGICAL SERVICE FOR INTERNATIONAL AIR NAVIGATION

Chapter 7	SIGMET and AIRMET Information, Aerodrome Warnings and Wind Shear Warnings
7.2.1	The vertical domain of U.S. AIRMETs is from the surface up to FL450. The content, order, and format of U.S. AIRMETs are not in accordance with Table A6–1A due to national practices, which are described in National Weather Service Instruction 10–811. Traditional Alphanumeric Code AIRMETs are no longer in use over the contiguous U.S., but continue to be used over Alaska and Hawaii. The AIRMET sequence number is not restricted to FIRs. AIRMETs in the U.S. are issued on a routine schedule when moderate turbulence, non-convective low-level wind shear, strong surface winds greater than 30 knots, moderate icing, freezing level, mountain obscuration, or IFR conditions are occurring or are expected to occur. The US does not issue AIRMETs for thunderstorms. AIRMET information is not restricted to FL100 and below and can be provided up to FL450 depending on the phenomena. The U.S. does not use flight level (FL) when describing the altitudes in AIRMETs except for those above FL180. The U.S. uses VORs instead of latitude and longitude to describe the area within an AIRMET.
7.2.3	AIRMETs over the conterminous U.S. (CONUS) and Hawaii are valid for 6 hours and are issued every 6 hours on a scheduled basis. AIRMETs over Alaska are valid for 8 hours and are issued every 8 hours on a scheduled basis. The vertical domain of AIRMETs is from the surface up to FL450. The U.S. also provides a graphical version of the AIRMET (G–AIRMET) that contains 3–hourly time steps valid from 0–hour to 12–hours.
7.4.1	The U.S. does not provide wind shear warnings. The U.S. believes wind shear alerts are timelier to flight crews in landing and takeoff than wind shear warnings and thus provide a greater level of safety. In addition, the information is duplicative in nature in that wind shear warnings could be delayed while wind shear alerts are provided via automated systems that allow for immediate data link to flight crews through ATS systems.
Chapter 9	Service for operators and flight crew members
9.2.3 & 9.2.4	U.S. meteorological offices have no means to communicate directly to flight crews if there is a divergence in the forecast from what is provided in the flight document folder.
9.3.3	U.S. meteorological offices have no means to provide updates to flight document folders or to contact the operator.
PART II	APPENDICES and ATTACHMENTS
APPENDIX 2	Technical specifications related to global systems, supporting centers and meteorological offices
Table A2–2	U.S. TCACs do not provide observed CB clouds in the tropical cyclone advisory message.
5.1.4	U.S. TCACs do not provide observed CB clouds in the tropical cyclone advisory (TCA) message. The U.S. does not provide a graphical version of the TCA.
<b>APPENDIX 3</b>	Technical specifications related to meteorological observations and reports
2.1.2	U.S. METARs and SPECIs are not issued in accordance with Table A3–2 due to national practices, which are described in FAA Order JO 7900.5 and Federal Meteorological Handbook No. 1 (FMH–1). Ranges and resolution for numerical elements included in METAR and SPECI differ from Table A3–5.
2.2	The U.S. does not use the term CAVOK in meteorological reports.
2.3	U.S. practices require SPECI for wind shift when wind direction changes by 45 degrees or more in less than 15 minutes and the wind speed is 10 knots or more throughout the wind shift. Practices do not require SPECI for increases of mean surface wind speed. Practices require SPECI for squall, where squall is defined as a strong wind characterized by a sudden onset in which the wind speed increases at least 16 knots and is sustained at least 22 knots or more for at least one minute. Practices do not require SPECI for wind direction changes based on local criteria. Practices do not require SPECI for the onset, cessation or change in intensity of: freezing fog; low drifting dust, sand or snow; blowing dust, sand or snow (including snowstorm); dust storm; or sandstorm. Practice provides a SPECI when a layer of clouds or obscurations aloft is present below 1000 ft and no layer aloft was reported below 1000 ft in the preceding report. A SPECI is also reported when the ceiling (ceiling is defined in the U.S. as the lowest broken or overcast layer) decreases or increases at these markers: 3000, 1500, 1000, 500 ft or lowest published instrument approach procedures. SPECI is made when referenced weather phenomena cause changes in the visibility, ceiling, sky condition, freezing precipitation (including intensity), hail, or ice pellets.

2.3.3 c)	The U.S. does not issue SPECI for the equivalents in feet of 50, 175, 300, 550 or 600 meters. RVR is measured in increments of 100 feet up to 1,000 feet, increments of 200 feet from 1,000 feet to 3,000 feet, and increments of 500 feet above 3,000 feet to 6,000 feet. SPECI is made when the highest value from the designated RVR runway decreases to less than or if below, increases to equal or exceeds 2,400 feet during the preceding 10 minutes.
3.1.4	Practice to disseminate SPECI for improving conditions as soon as possible after the observation.
4.1.1.2	The U.S. does not provide wind representatives for specific runways but does provide a wind representative for the aerodrome.
4.1.3.1 b)	The United States provides a 2-minute average wind observation for the METAR/SPECI.
4.1.5	The wind direction may be considered variable if, during the 2-minute evaluation period, the wind speed is 6 knots or less. Also, the wind direction must be considered variable if, during the 2-minute evaluation period, it varies by 60 degrees or more when the wind speed is greater than 6 knots. Practices define wind gusts as rapid fluctuations in wind speed with a variation of 10 knots or more between peaks and lulls. Wind speed data for the most recent 10 minutes is examined and a gust, the maximum instantaneous wind speed during that 10-minute period, is reported if the definition above is met during that period.
4.2.4.4	Surface visibility is derived from an automated sensor system and is reported as prevailing visibility in the METAR and SPECI. Tower visibility is the prevailing visibility determined from the airport control tower at locations that also report surface visibility. When visibility is reported from both surface and tower, the lower value (if below 4 miles) is reported in the body of the METAR/SPECI and the other value is reported in the remarks section of the METAR/SPECI.
4.3.4b)	The U.S. does not report in METAR or SPECI marked discontinuity values when RVR passes through values of 800, 550, 300 and 175 meters.
4.3.6	The U.S. reports RVR in increments of 100 feet up to 1,000 feet, increments of 200 feet from 1,000 feet to 3,000 feet, and increments of 500 feet above 3,000 feet to 6,000 feet. The U.S. reports RVR for a single designated runway in the METAR/SPECI. RVR tendency is not reported.
4.4	The following weather elements are augmented manually at designated automated stations observation sites: FC, TS, GR, GS, and VA. At selected airports, additional present weather elements may be provided. With the exception of volcanic ash, present weather is reported when prevailing visibility is less than 7 statute miles or considered operationally significant. Volcanic ash is always reported when observed.
4.4.2.3	GR refers to all hail. All reports of hail include hailstone size diameter in the Remarks (RMK) section of the METAR/SPECI in increments of 1/4 inch. If no hail size is reported it will be assumed to be small hail. Small hail will result in the issuance of a SPECI. GS is used only when snow pellets are observed. The U.S. automated surface observing systems (ASOS, AWOS, AWSS) do not generate an automated report for the occurrence of drizzle or freezing drizzle. The ASOS and AWSS do allow the manual augmentation of these elements to the observations.
4.4.2.8	The practice with respect to the proximity indicator VC is between 5 to 10 statute miles from point of observation.
4.4.2.10	The U.S. does not use "//" to denote the present weather is missing at an automated observing site. The U.S. uses "PWINO" in the remarks section of the METAR and SPECI to denote the present weather is unavailable.
4.5.3	Practice does not provide adjustments for runway thresholds more than 50 feet lower than aerodrome elevation. Applies to KDEN runways 7, 8, 16L, 16R, 17L, 17R, 25, 26, 34L, 34R and 35R, KCLT runway 36C, KCVG runway 36C, KDFW runways 13L and 31R, KLAS runways 25L and 25R, KMEM runways 9 and 18C, KPIT runways 10R, 28L and 32, KSTL runways 6, 12R, 24 and 29, KIND runway 5L, and KRDU runway 5L.

4.5.4	The United States reports only up to 3 layers at automated sites and up to 6 layers at manual sites. Cloud layer amounts are a summation of layers at or below a given level, utilizing cumulative cloud amount. In addition, at automated sites, which are unstaffed, cloud layers above 12,000 ft are not reported. At staffed automated sites, clouds above 12,000 ft may be augmented. CAVOK and NSC are not used. In addition, the US does not use "///" when cloud type cannot be observed; "NCD" when no clouds are detected; or "/////" for CB or TCU when not detected by automated observing systems. In the US, the symbol "///", when used in the cloud section of METAR, refers to a mountain station where the layer is below the station level. The US refers to a cloud Ceiling, with the abbreviation CIG, as the lowest layer reported as broken or overcast, or the vertical visibility into an indefinite ceiling. The US refers to a Variable Ceiling in the METAR and SPECI Remarks (RMK) when the ceiling layer is variable and below 3,000 feet. The range of variability (V) between the two values is included in the Remark, for example "CIG 005V010". This difference is also applicable to Table A3–2, METAR and SPECI.
4.5.4.6 d)	The United States does not provide supplemental section for the METAR rather the U.S provides a Remarks Section (RMK) that contains similar information. U.S. METAR and SPECI contain Remarks that are intended for all operational decision–making. FMH–1 contains the complete description of Remarks. Wind shear is not included in the METAR/SPECI code form in the U.S remarks. Practice is to not use RE and to use beginning and ending times in the remarks section for only recent precipitation and thunderstorms. Sea–surface temperature, the state of the sea and state of the runway are not provided in the METAR/SPECI code form in the U.S. remarks.
4.8	The United States does not provide supplemental section for the METAR rather the U.S provides a Remarks Section (RMK) that contains similar information. U.S. METAR and SPECI contain Remarks that are intended for all operational decision-making. FMH-1 contains the complete description of Remarks. Wind shear is not included in the METAR/SPECI code form in the U.S remarks. Practice is to not use RE and to use beginning and ending times in the remarks section for only recent precipitation and thunderstorms. Sea-surface temperature, the state of the sea and state of the runway are not provided in the METAR/SPECI code form in the U.S. remarks.
APPENDIX 4	Technical specifications related to aircraft observations and reports
3.1.3	The U.S. MWOs do not disseminate special air observations and reports.
APPENDIX 5	Technical specifications related to forecasts
1.1	NWS TAFS are not issued in accordance with Table A5–1 due to national practices, which are described in <i>National Weather Service Instruction 10–813</i> .
1.2	Forecast visibility increments used consist of 1/4 mile from 0 (zero) to 1 mile, 1/2 mile from 1 to 2 miles, and 1 mile above 2 miles. Note: miles are statute miles. Practice defines light winds as less than or equal to 6 knots for using VRB in TAF. Practices require forecast of non-convective low-level wind shear within 2,000 feet of the ground in the Optional Group. The NWS does not use CAVOK and NSC in the TAF. NWS practices do not include TCU in the TAF.
1.3	Change groups and amendment criteria below 1/2 statute mile (800 meters) are not used. The 100-foot (30 meter) change group and amendment criterion is not used. Practice requires TAF to be amended for a 30-degree change with an accompanying wind of 12 knots or greater; for a 10 knot wind increase only when the original was 12 knots or greater; and for a 10 knot wind gust, regardless of mean wind speed. The NWS does not use the change indicator "BECMG." The period of time covered by a TEMPO group is normally kept to a minimum but could be up to four (4) hours. Practice does not amend TAFs for moderate or heavy precipitation.
1.4	The NWS does not use "PROB 40" in the TAF. "PROB 30" will not be used in the first nine (9) hours of every TAF's valid period, including amendments.

APPENDIX 6	Technical specifications related to SIGMET and AIRMET information, aerodrome warnings and wind shear warnings and alerts
Table A6–1A, Template for SIGMET and AIRMET messages	The US does not provide SIGMET and AIRMET information in accordance with Table A6–1A, template for SIGMET and AIRMET messages.
1.1	The content and format of U.S. SIGMETs are not in accordance with Table A6–1A due to national practices, which are described in National Weather Service Instruction 10–811. SIGMETs in the conterminous U.S. (CONUS), i.e. except Alaska and Hawaii, are often valid for more than one FIR. The SIGMET sequence number is not restricted to FIRs. U.S. practices are to issue SIGMET for mountain wave only when accompanied by severe turbulence. Within the-CONUS and coastal waters, convective SIGMETs are issued in lieu of SIGMETS for thunderstorms. SIGMETs are issued by alphanumeric series, e.g., Kilo 1,2,3 etc. SIGMET messages in the CONUS use VORs in place of lat/long and do not reference FIRs. The U.S. does not use flight level (FL) when describing the altitudes in SIGMETs except for those above FL180. The U.S. does not include a specific forecast position for the end of the SIGMET and AIRMET validity time, other than TC and VA. The U.S. does not issue a SIGMETs are issued in lieu of SIGMETS for Tropical Cyclones (TC).
2.1	The content, order and format of U.S. AIRMETs are not in accordance with Table A6–1A due to national practices, which are described in National Weather Service Instruction 10–811. AIRMETs in the conterminous U.S. are often valid for more than one FIR. The AIRMET sequence number is not restricted to FIRs. AIRMETs in the U.S. are issued on a routine schedule for icing, turbulence, sustained surface winds, ceiling/visibility and mountain obscuration. The US does not issue AIRMETs for thunderstorms. AIRMET information is not restricted to FL100 and below and can be provided up to FL450 depending on the phenomena. The U.S. does not use flight level (FL) when describing the altitudes in AIRMETs except for those above FL180. The U.S. uses VORs instead of latitude and longitude to describe the area within an AIRMET.
4.2	The U.S. issues convective SIGMETs in lieu of SIGMETs for thunderstorms over the CONUS. The US does not issue AIRMETs for thunderstorms. Convective SIGMETs are issued hourly for the East, Central, and Western U.S. and thus they do not indicate the FIR. Connective SIGMETs have an outlook section.
4.2.1	<ul> <li>U.S. practices allow for the use of term widespread (WDSPR) for more than 50 percent of the area.</li> <li>Convective SIGMET criteria over the CONUS are:</li> <li>a. A line of thunderstorms at least 60 miles long with thunderstorms affecting at least 40 percent of its length.</li> <li>b. An area of active thunderstorms judged to have a significant impact on the safety of aircraft operations, covering at least 40 percent of the area concerned, and exhibiting a very strong radar reflectivity intensity or a significant satellite or lightning signature.</li> <li>c. Embedded or severe thunderstorm(s) expected to occur for more than 30 minutes during the valid period regardless of the size of the area.</li> </ul>
4.2.9	The U.S. criteria for heavy sandstorm and dust storm is visibility less than or equal to 1/4 SM (400 m). The U.S. criteria for moderate sandstorm and dust storm is visibility greater than 1/4 SM and less than or equal to 1/2 SM (800 m).
5.1	The U.S. issues airport warning messages similar to the ICAO format (Table A6–2, Template for aerodrome warnings) only at selected airports based on criteria per a bilateral agreement between the airport authority and the NWS Forecast Office.
6.2.1	The U.S. does not provide wind shear warnings.

ANNEX 4 – AERONAUTICAL CHARTS		
Chapter 1	Definitions	
Air taxiway	The U.S. does not depict defined surfaces for air-taxiing of helicopters.	
Final approach and take–off area (FATO)	The U.S. does not depict final approach and take-off areas (FATOs).	
Prohibited area Restricted area	The U.S. will employ the terms "prohibited area" and "restricted area" substantially in accordance with the definitions established and, additionally, will use the following terms: "Alert area." Airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft.	
	"Controlled firing area." Airspace wherein activities are conducted under conditions so controlled as to eliminate the hazards to nonparticipating aircraft and to ensure the safety of persons and property on the ground.	
	"Warning area." Airspace which may contain hazards to nonparticipating aircraft in international airspace.	
	"Maneuvering area." This term is not used by the U.S. "Military operations area (MOA)." An MOA is an airspace assignment of defined vertical and lateral dimensions established outside Class A airspace to separate/segregate certain military activities from IFR traffic and to identify for VFR traffic where these activities are conducted.	
	"Movement area." Movement area is defined by the U.S. as the runways, taxiways, and other areas of an airport which are utilized for taxiing, take-off, and landing of aircraft, exclusive of loading ramp and parking areas.	
Touchdown and lift–off area (TLOF)	The U.S. does not use this term.	
Chapter 1.1	Definitions	
Aerodrome reference point	Airport Reference Point is the approximate geometric center of all usable runway surfaces.	
Area Minimum Altitude	Off Route Obstruction Clearance Altitude (OROCA) used.	
Air Transit Route	Term "Helicopter Route" used.	
Arrival Routes	Arrival routes are also identified on Standard Terminal Arrival (STAR).	
Danger Area	The term "danger area" will not be used in reference to areas within the U.S. or in any of its possessions or territories.	
Flight Level	Flight level is related to a reference datum of 29.92 inches of mercury.	
Glide Path	Glideslope is used instead of glide path.	
Helicopter Stand	Helipad is used vice helicopter stand.	
Minimum obstacle clearance altitude (MOCA)	MOCA also assures acceptable navigational signal coverage within 22 NM of a VOR.	
Minimum sector altitude	Minimum Sector Altitude is centered on the navigation facility upon which the procedure is predicated.	
Missed approach point	Missed approach point based on acquiring the required visual reference.	
Movement Area	Movement area also includes areas used by helicopters in taxiing. It does not include loading ramps or parking areas.	
1 mea		

5.1	pertinent.
Chapter 5	Aerodrome Obstacle Chart – ICAO Type C This data is available digitally and is depicted on other individual flight products to which it is
4.2.1	Availability of chart is not dependent on provision of other charts.
4.2.1	pertinent.
4.1	This data is available digitally and is depicted on other individual flight products to which it is
Chapter 4	Aerodrome Obstacle Chart – ICAO Type B
3.2.2	Notification is not made when chart is not required.
3.2.1	Availability of chart is not dependent on provision of other charts.
3.1	This data is available digitally and is depicted on other individual flight products to which it is pertinent.
Chapter 3	Aerodrome Obstacle Chart – ICAO Type A (Operating Limitations)
2.18.3.1	Julian Calendar is also used. Local times are used on select charts.
2.16	Chart typography may vary in conformance to ICAO Standards.
2.15.4	Each aerodrome has its own magnetic variation assigned. IACC specifications require individually assigned magnetic variation values for each airport.
2.15.1	Depiction of magnetic variation differs by chart series and is not always shown.
2.14.1	Airspace depiction differs by chart.
2.12.2	Hypsometric tints differ by chart series.
2.11	Color schemes differ by chart series.
2.9.2	Abbreviations used are from FAA Order JO JO 7340.2, not ICAO Doc 8400.
2.6.2	Some charts have no linear scale.
2.5.7	Conversion scales are not universally used.
2.5.4	Linear dimensions are expressed in feet.
2.4.1	Symbols do not universally conform to Appendix 2.
2.4	Symbols do not universally conform to Appendix 2.
2.3.1	Marginal note layouts vary by chart type
2.2.1	The marginal note layouts, in some cases, differ from those set forth in Appendices 1, 5, and 6.
2.1.8	Sheet size of charts varies dependent on chart type.
2.1.7	Charts are True North oriented except as indicated.
Chapter 2	General Specifications
1.2.2.1	Charts vary in their conformance to ICAO Recommended Practices.
1.2.2	Charts vary in their conformance to ICAO Standards.
procedure Chapter 1.2	Applicability
Visual approach	Visual approach procedure is conducted on an IFR flight plan which authorizes the pilot to proceed visually and clear of clouds to the airport.
Touchdown zone	Touchdown zone is the first 3000 feet of the runway beginning at the threshold.
Terminal arrival altitude (TAA)	Terminal Arrival Areas defined by the extension of the IAF legs and the intermediate segment course.
altitude (OCA) or Obstacle clearance height (OCH)	
Obstacle clearance	Decision Altitude and Decision Height used vice Obstacle Clearance Altitude and Obstacle Clearance Height.

Chapter 6	Precision Approach Terrain Chart – ICAO
6.1	This data is available digitally and is depicted on other individual flight products to which it is pertinent.
Chapter 7	En Route Chart – ICAO
7.1	Simplified versions are not created.
7.6.1	Charts depict only oceanic shorelines and the major lake/river systems forming the U.S./Canadian border.
7.6.2	Off Route Obstruction Clearance Altitude (OROCA) is shown.
7.7	Isogonic date not charted. Isogonic data always reflects the most recent 5 year epoch date
7.9.2	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted.
7.9.3.1.1	Coordinates are shown in degrees, minutes and hundredths of minutes. DME antenna elevation is not shown. Vertical limits of airspace are shown in tabulated data form. RNP values are not shown on routes. Coordinates of significant points are not shown. Bearings are shown to the nearest degree and distances to the nearest mile.
Chapter 8	Area Chart – ICAO
8.1	Area charts produced only where the amount of detail required results in congestion of information on an IFR Enroute Low Altitude chart.
8.3.1	Departure and Arrival routes are not shown.
8.6.1	Charts depict only oceanic shorelines and the major lake/river systems forming the U.S./Canadian border.
8.6.2	Obstacles are not shown.
8.7	Magnetic Variation is not shown unless an isogonic line runs through the area.
8.8.1	Bearings and tracks are not provided as True values. IACC specifications do not accommodate nor require True values.
8.8.2	Bearings and tracks are not provided as true values.
8.9.1	Only airports shown are those with hard surface runways of 3000 feet or longer and/or with an Instrument Approach Procedure.
8.9.2	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted.
8.9.3	Off Route Obstruction Clearance Altitude (OROCA) is shown.
8.9.4.1.1	Coordinates are shown in degrees, minutes and hundredths of minutes. DME antenna elevation is not shown. Vertical limits of airspace are shown in tabulated data form. Terminal routings are not shown. Coordinates of significant points are not shown. Bearings are shown to the nearest degree and distances to the nearest mile. Minimum vectoring altitudes are not shown.
Chapter 9	Standard Departure Chart – Instrument (SID) – ICAO
9.2	Charts are provided only when a procedure has been established.
9.3.2	Charts are not generally drawn to scale.
9.3.3	Scale bar is not shown.
9.4.2	Parallels and meridians are not shown.
9.4.3	Graduation marks are not shown.
9.5	Procedure route is identified in accordance with FAA Order 8260.46
9.6.1	Culture and topography are not shown.
9.6.2	Contour relief is not shown. Obstacles are listed textually.
9.7	Magnetic variation is not shown.
9.8.1	Bearings and tracks are not provided as True values. IACC specifications do not accommodate nor require True values.
9.8.2	Bearings and tracks are not provided as True values.
9.8.3	Bearings, tracks, and radials are not provided as True/Grid values.
9.9.1.2	Any requested secondary airport shown by symbol vs runway pattern.

9.9.2	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when requested by procedure developer.
9.9.3.1	Minimum Sector Altitude is not shown.
9.9.3.2	Area minimum altitudes are not shown.
9.9.4.1.1	Coordinates for NAVAIDs and Significant Points are shown in degrees, minutes and hundredths of minutes. Bearings are shown to the nearest degree and distances to the nearest mile. DME antenna elevation is not shown. Obstacles are depicted textually with position and height, and without regard for penetration of OIS. Minimum vectoring altitudes are not shown.
Chapter 10	Standard Arrival Chart – Instrument (STAR) – ICAO
10.2	Charts are provided only when a procedure has been established.
10.3.2	Charts are not generally drawn to scale.
10.3.3	Scale bar is not shown.
10.4.2	Parallels and meridians are not shown.
10.4.3	Graduation marks are not shown.
10.5	Procedure route is identified in accordance with FAA Order JO 7100.9
10.6.1	Culture and topography are not shown.
10.6.2	Contour relief is not shown. Obstacles are listed textually.
10.7	Magnetic variation is not shown.
10.8.1 10.8.2	Bearings and tracks are not provided as True values.
10.8.3	Bearings, tracks, and radials are not provided as True/Grid values.
10.9.1.1	Airports are shown by symbol vice pattern.
10.9.1.2	Airports are shown by symbol vs runway pattern.
10.9.2	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when requested by procedure developer.
10.9.3.1	Minimum Sector Altitude is not shown.
10.9.3.2	Area minimum altitudes are not shown.
10.9.4.1.1	Bearings are shown to the nearest degree and distances to the nearest mile. Coordinates for NAVAIDs and Significant Points are shown in degrees, minutes and hundredths of minutes. DME antenna elevation is not shown. Minimum vectoring altitudes are not shown.
Chapter 11	Instrument Approach Chart – ICAO
11.3.3	Scale is not shown.
11.3.3.1	Distance circle is not shown.
11.3.3.2	Distance between components and between last component and runway shown.
11.4	Sheet size is 8.25 inches by 5.375 inches
11.5.2	Graduation marks are not shown.
11.7.1	Culture information is not shown. Shaded hydrographic features are shown, but not labeled.
11.7.2	Terrain charting criteria does not include approach gradient steeper than optimal due to terrain.
11.7.3	Terrain is not charted if Std 11.7.2 is not met.
11.8.1	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.
11.9.1	Bearings, tracks, and radials are not shown as true values for RNAV segments.
11.9.2	Only magnetic north values are shown.
11.9.3	Bearings, tracks, and radials are not provided in true/grid values.
11.10.1.1	Only airports specifically requested for charting are shown.
11.10.1.2	Only airports specifically requested for charting are shown.
11.10.2.2	Obstacles that are the determining factor for an OCA/OCH are not necessarily shown.

11.10.2.7	Absence of obstacle free zones are not shown.
11.10.3	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when
	requested by procedure developer.
11.10.4.3	Geographic final approach fix coordinates are not shown.
11.10.5	Minimum Safe Altitudes vice Minimum Sector Altitudes. Terminal Arrival Areas vice Terminal
	Arrival Altitude.
11.10.6.1	Arrowed dotted line is used for MA track. Arrowed dashed line used for Visual track. Times required for the procedure are not shown.
11.10.6.2	Distance to airport from final approach NAVAID is not shown.
11.10.6.3	Missed approach segment is shown by arrowed, dotted line. Arrowed, dashed line is used for visual segments. Times required for the procedure are not shown. Distance between components is shown vice a distance scale.
11.10.6.4	Parentheses are not shown.
11.10.6.5	Ground profile and shaded altitude blocks are not shown.
11.10.7.1	Procedure landing minima are shown vice aerodrome operating minima.
11.10.7.2	Decision Altitude/Height (DA/H) shown vice OCA/H.
11.10.8.2	Altitude/height table is not shown.
11.10.8.3	Altitude/height table is not shown.
11.10.8.4	Rate of descent table is not shown on individual plates, but a combined climb/descent table is available digitally or with printed procedure publication.
11.10.8.5	Descent gradient not shown, threshold crossing height shown in feet, vertical descent angle shown to hundredths of a degree.
11.10.8.6	Threshold crossing height shown in feet. Descent angle shown to the nearest hundredth of a degree.
11.10.8.8	Cautionary note is dependent on multiple criteria.
11.10.8.9	Simultaneous operations notes do not always contain references to runways or procedures.
Chapter 12	Visual Approach Chart – ICAO
12.2	Chart provided only when visual approach procedure has been established.
12.3.2	The scale can vary and also be not-to-scale.
12.3.3	Charts are shown at scale of 1:250,000, IAPs at 1:500,000 or smaller.
12.4	Sheet size is 8.25 inches by 5.375 inches.
12.5.2	Graduation marks are not shown
12.8	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.
12.8 12.9.2	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees
	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.
12.9.2	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.         Bearings, tracks, and radials are not shown as true/grid values.
12.9.2 12.9.3	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.         Bearings, tracks, and radials are not shown as true/grid values.         Grid meridian is not shown.
12.9.2 12.9.3 12.10.1.1	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.         Bearings, tracks, and radials are not shown as true/grid values.         Grid meridian is not shown.         Only airports specifically requested for charting are shown.
12.9.2 12.9.3 12.10.1.1 12.10.1.2	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.         Bearings, tracks, and radials are not shown as true/grid values.         Grid meridian is not shown.         Only airports specifically requested for charting are shown.         Airport elevation is not shown.
12.9.2 12.9.3 12.10.1.1 12.10.1.2 12.10.2.3	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.         Bearings, tracks, and radials are not shown as true/grid values.         Grid meridian is not shown.         Only airports specifically requested for charting are shown.         Airport elevation is not shown.         Height of obstacle above Mean Sea Level is shown.         Datum height not shown. Parentheses are not shown.         Vertical limits of areas are not shown. Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when requested by procedure developer.
12.9.2         12.9.3         12.10.1.1         12.10.2.3         12.10.2.3.1	<ul> <li>Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.</li> <li>Bearings, tracks, and radials are not shown as true/grid values.</li> <li>Grid meridian is not shown.</li> <li>Only airports specifically requested for charting are shown.</li> <li>Airport elevation is not shown.</li> <li>Height of obstacle above Mean Sea Level is shown.</li> <li>Datum height not shown. Parentheses are not shown.</li> <li>Vertical limits of areas are not shown. Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security</li> </ul>
12.9.2         12.9.3         12.10.1.1         12.10.2.3         12.10.2.3.1         12.10.3         12.10.4         12.10.5.3	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.Bearings, tracks, and radials are not shown as true/grid values.Grid meridian is not shown.Only airports specifically requested for charting are shown.Airport elevation is not shown.Height of obstacle above Mean Sea Level is shown.Datum height not shown. Parentheses are not shown.Vertical limits of areas are not shown. Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when requested by procedure developer.Control zones and Traffic zones are not shown.VASI, MEHT, and angle of displacement are not shown.
12.9.2 12.9.3 12.10.1.1 12.10.1.2 12.10.2.3 12.10.2.3.1 12.10.3 12.10.4 12.10.5.3 <b>Chapter 13</b>	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.Bearings, tracks, and radials are not shown as true/grid values.Grid meridian is not shown.Only airports specifically requested for charting are shown.Airport elevation is not shown.Height of obstacle above Mean Sea Level is shown.Datum height not shown. Parentheses are not shown.Vertical limits of areas are not shown. Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when requested by procedure developer.Control zones and Traffic zones are not shown.VASI, MEHT, and angle of displacement are not shown.Aerodrome/Heliport Chart – ICAO
12.9.2         12.9.3         12.10.1.1         12.10.2.3         12.10.2.3.1         12.10.3         12.10.4         12.10.5.3	Magnetic variation is shown only in areas of compass instability and on charts North of 67 degrees of latitude.Bearings, tracks, and radials are not shown as true/grid values.Grid meridian is not shown.Only airports specifically requested for charting are shown.Airport elevation is not shown.Height of obstacle above Mean Sea Level is shown.Datum height not shown. Parentheses are not shown.Vertical limits of areas are not shown. Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted when requested by procedure developer.Control zones and Traffic zones are not shown.VASI, MEHT, and angle of displacement are not shown.

13.6.1	Latitude and longitude graticules are shown vice geographical coordinates. Airport elevations and runway end elevations are shown. Runway length and width are shown in feet. Clearways are not shown. Taxiways and identification only are shown. Standard taxi routes are not shown. Boundaries of air traffic service are not shown. RVR observation sites are not shown. Approach and runway lighting are not shown. VASI systems are not shown. VOR checkpoint and frequency are not shown.
13.6.2	Locations accommodating folding wings tips are not shown.
13.6.3	Helicopter pads only are shown. Touchdown and liftoff areas are not shown. Final approach and takeoff areas are not shown. Safety areas are not shown. Clearways are not shown. Only highest obstacle within parameters of chart is shown. Visual aids are not shown. Declared distances are not shown.
Chapter 14	Aerodrome Ground Movement Chart – ICAO
14.1	Chart is not produced.
Chapter 15	
15.1	Chart is not produced.
Chapter 16	World Aeronautical Chart – ICAO 1:1 000 000
16.2.1	1:1,000,000 Chart Series only produced and made available in areas NOT covered by 1:500,000 Chart Series. (Available in Caribbean area only.)
16.3.1	Linear scales are shown in the following order: nautical miles, statute miles, kilometers.
16.4.3	Charts are folded in eleven vertical panels and one horizontal fold.
16.5.1	Standard parallels are for each 8 degrees and are shown 1 degree and 20 minutes in from the Northern and Southern edges of the chart. Charts are not produced above 80 degrees latitude.
16.5.2	Distance between parallels is 1 degree. Above 56 degrees North, latitude graduation marks are shown only on every even degree of longitude. Distance between longitude meridians is 1 degree. Above 64 degrees North, meridian graduation marks are shown every 5 minutes.
16.5.3.1	Lengths of interval marks are as follow: 1 minute – .045 inches; 5 minutes – .065 inches; 10 minutes – .10 inches on both sides.
16.6	Chart numbering is indicated on Title Panel chart index.
16.7.2.2	Tunnels, if possible, are shown wherever they exist.
16.7.3.2	Roads are not shown within outlined populated areas.
16.7.9.2	Coordinates shown to the nearest minute.
16.7.10.1	Notes will read 'Relief data incomplete' or 'Limits of reliable relief information.'
16.7.12.1	Wooded areas are not shown.
16.7.13	Date of topographic information is not shown.
16.8.2	Date of isogonic information is shown in the chart legend.
16.9.2.2	Other than hard surface runways are shown by symbol.
16.9.3.1	Obstacles greater than 500 feet are shown.
16.9.4	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted.
16.9.7.1	Only aeronautical ground lights that operate continuously are shown.
16.9.7.2	Only marine lights that operate year round, with a range of at least 10 NM, and are omnidirectional are shown.
Chapter 17	Aeronautical Chart – ICAO 1:500 000
17.3.1	Linear scales are shown in the following order: nautical miles, statute miles, kilometers.
17.4.3	Charts are folded in eleven vertical panels and one horizontal fold.
17.4.4	Relationship of chart to WAC series is not shown.
17.5.4.1	The 10 minute interval mark is .10 inches on both sides of the graticule line.
17.6.1.1	Relationship of chart to WAC series is not shown.
17.7.2.2	Tunnels, if possible, are shown wherever they exist. Prominent tunnels are shown pictorially.
17.7.3.1	Roads are shown for radar and visual value and for distinct configurations that provide visual
	checkpoint value.

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17.7.9.2	Coordinates are shown to the nearest minute.
17.7.10.1	Notes will read 'Relief data incomplete' or 'Limits of reliable relief information.'
17.7.12.1	Wooded areas are not shown.
17.7.13	Date of topographic information is not shown.
17.8.2	Date of isogonic information is shown in the chart legend.
17.9.2.2	Other than hard surface runways are shown by symbol.
17.9.3.1	Obstacles greater than 200 feet are shown, except in built up areas where only those greater than 300 feet are shown.
17.9.4	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted.
17.9.7.1	Only aeronautical ground lights that operate continuously are shown.
17.9.7.2	Only marine lights that operate year round, with a range of at least 10 NM, and are omnidirectional are shown.
Chapter 18	Aeronautical Navigation Chart — ICAO Small Scale
18.1	Chart is not produced.
Chapter 19	Plotting Chart – ICAO
19.1	Chart is not produced.
Chapter 20	Electronic Aeronautical Chart Display — ICAO
20.1	Charts provided digitally to operators. Digital charts mimic paper products described above and may not be modified.
Chapter 21	ATC Surveillance Minimum Altitude Chart — ICAO
21.1	Minimum Vectoring Altitude charts are available in electronic format only.
21.9.2	Danger Areas do not exist in the U.S. Prohibited and Restricted airspace, Military Operations Areas, Warning Areas, Alert Areas, and National Security Areas exist and are charted.
Appendix 6	Aeronautical Data Quality Requirements
Table 5. Bearing used for the formation of an en route and of a terminal fix	Whole degree resolution in charting of bearing used for formation of an en route and terminal fix.
Table 5. Bearing used for the formation of an instrument approach fix	Whole degree resolution in charting of bearing used for formation of an instrument approach procedure fix.
Table 6. (Length/ distance/ dimension	Whole NM resolution in charting of distance used for formation of an en route fix.
Distance used for the formation of an en route fix	

Table 6.	Whole NM resolution in charting of distance used for formation of an Arrival or Departure fix.
(Length/	
distance/	
dimension	
Distance used	
for formation of	
an terminal and	
instrument	
approach	
procedure fix	

DOC 10066, PANS-AIM	Procedures for Air Navigation Services Aeronautical Information Management
Chapter 1	Definitions
ASHTAM	The U.S. does not have a series of NOTAM called ASHTAM.
Danger Area	The FAA does not have Danger Area airspace within the U.S.
SNOWTAM	The U.S. does not use the SNOWTAM format.
Chapter 5	Aeronautical Information Products and Services
5.2.1.3.7	The FAA does not produce an AIP Supplement.
5.2.1.4	The FAA does not produce an AIP Supplement.
5.2.5	The U.S. Does not use SNOWTAM format.
5.2.5	The U.S. does not have a series of NOTAM called ASHTAM.
5.2.5	Currently, the U.S. does not utilize the ICAO format for Domestic NOTAMs. The U.S. NOTAMs that are distributed as International NOTAMs may be in ICAO format.
5.4.2	The FAA distribution system does not always match the ICAO standard for formatting, SNOWTAM, and ASHTAM.
Chapter 6	Aeronautical Information Updates
6.1.4	The FAA does not issue Trigger NOTAMs.
Appendix 2	Content of the Aeronautical Information Publication (AIP)
ENR 5.1	U.S. does not use the term Danger Areas. The U.S. describes navigation warnings for Prohibited and Restricted airspace, Warning Areas, Military Operations Areas, Alert Areas, Controlled Firing Areas, and National Security Areas.
Appendix 3	NOTAM Format
Entire Appendix	Currently, the U.S. does not utilize the ICAO format for Domestic NOTAMs. The U.S. NOTAMs that are distributed as International NOTAMs may be in ICAO format.
Appendix 4	SNOWTAM Format
Entire Appendix	The U.S. does not use the SNOWTAM format.
Appendix 5	ASHTAM Format
Entire Appendix	The U.S. does not have a series of NOTAM called ASHTAM.
Appendix 7	Predetermined Distribution System for NOTAM
Entire Appendix	The FAA distribution system does not always match the ICAO standard for formatting, SNOWTAM, and ASHTAM.

ANNEX 5 – UNITS OF MEASUREMENT TO BE USED IN AIR-GROUND COMMUNICATIONS	
Chapter 3	Standard application of units of measurement
3.2.2 Table 3–3 Table 3–4	Table 3-4 Ref 1.12, runway length and Ref 1.13 runway visual range, unit of measure is in feet.Table 3-4 Ref 1.16, visibility unit of measure is statute miles (SM).Table 3-4 Ref 3.2, altimeter setting, unit of measure is reported as inches of mercury.Table 3-4, Ref 3.3, atmospheric pressure, unit of measure is in inches of mercury.
Attachment B	Guidance on the application of System of Units (SI)
5.4.2	Specifications differ from Attachment B, Style and usage, Para 5.4 Numbers. Comma is not acceptable as a decimal marker. Comma is used to separate digits in groups of three.

ANNEX 6 - OPERATION OF AIRCRAFT	
Part I	
Chapter 3	General
Chapter 3 Reference 3.3.6	The U.S. Flight Quality Assurance Program is a voluntary program.
Chapter 4	Flight Operations
Chapter 4 Reference 4.2.2.3	U.S. regulations exempt a single pilot in a 9-or-less seating configuration operation from having a maintenance manual. Rather, U.S. regulations (CFR 135.411) require a single pilot to comply with the maintenance requirements in CFR 91 and 43 in lieu of a maintenance manual or program.
Chapter 4 Reference 4.3.2	For multiengine, aeroplanes, commuter and on-demand operators are required to maintain fuel and oil records as part of the load manifest for 30 days rather than 3 months. For single engine aeroplanes, commuter and on-demand operators are not required to maintain fuel and oil records.
Chapter 4 Reference 4.3.4.1.2	The FAA treats takeoff alternates differently. Take off alternate: for airplanes with 3 or more engines SP/59/4.1 states that the take-off alternate aerodrome must be located within the following flight time distance from the aerodrome of departure: two hours of flight time at an all-engine operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass. FAR 121.617 states 2 hours at normal cruising speed with one engine inoperative.
Chapter 4 Reference 4.3.8.2	The U.S. requires descent within four minutes to 14,000 ft not 13,000 ft, in the event of loss of pressurization. For commuter and on-demand operations, the descent altitude is 15,000 ft.
Chapter 4 Reference 4.9.2	The U.S. allows turbo-jets that are certificated for single pilot operations.
Chapter 5	Aeroplane performance operating limitations
Chapter 5 Reference 5.2.8.1	The United States does not have specific regulations that require the loss of Runway length be considered due to alignment of the airplane prior to takeoff. However, the United States does within its aircraft certification regulations require aircraft performance be determined by using the point on the runway where takeoff is started when computing takeoff distance. This same criteria is used when computing runway available for accelerate/stop distance. Accounting for runway loss due to alignment is done within each air carrier's approved operations manual.
Chapter 5 Reference 5.4.1	The U.S. does not require turbine engine reliability to have a power loss rate of less than 1 per 100,000 engine hours, a radio altimeter, two attitude indicators, airborne weather radar, a certified navigation system to identify aerodromes as forced landing areas, or an engine fire warning system.
Chapter 5 Reference 5.4.2	The U.S. does not require an automatic trend monitoring system on aeroplanes certificated after 1 January 2005.
Chapter 6	Aeroplane instruments, equipment and flight documents
6.3.2.3.2	Effective 1 January 2021, the United States will not have implemented the referenced standard because 14 CFR part 25 does not include the subject requirement for a 25-hour cockpit voice recorder.
Chapter 6 Reference 6.17.2	The U.S. does not require an ELT unless operated over water or remote areas.
Chapter 6 Reference 6.17.3	The U.S. does not require an ELT unless operated over water or remote areas.
Chapter 6 Reference 6.17.4	The U.S. does not require an ELT unless operated over water or remote areas.

Chapter 6 Reference 6.17.5	The U.S. does not require an ELT unless operated over water or remote areas.
Chapter 6 Reference 6.19.2	The U.S. does not require pressure altitude information with a resolution of 25 feet or better.
Chapter 6 Reference 6.19.3	The U.S. does not require pressure altitude information with a resolution of 25 feet or better.
Chapter 6 Reference 6.4.1	The U.S. does not require a time piece.
Chapter 6 Reference 6.4.2	The United States does not require aeroplanes on VFR flights, when operated as controlled flights, to be equipped in accordance with the requirements for aeroplanes operated under instrument flight rules.
Chapter 6 Reference 6.5.1	Seaplanes are not required to have equipment for making the sound signals prescribed in the International Regulations for Preventing Collision at Sea. Seaplanes are not required to be equipped with sea anchor.
Chapter 6 Reference 6.5.3.1	The United States defines extended over water operations for aircraft other than helicopters as an operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline.
Chapter 6 Reference 6.12	The United States does not require equipment to measure cosmic radiation.
Chapter 6 Reference 6.15.6	The U.S. does not require ground prox systems for piston powered airplanes.
Chapter 6 Reference 6.20.2	The U.S. does not require pressure altitude information with a resolution of 25 feet or better.
Chapter 6 Reference 6.20.3	The U.S. does not require pressure altitude information with a resolution of 25 feet or better.
Chapter 6 Reference 6.21	The United States does not require crewmembers on flight deck duty to communicate through boom or throat microphones below the transition level/altitude.
Chapter 6 Reference 6.23	The U.S. requires an autopilot for IFR passenger operations, not for VFR or cargo operations. A) The U.S. does not require a boom microphone. B) The U.S. requires charts be available and used.
Chapter 8	Aeroplane Maintenance
Chapter 8 Reference 8.1.3	The person signing the maintenance release must have a CFR 65 certificate.
Chapter 8 Reference 8.4.2	The United States requires that records of work be retained until the work is repeated, superseded by other work or for one year after the work is performed, but does not require the records be retained after the unit has been permanently withdrawn from service.
Chapter 8 Reference 8.7.1.1	Left Intentionally Blank
Chapter 9	Aeroplane flight crew
Chapter 9 Reference 9.4.2.1	The U.S. does not have currency requirements for cruise relief pilots.
Chapter 9 Reference 9.4.2.2	The U.S. does not have currency requirements for cruise relief pilots.
Chapter 9 Reference 9.4.3.2	The United States requires air carrier pilots "before beginning a flight become familiar with all available information concerning the flight." It does not require the pilot to demonstrate this knowledge.

Chapter 9 Reference 9.4.3.5	The U.S. does not restrict operators from using a pilot as a pilot-in-command on a route where the pilot has not, within the preceding 12 months, made at least one trip between the terminal points of that route as a pilot member of the flight crew, or as an observer on the flight deck except for special areas and airports.
	A list of U.S. Special airports may be found at the following link: http://fsims.faa.gov/PICDetail.aspx?docId=AD20682A64001B6686257B71005E5B74
Chapter 9 Reference 9.4.3.6	The U.S. does not have an area/route 12 month currency requirement for pilots in command, except for special areas and airports.
Chapter 9 Reference 9.4.4.1	For PICs, the U.S. requires 1 proficiency checks per 12 months and either proficiency check or an approved simulator training course, for SICs, the U.S. requires 1 proficiency check each 24 months and another proficiency check or an approved simulator training course every 12 months.
PART II	
Section I	General
Chapter 1.1	Definitions
Continuous descent final approach (CDFA)	The FAA does not believe "circling or visual flight maneuver" needs to be added to the definition of a CDFA. The primary reason for a CDFA is to maintain a continuous rate of descent from the FAF, through the MDA until 50 feet above the threshold in the FAS of an NPA. A circle or visual flight maneuver is contrary to the CDFA, the aircraft must stop at the MDA and transition to level flight in order to accomplish the circling or visual flight maneuver to landing. The FAA does recognize that a constant descent rate, not to exceed 1000 ft/min, is normally used to accomplish the descent from the FAF to the circling MDA where level flight is maintained to accomplish the maneuver. This rate of descent may vary due to the design of the circle and/or category of the aircraft. The procedure for accomplishing a circling maneuver has not changed over time, versus, changing the technique for flying a FAS from a "dive and drive" maneuver to a CDFA.
Low-visibility operations (LVO)	FAA defines LVO only as a condition regarding ground operations; not as it pertains to approach and takeoff operations. Further, the FAA sets the threshold for LVO at an RVR of 1200 feet or 350 meters.
Section II	General Aviation Operations
Chapter 2.2	Flight Operations
2.2.2.1.1	The FAA allows general aviation operations to 100' HAT using enhanced flight visions systems when actual visibility is below the newly established ICAO LVO threshold, without a specific approval.
2.2.2.5	The FAA allows general aviation instrument approach operations down to MDA or CAT I DA, irrespective of ceiling and visibility, without a specific approval. Further, these operations may be conducted without RVR information.
2.2.2.2.6	The FAA allows general aviation and fractional ownership operators to conduct takeoffs with visibility below the newly established ICAO LVO threshold without a specific approval
2.2.3.4.3	In addition to the Standard prescribed in Annex 6, Part II, 4.6.4, the U.S. prohibits a pilot from taking of a US registered large or turbine-powered multi-engine general aviation
	aeroplane if there is frost, snow, or ice adhering to critical systems, components, and surfaces of the aircraft.
Chapter 2.4	aeroplane if there is frost, snow, or ice adhering to critical systems, components, and
Chapter 2.4 2.4.2.6.1	aeroplane if there is frost, snow, or ice adhering to critical systems, components, and surfaces of the aircraft.

2.4.4.1	The United States does not require all seaplanes on all flights to be equipped with one life jacket or equivalent individual floatation device for each person on board; equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea; and anchor or a sea anchor (drogue).
2.4.5	Airplanes operated over land areas designated as areas in which search and rescue would be especially difficult are not required to be equipped with signaling devices or life-saving equipment. The United States does not designate areas in which search and rescue would be especially difficult, and therefore does not require such additional equipment.
2.4.8	Airplanes operated under visual flight rules at night are not required to be equipped with c) to f) a) a turn and slip indicator; b) an altitude indicator (artificial horizon); c) a heading indicator (directional gyroscope); d) a means of indicating whether the supply of power to the gyroscopic instruments is adequate; 3) a sensitive pressure altimeter; f) a means of indicating the outside air temperature; g) a timepiece with a sweep second hand; h) an airspeed indicating system with a means of preventing malfunctioning due to condensation or icing; i) a rate-of-climb and descent indicator; j) a landing light; k) illumination for flight instruments and equipment; l) lights in passenger compartments; and m) a flashlight (electric torch) for each crew member station.
2.4.11.4	Ground proximity warning systems are not required on general aviation aircraft, including turbine-engine airplanes with a take-off mass greater than 5700 kg or capable of carrying more than nine passengers.
Chapter 2.5	Aeroplane Communication, Navigation and Surveillance Equipment
2.5.1.1	Except when operating under controlled flight, airplanes operated at night are not required to have radio communications equipment capable of conducting two-way communications. United States requirements for radio communications equipment are based upon the type of airspace in which the operation occurs, and not on the time of the day.
2.5.1.2	When more than one radio communications equipment unit is required, the United States has no provision that each unit be independent of any other.
2.5.1.4	Except when operating under controlled flight, airplanes on extended flights over water or on flights over underdeveloped land are not required to have radio communications equipment capable of conducting two-way communications.
2.5.2.1	The United States has no provisions concerning requirement aircraft navigation instruments enabling a flight to proceed in accordance with a flight plan, prescribed RNP types, or the air traffic services provided. The United States does not specify a minimum distance between landmark references used by flight operating under visual flight rules.
2.5.2.7 (b)	The FAA monitors RVSM performance on a continual basis via ADS-B
2.5.2.9	Though the FAA does not have RVSM operational reporting requirements, it does have a quality assurance requirement in 14 CFR appendix G Sections 2,3, and 4. In addition, RVSM operational deviation may be noted by FAA ATC and reported the FAA Office of Aviation Safety for disposition as deem appropriate.
2.5.2.12	Airplanes are not required to have navigation equipment to ensure that in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment will enable the aeroplane to proceed in accordance with Annex 6, Part II, 2.2.1. to 7.2.3.
Chapter 2.6	Aeroplane maintenance
2.6.2.2.	The FAA established Title 14 Code of Federal Regulations section 43.10, which speaks to the disposition of parts, removed from type-certificated products. After April 15, 2002, each person who removes a life-limited part from a type certificated product must ensure that the part is controlled using: a record keeping system; tag or record attached to part; non-permanent marking; permanent marking; or segregation.

Chapter 2.7	Aeroplane flight crew
2.7.2.2	Only pilot operating aircraft with TCAS under 14 CFR parts 91 (subpart K), 121, and 135 are required to having on the use of TCAS.
Appendix 2.4	General aviation specific approvals
2. SPECIFIC APROVAL TEMPLATE	The FAA monitors RVSM performance on a continual basis via ADS-B.
Section III	Large and Turbojet Aeroplanes
Chapter 3.6	Aeroplane instruments, equipment and flight documents
3.6.1.1.2	The United States does not base requirements for flight data recorders on aircraft mass, but on passenger and engine configuration.
PART III	•
Section I	General
Chapter 1	Definitions
Continuous descent final approach (CDFA).	The FAA does not believe "circling or visual flight maneuver" needs to be added to the definition of a CDFA. The primary reason for a CDFA is to maintain a continuous rate of descent from the FAF, through the MDA until 50 feet above the threshold in the FAS of an NPA. A circle or visual flight maneuver is contrary to the CDFA, the aircraft must stop at the MDA and transition to level flight in order to accomplish the circling or visual flight maneuver to landing. The FAA does recognize that a constant descent rate, not to exceed 1000 ft/min, is normally used to accomplish the descent from the FAF to the circling MDA where level flight is maintained to accomplish the maneuver. This rate of descent may vary due to the design of the circle and/or category of the aircraft. The procedure for accomplishing a circling maneuver has not changed over time, versus, changing the technique for flying a FAS from a "dive and drive" maneuver to a CDFA.
Low-visibility operations (LVO).	FAA defines LVO only as a condition regarding ground operations; not as it pertains to approach and takeoff operations. Further, the FAA sets the threshold for LVO at an RVR of 1200 feet or 350 meters
Section II	International Commercial Air Transport
Chapter 2 Reference	Intentionally left blank.
2.2.3.1 Chapter 2 Reference	Intentionally left blank
Chapter 2 Reference 2.2.4.2	
Chapter 2 Reference	Helicopter operators are not required to maintain fuel and oil records showing that the requirements of 2.3.6 have been met.
2.2.9.1 Chapter 2 Reference 2.2.9.2 Chapter 2 Reference	Helicopter operators are not required to keep fuel and oil records for three months, though there is a requirement that load manifests be retained for 30 days. Intentionally left blank
2.2.12 Chapter 2 Reference 2.3.2	The pilot-in-command is not required to ensure that all persons on board are aware of the location and general manner of use of the principal emergency equipment carried for collective use.
Chapter 2 Reference 2.3.2 Chapter 2 Reference	The United States requires that flight preparation forms must be retained for 30 days, not three months. The United States does not require that the operations manual describe the contents and use
2.3.3.2	of the operational flight plan, but does require establishing procedures for locating each flight. Intentionally left blank
Chapter 2 Reference 2.3.6.2.	
Chapter 2 Reference	The fuel requirements for commuter and on demand operations are expressed in terms of flight time and do not include a specific altitude requirement.
2.3.6.3 Chapter 2 Reference	The United States does not require IFR helicopter operations to maintain a specific altitude

Chapter 2 Reference	Fuel reserves for IFR helicopter operations is 30 minutes at normal cruise speed beyond the
2.3.6.3.2	alternate heliport.
Chapter 2 Reference	The U.S. has no provisions addressing when a suitable alternate is unavailable. If the
2.3.6.3.3	destination weather so requires, an alternate must be specified and 30 minute fuel reserved
	must be carried.
Chapter 2 Reference	The operations manual does not include procedures for loss of pressurization and other
2.3.6.4	contingencies.
Chapter 2 Reference	The United States does not require oxygen at all times for passengers experiencing cabin
2.3.8.1	pressure altitudes above 13,000 ft (620hPa). Oxygen for all passengers is not required until
2.0.011	15,000 ft (4,572m).
Chapter 2 Reference	The United States does not require oxygen at all times for passengers experiencing cabin
2.3.8.2	pressure altitudes above 13,000 ft (620hPa). Oxygen for all passengers is not required until
2.3.6.2	15,000 ft (4,572m).
Chapter 2 Reference	The pilot-in-command is not specifically required, prior to commencing a flight, to be
*	
2.4 Chapter 2 Reference	satisfied that any load carried is safely secured. The United States does not utilize a 1,000 ft minimum for non-precision approaches
	The Onited States does not utilize a 1,000 it minimum for non-precision approaches
2.4.1.3	The United States allows for maternals and an different the estimated time of animal and
Chapter 2 Reference	The United States allows for meteorological conditions at the estimated time of arrival and
2.6.2.2 Chapter 2 Reference	for one hour after the estimated time of arrival, not two hours.
	The United States allows the continuation of an approach regardless of the reported weather.
2.6.3.2	
Chapter 2 Reference	The United States does not require that a specific altitude above the alternate be maintained.
2.8.3.1	
Chapter 2 Reference	The United States does not require that a specific altitude above the alternate be maintained.
2.8.3.2	
Chapter 2 Reference	The U.S. does not require that the procedures for loss of pressurization, where applicable, or
2.8.4	failure of one power-unit while en route, be part of the required fuel and oil computations.
Chapter 2 Reference	The U.S. requirement for use of breathing oxygen by flight crew members applies only to
2.10	altitudes above 14000 ft (4,267m).
Chapter 2 Reference	During an emergency, the pilot-in-command is not required to ensure that all persons on
2.11	board the aircraft are instructed in emergency procedures.
Chapter 2 Reference	The pilot-in-command is not specifically required to discontinue a flight beyond the nearest
2.14	suitable aerodrome when flight crew member's capacity to perform functions is
	significantly reduced by impairment of faculties from causes such as fatigue, sickness, and
	lack of oxygen.
Chapter 3 Reference	US does not specify or restrict helicopter operations based on performance, class or
3.1.1	category. (See definition of performance class in Annex 6, Part III, Section 1).
Chapter 3 Reference	The United States does not specify or restrict helicopter operations based on performance
3.2.1	class or category (see definition of Performance Class in Annex 6, Part III, Section 1)
Chapter 3 Reference	US does not require the helicopter weight limitations found I n3.2.7 a), c), and d).
3.2.7	
Chapter 4 Reference	US does not require carriage of a copy of the air operator's certificate.
4.1.2	
Chapter 4 Reference	The United States does not require break-in points.
4.1.4.1	
Chapter 4 Reference	The United States does not require break-in points.
4.1.4.2	
Chapter 4 Reference	a) first aid equipment is not required on helicopters b) Us has no provisions that fire
4.2.2	extinguishers, when discharge, will not cause dangerous contamination of the air within the
	helicopter c) (3) US has no provisions for a safety harness device to prevent interference
	with flight controls should a pilot become incapacitated.
Chapter 4 Reference	The US does not require marking of break-in points.
4.2.4.1	
Chapter 4 Reference	The U.S. does not require marking of break-in points.
4.2.4.2	· ···· · · · ·························
Chapter 4 Reference	Life-saving rafts are not required on helicopters operating on flights over water.
4.3.2.3	
1.0.2.0	1

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Chapter 4 Reference	Helicopters operated over land areas designated as areas in which search and rescue would
4.4	be especially difficult are not required to be equipped with signaling devices or life-saving
	equipment. The U.S. does not designate areas in which search and rescue would be
	especially difficult and therefore does not require such additional equipment.
Chapter 4 Reference	Helicopters flown over water in passenger operations are not required to be certified for
4.4.2	ditching but only to be equipped with flotation devices.
Chapter 4 Reference	B) and C) Life saving rafts and pyrotechnic devices are only required for extended
4.5.2.1	over-water operations. That is in respect to helicopters in operations over water with a
1.5.2.1	horizontal distance of more than 50 NM from the nearest shore line and more than 50 NM
	form an off-shore heliport structure.
Chapter 4 Reference	The U.S. does not require helicopters to carry a specific document attesting noise
4.6	certification. However, the helicopter's type certificate is the de facto document that the
4.0	
	helicopter complied with the noise certification requirements at the time it received FAA
Chanton 4 Defense	type certification.
Chapter 4 Reference	Helicopters operated over land areas designated as areas in which search and rescue would
4.6	be especially difficult are not required to be equipped with signaling devices or life-saving
	equipment. The U.S. does not designate areas in which search and rescue would be
	especially difficult and therefore does not require additional equipment.
Chapter 4 Reference	The U.S. requires transponders only in certain airspace.
4.9.1	
Chapter 4 Reference	The U.S. does not require helicopters to carry a specific document attesting noise
4.11	certification. However, the helicopter's type certificate is the de facto document that the
	helicopter complied with the noise certification requirements at the time it received FAA
	type certification.
Chapter 4 Reference	The U.S. requires transponders only in certain airspace.
4.13	
Chapter 4 Reference	The U.S. does not require crew members flight deck duty to communicate through boom or
4.14	throat microphone.
Chapter 5 Reference	Except when operating under controlled flight, helicopters are not required to have radio
5.1.1	communications for night operators.
Chapter 5 Reference	The U.S. does not require that the radio communications equipment specified in 5.1.1 be
5.1.2	independent of the other or others to the extent that failure in my any one will not result in
	failure of any other.
Chapter 5 Reference	Except when operating under controlled flight, helicopters on extended flights over water or
5.1.4	on flights over underdeveloped land are not required to have radio communications
	equipment.
Chapter 5 Reference	The U.S. has no provision that visual landmarks used in VFR be located at least every 60
5.2.1	NM (110km).
Chapter 5 Reference	The United does not require a helicopter to be provided with navigation equipment in
5.2.1	accordance with RNP types for navigation with the United States. However, the United
	States does provide information and operations specifications for IFR operating
	requirements when U.S. operators and aircraft conduct operations in the European Airspace
	Designated for Basic Area Navigation (RNP-5 and 10).
Chapter 6 Reference	All United States helicopters used in commercial air transport are certified as commuter or
6.1.1	on demand operations. Maintenance on United States commuter and on demand helicopters
0.1.1	may be performed by either an approved maintenance organization, a certified mechanic, or
Chapter 6 Reference	by persons under the supervisions of a certified mechanic. The U.S. requires that records of work must be retained until the work is repeated,
6.2.2	superseded by other work, or for one year after the work is performed.
Chapter 6 Reference	The U.S. does not require an operator's maintenance training program to include training in
6.3.1	
Chapter 6 Reference	knowledge and skills related to human performance. The U.S. requires that records of work be retained until the work is repeated, superseded by
6.4.2	
0.4.2	other work for one year after the work is performed, but does not require the records be
Chapter 6 Reference	retained after the until has been permanently withdrawn from service. The U.S. requires that records of work must be retained until the work is repeated,
6.8.2 Chapter 7 Reference	superseded by other work, or for one year after the work is performed.
	Helicopter pilots are not required to demonstrate to the operator an adequate knowledge of the specific areas described in 7.4.3.2
7.4.2.2	the specific areas described in 7.4.3.2

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Chapter 7 Reference	The U.S. practice is to require a spare set of correcting lenses only when a flight crew
7.5	member's defective visual acuity necessitates a limitation on the pilot's medical certificate.
Chapter 9 Reference	The U.S. does not require that an operator keep a list of the emergency and survival
9.5	equipment carried on board any of their helicopters engaged in international air navigation.
Chapter 11 Reference	A checklist containing procedures to be followed in searching for a suspected bomb is not
11.1	required to be aboard the aircraft. The U.S. requires that crew members be trained in dealing
	with explosives that may be on board an aircraft, but this does not necessarily include
	training on how to search for an explosive.
Chapter 11 Reference	The U.S. does not require an operator to establish and maintain a training program that
11.2.1	enables crew members to act in the most appropriate manner to minimize the consequences
	of acts of unlawful interference.
Chapter 11 Reference	The U.S. does not require an operator to establish and maintain a training program that
11.2.2	enables crew members to act in the most appropriate manner to minimize the consequences
	of acts of unlawful interference.
Chapter 11 Reference	The pilot-in-command is not required to submit, without delay, a report of an act of
11.3	unlawful interference to the designated local authority.
Section III	International General Aviation
	Intentionally left blank

ANNEX 7 – AIRC	ANNEX 7 – AIRCRAFT NATIONALITY AND REGISTRATION MARKS	
3.3.1 and 4.2.1	The marks on wing surfaces are not required.	
3.2.5 and Section 8	Identification plates are not required on unmanned, free balloons.	
4.2.2	The minimum height of marks on small (12,500 lb or less), fixed-wing aircraft is 3 inches when none of the following exceeds 180 knots true airspeed: (1) design cruising speed; (2) maximum operating limit speed; (3) maximum structural cruising speed; and (4) if none of the foregoing speeds have been determined for the aircraft, the speed shown to be the maximum cruising speed of the aircraft.	
Section 6	A centralized registry of unmanned free balloons is not maintained. Operators are required to furnish the nearest ATC facility with a prelaunch notice containing information on the date, time, and location of release, and the type of balloon. This information is not maintained for any specified period of time.	
Section 8	<ul> <li>United States Identification plate does not have nationality or registration mark.</li> <li>ICAO ID plate information required by Annex 7.8 does not include nationality or registration mark.</li> <li>Also for non Part 121 and commuter aircraft, location must be either adjacent to and aft of the rear-most entrance door or on the fuselage near the tail surfaces.</li> </ul>	

ANNEX 8 - AIRWOI	RTHINESS OF AIRCRAFT
PART II Procedures for Certification and Continued Airworthiness	
Chapter 1	Type Certification
1.2.5	ICAO requires that the design of an aircraft under ICAO Annex 8, Parts IIIB, IVB, and V use alternative fire extinguishing agents to halon in the lavatories, engines, and auxiliary power units. The United States does not have a similar requirement.
PART III Aeroplanes	5
Part IIIA	
Chapter 4	Design and Construction
4.1.6 (b), 4.1.6 (g), 4.1.6 (h), 4.1.6 (i)	The United States does not have similar requirements. The FAA has begun work in an effort to amend the U.S. regulations with the purpose of eventually meeting the intent of these provisions.
Chapter 8	Instruments and Equipment
8.4.1	ICAO requires that airplanes operating on the movement area of an airport shall have airplane lights of such intensity, color, fields of coverage and other characteristics to furnish personnel on the ground with as much time as possible for interpretation and for subsequent maneuver necessary to avoid a collision. The FAA has no such requirement.
8.4.2 (b)	This provision addresses the lights' affect on outside observers in reference to "harmful dazzle." The U.S. regulations do not address the affect of aircraft lights on outside observers. However, visibility to other pilots and the lights' affect on the flight crew is addressed.
Chapter 9	Operating Limitations and Information
9.3.5	The United States does not have similar requirements. The FAA has begun work in an effort to amend the U.S. regulations with the purpose of eventually meeting the intent of these provisions.
Chapter 11	Security
11.2, 11.3, 11.4	With the exception of the door required by 11.3, the United States does not have similar re- quirements. The FAA has begun work in an effort to amend the U.S. regulations with the purpose of eventually meeting the intent of these provisions.
Part IIIB	Large Aeroplane Certification
Chapter 3	Structure
3.8.2	The corresponding FAA requirement does not specify the use of failsafe principles; howev- er, the FAA does advise the use of failsafe principles.
Chapter 4	Design and Construction
4.1.6	On November 28, 2008, the FAA adopted new regulations that meet the intent of these pro- visions. However, Part IIIB applies to airplanes with a date of application of March 2, 2004 or later, but the U.S. requirements apply to airplanes with a date of application of November 28, 2008 or later.
4.2 g)4)	The United States has not modified regulations to require manufacturers to include the elements of the aeroplane design associated with cargo compartment fire protection and a summary of the demonstrated standards that were considered in the process of aeroplane certification, in the documentation made available to the operator for those aircraft certificated on or after 1 January 2025.

D.2 (g)	Paragraph D.2.g.1 of the ICAO standard requires a fire suppression system for each cargo compartment accessible to a crewmember in a passenger–carrying airplane. U.S. requirements permit manual fire fighting in an accessible cargo compartment by a crewmember or members for an all–passenger–carrying airplane or a passenger–cargo combination carrying airplane.
	Additionally, the FAA does not have specific requirements to consider the effects of explo- sions or incendiary devices.
D.2 (h)	The United States does have provisions to protect against possible instances of cabin depres- surization. However, the FAA does not have specific requirements to consider the effects of explosions or incendiary devices.
F.4.1	ICAO requires that airplanes operating on the movement area of an airport shall have airplane lights of such intensity, color, fields of coverage and other characteristics to furnish personnel on the ground with as much time as possible for interpretation and for subsequent maneuver necessary to avoid a collision. The U.S. has no such requirement.
Chapter 7	Operating Limitations and Information
7.3.5	The United States does not have similar requirements. The FAA has begun work in an effort to amend the U.S. regulations with the purpose of eventually meeting the intent of these provisions.
Chapter 10	Security
10.3.1, 10.3.2	The FAA has a door requirement, but no requirements addressing bulkheads, floors, etc. On January 5, 2007, the FAA published Notice of Proposed Rulemaking that, when adopted, will meet the intent of these provisions.
PART IV Helicopters	5
Part IIIB	Large Aeroplane Certification
Chapter 2	Design and Production
4.2	The United States does not have a specific requirement for physical separation of systems. However, physical separation is considered in the means of compliance to various regula- tions such as 25.1309, 25.901(c) and 25.903(d).
Part IVA	
Chapter 2	Flight
2.2.3.1, 2.2.3.1.1 – 2.2.3.1.4	These provisions address take–off performance data for all classes of helicopters and require that this performance data include the take–off distance required. However, the United States has adopted the requirements only for Category A helicopters.
Chapter 6	Rotor and Power Transmissions Systems and Powerplant Installation
6.7	This provision requires that there be a means for restarting a helicopter's engine at altitudes up to a declared maximum altitude. In some cases the FAA does not require demonstration of engine restart capability. Since there is a different level of certitude for transport and nor- mal category helicopters in the United States, the engine restart capability is only required for Category A and B helicopters (14 CFR Part 29) and Category A normal helicopters (14 CFR Part 27).
Chapter 7	Instruments and Equipment
7.4.2	This provision addresses the need to switch off or reduce the intensity of the flashing lights. The United States has minimum acceptable intensities that are prescribed for navigation lights and anti-collision lights. No reduction below these levels is possible.
7.4.2 (b)	This provision addresses the lights' affect on outside observers in reference to "harmful dazzle." The U.S. regulations do not address the affect of aircraft lights on outside observers. However, visibility to other pilots and the lights' affect on the flight crew is addressed.

8.4.2 (b)	This provision addresses the lights' affect on outside observers in reference to "harmful dazzle." The U.S. regulations do not address the affect of aircraft lights on outside observers. However, visibility to other pilots and the lights' affect on the flight crew is addressed.
Part IVB	
Chapter 6	Systems and Equipment
6.5	U.S. regulations do not address electromagnetic interference from external sources. High Intensity Radiated Fields (HIRF) are addressed by Special Conditions but only for flight critical systems, not flight essential systems.
PART V Small Aer	oplanes
Chapter 8	Crashworthiness and Cabin Safety
8.5 (e)	The FAA provides requirements for emergency lighting systems in 14CFR 23.812. These requirements do not address the impact of the fuel spillage on emergency lighting systems. Only commuter category airplanes are required to install emergency lighting systems.

ANNEX 9 - FAC	CILITATION
	ences include Guam, Puerto Rico, and the U.S. Virgin Islands. The status of implementation of with respect to public health quarantine is not covered in the list of differences.
Chapter 2	Entry and Departure of Aircraft
2.3	Written crew baggage declaration is required in certain circumstances, and a special Embarkation/Disembarkation Card is required for most alien crew members.
2.4	A General Declaration for all inbound and for outbound flights with commercial cargo are required. However, the General Declaration outbound flights with commercial cargo shall not be required if the declaratory statement is made on the air cargo manifest. No declaration is required for outbound flights without commercial cargo if Customs clearance is obtained by telephone.
Remarks	19 CFR 122
2.4.1	Each crew member must be listed showing surname, given name, and middle initial.
2.4.4	The signing or stamping of the General Declaration protects the carrier by serving as proof of clearance.
2.5	The crew list is required by statute.
2.7	There is a statutory requirement for the Cargo Manifest.
2.8	In order to combat illicit drug smuggling, the U.S. requires the additional following information: the shipper's and the consignee's name and address, the type of air waybills, weight, and number of house air waybills. The manifest submitted in electronic form may become legally acceptable in the future. However, until the compliance rate for the automated manifest is acceptable, the U.S. must be able to require the written form of the manifest.
Remarks	19 CFR 122.48
2.9	Nature of goods information is required.
2.10	Stores list required in all cases but may be recorded on General Declaration in lieu of a separate list.
2.17	A cargo manifest is required except for merchandise, baggage and stores arriving from and departing for a foreign country on the same through flight. "All articles on board which must be licensed by the Secretary of State shall be listed on the cargo manifest." "Company mail shall be listed on the cargo manifest."
2.18	Traveling general declaration and manifest, crew purchases and stores list as well as a permit to proceed are required under various conditions when aircraft arrive in the U.S. from a foreign area with cargo shown on the manifest to be traveling to other airports in the U.S. or to foreign areas.
2.21	There is a statutory requirement that such changes can only be made prior to or at the time of formal entry of the aircraft.
2.25	The U.S. does not support the use of insecticides in aircraft with passengers present. Pesticides registered for such use should not be inhaled. In effect, the passenger safety issue has precluded the use of such insecticides in the presence of passengers since 1979.
2.35	Advance notice is required of the number of citizens and aliens on board (non-scheduled flights only).
2.40	A copy of the contract for remuneration or hire is required to be a part of the application in the case of non–common carrier operations.
2.41	Single inspection is accorded certain aircraft not by size of aircraft but rather by type of operation. Loads (cargo) of an agricultural nature require inspection by a plant or animal quarantine inspector.
2.41c	Fees are charged for services provided in connection with the arrival of private aircraft (nonscheduled aircraft).
Chapter 3	Entry and Departure of Persons and Their Baggage
3.3	Medical reports are required in some cases.

Remarks	8 CFR 212.7 and INA 234
3.4	Documents such as visas with certain security devices serve as identity documents.
3.4.1	The U.S. has not standardized the personal identification data included in all national passports to conform with the recommendation in Doc 9303.
3.5.6	U.S. passport fees exceed the cost of the operation.
3.5.7	U.S. allows separate passports for minor dependents under the age of 16 entering the U.S. with a parent or legal guardian.
3.7	The U.S. has a pilot program that allows nationals of certain countries which meet certain criteria to seek admission to the U.S. without a visa for up to 90 days as a visitor for pleasure or business.
Remarks	22 CFR 41.112(d) INA 212(d)(4), INA 238, 8 CFR 214.2(c) INA 217
	The law permits visa waivers for aliens from contiguous countries and adjacent islands or in emergency cases. Visas are also waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.
3.8	The U.S. charges a fee for visas.
3.8.3	Duration of stay is determined at port of entry.
Remarks	INA 217
3.8.4	A visitor to the U.S. cannot enter without documentation.
Remarks	INA 212(a) (26)
3.8.5	Under U.S. law, the duration of stay is determined by the Immigration Authorities at the port of entry and thus cannot be shown on the visa at the time of issuance.
3.10	Embarkation/Disembarkation Card does not conform to Appendix 4 in some particulars.
3.10.1	The operator is responsible for passengers' presentation of completed embarkation/disembarkation cards.
Remarks	8 CFR 299.3
3.10.2	Embarkation/Disembarkation cards may be purchased from the U.S. Government, Superintendent of Documents.
Remarks	8 CFR 299.3
3.14.2	The U.S. fully supports the electronic Advance Passenger Information (API) systems. However, the WCO/IATA Guideline is too restrictive and does not conform to the advancements in the PAXLIST EDIFACT international standard.
3.15	U.S. Federal Inspection Services' officials see individuals more than once.
3.16	Written baggage declarations by crew members are required in some instances.
3.17.1	The U.S. uses a multiple channel system rather than the dual channel clearance system.
3.23, 3.23.1	Statute requires a valid visa and passport of all foreign crew members.
3.24, 3.24.1, 3.25, 3.25.1, 3.25.2, 3.25.3	Crew members, except those eligible under Visa Waiver Pilot Program guidelines, are required to have valid passports and valid visas to enter the U.S.
Remarks	INA 212(a) (26), INA 252 and 253, 8 CFR 214.1(a), 8 CFR 252.1(c)
3.26, 3.27, 3.28, 3.29	Passports and visas are required for crew and non–U.S. nationals to enter the U.S.
3.33	Does not apply to landing card.
3.35	Law requires that the alien shall be returned to the place whence he/she came. Interpretation of this provision requires that he/she be returned to the place where he/she began his/her journey and not only to the point where he/she boarded the last–used carrier.
3.35.1	Law requires that certain aliens be deported from the U.S. at the expense of the transportation line which brought them to the U.S.
3.36	Statute provides for a fine if a passenger is not in possession of proper documents.

3.39.3	NOTE: The U.S. considers security for individuals in airline custody to be the carrier's responsibility.
3.40.2	Annex 9 recommends that fines and penalties be mitigated if an alien with a document deficiency is eventually admitted to the country of destination.
3.43	Operator can be held responsible for some detention costs.
Chapter 4	Entry and Departure of Cargo and Other Articles
4.20	The Goods Declaration as defined by the Kyoto Convention serves as the fundamental Customs document rather than the commercial invoice.
4.40	Aircraft equipment and parts, certified for use in civil aircraft, may be entered duty-free by any nation entitled to most-favored nation tariff treatment. Security equipment and parts, unless certified for use in the aircraft, are not included.
4.41	Customs currently penalizes the exporting carrier for late filing of Shipper's Export Declarations (SEDs) and inaccuracies on bills of lading with respect to the SEDs.
4.42	Regulations require entry of such items, most of which are dutiable by law.
4.44	Certain items in this category are dutiable by law.
4.48	Carriers are required to submit new documentation to explain the circumstances under which cargo manifest is not unladen. No penalty is imposed if the carrier properly reports this condition.
4.50	The procedures for adding, deleting, or correcting manifest items require filing a separate document.
4.55	The U.S. requires a transportation in-bond entry or a special manifest bonded movement for this type of movement.
Chapter 5	Traffic Passing Through the Territory of a Contracting State
5.1	Such traffic must be inspected at airports where passengers are required to disembark from
	the aircraft and no suitable sterile area is available.
5.2	
	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country</li> </ul>
5.2	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> </ul>
5.2	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country</li> </ul>
5.2       5.3       5.4	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the</li> </ul>
5.2       5.3       5.4       5.4.1	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the U.S. within 8 hours of arrival or on the first flight thereafter departing for their destination.</li> <li>Examination of transit traffic is required by law. Transit passengers without visas are allowed</li> </ul>
5.2       5.3       5.4       5.4.1       5.8	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the U.S. within 8 hours of arrival or on the first flight thereafter departing for their destination.</li> <li>Examination of transit traffic is required by law. Transit passengers without visas are allowed one stopover between the port of arrival and their foreign destination.</li> <li>Passports and visas are required generally for transit passengers who are remaining in the</li> </ul>
5.2         5.3         5.4         5.4.1         5.8         5.9	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the U.S. within 8 hours of arrival or on the first flight thereafter departing for their destination.</li> <li>Examination of transit traffic is required by law. Transit passengers without visas are allowed one stopover between the port of arrival and their foreign destination.</li> <li>Passports and visas are required generally for transit passengers who are remaining in the U.S. beyond 8 hours or beyond the first available flight to their foreign destinations.</li> </ul>
5.2         5.3         5.4         5.4.1         5.8         5.9         Chapter 6	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the U.S. within 8 hours of arrival or on the first flight thereafter departing for their destination.</li> <li>Examination of transit traffic is required by law. Transit passengers without visas are allowed one stopover between the port of arrival and their foreign destination.</li> <li>Passports and visas are required generally for transit passengers who are remaining in the U.S. beyond 8 hours or beyond the first available flight to their foreign destinations.</li> <li>International Airports – Facilities and Services for Traffic</li> <li>Procedures involving scheduling committees raise a number of anti–trust problems under</li> </ul>
5.2         5.3         5.4         5.4.1         5.8         5.9         Chapter 6         6.3.1	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the U.S. within 8 hours of arrival or on the first flight thereafter departing for their destination.</li> <li>Examination of transit traffic is required by law. Transit passengers without visas are allowed one stopover between the port of arrival and their foreign destination.</li> <li>Passports and visas are required generally for transit passengers who are remaining in the U.S. beyond 8 hours or beyond the first available flight to their foreign destinations.</li> <li>International Airports – Facilities and Services for Traffic</li> <li>Procedures involving scheduling committees raise a number of anti-trust problems under U.S. law.</li> <li>Sterile physical facilities shall be provided, and in-transit passengers within those areas shall</li> </ul>
5.2         5.3         5.4         5.4         5.8         5.9         Chapter 6         6.3.1         6.33	<ul> <li>the aircraft and no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Such traffic must be inspected at airports where no suitable sterile area is available.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passports and visas are waived for admissible aliens arriving on a carrier which is signatory to an agreement assuring immediate transit of its passengers provided they have a travel document or documents establishing identity, nationality, and ability to enter some country other than the U.S.</li> <li>Passengers will not be required to obtain and present visas if they will be departing from the U.S. within 8 hours of arrival or on the first flight thereafter departing for their destination.</li> <li>Examination of transit traffic is required by law. Transit passengers without visas are allowed one stopover between the port of arrival and their foreign destination.</li> <li>Passports and visas are required generally for transit passengers who are remaining in the U.S. beyond 8 hours or beyond the first available flight to their foreign destinations.</li> <li>International Airports – Facilities and Services for Traffic</li> <li>Procedures involving scheduling committees raise a number of anti-trust problems under U.S. law.</li> <li>Sterile physical facilities shall be provided, and in-transit passengers within those areas shall be subject to immigration inspection at any time.</li> </ul>

6.56	Operators of aircraft are statutorily required to pay overtime charges for federal inspections conducted outside normal scheduled hours of operation. This requirement places aircraft operators in a less favorable position than operators of highway vehicles and ferries who are statutorily exempt from such charges.
Chapter 8	Other Facilitation Provisions
8.1	Separate bonds are required.
8.3.2	Visas are issued by the Department of State and are not issued at ports of entry.

ANNEX 10 - A	ERONAUTICAL TELECOMMUNICATIONS
ANNEX 10 - V	OLUME 1 – RADIO NAVIGATION AIDS
PART I	
Chapter 3	Specifications for Radio Navigation Aids
3.1.4.1, 3.1.4.2	The United States does not require such aircraft ILS equipment immunity. Interference from FM broadcast signals will not adversely affect aircraft navigation and communications systems in the United States airspace.
3.3.4.2	The US minimum VOR signal strength is -120 dBW/m2. The ICAO requirement is - 107 dBW/m2.
3.3.8.1, 3.3.8.2	The United States does not require such equipage for aircraft. Interference from FM broadcast signals will not adversely affect aircraft navigation and communications systems in the United States airspace.
3.7.3.5.3.1	Currently, the service volume of GBAS in FAA Order 6050.32B is 23 NM up to 10,000 feet vs. 15 and 20 NM ICAO standard.
3.7.3.5.4.1	In the U.S., the LAAS operates on center frequencies from 112.050 to 117.950 MHz vs. ICAO's 108.0 to117.975 MHz with the lowest assignable frequency of 112.05 MHz and the last upper assignable frequency of 117.150 MHz vs. ICAO's 108.025 MHz and 117.900 MHz respectively.
3.7.3.5.3	Currently, the service volume of GBAS in FAA Order 6050.32B is 23 NM up to 10,000 feet.
Appendix B	TECHNICAL SPECIFICATIONS FOR THE GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)
3.6.7.2.3.5	A solution has been implemented in the US which does not require protection level bounding for rare anomalous ionospheric storms under extreme conditions. The solution requires denial of the approach service when anomalous ionosphere conditions could cause potentially large residual errors and allows operations when estimated residual errors would be below a threshold. The resulting errors under the threshold were found to be acceptable using specific safety assessments and criteria for this equipment.
3.6.8.2.2.5.3	In the U.S., the LAAS operates above the ILS LOC frequency band on center frequencies from 112.05 to 117.950 MHz; therefore, this standard does not apply.
3.6.8.2.2.6	Currently, the D/U standard for co-channel rejection is the same as the ICAO standard of 26 dB. However, D/U standard for the second adjacent channel rejection is 46 dB, which is 3 dB less than the ICAO standard. In addition, no third adjacent channel rejection standard exists in Order 6050.32B.
3.6.8.2.2.6.1c	In the U.S., the LAAS operates above the ILS LOC frequency band on center frequencies from 112.05 to 117.950 MHz; therefore, this standard does not apply.
3.6.8.2.2.6.2a	In the U.S., the LAAS receiver protection from an undesired LAAS signal offset by +/- 50 kHz is 46 dB vs. ICAOs 43 dB.
3.6.8.2.2.6.2c	In the U.S., the LAAS operates above the ILS LOC frequency band on center frequencies from 112.05 to 117.950 MHz.
3.6.8.2.2.6.3	In the U.S., the LAAS receiver protection from an undesired LAAS, VOR, or ILS signal offset by $+/-75$ to $+/-975$ kHz is not considered during the frequency assignment process.
3.6.8.2.2.6.3c	In the U.S., the LAAS operates above the ILS LOC frequency band on center frequencies from 112.05 to 117.950 MHz.
3.6.8.2.2.6.4	In the U.S., the LAAS receiver protection from an undesired LAAS, VOR, or ILS signal offset by $+/-1$ MHz or more is not considered during the frequency assignment process.
Attachment C	INFORMATION AND MATERIAL FOR GUIDANCE IN THE APPLICATION OF THE STANDARDS AND RECOMMENDED PRACTICES FOR ILS, VOR, PAR, 75 MHz MARKER BEACONS (EN-ROUTE), NDB AND DME
2.6.2.1.1 and 2.6.2.1.2	The US frequency protections for ILS localizers are 3 dB more stringent than the ICAO protections (i.e. 23 dB vs. 20 dB for co-channel, -4 dB vs7 dB for interim 1st adjacent channels, -31 dB vs34 dB for final 1st adjacent channels, -43 dB vs46 dB for 2nd adjacent channels, and -47 dB vs50 dB for 3rd adjacent channels).

2.6.2.2.1	The US frequency protections for ILS localizers are 3 dB more stringent than the ICAO protections (i.e. 23 dB vs. 20 dB for co-channel, -4 dB vs7 dB for interim 1st adjacent channels, -31 dB vs34 dB for final 1st adjacent channels, -43 dB vs46 dB for 2nd adjacent channels, and -47 dB vs50 dB for 3rd adjacent channels).
3.4.6.1 a),b),c) 3.4.6.2 a),b),c)	The US frequency protections for co-channel, 1st and 2nd adjacent channels for VOR are 3 dB more stringent than the ICAO protections (i.e. 23 dB vs. 20 dB for co-channel, -4 dB vs7 dB for interim 1st adjacent channels, -31 dB vs34 dB for final 1st adjacent channels, -43 dB vs46 dB for 2nd adjacent channels).
3.4.6.1 d) 3.4.6.2 d)	The US does not provide any VOR frequency protection for 3rd adjacent channels. The ICAO protection provides –50 dB for 3rd adjacent channels.
7.1.8.1 7.1.8.2 Table C–6	The US frequency protections for co-channel and 1st adjacent channels for DME are 3 dB more stringent than the ICAO protections (i.e. 11 dB vs. 8 dB for co-channel, -39 dB vs42 dB for 1st adjacent channels). The US frequency protection for 2nd adjacent channels for DME is 28 dB more stringent than the ICAO protection (i.e 47 dB vs 75 dB).
Attachment D	INFORMATION AND MATERIAL FOR GUIDANCE IN THE APPLICATION OF THE GNSS STANDARDS AND RECOMMENDED PRACTICES
7.2.1.5 and Table D–4	In the U.S., the LAAS/LAAS co-channel geographical separation is 159 nm at 10,000 and 20,000 ft. ICAO separation is 195 nm at 10,000 ft.
	The first adjacent channel in the U.S. is equivalent to the ICAO second adjacent channel or $\pm -50$ kHz.
	The ICAO separation requirement for GBAS/GBAS second adjacent channel separation is 24 NM. In the U.S., geographical separations are not required between LAAS facilities, which differ in frequency by more than 25 kHz.
7.2.1.6 and Table D–5	Distances shown in ICAO Table D–5 are different from the distances in FAA Order 6050.32B figures 203 and 204 since in the U.S. the separation distances are calculated using the same method as for VOR described in FAA Order 6050.32B.
ANNEX 10 - V STATUS	DLUME II – COMMUNICATION PROCEDURES INCLUDING THOSE WITH PANS
Chapter 3	General Procedures for the International Aeronautical Telecommunication Service
3.2.2, 3.2.3	US regulations do not have any specific procedures for closing down international aeronautical stations. All international aeronautical stations in the U.S. operate continuously (24 hours a day and seven days a week)
Chapter 5	Aeronautical Mobile Service – Voice Communications
5.1.5	US regulations do not require pilots to wait 10 seconds before making a second call. US regulations only require "a few seconds" instead of "10 seconds."
5.2.1.4.1.1	The United States directs that, for air carriers and other civil aircraft having FAA authorized call signs, the call sign should be followed by the flight number in group form; and for air carriers of foreign registry, the flight number should be stated in group form, or using separate digits if that is the format used by the pilot.
5.2.1.4.1.1	The United States issues surface wind using the word "wind" followed by the separate digits of the indicated wind direction to the nearest 10–degree multiple, the word "at" and the separate digits of the indicated velocity in knots, to include any gusts.
5.2.1.4.1.3	The United States issues the separate digits of a frequency, inserting the word "point" where the decimal point occurs.
5.2.2.7.1.2	US regulations do not specifically require pilots to send a message twice preceded with the phrase "TRANSMITTING BLIND".
	US regulations provides general procedures which allow pilots to make blind transmissions in case of emergency.

5.2.2.7.1.3.1	US regulations do not specifically require pilots to make a blind transmission preceded by "TRANSMITTING BLIND DUE TO RECEIVER FAILURE" with respect to the continuation of the flight of the aircraft.
	US regulations provide general procedures which allow pilots to make appropriate blind transmissions.
5.2.2.7.2.1, 5.2.2.7.2.2,	US regulations do not specifically require aeronautical stations to get assistance from other aircraft in case of communications failure.
5.2.2.7.2.3	US regulations require aeronautical stations to use "all appropriate means" available to re–establish communications with aircraft.
5.2.2.7.2.4	US regulations do not provide this specific standard.
	US regulations require aeronautical stations to use "all appropriate means" available to re–establish communications with aircraft.
5.2.2.7.3.1	US regulations do not specifically require pilots to make a blind transmission preceded by "TRANSMITTING BLIND DUE TO RECEIVER FAILURE".
	US regulations provide general procedures which allow pilots to make appropriate blind transmissions.
ANNEX 10 - VO	LUME III – COMMUNICATION SYSTEMS
PART I – DIGIT	AL DATA COMMUNICATION SYSTEMS
Chapter 7	Aeronautical Mobile Airport Communications System (AeroMACS)
7.4.5.1 (d)	In the U.S., the power spectral density of any frequency removed from the assigned frequency above $150\%$ of the authorized frequency is 50 dB or 55 + log (P) dB, whichever is the lesser attenuation. ICAO requires 50 dB.
PART II – VOIC	E COMMUNICATION SYSTEMS
Chapter 2	Aeronautical Mobile Service
Chapter 2	Aeronautical Mobile Service ICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m <sup>2</sup> ), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA
Chapter 2 2.2.1.2 2.3.3.1 2.3.3.2 2.3.3.3	Aeronautical Mobile Service ICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m <sup>2</sup> ), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm. The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM immunity standards to avoid FM interference in aircraft.The U.S. does not require airborne VHF communications receiving systems to meet the FM
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM immunity standards to avoid FM interference in aircraft.The U.S. does not require airborne VHF communications receiving systems to meet the FM broadcast immunity performance standards recommended by ICAO.
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM 
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4         ANNEX 10 - VO         Chapter 3	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM immunity standards to avoid FM interference in aircraft.The U.S. does not require airborne VHF communications receiving systems to meet the FM broadcast immunity performance standards recommended by ICAO. <b>LUME IV - SURVEILLANCE AND COLLISION AVOIDANCE SYSTEMS</b> Surveillance Systems
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4         ANNEX 10 - VO         Chapter 3         3.1.1.7.13	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM immunity standards to avoid FM interference in aircraft.The U.S. does not require airborne VHF communications receiving systems to meet the FM broadcast immunity performance standards recommended by ICAO.LUME IV - SURVEILLANCE AND COLLISION AVOIDANCE SYSTEMSSPI required to be transmitted for 18 +/- 1 second. US regulations are more stringent than ICAO.
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4         ANNEX 10 - VO         Chapter 3         3.1.1.7.13         Chapter 4	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translates to -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCA DO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunity performance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph 2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the. Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM immunity standards to avoid FM interference in aircraft.The U.S. does not require airborne VHF communications receiving systems to meet the FM broadcast immunity performance standards recommended by ICAO.LUME IV – SURVEILLANCE AND COLLISION AVOIDANCE SYSTEMSSurveillance SystemsSPI required to be transmitted for 18 +/- 1 second. US regulations are more stringent than ICAO.Airborne Collision Avoidance SystemThe TSO-C118 (RTCA DO-197) implements this requirement. However, the requirement of
Chapter 2         2.2.1.2         2.3.3.1         2.3.3.2         2.3.3.3         2.3.3.4         2.3.3.4         ANNEX 10 - VO         Chapter 3         3.1.1.7.13         Chapter 4         4.2.3.3.4	Aeronautical Mobile ServiceICAO recommends a signal-in-space field strength of 75 uv/m (-109dBW/m²), which translatesto -82.5 dBm at the input of the receiver assuming 0 dB system losses. In the U.S., per RTCADO-186a MOPS, the input power to the aircraft receiver should be -87 dBm.The US does not require aircraft flying within the US airspace to meet the interference immunityperformance of paragraphs 2.3.3.1, 2.3.3.2, and 2.3.3.3 and the recommendation of paragraph2.3.3.4 of Annex 10, Vol 3, Part 2, Chapter 2. The FAA, based on the recommendations of the.Aviation Rulemaking Advisory Committee, made a decision, in 1996, not to adopt the FMinterference immunity performance standards in the U.S. The U.S. continues to use its own FMimmunity standards to avoid FM interference in aircraft.The U.S. does not require airborne VHF communications receiving systems to meet the FMbroadcast immunity performance standards recommended by ICAO.LUME IV - SURVEILLANCE AND COLLISION AVOIDANCE SYSTEMSSurveillance SystemsSPI required to be transmitted for 18 +/- 1 second. US regulations are more stringent than ICAO.Airborne Collision Avoidance SystemThe TSO-C118 (RTCA DO-197) implements this requirement. However, the requirement oflimiting Mode S power to the level of Mode A/C (paragraph 4.2.3.4) is not implemented.

4.3.5.3.2	No changes planned to the current U.S. guidance. Per Advisory Circular (AC) 120–55C, Change 1, Section 11 (MAINTENANCE), para c., TCAS Software Updates: "when necessary, operators
	should ensure that appropriate TCAS software updates are incorporated. The latest version of software for TCAS II is version 7.1. To ensure compatibility with international standards, the FAA encourages the installation of this software as practical. Software version 6.04A, version 7.0 and version 7.1 are all approved for operations in U.S. airspace."
4.3.5.3.3	No changes planned to the current U.S. guidance. Per Advisory Circular (AC) 120–55C, Change 1, Section 11 (MAINTENANCE), para c., TCAS Software Updates: "when necessary, operators should ensure that appropriate TCAS software updates are incorporated. The latest version of software for TCAS II is version 7.1. To ensure compatibility with international standards, the FAA encourages the installation of this software as practical. Software version 6.04A, version 7.0 and version 7.1 are all approved for operations in U.S. airspace."
ACAS	The US uses the term Traffic Alert and Collision Avoidance System (TCAS). The difference of terminology does not impact interoperability of the systems.
ANNEX 10 - V	OLUME V – AERONAUTICAL RADIO FREQUENCY SPECTRUM UTILIZATION
Chapter 2	Distress frequencies
2.1.1	All emergency locator transmitters installed on or after 1 January 2002 and carried in compliance with Standards of Annex 6, Parts I, II and III shall operate on both 406 MHz and 121.500 MHz or on 121.5 MHz.
Chapter 4	Utilization of frequencies above 30 MHz
4.1.2.4	FAA has not issued a mandatory carriage of VDL Mode 3 and VDL Mode 4. Participation in CPDLC (VDL Mode 2) "is at the discretion of the flight crew and/or operator" (NAS Data Communications Guide, version 8, September 10, 2019).
4.1.2.4.1	FAA has not issued a mandatory carriage of VDL Mode 3 and VDL Mode 4.
4.1.4.1	The US does not provide the 20 dB desired-to-undesired signal protection for VHF frequency assignments. The US provides 14 dB.
4.1.4.2	The US does not require aircraft flying within the US airspace to meet one of the characteristics dealing with the FM interference immunity performance. The U.S. Aviation Rulemaking Committee made a decision not to adopt the FM interference immunity performance standards in the U.S. The U.S. continues to use its own FM immunity standards to avoid FM interference in aircraft.
4.1.6.1.2	Assignable frequencies in 25 KHz steps in the US are 121.550 – 123.075 MHz instead of 121.550 – 123.050 MHz, and 123.125 – 136.975 MHz instead of 123.150 – 136.475 MHz.
4.2.3	The US does not follow the VOR assignment priority as defined in Section 4.2.3. Due to severe frequency congestion in the U.S., the ICAO frequency assignment priority order would result in inefficient use of the radio spectrum.

ANNEX 11 – AIR TRAFFIC SERVICES		
Chapter 1	Definitions	
Accepting Un- it	The term "receiving facility" is used.	
Advisory Airspace	Advisory service is provided in terminal radar service areas and the outer area associated with class C airspace areas as well as Class E airspace.	
Advisory Route	Advisory service is provided in terminal radar service areas and the outer area associated with class C airspace areas as well as Class E airspace.	
ACAS– Airborne Collision Avoidance System	Traffic Alert and Collision Avoidance System (TCAS) – An airborne collision avoidance system based on radar beacon signals which operates independent of ground–based equipment. 14 CFR 1.1 further defines and breaks down TCAS into TCAS 1 – provides traffic advisories 2 – provides traffic advisories and resolution advisories in the vertical plane and 3 – provides traffic advisories and resolution advisories in the vertical planes.	
AIRMET	FAA Pilot Controller Glossary defines (in part) AIRMET as "A concise description of an occur- rence or expected occurrence of specified en route weather phenomena that may affect the safety of aircraft operations, but at intensities lower than those that require the issuance of a SIGMET." The ICAO definition of AIRMET narrows the purpose of the advisory to "low-level aircraft opera- tions", where the FAA has a more broad definition to encompass "all aircraft andaircraft having limited capability" Also, ICAO uses the term "forecastfor the flight information region" where the FAA uses "area forecast". Difference in character (terminology) for area forecast. FAA uses AIRMETS for broader purpose.	
Air traffic con- trol unit	The U.S. uses the term "air traffic control facility". (i.e. En Route, Terminal, or Flight Service)	
Air traffic ser- vices reporting office	FAA Pilot Control Glossary defines (in part) Flight Service Stations (FSS) as "air traffic facilities which provide pilot briefing, en route communications and VFR search and rescue services, assist lost aircraft in emergency situations, relay ATC clearances, originate Notices to Air Missions, broadcast aviation weather and NAS information, receive and process IFR flight plans" FSS's are available to receive any reports concerning air traffic services as well as accept and file flight plans.	
Air traffic ser- vices unit	The U.S. uses "Air Route Traffic Control Center".	
Airway	A Class E airspace area established in the form of a corridor, the centerline of which is defined by radio navigational aids.	
Alert Phase	Alert – a notification to a position that there is an aircraft–to–aircraft or aircraft–to–airspace conflict as detected by automated problem detection.	
Altitude	Height above ground level (AGL), mean sea level (MSL) or indicate altitude.	
Apron Management Service	Ground control or ramp control provide the same service. There is no formal definition in the Pilot Controller Glossary.	
Area Control Centre	The U.S. uses the terms "Traffic Control Center", "Radar Approach Control Facility", and "Tower" to define a facility that provides air traffic control service to aircraft operating on IFR flight plans within controlled airspace and principally during the en route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to VFR aircraft.	
Area Control Service	Air Traffic Control – A service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic.	
Controlled flight	The US uses the term "IFR Clearance".	

## ANNEX 11 – AIR TRAFFIC SERVICES

Control Zone	The US uses the term "Surface Area". Surface area is airspace contained by the lateral boundary of the Class B, C, D, or E airspace designated for an airport that begins at the surface and extends upward.						
Cruising Level	Cruising Altitude – an altitude or flight level maintained during en route level flight. This is a constant altitude and should not be confused with a cruise clearance.						
Downstream Clearance	Same as air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.						
Flight Information Centre	In the US, flight information service and alerting service are often provided by flight service stations.						
Level	The term "altitude" is used.						
Maneuvering Area	Any locality either on land, water, or structures, including airports/heliports and intermediate landing fields, which is used, or intended to be used, for the landing and takeoff of aircraft whether or not facilities are provided for the shelter, servicing, or for receiving or discharging passengers or cargo.						
Meteorological office	No PCG definition. However FSSs perform this duty.						
Movement Area	The runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC.						
Pilot-in-com mand	The person who has final authority for the operation and safety of the flight has been designated as pilot in command before or during the flight and hold the appropriate category, class and type rating for the flight.						
Traffic avoidance advice	US uses the term "Safety Alert"						
Traffic information	US uses the term "Traffic Advisory"						
Waypoint	A predetermined geographical position used for route/instrument approach definition, progress reports, published VFR routes, visual reporting points or points for transitioning and/or circumnavigating controlled and/or special use airspace, that is defined relative to a VORTAC station or in terms of latitude/longitude coordinates.						
Chapter 2	General						
2.3.2	Annex 11, paragraph 2.3.2 directs the flight information service to accomplish objective d) of para 2.2, "to provide advice and information for the safe and efficient conduct of flight." Details on procedures to accomplish this objective are contained in FAA Order JO 7210.3, Part 4, Flight Service Stations. Specific procedures for accomplishing this objective are contained in FAA Order JO 7110.10, Flight Services. Also, the FAA Pilot Controller Glossary defines a Flight Service Station (FSS) as an air traffic facility which provides pilot briefings, flight plan processing, en route flight advisories, search and rescue services, and assistance to lost aircraft and aircraft in emergency situations. FSSs also relay ATC clearances, process Notices to Air Missions, and broadcast aviation weather and aeronautical information. In Alaska, FSSs provide Airport Advisory Services.						
2.5.2.2.1	FAA uses the generic term "controlled airspace" and "surface areas"						
2.5.2.2.1.1	FAA also provides this service in Class E.						

2.5.2.2.2	Annex 11, paragraph 2.3.2 directs the flight information service to accomplish objective d) of para 2.2, "to provide advice and information for the safe and efficient conduct of flight." Details on procedures to accomplish this objective are contained in FAA Order 7210.3, Part 4, Flight Service Stations. Specific procedures for accomplishing this objective are contained in FAA Order 7110.10, Flight Services. Also, the FAA Pilot Controller Glossary defines Flight Service Stations as "air traffic facilities which provide pilot briefing, en route communications and VFR search and rescue services, assist lost aircraft and aircraft in emergency situations, relay ATC clearances, originate Notices to Air Missions, broadcast aviation weather and NAS information, receive and process IFR flight plans, and monitor NAVAIDs. In addition, at selected locations, FSSs provide En Route Flight Advisory Service (Flight Watch), take weather observations, issue airport advisories, and advise Customs and Immigration of trans–border flights."
2.6.1	The U.S. has chosen not to use Class F airspace.
2.11.3.2.2	Class E–5 700/1200–foot airspace areas are used for transitioning aircraft to/from the terminal or en route environment.
2.11.3.3	En Route Domestic Airspace Areas consist of Class E airspace that extends upward from a spe- cified altitude to provide controlled airspace in those areas where there is a requirement to provide IFR en route ATC services but the Federal airway structure is inadequate. En Route Domestic Airspace Areas may be designated to serve en route operations when there is a requirement to provide ATC service but the desired routing does not qualify for airway designation. Offshore/ Control Airspace Areas are locations designated in international airspace (between the U.S. 12–mile territorial limit and the CTA/FIR boundary, and within areas of domestic radio navigation- al signal or ATC radar coverage) wherein domestic ATC procedures may be used for separation purposes.
2.11.5.1	A Class D airspace area shall be of sufficient size to: 1. Allow for safe and efficient handling of operations. 2. Contain IFR arrival operations while between the surface and 1,000 feet above the surface, and IFR departure operations while between the surface and the base of adjacent controlled airspace. Size and shape may vary to provide for 1 and 2. The emphasis is that a Class D area shall be sized to contain the intended operations.
2.11.5.3	Refer to Surface Areas. The U.S. uses the term "Surface Area". Surface area is airspace contained by the lateral boundary of the Class B, C, D, or E airspace designated for an airport that begins at the surface and extends upward.
2.26.5	No time is issued prior to taxi for take-off. Time checks are given to the nearest quarter minute.
2.29	Process is described in the FAA Safety Management System Manual and the FAA Order 1100.161.
Chapter 3	Air Traffic Control Service
3.2	Air Route Traffic Control Facilities (ARTCC) are used instead of Area Control Service, and Terminal Control Facilities instead of Approach Control Service.
3.6.2.4	The U.S does not specify notification of 2–way communication. The accepting unit shall not alter the clearance of an aircraft that has not yet reached the transfer of control point without the prior approval of the transferring unit.
3.7.3.1	Air crews are not required to read back clearances, only to acknowledge receipt of clearances.
3.7.3.1.1	Air crews are not required to read back clearances, only to acknowledge receipt of clearances.
3.7.3.3	The U.S. only requires a read back for operations regarding hold short instructions. Controllers may request a read back whenever they feel a read back is necessary.
3.7.4.3	4–3–8. COORDINATION WITH RECEIVING FACILITY Coordinate with the receiving facility before the departure of an aircraft if the departure point is less than 15 minutes flying time from the transferring facility's boundary unless an automatic transfer of of data between automated systems will occur, in which case the flying time requirement may be reduced to 5 minutes or replaced with a mileage from the boundary parameter when mutually agreeable to both facilities.

3.7.4.4	4–4–5. CLASS G AIRSPACE Include routes through Class G airspace only when requested by the pilot. NOTE–1. Flight plans filed for random RNAV routes through Class G airspace are considered a request by the pilot. 2. Flight plans containing MTR segments in/through Class G airspace are considered a request by the pilot. Air Traffic Control Clearance means an authorization by air traffic control within controlled airspace.							
Chapter 4	Flight Information Service							
4.2.2	No Class F airspace. Collision Hazard information is provided between known traffic to aircraft in Class G airspace.							
Chapter 6	Air Traffic Services Requirements for Communications							
6.1.1.4	The US uses a 45 day retention period.							
6.2.2.3.8								
6.2.3.6	The US has a 45 day or longer retention period, with some exceptions. US en route facilities using system analysis recording tapes as their radar retention media shall retain radar data for 15 days. Facilities using a teletype emulator or console printout must be retained for 30 days unless they are related to an accident or incident. A facility using a console typewriter printout take–up device may retain the printout on the spool for 15 days after the last date on the spool. If a request is received to retain data information following an accident or incident, the printout of the relative data will suffice and the tape/disc may then be returned to service through the normal established rotational program.							
6.3.1.3	The US has a 45 day or longer retention period except that those facilities utilizing an analog voice recorder system shall retain voice recordings for 15 days.							
6.4.1.2	The US retains surveillance data recordings for 45 days or longer when they are pertinent to an accident or incident investigation, except that en route facilities using system analysis recording tapes as their radar retention media (regardless of the type of voice recorder system being used) shall retain voice recordings for 15 days and those facilities using an analog voice recorder system shall retain voice recordings for 15 days. FAA's Air Traffic Control System Command Center shall retain voice recordings for 15 days.							
Chapter 7	Air Traffic Services Requirements for Information							
7.1.5	The term "communication station" is not used but the flight information is passed.							
7.6	Temporary Flight Restrictions (TFRs) are the mechanism that would be implemented in such cases.							
Appendix 2	Principles Governing the Establishment and Identification of Significant Points							
3.1	In US, per FAA Order 8260.19D, there are some points not to be named. Fixes used for navigation not to be named include Visual Descent Points (VDPs), radar fixes used on ASR and/or PAR procedures, RNAV missed approach point at threshold, and an ATD fix located between the MAP and the landing area marking the visual segment descent point on COPTER RNAV PinS approach annotated "PROCEED VISUALLY."							
	Additionally, there are some non-pronounceable points allowed. Order 8260.19 states "Except as noted below, each name must consist of a 5-letter pronounceable word. These non-pronounceable exceptions include; Stepdown fixes between FAF and MAP, Missed Approach Points (MAP), Computer Navigation Fixes (CNFs), and VFR Waypoints.							

Appendix 4	ATS Airspace Classifications					
	Speed restrictions of 250 knots do not apply to aircraft operating beyond 12 NM from the coast line within the U.S. Flight Information Region, in offshore Class E airspace below 10,000 feet MSL.					
	Paragraph (a) of § 91.117 of Title 14 of the Code of Federal Regulations (CFR) provides that "Unless otherwise authorized by the Administrator, no person may operate an aircraft below 10,000 feet MSL at an indicated airspeed of more than 250 knots." Within domestic airspace, a pilot operating at or above 10,000 MSL on an assigned speed adjustment greater than 250 knots is expected to comply with § 91.117(a) when cleared below 10,000 feet MSL without notifying Air Traffic Control (ATC).					
	The Federal Aviation Administration has proceeded from an operational perspective that the speed restrictions of § 91.117(a) do not apply to U.Sregistered aircraft, via § 91.703(a)(3), when operating outside the United States (and not within another country's territorial airspace).					
Appendix 6	Fatigue Risk Management System (FRMS) Requirements					
1.2 f)	Breaks ("relief periods") required to be "of reasonable duration" (Section 2–5–4c) and "administered in an equitable manner" (2–6–6a)y. Minimum duration not defined except for a meal break (30 minutes).					
1.2 Note	Variation from prescriptive schedule rules must be entered into the Daily Record of Facility Operation at the time of the deviation.					
3 b)	FAA does not have <i>specific</i> processes for deviations or variations from prescriptive fatigue management regulations.					

## ANNEX 12 – SEARCH AND RESCUE

There are no reportable differences between U.S. regulations and the Standards and Recommended Practices contained in this Annex.

Chapter 5	Investigation
5.12	<ul> <li>The full exchange of information is vital to effective accident investigation and prevention. The U.S. supports, in principle, measures that are intended to facilitate the development and sharing of information. The laws of the U.S. require the determination and public reporting of the facts, circumstances, and probable cause of every civil aviation accident. This requirement does not confine the public disclosure of such information to an accident investigation. However, the laws of the U.S. do provide some protection against public dissemination of certain information of a medical or private nature.</li> <li>Also, U.S. law prohibits the disclosure of cockpit voice recordings to the public and limits the disclosure of cockpit voice recording transcript to that specific information which is deemed pertinent and relevant by the investigative authority. However, U.S. Courts can order the disclosure of the foregoing information for other than accident investigation purposes. The standard for determining access to this information does not consider the adverse domestic or international effects on investigations that might result from such access.</li> </ul>
5.25 h)	Investigative procedures observed by the U.S. allow full participation in all progress and investigation planning meetings; however, deliberations related to analysis, findings, probable causes, and safety recommendations are restricted to the investigative authority and its staff. However, participation in these areas is extended through timely written submissions, as specified in paragraph 5.25 i).
5.26 b)	The U.S. supports, in principle, the privacy of the State conducting the investigation regarding the progress and the findings of that investigation. However, the laws of the U.S. facilitate the public disclosure of information held by U.S. government agencies and U.S. commercial business. The standard for determining public access to information requested from a U.S. government agency or a commercial business does not consider or require the expressed consent of the State conducting the investigation.
Chapter 6	Reporting
6.13	The U.S. supports the principle of not circulating, publishing, or providing access to a draft report or any part thereof unless such a report or document has already been published or released by the State which conducted the investigation. However, the laws of the U.S. facilitate the public disclosure of information held by government agencies and commercial business. The U.S. government may not be able to restrict public access to a draft report or any part thereof on behalf of the State conducting the investigation. The standard for determining public access to information requested from a U.S. government agency or a commercial business does not consider or require the expressed consent of the State conducting an investigation.

## ANNEX 13 - AIRCRAFT ACCIDENT INVESTIGATION

ANNEX 14 -	AERODROMES						
VOLUME 1 - AERODROME DESIGN AND OPERATIONS							
Chapter 1	General						
1.2.1	<ul> <li>Airports in the U.S. are for the most part owned and operated by local governments and quasi-government organizations formed to operate transportation facilities. The Federal Government provides air traffic control, operates and maintains NAVAIDs, provides financial assistance for airport development, certificates major airports, and issues standards and guidance for airport planning, design, and operational safety.</li> <li>There is general conformance with the Standards and Recommended Practices of Annex 14, Volume I. At airports with scheduled passenger service using aircraft having more than nine seats, compliance with standards is enforced through regulation and certification. At other airports, compliance is achieved through the agreements with individual airports under which Federal development funds were granted; or, through voluntary actions.</li> </ul>						
1.3.1 1.3.2 1.3.3 1.3.4	In the U.S., the Airport Reference Code is a two-component indicator relating the standards used in the airport's design to a combination of dimensional and operating characteristics of the largest aircraft expected to use the airport. The first element, Aircraft Approach Category, corresponds to the ICAO PANS-OPS approach speed groupings. The second, Airplane Design Group, corresponds to the wingspan groupings of code element 2 of the Annex 14, Aerodrome Reference Code. See below:						

Aircraft Approach Category	Approximate Annex 14 Code Number			
А	1			
В	2			
С	3			
D	4			
E	-			
Airplane Design Group	Corresponding Annex 14 Code Letter			
Ι	А			
II	В			
III	С			
IV	D			
V	Е			
VI	F			
	(proposed)			

## *TBL GEN 1.7–1* Airport Reference Code (ARC)

EXAMPLE: AIRPORT DESIGNED FOR B747-400 ARC D-V.

Chapter 2	Aerodrome Data
2.2.1	The airport reference point is recomputed when the ultimate planned development of the airport is changed.
2.9.6 2.9.7	Minimum friction values have not been established to indicate that runways are "slippery when wet." However, U.S. guidance recommends that pavements be maintained to the same levels indicated in the ICAO Airport Services Manual.
2.11.3	If inoperative fire fighting apparatus cannot be replaced immediately, a NOTAM must be issued. If the apparatus is not restored to service within 48 hours, operations shall be limited to those compatible with the lower index corresponding to operative apparatus.
2.12 e)	Where the original VASI is still installed, the threshold crossing height is reported as the center of the on-course signal, not the top of the red signal from the downwind bar.

Chapter 3	Physical Characteristics
3.1.2*	The crosswind component is based on the ARC: 10.5 kt for AI and BI; 13 kt for AII and BII; 16 kt for AIII, BIII and CI through DIII; 20 kts for AIV through DVI.
3.1.9*	Runway widths (in meters) used in design are shown in the table below:

## Width of Runway in Meters

Aircraft Approach Category	Airplane Design Group							
	Ι	II	III	IV	V	VI		
А	18 <sup>1</sup>	23 <sup>1</sup>			45	60		
В	18 <sup>1</sup>	23 <sup>1</sup>			45	60		
С	30	30	30 <sup>2</sup>	45	45	60		
D	30	30	<b>30</b> <sup>2</sup>	45	45	60		

<sup>1</sup>The width of a precision (lower than 3/4 statute mile approach visibility minimums) runway is 23 meters for a runway which is to accommodate only small (less than 5,700 kg) airplanes and 30 meters for runways accommodating larger airplanes.

 $^{2}$ For airplanes with a maximum certificated take–off mass greater than 68,000 kg, the standard runway width is 45 meters.

3.1.12	FAA allows dual and triple simultaneous independent approaches when runway centerlines are at least 3100 feet apart.
3.1.14*	Longitudinal runway slopes of up to 1.5 percent are permitted for aircraft approach categories C and D except for the first and last quarter of the runway where the maximum slope is 0.8 percent.
3.1.19*	<ul> <li>Minimum and maximum transverse runway slopes are based on aircraft approach categories as follows:</li> <li>For categories A and B: 1.0 – 2.0 percent</li> <li>C and D: 1.0 – 1.5 percent</li> </ul>
3.2.2	The U.S. does not require that the minimum combined runway and shoulder widths equal 60 meters. The widths of shoulders are determined independently.
3.2.3*	The transverse slope on the innermost portion of the shoulder can be as high as 5 percent.
3.3.3 3.3.4* 3.3.5*	A strip width of 120 meters is used for code 3 and 4 runways for precision, nonprecision, and non-instrumented operations. For code 1 and 2 precision runways, the width is 120 meters. For non-precision/visual runways, widths vary from 37.5 meters up to 120 meters.
3.3.9*	Airports used exclusively by small aircraft (U.S. Airplane Design Group I) may be graded to distances as little as 18 meters from the runway centerline.
3.3.14*	The maximum transverse slope of the graded portion of the strip can be 3 percent for aircraft approach categories C and D and 5 percent for aircraft approach categories A and B.
3.3.15*	The U.S. does not have standards for the maximum transverse grade on portions of the runway strip falling beyond the area that is normally graded.
3.3.17*	Runways designed for use by smaller aircraft under non–instrument conditions may be graded to distances as little as 18 meters from the runway centerline (U.S. Airplane Design Groups I and II).
3.4.2*	For certain code 1 runways, the runway end safety areas may be only 72 meters.
3.7.1* 3.7.2*	The U.S. does not provide Standards or Recommended Practices for radio altimeter operating areas.
3.8.3*	The U.S. specifies a 6 meter clearance for Design Group VI airplanes.
3.8.4*	The taxiway width for Design Group VI airplanes is 30 meters.
3.8.5*	The U.S. also permits designing taxiway turns and intersections using the judgmental oversteering method.

# 3.8.7\* Minimum separations between runway and taxiway centerlines, and minimum separations between taxiways and taxilanes and between taxiway/taxilanes and fixed/moveable objects are shown in the tables that follow. Generally, U.S. separations are larger for non-instrumented runways, and smaller for instrumented runways, than the Annex. Values are also provided for aircraft with wingspans up to 80 meters.

### Minimum Separations Between Runway Centerline and Parallel Taxiway/Taxilane Centerline

Operation	Aircraft Approach							
Operation	Category	I1	Ι	п	III	IV	V	VI
Visual runways and runways with not lower than <sup>3</sup> / <sub>4</sub> _statute mile (1,200 meters) approach visibility minimums	A and B	150 feet 45 meters	225 feet 67.5 meters	240 feet 72 meters	300 feet 90 meters	400 feet 120 meters		
Runways with lower than $^{3}/_{4}$ -statute mile (1,200 meters) approach visibility minimums	A and B	200 feet 60 meters	250 feet 75 meters	300 feet 90 meters	350 feet 105 meters	400 feet 120 meters		
Visual runways and runways with not lower than <sup>3</sup> / <sub>4</sub> _statute mile (1,200 meters) approach visibility minimums	C and D		300 feet 90 meters	300 feet 90 meters	400 feet 120 meters	400 feet 120 meters	$400^2$ feet $120^2$ meters	600 feet 180 meters
Runways with lower than <sup>3</sup> / <sub>4</sub> _statute mile (1,200 meters) approach visibility minimums	C and D		400 feet 120 meters	400 feet 120 meters	400 feet 120 meters	400 feet 120 meters	$400^2$ feet $120^2$ meters	600 feet 180 meters

<sup>1</sup>These dimensional standards pertain to facilities for small airplanes exclusively.

 $^{2}$ Corrections are made for altitude: 120 meters separation for airports at or below 410 meters; 135 meters for altitudes between 410 meters and 2,000 meters; and, 150 meters for altitudes above 2,000 meters.

Airplane Design Group							
	I	II	III	IV	V	VI	
Taxiway centerline to parallel taxiway/ taxilane centerline	69 feet 21 meters	105 feet 32 meters	152 feet 46.5 meters	215 feet 65.5 meters	267 feet 81 meters	324 feet 99 meters	
Fixed or movable object	44.5 feet 13.5 meters	65.5 feet 20 meters	93 feet 28.5 meters	129.5 feet 39.5 meters	160 feet 48 meters	193 feet 59 meters	
Taxilane centerline to parallel taxilane centerline	64 feet 19.5 meters	97 feet 29.5 meters	140 feet 42.5 meters	198 feet 60 meters	245 feet 74.5 meters	298 feet 91 meters	
Fixed or movable object	39.5 feet 12 meters	57.5 feet 17.5 meters	81 feet 24.5 meters	112.5 feet 34 meters	138 feet 42 meters	167 feet 51 meters	

#### Minimum Taxiway and Taxilane Separations:

3.8.10* Line-of-sight standards for taxiways are not provided in U.S. practice, but there is a require that the sight distance along a runway from an intersecting taxiway must be sufficient to all taxiing aircraft to safely enter or cross the runway.		
3.8.11*	Transverse slopes of taxiways are based on aircraft approach categories. For categories C and D, slopes are 1.0–1.5 percent; for A and B, 1.0–2.0 percent.	
3.11.5	The runway centerline to taxi-holding position separation for code 1 is 38 meters for non-precision operations and 53 meters for precision. Code 3 and 4 precision operations require a separation of 75 meters, except for "wide bodies," which require 85 meters.	

	Precision Approach	Non-precision Instrument Approach			Visual Runway	
	All runways	All runways <sup>a</sup>	Runways other than utility <sup>b</sup>	Utility runways <sup>d</sup>	Runways other than utility	Utility runways
Width of inner edge	305 meters	305 meters	152 meters	152 meters	152 meters	76 meters <sup>c</sup>
Divergency (each side)	15 percent	15 percent	15 percent	15 percent	10 percent	10 percent
Final width	4,877 meters	1,219 meters	1,067 meters <sup>c</sup>	610 meters	475 meters <sup>c</sup>	381 meters <sup>c</sup>
Length	15,240 meters	3,048 meters <sup>c</sup>	3,048 meters <sup>c</sup>	1,524 meters <sup>c</sup>	1,524 meters <sup>c</sup>	1,524 meters <sup>c</sup>
Slope: inner 3,049 meters	2 percent	2.94 percent <sup>c</sup>	2.94 percent <sup>c</sup>	5 percent <sup>c</sup>	5 percent <sup>c</sup>	5 percent <sup>c</sup>
Slope: beyond 3,048 meters	2.5 percent <sup>c</sup>					

## **Dimensions and Slopes for Protective Areas and Surfaces**

<sup>a</sup>With visibility minimum as low as 1.2 km; <sup>b</sup>with visibility minimum greater than 1.2 km; <sup>c</sup>criteria less demanding than Annex 14 Table 4–1 dimensions and slopes. <sup>d</sup>Utility runways are intended to serve propeller–driven aircraft having a maximum take–off mass of 5,570 kg.

Chapter 4	Obstacle Restriction and Removal
4.1	Obstacle limitation surfaces similar to those described in 4.1–4.20 are found in 14 CFR Part 77.
4.1.21	A balked landing surface is not used.
4.1.25	The U.S. does not establish take–off climb obstacle limitation areas and surface, <i>per se</i> , but does specify protective surfaces for each end of the runway based on the type of approach procedures available or planned. The dimensions and slopes for these surfaces and areas are listed in the table above.
4.2	The dimensions and slopes of U.S. approach areas and surfaces are set forth in the above table. Aviation regulations do not prohibit construction of fixed objects above the surfaces described in these sections.
4.2.1	Primary surface is also used as a civil airport imaginary surface. Primary surface is a surface longitudinally centered on a runway.
	U.S. uses the width of the primary surface of a runway as prescribed in 14 CFR Part 77.25 for the most precise approach existing or planned for either end of that runway.
4.2.8	The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.
4.2.9	Approach surfaces are applied to each end of each runway based upon the type of approach available or planned for that runway end.
4.2.10, 4.2.11	Any proposed construction of or alteration to an existing structure is normally considered to be physically shielded by one or more existing permanent structure(s), natural terrain, or topographic feature(s) of equal or greater height if the structure under consideration is located within the lateral dimensions of any runway approach surface but would not exceed an overall height above the established airport elevation greater than that of the outer extremity of the approach surface, and located within, but would not penetrate, the shadow plane(s) of the shielding structure(s).
4.2.12	The basic principle in applying shielding guidelines is whether the location and height of the structures are such that aircraft, when operating with due regard for the shielding structure, would not collide with that structure.
4.2.16	The size of each imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.
4.2.17	Approach surfaces are applied to each end of each runway based upon the type of approach available or planned for that runway end.

Chapter 5	Visual Aids for Navigation
5.2.1.7*	The U.S. does not require unpaved taxiways to be marked.
5.2.2.2*	The U.S. does not require a runway designator marking for unpaved runways.
5.2.2.4	Zeros are not used to precede single-digit runway markings. An optional configuration of the numeral 1 is available to designate a runway 1 and to prevent confusion with the runway centerline.
5.2.4.2* 5.2.4.3*	Threshold markings are not required, but sometimes provided, for non-instrument runways that do not serve international operations.
5.2.4.5	The current U.S. standard for threshold designation is eight stripes, except that more than eight stripes may be used on runways wider than 45 meters. After 1 January 2008, the U.S. standard will comply with Annex 14.
5.2.4.6	The width and spacing of threshold stripes will comply with Annex 14 after 1 January 2008.
5.2.4.10	When a threshold is temporarily displaced, there is no requirement that runway or taxiway edge markings, prior to the displaced threshold, be obscured. These markings are removed only if the area is unsuitable for the movement of aircraft.
5.2.5.2 5.2.5.3*	Aiming point markings are required on precision instrument runways and code 3 and 4 runways used by jet aircraft.
5.2.5.4	The aiming point marking commences 306 meters from the threshold at all runways.
5.2.6.3	The U.S. pattern for touchdown zone markings, when installed on both runway ends, is only applicable to runways longer than 4,990 feet. On shorter runways, the three pair of markings closest to the runway midpoint are eliminated.
5.2.6.4	The U.S. standard places the aiming point marking 306 meters from the threshold where it replaces one of the pair of three stripe threshold markings. The 306 meters location is used regardless of runway length.
5.2.6.5*	Touchdown zone markings are not required at a non-precision approach runway, though they may be provided.
5.2.7.4*	Runway side stripe markings on a non-instrument runway may have an over-all width of 0.3 meter.
5.2.8.3	Taxiway centerline markings are never installed longitudinally on a runway even if the runway is part of a standard taxi route.
5.2.9.5*	The term "ILS" is used instead of CAT I, CAT II, CAT III.
5.2.11.4 5.2.11.5* 5.2.11.6*	Check-point markings are provided, but the circle is 3 meters in diameter, and the directional line may be of varying width and length. The color is the yellow used for taxiway markings.
5.2.12	Standards for aircraft stand markings are not provided.
5.2.13.1*	Apron safety lines are not required although many airports have installed them.
5.2.14.1	The U.S. does not have standards for holding position markings on roadways that cross runways. Local traffic control practices are used.
5.3.1.1 5.3.1.2*	The U.S. does not have regulations to prevent the establishment of non-aviation ground lights that might interfere with airport operations.
5.3.1.3 5.3.1.4	New approach lighting installations will meet the frangibility requirements. Some existing non-frangible systems may not be replaced before 1 January 2005.
5.3.2.1* 5.3.2.2* 5.3.2.3*	There is no requirement for an airport to have emergency runway lighting available if it does not have a secondary power source. Some airports do have these systems, and there is an FAA specification for these lights.
5.3.3.1 5.3.3.3	Only airports served by aircraft having more than 30 seats are required to have a beacon, though they are available at many others.
5.3.3.6	Although the present U.S. standard for beacons calls for 24–30 flashes per minute, some older beacons may have flash rates as low as 12 flashes per minute.
5.3.3.8	Coded identification beacons are not required and are not commonly installed. Typically, airport beacons conforming to 5.3.3.6 are installed at locations served by aircraft having more than 30 seats.

5.3.4.1	While the U.S. has installed an approach light system conforming to the specifications in 5.3.4.10 through 5.3.4.19, it also provides for a lower cost system consisting of medium intensity approach lighting and sequenced flashing lights (MALSF) at some locations.
5.3.4.2	In addition to the system described in 5.3.4.1, a system consisting of omnidirectional strobe lights (ODALS) located at 90 meters intervals extending out to 450 meters from the runway threshold is used at some locations.
5.3.4.10 through 5.3.4.19	The U.S. standard for a precision approach category I lighting system is a medium intensity approach lighting system with runway alignment indicator lights (MALSR). This system consists of 3 meters barrettes at 60 meters intervals out to 420 meters from the threshold and sequenced flashing lights at 60 meters intervals from 480 meters to 900 meters. A crossbar 20 meters in length is provided 300 meters from the threshold. The total length of this system is dependent upon the ILS glide path angle. For angles 2.75° and higher, the length is 720 meters.
5.3.4.16 5.3.4.31	The capacitor discharge lights can be switched on or off when the steady-burning lights of the approach lighting system are operating. However, they cannot be operated when the other lights are not in operation.
5.3.4.20	The U.S. standard for a precision approach category II and III lighting system has a total length dependent upon the ILS glide path angle. For angles 2.75° and higher, the length is 720 meters.
5.3.5.1 5.3.5.3 5.3.5.4	Visual approach slope indicator systems are not required for all runways used by turbojets except runways involved with land and hold short operations that do not have an electronic glideslope system.
5.3.5.2	In addition to PAPI and APAPI systems, VASI and AVASI type systems remain in service at U.S. airports with commercial service. Smaller general aviation airports may have various other approach slope indicators including tri–color and pulsating visual approach slope indicators.
5.3.5.27	The U.S. standard for PAPI allows for the distance between the edge of the runway and the first light unit to be reduced to 9 meters for code 1 runways used by nonjet aircraft.
5.3.5.42	The PAPI obstacle protection surface used is as follows: The surface begins 90 meters in front of the PAPI system (toward the threshold) and proceeds outward into the approach zone at an angle 1 degree less than the aiming angle of the third light unit from the runway. The surface flares 10 degrees on either side of the extended runway centerline and extends 4 statute miles from its point of origin.
5.3.8.4	The U.S. permits the use of omnidirectional runway threshold identification lights.
5.3.13.2	The U.S. does not require the lateral spacing of touchdown zone lights to be equal to that of touchdown zone marking when runways are less that 45 meters wide.
	The lateral distance between the markings is 22 meters when installed on runways with a width of 45 meters or greater. The distance is proportionately smaller for narrower runways. The lateral distance between touchdown zone lights is nominally 22 meters but may be reduced to 20 meters to avoid construction problems.
5.3.14	The U.S. has no provision for stopway lights.
5.3.15.1 5.3.15.2*	Taxiway centerline lights are required only below 183 meters RVR on designated taxi routes. However, they are generally recommended whenever a taxiing problem exists.
5.3.15.3 8.2.3	Taxiway centerline lights are not provided on runways forming part of a standard taxi route even for low visibility operations. Under these conditions, the taxi path is coincident with the runway centerline, and the runway lights are illuminated.
5.3.15.5	Taxiway centerline lights on exit taxiways presently are green. However, the new U.S. standard which is scheduled to be published by 1 January 98 will comply with the alternating green/yellow standard of Annex 14.
5.3.15.7*	The U.S. permits an offset of up to 60 cm.
5.3.16.2 8.2.3	Taxiway edge lights are not provided on runways forming part of a standard taxi route.

5.3.17.1 5.3.17.2* 5.3.17.3 5.3.17.4* 5.3.17.5*	Stop bars are required only for runway visual range conditions less than a value of 183 meters at taxiway/runway intersections where the taxiway is lighted during low visibility operations. Once installed, controlled stop bars are operated at RVR conditions less than a value of 350 meters.				
5.3.17.6	Elevated stop bar lights are normally installed longitudinally in line with taxiway edge lights. Where edge lights are not installed, the stop bar lights are installed not more than 3 meters from the taxiway edge.				
5.3.17.9	The beamspread of elevated stop bar lights differs from the inpavement lights. The inner isocandela curve for the elevated lights is $\pm$ 7 horizontal and $\pm$ 4 vertical.				
5.3.17.12	The U.S. standard for stop bars, which are switchable in groups, does not require the taxiway centerline lights beyond the stop bars to be extinguished when the stop bars are illuminated. The taxiway centerline lights which extend beyond selectively switchable stop bars are grouped into two segments of approximately 45 meters each. A sensor at the end of the first segment re–illuminates the stop bar and extinguishes the first segment of centerline lights. A sensor at the end of the second segment extinguishes that segment of centerline lights.				
5.3.18.1*	Taxiway intersection lights are also used at other hold locations on taxiways such as low visibility holding points.				
5.3.18.2	Taxiway intersection lights are collocated with the taxiway intersection marking. The marking is located at the following distances from the centerline of the intersecting taxiway:				
	Airplane Design GroupDistanceI13.5 metersII20 metersIII28.5 metersIV39 metersV48.5 metersVI59 meters				
5.3.19.1 5.3.19.2*	Runway guard lights are required only for runway visual range conditions less than a value of 350 meters.				
5.3.19.4 5.3.19.5	Runway guard lights are placed at the same distance from the runway centerline as the aircraft holding distance, or within a few feet of this location.				
5.3.19.12	The new U.S. standard for in-pavement runway guard lights complies with Annex 14. However, there may be some existing systems that do not flash alternately.				
5.3.20.4*	The U.S. does not set aviation standards for flood lighting aprons.				
5.3.21	The U.S. does not provide standards for visual docking guidance systems. U.S. manufacturers of these devices generally adhere to ICAO SARPS.				
5.3.23.1	The U.S. does not have a requirement for providing roadholding position lights during RVR conditions less than a value of 350 meters.				
5.4.1.2	Signs are often installed a few centimeters taller than specified in Annex 14, Volume 1, Table 5–4.				
5.4.1.5	Sign inscriptions are slightly larger, and margins around the sign slightly smaller, than indicated in Annex 14, Volume 1, Appendix 4.				
5.4.1.6	The sign luminance requirements are not as high as specified in Appendix 4. The U.S. does not specify a nighttime color requirement in terms of chromaticity.				
5.4.2.2 5.4.2.4 5.4.2.9 5.4.2.14 5.4.2.16	All signs used to denote precision approach holding positions have the legend "ILS."				
5.4.2.6	U.S. practice uses the NO ENTRY sign to prohibit entry by aircraft only.				
5.4.2.8 5.4.2.10	The second mandatory instruction sign is usually not installed unless added guidance is necessary.				

5.4.2.15	Signs for holding aircraft and vehicles from entering areas where they would infringe on obstacle limitation surfaces or interfere with NAVAIDs are inscribed with the <i>designator of the approach</i> , followed by the letters "APCH"; for example, "15–APCH."
5.4.3.13 5.4.3.15	U.S. practice is to install signs about 3 to 5 meters closer to the taxiway/runway (See Annex 14, Table 5–4).
5.4.3.16	The U.S. does not have standards for the location of runway exit signs.
5.4.3.24	A yellow border is used on all location signs, regardless of whether they are stand-alone or collocated with other signs.
5.4.3.26	U.S. practice is to use Pattern A on runway vacated signs, except that Pattern B is used to indicate that an ILS critical area has been cleared.
5.4.3.30*	The U.S. does not have standards for signs used to indicate a series of taxi-holding positions on the same taxiway.
5.4.4.4*	The inscription, "VOR Check Course," is placed on the sign in addition to the VOR and DME data.
5.4.5.1*	The U.S. does not have requirements for airport identification signs, though they are usually installed.
5.4.6.1*	Standards are not provided for signs used to identify aircraft stands.
5.4.7.2	The distance from the edge of road to the road-holding position sign conforms to local highway practice.
5.5.2.2* 5.5.7.1*	Boundary markers may be used to denote the edges of an unpaved runway.
5.5.3	There is no provision for stopway edge markers.
Chapter 6	Visual Aids for Denoting Obstacles
6.1	Recommended practices for marking and lighting obstacles are found in FAA Advisory Circular 70/7460–1J, Obstruction Marking and Lighting.
6.1.3	Any temporary or permanent structure, including all appurtenances, that exceeds an overall height of 200 feet (61m) above ground level or exceeds any obstruction standard contained in 14 CFR Part 77, should normally be marked and/or lighted.
6.2.1	This chapter provides recommended guidelines to make certain structures conspicuous to pilots during daylight hours. One way of achieving this conspicuity is by painting and/or marking these structures.
	Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.
6.2.3*	The maximum dimension of the rectangles in a checkered pattern is 6 meters on a side.
6.2.7	Markers should be displayed in conspicuous positions on or adjacent to the structure so as to retain the general definition of the structure. They should be recognizable in clear air from a distance of at least 4,000 feet (1219m) and in all directions from which aircraft are likely to approach. Markers should be distinctively shaped, i.e., spherical or cylindrical, so they are not mistaken for items that are used to convey other information. They should be replaced when faded or otherwise deteriorated.
6.2.11	Flag markers should be displayed around, on top, or along the highest edge of the obstruction. When flags are used to mark extensive or closely grouped obstructions, they should be displayed approximately 50 feet (15m) apart. The flag stakes should be of such strength and height that they will support the flags above all surrounding ground, structures, and/or objects of natural growth.
6.2.12	Each side of the flag marker should be at least 2 feet $(0.6m)$ in length.
	Standard does not specifically address mobile objects.
6.2.14	Color patterns. Flags should be colored as follows: solid, orange and white, and checkerboard. Standard does not specifically address mobile objects.

6.3.1	Obstruction lighting may be displayed on structures as follows: aviation red obstruction lights; medium intensity flashing white obstruction lights, high intensity flashing white obstruction lights, dual lighting, obstruction lights during construction, obstruction lights in urban areas, and temporary construction equipment lighting.
6.3.11	The height of the structure AGL determines the number of light levels.
	Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.
6.3.13	When a structure lighted by a high intensity flashing light system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white light (L-865) should be placed within 40 feet (12m) from the tip of the appurtenance. This light should operate 24 hours a day and flash simultaneously with the rest of the lighting system.
6.3.14	The number of light units recommended depends on the diameter of the structure at the top.
6.3.16	Lights should be installed on the highest point at each end. At intermediate levels, lights should be displayed for each 150 feet (46m) or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.
6.3.17	Lights should be installed on the highest point at each end. At intermediate levels, lights should be displayed for each 150 feet (46m) or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.
6.3.18	Lights should be installed on the highest point at each end. At intermediate levels, lights should be displayed for each 150 feet (46m) or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.
6.3.19, 6.3.20	One or more light units is needed to obtain the desired horizontal coverage. The number of light units recommended per level (except for the supporting structures of catenary wires and buildings) depends upon the average outside diameter of the specific structure, and the horizontal beam width of the light fixture. The light units should be installed in a manner to ensure an unobstructed view of the system by a pilot approaching from any direction. The number of lights recommended is the minimum.
	The U.S. does not utilize Type A or Type B obstacle lights. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.
6.3.21* 6.3.22*	<ul> <li>The effective intensity, for daylight–luminance background, of Type A high–intensity obstacle lights is 270,000 cd ± 25 percent.</li> <li>The effective intensity, for daylight–luminance background, of Type B high–intensity obstacle lights is 140,000 cd ± 25 percent.</li> </ul>
6.3.22	The height of the structure AGL determines the number of light levels. The light levels may be adjusted slightly, but not to exceed 10 feet (3m) when necessary to accommodate guy wires and personnel who replace or repair light fixtures. If an adjacent object shields any light, horizontal placement of the lights should be adjusted or additional lights should be mounted on that object to retain or contribute to the definition of the obstruction.
	Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

6.3.23, 6.3.24, 6.3.27, 6.3.29	Red obstruction lights are used to increase conspicuity during nighttime. The red obstruction lighting system is composed of flashing omnidirectional beacons $(L-864)$ and/or steady burning $(L-810)$ lights. When one or more levels is comprised of flashing beacon lighting, the lights should flash simultaneously.			
	The U.S. does not utilize Type A, B, C, or D obstacle lights. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in			
6.3.28	When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from any direction.			
6.3.30, 6.3.31, 6.3.32	The medium intensity flashing white light system is normally composed of flashing omni- directional lights. Medium intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected reduced intensity for nighttime operation.			
	The U.S. does not utilize Type A, B, or C obstacle lights. Medium intensity flashing white (L-865) obstruction lights may provide conspicuity both day and night. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of structures and overall layout of design.			
6.3.35	Use high intensity flashing white obstruction lights during daytime with automatically selected reduced intensities for twilight and nighttime operations. When high intensity white lights are operated 24 hours a day, other methods of marking and lighting may be omitted.			
	The U.S. does not utilize Type A obstacle lights. Lighting with high intensity (L-856) flashing white obstruction lights provides the highest degree of conspicuity both day and night. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.			
Chapter 7	Visual Aids for Denoting Restricted Use Areas			
7.1.2*	A "closed" marking is not used with partially closed runways. See 5.2.4.10, above.			
7.1.4	Crosses with shapes similar to figure 7.1, illustration b) are used to indicate closed runways and taxiways. The cross for denoting a closed runway is yellow.			
7.1.5	In the U.S. when a runway is permanently closed, only the threshold marking, runway designation marking, and touchdown zone marking need be obliterated. Permanently closed taxiways need not have the markings obliterated.			
7.1.7	The U.S. does not require unserviceability lights across the entrance to a closed runway or taxiway when it is intersected by a night–use runway or taxiway.			
7.4.4	Flashing yellow lights are used as unserviceability lights. The intensity is such as to be adequate to delineate a hazardous area.			
Chapter 8	Equipment and Installations			
8.1.5* 8.1.6* 8.1.7	A secondary power supply for non-precision instrument and non-instrument approach runways is not required, nor is it required for all precision approach runways.			
8.1.8	The U.S. does not provide secondary power specifically for take–off operations below 550 meters RVR.			
8.2.1	There is no requirement in the U.S. to interleave lights as described in the Aerodrome Design Manual, Part 5.			
8.2.3	See 5.3.15.3 and 5.3.16.2			
8.7.2* 8.7.3 8.7.4*	Glide slope facilities and certain other installations located within the runway strip, or which penetrate obstacle limitation surfaces, may not be frangibly mounted.			

8.9.7*	A surface movement surveillance system is recommended for operations from 350 meters RVR down to 183 meters. Below 183 meters RVR, a surface movement radar or alternative technology is generally required.				
Chapter 9	Emergency and Other Services				
9.1.1	Emergency plans such as those specified in this section are required only at airports serving scheduled air carriers using aircraft having more than 30 seats. These airports are certificated under 14 CFR Part 139. In practice, other airports also prepare emergency plans.				
9.1.12	Full-scale airport emergency exercises are conducted at intervals, not to exceed three years, at airports with scheduled passenger service using aircraft with more than 30 seats.				
9.2.1	Rescue and fire fighting equipment and services such as those specified in this section are required only at airports serving scheduled air carriers in aircraft having more than 30 seats. Such airports generally equate to ICAO categories 4 through 9. Other airports have varying degrees of services and equipment.				
9.2.3*	There is no plan to eliminate, after 1 January 2005, the current practice of permitting a reduction of one category in the index when the largest aircraft has fewer than an average of five scheduled departures a day.				
9.2.4 9.2.5	The level of protection at U.S. airports is derived from the length of the largest aircraft serving the airport similar to the Annex's procedure, except that maximum fuselage width is not used. U.S. indices A–E are close equivalents of the Annex's categories 5–9. The U.S. does not have an equivalent to category 10.				

## Fire Extinguishing Agents and Equipment

Index	Aircraft length		Total minimum quantities of extinguishing agents			
	More than	Not more than	Dry chemical	Water for protein foam	Minimum trucks	Discharge rate <sup>1</sup>
А		27 meters	225 kg	0	1	See below
В	27 meters	38 meters	225 kg	5,700 L	1	See below
С	38 meters	48 meters	225 kg	5,700 L	2	See below
D	48 meters	60 meters	225 kg	5,700 L	3	See below
Е	60 meters		225 kg	11,400 L	3	See below

<sup>1</sup> Truck size	Discharge rate
1,900 L but less than 7,600	at least 1,900 L per minute but not more than 3,800 L per minute
7,600 L or greater	at least 2,280 L per minute but not more than 4,560 L per minute

9.2.10	The required firefighting equipment and agents by index are shown in the table above.
	The substitution equivalencies between complementary agents and foam meeting performance level A are also used for protein and fluoroprotein foam. Equivalencies for foam meeting performance level B are used only for aqueous film forming foams.
9.2.18*	There is no specific requirement to provide rescue equipment as distinguished from firefighting equipment.
9.2.19*	At least one apparatus must arrive and apply foam within 3 minutes with all other required vehicles arriving within 4 minutes.
	Response time is measured from the alarm at the equipment's customary assigned post to the commencement of the application of foam at the mid-point of the farthest runway.
9.2.29*	For ICAO category 6 (U.S. index B), the U.S. allows one vehicle.

9.4.4	At the present time, there is no requirement to perform tests using a continuous friction measuring device with self–wetting features. Some U.S. airports own these devices, while others use less formal methods to monitor build–up of rubber deposits and the deterioration of friction characteristics.
9.4.15	The standard grade for temporary ramps is 15 feet longitudinal per 1 inch of height (0.56 percent slope) maximum, regardless of overlay depth.
9.4.19	There is no U.S. standard for declaring a light unserviceable if it is out of alignment or if its intensity is less than 50 percent of its specified value.

\*Indicates ICAO Recommended Practice

ANNEX 14 – AERODROMES		
VOLUME II – H	VOLUME II – HELIPORTS	
Chapter 1	Definitions	
Declared distances	The U.S. does not use declared distances (take-off distance available, rejected take-off distance available, or landing distance available) in designing heliports.	
Final approach and take–off area (FATO)	The U.S. "take-off and landing area" is comparable to the ICAO FATO, and the U.S. "FATO" is more comparable to the ICAO TLOF. The U.S. definition for the FATO stops with "the take-off manoeuvre is commenced." This difference in definition reflects a variation in concept. The rejected take-off distance is an operational computation and is not required as part of the design.	
Helicopter stand	The U.S. does not use the term "helicopter stand." Instead, the U.S. considers paved or unpaved aprons, helipads, and helidecks, all as helicopter parking areas; i.e., helicopter stands.	
Safety area	The U.S. considers the safety area to be part of the take–off and landing area which surrounds the FATO and does not call for or define a separate safety area.	
Touchdown and lift–off area (TLOF)	The U.S. differs in the definition by considering helipads and helidecks to be FATO. The U.S. does not define the load bearing area on which the helicopter may touch down or lift–off as a TLOF.	
Chapter 2	Heliport Data	
2.1 d)	The U.S. does not measure or report a safety area as a separate feature of a heliport.	
2.2	The U.S. does not "declare" distances for heliports.	
Chapter 3	Physical Characteristics	
3.1.2	The U.S. does not distinguish between single–engine and multi–engine helicopters for the purposes of heliport design standards. Neither does the U.S. design or classify heliports on the basis of helicopter performance. The U.S. FATO dimensions are at least equal to the rotor diameter of the design single rotor helicopter and the area must be capable of providing ground effect. The U.S. does not have alternative design standards for water FATOs, elevated heliports, or helidecks.	
3.1.3	The U.S. has a single gradient standard; i.e., 5 percent, except in fueling areas where the limit is 2 percent, which is applicable for all portions of heliports.	
3.1.6 3.1.7* 3.1.8*	The U.S. does not require or provide criteria for clearways in its design standards. It does encourage ownership and clearing of the land underlying the innermost portion of the approach out to where the approach surface is 10.5 meters above the level of the take–off surface.	
3.1.14 to 3.1.21	Safety areas are considered part of the take-off and landing area (or primary surface) in U.S. heliport design. The take-off and landing area of the U.S. design criteria, based on 2 rotor diameters, provides for the ICAO safety area; however, the surface does not have to be continuous with the FATO or be load bearing.	
3.1.22	Taxiway widths are twice the undercarriage width of the design helicopter.	
3.1.23	The U.S. requires 1.25 rotor diameters plus 2 meters of separation between helicopter ground taxiways.	
3.1.24	The U.S. gradient standard for taxiways is a maximum of 5 percent.	
3.1.32*	The U.S. sets no gradient standards for air taxiways.	
3.1.33	The U.S. requires 1.5 rotor diameters of separation between hover or air taxiways.	
3.1.34	The U.S. standards for air taxiways and air transit routes are combined as the standards for hover taxiways noted in paragraphs 3.1.23, 3.1.24 and 3.1.33.	
3.1.35	The U.S. sets no maximum turning angle or minimum radius of turn on hover taxiways.	
3.1.36	The U.S. gradient standard for aprons is a maximum of 5 percent except in fueling areas where it is 2 percent.	
3.1.37	The U.S. criterion for object clearances is 1/3 rotor diameter or 3 meters, whichever is greater.	
3.1.38	The U.S. standard for helipads (comparable to helicopter stands) is 1.5 times the undercarriage length or width, whichever is greater.	

3.1.39	The U.S. standard for separation between FATO center and the centerline of the runway is 120 meters.
3.2.2	The U.S. does not apply either a performance related or an alternative design standard for elevated heliport facilities.
3.2.5 to 3.2.10	The U.S. does not use safety areas in its heliport design.
3.3 3.4	In the U.S., shipboard and relocatable off-shore helicopter "helideck" facilities are under the purview of the U.S. Coast Guard and utilize the International Maritime Organization (IMO) code. Fixed off-shore helideck facilities are under the purview of the Department of Interior based on their document 351DM2. Coastal water helideck facilities are under the purview of the individual affected States.
Chapter 4	Obstacle Restriction and Removal
4.1.1	The U.S. approach surface starts at the edge of the take-off and landing area.
4.1.2 a)	The U.S. approach surface width adjacent to the heliport take-off and landing area is a minimum of 2 rotor diameters.
4.1.2 b) 2)	The U.S. precision instrument approach surface flares from a width of 2 rotor diameters to a width of 1,800 meters at the 7,500 meters outer end. The U.S. does not use a note similar to the one that follows 4.1.4, as it does not differentiate between helicopter requirements on the basis of operational performance.
4.1.5	The outer limit of the U.S. transitional surfaces adjacent to the take–off and landing area is 76 meters from the centerline of the VFR approach/departure surfaces. The transitional surface width decreases to zero at a point 1,220 meters from the take–off and landing area. It does not terminate at an inner horizontal surface or at a predetermined height.
4.1.6	The U.S. transitional surfaces have a fixed width, 76 meters less the width of the take–off and landing area, from the approach centerline for visual operations and an outwardly flaring width to 450 meters for precision instrument operations. The U.S. does not use an inner horizontal surface nor terminate the transitional surfaces at a fixed/predetermined height.
4.1.7 b)	Since the U.S. includes the safety area in the take–off and landing area, the comparable elevation is at the elevation of the FATO.
4.1.9 through 4.1.20	The U.S. does not use the inner horizontal surface, the conical surface, or take-off climb surface described in these paragraphs or the note following paragraph 4.1.20 for heliport design.
4.1.21 through 4.1.25	The U.S. does not have alternative criteria for floating or fixed-in-place helidecks.
4.2	The U.S. has no requirement for a note similar to the one following the heading "Obstacle limitation requirements."
4.2.1	The U.S. criteria does not require a take–off climb surface or a conical obstacle limitation surface to establish a precision instrument approach procedure.
4.2.2	The U.S. criteria does not require a take–off climb surface or a conical obstacle limitation surface to establish a non–precision instrument approach procedure.
4.2.3	The U.S. criteria does not require a take-off climb obstacle limitation surface to establish a non-instrument approach procedure.
4.2.4*	The U.S. has no requirement for protective surfaces such as an inner horizontal surface or a conical surface.
4.2.5	The U.S. does not have tables for heliport design comparable to the ICAO Tables 4–1 to 4–4.
4.2.6	The U.S. subscribes to the intent of this paragraph to limit object heights in the heliport protective surfaces but uses fewer surfaces with different dimensions for those surfaces.
4.2.7*	The U.S. subscribes to the intent of this paragraph but uses different dimensional surfaces.
4.2.8	The U.S. criterion requires that a heliport have at least one approach and departure route and encourages multiple approaches separated by arcs of 90 to 180 degrees.
4.2.9*	The U.S. has no requirement that a heliport's approach surfaces provide 95 percent usability.

4.2.10	Since the U.S. does not differentiate between surface level and elevated heliports, the comments to paragraphs 4.2.1 through 4.2.5 above apply.
4.2.11	The U.S. has no requirement for a take–off climb surface. It does require at least one approach/departure surface and encourages that there be as many approaches as is practical separated by arcs of 90 to 180 degrees.
4.2.12 through 4.2.22	Since the U.S. does not have alternative design criteria for helidecks or shipboard heliports, there are no comparable U.S. protective surface requirements.
Tables 4–1, 4–2, 4–3, 4–4	The U.S. does not have tables comparable to the ICAO Tables 4–1 to 4–4.
Chapter 5	Visual Aids
5.2.1	The U.S. does not have criteria for markings to be used in defining winching areas.
5.2.3.3	The U.S. maximum mass markings are specified in 1,000 pound units rather than tonnes or kilograms.
5.2.4.3	The U.S. criterion requires FATO markers but is not specific on the number or spacing between markers.
5.2.4.4	The U.S. criteria for FATO markers is not dimensionally specific.
5.2.6	The U.S. does not require, or have criteria for, marking an aiming point.
5.2.7.1	The U.S. does not require specific criteria for marking floating or off-shore fixed-in-place helicopter or helideck facilities.
5.2.8	The U.S. does not require marking the touchdown area.
5.2.9	The U.S. does not have criteria for heliport name markings.
5.2.10	The U.S. does not have a requirement to mark helideck obstacle-free sectors.
5.2.12.2	The U.S. criterion places the air taxiway markers along the edges of the routes rather than on the centerline.
5.2.12.3	The U.S. criterion for air taxiway markers does not specify the viewing area or height to width ratio.
5.3.2.3	The U.S. heliport beacon flashes white-green-yellow colors rather than a series of timed flashes.
5.3.2.5*	The U.S. criteria is not specific on the light intensity of the flash.
5.3.3.3	The U.S. criterion specifies a 300 meters approach light system configuration. The light bars are spaced at 30 meters intervals. The first two bars of the configuration are single lights, the next two bars are two lights, then two bars with three lights, then two bars with four lights, and finally two bars with five lights.
5.3.3.4	The U.S. approach light system uses aimed PAR-56 lights.
5.3.3.6	The U.S. heliport approach light system does not contain flashing lights.
5.3.5.2 a)	The U.S. requires an odd number of lights, but not less than three lights per side.
5.3.5.2 b)	The U.S. requires a minimum of eight lights for a circular FATO and does not specify the distance between lights.
5.3.5.4*	The U.S. criteria does not specify light distribution.
5.3.6	The U.S. does not have specific criteria for aiming point lights.
5.3.8	The U.S. does not have standards for winching area lighting.
Chapter 6	Heliport Services
6.1*	The U.S. requirements for rescue and fire fighting services at certificated heliports are found in 14 CFR Part 139. Criteria for other heliports are established by the National Fire Protection Association (NFPA) pamphlets 403 or 418, or in regulations of local fire departments.

\*Indicates ICAO Recommended Practice

ANNEX 15 – AERONAUTICAL INFORMATION SERVICES	
Chapter 1	General
ASHTAM	The U.S. doesn't have a series of NOTAM called ASHTAM.
Danger area	Danger Areas do not exist in the U.S. Equivalent/similar areas are defined, designated & charted as Prohibited, Warning, Alert, and Restricted Areas."
Pre-flight Information Bulletin (PIB)	The US does not use the term PIB.
Prohibited Area	Additional terminology used by the US.
Restricted Area	Additional terminology used by the US.
SNOWTAM	The US presents the information via a NOTAM.
1.1.20	The US does not use the term ASHTAM.
1.2.2.2	The U.S. utilizes Geoid–03 which is a component of the North American Vertical Datum of 1988 (NAVD 88).
Chapter 5	Aeronautical Information Products and Services
5.2.1	Currently, the U.S. does not utilize the ICAO format for domestic NOTAMs. The US NOTAMs that are distributed as International NOTAMs are in ICAO format (excluding the L/L).
5.2.5.1. f)	The US does not produce an Aircraft Parking / Docking Chart.
5.2.6	The U.S. does not use the term SNOWTAM.
Chapter 6	Aeronautical Information Updates
6.3.2.1	The U.S. does not routinely issue "trigger NOTAMs" referencing published material when an AIP amendment is issued.
6.3.2.3	The U.S. does not provide a NOTAM for accidental release of radioactive material, toxic chemicals, or volcanic ash deposition.

#### ANNEX 16 – ENVIRONMENTAL PROTECTION **VOLUME I – AIRCRAFT NOISE** Reference: Part 36 of Title 14 of the United States Code of Federal Regulations Chapter 1 1.7 Each person who applies for a type certificate for an airplane covered by 14 CFR Part 36, irrespective of the date of application for the type certificate, must show compliance with Part 36. Chapter 2 2.1.1For type design change applications made after 14 August 1989, if an airplane is a Stage 3 airplane prior to a change in type design, it must remain a Stage 3 airplane after the change in type design regardless of whether Stage 3 compliance was required before the change in type design. 2.3.1 a) Sideline noise is measured along a line 450 meters from and parallel to the extended runway centerline for two- and three-engine aircraft; for four-engine aircraft, the sideline distance is 0.35 NM. 2.4.2 Noise level limits for Stage 2 derivative aircraft depend upon whether the engine by-pass ratio is less than two. If it is, the Stage 2 limits apply. Otherwise, the limits are the Stage 3 limits plus 3 dB or the Stage 2 value, whichever is lower. Take-off noise limits for three-engine, Stage 2 derivative airplanes with a by-pass ratio equal to or 2.4.2.2 b) greater than 2 are 107 EPNdB for maximum weights of 385,000 kg (850,000 lb) or more, reduced by 4 dB per halving of the weight down to 92 EPNdB for maximum weights of 28,700 kg (63,177 lb) or less. Aircraft with a by-pass ratio less than 2 only need meet the Stage 2 limits. 2.5.1 Trade-off sum of excesses not greater than 3 EPNdB and no excess greater than 2 EPNdB. 2.6.1.1 For airplanes that do not have turbo-jet engines with a by-pass ratio of 2 or more, the following apply: a) four-engine airplanes - 214 meters (700 feet); b) all other airplanes – 305 meters (1,000 feet). For all airplanes that have turbo-jet engines with a by-pass ratio of 2 or more, the following apply: a) four-engine airplanes - 210 meters (689 feet); b) three-engine airplanes - 260 meters (853 feet); c) airplanes with fewer than three engines – 305 meters (1,000 feet). The power may not be reduced below that which will provide level flight for an engine inoperative or that will maintain a climb gradient of at least 4 percent, whichever is greater. Chapter 3 3.1.1 For type design change applications made after 14 August 1989, if an airplane is a Stage 3 airplane prior to a change in type design, it must remain a Stage 3 airplane after the change in type design regardless of whether Stage 3 compliance was required before the change in type design. 3.3.1 a) 2) The U.S. has no equivalent provision in 14 CFR Part 36. 3.3.2.2 A minimum of two microphones symmetrically positioned about the test flight track must be used to define the maximum sideline noise. This maximum noise may be assumed to occur where the aircraft reaches 305 meters (1,000 feet). 14 CFR Part 36 does not require symmetrical measurements to be made at each and every point for propeller-driven airplane sideline noise determination. 3.6.2.1 c) Under 14 CFR Part 36, during each test take-off, simultaneous measurements should be made at the sideline noise measuring stations on each side of the runway and also at the take-off noise measuring station. If test site conditions make it impractical to simultaneously measure take-off and sideline noise, and if each of the other sideline measurement requirements is met, independent

measurements may be made of the sideline noise under simulated flight path techniques. If the reference flight path includes a power cutback before the maximum possible sideline noise level is

developed, the reduced sideline noise level, which is the maximum value developed by the

simulated flight path technique, must be the certificated sideline noise value.

3.6.2.1 d)	14 CFR Part 36 specifies the day speeds and the acoustic reference speed to be the minimum approved value of $V_2 + 10$ kt, or the all-engines operating speed at 35 feet (for turbine-engine powered airplanes) or 50 feet (for reciprocating-engine powered airplanes), whichever speed is greater as determined under the regulations constituting the type certification basis of the airplane. The test must be conducted at the test day speeds $\pm 3$ kt.
3.7.4	If a take-off test series is conducted at weights other than the maximum take-off weight for which noise certification is requested: <ul> <li>a) at least one take-off test must be at or above that maximum weight;</li> <li>b) each take-off test weight must be within +5 or -10 percent of the maximum weight.</li> </ul> If an approach test series is conducted at weights other than the maximum landing weight for which certification is requested: <ul> <li>a) at least one approach test must be conducted at or above that maximum weight;</li> <li>b) each test weight must exceed 90 percent of the maximum landing weight.</li> </ul> Total EPNL adjustment for variations in approach flight path from the reference flight path and for any difference between test engine thrust or power and reference engine thrust or power must not exceed 2 EPNdB.
Chapter 5	
5.1.1	Applies to all large transport category aircraft (as they do to all subsonic turbo–jet aircraft regardless of category). Commuter category aircraft, propeller–driven airplanes below 8,640 kg (19,000 lb) are subject to 14 CFR Part 36, Appendix F or to Appendix G, depending upon the date of completion of the noise certification tests.
Chapter 6	
6.1.1	Applies to new, all propeller-driven airplane types below 19,000 lb (8,640 kg.) in the normal, commuter, utility, acrobatic, transport, or restricted categories for which the noise certification tests are completed before 22 December 1988.
Chapter 8	
General	14 CFR Part 36 (Section 36.1 (h)) defines Stage 1 and Stage 2 noise levels and Stage 1 and Stage 2 helicopters. These definitions parallel those used in 14 CFR Part 36 for turbo-jets and are used primarily to simplify the acoustical change provisions in Section 36.11.
	14 CFR Part 36 (Section 36.805(c)) provides for certain derived versions of helicopters for which there are no civil prototypes to be certificated above the noise level limits.
8.1.1 a)	Applicable to new helicopter types for which application for an original type certificate was made on or after 6 March 1988.
8.1.1 b)	Applicable only to "acoustical changes" for which application for an amended or supplemental type certificate was made on or after 6 March 1988.
8.4	14 CFR Part 36 Appendix H specifies a slightly different rate of allowable maximum noise levels as a function of helicopter mass. The difference can lead to a difference in the calculated maximum noise limits of 0.1 EPNdB under certain roundoff condition.
8.6.3.1 b)	Does not include the V <sub>NE</sub> speeds.
8.7	14 CFR Part 36 Appendix H does not permit certain negative corrections. Annex 16 has no equivalent provision.
8.7.4	EPNL correction must be less than 2.0 EPNdB for any combination of lateral deviation, height, approach angle and, in the case of flyover, thrust or power.
	Corrections to the measured data are required if the tests were conducted below the reference weight.
	Corrections to the measured data are required if the tests were conducted at other than reference engine power.
8.7.5	The rotor speed must be maintained within one percent of the normal operating RPM during the take–off procedure.
8.7.8	The helicopter shall fly within $\pm 10^{\circ}$ from the zenith for approach and take–off, but within $\pm 5^{\circ}$ from the zenith for horizontal flyover.

Chapter 10	
General	Exception from acoustical change rule given for aircraft with flight time prior to 1 January 1955 and land configured aircraft reconfigured with floats or skis.
10.1.1	Applies to new, amended, or supplemental type certificates for propeller–driven airplanes not exceeding 8,640 kg (19,000 lb) for which noise certification tests have not been completed before 22 December 1988.
10.4	The maximum noise level is a constant 73 dBA up to 600 kg (1,320 lb). Above that weight, the limit increases at the rate of 1 dBA/75kg (1 dBA/165 lb) up to 85 dBA at 1,500 kg (3,300 lb) after which it is constant up to and including 8,640 kg (19,000 lb).
10.5.2, second phase, d)	For variable–pitch propellers, the definition of engine power is different in the second segment of the reference path. Maximum continuous installed power instead of maximum power is used.
Chapter 11	
11.1	14 CFR Part 36 Appendix J was effective 11 September 1992 and applies to those helicopters for which application for a type certificate was made on or after 6 March 1986.
11.4	14 CFR Part 36 Appendix J specifies a slightly different rate of allowable maximum noise levels as a function of helicopter mass. The difference can lead to a difference in the calculated maximum noise limits of 0.1 EPNdB under certain roundoff condition.
11.6	14 CFR Part 36 Appendix J prescribes a $\pm 15$ meter limitation on the allowed vertical deviation about the reference flight path. Annex 16 has no equivalent provision.
PART V	
General	No comparable provision exists in U.S. Federal Regulations. Any local airport proprietor may propose noise abatement operating procedures to the FAA which reviews them for safety and appropriateness.
Appendix 1	
General	Sections 3, 8, and 9 of Appendix 1 which contain the technical specifications for equipment, measurement and analysis and data correction for Chapter 2 aircraft and their derivatives differ in many important aspects from the corresponding requirements in Appendix 2 which has been updated several times. 14 CFR Part 36 updates have generally paralleled those of Appendix 2 of Annex 16. These updated requirements are applicable in the U.S. to both Stage 2 and Stage 3 aircraft and their derivatives.
2.2.1	A minimum of two microphones symmetrically positioned about the test flight track must be used to define the maximum sideline noise. This maximum noise may be assumed to occur where the aircraft reaches 305 meters (1,000 feet), except for four-engine, Stage 2 aircraft for which 439 meters (1,440 feet) may be used.
2.2.2	No obstructions in the cone defined by the axis normal to the ground and the half–angle $80^{\circ}$ from the axis.
2.2.3 c)	Relative humidity and ambient temperature over the sound path between the aircraft and 10 meters above the ground at the noise measuring site is such that the sound attenuation in the 8 kHz one-third octave band is not greater than 12 dB/100 meters and the relative humidity is between 20 and 95 percent. However, if the dew point and dry bulb temperature used for obtaining relative humidity are measured with a device which is accurate to within one-half a degree Celsius, the sound attenuation rate shall not exceed 14 dB/100 meters in the 8 kHz one-third octave band.
2.2.3 d)	Test site average wind not above 12 kt and average cross-wind component not above 7 kt.
2.3.4	The aircraft position along the flight path is related to the recorded noise 10 dB downpoints.
2.3.5	At least one take-off test must be a maximum take-off weight and the test weight must be within $+5$ or $-10$ percent of maximum certificated take-off weight.
Appendix 2	
2.2.1	A minimum of two symmetrically placed microphones must be used to define the maximum sideline noise at the point where the aircraft reaches 305 meters.

2.2.2	When a multiple layering calculation is required, the atmosphere between the airplane and the ground shall be divided into layers. These layers are not required to be of equal depth, and the maximum layer depth must be 100 meters.
2.2.2 b)	14 CFR Part 36 specifies that the lower limit of the temperature test window is 36 degrees Fahrenheit (2.2 degrees Celsius). Annex 16 provides 10 degrees Celsius as the lower limit for the temperature test window.
	14 CFR Part 36 does not specify that the airport facility used to obtain meteorological condition measurements be within 2,000 meters of the measurement site.
2.2.2 c)	14 CFR Part 36 imposes a limit of 14 dB/100 meters in the 8 kHz one-third octave band when the temperature and dew point are measured with a device which is accurate to within one-half a degree Celsius.
2.2.3	14 CFR Part 36 requires that the limitations on the temperature and relative humidity test window must apply over the whole noise propagation path between a point 10 meters above the ground and the helicopter. Annex 16 specifies that the limitations on the temperature and relative humidity test window apply only at a point 10 meters above the ground.
	14 CFR Part 36 requires that corrections for sound attenuation must be based on the average of temperature and relative humidity readings at 10 meters and the helicopter. Annex 16 implies that the corrections for sound absorption are based on the temperature and relative humidity measured at 10 meters only.
3.2.6	No equivalent requirement.
3.4.5	For each detector/integrator the response to a sudden onset or interruption of a constant sinusoidal signal at the respective one-third octave band center frequency must be measured at sampling times 0.5, 1.0, 1.5, and 2.0 seconds after the onset or interruption. The rising responses must be the following amounts before the steady-state level: 0.5 seconds: $4.0 \pm 1.0 \text{ dB}$ 1.0 seconds: $1.75 \pm 0.75 \text{ dB}$ 1.5 seconds: $1.0 \pm 0.5 \text{ dB}$ 2.0 seconds: $0.6 \pm 0.5 \text{ dB}$
3.4.5 (Note 1)	No equivalent provision in 14 CFR Part 36.
3.5.2	No equivalent requirement.
5.4	14 CFR Part 36 requires that the difference between airspeed and groundspeed shall not exceed 10 kt between the 10 dB down time period.
8.4.2	14 CFR Part 36 specifies a value of $-10$ in the adjustment for duration correction. Annex 16 specifies a value of $-7.5$ .
9.1.2, 9.1.3	14 CFR Part 36 always requires use of the integrated procedure if the corrected take–off or approach noise level is within 1.0 dB of the applicable noise limit.
Appendix 6	
4.4.1	The microphone performance, not its dimensions, is specified. The microphone must be mounted $1.2$ meters (4 feet) above ground level. A windscreen must be employed when the wind speed is in excess of 9 km/h (5 kt).
5.2.2 a)	Reference conditions are different. Noise data outside the applicable range must be corrected to 77 degrees F and 70 percent humidity.
5.2.2 c)	There is no equivalent provision in 14 CFR Part 36. Fixed-pitch propeller-driven airplanes have a special provision. If the propeller is fixed-pitch and the test power is not within 5 percent of reference power, a helical tip Mach number correction is required.

## ANNEX 16 – ENVIRONMENTAL PROTECTION

VOLUME II – AIRCRAFT ENGINE EMISSIONS	
Chapter 1	
	The U.S. currently has regulations prohibiting intentional fuel venting from turbojet, turbofan and turboprop aircraft, but we do not now have a regulation preventing the intentional fuel venting from helicopter engines.

# ANNEX 17 – SECURITY – SAFEGUARDING INTERNATIONAL CIVIL AVIATION AGAINST ACTS OF UNLAWFUL INTERFERENCE

There are no reportable differences between U.S. regulations and the Standards and Recommended Practices contained in this Annex.

## ANNEX 18 - THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR

Adopted by the ICAO Council 6/26/81

Effective Date: 1/1/83

Applicability Date: 1/1/84

(Note: Differences are to be filed with ICAO by 6/1/83).

Chapter 1	General
1.2.2.2	The U.S. utilizes Geoid–03 which is a component of the North American Vertical Datum of 1988 (NAVD 88).
1.1 ASHTAM	The U.S. doesn't have a series of NOTAM called ASHTAM, although notification procedures are written on handling of Volcanic Ash activity.
1.1 Danger area	"Danger area" is not used in reference to areas within the U.S. or in any of its possessions or territories.
1.1 Maneuvering area	Any locality either on land, water, or structures, including airports/heliports and intermediate landing fields, which is used, or intended to be used, for the landing and takeoff of aircraft whether or not facilities are provided for the shelter, servicing, or for receiving or discharging passengers or cargo.
1.1 Movement area	The runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing/hover-taxiing, air-taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC.
1.1 Pre–flight Information Bulletin (PIB)	The US does not use the term PIB. However, current NOTAM information is gathered and available through different sources.
1.1 SNOWTAM	The US presents the information in a different manner via a NOTAM.
Chapter 3	Aeronautical Information Management
3.6.1	Current quality management system applies only to the Aeronautical Informational Services.
Chapter 5	Aeronautical Information Products and Services
5.2.2	The FAA does not use PIBs, but does provide pertinent NOTAM information in plain language form every 28 days in a document called the Notices to Air Missions Publication (NTAP).
5.2.5.1. f)	The US does not produce an Aircraft Parking / Docking Chart.
5.3.3.4.1	The United States does not publish the horizontal extent of obstacles.
Chapter 6	Aeronautical Information Updates
6.3.2.1	The U.S. does not routinely issue "trigger NOTAMs" referencing published material when an AIP amendment is issued.
6.3.2.3	The U.S. does not provide a NOTAM for accidental release of radioactive material, toxic chemicals, or volcanic ash deposition.

ANNEX 19 – SAFETY MANAGEMENT		
Chapter 3	State Safety Management Responsibilities	
3.3.2.1	U.S. does not currently require the implementation of SMS by approved training organizations that are exposed to safety risks related to aircraft operations during the provision of their services; some operators of aeroplanes or helicopters authorized to conduct international commercial air transport; approved maintenance organizations providing services to operators of aeroplanes or helicopters engaged in international commercial air transport; organizations responsible for the type design or manufacture of aircraft, engines or propellers; and operators of certified aerodromes.	
3.3.2.3	The U.S. has not established criteria for international general aviation operators of large or turbojet aeroplanes to implement an SMS.	

PANS - OPS - 8168/611 VOLUME I - Flight Procedures		
Table III–1–1 and Table III–1–2	Max speeds for visual maneuvering (Circling)" must not be applied to circling procedures in the U.S. Comply with the airspeeds and circling restrictions in ENR 1.5, paragraphs 11.1 and 11.6, in order to remain within obstacle protection areas.	
PART IV		
1.2.1	The airspeeds contained in ENR 1.5 shall be used in U.S. CONTROLLED AIRSPACE.	
VOLUME III – Aircraft Operating Procedures		
Section 10 – Flight Tracking		
1.2.1	The United States has notified differences to the distress tracking standards in Annex 6, Part I, 6.18. Consistent with those differences, the United States does not require U.S. operators to establish training programs and procedures specific to autonomous distress tracking and will not perform surveillance of implementation by U.S. operators.	
1.2.2	FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting, establishes mandatory occurrence reporting (MOR) requirements and format for FAA employees, including reports sourced from operators and missed position reporting. The MOR Report form includes most, but not all, of the template in the Appendix to Ch. 1.	
1.2.3	The United States has notified differences to the distress tracking standards in Annex 6, Part I, 6.18. Consistent with those differences, the United States does not require U.S. operators to maintain contact details in the ICAO OPS CTRL.	

## PAN - ABC - DOC 8400

Differences between abbreviations used in U.S. AIP, International NOTAMs Class I and Class II, and Notices to Air Missions Publication and ICAO PANS – ABC are listed in GEN 2.2. For other U.S. listings of abbreviations (contractions) for general use, air traffic control, and National Weather Service (NWS), which differ in some respects, see U.S. publication Contractions Handbook (FAA Order JO 7340.2). In addition, various U.S. publications contain abbreviations of terms used therein, particularly those unique to that publication.

## **GEN 2.4 Location Indicators**

Location identifiers authorized by the Federal Aviation Administration, Department of the Navy, and Transport Canada and U.S. airspace fixes and procedure codes are published in FAA Order JO 7350.9, Location Identifiers.

## **GEN 3. SERVICES**

## **GEN 3.1 Aeronautical Information Services**

## 1. Aeronautical Information Service

**1.1** The U.S. Aeronautical Information Services is a part of the Air Traffic Organization of the Federal Aviation Administration.

Postal Address: Federal Aviation Administration Aeronautical Information Services 1305 East–West Highway Silver Spring, MD 20910 *Telephone:* 800–638–8972 *Telex:* 892–562 Commercial Telegraphic Address: FAA WASH AFTN Address: KRWAYAYX

**1.2** The U.S. NOTAM office is located at the following address:

Postal Address: Federal Aviation Administration U.S. NOTAM Office Air Traffic Control System Command Center 3701 Macintosh Drive Warrenton, VA 20187 Telephone: 540–422–4260 Toll Free: 1–888–876–6826 Facsimile: 540–422–4298 Telex: None AFTN Address (Administrative): KDCAYNYX AFTN (NOTAM): KDZZNAXX

## 2. Area of Responsibility of AIS

**2.1** Aeronautical Information Services is responsible for the collection, validation, and dissemination of aeronautical information for the U.S. and areas under its jurisdiction for air traffic control purposes.

## 3. Aeronautical Publications

## 3.1 United States AIP

**3.1.1** The AIP, issued in one volume, is the basic aeronautical information document published for international use. It contains information of a lasting character, with interim updates published in various other publications. The AIP is available in English only and is maintained on a current basis by a 6-month amendment service.

## **3.2 Aeronautical Information Circulars**

**3.2.1** These circulars, called Advisory Circulars, contain information of general or technical interest relating to administrative or aviation matters which are inappropriate to either the AIP or the NOTAM. Advisory Circulars are available in English only. A checklist of outstanding circulars is issued annually.

# **3.3** En Route Aeronautical Charts, En Route Supplements, Approach Procedure Charts, Chart Supplements

**3.3.1** These publications, available in English only, contain specific information on airspace, airports, navigational aids, and flight procedures applicable to the regional areas of the U.S. and the territories and airspace under its jurisdiction. These publications are available on the AIS website at: http://www.faa.gov/air traffic/flight info/aeronav.

## 4. Distribution of Publications

**4.1** This order is available on the FAA's Air Traffic Plans and Publications website at http://faa.gov/air\_traffic/publications. All foreign aeronautical authorities are responsible for viewing, downloading, and subscribing to receive electronic mail notifications when changes occur to this publication. Subscriptions to air traffic directives can be made through the Air Traffic Plans and Publications website at https://www.faa.gov/air\_traffic/publications/ or directly via the following link: https://public.govdelivery.com/accounts/USAFAA/subscriber/new?topic\_id=USAFAA\_39. See information in paragraph 1.2 for published NOTAMs.

**4.2** Advisory Circulars are available, upon request, from the:

U.S. Department of Transportation Subsequent Distribution Office Ardmore East Business Center 3341 Q 75th Avenue Landover, MD 20785

**4.3** Public sales of charts and publications are available through FAA approved print providers. A listing of products, dates of latest editions, and print providers is available on the AIS website at: http://www.faa.gov/air\_traffic/flight\_info/aeronav.

**4.4** For the latest information regarding publication availability of world-wide products see the National Geospatial-Intelligence Agency (NGA) website: https://www.nga.mil/ProductsServices/Pages/PublicProducts.aspx.

## 5. NOTAM Service

## 5.1 NOTAM Class I (Telecommunication Distribution)

**5.1.1** NOTAM Class I distribution is used mainly for the notification of temporary information of timely significance such as unforeseen changes in services, facilities, airspace utilization, or any other emergency. Distribution is via telecommunications through International NOTAM Office of the Aeronautical Information Services, in accordance with the following classifications:

**5.1.1.1 International NOTAM.** NOTAM containing full information on all airports, facilities and flight procedures available for use by international civil aviation. NOTAMs are given selected distribution to adjacent or appropriate International NOTAM Offices which require their exchange.

**5.1.1.2 International Airspace NOTAM.** NOTAM containing short term information pertaining to potentially hazardous international and domestic airspace utilization which is of concern to international flights. NOTAMs are given selected distribution to adjacent or appropriate International NOTAM Offices which require their exchange.

**5.1.1.3 International Airspace NOTAM.** NOTAM containing permanent changes-en route airway structure/aeronautical service and information of a general nature. NOTAMs are given selected distribution to adjacent or appropriate International NOTAM Offices which require their exchange.

**5.1.1.4 Domestic NOTAM.** NOTAM containing information of concern to aircraft other than those engaged in international civil aviation. Distribution is to local or national users only. (See ENR 1.10.)

**5.1.2** Each NOTAM is assigned a four digit serial number which is followed by the location indicator for which the series is applicable. The serial numbers start with number 0001 at 0000 UTC on 1 July of each year. Each serial number is preceded by a letter:

#### 5.1.2.1 "A" for NOTAM classification "1."

#### NOTE-

NOTAM number one for the year 1984 for the New York, John F. Kennedy International Airport would read A0001/84 KJFK. All NOTAMs issued will be preceded by an "A."

**5.1.2.2** "**B**" for NOTAM classification "2." (Airspace): the identifier of the affected air traffic control center/FIR will be used.

#### NOTE-

NOTAM number one for the year 1984 for the Oakland ARTCC/FIR (Pacific Ocean Area) would read A0001/84 KZOA.

**5.1.2.3** "C" for NOTAM classification "3" (Permanent Airspace): The KFDC identifier will be used for data of permanent airway/aeronautical services and of a general nature that are transmitted as NOTAMs and are given selected distribution to adjacent or appropriate International NOTAM Offices which require their exchange.

#### NOTE-

NOTAM number one for the year 1984 for KFDC is A0001/84 KFDC.

**5.1.2.4** "E" for NOTAM classification "5" (domestic): No application (see ENR 1.10.)

**5.2** Each NOTAM is provided with an identification letter adjoining the end of the word NOTAM meaning:

**5.2.1 NOTAMN:** NOTAM containing new information.

**5.2.2 NOTAMC:** NOTAM cancelling a previous NOTAM indicated.

**5.2.3 NOTAMR:** NOTAM replacing a previous NOTAM indicated.

**5.3** A checklist of NOTAMs currently in force for each international NOTAM classification is issued each month over the Aeronautical Fixed Telecommunications Network (AFTN) to each International NOTAM office which exchanges International NOTAMs with the U.S. International NOTAM Office.

**5.4** NOTAM Class I information is exchanged between the U.S. International NOTAM Office and the following International NOTAM Offices.

COUNTRY	CITY
AFGHANISTAN	KABUL
ALBANIA	ROME
ALGERIA	ALGIERS
ANGOLA	LUANDA
ARGENTINA	BUENOS AIRES
AUSTRALIA	SIDNEY
AUSTRIA	VIENNA
AZORES	SANTO MARIA
BAHAMAS	NASSAU
BAHRAIN	BAHRAIN
BANGLADESH	DHAKA (DACCA)
BELGIUM	BRUSSELS
BERMUDA	BERMUDA
BOLIVIA	LA PAZ
BOSNIA	ZAGREB
BRAZIL	RIO DE JANEIRO
BULGARIA	SOFIA
CAMBODIA	PHNOM-PEHN
CANADA	OTTAWA

#### TBL GEN 3.1-1

COUNTRY	CITY
CAPE VERDE	AMILCAR CABRAL
ISLANDS	
CHILE	SANTIAGO
CHINA	BEIJING
CHINA	TAIPEI
(FORMOSA)	
COLOMBIA	BOGOTA
CONGO	BRAZZAVILLE
CROATIA	ZAGREB
CUBA	HAVANA
CYPRUS	NICOSIA
CZECH REPUBLIC	PRAGUE
DENMARK	COPENHAGEN
DOMINICAN	SANTO DOMINGO
REPUBLIC	
ECUADOR	GUAYAQUIL
ENGLAND	LONDON
ESTONIA	TALLINN
ETHIOPIA	ADDIS ABABA

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IRELAND SHANNON
ISRAEL TEL AVIV
ITALY ROME
JAMAICA KINGSTON
JAPAN TOKYO
JORDAN AMMAN
KENYA NAIROBI
KOREA (SOUTH) SEOUL
KUWAIT KUWAIT
LATVIA MOSCOW
LEBANON BEIRUT
LIBERIA ROBERTS
LIBYA TRIPOLI
MALAYSIA KUALA LUMPUR
MALTA LUQA
MAURITIUS PLAISANCE
MAYNMAR RANGOON
MEXICO MEXICO CITY
MOROCCO CASABLANCA
MOZAMBIQUE MAPUTO
NAMIBIA JOHANNESBURG
NAURU ISLAND NAURU
NETHERLANDS AMSTERDAM

COUNTRY	CITY
NETHERLANDS ANTILLES	CURACAO
NEW GUINEA	PORT MOSEBY
NEW ZEALAND	AUCKLAND
NIGERIA	LAGOS
NORWAY	OSLO
OMAN	MUSCAT
PAKISTAN	KARACHI
PANAMA	TOCUMEN
PARAGUAY	ASUNCION
PERU	LIMA
PHILLIPINES	MANILLA
POLAND	WARSAW
PORTUGAL	LISBON
ROMANIA	BUCHAREST
RUSSIA	MOSCOW
SAMOA	FALEOLA
SAUDI ARABIA	JEDDAH
SENEGAL	DAKAR
SEYCHELLES	MAHE
SINGAPORE	SINGAPORE
SLOVAKIA	BRATISLAVA
SOLOMON ISLANDS	HONIARA
SOUTH AFRICA	JOHANNESBURG
SPAIN	MADRID
SRI LANKA	COLOMBO
SUDAN	KHARTOUM
SURINAME	PARAMARIBO
SWEDEN	STOCKHOLM
SWITZERLAND	ZURICH
SYRIA	DAMASCUS
TANZANIA	DAR-ES-SALAAM
THAILAND	BANKOK
TRINIDAD	PORT OF SPAIN
TUNISIA	TUNIS
TURKEY	ANKARA
URUGUAY	MONTEVIDEO
VIET NAM	HO CHI MINH CITY
VENEZUELA	CARACAS
YEMEN	ADEN
YUGOSLAVIA	BELGRADE
ZAIRE	KINSHASA
ZAMBIA	LUSAKA
ZIMBABWE	HARARE

### 6. Pre-Flight Information Service at Aerodromes Available to International Flights

**6.1** Pre–Flight Information Units in the U.S. are Flight Service Stations (FSS) operated by either FAA (in Alaska) or by federal contract facilities (elsewhere in the U.S.).

**6.2** FSSs are air traffic facilities that provide pilot briefings, flight plan processing, en route flight advisories, search and rescue services, and assistance to lost aircraft and aircraft in emergency situations. FSSs also relay ATC clearances, process Notices to Air Missions, and broadcast aviation weather and aeronautical information. In Alaska, designated FSSs also take weather observations, and provide Airport Advisory Services (AAS).

**6.3** FSS locations, services, and telephone information are available in the Chart Supplement U.S., Chart Supplement Alaska, and Chart Supplement Pacific.

**6.4** Flight Service Stations have telecommunications access to all of the weather and NOTAM information available for a preflight briefing to international locations with which the U.S. International NOTAM office exchanges information.

Use	Frequency
Air-to-air communication (private fixed wing aircraft).	122.750
Helicopter air-to-air communications; Air traffic control operations.	123.025
Aviation instruction, Glider, Hot Air Balloon (not to be used for advisory service).	123.300 123.500
Assignment to flight test land and aircraft stations (not for air-to-air communication except for those aircraft operating in an oceanic FIR).	123.400 <sup>1</sup> 123.450 <sup>2</sup>

#### TBL GEN 3.3-22 Other Frequency Usage Designated by FCC

<sup>1</sup>This frequency is available only to itinerant stations that have a requirement to be periodically transferred to various locations.

 $^{2}$ Mobile station operations on these frequencies are limited to an area within 320 km (200 mi) of an associated flight test land station.

#### **9.6** Automatic Terminal Information Service (ATIS)

**9.6.1** ATIS is the continuous broadcast of recorded noncontrol information in selected high activity terminal areas. Its purpose is to improve controller effectiveness and to relieve frequency congestion by automating the repetitive transmission of essential but routine information. The information is continuously broadcast over a discrete VHF radio frequency or the voice portion of a local NAVAID. ATIS transmissions on a discrete VHF radio frequency are engineered to be receivable to a maximum of 60 NM from the ATIS site and a maximum altitude of 25,000 feet AGL. At most locations, ATIS signals may be received on the surface of the airport, but local conditions may limit the maximum ATIS reception distance and/or altitude. Pilots are urged to cooperate in the ATIS program as it relieves frequency congestion on approach control, ground control, and local control frequencies. The Chart Supplement U.S. indicates airports for which ATIS is provided.

9.6.2 ATIS information includes:

9.6.2.1 Airport/facility name

- **9.6.2.2** Phonetic letter code
- **9.6.2.3** Time of the latest weather sequence (UTC)

9.6.2.4 Weather information consisting of:

- **a**) Wind direction and velocity
- **b**) Visibility
- c) Obstructions to vision

**d**) Present weather consisting of: sky condition, temperature, dew point, altimeter, a density altitude advisory when appropriate, and other pertinent remarks included in the official weather observation

9.6.2.5 Instrument approach and runway in use.

The ceiling/sky condition, visibility, and obstructions to vision may be omitted from the ATIS broadcast if the ceiling is above 5,000 feet and the visibility is more than 5 miles. The departure runway will only be given if

different from the landing runway except at locations having a separate ATIS for departure. The broadcast may include the appropriate frequency and instructions for VFR arrivals to make initial contact with approach control. Pilots of aircraft arriving or departing the terminal area can receive the continuous ATIS broadcast at times when cockpit duties are least pressing and listen to as many repeats as desired. ATIS broadcast must be updated upon the receipt of any official hourly and special weather. A new recording will also be made when there is a change in other pertinent data such as runway change, instrument approach in use, etc.

#### SAMPLE BROADCAST-

DULLES INTERNATIONAL INFORMATION SIERRA. ONE FOUR ZERO ZERO ZULU. WIND THREE FIVE ZERO AT EIGHT. VISIBILITY ONE ZERO. CEILING FOUR THOUSAND FIVE HUNDRED BROKEN. TEMPERATURE THREE FOUR. DEW POINT TWO EIGHT. ALTIMETER THREE ZERO ONE ZERO. ILS RUNWAY ONE RIGHT APPROACH IN USE. DEPARTING RUNWAY THREE ZERO. ADVISE ON INITIAL CONTACT YOU HAVE INFORMATION SIERRA.

**9.6.3** Pilots should listen to ATIS broadcasts whenever ATIS is in operation.

**9.6.4** Pilots should notify controllers on initial contact that they have received the ATIS broadcast by repeating the alphabetical code word appended to the broadcast.

#### EXAMPLE-

"Information Sierra received."

**9.6.5** When the pilot acknowledges receipt of the ATIS broadcast, controllers may omit those items contained on the broadcast if they are current. Rapidly changing conditions will be issued by ATC and the ATIS will contain words as follows:

#### EXAMPLE-

"Latest ceiling/visibility/altimeter/wind/(other conditions) will be issued by approach control/tower."

#### NOTE-

The absence of a sky condition/ceiling and/or visibility on ATIS indicates a sky condition/ceiling of 5,000 feet or above and visibility of 5 miles or more. A remark may be made on the broadcast, "the weather is better than 5,000 and 5," or the existing weather may be broadcast.

**9.6.6** Controllers will issue pertinent information to pilots who do not acknowledge receipt of a broadcast or who acknowledge receipt of a broadcast which is not current.

**9.6.7** To serve frequency–limited aircraft, FSSs are equipped to transmit on the omnirange frequency at most en route VORs used as ATIS voice outlets. Such communication interrupts the ATIS broadcast. Pilots of aircraft equipped to receive on other FSS frequencies are encouraged to do so in order that these override transmissions may be kept to an absolute minimum.

**9.6.8** While it is a good operating practice for pilots to make use of the ATIS broadcast where it is available, some pilots use the phrase "Have Numbers" in communications with the control tower. Use of this phrase means that the pilot has received wind, runway and altimeter information ONLY and the tower does not have to repeat this information. It does not indicate receipt of the ATIS broadcast and should never be used for this purpose.

#### 9.7 Airport Reservation Operations and Special Traffic Management Programs

**9.7.1** This section describes procedures for obtaining required airport reservations at airports designated by the FAA and for airports operating under Special Traffic Management Programs.

#### 9.7.2 Slot Controlled Airports.

**9.7.2.1** The FAA may adopt rules to require advance reservations for unscheduled operations at certain airports. In addition to the information in the rules adopted by the FAA, a listing of the airports and relevant information will be maintained on the FAA website www.fly.faa.gov/ecvrs.

**9.7.2.2** The FAA has established an Airport Reservation Office (ARO) to receive and process reservations for unscheduled flights at the slot controlled airports. The ARO uses the Enhanced Computer Voice Reservation System (e-CVRS) to allocate reservations. Reservations will be available beginning 72 hours in advance of the operation at the slot controlled airport. Standby lists are not maintained. Flights with declared emergencies do

not require reservations. Refer to the website for the current listing of slot controlled airports, limitations, and reservation procedures.

**9.7.2.3** For more detailed information on operations and reservation procedures at a slot controlled airport, please see 14 CFR Part 93, Subpart K – High Density Traffic Airports.

#### 9.7.3 Special Traffic Management Programs (STMP)

**9.7.3.1** Special programs may be established when a location requires special traffic handling to accommodate above normal traffic demand (for example, EAA AirVenture Oshkosh, SUN 'n FUN Aerospace Expo) or reduced airport capacity (for example, airport runway/taxiway closures for airport construction). The special programs may remain in effect until the problem has been resolved or until local traffic management procedures can handle the volume and a need for special handling no longer exists.

**9.7.3.2** If an STMP is used to accommodate a special event, a domestic notice will be issued relaying the website address: www.fly.faa.gov/estmp. Domestic notice information includes: what airports are included in the STMP, the dates and times reservations are required, the time limits for reservation requests, the point of contact for reservations, and any other instructions.

**9.7.4 Making Reservations.** Detailed information and User Instruction Guides for using the Web interface to the reservation systems are available on the websites for the slot controlled airports (e-CVRS), www.fly.faa.gov/ecvrs; and STMPs (e-STMP), www.fly.faa.gov/estmp.

#### NOTE-

Users may contact the ARO at (540) 422–4246 if they have a problem with their reservation.

# **9.8** Operations at Uncontrolled Airports with Automated Surface Observing System (ASOS)/Automated Weather Observation System (AWOS)

**9.8.1** Many airports throughout the National Airspace System are equipped with either ASOS or AWOS. At most airports with an operating control tower or human observer, the weather will be available to you in a METAR hourly or special observation format on the Automatic Terminal Information Service (ATIS) or directly transmitted from the controller/observer.

**9.8.2** At uncontrolled airports that are equipped with ASOS/AWOS with ground-to-air broadcast capability, the one-minute updated airport weather should be available to you within approximately 25 NM of the airport below 10,000 feet. The frequency for the weather broadcast will be published on sectional charts and in the Chart Supplement U.S. Some part-time towered airports may also broadcast the automated weather on their ATIS frequency during the hours that the tower is closed.

**9.8.3** Controllers issue SVFR or IFR clearances based on pilot request, known traffic and reported weather; i.e., METAR/SPECI observations, when they are available. Pilots have access to more current weather at uncontrolled ASOS/AWOS airports than do the controllers who may be located several miles away. Controllers will rely on the pilot to determine the current airport weather from the ASOS/AWOS. All aircraft arriving or departing an ASOS/AWOS equipped uncontrolled airport should monitor the airport weather frequency to ascertain the status of the airspace. Pilots in Class E airspace must be alert for changing weather conditions which may affect the status of the airspace from IFR/VFR. If ATC service is required for IFR/SVFR approach/departure or requested for VFR service, the pilot should advise the controller that he/she has received the one–minute weather and state his/her intentions.

#### EXAMPLE-

"I have the (airport) one-minute weather, request an ILS runway 14 approach."

REFERENCE-

Section GEN 3.5, Paragraph 7, Weather Observing Programs.

## **GEN 3.4 Communication Service**

#### 1. Responsible Authority

**1.1** The authority responsible for the administration of communications services in the U.S. is the Federal Aviation Administration, Communications, Information and Network Programs Group, AJM–31.

Postal Address: Federal Aviation Administration Communications, Information and Network Programs Group, AJM–31 800 Independence Ave, SW Washington, D.C. 20591 AFTN Address: KRWAYAYX Commercial Telegraphic Address: FAA WASH

#### 2. Area of Responsibility

**2.1** Communications services are available on a continuous basis without charge to the user. The Air Traffic Services Division is responsible for the establishment of the operational requirements of the U.S. communications system. Responsibility for the day to day operation of these services resides with the local air traffic facility. Enquiries or complaints regarding any communications services or facilities should be referred to the relevant air traffic facility or to the Federal Aviation Administration, Air Traffic Operations Services, as appropriate.

#### 3. Types of Services

#### 3.1 Radio Navigation Service

**3.1.1** Various types of air navigation aids are in use today, each serving a special purpose. These aids have varied owners and operators, namely: the Federal Aviation Administration, the military services, private organizations; and individual states and foreign governments. The Federal Aviation Administration has the statutory authority to establish, operate, and maintain air navigation facilities and to prescribe standards for the operation of any of these aids which are used by both civil and military aircraft for instrument flight in federally controlled airspace. These aids are tabulated in the Chart Supplement U.S. by State.

**3.1.2** Pilots should be aware of the possibility of momentary erroneous indications on cockpit displays when the primary signal generator for a ground–based navigational transmitter (for example, a glideslope, VOR, or nondirectional beacon) is inoperative. Pilots should disregard any navigation indication, regardless of its apparent validity, if the particular transmitter was identified by NOTAM or otherwise as unusable or inoperative.

**3.1.3** The following types of radio navigation aids are provided in the U.S.:

**3.1.3.1** VHF Direction–Finding (VHF–DF).

**3.1.3.2** LF Non–Directional Beacon (NDB).

3.1.3.3 VHF Omni–Directional Radio Range (VOR).

- 3.1.3.4 Distance Measuring Equipment (DME).
- **3.1.3.5** Tactical Air Navigation (TACAN).
- **3.1.3.6** Instrument Landing System (ILS).

- 3.1.3.7 Final Approach Simplified Directional Facility (SDF).
- **3.1.3.8** Precision Approach Radar (PAR) at certain military aerodromes.
- **3.1.3.9** Global Positioning System (GPS).

### 3.1.4 NAVAID Service Volumes

**3.1.4.1** The FAA publishes Standard Service Volumes (SSVs) for most NAVAIDs. The SSV is a three-dimensional volume within which the FAA ensures that a signal can be received with adequate signal strength and course quality, and is free from interference from other NAVAIDs on similar frequencies (e.g., co-channel or adjacent-channel interference). However, the SSV signal protection does not include potential blockage from terrain or obstructions. The SSV is principally intended for off-route navigation, such as proceeding direct to or from a VOR when not on a published instrument procedure or route. Navigation on published instrument procedures (e.g., approaches or departures) or routes (e.g., Victor routes) may use NAVAIDs outside of the SSV, when Extended Service Volume (ESV) is approved, since adequate signal strength, course quality, and freedom from interference are verified by the FAA prior to the publishing of the instrument procedure or route.

#### NOTE-

#### A conical area directly above the NAVAID is generally not usable for navigation.

**3.1.4.2** A NAVAID will have service volume restrictions if it does not conform to signal strength and course quality standards throughout the published SSV. Service volume restrictions are first published in Notices to Air Missions (NOTAMs) and then with the alphabetical listing of the NAVAIDs in the Chart Supplement. Service volume restrictions do not generally apply to published instrument procedures or routes unless published in NOTAMs for the affected instrument procedure or route.

#### 3.1.4.3 VOR/DME/TACAN Standard Service Volumes (SSV).

**a**) The three original SSVs are shown in FIG GEN 3.4–1 and are designated with three classes of NAVAIDs: Terminal (T), Low (L), and High (H). The usable distance of the NAVAID depends on the altitude Above the Transmitter Height (ATH) for each class. The lower edge of the usable distance when below 1,000 feet ATH is shown in FIG GEN 3.4–2 for Terminal NAVAIDs and in FIG GEN 3.4–3 for Low and High NAVAIDs.

## PART 2 – EN ROUTE (ENR)

## ENR 0.

ENR 0.1 Preface – Not applicable

ENR 0.2 Record of AIP Amendments - See GEN 0.2-1

ENR 0.3 Record of AIP Supplements - Not applicable

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1.5-6	19 MAY 22	1.5–58	19 MAY 22		1.8-5	5 OCT 23
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1.5-8	19 MAY 22	1.5-60	19 MAY 22			5 OCT 23
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1.5–11	19 MAY 22	1.5-63	19 MAY 22		1.9–1	19 MAY 22
1.5-12	19 MAY 22	1.5-64	19 MAY 22		1.10-1	19 MAY 22
1.5-13	19 MAY 22	1.5-65	19 MAY 22		1.10-2	19 MAY 22
1.5-14	19 MAY 22	1.5-66	19 MAY 22		1.10-3	19 MAY 22
1.5-15	19 MAY 22	1.5-67	19 MAY 22		1.10-4	19 MAY 22
1.5-16	19 MAY 22	1.5-68	19 MAY 22		1.10-5	19 MAY 22
1.5-17	19 MAY 22	1.5-69	19 MAY 22		1.10-6	19 MAY 22
1.5-18	19 MAY 22	1.5-70	19 MAY 22		1.10-7	19 MAY 22
1.5-19	3 NOV 22	1.5-71	19 MAY 22		1.10-8	19 MAY 22
1.5-20	19 MAY 22	1.5-72	3 NOV 22		1.10-9	19 MAY 22
1.5-21	19 MAY 22	1.5-73	3 NOV 22		1.10-10	19 MAY 22
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1.5–31	19 MAY 22	1.5-83	19 MAY 22		1.11-2	19 MAY 22
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1.5–33	19 MAY 22	1.5-85	19 MAY 22		1.12-2	20 APR 23
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1.5-35	19 MAY 22	1.5-87	19 MAY 22		1.12-4	20 APR 23
1.5-36	3 NOV 22	1.5-88	19 MAY 22		1.12-5	20 APR 23
1.5–37	3 NOV 22	1.5-89	19 MAY 22		1.12-6	20 APR 23
1.5-38	19 MAY 22	1.5-90	19 MAY 22		1.12-7	20 APR 23
1.5–39	19 MAY 22	1.5-91	19 MAY 22		1.12-8	20 APR 23
1.5-40	19 MAY 22	1.6-1	19 MAY 22		1.12-9	20 APR 23
1.5-41	19 MAY 22	1.6-2	19 MAY 22	jĽ		

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1.12–14	20 APR 23		4.1-9	19 MAY 22	5.7-3	19 MAY 22
1.12–15	19 MAY 22		4.1–10	19 MAY 22	5.7-4	19 MAY 22
1.13–1	19 MAY 22		4.1–11	5 OCT 23	5.7–5	3 NOV 22
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1.15-2	19 MAY 22		4.1–14	3 NOV 22	5.7-8	19 MAY 22
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1.15-9	19 MAT 22 19 MAY 22		4.1-20	3 NOV 22 3 NOV 22	5.7-14	19 MAY 22 19 MAY 22
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1.17-4	19 MAT 22 19 MAY 22		4.1-27	3 NOV 22	6.1-2	19 MAY 22
1.17-4	19 MAT 22 19 MAY 22		4.1-28	3 NOV 22 3 NOV 22	6.1-3	19 MAY 22
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	ID A		4.2-1	19 MAI 22	6.2-8	19 MAY 22
	NR 3		En	NR 5	6.2-9	19 MAY 22
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3.2-1	19 MAY 22		5.1-1	19 MAY 22	6.2-11	19 MAY 22
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7.1-6	19 MAY 22	7.8–2	3 NOV 22	8.4-2	20 APR 23
7.1–7	3 NOV 22	7.8–3	19 MAY 22	8.4-3	20 APR 23
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7.4–2	3 NOV 22	8.1-2	20 APR 23	8.7-1	20 APR 23
7.4–3	19 MAY 22	8.2-1	20 APR 23	8.8-1	20 APR 23
7.4–4	19 MAY 22	8.2-2	5 OCT 23	8.8-2	20 APR 23
7.4–5	3 NOV 22	8.2-3	20 APR 23	8.8-3	20 APR 23
7.5–1	20 APR 23	8.3-1	20 APR 23	8.8-4	20 APR 23
7.5–2	20 APR 23	8.3-2	20 APR 23		
7.5–3	20 APR 23	8.3-3	20 APR 23		

ENR 0.5 List of Hand Amendments to the AIP - Not applicable

**4.4** Airport Criteria. The CTA risk analysis is performed on airports that have at least one runway of 2500 ft. Pilots operating into an airport with a runway length less than 2500 ft. may make a cold temperature altitude correction in cold temperature conditions, if desired. Comply with operating and reporting procedures for CTAs.

**4.5** ATC Reporting Requirements. Pilots must advise ATC with the corrected altitude when applying an altitude correction on any approach segment with the exception of the final segment.

**4.6** Methods to apply correction: The FAA recommends operators/pilots use either the All Segments Method or the Individual Segments Method when making corrections at CTAs.

### 5. Cold Temperature Airport Procedures

**5.1** PILOTS MUST NOT MAKE AN ALTIMETER CHANGE to accomplish an altitude correction. Pilots must ensure that the altimeter is set to the current altimeter setting provided by ATC in accordance with 14 CFR §91.121.

**5.2** Actions on when and where to make corrections: Pilots will make an altitude correction to the published, "at", "at or above", and "at or below" altitudes on all designated segment(s) to all runways for all published instrument approach procedures when the reported airport temperature is at or below the published CTA temperature on the approach plate. A pilot may request an altitude correction (if desired) on any approach at any United States airport when extreme cold temperature is encountered. Pilots making a correction must comply with ATC reporting requirements.

**5.3** Correctable altitudes: ATC does not apply a cold temperature correction to their Minimum Vectoring Altitude (MVA) or Minimum IFR Altitude (MIA) charts. Pilots must request approval from ATC to apply a cold temperature correction to any ATC assigned altitude. Pilots must not correct altitudes published on Standard Instrument Departures (SIDs), Obstacle Departure Procedures (ODPs), and Standard Terminal Arrivals (STARs).

**5.4** Use of corrected MDA/DA: Pilots will use the corrected MDA or DA as the minimum altitude for an approach. Pilots must meet the requirements in 14 CFR Part 91.175 in order to operate below the corrected MDA or DA. Pilots must see and avoid obstacles when descending below the minimum altitude on the approach.

#### NOTE-

The corrected DA or MDA does not affect the visibility minima published for the approach. With the application of a cold temperature correction to the DA or MDA, the airplane should be in a position on the glideslope/glidepath or at the published missed approach point to identify the runway environment.

**5.5** Acceptable use of table for manual CTA altitude correction (see TBL ENR 1.8–1): Pilots may calculate a correction with a visual interpolation of the chart when using reported temperature and height above airport. This calculated altitude correction may then be rounded to the nearest whole hundred or rounded up. For example, a correction of 130 ft from the chart may be rounded to 100 ft or 200 ft. A correction of 280 ft will be rounded up to 300 ft. This rounded correction will be added to the appropriate altitudes for the "Individual" or "All" segment method. The correction calculated from the table for the MDA or DA may be used as is or rounded up, but never rounded down. This number will be added to the MDA, DA, and all step-down fix altitudes inside of the FAF/PFAF.

**5.5.1** No extrapolation above the 5000 ft column is required. Pilots may use the 5000 ft "height above airport in feet" column for calculating corrections when the calculated altitude is greater than 5000 ft above reporting station elevation. Pilots must add the correction(s) from the table to the affected segment altitude(s) and fly at the new corrected altitude. Do not round down when using the 5000 ft column for calculated height above airport values greater than 5000 ft. Pilots may extrapolate above the 5000 ft column to apply a correction if desired.

**5.5.2** These techniques have been adopted to minimize pilot distraction by limiting the number of entries into the table when making corrections. Although not all altitudes on the approach will be corrected back to standard day values, a safe distance above the terrain/obstacle will be maintained on the corrected approach segment(s). Pilots may calculate a correction for each fix based on the fix altitude if desired.

#### NOTE-

Pilots may use Real Time Mesoscale Analysis (RTMA): Alternate Report of Surface Temperature, for computing altitude corrections, when airport temperatures are not available via normal reporting.

5.6 How to apply Cold Temperature Altitude Corrections on an Approach.

**5.6.1** All Segments Method: Pilots may correct all segment altitudes from the IAF altitude to the MA final holding altitude. Pilots familiar with the information in this section and the procedures for accomplishing the all segments method, only need to use the published "snowflake" icon, EA /CTA temperature limit on the approach chart for making corrections. Pilots are not required to reference the CTA list. The altitude correction is calculated as follows:

**5.6.1.1** Manual correction: Pilots will make a manual correction when the aircraft is not equipped with a temperature compensating system or when a compensating system is not used to make the correction. Use TBL ENR 1.8–1, ICAO Cold Temperature Error Table to calculate the correction needed for the approach segment(s).

a) Correct all altitudes from the FAF/PFAF up to and including the IAF altitude: Calculate the correction by taking the FAF/PFAF altitude and subtracting the airport elevation. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Round this number as applicable and then add to all altitudes from the FAF altitude through the IAF altitude.

**b**) Correct all altitudes in the final segment: Calculate the correction by taking the MDA or DA for the approach being flown and subtract the airport elevation. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Use this number or round up to next nearest 100 ft. Add this number to MDA or DA, and any step-down fix altitudes in the final segment.

c) Correct final holding altitude in the MA Segment: Calculate the correction by taking the MA holding altitude and subtract the airport elevation. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Round this number as applicable and then add to the final MA altitude only.

**5.6.1.2** Aircraft with temperature compensating systems: If flying an aircraft equipped with a system capable of temperature compensation, follow the instructions for applying temperature compensation provided in the airplane flight manual (AFM), AFM supplement, or system operating manual. Ensure that temperature compensation system is on and active prior to the IAF and remains active throughout the entire approach and missed approach.

**a**) Pilots that have a system that is able to calculate a temperature-corrected DA or MDA may use the system for this purpose.

**b**) Pilots that have a system unable to calculate a temperature corrected DA or MDA will manually calculate an altitude correction for the MDA or DA.

#### NOTE-

Some systems apply temperature compensation only to those altitudes associated with an instrument approach procedure loaded into the active flight plan, while other systems apply temperature compensation to all procedure altitudes or user entered altitudes in the active flight plan, including altitudes associated with a Standard Terminal Arrival (STAR). For those systems that apply temperature compensation to all altitudes in the active flight plan, delay activating temperature compensation until the aircraft has passed the last altitude constraint associated with the active STAR.

**5.6.2** Individual Segment(s) Method: Pilots are allowed to correct only the marked segment(s) indicated in the CTA list (https://www.faa.gov/air\_traffic/flight\_info/aeronav/digital\_products/dtpp/search/). Pilots using the Individual Segment(s) Method will reference the CTA list to determine which segment(s) need a correction. (See FIG ENR 1.8–1.)

Identifier	Airport name	Temperature	Initial	Intermediate	Final	Missed
<u>Montana</u>						
KBTM	Bert Mooney	-25C	X	X	X	
KBZN	Bozeman Yellowstone Intl	-31C		X		
KEKS	Ennis Big Sky	-25C			X	
KGPI	Glacier Park Intl	-15C		X		
KHLN	Helena Rgnl	-17C	X	X	X	

FIG ENR 1.8-1 Example Cold Temperature Restricted Airport List – Required Segments

**5.6.2.1** Manual Correction: Pilots will make a manual correction when the aircraft is not equipped with a temperature compensating system or when a compensating system is not used to make the correction. Use TBL ENR 1.8–1, ICAO Cold Temperature Error Table, to calculate the correction needed for the approach segment(s).

**a**) Initial Segment: All altitudes from the intermediate fix (IF) altitude up to and including the IAF altitude. The correction may be accomplished by using the IF altitude or by using the All Segments Method (a) Manual correction (1). To correct the initial segment by using the IF altitude, subtract the airport elevation from the IF altitude. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Round this number as applicable and then add to the IF, IAF, and any step-down fix altitudes.

**b**) Intermediate Segment: All altitudes from the FAF/PFAF up to but not including the IF altitude. Calculate the correction by taking FAF/PFAF altitude and subtracting the airport elevation. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Round this number as applicable and then add to FAF altitude and all step-down fix altitudes within the intermediate segment (inside of the waypoint labeled "IF").

c) Final segment: Calculate the correction by taking the MDA or DA for the approach flown and subtract the airport elevation. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Use this number or round up to next nearest 100 ft. Add this number to MDA or DA and any applicable step-down fix altitudes in the final segment.

d) Missed Approach Segment: Calculate the correction by taking the final MA holding altitude and subtract the airport elevation. Use this number to enter the height above airport column in TBL ENR 1.8–1 until reaching the reported temperature from the "Reported Temperature" row. Round this number as applicable and then add to the final MA altitude only.

**5.6.2.2** Aircraft with temperature compensating system: If flying an aircraft equipped with a system capable of temperature compensation, follow the instructions for applying temperature compensation provided in the AFM, AFM supplement, or system operating manual. Ensure the temperature compensation system is on and active prior to the segment(s) being corrected. Manually calculate an altimetry correction for the MDA or DA. Determine an altimetry correction from the ICAO table based on the reported airport temperature and the height difference between the MDA or DA, as applicable, and the airport elevation, or use the compensating system to calculate a temperature corrected altitude for the published MDA or DA if able.

**5.7** Communication: Pilots must request approval from ATC whenever applying a cold temperature altitude correction. Pilots do not need to inform ATC of the final approach segment correction (i.e., new MDA or DA). This request should be made on initial radio contact with the ATC facility issuing the approach clearance. ATC requires this information in order to ensure appropriate vertical separation between known traffic. Pilots should query ATC when vectored altitudes to a segment are lower than the requested corrected altitude. Pilots are encouraged to self–announce corrected altitude when flying into a non–towered airfield.

**5.7.1** The following are examples of appropriate pilot-to-ATC communication when applying cold-temperature altitude corrections:

**5.7.1.1** On initial check-in with ATC providing approach clearance: Missoula, MT (example below).

- a) Vectors to final approach course: Outside of IAFs: "Request 9700 ft. for cold temperature operations."
- b) Vectors to final approach course: Inside of ODIRE: "Request 7300 ft. for cold temperature operations."

c) Missed Approach segment: "Require final holding altitude, 12500 ft. on missed approach for cold temperature operations."

**5.7.1.2** Pilots cleared by ATC for an instrument approach procedure; "Cleared the RNAV (GPS) Y RWY 12 approach (from any IAF)". Missoula, MT (example below).

a) IAF: "Request 9700 ft. for cold temperature operations at LANNY, CHARL, or ODIRE."

#### 6. Example for Calculating Altitude Corrections on CTAs

All 14 CFR Part 97 IAPs must be corrected at an airport. The following example provides the steps for correcting the different segments of an approach and will be applied to all 14 CFR Part 97 IAPs.

6.1 Missoula Intl (KMSO). Reported Temperature -12°C: RNAV (GPS) Y RWY 12.

6.1.1 All Segments Method: All segments corrected from IAF through MA holding altitude.

**6.1.1.1** Manual calculation:

a) Cold Temperature Airport Temperature Limit: -12°C.

- b) Altitude at the Final Approach Fix (FAF) (SUPPY) = 6200 ft.
- c) Airport elevation = 3206 ft.
- **d**) Difference: 6200 ft. 3206 ft. = 2994 ft.

e) Use TBL ENR 1.8–1, ICAO Cold Temperature Error Table, height above airport of 2994 ft. and –12°C. Visual interpolation is approximately 300 ft. Actual interpolation is 300 ft.

f) Add 300 ft. to the FAF and all procedure altitudes outside of the FAF up to and including IAF altitude(s):

1) LANNY (IAF), CHARL (IAF), and ODIRE (IAF Holding-in-Lieu): 9400 + 300 = 9700 ft.

2) CALIP (stepdown fix): 7000 + 300 = 7300 ft

**3**) SUPPY (FAF): 6200 + 300 = 6500 ft.

g) Correct altitudes within the final segment altitude based on the minima used. LNAV MDA = 4520 ft.

- h) Difference: 4520 ft. 3206 ft. = 1314 ft
- i) TBL ENR 1.8-1: 1314 ft. at -12°C is approximately 150 ft. Use 150 ft. or round up to 200 ft.

j) Add corrections to altitudes up to but not including the FAF:

1) BEGPE (stepdown fix): 4840 + 150 = 4990 ft.

**2**) LNAV MDA: 4520 + 150 = 4670 ft.

k) Correct JENKI/Missed Approach Holding Altitude: MA altitude is 12000 ft.

**1**) JENKI: 12000 – 3206 = 8794 ft.

l) TBL ENR 1.8–1: 8794 ft. at –12°C. Enter table at –12°C and intersect the 5000 ft. height above airport column. The approximate value is 500 ft.

- m) Add correction to holding fix final altitude:
  - **1**) JENKI: 12000 + 500 = 12500 ft.

**6.1.1.2** Temperature Compensating System: Operators using a temperature compensating RNAV system to make altitude corrections will be set to the current airport temperature  $(-12^{\circ}C)$  and activated prior to passing the IAF. A manual calculation of the cold temperature altitude correction is required for the MDA/DA.

**6.1.2** Individual Segments Method: Missoula requires correction in the intermediate and final segments. However, in this example, the missed approach is also shown.

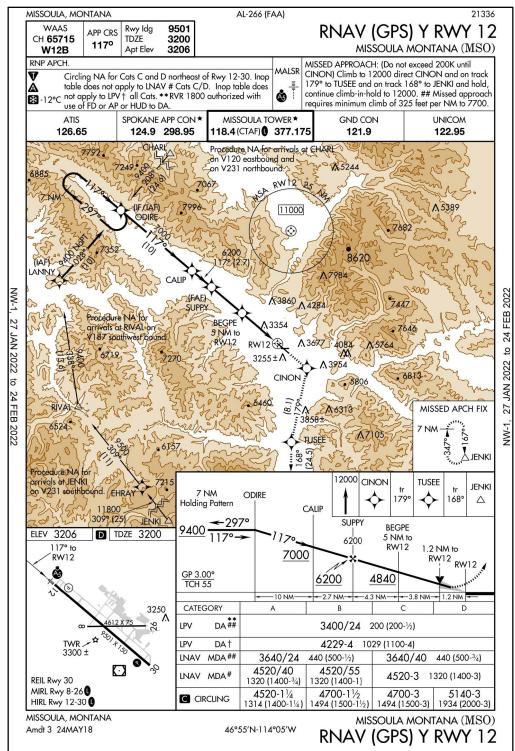
**6.1.2.1** Manual Calculation: Use the appropriate steps in the All Segments Method above to apply a correction to the required segment.

a) Intermediate. Use steps 6.1.1.1 a) thru e). Do not correct the IAF or IF when using individual segments method.

- **b**) Final. Use steps 6.1.1.1 f) thru i).
- c) Missed Approach. Use steps 6.1.1.1 j) thru l).

**6.1.2.2** Temperature Compensating System: Operators using a temperature compensating RNAV system to make altitude corrections will be set to the current airport temperature  $(-12^{\circ}C)$  and activated at a point needed to correct the altitude for the segment. A manual calculation of the cold temperature altitude correction is required for the MDA/DA.

FIG ENR 1.8-2 Missoula Intl RNAV (GPS) Y RWY 12



**2.3.3** A sinus block is prevented by not flying with an upper respiratory infection or nasal allergic condition. Adequate protection is usually not provided by decongestant sprays or drops to reduce congestion around the sinus openings. Oral decongestants have side effects that can impair pilot performance.

**2.3.4** If a sinus block does not clear shortly after landing, a physician should be consulted.

#### 2.4 Decompression Sickness After Scuba Diving

**2.4.1** A pilot or passenger who intends to fly after scuba diving should allow the body sufficient time to rid itself of excess nitrogen absorbed during diving. If not, altitude decompression sickness due to evolved nitrogen gas can occur during exposure to reduced barometric pressure (i.e., low cabin pressure) associated with increased altitude and may lead to a serious inflight emergency.

**2.4.2** The recommended wait time before going to flight altitudes up to 8,000 feet is at least 12 hours after diving that did not require a controlled ascent (i.e., non-decompression stop diving), and at least 24 hours after diving that required a controlled ascent (i.e., decompression stop diving). The recommended wait time before going to flight altitudes above 8,000 feet is at least 24 hours after any SCUBA dive. These altitudes are actual flight altitudes above mean sea level (AMSL) and not pressurized cabin altitudes. This takes into consideration the risk of aircraft decompression during flight.

#### 3. Hyperventilation in Flight

**3.1** Hyperventilation, or an abnormal increase in the volume of air breathed in and out of the lungs, can occur subconsciously when a stressed situation is encountered in flight. As hyperventilation "blows off" excessive carbon dioxide from the body, a pilot can experience symptoms of lightheadedness, suffocation, drowsiness, tingling in the extremities, and coolness – and react to them with even greater hyperventilation. Incapacitation can eventually result from incoordination, disorientation, and painful muscle spasms. Finally, unconsciousness can occur.

**3.2** The symptoms of hyperventilation subside within a few minutes after the rate and depth of breathing are consciously brought back under control. The buildup of carbon dioxide in the body can be hastened by controlled breathing in and out of a paper bag held over the nose and mouth.

**3.3** Early symptoms of hyperventilation and hypoxia are similar. Moreover, hyperventilation and hypoxia can occur at the same time. Therefore, if a pilot is using an oxygen system when symptoms are experienced, the oxygen regulator should immediately be set to deliver 100 percent oxygen, and then the system checked to assure that it has been functioning effectively before giving attention to rate and depth of breathing.

#### 4. Carbon Monoxide Poisoning in Flight

**4.1** Carbon monoxide is a colorless, odorless, and tasteless gas contained in exhaust fumes. When breathed even in minute quantities over a period of time, it can significantly reduce the ability of the blood to carry oxygen. Consequently, effects of hypoxia occur (see subparagraph 2.1).

**4.2** Most heaters in light aircraft work by air flowing over the manifold. Use of these heaters while exhaust fumes are escaping through manifold cracks and seals is responsible every year for several nonfatal and fatal aircraft accidents from carbon monoxide poisoning.

**4.3** A pilot who detects the odor of exhaust or experiences symptoms of headache, drowsiness, or dizziness while using the heater should suspect carbon monoxide poisoning, and immediately shut off the heater and open air vents. If symptoms are severe, or continue after landing, medical treatment should be sought.

#### 5. Illusions in Flight

**5.1 Introduction.** Many different illusions can be experienced in flight. Some can lead to spatial disorientation. Others can lead to landing errors. Illusions rank among the most common factors cited as contributing to fatal aircraft accidents.

#### 5.2 Illusions Leading to Spatial Disorientation

**5.2.1** Various complex motions and forces and certain visual scenes encountered in flight can create illusions of motion and position. Spatial disorientation from these illusions can be prevented only by visual reference to reliable, fixed points on the ground or to flight instruments.

**5.2.2 The Leans.** An abrupt correction of a banked attitude, which has been entered too slowly to stimulate the motion sensing system in the inner ear, can create the illusion of banking in the opposite direction. The disoriented pilot will roll the aircraft back into its original dangerous attitude or, if level flight is maintained, will feel compelled to lean in the perceived vertical plane until this illusion subsides.

**5.2.3 Coriolis Illusion.** An abrupt head movement in a prolonged constant-rate turn that has ceased stimulating the motion sensing system can create the illusion of rotation or movement in an entirely different axis. The disoriented pilot will maneuver the aircraft into a dangerous attitude in an attempt to stop rotation. This most overwhelming of all illusions in flight may be prevented by not making sudden, extreme head movements, particularly while making prolonged constant-rate turns under IFR conditions.

**5.2.4 Graveyard Spin.** A proper recovery from a spin that has ceased stimulating the motion sensing system can create the illusion of spinning in the opposite direction. The disoriented pilot will return the aircraft to its original spin.

**5.2.5 Graveyard Spiral.** An observed loss of altitude during a coordinated constant-rate turn that has ceased stimulating the motion sensing system can create the illusion of being in a descent with the wings level. The disoriented pilot will pull back on the controls, tightening the spiral and increasing the loss of altitude.

**5.2.6 Somatogravic Illusion.** A rapid acceleration during takeoff can create the illusion of being in a nose–up attitude. The disoriented pilot will push the aircraft into a nose–low, or dive attitude. A rapid deceleration by a quick reduction of the throttles can have the opposite effect, with the disoriented pilot pulling the aircraft into a nose–up, or stall attitude.

**5.2.7 Inversion Illusion.** An abrupt change from climb to straight and level flight can create the illusion of tumbling backwards. The disoriented pilot will push the aircraft abruptly into a nose–low attitude, possibly intensifying this illusion.

**5.2.8 Elevator Illusion.** An abrupt upward vertical acceleration, usually by an updraft, can create the illusion of being in a climb. The disoriented pilot will push the aircraft into a nose–low attitude. An abrupt downward vertical acceleration, usually by a downdraft, has the opposite effect, with the disoriented pilot pulling the aircraft into a nose–up attitude.

**5.2.9 False Horizon.** Sloping cloud formations, an obscured horizon, a dark scene spread with ground lights and stars, and certain geometric patterns of ground lights can create illusions of not being aligned correctly with the actual horizon. The disoriented pilot will place the aircraft in a dangerous attitude.

**5.2.10** Autokinesis. In the dark, a static light will appear to move about when stared at for many seconds. The disoriented pilot will lose control of the aircraft in attempting to align it with the light.

#### **5.3 Illusions Leading to Landing Errors**

**5.3.1** Various surface features and atmospheric conditions encountered in landing can create illusions of incorrect height above and distance from the runway threshold. Landing errors from these illusions can be prevented by anticipating them during approaches, aerial visual inspection of unfamiliar airports before landing, using electronic glide slope or VASI systems when available, and maintaining optimum proficiency in landing procedures.

**5.3.2 Runway Width Illusion.** A narrower-than-usual runway can create the illusion that the aircraft is at a higher altitude than it actually is. The pilot who does not recognize this illusion will fly a lower approach, with the risk of striking objects along the approach path or landing short. A wider-than-usual runway can have the opposite effect, with the risk of leveling out high and landing hard or overshooting the runway.

**9.1.6 Category IIIb.** No DH or DH below 50 feet and RVR less than 700 feet but not less than 150 feet; and **9.1.7 Category IIIc.** No DH and no RVR limitation.

NOTE-

Special authorization and equipment are required for Category II and III.

#### 10. Inoperative ILS Components

10.1 Inoperative Localizer. When the localizer fails, an ILS approach is not authorized.

**10.2 Inoperative Glide Slope.** When the glide slope fails, the ILS reverts to a nonprecision localizer approach.

#### REFERENCE-

See the Inoperative Component Table in the U.S. Government Terminal Procedures Publication (TPP) for adjustments to minimums due to inoperative airborne or ground system equipment.

#### 11. ILS Course and Glideslope Distortion

**11.1** All pilots should be aware that ILS installations are subject to signal interference by surface vehicles and aircraft (either on the ground or airborne). ILS CRITICAL AREAS are established near each localizer and glide slope antenna. Pilots should be aware of the level of critical area protection they can expect in various weather conditions and understand that signal disturbances may occur as a result of normal airport operations irrespective of the official weather observation.

**11.2** ATC is not always required to issue control instructions to avoid interfering operations within ILS critical areas at controlled airports during the hours the Airport Traffic Control Tower (ATCT) is in operation. ATC responsibilities vary depending on the official weather observation and are described as follows:

**11.2.1 Weather Conditions.** Official weather observation indicates a ceiling of 800 feet or higher and visibility 2 miles or greater, no localizer or glideslope critical area protection is provided by ATC unless specifically requested by the flight crew.

**11.2.2 Weather Conditions.** Official weather observation indicates a ceiling of less than 800 feet or visibility less than 2 miles.

**11.2.2.1** Holding. Aircraft holding below 5,000 feet between the outer marker and the airport may cause localizer signal variations for aircraft conducting the ILS approach. Accordingly, such holding will not be authorized by ATC.

**11.2.2.2** Localizer Critical Area. When an arriving aircraft is inside the outer marker (OM) or the fix used in lieu of the OM, vehicles and aircraft will not be authorized in or over the precision approach critical area except:

**a**) A preceding arriving aircraft on the same or another runway may pass over or through the localizer critical area, and;

**b**) A preceding departing aircraft or missed approach on the same or another runway may pass through or over the localizer critical area.

**11.2.2.3** Glide Slope Critical Area. ATC will not authorize vehicles or aircraft operations in or over the glideslope critical area when an arriving aircraft is inside the outer marker (OM), or the fix used in lieu of the OM, unless the arriving aircraft has reported the runway in sight and is circling or side–stepping to land on another runway.

**11.2.3 Weather Conditions.** Official weather observation indicates a ceiling less than 200 feet or runway visual range (RVR) less than 2000 feet.

**11.2.3.1** Localizer Critical Area. In addition to the critical area protection described in 11.2.2 above, when an arriving aircraft is inside the middle marker (MM), or in the absence of a MM,  $\frac{1}{2}$  mile final, ATC will not authorize:

**a**) A preceding arriving aircraft on the same or another runway to pass over or through the localizer critical area, or;

**b**) A preceding departing aircraft or missed approach on the same or another runway to pass through or over the localizer critical area.

**11.3** In order to ensure that pilot and controller expectations match with respect to critical area protection for a given approach and landing operation, a flight crew should advise the tower any time it intends to conduct any autoland operation or use an SA CAT I, any CAT II, or any CAT III line of minima anytime the official weather observation is at or above a ceiling of 800 feet and 2 miles visibility. If ATC is unable to protect the critical area, they will advise the flight crew.

#### EXAMPLE-

Denver Tower, United 1153, Request Autoland (runway) ATC replies with: United 1153, Denver Tower, Roger, Critical Areas not protected.

**11.4** Pilots are cautioned that even when the critical areas are considered to be protected, unless the official weather observation including controller observations indicates a ceiling less than 200 feet or RVR less than 2000 feet, ATC may still authorize a preceding arriving, departing, or missed approach aircraft to pass through or over the localizer critical area and that this may cause signal disturbances that could result in an undesired aircraft state during the final stages of the approach, landing, and rollout.

**11.5** Pilots are cautioned that vehicular traffic not subject to ATC may cause momentary deviation to ILS course or glide slope signals. Also, critical areas are not protected at uncontrolled airports or at airports with an operating control tower when weather or visibility conditions are above those requiring protective measures. Aircraft conducting coupled or autoland operations should be especially alert in monitoring automatic flight control systems and be prepared to intervene as necessary. (See FIG ENR 4.1–3.)

#### NOTE-

Unless otherwise coordinated through Flight Standards, ILS signals to Category I runways are not flight inspected below the point that is 100 feet less than the decision altitude (DA). Guidance signal anomalies may be encountered below this altitude.

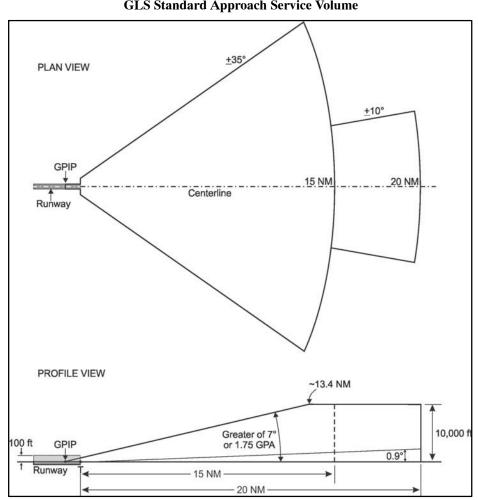


FIG ENR 4.1-4 GLS Standard Approach Service Volume

### 19. Precision Approach Systems Other than ILS and GLS

#### 19.1 General

Approval and use of precision approach systems other than ILS and GLS require the issuance of special instrument approach procedures.

#### **19.2** Special Instrument Approach Procedure

**19.2.1** Special instrument approach procedures must be issued to the aircraft operator if pilot training, aircraft equipment, and/or aircraft performance is different than published procedures. Special instrument approach procedures are not distributed for general public use. These procedures are issued to an aircraft operator when the conditions for operations approval are satisfied.

**19.2.2** General aviation operators requesting approval for special procedures should contact the local Flight Standards District Office to obtain a letter of authorization. Air carrier operators requesting approval for use of special procedures should contact their Certificate Holding District Office for authorization through their Operations Specification.

#### 20. Area Navigation

20.1 General

**20.1.1** Area Navigation (RNAV) provides enhanced navigational capability to the pilot. RNAV equipment can compute the airplane position, actual track and ground speed and then provide meaningful information relative to a route of flight selected by the pilot. Typical equipment will provide the pilot with distance, time, bearing and crosstrack error relative to the selected "TO" or "active" waypoint and the selected route. Several navigational systems with different navigational performance characteristics are capable of providing area navigational functions. Present day RNAV includes INS, VOR/DME, and GPS systems. Modern multi–sensor systems can integrate one or more of the above systems to provide a more accurate and reliable navigational system. Due to the different levels of performance, area navigational capabilities can satisfy different levels of required navigation performance (RNP).

#### 20.2 RNAV Operations Incorporating RNP

**20.2.1** During the past four decades, domestic and international air navigation have been conducted using a system of airways and instrument procedures based upon ground-based navigational systems such as NDB, VOR, and ILS. Reliance on ground-based navigational systems has served the aviation community well, but often results in less than optimal routes or instrument procedures and an inefficient use of airspace. With the widespread deployment of RNAV systems and the advent of GPS-based navigation, greater flexibility in defining routes, procedures, and airspace design is now possible with an associated increase in flight safety. To capitalize on the potential of RNAV systems, both the FAA and International Civil Aviation Organization (ICAO) are affecting a shift toward a new standard of navigation and airspace management called RNP.

**20.2.2** Navigational systems are typically described as being sensor specific, such as a VOR or ILS system. By specifying airspace requirements as RNP, various navigation systems or combination of systems may be used as long as the aircraft can achieve the RNP. RNP is intended to provide a single performance standard that can be used and applied by aircraft and aircraft equipment manufacturers, airspace planners, aircraft certification and operations, pilots and controllers, and international aviation authorities. RNP can be applied to obstacle clearance or aircraft separation requirements to ensure a consistent application level.

**20.2.3** ICAO has defined RNP values for the four typical navigation phases of flight: oceanic, en route, terminal, and approach. The RNP applicable to a selected airspace, route, or procedure is designated by it's RNP Level or Type. As defined in the Pilot/Controller Glossary, the RNP Level or Type is a value typically expressed as a distance, in nautical miles, from the procedure, route or path within which an aircraft would typically operate. RNP applications also provide performance to protect against larger errors at some multiple of RNP level (e.g., twice the RNP level).

#### 20.3 Standard RNP Levels

**20.3.1** U.S. standard values supporting typical RNP airspace are as specified in TBL ENR 4.1–6 below. Other RNP levels as identified by ICAO, other states and the FAA may also be used.

RNP Level	Typical Application
.3	Approach
1	Departure, Terminal
2	En Route

*TBL ENR 4.1-6* U.S. Standard RNP Levels

**20.3.1.1 Application of Standard RNP Levels.** U.S. standard levels of RNP typically used for various routes and procedures supporting RNAV operations may be based on use of a specific navigational system or sensor such as GPS, or on multi–sensor RNAV systems having suitable performance. New RNAV routes and procedures will be FAA's first public use procedures to include a specified RNP level. These procedures are being developed based on earth referenced navigation and do not rely on conventional ground–based navigational aids. Unless otherwise noted on affected charts or procedures, depiction of a specified RNP level will not preclude the use of other airborne RNAV navigational systems.

**20.3.1.2 Depiction of Standard RNP Levels.** The applicable RNP level will be depicted on affected charts and procedures. For example, an RNAV departure procedure may contain a notation referring to eligible aircraft by equipment suffix and a phrase "or RNP–1.0." A typical RNAV approach procedure may include a notation referring to eligible aircraft by specific navigation sensor(s), equipment suffix, and a phrase "or RNP–0.3." Specific guidelines for the depiction of RNP levels will be provided through chart bulletins and accompany affected charting changes.

**20.4 Aircraft and Airborne Equipment Eligibility for RNP Operations.** Aircraft meeting RNP criteria will have an appropriate entry including special conditions and limitations, if any, in its Aircraft/Rotorcraft Flight Manual (AFM), or supplement. RNAV installations with AFM–RNP certification based on GPS or systems integrating GPS are considered to meet U.S. standard RNP levels for all phases of flight. Aircraft with AFM–RNP certification without GPS may be limited to certain RNP levels, or phases of flight. For example, RNP based on DME/DME without other augmentation may not be appropriate for phases of flight outside the certified DME service volume. Operators of aircraft not having specific AFM–RNP certification may be issued operational approval including special conditions and limitations, if any, for specific RNP levels. Aircraft navigation systems eligible for RNP airspace will be indicated on charts, or announced through other FAA media such as NOTAMs and chart bulletins.

**20.5 Understanding RNP Operations.** Pilots should have a clear understanding of the aircraft requirements for operation in a given RNP environment, and advise ATC if an equipment failure or other malfunction causes the aircraft to lose its ability to continue operating in the designated RNP airspace. When a pilot determines a specified RNP level cannot be achieved, he/she should be prepared to revise the route, or delay the operation until an appropriate RNP level can be ensured. Some airborne systems use terms other than RNP to indicate the current level of performance. Depending on the airborne system implementation, this may be displayed, and referred to, as actual navigation performance (ANP), estimate of position error (EPE), or other.

**20.6 Other RNP Applications Outside the U.S.** The FAA, in cooperation with ICAO member states has led initiatives in implementing the RNP concept to oceanic operations. For example, RNP–10 routes have been established in the Northern Pacific (NOPAC) which has increased capacity and efficiency by reducing the distance between tracks to 50 NM. Additionally, the FAA has assisted those U.S. air carriers operating in Europe where the routes have been designated as RNP–5. TBL ENR 4.1–7 below, shows examples of current and future RNP levels of airspace.

RNP Level	Typical Application
4	Oceanic/remote areas where performance-based horizontal separation is applied
5	European Basic RNAV (B-RNAV)
10	Oceanic/remote areas where performance-based horizontal separation is applied

TBL ENR 4.1–7
<b>RNP</b> Levels Supported for International Operations

#### 20.7 RNAV and RNP Operations

#### 20.7.1 Pilot

**20.7.1.1** If unable to comply with the requirements of an RNAV or RNP procedure, pilots must advise air traffic control as soon as possible. For example, "N1234, failure of GPS system, unable RNAV, request amended clearance."

**20.7.1.2** Pilots are not authorized to fly a published RNAV or RNP procedure (instrument approach, departure, or arrival procedure) unless it is retrievable by the procedure name from the current aircraft navigation database and conforms to the charted procedure. The system must be able to retrieve the procedure by name from the aircraft navigation database, not just as a manually entered series of waypoints.

**20.7.1.3** Whenever possible, RNAV routes (Q- or T-route) should be extracted from the database in their entirety, rather than loading RNAV route waypoints from the database into the flight plan individually. However, selecting and inserting individual, named fixes from the database is permitted, provided all fixes along the published route to be flown are inserted.

**20.7.1.4** Pilots must not change any database waypoint type from a fly–by to fly–over, or vice versa. No other modification of database waypoints or the creation of user–defined waypoints on published RNAV or RNP procedures is permitted, except to:

a) Change altitude and/or airspeed waypoint constraints to comply with an ATC clearance/ instruction.

**b**) Insert a waypoint along the published route to assist in complying with ATC instruction, example, "Descend via the WILMS arrival except cross 30 north of BRUCE at/or below FL 210." This is limited only to systems that allow along-track waypoint construction.

**20.7.1.5** Pilots of FMS–equipped aircraft, who are assigned an RNAV DP or STAR procedure and subsequently receive a change of runway, transition or procedure, must verify that the appropriate changes are loaded and available for navigation.

**20.7.1.6** For RNAV 1 DPs and STARs, pilots must use a CDI, flight director and/or autopilot, in lateral navigation mode. Other methods providing an equivalent level of performance may also be acceptable.

**20.7.1.7** For RNAV 1 DPs and STARs, pilots of aircraft without GPS, using DME/DME/IRU, must ensure the aircraft navigation system position is confirmed, within 1,000 feet, at the start point of take–off roll. The use of an automatic or manual runway update is an acceptable means of compliance with this requirement. Other methods providing an equivalent level of performance may also be acceptable.

**20.7.1.8** For procedures or routes requiring the use of GPS, if the navigation system does not automatically alert the flight crew of a loss of GPS, the operator must develop procedures to verify correct GPS operation.

**20.7.1.9** RNAV terminal procedures (DP and STAR) may be amended by ATC issuing radar vectors and/or clearances direct to a waypoint. Pilots should avoid premature manual deletion of waypoints from their active "legs" page to allow for rejoining procedures.

**20.7.1.10** RAIM Prediction: If TSO-C129 equipment is used to solely satisfy the RNAV and RNP requirement, GPS RAIM availability must be confirmed for the intended route of flight (route and time). If RAIM is not available, pilots need an approved alternate means of navigation.

#### REFERENCE-

AIP, ENR 1.10, Para 11.3, RNAV and RNP Operations.

**20.7.1.11 Definition of "established" for RNAV and RNP operations:** An aircraft is considered to be established on-course during RNAV and RNP operations anytime it is within 1 times the required accuracy for the segment being flown. For example, while operating on a Q-Route (RNAV 2), the aircraft is considered to be established on-course when it is within 2 nm of the course centerline.

#### NOTE-

Pilots must be aware of how their navigation system operates, along with any AFM limitations, and confirm that the aircraft's lateral deviation display (or map display if being used as an allowed alternate means) is suitable for the accuracy of the segment being flown. Automatic scaling and alerting changes are appropriate for some operations. For example, TSO-C129 systems change within 30 miles of destination and within 2 miles of FAF to support approach operations. For some navigation systems and operations, manual selection of scaling will be necessary.

(a) Pilots flying FMS equipped aircraft with barometric vertical navigation (Baro-VNAV) may descend when the aircraft is established on-course following FMS leg transition to the next segment. Leg transition normally occurs at the turn bisector for a fly-by waypoint (reference paragraph 1-2-1 for more on waypoints). When using full automation, pilots should monitor the aircraft to ensure the aircraft is turning at appropriate lead times and descending once established on-course.

(b) Pilots flying TSO-C129 navigation system equipped aircraft without full automation should use normal lead points to begin the turn. Pilots may descend when established on-course on the next segment of the approach.

### 21. NAVAID Identifier Removal During Maintenance

**21.1** During periods of routine or emergency maintenance, coded identification (or code and voice, where applicable) is removed from certain FAA NAVAIDs. Removal of the identification serves as warning to pilots that the facility is officially off the air for tune–up or repair and may be unreliable even though intermittent or constant signals are received.

#### NOTE-

During periods of maintenance, VHF ranges may radiate a T-E-S-T code  $(- \bullet \bullet \bullet \bullet -)$ .

#### NOTE-

DO NOT attempt to fly a procedure that is NOTAMed out of service even if the identification is present. In certain cases, the identification may be transmitted for short periods as part of the testing.

#### 22. User Reports Requested on NAVAID Outages

**22.1** Users of the National Airspace System (NAS) can render valuable assistance in the early correction of NAVAID malfunctions or GNSS problems and are encouraged to report their observations of undesirable avionics performance. Although NAVAIDs are monitored by electronic detectors, adverse effects of electronic interference, new obstructions or changes in terrain near the NAVAID can exist without detection by the ground monitors. Some of the characteristics of malfunction or deteriorating performance which should be reported are: erratic course or bearing indications; intermittent, or full, flag alarm; garbled, missing or obviously improper coded identification; poor quality communications reception; or, in the case of frequency interference, an audible hum or tone accompanying radio communications or NAVAID identification. GNSS problems are often characterized by navigation degradation or service loss indications. For instance, pilots conducting operations in areas where there is GNSS interference may be unable to use GPS for navigation, and ADS–B may be unavailable for surveillance. Radio frequency interference may affect both navigation for the pilot and surveillance by the air traffic controller. Depending on the equipment and integration, either an advisory light or message may alert the pilot. Air traffic controllers monitoring ADS–B reports may stop receiving ADS–B position messages and associated aircraft tracks.

**22.2** Malfunctioning, faulty, inappropriately installed, operated, or modified GPS re-radiator systems, intended to be used for aircraft maintenance activities, have resulted in unintentional disruption of aviation GPS receivers. This type of disruption could result in unflagged, erroneous position-information output to primary flight displays/indicators and to other aircraft and air traffic control systems. Since Receiver Autonomous Integrity Monitoring (RAIM) is only partially effective against this type of disruption (effectively a "signal spoofing"), the pilot may not be aware of any erroneous navigation indications; ATC may be the only means available to identify these disruptions and detect unexpected aircraft positions while monitoring aircraft for IFR separation.

**22.3** Pilots encountering navigation error events should transition to another source of navigation and request amended clearances from ATC as necessary.

**22.4** Pilots are encouraged to submit detailed reports of NAVAID or GPS anomaly as soon as practical. Pilot reports of navigation error events should contain the following information:

**22.4.1** Date and time the anomaly was observed, and NAVAID ID (or GPS).

**22.4.2** Location of the aircraft at the time the anomaly started and ended (e.g., latitude/longitude or bearing/distance from a reference point),

22.4.3 Heading, altitude, type of aircraft (make/model/call sign).

- 22.4.4 Type of avionics/receivers in use (e.g., make/model/software series or version).
- 22.4.5 Number of satellites being tracked, if applicable.
- **22.4.6** Description of the position/navigation/timing condition observed; and duration of the event.

**22.4.7** Consequences/operational impact(s) of the NAVAID or GPS loss.

**22.4.8** Actions taken to mitigate the anomaly and/or remedy provided by the ATC facility.

22.4.9 Post flight pilot/maintenance actions taken.

**22.5** Pilots operating an aircraft in controlled airspace under IFR shall comply with CFR § *91.187* and promptly report as soon as practical to ATC any malfunctions of navigational equipment occurring in–flight; pilots should submit initial reports:

**22.5.1** Immediately, by radio to the controlling ATC facility or FSS.

**22.5.2** By telephone to the nearest ATC facility controlling the airspace where the disruption was experienced.

**22.5.3** Additionally, GPS problems should be reported, post flight, by Internet via the GPS Anomaly Reporting Form at http://www.faa.gov/air\_traffic/nas/gps\_reports/.

**22.6** To minimize ATC workload, GPS interference/outages associated with known testing NOTAMs should NOT be reported in–flight to ATC in detail; EXCEPT when:

**22.6.1** GPS degradation is experienced outside the NOTAMed area.

**22.6.2** Pilot observes any unexpected consequences (e.g., equipment failure, suspected spoofing, failure of other aircraft systems not identified in AFM, such as TAWS).

#### 23. Radio Communications and Navigation Facilities

**23.1** A complete listing of air traffic radio communications facilities and frequencies and radio navigation facilities and frequencies are contained in the Chart Supplement U.S. Similar information for the Pacific and Alaskan areas is contained in the Chart Supplements Pacific and Alaska.

UNLIMITED, WITHIN THE FOLLOWING AREA 30–NAUTICAL–MILE RADIUS OF THE MELBOURNE /MLB/ VORTAC 010 DEGREE RADIAL 21–NAUTICAL–MILE FIX. ST. PETERSBURG, FLORIDA, /PIE/ FSS 813–545–1645 (122.2) IS THE FAA COORDINATION FACILITY AND SHOULD BE CONTACTED FOR THE CURRENT STATUS OF ANY AIRSPACE ASSOCIATED WITH THE SPACE SHUTTLE OPERATIONS. THIS AIRSPACE ENCOMPASSES R2933, R2932, R2931, R2934, R2935, W497A AND W158A. ADDITIONAL WARNING AND RESTRICTED AREAS WILL BE ACTIVE IN CONJUNCTION WITH THE OPERATIONS. PILOTS MUST CONSULT ALL NOTAMS REGARDING THIS OPERATION.

#### 2.3 Parachute Jump Aircraft Operations

**2.3.1** Procedures relating to parachute jump areas are contained in 14 CFR Part 105. Tabulations of parachute jump areas in the U.S. are contained in the Chart Supplement U.S.

**2.3.2** Pilots of aircraft engaged in parachute jump operations are reminded that all reported altitudes must be with reference to mean sea level, or flight level, as appropriate, to enable ATC to provide meaningful traffic information.

**2.3.3 Parachute Operations in the Vicinity of an Airport Without an Operating Control Tower.** There is no substitute for alertness while in the vicinity of an airport. It is essential that pilots conducting parachute operations be alert, look for other traffic, and exchange traffic information as recommended in GEN 3.3, paragraph 9.2, Traffic Advisory Practices at Airports Without Operating Control Towers. In addition, pilots should avoid releasing parachutes while in an airport traffic pattern when there are other aircraft in that pattern. Pilots should make appropriate broadcasts on the designated Common Traffic Advisory Frequency (CTAF), and monitor that CTAF until all parachute activity has terminated or the aircraft has left the area. Prior to commencing a jump operation, the pilot should broadcast the aircraft's altitude and position in relation to the airport, the approximate relative time when the jump will commence and terminate, and listen to the position reports of other aircraft in the area.

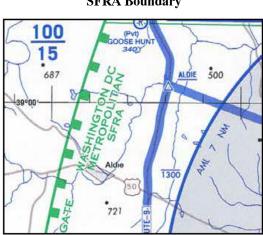
#### 2.4 Special Air Traffic Rules (SATR) and Special Flight Rules Area (SFRA)

**2.4.1 Background.** The Code of Federal Regulations (CFR) prescribes special air traffic rules for aircraft operating within the boundaries of certain designated airspace. These areas are listed in 14 CFR Part 93 and can be found throughout the NAS. Procedures, nature of operations, configuration, size, and density of traffic vary among the identified areas.

**2.4.2 SFRAs.** Airspace of defined dimensions, above land areas or territorial waters, within which the flight of aircraft is subject to the rules set forth in 14 CFR Part 93, unless otherwise authorized by air traffic control. Not all areas listed in 14 CFR Part 93 are designated SFRA, but special air traffic rules apply to all areas described in 14 CFR Part 93.

**2.4.3 Participation.** Each person operating an aircraft to, from, or within airspace designated as a SATR area or SFRA must adhere to the special air traffic rules set forth in 14 CFR Part 93, as applicable, unless otherwise authorized or required by ATC.

**2.4.4 Charts.** SFRAs are depicted on VFR sectional, terminal area, and helicopter route charts. (See FIG ENR 5.1–1.)



**2.4.5 Washington DC Special Flight Rules Area (SFRA) including the Flight Restricted Zone (FRZ).** A pilot conducting any type of flight operation in the Washington DC SFRA/FRZ must comply with the requirements in:

**2.4.5.1** 14 CFR Section 93.339 Washington, DC Metropolitan Area Special Flight Rules Area including the FRZ.

**2.4.5.2** 14 CFR Section 91.161 Special Awareness Training for the DC SFRA/FRZ, also located on the FAA website at https://www.faasafety.gov/.

**2.4.5.3** Any 14 CFR Section 99.7 special security instructions for the DC SFRA/FRZ published via NOTAM by FAA in the interest of national security.

### 2.5 Weather Reconnaissance Area (WRA)

**2.5.1 General.** Hurricane Hunters from the United States Air Force Reserve 53<sup>rd</sup> Weather Reconnaissance Squadron (WRS) and the National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC) operate weather reconnaissance/research aircraft missions, in support of the National Hurricane Operations Plan (NHOP), to gather meteorological data on hurricanes and tropical cyclones. 53<sup>rd</sup> WRS and NOAA AOC aircraft normally conduct these missions in airspace identified in a published WRA Notice to Air Missions (NOTAM).

**2.5.2 WRAs.** Airspace with defined dimensions and published by a NOTAM, which is established to support weather reconnaissance/research flights. ATC services are not provided within WRAs. Only participating weather reconnaissance/research aircraft from the 53<sup>rd</sup> WRS and NOAA AOC are permitted to operate within a WRA. A WRA may only be established in airspace within U. S. Flight Information Regions (FIR) outside of U. S. territorial airspace.

**2.5.3** A published WRA NOTAM describes the airspace dimensions of the WRA and the expected activities within the WRA. WRAs may border adjacent foreign FIRs, but are wholly contained within U.S. FIRs. As ATC services are not provided within a WRA, non-participating aircraft should avoid WRAs, and IFR aircraft should expect to be rerouted to avoid WRAs.

*FIG ENR 5.1–1* SFRA Boundary

## ENR 5.2 Military Exercise and Training Areas

### 1. Military Operations Area (MOA)

**1.1** MOAs consist of airspace of defined vertical and lateral limits established for the purpose of separating certain military training activities from IFR traffic. Whenever a MOA is being used, nonparticipating IFR traffic may be cleared through a MOA if IFR separation can be provided by ATC. Otherwise, ATC will reroute or restrict nonparticipating IFR traffic.

**1.2** Examples of activities conducted in MOAs include, but are not limited to: air combat tactics, air intercepts, aerobatics, formation training, and low-altitude tactics. Military pilots flying in an active MOA are exempted from the provisions of 14 CFR Section 91.303(c) and (d) which prohibits aerobatic flight within Class D and Class E surface areas, and within Federal airways. Additionally, the Department of Defense has been issued an authorization to operate aircraft at indicated airspeeds in excess of 250 knots below 10,000 feet MSL within active MOAs.

**1.3** Pilots operating under VFR should exercise extreme caution while flying within a MOA when military activity is being conducted. The activity status (active/inactive) of MOAs may change frequently. Therefore, pilots should contact any FSS within 100 miles of the area to obtain accurate real-time information concerning the MOA hours of operation. Prior to entering an active MOA, pilots should contact the controlling agency for traffic advisories.

**1.4** Permanent MOAs are charted on Sectional Aeronautical, VFR Terminal Area, and the appropriate En Route Low Altitude charts.

#### NOTE-

Temporary MOAs are not charted. For temporary restricted areas, pilots should review the Domestic Notices found in the External Links section of the Federal NOTAM System (FNS) NOTAM Search or Air Traffic Plans and Publications website, the FAA SUA website, and/or contact the appropriate overlying ATC facility to determine the effect of non-depicted SUA areas along their routes of flight.

### 2. Alert Areas

**2.1** Alert Areas are depicted on aeronautical charts to inform nonparticipating pilots of areas that may contain a high volume of pilot training or an unusual type of aerial activity. Pilots should be particularly alert when flying in these areas. All activity within an Alert Area must be conducted in accordance with FAA regulations, without waiver, and pilots of participating aircraft as well as pilots transiting the area must be equally responsible for collision avoidance.

#### 3. Controlled Firing Area (CFA)

**3.1** CFAs contain activities which, if not conducted in a controlled environment, could be hazardous to nonparticipating aircraft. The distinguishing feature of the CFA, as compared to other special use airspace, is that its activities are suspended immediately when spotter aircraft, radar, or ground lookout positions indicate an aircraft might be approaching the area. There is no need to chart CFAs since they do not cause a nonparticipating aircraft to change its flight path.

### 4. Military Training Route (MTR)

**4.1** National security depends largely on the deterrent effect of our airborne military forces. To be proficient, the military services must train in a wide range of airborne tactics. One phase of this training involves "low level" combat tactics. The required maneuvers and high speeds are such that they may occasionally make the see–and–avoid aspect of VFR flight more difficult without increased vigilance in areas containing such operations. In an effort to ensure the greatest practical level of safety for all flight operations, the MTR program was conceived.

**4.2** The MTR program is a joint venture by the FAA and the DOD. MTRs are mutually developed for use by the military for the purpose of conducting low-altitude, high-speed training. The routes above 1,500 feet above ground level (AGL) are developed to be flown, to the maximum extent possible, under IFR. The routes at 1,500 feet AGL and below are generally developed to be flown under VFR.

**4.3** Generally, MTRs are established below 10,000 feet MSL for operations at speeds in excess of 250 knots. However, route segments may be defined at higher altitudes for purposes of route continuity. For example, route segments may be defined for descent, climbout, and mountainous terrain. There are IFR and VFR routes as follows:

**4.3.1 IFR Military Training Routes–IR.** Operations on these routes are conducted in accordance with IFR regardless of weather conditions.

**4.3.2 VFR Military Training Routes–VR.** Operations on these routes are conducted in accordance with VFR except flight visibility must be 5 miles or more; and flights must not be conducted below a ceiling of less than 3,000 feet AGL.

**4.4** MTRs will be identified and charted as follows:

#### 4.4.1 Route Identification

**4.4.1.1** MTRs with no segment above 1,500 feet AGL must be identified by four number characters; e.g., IR1206, VR1207.

**4.4.1.2** MTRs that include one or more segments above 1,500 feet AGL must be identified by three number characters; e.g., IR206, VR207.

**4.4.1.3** Alternate IR/VR routes or route segments are identified by using the basic/principal route designation followed by a letter suffix, e.g., IR008A, VR1007B, etc.

#### 4.4.2 Route Charting

**4.4.2.1 IFR Enroute Low Altitude Chart.** This chart will depict all IR routes and all VR routes that accommodate operations above 1,500 feet AGL.

**4.4.2.2 VFR Sectional Aeronautical Charts.** These charts will depict military training activities such as IR and VR information.

**4.4.2.3** Area Planning (AP/1B) Chart (DOD Flight Information Publication–FLIP). This chart is published by the National Geospatial–Intelligence Agency (NGA) primarily for military users and contains detailed information on both IR and VR routes.

**4.5** DoD FLIP– Department of Defense Flight Information Publications describe IR/VR routes through charts and narratives, and the FAA provides information regarding these routes to all users via IFR and VFR charts.

#### NOTE-

DoD users that require copies of FLIP, should contact:

Defense Logistics Agency for Aviation Mapping Customer Operations (DLA AVN/QAM) 8000 Jefferson Davis Highway Richmond, VA 23297–5339 Toll free phone: 1–800–826–0342 Commercial: 804–279–6500

MTR information from the FLIP is available for pilot briefings through Flight Service. (See subparagraph 4.6.1 below.)

**4.6** Availability of MTR information.

**4.6.1** Pilots may obtain preflight MTR information through Flight Service. (See paragraph ENR 1.10–1., Preflight Preparation.)

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**4.6.2** MTR routes are depicted on IFR En Route Low Altitude Charts and VFR Sectional Aeronautical Charts, which are downloaded free and available on the FAA website at https://www.faa.gov/air\_traffic/flight\_info/aeronav/digital\_products/.

**4.7** Nonparticipating aircraft are not prohibited from flying within an MTR; however, extreme vigilance should be exercised when conducting flight through or near these routes. Pilots, while inflight, should contact the FSS within 100 NM of a particular MTR to obtain current information or route usage in their vicinity. Information available includes times of scheduled activity, altitudes in use on each route segment, and actual route width. Route width varies for each MTR and can extend several miles on either side of the charted MTR centerline. Route width information for IFR Military Training Route (IR) and VFR Military Training Route (VR) MTRs is also available in the FLIP AP/1B along with additional MTR (slow routes/air refueling routes) information. When requesting MTR information, pilots should give the FSS their position, route of flight, and destination in order to reduce frequency congestion and permit the FSS specialist to identify the MTR which could be a factor.

# **ENR 6.2 Special Operations**

# 1. Offshore Helicopter Operations

# **1.1 Introduction**

**1.1.1** The offshore environment offers unique applications and challenges for helicopter pilots. The mission demands, the nature of oil and gas exploration and production facilities, and the flight environment (weather, terrain, obstacles, traffic), demand special practices, techniques and procedures not found in other flight operations. Several industry organizations have risen to the task of reducing risks in offshore operations, including the Helicopter Safety Advisory Conference (HSAC) (http://www.hsac.org), and the Offshore Committee of the Helicopter Association International (HAI) (https://rotor.org/). The following recommended practices for offshore helicopter operations are based on guidance developed by HSAC for use in the Gulf of Mexico, and provided here with their permission. While not regulatory, these recommended practices provide aviation and oil and gas industry operators with useful information in developing procedures to avoid certain hazards of offshore helicopter operations.

#### NOTE-

Like all aviation practices, these recommended practices are under constant review. Any questions or feedback concerning these recommended procedures may be directed to the HSAC through the feedback feature of the HSAC website (http://www.hsac.org).

#### 1.2 Passenger Management on and about Heliport Facilities

**1.2.1 Background.** Several incidents involving offshore helicopter passengers have highlighted the potential for incidents and accidents on and about the heliport area. The following practices will minimize risks to passengers and others involved in heliport operations.

#### **1.2.2 Recommended Practices**

**1.2.2.1** Heliport facilities should have a designated and posted passenger waiting area which is clear of the heliport, heliport access points, and stairways.

**1.2.2.2** Arriving passengers and cargo should be unloaded and cleared from the heliport and access route prior to loading departing passengers and cargo.

**1.2.2.3** Where a flight crew consists of more than one pilot, one crewmember should supervise the unloading/loading process from outside the aircraft.

**1.2.2.4** Where practical, a designated facility employee should assist with loading/unloading, etc.

#### **1.3 Crane-Helicopter Operational Procedures**

**1.3.1 Background.** Historical experience has shown that catastrophic consequences can occur when industry safe practices for crane/helicopter operations are not observed. The following recommended practices are designed to minimize risks during crane and helicopter operations.

#### **1.3.2 Recommended Practices**

#### **1.3.2.1** Personnel awareness

**a**) Crane operators and pilots should develop a mutual understanding and respect of the others' operational limitations and cooperate in the spirit of safety;

**b**) Pilots need to be aware that crane operators sometimes cannot release the load to cradle the crane boom, such as when attached to wire line lubricators or supporting diving bells; and

c) Crane operators need to be aware that helicopters require warm up before takeoff, a two-minute cool down before shutdown, and cannot circle for extended lengths of time because of fuel consumption.

**1.3.2.2** It is recommended that when helicopters are approaching, maneuvering, taking off, or running on the heliport, cranes be shutdown and the operator leave the cab. Cranes not in use must have their booms cradled, if feasible. If in use, the crane's boom(s) are to be pointed away from the heliport and the crane shutdown for helicopter operations.

**1.3.2.3** Pilots will not approach, land on, takeoff, or have rotor blades turning on heliports of structures not complying with the above practice.

**1.3.2.4** It is recommended that cranes on offshore platforms, rigs, vessels, or any other facility, which could interfere with helicopter operations (including approach/departure paths):

**a**) Be equipped with a red rotating beacon or red high intensity strobe light connected to the system powering the crane, indicating the crane is under power;

**b**) Be designed to allow the operator a maximum view of the helideck area and should be equipped with wide–angle mirrors to eliminate blind spots; and

c) Have their boom tips, headache balls, and hooks painted with high visibility international orange.

# 1.4 Helicopter/Tanker Operations

**1.4.1 Background.** The interface of helicopters and tankers during shipboard helicopter operations is complex and may be hazardous unless appropriate procedures are coordinated among all parties. The following recommended practices are designed to minimize risks during helicopter/tanker operations.

# **1.4.2 Recommended Practices**

**1.4.2.1** Management, flight operations personnel, and pilots should be familiar with and apply the operating safety standards set forth in "Guide to Helicopter/Ship Operations", International Chamber of Shipping, Third Edition, 5–89 (as amended), establishing operational guidelines/standards and safe practices sufficient to safeguard helicopter/tanker operations.

**1.4.2.2** Appropriate plans, approvals, and communications must be accomplished prior to reaching the vessel, allowing tanker crews sufficient time to perform required safety preparations and position crew members to receive or dispatch a helicopter safely.

**1.4.2.3** Appropriate approvals and direct communications with the bridge of the tanker must be maintained throughout all helicopter/tanker operations.

**1.4.2.4** Helicopter/tanker operations, including landings/departures, must not be conducted until the helicopter pilot–in–command has received and acknowledged permission from the bridge of the tanker.

**1.4.2.5** Helicopter/tanker operations must not be conducted during product/cargo transfer.

**1.4.2.6** Generally, permission will not be granted to land on tankers during mooring operations or while maneuvering alongside another tanker.

# 1.5 Helideck/Heliport Operational Hazard Warning(s) Procedures

# 1.5.1 Background

**1.5.1.1** A number of operational hazards can develop on or near offshore helidecks or onshore heliports that can be minimized through procedures for proper notification or visual warning to pilots. Examples of hazards include but are not limited to:

- a) Perforating operations: subparagraph 1.6.
- **b**)  $H_2S$  gas presence: subparagraph 1.7.
- c) Gas venting: subparagraph 1.8; or,
- d) Closed helidecks or heliports: subparagraph 1.9 (unspecified cause).

**1.5.1.2** These and other operational hazards are currently minimized through timely dissemination of a written Notice to Air Missions (NOTAM) for pilots by helicopter companies and operators. A NOTAM provides a

# 1.9 Helideck/Heliport Operational Warning(s)/ Procedure(s) – Closed Helidecks or Heliports

**1.9.1 Background.** A white "X" marked diagonally from corner to corner across a helideck or heliport touchdown area is the universally accepted visual indicator that the landing area is closed for safety of other reasons and that helicopter operations are not permitted. The following practices are recommended.

**1.9.1.1 Permanent Closing.** If a helideck or heliport is to be permanently closed, X diagonals of the same size and location as indicated above should be used, but the markings should be painted on the landing area.

#### NOTE-

White Decks: If a helideck is painted white, then international orange or yellow markings can be used for the temporary or permanent diagonals.

**1.9.1.2 Temporary Closing.** A temporary marker can be used for hazards of an interim nature. This marker could be made from vinyl or other durable material in the shape of a diagonal "X." The marker should be white with legs at least 20 feet long and 3 feet in width. This marker is designed to be quickly secured and removed from the deck using grommets and rope ties. The duration, time, location, and nature of these temporary closings should be provided to and coordinated with company aviation departments, nearby helicopter bases, and helicopter operators supporting the area. These markers MUST be removed when the hazard no longer exists. (See FIG ENR 6.2-2.)

### 1.10 Offshore (VFR) Operating Altitudes for Helicopters

**1.10.1 Background.** Mid-air collisions constitute a significant percentage of total fatal offshore helicopter accidents. A method of reducing this risk is the use of coordinated VFR cruising altitudes. To enhance safety through standardized vertical separation of helicopters when flying in the offshore environment, it is recommended that helicopter operators flying in a particular area establish a cooperatively developed Standard Operating Procedure (SOP) for VFR operating altitudes. An example of such an SOP is contained in this example.

#### **1.10.2 Recommended Practice Example**

**1.10.2.1 Field Operations.** Without compromising minimum safe operating altitudes, helicopters working within an offshore field "constituting a cluster" should use altitudes not to exceed 500 feet.

#### **1.10.2.2 En Route Operations**

a) Helicopters operating below 750' AGL should avoid transitioning through offshore fields.

**b**) Helicopters en route to and from offshore locations, below 3,000 feet, weather permitting, should use en route altitudes as outlined in TBL ENR 6.2–1.

Magnetic Heading	Altitude
$0^{\circ}$ to $179^{\circ}$	750'
	1750'
	2750'
180° to 359°	1250'
	2250'

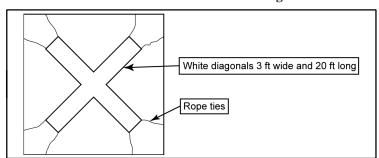
#### TBL ENR 6.2-1

c) Area Agreements. See HSAC Area Agreement Maps for operating procedures for onshore high density traffic locations.

#### NOTE-

Pilots of helicopters operating VFR above 3,000 feet above the surface should refer to the current Federal Aviation Regulations (14 CFR Part 91), and Section ENR 1.4, Paragraph 1.7, Basic VFR Weather Minimums, of the AIP.

FIG ENR 6.2-2 Closed Helideck Marking



- d) Landing Lights. Aircraft landing lights should be on to enhance aircraft identification:
  - 1) During takeoff and landings;
  - 2) In congested helicopter or fixed wing traffic areas;
  - **3**) During reduced visibility; or,
  - 4) Anytime safety could be enhanced.

# 1.11 Offshore Helidecks/Landing Communications

**1.11.1 Background.** To enhance safety, and provide appropriate time to prepare for helicopter operations, the following is recommended when anticipating a landing on an offshore helideck.

# **1.11.2 Recommended Practices**

**1.11.2.1** Before landing on an offshore helideck, pilots are encouraged to establish communications with the company owning or operating the helideck if frequencies exist for that purpose.

**1.11.2.2** When impracticable, or if frequencies do not exist, pilots or operations personnel should attempt to contact the company owning or operating the helideck by telephone. Contact should be made before the pilot departs home base/point of departure to advise of intentions and obtain landing permission if necessary.

# NOTE-

It is recommended that communications be established a minimum of 10 minutes prior to planned arrival time. This practice may be a requirement of some offshore owner/operators.

# NOTE-

1. See subparagraph 1.4 for Tanker Operations.

**2.** Private use Heliport. Offshore heliports are privately owned/operated facilities and their use is limited to persons having prior authorization to utilize the facility.

# 1.12 Two (2) Helicopter Operations on Offshore Helidecks

**1.12.1 Background.** Standardized procedures can enhance the safety of operating a second helicopter on an offshore helideck, enabling pilots to determine/maintain minimum operational parameters. Orientation of the parked helicopter on the helideck, wind and other factors may prohibit multi-helicopter operations. More conservative Rotor Diameter (RD) clearances may be required under differing condition, i.e. temperature, wet deck, wind (velocity/direction/gusts), obstacles, approach/departure angles, etc. Operations are at the pilot's discretion.

**1.12.2 Recommended Practice.** Helideck size, structural weight capability, and type of main rotor on the parked and operating helicopter will aid in determining accessibility by a second helicopter. Pilots should determine that multi-helicopter deck operations are permitted by the helideck owner/operator.

# **1.12.3 Recommended Criteria**

# ENR 7.2 Data Link Procedures

# 1. Oakland Oceanic Airspace

**1.1** Oakland ARTCC has full CPDLC and ADS–C services in the entire Oakland Oceanic FIR for FANS–1/A capable aircraft. The Oakland Oceanic FIR log–on address is "KZAK;" the facility is "OAKODYA." CADS LOGON is not supported.

**1.2** The use of CPDLC and ADS–C in the Oakland Oceanic FIR (KZAK) is only permitted by Inmarsat and Iridium customers. All other forms of data link connectivity are not authorized. Users must ensure that the proper data link code is filed in Item 10a of the ICAO FPL in order to indicate which satellite medium(s) the aircraft is equipped with. The identifier for Inmarsat is J5 and the identifier for Iridium is J7. If J5 or J7 is not included in the ICAO FPL, then the LOGON will be rejected by KZAK and the aircraft will not be able to connect.

**1.3** Prior to entering the Oakland Oceanic FIR, contact San Francisco Radio and request a SELCAL check. *NOTE*-

**1.** Expect to receive primary and secondary HF frequency assignments from San Francisco Radio for the entire route of flight within the Oakland Oceanic FIR.

**2.** Pilots must maintain HF communications capability with San Francisco Radio at all times within the Oakland Oceanic FIR.

1.4 Aircraft entering the Oakland Oceanic FIR data link service area from non-data link airspace should:

**1.4.1** Log on to CPDLC at least 15 but not more than 45 minutes prior to entering the Oakland Oceanic FIR CPDLC service area.

**1.4.2** Contact San Francisco Radio on HF for a SELCAL check and provide the information outlined in paragraph 1.3.

**1.5** Aircraft entering the Oakland Oceanic FIR data link service area from adjacent data link airspace should:

**1.5.1** Determine the status of the CPDLC connection. If KZAK is the active center, the pilot must contact San Francisco Radio on HF for a SELCAL check.

**1.5.2** If KZAK is not the active center, the pilot must, within 5 minutes after the boundary is crossed, terminate the CPDLC connection, then log on to KZAK, and contact San Francisco Radio on HF for a SELCAL check.

**1.6** Flights overflying Honolulu Control Facility (HCF) airspace will receive an END SERVICE message prior to entering HCF airspace that will result in termination of CPDLC. Aircraft must re-log on to CPDLC prior to reentering Oakland Oceanic FIR airspace when HCF advises to contact en route communications or San Francisco Radio.

**1.7** Flights overflying Guam Combined Center Radar Approach Control (CERAP) airspace should maintain the CPDLC connection with Oakland ARTCC; however, do not use CPDLC for ATC COM until Guam CERAP advises you to again contact en route communications or San Francisco Radio.

# 2. Anchorage Oceanic Airspace

**2.1** Anchorage ARTCC has full CPDLC capability and normal service in the Arctic FIR for FANS–1/A capable aircraft within INMARSAT or Iridium coverage. The Anchorage Arctic FIR log-on address is "PAZN;" the facility is "ANCXFXA." CADS LOGON is not supported.

**2.2** Anchorage ARTCC has full CPDLC capability and normal service in the Anchorage Domestic and Oceanic FIRs, South of N63 and west of W165 for FANS–1/A capable aircraft. The Anchorage log-on address is "PAZN;" the facility is "ANCATYA." CADS LOGON is not supported.

2.3 Prior to entering the Anchorage Oceanic FIR, contact San Francisco Radio and request a SELCAL check.

#### NOTE-

**1.** *HF* service in the Anchorage Arctic FIR is provided via Gander Radio. San Francisco Radio maintains an HF Long–Distance Operational Control (LDOC) station at Barrow, Alaska that may be of use when the solar conditions inhibit normal communications via Gander. HF service in the Anchorage Oceanic FIR is provided via San Francisco Radio.

**2.** Expect to receive primary and secondary HF frequency assignments from San Francisco Radio for the entire route of flight when within the Anchorage Oceanic FIR.

**3.** Pilots must maintain HF communications capability with appropriate en route RADIO (San Francisco Radio or Gander) at all times within the Anchorage Arctic or Oceanic FIRs.

## 3. New York Oceanic Airspace

**3.1** New York ARTCC provides full CPDLC and ADS–C services throughout its Oceanic Airspace to FANS–1/A capable flights. The New York Oceanic FIR FANS LOGON address is "KZWY." CADS LOGON is not supported. Flights should use ADS for position reporting and CPDLC for all other ATC communications while in the New York Oceanic Area.

**3.2** The use of CPDLC and ADS–C in the New York Oceanic FIR (KZWY) is only permitted by Inmarsat and Iridium customers. All other forms of data link connectivity are not authorized. Users must ensure that the proper data link code is filed in Item 10a of the ICAO FPL in order to indicate which satellite medium(s) the aircraft is equipped with. The identifier for Inmarsat is J5 and the identifier for Iridium is J7. If J5 or J7 is not included in the ICAO FPL, then the LOGON will be rejected by KZWY and the aircraft will not be able to connect.

3.3 Prior to entering the New York Oceanic FIR, contact New York Radio and request a SELCAL check.

NOTE-

**1.** Expect to receive primary and secondary HF frequency assignments from New York Radio for the route of flight within the data link service area.

2. Pilots must maintain HF communications capability with New York Radio at all times within the New York Oceanic FIR.

**3.** If not filed in the flight plan, NY Radio will request if the flight is CPDLC connected and confirm their exit point from the New York FIR.

**3.4** If the flight will exit ZNY oceanic airspace into domestic airspace (including over New York Bermuda RADAR):

**3.4.1** Identify the flight as ADS and/or CPDLC connected;

3.4.2 If operating on the Organized Track System (OTS), state the track letter;

**3.4.3** State the name of the next CTA/FIR to be entered along with the latitude and longitude or waypoint exit point leaving the ZNY FIR; and

**3.4.4** Request a SELCAL check.

NOTE-

New York Radio may require flights to contact them at 60 West for HF frequency updates.

3.5 Aircraft entering the New York Oceanic FIR data link service area from non-data link airspace should:

**3.5.1** LOGON to KZWY at least 15 minutes but not more than 45 minutes prior to entering the New York Oceanic CTA/FIR.

**3.5.2** Prior to entering the New York Oceanic FIR contact New York Radio on HF or VHF providing the information as outlined in paragraph 3.3.

## NOTE-

Do not send a CPDLC position report to confirm CDA prior to, or upon crossing, the FIR.

3.6 Aircraft entering the New York Oceanic FIR data link service area from adjacent data link airspace should:

**3.6.1** Determine the status of the FANS connection when crossing the New York Oceanic FIR boundary.

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NOTE-

CPDLC and ADS services will be forwarded automatically between New York, Santa Maria, and Gander OCA's. CPDLC connections will be transferred approximately 5 minutes prior to the boundary crossing point.

**3.6.1.1** If KZWY is the active connection when crossing the New York Oceanic FIR boundary the pilot must:

3.6.1.2 Contact New York Radio on HF providing the information as outlined in paragraph 3.3.

**3.6.2** If KZWY is not the active center when crossing the New York Oceanic FIR boundary the pilot must:

**3.6.2.1** Terminate the CPDLC connection, then log-on to KZWY; and

**3.6.2.2** Contact New York Radio on HF providing the information as outlined in paragraph 3.3.

### NOTE-

Do not send a CPDLC position report to confirm CDA prior to, or upon crossing, the FIR.

3.7 Flights overflying Bermuda RADAR airspace should:

**3.7.1** Prior to entering New York Bermuda RADAR airspace, aircraft will receive an END SERVICE message that will result in termination of CPDLC.

**3.7.2** Aircraft must re-log-on to KZWY prior to re-entering the New York Oceanic CTA/FIR when they are advised by ATC to contact New York Radio on HF.

**3.8** Aircraft exiting the KZWY data link service area and approaching New York Center Domestic, New York Center Bermuda RADAR, San Juan, Piarco, Jacksonville, Miami, Moncton, and Gander Domestic can expect a CPDLC uplink message containing the VHF frequency assignment for the next facility. CPDLC End Service will be sent approximately 5 minutes prior to the boundary crossing point.

# 4. Data Link Failure

**4.1** In the event of data link failure or outages, flight crews must contact New York Radio or San Francisco Radio via HF voice for routine communications. When unable to communicate on HF, the pilot may conduct normal and routine communications with ATC via New York Radio or San Francisco Radio on SATVOICE. Direct SATVOICE contact with ATC should be limited to distress and urgency situations or when other means are not available and communication is essential.

# ENR 8.2 Small Unmanned Aircraft System (sUAS)

# 1. Part 107 sUAS and Recreational Flyers

**1.1** Part 107 UAS. A regulatory first step for civil non-recreational UAS operations. To fly under 14 CFR Part 107, the UAS must weigh less than 55 pounds and the operator (called a remote pilot) must pass a knowledge test. Also, the UAS must be registered. Part 107 enabled the vast majority of routine sUAS operations, allowing flight within VLOS while maintaining flexibility to accommodate future technological innovations. Part 107 allows sUAS operations for many different purposes without requiring airworthiness certification, exemptions, or a COA for Class G airspace access. Part 107 includes the opportunity for individuals to request waivers for certain provisions of the rules, for example, Beyond Visual Line Of Sight (BVLOS). Part 107 also has specific restrictions which are not subject to waiver, such as the prohibition of the carriage or transport of Hazardous Materials (HAZMAT).

# **1.2** Recreational Flyer UAS:

**1.2.1** The FAA considers recreational UAS to be aircraft that fall within the statutory and regulatory definitions of an aircraft, in that they are devices that are used or intended to be used for flight in the air. As aircraft, these devices generally are subject to FAA oversight and enforcement.

**REFERENCE –** 49 USC 40102, Definitions. 14 CFR Part 1, Definitions and Abbreviations.

**1.2.2** Recreational aircraft may operate in Class G airspace where the aircraft is flown from the surface to not more than 400 feet AGL, and the operator must comply with all airspace restrictions and prohibitions. The only exception to this altitude restriction in Class G airspace is at FAA–recognized fixed sites and sanctioned events, with specifically approved procedures for flights above 400 feet AGL.

#### NOTE-

*Higher altitude airspace authorizations for Recreational Flyers are obtained through the FAA's DroneZone website at: https://faadronezone.faa.gov/#/.* 

**1.2.3** The Recreational UAS Safety Test (TRUST) module was developed in consultation with multiple UAS stakeholders and through interested party feedback. TRUST is available electronically, has no minimum age limit, and is provided by volunteer test administrators, vetted by the FAA. See ENR 8.5, paragraph 1., UAS Pilot Certification and Requirements for Part 107 and Recreational Flyers, for further information on TRUST. Additional information regarding TRUST is available at the FAA's The Recreational UAS Safety Test website.

# NOTE-

The FAA's The Recreational UAS Safety Test website may be viewed at: https://www.faa.gov/uas/recreational\_fliers/knowledge\_test\_updates/.

**1.2.4** Recreational UAS weighing more than .55 lbs must be registered. This can be done electronically through the FAA's DroneZone website. Owners must then label all aircraft with their assigned registration number on the exterior of their aircraft so that the registration can be clearly seen and read from a reasonable distance. For more information on registering UAS See ENR 8.2, paragraph 2., Registration Requirements, for more information on registering UAS.

# NOTE-

The FAA's DroneZone website may be viewed at: https://faadronezone.faa.gov/#/.

# 2. Registration Requirements

**2.1** Nearly all UAS flown in the NAS are required to be registered in the FAA aircraft registration database. UAS weighing 55 pounds MGOW or more must be registered under 14 CFR Part 47, Aircraft Registration, while UAS less than 55 pounds may be registered under the FAA's newer 14 CFR Part 48 online system.

#### NOTE-

The FAA's Aircraft Registration Unmanned Aircraft (UA) website may be viewed at: https://www.faa.gov/licenses\_certificates/air craft\_certification/air craft\_registry/UA/.

#### REFERENCE-

# 14 CFR Part 47, Aircraft Registration.

**2.2** Registering UAS under 14 CFR Part 47. For those UAS, which do not meet the weight stipulations for registration under 14 CFR Part 48, registration is accomplished under 14 CFR Part 47. 14 CFR Part 47 registration will result in an "N"–number like those assigned to manned aircraft. To learn more about the process and to register a UAS under Part 47, see the FAA's Aircraft Registration Unmanned Aircraft (UA) website. If desired by the owner, any UAS may be registered under 14 CFR Part 47.

# NOTE-

The FAA's Aircraft Registration Unmanned Aircraft (UA) website may be viewed at: https://www.faa.gov/licenses\_certificates/air craft\_certification/air craft\_registry/UA/.

**2.3** Registering UAS under 14 CFR Part 48. For most operators of sUAS (those UAS weighing less than 55 pounds MGOW), registration under 14 CFR Part 48, Registration and Marking Requirements for Small UA, will be most expedient and the least expensive. 14 CFR Part 48 registrants are those UAS flyers operating under either of the following statutes:

**2.3.1** Part 107. Under the provisions of Part 107, all UAS must be registered regardless of weight. Operations under Part 107 are generally those involving commerce, but can be for recreation as well.

**2.3.2** Recreational Flyers. UAS that are flown exclusively for recreational purposes must be registered if they weigh more than 0.55 pounds (250 grams).

### NOTE-

**1.** If you are not sure what kind of a drone flyer you are, refer to the FAA's User Identification Tool at: https://www.faa.gov/uas/getting\_started/user\_identification\_tool/, or visit the FAA Getting Started webpage at: https://www.faa.gov/uas/getting\_started/.

2. Registrations cannot be transferred between 14 CFR Part 107 UAS and 49 USC 44809 UAS.

#### REFERENCE-

14 CFR Part 48, Registration and Marking Requirements for Small Unmanned Aircraft.

2.4 How to Register a UAS under 14 CFR Part 48:

**2.4.1** To register a UAS online under Part 48, refer to the FAA's DroneZone website. When registering a UAS online under Part 48, you will need to select registration in either Part 107 or the exception for recreational flyers.

**2.4.2** Registration fees for Part 107 registration are per sUAS, and the registration is valid for three years. Each Part 107 registered sUAS will receive a different number. Recreational flyer registration fees are per UAS and valid for three years, but the same registration number can be applied to any UAS in the registrant's ownership. The recreational flyer will receive one registration number that can be used for all UAS flown by that person. In order to register, a person must be 13 years of age or older and be a U. S. citizen or legal permanent resident. If the owner is less than 13 years of age, another person 13 years of age or older must register the UAS and that person must be a U.S. citizen or legal permanent resident.

**2.4.3** An FAA registration certificate will be issued after UAS registration. The registration certificate (either paper copy or digital copy) must be available for inspection during all flight operations. If an individual other than the registered owner operates a UAS the registration certificate (either paper copy or digital copy) must also be available for inspection during all flight operations. Federal law requires registered UAS operators, if asked, to show their certificate of registration to any federal, state, or local law enforcement officer. Failure to register a UAS that requires registration may result in regulatory and criminal penalties. The FAA may assess civil penalties up to \$27,500.

# NOTE-

The FAA's DroneZone website may be viewed at: https://faadronezone.faa.gov/#/.

**2.5** Labeling a UAS with a Registration Number. All UAS requiring registration must be marked with a registration number before being flown. The UAS registration number can be applied to the aircraft by

# ENR 8.5 UAS Pilot Testing, Certification and Responsibilities

# 1. UAS Pilot Certification and Requirements for Part 107 Pilots and Recreational Flyers

1.1 General:

**1.1.1** Part 107 Operations. Any person who operates a civil sUAS in the NAS, for any operation that is not for recreational/pleasure purposes, must have a UAS pilot's certificate (also called the "Part 107 Certificate") with a Small Unmanned Aircraft System Rating.

**1.1.2** Recreational Flyer Operations. A person who is flying a sUAS for recreational/pleasure purposes in the NAS must have taken and passed TRUST, as required by 14 USC 44809.

**1.2** Eligibility for Testing:

**1.2.1** Part 107 operations. Applicants must be at least 16 years of age and be able to speak and understand English. For further information on Part 107 testing see the FAA's website, Become a Drone Pilot.

#### NOTE-

The FAA's Become a Drone Pilot website may be viewed at: https://www.faa.gov/uas/commercial operators/become a drone pilot/.

**1.2.2** Recreational Flyer Operations. There are no minimum age or other eligibility requirements for a recreational UAS pilot to take TRUST.

**1.3** Initial Testing for Certification:

1.3.1 Part 107 Operations:

**1.3.1.1** Current 14 CFR Part 61 Certificate Holder (Online Training). A person who holds a Part 61 manned pilot certificate (other than a student pilot certificate), and who has a current flight review, as per 14 CFR Section 61.56, may complete online training that is offered by the FAA to obtain their 14 CFR Part 107, in lieu of taking the Initial Knowledge Test. However, a Part 61 certificate holder may also take the sUAS Initial Aeronautical Knowledge Test for certification.

**1.3.1.2** Non 14 CFR Part 61 certificate holder, or 14 CFR Part 61 certificate holder lacking currency (Initial Aeronautical Knowledge Test). A person who does not hold a 14 CFR Part 61 manned pilot certificate and/or they do not have a current flight review must take the Initial Aeronautical Knowledge Test at an FAA designated Knowledge Testing Center to obtain their sUAS Certificate.

**1.3.2** Recreational Flyer Operations. Any person who flies a UA for recreational use under 49 USC 44809 must take and pass TRUST. See the FAA website, The Recreational UAS Safety Test (TRUST).

#### NOTE-

A current 14 CFR Part 107 sUAS certificate holder may fly recreationally under that part, but must adhere entirely to 14 CFR Part 107 rules and requirements. If a Part 107 sUAS certificate holder wishes to fly under 49 USC 44809, they must take and pass TRUST.

NOTE-

The FAA's website, The Recreational UAS Safety Test (TRUST), may be viewed at: https://www.faa.gov/uas/recreational\_flyers/knowledge\_test\_updates.

**1.4** Recurrent Training (Testing) Requirements:

**1.4.1** Part 107 operations:

**1.4.1.1** To exercise the privileges of a sUAS certificate that was issued under 14 CFR Part 107, a person must maintain currency. Therefore, the FAA requires that a person take a recurrent course within 24 months from the month the Initial Aeronautical Knowledge Test was passed, or the online training was completed.

**1.4.1.2** Recurrent training (online training) is found at the FAA's Become a Drone Pilot website.

#### NOTE-

The FAA's Become a Drone Pilot website may be viewed at: https://www.faa.gov/uas/commercial\_operators/become\_a\_drone\_pilot/.

1.4.2 Recreational Operations. TRUST is taken on a once-and-done basis; no recurrent testing is required.

**1.5** Pre–Test Training Requirements:

**1.5.1** Part 107 Operations:

**1.5.1.1** No documented pre-test training is required under Part 107 to take the Initial Aeronautical Knowledge Test. However, the FAA Remote Pilot Small Unmanned Aircraft Systems Study Guide is an excellent resource.

NOTE-

To view the FAA Remote Pilot – Small Unmanned Aircraft Systems Study Guide see: https://www.faa.gov/regulations\_policies/handbooks\_manuals/aviation/media/remote\_pilot\_study\_guide.pdf.

**1.5.1.2** Initial Aeronautical Knowledge Test subject areas. The testing topics for the sUAS Knowledge Test can be found in 14 CFR Section 107.73, Knowledge and Training.

#### REFERENCE-

14 CFR Section 107.73, Knowledge and Training.

**1.5.1.3** Part 107 online training. This online training may be used by those who hold a 14 CFR Part 61 pilot certificate (not including a student pilot certificate) seeking 14 CFR Part 107 remote pilot certification. A person who holds a 14 CFR Part 61 pilot certificate must also show, at the time of certification, a current Flight Review as per 14 CFR Section 61.56.

**1.5.2** Recreational Flyer Operations. No pre-test training is necessary to complete TRUST.

**1.6** Endorsements and re-testing. Neither the Part 107 Initial Aeronautical Knowledge Test nor the Recreational TRUST have any requirements for flight instructor endorsements prior to testing. A person who fails the Initial Aeronautical Knowledge Test must wait 14 calendar days before they may retake the test. TRUST may be retaken at any time.

1.7 Registering to Take the Part 107 sUAS Initial Aeronautical Knowledge Test:

**1.7.1** Before a person can take the sUAS Initial Aeronautical Knowledge Test at an FAA–recognized testing center, that person must obtain an FAA Tracking Number (FTN). To obtain an FTN a person must create an account in the Integrated Airman Certification and Rating Application (IACRA) system. For detailed instructions on how to obtain an FTN, see the FAA's, Airman Certificate Testing Service (ACTS) Contract Briefing.

#### NOTE-

Any person who has any FAA Airman Certificate will already have an FTN.

NOTE-

The FAA's Airman Certificate Testing Service (ACTS) Contract Briefing, may be viewed at: https://www.youtube.com/watch?v=ETLsH8BruBM.

**1.7.2** Once an applicant has a FTN, they will go to the testing vendor's website and register for the test. The FAA's testing vendor is PSI Services LLC.

#### NOTE-

The PSI Services LLC website may be viewed at: https://candidate.psiexams.com/.

**1.8** Applying for a 14 CFR Part 107 sUAS Certificate. The FAA's Become a Drone Pilot website has instructions on how to obtain the 14 CFR Part 107 Pilot Certificate, following testing or online training completion.

#### NOTE-

The Become a Drone Pilot website may be viewed at: https://www.faa.gov/uas/commercial\_operators/become\_a\_drone\_pilot/.

**1.9** Night Operations and Operations over People:

# PART 3 - AERODROMES (AD)

# AD 0.

AD 0.1 Preface – Not applicable

AD 0.2 Record of AIP Amendments - See GEN 0.2-1

AD 0.3 Record of AIP Supplements - Not applicable

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AD 0.5 List of Hand Amendments to the AIP – Not applicable

# AD 2. AERODROMES

**1.** The following is a partial list of U.S. airports designated to serve international operations. This list contains U.S. airports with scheduled passenger service in large aircraft and certain airports designated as alternate service airports. Omitted from this list are designated general aviation airports, airports with scheduled cargo but no scheduled passenger service, and certain airports having international service in commuter-type aircraft.

ICAO ID	Location	Airport Name	Designation
	L	Alaska	
PANC	Anchorage	Ted Stevens Anchorage International	Regular
PAED	Anchorage	Elmendorf AFB	Alternate
PACD	Cold Bay	Cold Bay	Alternate
PAEI	Fairbanks	Eielson AFB	Alternate
PAFA	Fairbanks	Fairbanks International	Regular
PAJN	Juneau	Juneau International	Regular
PAKN	King Salmon	King Salmon	Alternate
	Am	erican Samoa	
NSTU	Pago Pago	Pago Pago International	Regular
	L.	Arizona	
KPHX	Phoenix	Phoenix Sky Harbor International	Regular
KTUS	Tucson	Tucson International	Regular
	IL.	California	
KFAT	Fresno	Fresno Yosemite International	Alternate
KLAX	Los Angeles	Los Angeles International	Regular
KOAK	Oakland	Metropolitan Oakland International	Regular
KONT	Ontario	Ontario International	Alternate
KPMD	Palmdale	Palmdale Regional/ USAF Plant 42	Alternate
KSMF	Sacramento	Sacramento International	Alternate
KSAN	San Diego	San Diego International	Regular
KSFO	San Francisco	San Francisco International	Regular
KSJC	San Jose	San Jose Norman Y. Mineta International	Regular
KSCK	Stockton	Stockton Metropolitan	Alternate
		Colorado	
KDEN	Denver	Denver International	Regular
KPUB	Pueblo	Pueblo Memorial	Alternate

ICAO ID	Location	Airport Name	Designation				
	Connecticut						
KBDL	Windsor Locks	Bradley International	Regular				
	Dist	rict of Columbia					
KIAD	Washington	Washington Dulles International	Regular				
		Florida	IL.				
KFLL	Fort Lauderdale	Fort Lauderdale– Hollywood International	Regular				
KRSW	Fort Myers	Southwest Florida International	Regular				
KMIA	Miami	Miami International	Regular				
КМСО	Orlando	Orlando International	Regular				
KTPA	Tampa	Tampa International	Regular				
KPBI	West Palm Beach	Palm Beach International	Regular				
		Georgia	1				
KATL	Atlanta	Hartsfield – Jackson Atlanta International	Regular				
		Guam					
PGUM	Agana	Guam International	Regular				
PGUA	Guam Island	Andersen AFB	Alternate				
		Hawaii	<b>1</b>				
PHTO	Hilo	Hilo International	Alternate				
PHNL	Honolulu	Honolulu International	Regular				
PHOG	Kahului	Kahului	Regular				
		Illinois					
KORD	Chicago	Chicago–O'Hare International	Regular				
		Indiana					
KIND	Indianapolis	Indianapolis International	Regular				
		Kansas					
KICT	Wichita	Wichita Mid-Continent	Alternate				
		Kentucky					
KCVG	Covington	Cincinnati/Northern Kentucky International	Regular				

ICAO ID	Location	Airport Name	Designation
		Louisiana	
KMSY	New Orleans	Louis Armstrong New Orleans International Maine	Regular
KBGR	Bangor	Bangor International	Alternate
		Maryland	
KBWI	Baltimore	Baltimore– Washington International Thurgood Marshall	Regular
	Μ	assachusetts	
KBOS	Boston	General Edward Lawrence Logan International	Regular
		Michigan	
KDTW	Detroit	Detroit Metropolitan Wayne County	Regular
		Minnesota	
KMSP	Minneapolis	Minneapolis–St. Paul International (Wold– Chamberlain)	Regular
		Missouri	
KMCI	Kansas City	Kansas City International	Regular
KSTL	St. Louis	Lambert–St. Louis International	Regular
		Nevada	
KLAS	Las Vegas	Harry Reid International	Regular
KRNO	Reno	Reno/Tahoe International	Regular
	1	New Jersey	
KEWR	Newark	Newark Liberty International New York	Regular
KJFK	New York	John F. Kennedy International	Regular
KIAG	Niagara Falls	Niagara Falls International	Alternate
KSYR	Syracuse	Syracuse Hancock International	Regular
	No	orth Carolina	
KCLT	Charlotte	Charlotte/Douglas International	Regular
KRDU	Raleigh– Durham	Raleigh–Durham International	Regular
	Norther	n Mariana Islands	
PGSN	Saipan Island	Francisco C. Ada/Saipan International	Regular

ICAO ID	Location	Airport Name	Designation			
		Ohio				
KCLE	Cleveland	Cleveland–Hopkins International	Regular			
КСМН	Columbus	Port Columbus International	Regular			
	Oregon					
KPDX	Portland	Portland	Regular			
M DA	1 01010010	International	Itogului			
	ŀ	Pennsylvania	1			
KPHL	Philadelphia	Philadelphia International	Regular			
KPIT	Pittsburgh	Pittsburgh International	Regular			
	· · · · · · · · · · · · · · · · · · ·	Puerto Rico				
TJMZ	Mayaguez	Eugenio Maria De Hostos	Regular			
TJSJ	San Juan	Luis Munoz Marin International	Regular			
	1	Tennessee	1			
KME M	Memphis	Memphis International	Regular			
KBNA	Nashville	Nashville International	Regular			
	1	Texas				
KDFW	Dallas	Dallas–Fort Worth International	Regular			
KELP	El Paso	El Paso International	Regular			
KIAH	Houston	George Bush Intercontinental/ Houston	Regular			
KLRD	Laredo	Laredo International	Regular			
KSAT	San Antonio	San Antonio International	Regular			
	1	Utah				
KSLC	Salt Lake City	Salt Lake City International	Regular			
	V	rirgin Islands				
TIST	Charlotte Amalie St. Thomas	Cyril E King	Regular			
TISX	Christiansted St. Croix	Henry E Rohlsen	Regular			
	Washington					
KPAE	Everett	Snohomish County (Paine Field)	Alternate			
KSEA	Seattle	Seattle-Tacoma International	Regular			
KGEG	Spokane	Spokane International	Alternate			
	·	Wisconsin	·			
KMKE	Milwaukee	General Mitchell International	Regular			

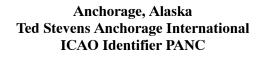
**1.1** Diagrams of these airports, arranged alphabetically by state and in the order listed above, are on the pages following. The most up-to-date diagrams of these and other U.S. airports are in the Terminal Procedures Publication (TPP). For additional information on these airports, see the Chart Supplement U.S.

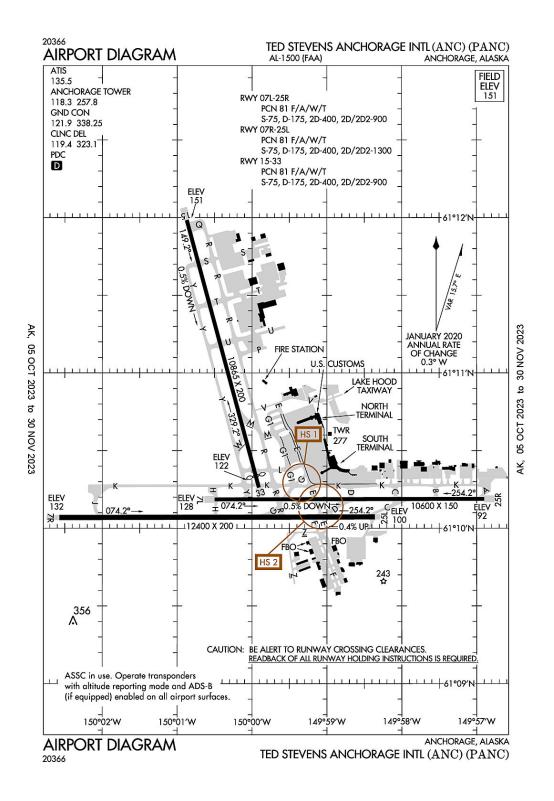
**1.2** Public sales of the Chart Supplement U.S. and TPP are available through a network of FAA approved print providers. A listing of products, dates of latest editions, and print providers is available on the AIS website at: http://www.faa.gov/air\_traffic/flight\_info/aeronav.

#### Instrument Approach Procedures (Charts) Airport Diagram/Airport Sketch

AIRPORT DIAGRAM/AIRPORT SKETCH	
Hard Other Than Stopways,Taxiways, Metal Surface Hard Surface Parking Areas Surface	Negative Symbols used to identify Copter Procedures landing point
X X X     X X X       Closed     Closed       Runway     Surface   Construction	NOTE: Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.
ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.	Runway TDZ elevationTDZE 123 0.3% DOWN Runway Slope
ARRESTING SYSTEM (EMAS) REFERENCE FEATURES	NOTE: Runway Slope measured to midpoint on runways 8000 teet or longer.
Displaced Threshold	U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.
Tanks	Approach light symbols are shown in the Flight Information Handbook.
Airport Beacon # 🏠 🤡	Airport diagram scales are variable.
Runway Radar ReflectorsX Control Tower #	True/magnetic North orientation may vary from diagram to diagram
# When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.	Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.
## A fuel symbol is shown to indicate 24-hour self-serve fuel available, see appropriate Chart Supplement for information.	Positional accuracy within ±600 feet unless otherwise noted on the chart.
NOTE: All new and revised airport diagrams are shown refer- enced to the World Geodetic System (WGS) (noted on	Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.
appropriate diagram), and may not be compatible with local coordinates published in FLIP. (Foreign Only)	A <b>D</b> symbol is shown to indicate runway declared distance information available, see appropriate Chart Supplement for distance information.
Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicabl e.g., RWY 14-32 PCN 80 F/D/X/U S-75, D-185, 2S-175, 2	le codes
HS 1 	Identification     Screen     O23.2°     1000 X 200     EMAS     Runway Heading     (Magnetic) Movement Area Dimensions
SCC	(in feet) PPE
Airport diagrams are specifically designed to assist in th runway/taxiway configurations. Airport diagrams are not in operations. For revisions to Airport Diagrams: Consult FAA	he movement of ground traffic at locations with complex ntended to be used for approach and landing or departur

LEGEND





#### Anchorage, AK Ted Stevens Anchorage Intl ICAO Identifier PANC

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 61–10–26.705N / 149–59–53.295W 2.2.2 From City: 4 miles SW of ANCHORAGE, AK 2.2.3 Elevation: 151.4 ft 2.2.5 Magnetic Variation: 16E (2020) 2.2.6 Airport Contact: CRAIG CAMPBELL BOX 196960 ANCHORAGE, AK 99519 (907–266–2600) 2.2.7 Traffic: IFR/VFR

### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,100LL,A,A12.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 4/1/2005 2.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 07L 2.12.2 True Bearing: 90 2.12.3 Dimensions: 10600 ft x 150 ft 2.12.4 PCN: 81 F/A/W/T 2.12.5 Coordinates: 61–10–11.1539N / 150–0–29.9998W 2.12.6 Threshold Elevation: 127.6 ft 2.12.6 Touchdown Zone Elevation: 128.2 ft

2.12.1 Designation: 25R
2.12.2 True Bearing: 270
2.12.3 Dimensions: 10600 ft x 150 ft
2.12.4 PCN: 81 F/A/W/T
2.12.5 Coordinates: 61–10–11.3202N / 149–56–53.8826W
2.12.6 Threshold Elevation: 91.5 ft
2.12.6 Touchdown Zone Elevation: 91.8 ft

2.12.1 Designation: 07R

2.12.2 True Bearing: 90 2.12.3 Dimensions: 12400 ft x 200 ft 2.12.4 PCN: 81 F/A/W/T 2.12.5 Coordinates: 61–10–4.1216N / 150–2–34.3367W 2.12.6 Threshold Elevation: 131.7 ft 2.12.6 Touchdown Zone Elevation: 131.7 ft

2.12.1 Designation: 25L
2.12.2 True Bearing: 270
2.12.3 Dimensions: 12400 ft x 200 ft
2.12.4 PCN: 81 F/A/W/T
2.12.5 Coordinates: 61–10–4.3722N / 149–58–21.535W
2.12.6 Threshold Elevation: 100.4 ft
2.12.6 Touchdown Zone Elevation: 114.6 ft

2.12.1 Designation: 15
2.12.2 True Bearing: 165
2.12.3 Dimensions: 10865 ft x 200 ft
2.12.4 PCN: 81 F/A/W/T
2.12.5 Coordinates: 61–11–59.03N / 150–0–52.31W
2.12.6 Threshold Elevation: 151.3 ft
2.12.6 Touchdown Zone Elevation: 151.4 ft

2.12.1 Designation: 33
2.12.2 True Bearing: 345
2.12.3 Dimensions: 10865 ft x 200 ft
2.12.4 PCN: 81 F/A/W/T
2.12.5 Coordinates: 61–10–15.75N / 149–59–54.49W
2.12.6 Threshold Elevation: 121.7 ft
2.12.6 Touchdown Zone Elevation: 120.8 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 07L
2.13.2 Take-off Run Available: 10600
2.13.3 Take-off Distance Available: 10600
2.13.4 Accelerate-Stop Distance Available: 10600
2.13.5 Landing Distance Available: 10600

2.13.1 Designation: 25R
2.13.2 Take-off Run Available: 10600
2.13.3 Take-off Distance Available: 10600
2.13.4 Accelerate-Stop Distance Available: 10600
2.13.5 Landing Distance Available: 10600

2.13.1 Designation: 07R
2.13.2 Take-off Run Available: 10900
2.13.3 Take-off Distance Available: 10900
2.13.4 Accelerate-Stop Distance Available: 10900
2.13.5 Landing Distance Available: 12400

2.13.1 Designation: 25L

2.13.2 Take-off Run Available: 12400

2.13.3 Take-off Distance Available: 12400

2.13.4 Accelerate-Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 15

2.13.2 Take-off Run Available: 10865

2.13.3 Take-off Distance Available: 10865

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 33
2.13.2 Take-off Run Available: 10865
2.13.3 Take-off Distance Available: 11965
2.13.4 Accelerate-Stop Distance Available: 10865
2.13.5 Landing Distance Available: 10400

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 07L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 25R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 07R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 25L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 15

2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 332.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 119.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 323.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/S2.18.3 Channel: 128.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 135.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 338.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 07L. Magnetic variation: 16E
2.19.2 ILS Identification: TGN
2.19.5 Coordinates: 61–10–14.0636N / 149–56–33.0327W
2.19.6 Site Elevation: 105.5 ft

2.19.1 ILS Type: Glide Slope for runway 07L. Magnetic variation: 16E
2.19.2 ILS Identification: TGN
2.19.5 Coordinates: 61–10–13.93N / 150–0–9.62W
2.19.6 Site Elevation: 122.8 ft

2.19.1 ILS Type: Localizer for runway 07L. Magnetic variation: 16E
2.19.2 ILS Identification: TGN
2.19.5 Coordinates: 61–10–11.3329N / 149–56–32.6534W
2.19.6 Site Elevation: 84.7 ft

2.19.1 ILS Type: DME for runway 07R. Magnetic variation: 16E
2.19.2 ILS Identification: ANC
2.19.5 Coordinates: 61–10–2.0211N / 149–57–58.3996W
2.19.6 Site Elevation: 112 ft

2.19.1 ILS Type: Glide Slope for runway 07R. Magnetic variation: 16E
2.19.2 ILS Identification: ANC
2.19.5 Coordinates: 61–10–8.1823N / 150–2–12.4572W
2.19.6 Site Elevation: 124.9 ft

2.19.1 ILS Type: Localizer for runway 07R. Magnetic variation: 16E
2.19.2 ILS Identification: ANC
2.19.5 Coordinates: 61–10–4.3906N / 149–57–55.495W
2.19.6 Site Elevation: 97.7 ft

2.19.1 ILS Type: DME for runway 15. Magnetic variation: 16E
2.19.2 ILS Identification: BSC
2.19.5 Coordinates: 61–10–0.0069N / 149–59–40.3379W
2.19.6 Site Elevation: 134.7 ft

2.19.1 ILS Type: Glide Slope for runway 15. Magnetic variation: 16E 2.19.2 ILS Identification: BSC

AD 2–10 5 OCT 23

2.19.5 Coordinates: 61–11–46.76N / 150–0–54.42W 2.19.6 Site Elevation: 151.3 ft

2.19.1 ILS Type: Localizer for runway 15. Magnetic variation: 16E
2.19.2 ILS Identification: BSC
2.19.5 Coordinates: 61–9–59.9158N / 149–59–45.6352W
2.19.6 Site Elevation: 120.9 ft

#### **General Remarks:**

NON–RADIO NIGHT OPS NA; NON–PARROT OPS 1 HR PPR; NON–RADIO OPS PPR; MUST PRVD ETA & REMAIN WI 15 MIN – ATCT 907–271–2700 WKDAYS 0730–1600; AFT HR & HOL – FAA 907–271–5936.

NOISE SENSITIVE AREA S & E; RWY 07R, 07L, 15 TBJT/TURBOFAN DEP EMPLOY FAA CLOSE IN NADP OR ICAO PROC B NADP WHEN SAFETY PERMITS; INFO – AMGR.

R TURN OUT OF RAMP PRKG R-2 THRU R-4 NA.

COMPASS CLBR PAD N/A.

BIRDS INVOF ARPT SPRING - FALL.

COLD TEMPERATURE AIRPORT. ALTITUDE CORRECTION REQUIRED AT OR BELOW -22C.

TWY V, SCTY GATE E OF TWY E – PCL 121.75 5 TIMES; TWY H–2, LAKESHORE TWY GATES – PCL 121.75 3 TIMES; IF INOP ALLOW 30 SEC RESET & NOTIFY LHD OPS – 907–266–2600.

PTNS OF TWY K BTN TWY H & J NOT VIS FM ATCT.

PPR FOR GND TIME GTR THAN 4 HR AT ARPT CTL SPOTS; APVL REQ 48 HR PRIOR TO DEP FOR ANC – GATE MGMT 907 266–2633 OR EMAIL: DOT.AIA.OPS.GATEMANAGEMENT@ALASKA.GOV.

TSNT MIL PPR.

TWY V RSTRD TO 12500 LB OR LESS; SUBJECT TO JET BLAST W OF TWY E.

ASSC IN USE; OPR PARROT WITH ALT RPRTG MODE & ADS-B IF EQUIPPED ENABLED ON ARPT SFCS.

489 FT UNLGTD TWR 2.5 MI NE.

EXITING PAPA RAMP PARKING SPOTS P1/2/3, USE MIN THRUST REQ DUE TO JET BLAST HAZARD ON PAPA RAMP AND TWY UNIFORM.

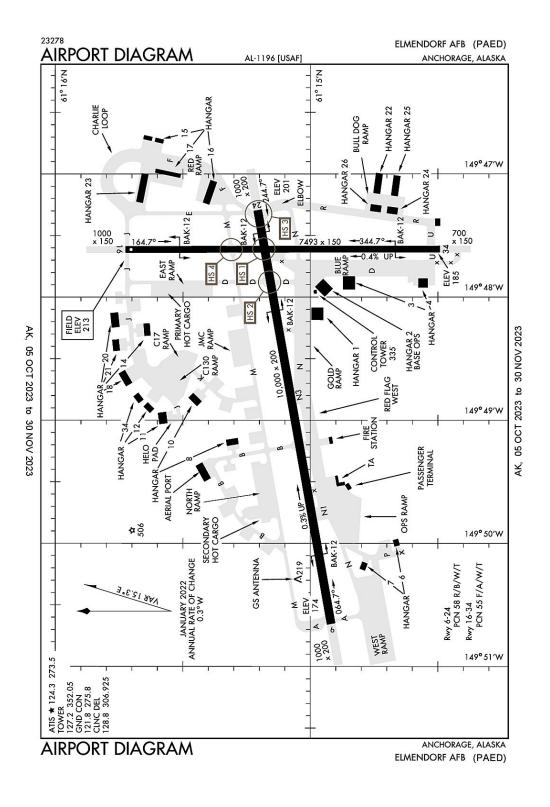
ANCHORAGE WX CAMERA AVBL ON INTERNET AT HTTPS://WEATHERCAMS.FAA.GOV.

FLT PLANNING IN ANCHORAGE BOWL AREA – RCO 122.55.

FAA RAMP PPR WITH ANC FIFO MON-FRI 0600-1430 - 135.85 OR 907-271-2414 OR AVN 405-954-9780.

WSO - 907-266-5105.

# Anchorage, Alaska Elmendorf AFB ICAO Identifier PAED



## Anchorage, AK Elmendorf AFB ICAO Identifier PAED

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 61–15–4.8715N / 149–48–23.4924W 2.2.2 From City: 3 miles NE of ANCHORAGE, AK 2.2.3 Elevation: 213 ft 2.2.5 Magnetic Variation: 18E (2015) 2.2.6 Airport Contact: AIRFIELD MGR 300SS/DOFJ ELMENDORF AFB, AK 99506 (907–552–2444) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

#### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: J82.4.5 Hangar Space:2.4.6 Repair Facilities: None

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: None2.6.2 Rescue and Firefighting Services: None

#### AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 06 2.12.2 True Bearing: 80 2.12.3 Dimensions: 10000 ft x 200 ft 2.12.4 PCN: 58 R/B/W/T 2.12.5 Coordinates: 61–14–55.08N / 149–50–39.34W 2.12.6 Threshold Elevation: 174.5 ft 2.12.6 Touchdown Zone Elevation: 174.5 ft

2.12.1 Designation: 24 2.12.2 True Bearing: 260 2.12.3 Dimensions: 10000 ft x 200 ft 2.12.4 PCN: 58 R/B/W/T 2.12.5 Coordinates: 61–15–12.16N / 149–47–18.02W 2.12.6 Threshold Elevation: 201.3 ft 2.12.6 Touchdown Zone Elevation: 201.3 ft

2.12.1 Designation: 16 2.12.2 True Bearing: 180 2.12.3 Dimensions: 7493 ft x 150 ft 2.12.4 PCN: 55 F/A/W/T 2.12.5 Coordinates: 61–15–43.43N / 149–47–36.52W 2.12.6 Threshold Elevation: 212.5 ft 2.12.6 Touchdown Zone Elevation: 212.4 ft 2.12.1 Designation: 34

2.12.2 True Bearing: 360 2.12.3 Dimensions: 7493 ft x 150 ft

2.12.4 PCN: 55 F/A/W/T 2.12.5 Coordinates: 61-14-29.64N / 149-47-36.57W 2.12.6 Threshold Elevation: 184.9 ft 2.12.6 Touchdown Zone Elevation: 194.1 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 06 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate-Stop Distance Available: 2.13.5 Landing Distance Available:

2.13.1 Designation: 24

2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available:

2.13.4 Accelerate-Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 16 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available:

2.13.1 Designation: 34

2.13.2 Take-off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 06 2.14.2 Approach Lighting System: ALSF1 2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 34 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 124.32.18.5 Hours of Operation: 0700-2300

2.18.1 Service Designation: ATIS 2.18.3 Channel: 273.5 2.18.5 Hours of Operation: 0700–2300

2.18.1 Service Designation: CD/P2.18.3 Channel: 128.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 306.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 275.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 127.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 352.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: OPS (11AF RESCUE COORD CNTR)2.18.3 Channel: 123.12.18.5 Hours of Operation:

2.18.1 Service Designation: OPS (11AF RESCUE COORD CNTR)2.18.3 Channel: 282.82.18.5 Hours of Operation:

2.18.1 Service Designation: OPS (11AF COMD CEN)2.18.3 Channel: 3812.18.5 Hours of Operation:

2.18.1 Service Designation: OPS (ARTIC WARRIOR OPS)2.18.3 Channel: 3812.18.5 Hours of Operation:

2.18.1 Service Designation: PMSV METRO2.18.3 Channel: 346.62.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 134.82.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 372.22.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 06. Magnetic variation: 18E
2.19.2 ILS Identification: EDF
2.19.5 Coordinates: 61–15–1.2N / 149–50–17W
2.19.6 Site Elevation: 169.2 ft

2.19.1 ILS Type: Localizer for runway 06. Magnetic variation: 18E
2.19.2 ILS Identification: EDF
2.19.5 Coordinates: 61–15–14.33N / 149–46–52.29W
2.19.6 Site Elevation: 212.3 ft

2.19.1 Navigation Aid Type: TACAN. Magnetic variation: 18E
2.19.2 Navigation Aid Identification: EDF
2.19.5 Coordinates: 61–15–18.03N / 149–46–9.03W
2.19.6 Site Elevation: 226.2 ft

#### **General Remarks:**

DURING VMC DEPS/MISSED APCHS/GO AROUNDS; ACFT SHALL MAINTAIN AT OR BLW 1200 FT MLS UNTIL DEP END OF RWY 06.

RWY 34 HAS A 500 FT DISPLACED THLD ALLOWING 7993 FT USABLE FOR TKFS (RWY 34 TKFS ONLY). ACFT REQG TO USE THE ADDITIONAL 500 FT FOR RWY 34 TKF MUST CTC ATC.

EXTENSIVE SVC DELAY FOR FUEL.

CAUTION: UNLIT TERRAIN 0 FT AGL/341 FT MSL, 1909 FT PRIOR TO THLD, 1914 FT RIGHT OF COURSE.

TRAN ALERT ACFT SVC LTD TO POL SERVICING, INTAKE INSPECTIONS, MAGNETIC CHIP DETECTOR INSPECTIONS AND EOR INSPECTIONS.

QUIET HR 0630-1400Z WKDAYS; 0630-1600Z WKEND & HOLS, AMC ACFT EXEMPT.

PREVENTIVE MAINT: TACAN WED AND FRI 1600–1700Z; ILS TUE AND THR 1500–1700Z; PAR SAT–SUN 1800–2000Z; ASR SAT–SUN 2000–2200.

FREQUENT ACTIVITY IN R2203; WHEN UNABLE TO AVOID, CTC ATCT.

LIMITED MAINTENANCE CAPABILITIES ON WKEND.

JOAP & LOW & HIGH PRESURE NITROGEN SERVICING FURNISHED DURING NORMAL DUTY HOURS, OTR TIMES ON REQUEST.

UNLESS PARTICIPATING IN MAJCOM SPONSORED EXER AT ELMENDORF; DEPLOYED OR STAGED UNITS MUST CTC 3 WG SCHEDULING AT DSN 317–552–2406 OR C907–552–2406 AS EARLY AS POSSIBLE TO COORD LOCAL AREA ORIENTATION BRIEFING, MAINT SPONSORSHIP IF APPLICABLE, AND SUBMIT VISITING UNIT REQUEST FORM FOR 3 OG/CC APVL PRIOR TO LCL AREA OPS.

OIL: O-123, O-128, O-133, O-148, O-156, JOAP.

ACFT UNABLE TO MEET R2203 DEP RSTRNS ADVISE ATC PRIOR TO DEP; CONSIDER DEP RWY 24. SEE ATC NOTES IN GIANT REPORT.

HGR SPACE & WARM STORAGE EXTREMELY LMTD OCT-MAY.

RCR/RSC RWY 06/24 & 16/34 & FLD RCR CTC ATCT. RWY COND CODE & FICON NOT RPTD.

CHANGE JET AIRCRAFT STARTING UNITS (JASU) TO, (A/M32A–86), MC–1A), (MC–2A), (AM32A–60A). (AM32–95)150 +/–5 LBS/MIN (2055 +/–68CFM) AT 51 +/–02 PSIA. LASS 150 +/–5 LBS/MIN @ 49 +/–2 PSIA.

IF EXP TO USE RWY 16 FOR DEP OR RWY 34 FOR LDG SEE JBER CARTEE AIRSPACE DESCRIPTION IN NOTICES SEC OF THIS SUPPLEMENT.

ACFT REQUIRING CABLES DE–RIGGED MUST CTC BASE OPS 24 HR PRIOR TO ARR OR MAKE REQ PRIOR TO PPR BEING ISSUED.

ALL FTR ACFT ON ARR EXPECT REDUCED SEPARATION; SAME TYPE ACFT AND DAY 3000 FT; DISSIMILAR ACFT AND/OR NIGHT 6000 FT; AHEAD/BEHIND FORMATION LDG-6000 FT.

ALL NON–AMC ACFT RQR 732 AMS MAINT/SVC MAY EXPERIENCE LOGISTICAL DELAYS DUE TO MISSION NECESSITIES.

SPECIAL AIR TRAFFIC RULES FAR PART 93, SEE REGULATORY NOTICES IN THE SUPPLEMENT.

FLUID: PRESAIR, DE-ICE, NITROGEN-LHNIT.

NORMAL BARRIER CONFIGURATION DUR FTR FLY WINDOW LEAVES 5675 FT BTN CABLES ON RWY 06/24, OUTSIDE OF FTR FLY WINDOWS THERE IS 7658 FT BTN CABLES.

RWY 34 DEPARTURES FOR ACFT WITH WINGSPANS GREATER THAN 98 FT RQR PRIOR COORD WITH AMC, ATC TWR, OR ALD MGT.

DV SPOTS 1 AND 3 LTD TO ACFT WITH WINGSPANS OF 136 FT OR LESS.

ALL VIP ACFT CTC BASE OPS 30 MIN PRIOR TO ARR ON PTD 372.2 OR 134.1 OR C907–552–2107.

UNITS DEPLOYING TO, STAGING OUT OF, OR FLYING LCL SORTIES AT ELMENDORF AFB MUST DEPLOY WITH MAINT PERS REQUIRED TO COMPLETE OPS TO INCLUDE DE–ICE QUALIFIED CREWMEMBERS DUR COLD WX OPS.

ANY DEPLOYED OR STAGED ACFT WILL NOT RCV TA SUPPORT BYD INITIAL BLOCK IN.

C17/C130 OVERT LIGHTS AVBL ON RWY 16/34. C17/C130 COVERT LIGHTS AVBL ON RWY 16.

NO SIGNS ACCOMPANYING HOLD SHORT LINES ON INTERSECTING RWYS.

CAUTION: MOOSE ON & INVOF RWY.

LNDG RWY 16 NOT RCMND FOR JET ACFT EXCPT DURG DAY VFR DUE OBSTRN 337 FT MSL LCTD 1950 FT FM THR & 574 FT W OF CNGRLN.

WX OPR H24; DSN 317-552-4903/4397, C907-552-4903/4397. AUGMENTED SFC VIS RSTD E-SW BY BLDG.

IFF SVC AVBL.

CAUTION: NUMEROUS ACFT WILL BE OPR IFR BETWEEN 1500–2000 MSL FROM BGQ 092/10 INTO R2203 TO EDF 320/07 INVOF BIG LAKE, PALMER, BIRCHWOOD, GOOSEBAY AND WASILLA, AK., MON–SAT 0300–0800Z++, AND TUES AND THU 1800–2200Z++.

CAUTION: WHEN RWY 16 VGSI INOP, STR–IN TO RWY 16 ONLY AUTHORIZED AT NIGHT WITH MAJCOM A3 APVL.

RWY 16/34 RWY DIST REMAINING (RDR) SIGNS NOT LCTD IN CORRECT LCTN. AT RWY 16 – 2 RDR 2487 FT OF RWY REMAINING. AT RWY 16 – 1 RDR 1487 FT OF RWY REMAINING.

ACFT WITH WINGSPANS OF 145 FT OR GREATER MAY EXPERIENCE REDUCED WINGTIP CLNC DOWN TO 25 FT WHEN FIGHTER ACFT ARE LCTD IN NORTHERNMOST ELBOW EOR SPOT. TWY N FM RWY 16/34 TO TWY R RSTRD TO FIGHTER ACFT ONLY WHEN ACFT ARE STAGED IN ELBOW EOR. TWY N FM RWY 16/34 TO TWY R UNUSABLE WHEN FIGHTER ACFT STAGED IN SOUTHERNMOST ELBOW EOR SPOT.

NOTICE: A RIDGE EXTENDING FROM APPROXIMATELY 260–020 DEGS ONE TO TWO MILES FROM THE TOWER PREVENTS OBSERVATION OF FOG OVER KNIK ARM. VISIBILITY MAY DROP RAPIDLY AS FOG POURS OVER RIDGE.

CAUTION: RWY 16/34, USE EXTREME CAUTION TO AVOID FALLING BLW GP TO RWY 34. DECREASED OBST CLNC ON APCH END OF RWY 34. SEVERAL TREES EXCEED 2.5 DEG, 40:1, OR PAPI CLNC PLANES, OR FALL ONLY 30 FT BLW STD FLT PATH OF LDG ACFT.

AFLD MGMT DOES NOT HAVE COMSEC STORAGE AVBL, FOR COMSEC STORAGE CTC COMMAND POST DSN 317–552–3000.

AMC ACFT ON AN AMC ASGN MSN CAN EXP TO HAVE MAINT SVC ACCOMPLISHED BY 732 AMS.

ALL ACFT MAINTAIN IDLE POWER ON OUTBOARD ENG WHILE TAXIING.

NVD OPS ON RWY 16/34 & RWY 06/24 MON-FRI FROM 0400-1000Z++.

JOAP, JOINT OIL ANALYSIS PROGRAM AVBL. LHNIT, LOW & HIGH PRESSURE NITROGEN SERVICING AVBL. DE–ICE, TYPE 1 DE–ICE LIFTOFF P–88; TYPE 4 ANTI–ICE CLARIANT SAFEWING MP–LAUNCH.

EAST RAMP HOT SPOT 19 LTD; 20K LBS N.E.W. CAT 1.1, AND 10K LBS N.E.W. CAT 1.2. COMPENSATORY MEASURES REQ FOR 1.1 N.E.W. >5K LBS AND 1.2 N.E.W. >8.8K LBS. COORDINATE ACFT PARKING WITH 732 AMS AND AFLD MGR. FOR BLDG EVAC CTC 907–552–2577.

PPRS WILL BE ISSUED NO EARLIER THAN 7 DAYS PRIOR TO ARR.

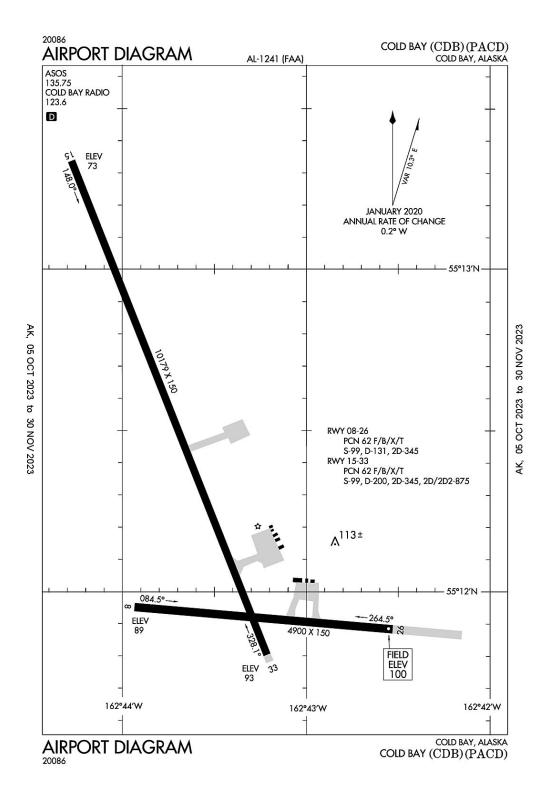
ACFT REQUIRING CUSTOMS AND AG INSPECTIONS ARE RQR TO CTC BASE OPS NO LATER THAN 90 MIN PRIOR TO ARR.

PPR REQUIRED FOR ALL NON JBER ASSIGNED ACFT EXCEPT NON–EXPLOSIVE LADEN AMCC ACFT UNLESS CONDUCTING LCL TRNG.

SUBMIT ALL PPR REQUESTS UTILIZING THE PAED PPR REQUEST FORM LOCATED IN THE PAED GIANT REPORT STIF TO BASEOPS3@US.AF.MIL NO EARLIER THAN 30 DAYS PRIOR AND NO LATER THAN 48 HOURS PRIOR TO ARRIVAL TO BEGIN COORDINATION FOR PPR.

TWYS N2 & N5 PERM CLOSED.

Cold Bay, Alaska Cold Bay ICAO Identifier PACD



# Cold Bay, AK Cold Bay ICAO Identifier PACD

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 55–12–21.3N / 162–43–34.5W
2.2.2 From City: 0 miles N of COLD BAY, AK
2.2.3 Elevation: 99.5 ft
2.2.5 Magnetic Variation: 12E (2015)
2.2.6 Airport Contact: HAROLD KREMER BOX 97 COLD BAY, AK 99571 (907–532–5000)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, MON – SAT Days, 0700 – 1800 Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: NONE

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 4/1/20052.6.2 Rescue and Firefighting Services: ARFF Index–B

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08 2.12.2 True Bearing: 95 2.12.3 Dimensions: 4900 ft x 150 ft 2.12.4 PCN: 62 F/B/X/T 2.12.5 Coordinates: 55–11–57.1589N / 162–43–56.7308W 2.12.6 Threshold Elevation: 88.9 ft 2.12.6 Touchdown Zone Elevation: 95.2 ft

2.12.1 Designation: 26 2.12.2 True Bearing: 275 2.12.3 Dimensions: 4900 ft x 150 ft 2.12.4 PCN: 62 F/B/X/T 2.12.5 Coordinates: 55–11–53.1425N / 162–42–32.588W 2.12.6 Threshold Elevation: 99.5 ft 2.12.6 Touchdown Zone Elevation: 99.5 ft

2.12.1 Designation: 15 2.12.2 True Bearing: 158 2.12.3 Dimensions: 10179 ft x 150 ft 2.12.4 PCN: 62 F/B/X/T 2.12.5 Coordinates: 55–13–20.4998N / 162–44–16.4235W 2.12.6 Threshold Elevation: 72.5 ft 2.12.6 Touchdown Zone Elevation: 75 ft 2.12.1 Designation: 33 2.12.2 True Bearing: 338 2.12.3 Dimensions: 10179 ft x 150 ft 2.12.4 PCN: 62 F/B/X/T 2.12.5 Coordinates: 55–11–47.2428N / 162–43–11.707W 2.12.6 Threshold Elevation: 93.3 ft 2.12.6 Touchdown Zone Elevation: 93.4 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 08
2.13.2 Take-off Run Available: 4900
2.13.3 Take-off Distance Available: 4900
2.13.4 Accelerate-Stop Distance Available: 4900
2.13.5 Landing Distance Available: 4900

2.13.1 Designation: 262.13.2 Take-off Run Available: 49002.13.3 Take-off Distance Available: 4900

2.13.4 Accelerate–Stop Distance Available: 4900

2.13.5 Landing Distance Available: 4900

2.13.1 Designation: 15

2.13.2 Take-off Run Available: 10179

2.13.3 Take-off Distance Available: 10179

2.13.4 Accelerate-Stop Distance Available: 10179

2.13.5 Landing Distance Available: 10179

2.13.1 Designation: 33

2.13.2 Take-off Run Available: 10179

2.13.3 Take-off Distance Available: 10179

2.13.4 Accelerate-Stop Distance Available: 10179

2.13.5 Landing Distance Available: 10179

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 082.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 262.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 152.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 332.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 15. Magnetic variation: 12E
2.19.2 ILS Identification: CDB
2.19.5 Coordinates: 55–13–12.7692N / 162–44–3.6464W
2.19.6 Site Elevation: 71 ft

2.19.1 ILS Type: Localizer for runway 15. Magnetic variation: 12E
2.19.2 ILS Identification: CDB
2.19.5 Coordinates: 55–11–40.9813N / 162–43–7.3592W
2.19.6 Site Elevation: 95.9 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 10E
2.19.2 Navigation Aid Identification: CDB
2.19.5 Coordinates: 55–16–2.2606N / 162–46–26.3866W
2.19.6 Site Elevation: 98.5 ft

**General Remarks:** PERSONNEL & EQUIP ON RWY.

SNOW, ICE REMOVAL & ARPT HAZ RPRTG DURG DUTY HR UNLESS PRIOR ARNGMT IN WRITING - AMGR.

ARPT SAND LRGR GRADE THAN FAA RCMDD/SEE AC150/5200-30.

NWS BALLOON LAUNCH FAC LCTD ON ARPT; SEE INSIDE BACK COVER FOR DETAILS.

WX CAMERA AVBL – HTTPS://WEATHERCAMS.FAA.GOV

NO CUSTOMS AVBL; 24–48 HR WRITTEN PPR FOR FOREIGN ARR RFLG STOPS – FAX 907–271–2684 OR 907–271–2686.

UNLGTD TWR 0.4 NM N; UNLGTD TWR 0.9 NM S; UNLGTD TWR 4.8 NM NW.

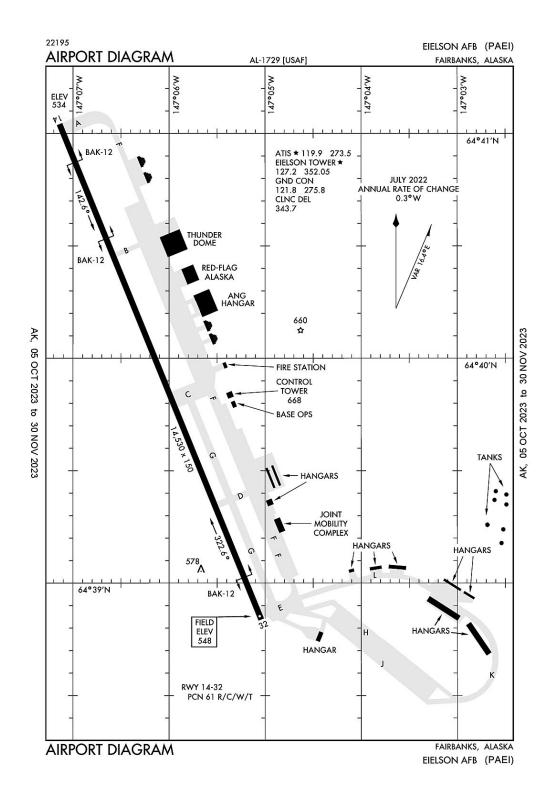
BRAKELOCK TURNS NA.

ROTG BCN UNMON WHEN FSS UNMANNED.

CFR INDEX B; MAY BE REDUCED FOR ACFT LESS THAN 90 FT.

BIRDS INVOF ALL RWY APCH ENDS.

Fairbanks, Alaska Eielson AFB ICAO Identifier PAEI



# Fairbanks, AK Eielson AFB ICAO Identifier PAEI

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 64–39–56.32N / 147–6–5.18W
2.2.2 From City: 17 miles SE of FAIRBANKS, AK
2.2.3 Elevation: 547.5 ft
2.2.5 Magnetic Variation: 19E (2015)
2.2.6 Airport Contact: CHIEF AIRFIELD MANAGEMENT 343 CSG/OTM EIELSON AFB, AK 99702 (907–377–3201)
2.2.7 Traffic: JED (JED)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, 1600–0800Z++ Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types:2.4.5 Hangar Space: YES2.4.6 Repair Facilities: None

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: None2.6.2 Rescue and Firefighting Services: None

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 32
2.12.2 True Bearing: 339
2.12.3 Dimensions: 14530 ft x 150 ft
2.12.4 PCN: 61 R/C/W/T
2.12.5 Coordinates: 64–38–49.48N / 147–5–5.85W
2.12.6 Threshold Elevation: 547.5 ft
2.12.6 Touchdown Zone Elevation: 547.5 ft

2.12.1 Designation: 14
2.12.2 True Bearing: 159
2.12.3 Dimensions: 14530 ft x 150 ft
2.12.4 PCN: 61 R/C/W/T
2.12.5 Coordinates: 64–41–3.14N / 147–7–4.52W
2.12.6 Threshold Elevation: 533.9 ft
2.12.6 Touchdown Zone Elevation: 536.8 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 322.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 142.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 322.14.2 Approach Lighting System: ALSF12.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 142.14.2 Approach Lighting System: ALSF12.14.4 Visual Approach Slope Indicator System: P4L

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 119.92.18.5 Hours of Operation: 1600–0800Z++

2.18.1 Service Designation: ATIS2.18.3 Channel: 273.52.18.5 Hours of Operation: 1600–0800Z++

2.18.1 Service Designation: CD/P 2.18.3 Channel: 343.7 2.18.5 Hours of Operation: 1600–0800Z++

2.18.1 Service Designation: COMD POST (IGLOO OPS)2.18.3 Channel: 259.52.18.5 Hours of Operation:

2.18.1 Service Designation: COMD POST (IGLOO OPS, HAVE QUICK)2.18.3 Channel: 289.42.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 1600–0800Z++

2.18.1 Service Designation: GND/P 2.18.3 Channel: 275.8 2.18.5 Hours of Operation: 1600–0800Z++

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 127.2 2.18.5 Hours of Operation: 1600–0800Z++ 2.18.1 Service Designation: LCL/P 2.18.3 Channel: 352.05 2.18.5 Hours of Operation: 1600–0800Z++

2.18.1 Service Designation: OPS (SOURDOUGH)2.18.3 Channel: 139.62.18.5 Hours of Operation:

2.18.1 Service Designation: OPS (168 ANG OPS)2.18.3 Channel: 238.32.18.5 Hours of Operation:

2.18.1 Service Designation: OPS (168 ANG OPS)2.18.3 Channel: 293.62.18.5 Hours of Operation:

2.18.1 Service Designation: OPS (SOURDOUGH)2.18.3 Channel: 359.152.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 139.32.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 372.22.18.5 Hours of Operation:

2.18.1 Service Designation: RANGE CTL (SUAIS RADIO)2.18.3 Channel: 125.32.18.5 Hours of Operation:

2.18.1 Service Designation: SFA2.18.3 Channel: 118.62.18.5 Hours of Operation:

2.18.1 Service Designation: SFA2.18.3 Channel: 259.12.18.5 Hours of Operation:

2.18.1 Service Designation: SFA2.18.3 Channel: 318.22.18.5 Hours of Operation:

2.18.1 Service Designation: SFA2.18.3 Channel: 320.12.18.5 Hours of Operation:

2.18.1 Service Designation: SFA2.18.3 Channel: 324.32.18.5 Hours of Operation:

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 14. Magnetic variation: 19E
2.19.2 ILS Identification: EIL
2.19.5 Coordinates: 64–40–51.59N / 147–7–6.54W
2.19.6 Site Elevation: 532 ft

2.19.1 ILS Type: Localizer for runway 14. Magnetic variation: 19E
2.19.2 ILS Identification: EIL
2.19.5 Coordinates: 64–38–33.05N / 147–4–51.27W
2.19.6 Site Elevation: 548 ft

2.19.1 ILS Type: Glide Slope for runway 32. Magnetic variation: 19E
2.19.2 ILS Identification: EAF
2.19.5 Coordinates: 64–38–58.93N / 147–5–25.28W
2.19.6 Site Elevation: 540 ft

2.19.1 ILS Type: Localizer for runway 32. Magnetic variation: 19E
2.19.2 ILS Identification: EAF
2.19.5 Coordinates: 64–41–22.13N / 147–7–21.41W
2.19.6 Site Elevation: 528 ft

2.19.1 Navigation Aid Type: TACAN. Magnetic variation: 19E
2.19.2 Navigation Aid Identification: EIL
2.19.5 Coordinates: 64–39–13.67N / 147–5–38.21W
2.19.6 Site Elevation: 542.4 ft

#### **General Remarks:** SEE AP1 SUP RMKS: BASE OPS COMSEC RESPONSIBILITY NA; LTD SECRET & COMSEC STORAGE AVBL. TOP SECRET & COMSEC INFO – COMMAND POST D317–377–1500.

ALASKA ANG 168TH AREFS OPS - D317-377-8800/C907-377-8800. ANG OPS H24 - D317-377-1861/3201.

AIR TERM & GND HANDLING SVC 1630-0030Z++ WKDAY; PPR OR EXP DELAY - AFLD MGMT.

EXTSV FUEL DELAYS DURG RED FLAG ALASKA EXER APR-OCT.

CARGO & ACR CTC COMMAND POST 3 HR PRIOR & 30 MIN PROIR TO LNDG.

MAINT OPS CNTR PPR 48 HR FM ETA – D317–377–1205. DEPLOYED OR STAGED ACFT TA SUPPORT NA BYD INITIAL BLOCK IN/FINAL BLOCK OUT; EXC MAJCOM EXER AT EIELSON. UHF PREF PAT FREQ.

FAIRBANKS FSS – 474–0137. FLT ADZY OR RSTRD & MIL OPRG AREA STATUS – EIELSON RANGE CTL SUAIS RADIO 125.3 OR 1–800–758–8723.

AVOID SMALL ARMS RANGE 2.5 NM E OF RWY 32 END; WKEND 1700-0100Z++; SFC - 3500 FT AGL.

CRYPTO MTRL TSNT CREW NOT AVBL. VIP 30 MIN PPR WITH CHOCK TIME – AFLD MGMT. LTD FLEET SVC. NO POTABLE WATER.

PRIME KNGHT NOT AVBL.

CTN: NSTD LGT; 2000 FT RWY EDGE LGT BTN D – C TWY; 12 FT FM RWY EDGE.

PTNS OF APRON O ROW & S RAMP NOT VIS FROM TWR.

H24 OPS; OFFL BUS ONLY. QUIET HR 0800-1500Z; UNCTLD TKOF/LDG NA; EXCEPTIONS RQR OG/CC APVL.

FICON & RWY COND CODE NOT RPRTD.

BASH PHASE II APR, MAY, AUG & SEP. GULLS, DUCKS & GEESE POSE HAZARD WHEN STANDING WATER ON FLD. RPT BIRD & ANIMAL STRIKES INVOF ARPT TO AFLD MGMT – D317–377–186, PTD OR 354 FW/SE D317–377–4110.

N & S BARRIER RUNOUT REDUCED TO 950 FT.

ARFF STATUS CRITICAL LVL OF SVC (CLS) 62% FOR USAF CAT 10; REDUCED LVL OF SVC (RLS) 81% FOR USAF CAT 9.

TSNT CTC 15 OWS DURG AFLD CLOSURE FOR WX BRIEFING – D576–9755/C618–256–9755; IF PSBL 3 HR PN.

BIRD WATCH COND MOD LCL PAT LTD TO MIN RQR WITH OG/CC APVL; TGL, FORMATION TKOF/LNDG NA; LOW APCH LTD TO 300 FT AGL. BIRD WATCH COND SVR; TKOF, PAT & LNDG NA EXC EMERG.

PPR 5 DAYS – 24 HR PRIOR TO ARR – ARFLD MGMT D317–377–1861/C907–377–1861. PPR GOOD +/– 30 MIN ARR TIME; COORD PPR AFT TIME BY FONE OR PPR CNLD. EXP ARR TIME RSTRN EXC AIR EVAC & DV CODE 7 & UP.

MOOSE ON & INVOF RWY.

CONTINGENCY OPS - AMGR.

NO PALLET TRAINS LONGER THAN T3 WITH OVERHANG WILL BE ACPTD DUE TO 25K LOADER SUPPORT.

LOOP TWY E OF CORROSION HANGAR 1348 THRU 4/8 BAY AREA RSTRD TO WINGSPAN 45 FT OR LESS.

TSNT CTC PTD AT LEAST 30 MIN PRIOR TO ARR. EIELSON AFB IS A 1 MOG STATION.

TRAN ALERT: TSNT MAINT LTD TO F16 SVCG UPON AIRCREW REQ. F16 THRU FLIGHT/BPO/PREFLIGHT INSP NA.

PACAF FTR ARR EXP RDCD RWY SEP; SIMILAR TYPE/DAY – 3000 FT; DISSIMILAR TYPE, NGT, WET RWY, BHND FRMN OR RCR LESS THAN 17 – 6000 FT; FTR LDG BHND NON FTR – 9000 FT; RCR VALIDATED AS COND WARRANT.

TRANS ALERT SVC 0700–0000 MON–FRI EXP HOL; AFT HR PPR – BASOPS.

CTN: FIRE HYDRANTS 64 FT NE OF TWY H CNTLN.

RADIO/NAV/WX RMRKS - (F) 1500-0700Z ++ DAILY.

PAEW ON RWY WHEN TWR UNMANNED.

LOAD/OFF LOAD ENG RUN NA. ERO SVC AVBL FOR AMC ACFT.

VHF PTD FREQ UNMNT.

MIL FLUID DE-ICE AVBL; ANTI ICE UNAVBL.

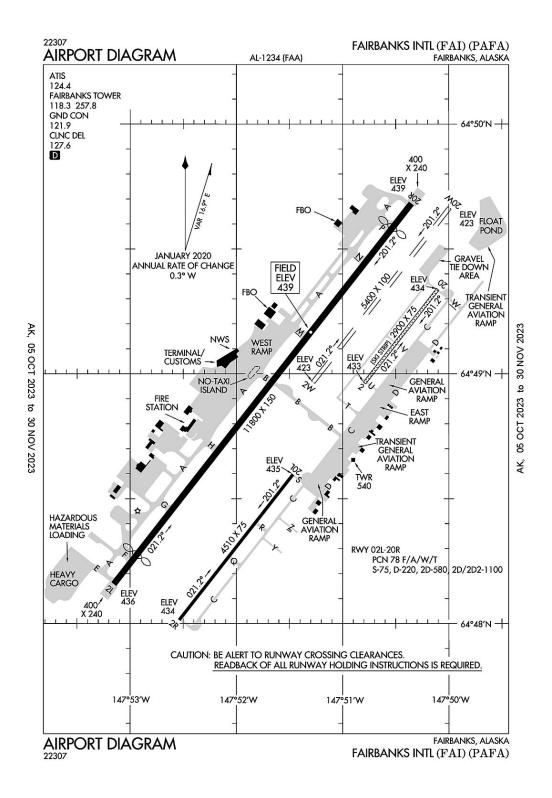
WX SVC H24 EXC AFLD/TWR CLOSURE – D377–1160/3140/C907–377–1160/3140; AN/FMQ–19 AUTOMATED OBS SYS AUGMENTED BY HUMAN OBSN. FMQ19 907–377–5846.

FILE FLT PLAN 2 HR BFR DEP. ARR RQR CUSTOMS 1.5 HR PPR – COMMAND POST. U.S. IMMIGRATION SVC NOT AVBL.

OVHD TFC PAT ALT 2000 FT MSL; RECTANGULAR TFC PAT ALT 1500 FT MSL.

RWY 14/32 BAK–12 DEP END CABLES IN RAISED POSITION; BAK–12 AER 14/32 AVBL WITH 20 MIN PRIOR NOTICE. NORTH BARRIER RUNOUT REDUCED TO 950 FT, HOOK EQUIPPPED ACFT BE ALERT.





### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 64–48–55.28N / 147–51–24W
2.2.2 From City: 3 miles SW of FAIRBANKS, AK
2.2.3 Elevation: 439 ft
2.2.5 Magnetic Variation: 15E (2025)
2.2.6 Airport Contact: ANGIE SPEAR

6450 AIRPORT WAY – SUITE 1
FAIRBANKS, AK 99709 (907–474–2500)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A12.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 3/1/2005 2.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 02
2.12.2 True Bearing: 38
2.12.3 Dimensions: 2900 ft x 75 ft
2.12.4 PCN:
2.12.5 Coordinates: 64–48–57.8002N / 147–50–47.5998W
2.12.6 Threshold Elevation: 433 ft
2.12.6 Touchdown Zone Elevation: 434.6 ft

2.12.1 Designation: 20
2.12.2 True Bearing: 218
2.12.3 Dimensions: 2900 ft x 75 ft
2.12.4 PCN:
2.12.5 Coordinates: 64–49–20.2644N / 147–50–6.2715W
2.12.6 Threshold Elevation: 433.6 ft
2.12.6 Touchdown Zone Elevation: 434.6 ft

2.12.1 Designation: 02L 2.12.2 True Bearing: 38 2.12.3 Dimensions: 11800 ft x 150 ft 2.12.4 PCN: 78 F/A/W/T 2.12.5 Coordinates: 64–48–9.4756N / 147–53–9.1838W 2.12.6 Threshold Elevation: 435.6 ft 2.12.6 Touchdown Zone Elevation: 438.6 ft 2.12.1 Designation: 20R 2.12.2 True Bearing: 218 2.12.3 Dimensions: 11800 ft x 150 ft 2.12.4 PCN: 78 F/A/W/T 2.12.5 Coordinates: 64-49-40.9108N / 147-50-21.1293W 2.12.6 Threshold Elevation: 438.9 ft 2.12.6 Touchdown Zone Elevation: 439 ft 2.12.1 Designation: 02R 2.12.2 True Bearing: 38 2.12.3 Dimensions: 4510 ft x 75 ft 2.12.4 PCN: 2.12.5 Coordinates: 64-48-0.8616N / 147-52-32.2332W 2.12.6 Threshold Elevation: 433.5 ft 2.12.6 Touchdown Zone Elevation: 433.8 ft 2.12.1 Designation: 20L 2.12.2 True Bearing: 218 2.12.3 Dimensions: 4510 ft x 75 ft 2.12.4 PCN: 2.12.5 Coordinates: 64-48-35.8092N / 147-51-28.0275W 2.12.6 Threshold Elevation: 434.5 ft 2.12.6 Touchdown Zone Elevation: 434.5 ft 2.12.1 Designation: 20W 2.12.2 True Bearing: 218 2.12.3 Dimensions: 5400 ft x 100 ft 2.12.4 PCN: 2.12.5 Coordinates: 64-49-39.8349N / 147-49-59.6293W 2.12.6 Threshold Elevation: 423.4 ft 2.12.6 Touchdown Zone Elevation: 423.4 ft 2.12.1 Designation: 02W 2.12.2 True Bearing: 38 2.12.3 Dimensions: 5400 ft x 100 ft 2.12.4 PCN: 2.12.5 Coordinates: 64-48-58.0039N / 147-51-16.5892W 2.12.6 Threshold Elevation: 423.4 ft 2.12.6 Touchdown Zone Elevation: 423.4 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 022.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 202.13.2 Take-off Run Available:

2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 02L 2.13.2 Take-off Run Available: 11800 2.13.3 Take-off Distance Available: 12800 2.13.4 Accelerate–Stop Distance Available: 11800 2.13.5 Landing Distance Available: 11050 2.13.1 Designation: 20R 2.13.2 Take-off Run Available: 11800 2.13.3 Take-off Distance Available: 12800 2.13.4 Accelerate-Stop Distance Available: 11800 2.13.5 Landing Distance Available: 11050 2.13.1 Designation: 02R 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 20L 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate-Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 20W 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 02W 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available:

- 2.13.4 Accelerate–Stop Distance Available:
- 2.13.5 Landing Distance Available:

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 022.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 20

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 02L

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 20R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 02R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 20L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 20W2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 02W2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P (360–179)2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (360–179) 2.18.3 Channel: 251.1 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (180–359) 2.18.3 Channel: 125.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (180–359) 2.18.3 Channel: 363.2 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S2.18.3 Channel: 119.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 124.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P 2.18.3 Channel: 127.6 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/S2.18.3 Channel: 327.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: TRSA (180–359) 2.18.3 Channel: 125.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: TRSA (360–179)2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: TRSA (360–179)2.18.3 Channel: 251.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: TRSA (180–359) 2.18.3 Channel: 363.2 2.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 02L. Magnetic variation: 15E
2.19.2 ILS Identification: CNA
2.19.5 Coordinates: 64–49–50.7376N / 147–50–15.0194W
2.19.6 Site Elevation: 434.8 ft

2.19.1 ILS Type: Glide Slope for runway 02L. Magnetic variation: 15E 2.19.2 ILS Identification: CNA

2.19.5 Coordinates: 64–48–21.0041N / 147–52–36.2974W 2.19.6 Site Elevation: 431.4 ft

2.19.1 ILS Type: Inner Marker for runway 02L. Magnetic variation: 15E
2.19.2 ILS Identification: CNA
2.19.5 Coordinates: 64–48–7.6611N / 147–53–12.5267W
2.19.6 Site Elevation: 429.8 ft

2.19.1 ILS Type: Localizer for runway 02L. Magnetic variation: 15E
2.19.2 ILS Identification: CNA
2.19.5 Coordinates: 64–49–49.8419N / 147–50–4.688W
2.19.6 Site Elevation: 438.1 ft

2.19.1 ILS Type: DME for runway 20R. Magnetic variation: 15E
2.19.2 ILS Identification: FAI
2.19.5 Coordinates: 64–48–2.289N / 147–53–30.754W
2.19.6 Site Elevation: 430 ft

2.19.1 ILS Type: Glide Slope for runway 20R. Magnetic variation: 15E
2.19.2 ILS Identification: FAI
2.19.5 Coordinates: 64–49–24.4215N / 147–50–39.7123W
2.19.6 Site Elevation: 434.3 ft

2.19.1 ILS Type: Localizer for runway 20R. Magnetic variation: 15E
2.19.2 ILS Identification: FAI
2.19.5 Coordinates: 64–48–1.4733N / 147–53–23.8771W
2.19.6 Site Elevation: 429.1 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 21E
2.19.2 Navigation Aid Identification: FAI
2.19.5 Coordinates: 64–48–0.2537N / 148–0–43.1132W
2.19.6 Site Elevation: 1526.4 ft

# **General Remarks:**

WATERLANE IS CONTROLLED; CTC ATCT ON FREQ 118.3 FOR APPROVAL. WATERLANE THRESHOLD BUOYS ARE 500 FROM N AND S SHORES AND MARK WATERLANE. STEP TAXI PROHIBITED OUTSIDE OF WATERLANE. EAST OF WATERLANE IS UNCONTROLLED; AIRCRAFT MAY TAXI IN THIS AREA AT PILOT DISCRETION. RECOMMEND CTC CLNC DEL AS SOON AS PRACTICAL AFTER ENG START. SFC FROZEN IN WINTER, NOT MONITORED. LIMITED TRANSIENT FLOAT PLANE PARKING AVBL CTC 907–455–4571. MIGRATORY BIRDS IN THE VICINITY OF ARPT DURING SPRING THRU FALL.

ALL RWY HOLD LINES OBSCURED OCTOBER 1 THRU APRIL 1.

WX CAMERA AVBL ON INTERNET AT HTTPS://WEATHERCAMS.FAA.GOV.

NWS WEATHER BALLOON LAUNCH SITE 2000 FEET WEST OF MIDFIELD RUNWAY 02L/20R. LAUNCHES ARE TWICE DAILY AT 1100 AND 2300 HOURS UTC.

MILITARY CONTRACT FUEL AVBL.

COLD TEMPERATURE AIRPORT. ALTITUDE CORRECTION REQUIRED AT OR BELOW –32C.

FOR AVBLTY OF SUMMER GRAVEL STRIP RWY 02/20 AND WINTER SKI STRIP RWY 02/20 CONSULT LOCAL NOTAMS AND CTC TWR PRIOR TO ARRIVAL /DEPARTURE.

TWY B SECURITY GATE BETWEEN RWY 02L/20R AND TWY CHARLIE KEY 121.75 5 TIMES TO ACTIVATE. IF TWY B GATE INOPERATIVE, WAIT 30 SECONDS TO RESET AND TRY AGAIN. IF UNSUCCESSFUL, NOTIFY FAI OPS, 907–451–2300

COMPASS ROSE NOT CALIBRATED.

FOR TRANSIENT HELICOPTER PARKING CALL ARPT OPS 907-451-2300.

RWY 02R/20L & RWY GRVL/SKI 02/20 NOT AVBL FOR SCHEDULED OR UNSCHEDULED ACR OPNS WITH MORE THAN 30 PSGR SEATS.

FOR FLIGHTS IN MOAS EAST OF FAIRBANKS RECOMMEND CONTACTING EIELSON RANGR CONTROL ON 125.3/126.3 OR CALL 1–800–758–8723 FOR INFORMATION ON MILITARY ACTIVITES.

ATCT LOCATED AT 64-48-39.438N 147-50-55.722W, ELEVATION 538 FT MSL.

BE ALERT FOR SNOW REMOVAL EQUIPMENT OPNS FM 1 OCT TO 15 MAY.

TRANSIENT PARKING EAST RAMP FOR ACFT WITH WINGSPAN LESS THAN 79 FT. NO TRANSIENT ACFT PARKING ON WEST RAMP, CTC APT OPS 907–451–2300 FOR INFO & MEDIVAC PARKING.

PPR FOR MIL ACFT UTILIZING HEAVY CARGO OR TRML APN, CTC APRT OPS

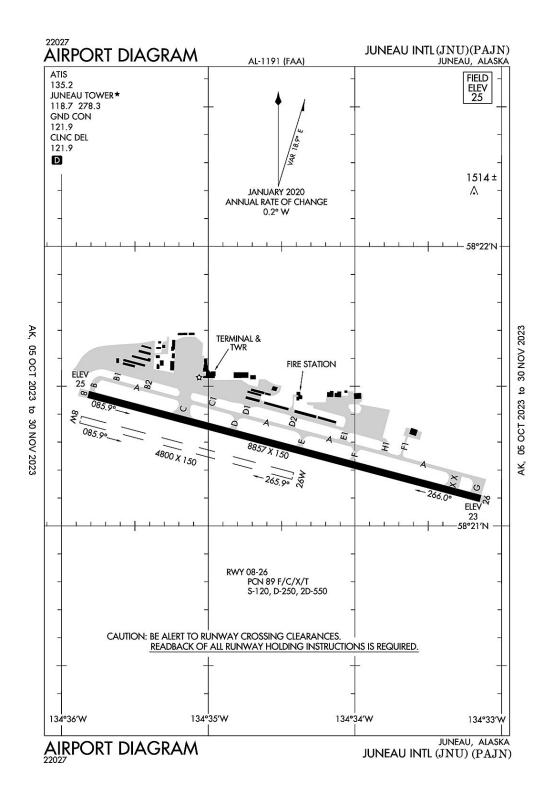
NOISE ABATEMENT PROCEDURES IN EFECT FM 2200–0800 ALL LARGE ACFT, TURBINE ENGINE, AND HEAVY ACFT UTILIZE RWY 02L FOR ARRS AND RWY 20R FOR DEPS WHEN WIND IS NOT AN OPERATIOINAL FACTOR. CTC APRT OPNS FOR ENGINE RUN–UP LOCATIONS.

N/S TAXIWAY (TWY A) IS WEST AND PARALLEL TO RWY 02L/20R. BE ALERT TO AVOID LANDING ON TAXIWAY.

SEE ADDITIONAL PAGES UNDER NOTICES FOR TRSA AND FAIRBANKS AREA INFORMATION.

RWY 02R/20L IS LIMITED FOR USE BY ACFT DESIGN GROUP B II, ACFT OR SMALLER.

Juneau, Alaska Juneau International ICAO Identifier PAJN



Juneau, AK Juneau Intl ICAO Identifier PAJN

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 58–21–16.9625N / 134–34–42.4939W
2.2.2 From City: 7 miles NW of JUNEAU, AK
2.2.3 Elevation: 25.3 ft
2.2.5 Magnetic Variation: 20E (2015)
2.2.6 Airport Contact: PATTY WAHTO

1873 SHELL SIMMONS DR, SUITE 200
JUNEAU, AK 99801 (907–789–7821)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 4/1/2005 2.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08 2.12.2 True Bearing: 105 2.12.3 Dimensions: 8857 ft x 150 ft 2.12.4 PCN: 89 F/C/X/T 2.12.5 Coordinates: 58–21–28.25N / 134–35–49.09W 2.12.6 Threshold Elevation: 25 ft 2.12.6 Touchdown Zone Elevation: 25 ft

2.12.1 Designation: 26 2.12.2 True Bearing: 285 2.12.3 Dimensions: 8857 ft x 150 ft 2.12.4 PCN: 89 F/C/X/T 2.12.5 Coordinates: 58–21–5.88N / 134–33–8.63W 2.12.6 Threshold Elevation: 23.4 ft 2.12.6 Touchdown Zone Elevation: 23.4 ft

2.12.1 Designation: 08W
2.12.2 True Bearing:
2.12.3 Dimensions: 4800 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 58-21-22.82N / 134-35-52.23W
2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

AIP United States of America

AD 2–40 5 OCT 23

2.12.1 Designation: 26W
2.12.2 True Bearing:
2.12.3 Dimensions: 4800 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 58–21–10.71N / 134–34–25.26W
2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 08
2.13.2 Take-off Run Available: 8857
2.13.3 Take-off Distance Available: 8857
2.13.4 Accelerate-Stop Distance Available: 8457
2.13.5 Landing Distance Available: 8457

2.13.1 Designation: 26

2.13.2 Take-off Run Available: 8857

2.13.3 Take-off Distance Available: 8857

2.13.4 Accelerate–Stop Distance Available: 8457

2.13.5 Landing Distance Available: 8457

2.13.1 Designation: 08W

2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 26W

2.13.2 Take-off Run Available:

2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 082.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: V2L

2.14.1 Designation: 262.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08W2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 26W2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System:

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 135.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P
2.18.3 Channel: 121.9
2.18.5 Hours of Operation: 1 APR - SEP 30 0600 - 2300, 1 OCT - MAR 31, 0700 - 2000.

2.18.1 Service Designation: GND/P
2.18.3 Channel: 121.9
2.18.5 Hours of Operation: 1 APR - SEP 30 0600 - 2300, 1 OCT - MAR 31, 0700 - 2000.

2.18.1 Service Designation: LCL/P
2.18.3 Channel: 118.7
2.18.5 Hours of Operation: 1 APR - SEP 30 0600 - 2300, 1 OCT - MAR 31, 0700 - 2000.

2.18.1 Service Designation: LCL/P
2.18.3 Channel: 278.3
2.18.5 Hours of Operation: 1 APR - SEP 30 0600 - 2300, 1 OCT - MAR 31, 0700 - 2000.

2.18.1 Service Designation: LCL/S (SEASONAL USE ONLY)
2.18.3 Channel: 120.7
2.18.5 Hours of Operation: 1 APR - SEP 30 0600 - 2300, 1 OCT - MAR 31, 0700 - 2000.

2.18.1 Service Designation: NG OPS2.18.3 Channel: 64.72.18.5 Hours of Operation:

2.18.1 Service Designation: NG OPS2.18.3 Channel: 124.652.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 08. Magnetic variation: 20E
2.19.2 ILS Identification: JDL
2.19.5 Coordinates: 58–21–31.0221N / 134–38–10.216W
2.19.6 Site Elevation: 179.8 ft

2.19.1 ILS Type: Localizer for runway 08. Magnetic variation: 20E
2.19.2 ILS Identification: JDL
2.19.5 Coordinates: 58–21–32.035N / 134–38–10.3944W
2.19.6 Site Elevation: 165 ft

2.19.1 ILS Type: Outer Marker for runway 08. Magnetic variation: 20E 2.19.2 ILS Identification: JDL

2.19.5 Coordinates: 58–21–33.5717N / 134–41–58.0236W 2.19.6 Site Elevation: 57.9 ft

#### **General Remarks:**

FOR LCL CALL TO JUNEAU FSS CALL 907-789-7380.

TRANSIENT DOCK AVBL FOR PUBLIC USE FOR UP TO SIX ACFT, SW CORNER.

RY 08/26 SAND USED TO ENHANCE RY FRICTION MAY NOT MEET FAA SPECS.

TPA 1500 AGL FOR LARGE TURBINE ACFT; 1000 FT AGL FOR FIXED WING ACFT; 500 FT AGL FOR HELICOPTERS.

APRON TERMINAL RAMP CLSD TO ROTORCRAFT. APRON US CUSTOMS RAMP CLSD TO ACFT WITH WINGSPAN MORE THAN 79 FT INTL ACFT WITH WINGSPAN MORE THAN 79 FT AND ALL INTL ROTORCRAFT USE E–1 RAMP (NTL GUARD RAMP).

WILDLIFE & BIRDS ON & INVOF ARPT.

BATTLESHIP ISLAND RLLS GROUPING; CENTER LIGHT 582132.88N 1344012.22W. IJDL–LOCALIZER RLLS GROUPING; CENTER LIGHT 582132.02N 1343810.39W.

COLD TEMPERATURE AIRPORT. ALTITUDE CORRECTION REQUIRED AT OR BELOW -0C.

LENA POINT, PEDERSON HILL AND SISTERS ISLAND WX CAMERAS AVBL ON INTERNET AT HTTPS://WEATHERCAMS.FAA.GOV

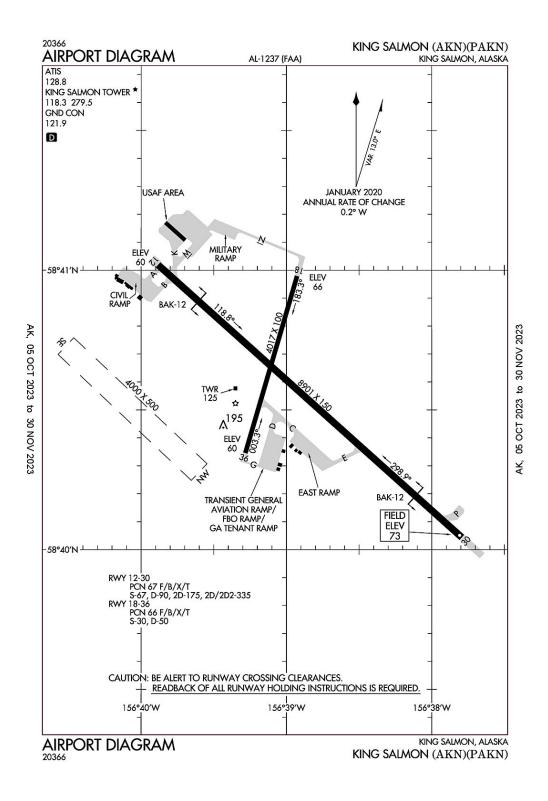
PARAGLIDING ACTIVITY 3 MILES N OF ARPT INVOF THUNDER MOUNTAIN & OVER GASTINEAU CHANNEL NEARS DOWNTOWN APR 15–OCT 1 6000 FT & BLO.

INCREASED HELICOPTER/LIGH ACFT ACTIVITY APR 15–OCT 1 ENTIRE LENGTH ON GASTINEAU CHANNEL & WITHIN 5 MILES OF ARPT.

NATIONAL GUARD 24 HR PPR DUE TO LIMITED PARKING C907–789–3366. 0730–1600 WEEKDAYS CONTACT GUARD OPS 10 MIN PRIOR TO LANDING ON 124.65.

SEE SPECIAL NOTICES AND GENERAL NOTICES FOR ADDITIONAL INFORMATION ON OPNS IN JUNEAU AREA.

# King Salmon, Alaska King Salmon ICAO Identifier PAKN



# King Salmon, AK King Salmon ICAO Identifier PAKN

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 58–40–35.3765N / 156–38–55.2876W 2.2.2 From City: 0 miles SE of KING SALMON, AK 2.2.3 Elevation: 73.4 ft 2.2.5 Magnetic Variation: 11E (2025) 2.2.6 Airport Contact: FLOYD WILSON PO BOX 65 KING SALMON, AK 99613 (907–246–3325) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, 0700–1700 Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 3/21/20052.6.2 Rescue and Firefighting Services: ARFF Index–B

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 12
2.12.2 True Bearing: 132
2.12.3 Dimensions: 8901 ft x 150 ft
2.12.4 PCN: 67 F/B/X/T
2.12.5 Coordinates: 58-41-2.184N / 156-39-53.0154W
2.12.6 Threshold Elevation: 59.9 ft
2.12.6 Touchdown Zone Elevation: 61.8 ft

2.12.1 Designation: 30 2.12.2 True Bearing: 312 2.12.3 Dimensions: 8901 ft x 150 ft 2.12.4 PCN: 67 F/B/X/T 2.12.5 Coordinates: 58–40–3.68N / 156–37–47.63W 2.12.6 Threshold Elevation: 73.4 ft 2.12.6 Touchdown Zone Elevation: 73.4 ft

2.12.1 Designation: 18
2.12.2 True Bearing: 196
2.12.3 Dimensions: 4017 ft x 100 ft
2.12.4 PCN: 66 F/B/X/T
2.12.5 Coordinates: 58-40-59.7835N / 156-38-55.6139W
2.12.6 Threshold Elevation: 66.1 ft
2.12.6 Touchdown Zone Elevation: 66.1 ft

2.12.1 Designation: 36 2.12.2 True Bearing: 16 2.12.3 Dimensions: 4017 ft x 100 ft 2.12.4 PCN: 66 F/B/X/T 2.12.5 Coordinates: 58–40–21.7997N / 156–39–16.9583W 2.12.6 Threshold Elevation: 59.9 ft 2.12.6 Touchdown Zone Elevation: 65.2 ft

2.12.1 Designation: NW
2.12.2 True Bearing:
2.12.3 Dimensions: 4000 ft x 500 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

2.12.1 Designation: SE
2.12.2 True Bearing:
2.12.3 Dimensions: 4000 ft x 500 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 12
2.13.2 Take-off Run Available: 8901
2.13.3 Take-off Distance Available: 8901
2.13.4 Accelerate-Stop Distance Available: 8501
2.13.5 Landing Distance Available: 8501

2.13.1 Designation: 30
2.13.2 Take-off Run Available: 8901
2.13.3 Take-off Distance Available: 8901
2.13.4 Accelerate-Stop Distance Available: 8501
2.13.5 Landing Distance Available: 8501

2.13.1 Designation: 182.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 36

2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: NW2.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: SE2.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 122.14.2 Approach Lighting System: SSALR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 302.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 182.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 362.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: NW2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: SE2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 128.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 0800–2000 1 AUG–14 JUN. 0800–2200 15 JUN– 31 JUL.

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 0800-2000 1 AUG-14 JUN. 0800-2200 15 JUN- 31 JUL.

2.18.1 Service Designation: LCL/P2.18.3 Channel: 279.52.18.5 Hours of Operation: 0800-2000 1 AUG-14 JUN. 0800-2200 15 JUN- 31 JUL.

2.18.1 Service Designation: PTD2.18.3 Channel: 372.22.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 12. Magnetic variation: 11E
2.19.2 ILS Identification: AKN
2.19.5 Coordinates: 58–39–59.6N / 156–37–31.7W
2.19.6 Site Elevation: 78 ft

2.19.1 ILS Type: Glide Slope for runway 12. Magnetic variation: 11E
2.19.2 ILS Identification: AKN
2.19.5 Coordinates: 58-40-57.3435N / 156-39-29.887W
2.19.6 Site Elevation: 63.5 ft

2.19.1 ILS Type: Localizer for runway 12. Magnetic variation: 11E
2.19.2 ILS Identification: AKN
2.19.5 Coordinates: 58–39–56.5549N / 156–37–32.3734W
2.19.6 Site Elevation: 77.7 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 16E
2.19.2 Navigation Aid Identification: AKN
2.19.5 Coordinates: 58–43–28.9653N / 156–45–8.4483W
2.19.6 Site Elevation: 94.6 ft

#### **General Remarks:**

USAF FAC CIV OPRD WITH LTD SUPPORT; CALL 24 HR PRIOR TO ARR FOR OPS HR; MIL CONFIRM FUEL RQMNTS 24–48 HR PRIOR.

FIGHTER ARR EXP RDCD SEPN; SIMILAR APCH CHARCS & DALGT 3000 FT; DISSIMILAR APCH CHARCS & NGT 6000 FT; AHD/BHND FRMN LNDG 6000 FT.

FLOCKS OF LRG BIRDS INVOF DURG SEASON.

TWY P CLSD. APRON SPOTS 4 – 7 N OF MIL HANGAR CLSD EXC PROP ACFT.

RCR DURG 11TH AF FIGHTER FLYING WINDOW; COORD RCR WITH KING SALMON OPS 907–439–3001/907–439–6000. OPS RSTRD TO LOW APCH/FSL ONLY.

600 FT SAFETY AREA AER 12.

BUSINESS JET PRKG GTR THAN 1 HR 48 HR PPR.

FLIGHT ORIG OUTSIDE AK REFER TO USAF FCG; CSTMS NOT AVBL.

CIV TSNT PRKG ON SE RAMP ONLY; OTR PRKG GTR THAN 48 HR RQRS PERMIT.

LOCKED WHEEL TURN NA ALL SFCS.

MIL FIGHTER/EMERG DVRSN CTC WARRIOR/ELMENDORF SOF 395.15; NON FIGHTER/EMERG CTC KING SALMON OPS. 24 HR POINT MNTS CTAF DURG OPS HR.

GA APRON PAVEMENT CRUMBLING; PSBL FOD HAZ. JET ACFT BE ALERT DURG RUN UP TO AVOID JET WASH DMG.

SNOW/ICE REMOVAL & ARPT HAZ COND RPRTD DURG ATND HR.

OFF PAVEMENT OPS BY ACFT & HEL NA AT ACR APRON. LNDG, TKOF OR PRKG FM DIRT OR GRASS NA.

TSA REG ARPT; SEE 49 CFR 1542. ALL GATES & DOORS RMN SECURE ALL TIMES. TSNT OR UNFAMILIAR PILOTS – AMGR FOR INFO.

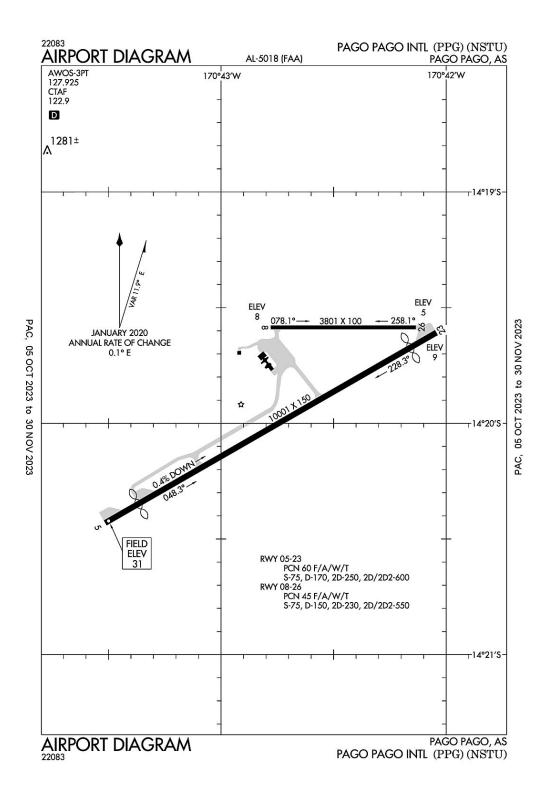
PVT JET PRKG SE SECTION OF E RAMP – AMGR FOR INFO.

WX CAMERA AVBL ON INTERNET AT HTTPS://WEATHERCAMS.FAA.GOV

ARFF AVBL FOR PART 121 ACR INVOLVED IN ETOPS WITH 30 MIN NOTICE.

NWS BLN LAUNCH FAC ON ARPT; SEE INSIDE BACK COVER FOR OPS DETAIL.





Pago Pago, AS Pago Pago Intl ICAO Identifier NSTU

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 14–19–53.984S / 170–42–41.411W 2.2.2 From City: 3 miles SW of PAGO PAGO, AS 2.2.3 Elevation: 31.2 ft 2.2.5 Magnetic Variation: 12E (1990) 2.2.6 Airport Contact: TAVITA S FUIMAONO 1539 AIRPORT WAY P.O. BOX 1539 PAGO PAGO, AS 96799 (684–733–3154) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A1+2.4.5 Hangar Space:2.4.6 Repair Facilities: NONE

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 05 2.12.2 True Bearing: 60 2.12.3 Dimensions: 10001 ft x 150 ft 2.12.4 PCN: 60 F/A/W/T 2.12.5 Coordinates: 14–20–25.8311S / 170–43–30.8448W 2.12.6 Threshold Elevation: 31.2 ft 2.12.6 Touchdown Zone Elevation: 29.3 ft

2.12.1 Designation: 23 2.12.2 True Bearing: 240 2.12.3 Dimensions: 10001 ft x 150 ft 2.12.4 PCN: 60 F/A/W/T 2.12.5 Coordinates: 14–19–36.4755S / 170–42–2.6116W 2.12.6 Threshold Elevation: 8.7 ft 2.12.6 Touchdown Zone Elevation: 8.7 ft

2.12.1 Designation: 08 2.12.2 True Bearing: 90 2.12.3 Dimensions: 3801 ft x 100 ft 2.12.4 PCN: 45 F/A/W/T 2.12.5 Coordinates: 14–19–35.126S / 170–42–46.7563W 2.12.6 Threshold Elevation: 8.1 ft 2.12.6 Touchdown Zone Elevation: 8.1 ft 2.12.1 Designation: 26 2.12.2 True Bearing: 270 2.12.3 Dimensions: 3801 ft x 100 ft 2.12.4 PCN: 45 F/A/W/T 2.12.5 Coordinates: 14–19–35.1106S / 170–42–8.096W 2.12.6 Threshold Elevation: 4.8 ft 2.12.6 Touchdown Zone Elevation: 5.7 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 05
2.13.2 Take-off Run Available: 9200
2.13.3 Take-off Distance Available: 10000
2.13.4 Accelerate-Stop Distance Available: 9200
2.13.5 Landing Distance Available: 8200

2.13.1 Designation: 23

2.13.2 Take-off Run Available: 10000

2.13.3 Take-off Distance Available: 10000

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 9200

2.13.1 Designation: 08

2.13.2 Take-off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 26

2.13.2 Take-off Run Available:

2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 052.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 232.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 082.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 262.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System:

### AD 2.18 Air Traffic Services Communication Facilities

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 05. Magnetic variation: 12E
2.19.2 ILS Identification: TUT
2.19.5 Coordinates: 14–19–37.6403S / 170–42–14.7077W
2.19.6 Site Elevation: 19.1 ft

2.19.1 ILS Type: Glide Slope for runway 05. Magnetic variation: 12E
2.19.2 ILS Identification: TUT
2.19.5 Coordinates: 14–20–13.069S / 170–43–15.1842W
2.19.6 Site Elevation: 24.5 ft

2.19.1 ILS Type: Localizer for runway 05. Magnetic variation: 12E
2.19.2 ILS Identification: TUT
2.19.5 Coordinates: 14–19–38.7728S / 170–42–12.8837W
2.19.6 Site Elevation: 5.1 ft

#### **General Remarks:**

OLOTELE MT 1617 FT MSL 3.5 MILES WEST OF THLD RY 08.

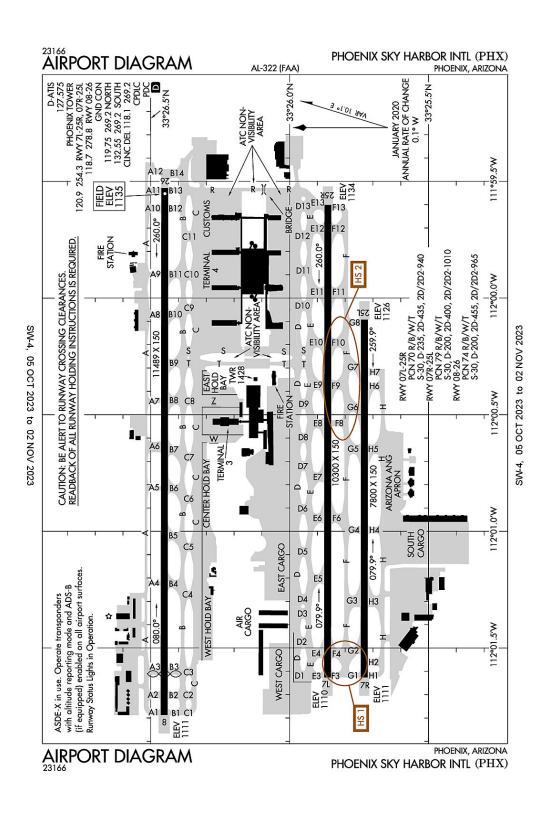
ALL ACFT TRANSITING PAGO PAGO (EXCP COMMERCIAL CARRIERS) MUST MAKE FUEL ARRANGEMENTS WITH PPG AT 684–733–3158.

<ALL FLTS (EXCP SKED) PRIOR PMSN FROM AMGR WITH 24 HRS PRIOR NOTICE.

FOR NOTAM CONTACT NEW ZEALAND (643) 358-1688FSS: NEW ZEALAND

SEA SPRAY FM SURF & BLOW HOLES MAY DRIFT ACRS RWY 05/23 UNDER ROUGH SEA CONDS.

PERMLY LGTD & MKD 226' TWR ATOP MT ALAVA 4.3SM NNE ARPT.



# Phoenix, Arizona Phoenix Sky Harbor International ICAO Identifier KPHX

# Phoenix, AZ Phoenix Sky Harbor Intl ICAO Identifier KPHX

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 33–26–3.4N / 112–0–41.7W 2.2.2 From City: 3 miles E of PHOENIX, AZ 2.2.3 Elevation: 1134.8 ft 2.2.5 Magnetic Variation: 12E (2000) 2.2.6 Airport Contact: CHAD R. MAKOVSKY 2485 E BUCKEYE RD PHOENIX, AZ 85034 (602–273–3302) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 07L
2.12.2 True Bearing: 90
2.12.3 Dimensions: 10300 ft x 150 ft
2.12.4 PCN: 70 R/B/W/T
2.12.5 Coordinates: 33–25–51.8081N / 112–1–37.5659W
2.12.6 Threshold Elevation: 1110.2 ft
2.12.6 Touchdown Zone Elevation: 1116.5 ft

2.12.1 Designation: 25R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 10300 ft x 150 ft 2.12.4 PCN: 70 R/B/W/T 2.12.5 Coordinates: 33–25–51.7284N / 111–59–36.0429W 2.12.6 Threshold Elevation: 1134 ft 2.12.6 Touchdown Zone Elevation: 1134.1 ft

2.12.1 Designation: 25L 2.12.2 True Bearing: 270 2.12.3 Dimensions: 7800 ft x 150 ft 2.12.4 PCN: 79 R/B/W/T 2.12.5 Coordinates: 33–25–43.8354N / 112–0–5.5412W 2.12.6 Threshold Elevation: 1126.3 ft 2.12.6 Touchdown Zone Elevation: 1126.4 ft 2.12.1 Designation: 07R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 7800 ft x 150 ft
2.12.4 PCN: 79 R/B/W/T
2.12.5 Coordinates: 33–25–43.8923N / 112–1–37.5686W
2.12.6 Threshold Elevation: 1111 ft
2.12.6 Touchdown Zone Elevation: 1115.9 ft

2.12.1 Designation: 26 2.12.2 True Bearing: 270 2.12.3 Dimensions: 11489 ft x 150 ft 2.12.4 PCN: 74 R/B/W/T 2.12.5 Coordinates: 33–26–26.9643N / 111–59–31.6884W 2.12.6 Threshold Elevation: 1134.7 ft 2.12.6 Touchdown Zone Elevation: 1134.8 ft

2.12.1 Designation: 08 2.12.2 True Bearing: 90 2.12.3 Dimensions: 11489 ft x 150 ft 2.12.4 PCN: 74 R/B/W/T 2.12.5 Coordinates: 33–26–27.0993N / 112–1–47.257W 2.12.6 Threshold Elevation: 1111.1 ft 2.12.6 Touchdown Zone Elevation: 1118 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 07L
2.13.2 Take-off Run Available: 10300
2.13.3 Take-off Distance Available: 10300
2.13.4 Accelerate-Stop Distance Available: 10300
2.13.5 Landing Distance Available: 10300

2.13.1 Designation: 25R
2.13.2 Take-off Run Available: 10300
2.13.3 Take-off Distance Available: 10300
2.13.4 Accelerate-Stop Distance Available: 10300
2.13.5 Landing Distance Available: 10300

2.13.1 Designation: 25L
2.13.2 Take-off Run Available: 7800
2.13.3 Take-off Distance Available: 7800
2.13.4 Accelerate-Stop Distance Available: 7800
2.13.5 Landing Distance Available: 7800

2.13.1 Designation: 07R

- 2.13.2 Take-off Run Available: 7800
- 2.13.3 Take-off Distance Available: 7800
- 2.13.4 Accelerate–Stop Distance Available: 7800
- 2.13.5 Landing Distance Available: 7800

2.13.1 Designation: 26
2.13.2 Take-off Run Available: 11489
2.13.3 Take-off Distance Available: 11489
2.13.4 Accelerate-Stop Distance Available: 11489
2.13.5 Landing Distance Available: 11489

2.13.1 Designation: 082.13.2 Take-off Run Available: 114892.13.3 Take-off Distance Available: 114892.13.4 Accelerate-Stop Distance Available: 11489

2.13.5 Landing Distance Available: 10591

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 07L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 25R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 25L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 07R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 262.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 082.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 118.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 269.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 127.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (NORTH)2.18.3 Channel: 119.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (SOUTH)2.18.3 Channel: 132.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 269.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08/26)2.18.3 Channel: 118.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 07L/25R, 07R/25L) 2.18.3 Channel: 120.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 07L/25R, 07R/25L) 2.18.3 Channel: 254.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08/26)2.18.3 Channel: 278.82.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 07L. Magnetic variation: 12E
2.19.2 ILS Identification: PHX
2.19.5 Coordinates: 33–25–54.0771N / 111–59–19.1054W
2.19.6 Site Elevation: 1143 ft

2.19.1 ILS Type: Glide Slope for runway 07L. Magnetic variation: 12E
2.19.2 ILS Identification: PHX
2.19.5 Coordinates: 33–25–49.0529N / 112–1–25.2134W
2.19.6 Site Elevation: 1106.5 ft

2.19.1 ILS Type: Localizer for runway 07L. Magnetic variation: 12E
2.19.2 ILS Identification: PHX
2.19.5 Coordinates: 33-25-51.7152N / 111-59-20.367W
2.19.6 Site Elevation: 1133.5 ft

2.19.1 ILS Type: DME for runway 07R. Magnetic variation: 12E

2.19.2 ILS Identification: AHA 2.19.5 Coordinates: 33–25–41.1847N / 111–59–52.1833W 2.19.6 Site Elevation: 1135.8 ft

2.19.1 ILS Type: Glide Slope for runway 07R. Magnetic variation: 12E
2.19.2 ILS Identification: AHA
2.19.5 Coordinates: 33–25–46.628N / 112–1–25.0931W
2.19.6 Site Elevation: 1107.4 ft

2.19.1 ILS Type: Localizer for runway 07R. Magnetic variation: 12E
2.19.2 ILS Identification: AHA
2.19.5 Coordinates: 33–25–43.8252N / 111–59–52.2902W
2.19.6 Site Elevation: 1124.2 ft

2.19.1 ILS Type: DME for runway 25L. Magnetic variation: 12E
2.19.2 ILS Identification: RJG
2.19.5 Coordinates: 33–25–41.1847N / 111–59–52.1833W
2.19.6 Site Elevation: 1117.1 ft

2.19.1 ILS Type: Glide Slope for runway 25L. Magnetic variation: 12E
2.19.2 ILS Identification: RJG
2.19.5 Coordinates: 33–25–40.9318N / 112–0–16.8722W
2.19.6 Site Elevation: 1120.3 ft

2.19.1 ILS Type: Localizer for runway 25L. Magnetic variation: 12E
2.19.2 ILS Identification: RJG
2.19.5 Coordinates: 33–25–43.8995N / 112–1–49.6368W
2.19.6 Site Elevation: 1103.2 ft

2.19.1 ILS Type: DME for runway 08. Magnetic variation: 12E
2.19.2 ILS Identification: SYQ
2.19.5 Coordinates: 33–26–24.3207N / 111–59–19.7057W
2.19.6 Site Elevation: 1149.2 ft

2.19.1 ILS Type: Glide Slope for runway 08. Magnetic variation: 12E
2.19.2 ILS Identification: SYQ
2.19.5 Coordinates: 33-26-29.6544N / 112-1-24.6276W
2.19.6 Site Elevation: 1111.7 ft

2.19.1 ILS Type: Localizer for runway 08. Magnetic variation: 12E
2.19.2 ILS Identification: SYQ
2.19.5 Coordinates: 33-26-26.9483N / 111-59-19.7443W
2.19.6 Site Elevation: 1134.1 ft

2.19.1 ILS Type: DME for runway 26. Magnetic variation: 12E 2.19.2 ILS Identification: CWJ 2.19.5 Coordinates: 33–26–24.3207N / 111–59–19.7057W 2.19.6 Site Elevation: 1149.2 ft

2.19.1 ILS Type: Glide Slope for runway 26. Magnetic variation: 12E 2.19.2 ILS Identification: CWJ

2.19.5 Coordinates: 33–26–29.603N / 111–59–44.4331W 2.19.6 Site Elevation: 1129.1 ft

2.19.1 ILS Type: Localizer for runway 26. Magnetic variation: 12E
2.19.2 ILS Identification: CWJ
2.19.5 Coordinates: 33–26–27.1078N / 112–1–59.2267W
2.19.6 Site Elevation: 1105.1 ft

## General Remarks:

TWYS A, A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, F BTN G2 AND G3, D BTN D8 AND T, D BTN S AND R, RESTRICTED TO A WINGSPAN OF LESS THAN 135 FT.

NO EXPERIMENTAL FLT OR GND DMSTRN ON ARPT WO PRIOR WRITTEN CONSENT FM THE AIRSIDE OPS.

NO ENG RUNS ON ARPT WO PRIOR COORDN WITH AIRSIDE OPS. NO ENG RUNS ON ARPT BETWEEN 2300L – 0500L.

RWY STATUS LGTS ARE IN OPN.

FOR GENERAL QUESTIONS CALL AIRPORT COMMUNICATIONS CENTER (602) 273-3302

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

TWY R OVERHEAD TRAIN BRIDGE AT MIDPOINT PROVIDES 82FT-4 IN. CLEARANCE.

TWY H5, H6, H7, TWY H BTN TWY H4 AND TWY H7 CLSD TO ACFT WINGSPAN MORE THAN 171 FT.

TWY F BTW TWY INT G2 AND G3 CLSD TO ACFT WITH WINGSPAN GREATER THAN 135 FT DUE TO FAA NAV EQUIPMENT.

PPR ACFT WITH WINGSPAN 215 FT OR GREATER (GROUP VI) CALL ARPT OPNS 602–272–2008 FOR FOLLOW–ME SERVICES WHILE TAXIING TO AND FROM RAMP AND RWYS.

REVIEW HOT SPOT INFO ON AIRPORT DIAGRAM. ADDITIONAL SAFETY VIDEO @ HTTP://SKYHARBOR.-COM/BUSINESS/FORPILOTS/SAFETYVIDEOFORPILOTS

FEE FOR ALL CHARTERS; TRAVEL CLUBS AND CERTAIN REVENUE PRODUCING ACFT.

PRACTICE INSTRUMENT APPROACHES, STOP & TAXI BACK LANDINGS, STOP & GO LANDINGS, TOUCH & GO LANDINGS ARE PROHIBITED. ALL OTHER FLIGHT TRAINING OPERATIONS PROHIBITED WO PRIOR WRITTEN APPROVAL (AIRSIDE OPS 602–272–2008).

TWYS C BTN S AND R, D BTN D2 AND D7, D3, D6, H BTN H4 AND H7, H7 RESTRICTED TO WINGSPAN OF LESS THAN 171 FT.

TWY R AND PORTIONS OF TWYS S AND T DIRECTLY BELOW THE ATCT ARE NON VISIBLE AREAS FROM THE ATCT.

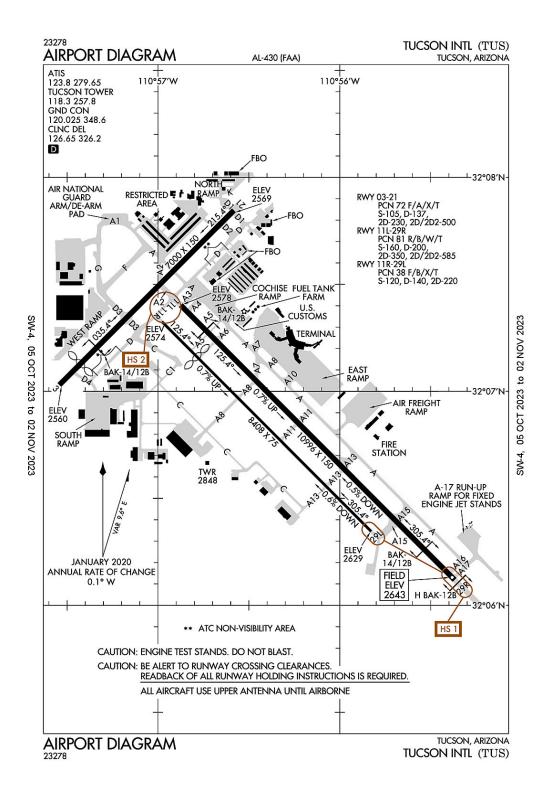
NATL GUARD HAS LMTD TSNT MAINTENANCE AND PARKING RON BY PPR (602)302-9119.

INTERNATIONAL GATE USE RQS COORDN WITH ARPT OPS 48 HOURS PRIOR TO ARRIVAL.

NOISE ABATEMENT PROCEDURES ARE IN AFFECT AT ALL TIMES.

INTERNATIONAL LANDING RIGHTS RQRS US CUSTOMS AND BORDER PROTECTION NOTIFICATION 48 HOURS PRIOR TO LANDING.

# Tucson, Arizona Tucson International ICAO Identifier KTUS



# Tucson, AZ Tucson Intl ICAO Identifier KTUS

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 32–6–57.849N / 110–56–27.65W
2.2.2 From City: 6 miles S of TUCSON, AZ
2.2.3 Elevation: 2643 ft
2.2.5 Magnetic Variation: 12E (1995)
2.2.6 Airport Contact: DANETTE BEWLEY TUCSON APT AUTH 7250 S TUCSON BLVD TUCSON, AZ 85756 (520–573–8100)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A++2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 03 2.12.2 True Bearing: 45 2.12.3 Dimensions: 7000 ft x 150 ft 2.12.4 PCN: 72 F/A/X/T 2.12.5 Coordinates: 32–7–1.7975N / 110–57–32.5438W 2.12.6 Threshold Elevation: 2560.2 ft 2.12.6 Touchdown Zone Elevation: 2572.1 ft

2.12.1 Designation: 21 2.12.2 True Bearing: 225 2.12.3 Dimensions: 7000 ft x 150 ft 2.12.4 PCN: 72 F/A/X/T 2.12.5 Coordinates: 32–7–50.7361N / 110–56–34.9535W 2.12.6 Threshold Elevation: 2568.8 ft 2.12.6 Touchdown Zone Elevation: 2572.4 ft

2.12.1 Designation: 11L
2.12.2 True Bearing: 135
2.12.3 Dimensions: 10996 ft x 150 ft
2.12.4 PCN: 81 R/B/W/T
2.12.5 Coordinates: 32–7–24.1289N / 110–56–52.4852W
2.12.6 Threshold Elevation: 2577.7 ft
2.12.6 Touchdown Zone Elevation: 2598.5 ft

2.12.1 Designation: 29R 2.12.2 True Bearing: 315 2.12.3 Dimensions: 10996 ft x 150 ft 2.12.4 PCN: 81 R/B/W/T 2.12.5 Coordinates: 32–6–7.1598N / 110–55–22.1441W 2.12.6 Threshold Elevation: 2643 ft 2.12.6 Touchdown Zone Elevation: 2643 ft

2.12.1 Designation: 11R 2.12.2 True Bearing: 135 2.12.3 Dimensions: 8408 ft x 75 ft 2.12.4 PCN: 38 F/B/X/T 2.12.5 Coordinates: 32–7–19.5659N / 110–56–58.741W 2.12.6 Threshold Elevation: 2573.5 ft 2.12.6 Touchdown Zone Elevation: 2605 ft

2.12.1 Designation: 29L 2.12.2 True Bearing: 315 2.12.3 Dimensions: 8408 ft x 75 ft 2.12.4 PCN: 38 F/B/X/T 2.12.5 Coordinates: 32–6–20.7186N / 110–55–49.6599W 2.12.6 Threshold Elevation: 2628.6 ft 2.12.6 Touchdown Zone Elevation: 2628.7 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 03
2.13.2 Take-off Run Available: 7000
2.13.3 Take-off Distance Available: 7000
2.13.4 Accelerate-Stop Distance Available: 7000
2.13.5 Landing Distance Available: 6150

2.13.1 Designation: 21
2.13.2 Take-off Run Available: 6000
2.13.3 Take-off Distance Available: 7000
2.13.4 Accelerate-Stop Distance Available: 6000
2.13.5 Landing Distance Available: 6000

2.13.5 Landing Distance Available: 6000
2.13.1 Designation: 11L
2.13.2 Take-off Run Available: 10996
2.13.3 Take-off Distance Available: 10996
2.13.4 Accelerate-Stop Distance Available: 10996
2.13.5 Landing Distance Available: 10996

2.13.1 Designation: 29R

- 2.13.2 Take-off Run Available: 10996
- 2.13.3 Take-off Distance Available: 10996
- 2.13.4 Accelerate-Stop Distance Available: 10996
- 2.13.5 Landing Distance Available: 10996

2.13.1 Designation: 11R
2.13.2 Take-off Run Available: 8408
2.13.3 Take-off Distance Available: 8408
2.13.4 Accelerate-Stop Distance Available: 8408
2.13.5 Landing Distance Available: 6998

2.13.1 Designation: 29L2.13.2 Take-off Run Available: 84082.13.3 Take-off Distance Available: 84082.13.4 Accelerate-Stop Distance Available: 8408

2.13.5 Landing Distance Available: 8408

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 032.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 212.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 11L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 29R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 11R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 29L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG COMD POST2.18.3 Channel: 138.5252.18.5 Hours of Operation:

2.18.1 Service Designation: ATIS2.18.3 Channel: 123.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 279.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 126.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 326.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 120.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 1192.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 11L. Magnetic variation: 12E
2.19.2 ILS Identification: TUS
2.19.5 Coordinates: 32–5–54.9712N / 110–55–3.2284W
2.19.6 Site Elevation: 2676.1 ft

2.19.1 ILS Type: Glide Slope for runway 11L. Magnetic variation: 12E
2.19.2 ILS Identification: TUS
2.19.5 Coordinates: 32–7–14.7604N / 110–56–48.0571W
2.19.6 Site Elevation: 2580.1 ft

2.19.1 ILS Type: Localizer for runway 11L. Magnetic variation: 12E 2.19.2 ILS Identification: TUS

2.19.5 Coordinates: 32–5–53.5044N / 110–55–6.1189W 2.19.6 Site Elevation: 2659.9 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 12E
2.19.2 Navigation Aid Identification: TUS
2.19.5 Coordinates: 32–5–42.7296N / 110–54–53.4781W
2.19.6 Site Elevation: 2670.5 ft

#### **General Remarks:**

CTN: REVIEW ARPT DIAGRAM HOT SPOT INFO.

MIL: ANG OFFL BUS ONLY; 72 HR PPR – D844–6731/C520–295–6731; FAX EXTN 6732. BASE OPS 1300Z–2300Z MON–FRI & DRILL WKEND 1300Z–2130Z; CLSD OTR WKENDS, HOL & SKED OFF DAYS. TRAN ALERT MAINT NA. TSNT SI FSL ONLY. CONTR FUEL NA.

ACR USE RWY 03/21 & 11L/29R.

SERVICE-A-GEAR: BAK-14/BAK-12B APCH END RWY 11L AND BAK-14/BAK-12B APCH END RWY 29R, ENGAGEMENTS AVBL ONLY DUR ANG DUTY HR AND 15 MIN PN RQR.

TWY A5 LTD 70000 LB OR LESS.

ALL ACFT USE UPPER ANTENNA UNTIL AIRBORNE.

PPR REQUIRED FOR ALL CHARTER, SPORTS TEAM, CARGO AND MILITARY AIRCRAFT. CONTACT FBO FOR PPR REQUEST. LANDING AND PARKING FEES MAY APPLY FOR ACFT 12500 LBS AND UP.

FLT TRNG 2200-0600 NA EXC PPR - 520-573-8190.

MIL/COMM/BASE OPS ARR CTC TITAN OR PUMA – ANG BASE OPS/COMD POST FREQ.

TL K, TWY D1, NW OF RWY 03/21, AND NORTH RAMP CLSD TO ACFT WITH WINGSPAN GREATER THAN 79 FT.

PTNS TWY D NOT VIS FM ATCT.

CTN: RWY 29L SHORTER NARROW RWY S OF RWY 29R. NW ARR & DEP DO NOT MISTAKE TWY A FOR LNDG SFC; TWY A IS N & PARL TO RWY 29R.

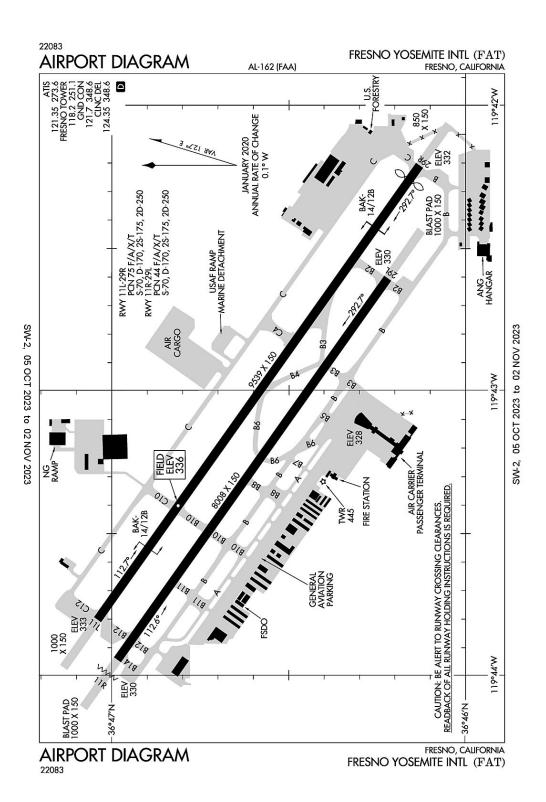
GEN ARPT INFO - 520-573-8182.

GROUP V TAX WITH INBOARD ENG ONLY.

OPERATE TRANSPONDERS ON ALL AIRPORT SURFACES, INCLUDING PUSHBACK AND GATE ARRIVAL.

MIL: BIRD ACT PHASE II IN EFCT 1 JUL-31 AUG.

USCBP INSP RAMP RFLG NA EXC MED EMERG.



Fresno, California Fresno Yosemite International ICAO Identifier KFAT

# Fresno, CA Fresno Yosemite Intl ICAO Identifier KFAT

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 36–46–35.6N / 119–43–7.8W 2.2.2 From City: 5 miles NE of FRESNO, CA 2.2.3 Elevation: 335.5 ft 2.2.5 Magnetic Variation: 13E (2020) 2.2.6 Airport Contact: HENRY L. THOMPSON 4995 E CLINTON WAY FRESNO, CA 93722 (559–621–4600) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A,A++2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 11L 2.12.2 True Bearing: 125 2.12.3 Dimensions: 9539 ft x 150 ft 2.12.4 PCN: 75 F/A/X/T 2.12.5 Coordinates: 36–47–2.406N / 119–43–48.3081W 2.12.6 Threshold Elevation: 333 ft 2.12.6 Touchdown Zone Elevation: 335.5 ft

2.12.1 Designation: 29R
2.12.2 True Bearing: 305
2.12.3 Dimensions: 9539 ft x 150 ft
2.12.4 PCN: 75 F/A/X/T
2.12.5 Coordinates: 36–46–7.8228N / 119–42–12.6898W
2.12.6 Threshold Elevation: 332 ft
2.12.6 Touchdown Zone Elevation: 332.6 ft

2.12.1 Designation: 29L 2.12.2 True Bearing: 305 2.12.3 Dimensions: 8008 ft x 150 ft 2.12.4 PCN: 44 F/A/X/T 2.12.5 Coordinates: 36–46–13.2042N / 119–42–36.4402W 2.12.6 Threshold Elevation: 329.9 ft 2.12.6 Touchdown Zone Elevation: 330.7 ft 2.12.1 Designation: 11R
2.12.2 True Bearing: 125
2.12.3 Dimensions: 8008 ft x 150 ft
2.12.4 PCN: 44 F/A/X/T
2.12.5 Coordinates: 36–46–59.0217N / 119–43–56.7171W
2.12.6 Threshold Elevation: 330 ft
2.12.6 Touchdown Zone Elevation: 332.9 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 11L
2.13.2 Take-off Run Available: 9539
2.13.3 Take-off Distance Available: 9539
2.13.4 Accelerate-Stop Distance Available: 9279
2.13.5 Landing Distance Available: 9279

2.13.1 Designation: 29R2.13.2 Take-off Run Available: 9539

2.13.3 Take-off Distance Available: 9539

2.13.4 Accelerate–Stop Distance Available: 9539

2.13.5 Landing Distance Available: 9227

2.13.1 Designation: 29L

2.13.2 Take-off Run Available: 8008

2.13.3 Take-off Distance Available: 8008

2.13.4 Accelerate–Stop Distance Available: 8008

2.13.5 Landing Distance Available: 8008

2.13.1 Designation: 11R

2.13.2 Take-off Run Available: 8008

2.13.3 Take-off Distance Available: 8008

2.13.4 Accelerate–Stop Distance Available: 8008

2.13.5 Landing Distance Available: 8008

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 11L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 29R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 29L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 11R2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System:

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 1402.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 298.32.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P DEP/P (091–239) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (091–239) 2.18.3 Channel: 323.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (240–090)2.18.3 Channel: 119.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (240–090) 2.18.3 Channel: 351.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S (S/SE VISALIA AREA)2.18.3 Channel: 118.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S (S/SE VISALIA AREA)2.18.3 Channel: 268.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 121.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 273.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 124.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (240–090) 2.18.3 Channel: 119.6 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (091–239) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (091–239) 2.18.3 Channel: 323.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (240–090) 2.18.3 Channel: 351.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 251.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: NG OPS2.18.3 Channel: 40.952.18.5 Hours of Operation:

2.18.1 Service Designation: NG OPS2.18.3 Channel: 1322.18.5 Hours of Operation:

2.18.1 Service Designation: NG OPS 2.18.3 Channel: 255.8

2.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 11L. Magnetic variation: 13E
2.19.2 ILS Identification: RPW
2.19.5 Coordinates: 36–47–10.81N / 119–43–56.63W
2.19.6 Site Elevation: 347.1 ft

2.19.1 ILS Type: Localizer for runway 11L. Magnetic variation: 13E
2.19.2 ILS Identification: RPW
2.19.5 Coordinates: 36-46-2.54N / 119-42-3.44W
2.19.6 Site Elevation: 331.3 ft

2.19.1 ILS Type: DME for runway 29R. Magnetic variation: 13E
2.19.2 ILS Identification: FAT
2.19.5 Coordinates: 36–47–10.81N / 119–43–56.63W
2.19.6 Site Elevation: 347.1 ft

2.19.1 ILS Type: Glide Slope for runway 29R. Magnetic variation: 13E
2.19.2 ILS Identification: FAT
2.19.5 Coordinates: 36-46-18.84N / 119-42-23.4799W
2.19.6 Site Elevation: 332 ft

2.19.1 ILS Type: Localizer for runway 29R. Magnetic variation: 13E
2.19.2 ILS Identification: FAT
2.19.5 Coordinates: 36–47–8.2801N / 119–43–58.6W
2.19.6 Site Elevation: 333.7 ft

### **General Remarks:** MILITARY: SVC: RWY 29R AND 11L A–GEAR CABLE AVBL UPON REQ ONLY; DEFAULT POSN DOWN.

MILITARY: ANG: CTC ANG OPS FOR LCL BIRD WATCH COND (BWC).

SERVICE- JET AIR START UNIT (JASU): (AM32A-60) 2(AGPU)

FRESNO YOSEMITE INTL IS NOISE SENSITIVE; NOISE ABATEMENT PROCEDURES IN EFFECT.

SERVICE – FUEL: ROSS AVIATION, C559–251–1555

RETRACTABLE BAK–12/14 AVBL ON RY 11L AND RY 29R ARE KEPT IN RECESSED POSITION UNTIL REQ FOR USE; TWR MUST BE NOTIFIED AT LEAST 5 SECONDS PRIOR TO ENGAGEMENT SO THAT THE AG CABLE MAY BE RAISED.

POSSIBLE WAKE TURBULENCE OR WIND SHEAR ARR TO RY 29L OR DEP FM RY 11R. JET TESTING CONDUCTED AT AIR NATIONAL GUARD RAMP LCTD AT SE CORNER OF ARPT.

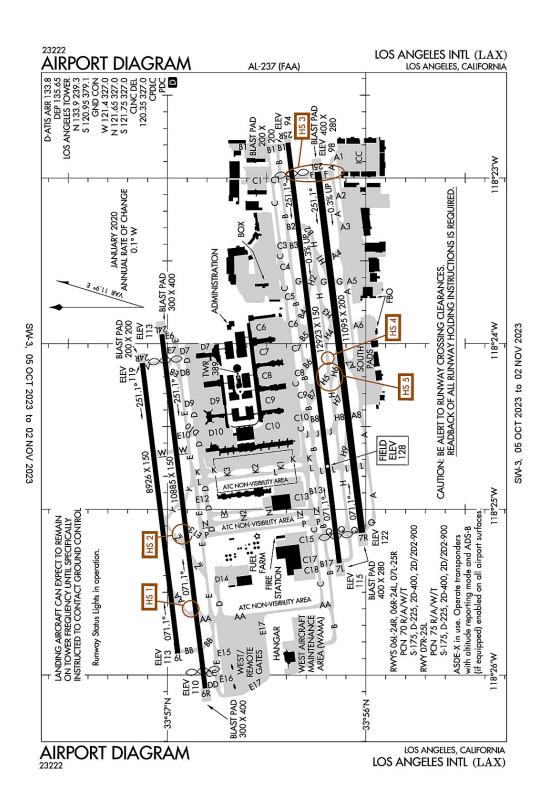
SERVICE-FUEL: SIGNATURE FLIGHT SUPPORT, C559-981-2490

NO MULT APCHS AND LNDGS MON-SAT 2200-0700 AND SUN 1800-1000.

LGTD RY DISTANCE REMAINING MARKERS ON SOUTH SIDE OF RY 11R/29L; LGTD RY DISTANCE REMAINING MARKERS BOTH SIDES OF RY 11L/29R– 11L DRM ON NORTH SIDE; 29R DRM ON SOUTH SIDE.

AD 2-73 5 OCT 23

NUMEROUS BIRDS INVOF ARPT.



Los Angeles, California Los Angeles International ICAO Identifier KLAX

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 33–56–32.987N / 118–24–28.975W
2.2.2 From City: 9 miles SW of LOS ANGELES, CA
2.2.3 Elevation: 127.8 ft
2.2.5 Magnetic Variation: 12E (2020)
2.2.6 Airport Contact: DOUGLAS WEBSTER
ONE WORLD WAY
LOS ANGELES, CA 90009 (424–646–8829)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 06L 2.12.2 True Bearing: 83 2.12.3 Dimensions: 8926 ft x 150 ft 2.12.4 PCN: 70 R/A/W/T 2.12.5 Coordinates: 33–56–56.8049N / 118–25–52.1755W 2.12.6 Threshold Elevation: 113.1 ft 2.12.6 Touchdown Zone Elevation: 118.8 ft

2.12.1 Designation: 24R
2.12.2 True Bearing: 263
2.12.3 Dimensions: 8926 ft x 150 ft
2.12.4 PCN: 70 R/A/W/T
2.12.5 Coordinates: 33–57–7.5741N / 118–24–7.0161W
2.12.6 Threshold Elevation: 118.9 ft
2.12.6 Touchdown Zone Elevation: 122.4 ft

2.12.1 Designation: 06R 2.12.2 True Bearing: 83 2.12.3 Dimensions: 10885 ft x 150 ft 2.12.4 PCN: 70 R/A/W/T 2.12.5 Coordinates: 33–56–48.5368N / 118–26–4.8042W 2.12.6 Threshold Elevation: 109.9 ft 2.12.6 Touchdown Zone Elevation: 116.2 ft 2.12.1 Designation: 24L

2.12.2 True Bearing: 263
2.12.3 Dimensions: 10885 ft x 150 ft
2.12.4 PCN: 70 R/A/W/T
2.12.5 Coordinates: 33–57–1.6678N / 118–23–56.5656W
2.12.6 Threshold Elevation: 112.9 ft
2.12.6 Touchdown Zone Elevation: 122.5 ft
2.12.1 Designation: 25R
2.12.2 True Bearing: 263
2.12.3 Dimensions: 12923 ft x 150 ft
2.12.4 PCN: 70 R/A/W/T
2.12.5 Coordinates: 33–56–23.5604N / 118–22–47.2005W
2.12.6 Threshold Elevation: 94.3 ft

2.12.6 Touchdown Zone Elevation: 103.8 ft

2.12.1 Designation: 07L
2.12.2 True Bearing: 83
2.12.3 Dimensions: 12923 ft x 150 ft
2.12.4 PCN: 70 R/A/W/T
2.12.5 Coordinates: 33–56–7.9864N / 118–25–19.4335W
2.12.6 Threshold Elevation: 114.8 ft
2.12.6 Touchdown Zone Elevation: 127.8 ft

2.12.1 Designation: 07R
2.12.2 True Bearing: 83
2.12.3 Dimensions: 11095 ft x 200 ft
2.12.4 PCN: 75 R/A/W/T
2.12.5 Coordinates: 33–56–1.1378N / 118–25–8.466W
2.12.6 Threshold Elevation: 121.7 ft
2.12.6 Touchdown Zone Elevation: 127.6 ft

2.12.1 Designation: 25L 2.12.2 True Bearing: 263 2.12.3 Dimensions: 11095 ft x 200 ft 2.12.4 PCN: 75 R/A/W/T 2.12.5 Coordinates: 33–56–14.5069N / 118–22–57.7701W 2.12.6 Threshold Elevation: 97.8 ft 2.12.6 Touchdown Zone Elevation: 103.7 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 06L
2.13.2 Take-off Run Available: 8926
2.13.3 Take-off Distance Available: 8926
2.13.4 Accelerate-Stop Distance Available: 8566
2.13.5 Landing Distance Available: 8566

2.13.1 Designation: 24R2.13.2 Take-off Run Available: 8926

2.13.3 Take-off Distance Available: 8926 2.13.4 Accelerate-Stop Distance Available: 8926 2.13.5 Landing Distance Available: 8926 2.13.1 Designation: 06R 2.13.2 Take-off Run Available: 10285 2.13.3 Take-off Distance Available: 10285 2.13.4 Accelerate–Stop Distance Available: 10285 2.13.5 Landing Distance Available: 9748 2.13.1 Designation: 24L 2.13.2 Take-off Run Available: 10285 2.13.3 Take-off Distance Available: 10285 2.13.4 Accelerate-Stop Distance Available: 10285 2.13.5 Landing Distance Available: 9483 2.13.1 Designation: 25R 2.13.2 Take-off Run Available: 12091 2.13.3 Take-off Distance Available: 12091 2.13.4 Accelerate-Stop Distance Available: 12091 2.13.5 Landing Distance Available: 11134 2.13.1 Designation: 07L 2.13.2 Take-off Run Available: 12091 2.13.3 Take-off Distance Available: 12091 2.13.4 Accelerate-Stop Distance Available: 12091 2.13.5 Landing Distance Available: 11259 2.13.1 Designation: 07R 2.13.2 Take-off Run Available: 11095 2.13.3 Take-off Distance Available: 11095 2.13.4 Accelerate-Stop Distance Available: 11095 2.13.5 Landing Distance Available: 11095 2.13.1 Designation: 25L

2.13.2 Take-off Run Available: 110952.13.3 Take-off Distance Available: 110952.13.4 Accelerate-Stop Distance Available: 11095

2.13.5 Landing Distance Available: 11095

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 06L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 06R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 25R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 07L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 07R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 25L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 120.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 3272.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 133.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 135.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (WEST) 2.18.3 Channel: 121.4 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (NORTH-CMPLX) 2.18.3 Channel: 121.65 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (SOUTH CMPLX) 2.18.3 Channel: 121.75 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P 2.18.3 Channel: 327 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (HELICOPTERS) 2.18.3 Channel: 119.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P IC (SOUTH CMPLX) 2.18.3 Channel: 120.95 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P IC (NORTH CMPLX) 2.18.3 Channel: 133.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P IC (NORTH CMPLX & HELI) 2.18.3 Channel: 239.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P IC (SOUTH CMPLX) 2.18.3 Channel: 379.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: OPS (SAMSO FLT OPS) 2.18.3 Channel: 372.2 2.18.5 Hours of Operation: 2.18.1 Service Designation: RAMP CTL (TXL C10 0630L-2330L) 2.18.3 Channel: 129.325 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: RAMP CTL (TXL C7 0600L-2300L) 2.18.3 Channel: 129.4 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: RAMP CTL (TXL C6 0600L-2300L) 2.18.3 Channel: 129.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (TXL C9 0530L-2230L)

2.18.3 Channel: 130.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (TXL C8 0500L-2359L)2.18.3 Channel: 130.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (TXL D9)2.18.3 Channel: 131.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: SFRA2.18.3 Channel: 128.552.18.5 Hours of Operation:

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 06L. Magnetic variation: 12E
2.19.2 ILS Identification: UWU
2.19.5 Coordinates: 33–56–50.7522N / 118–26–26.6221W
2.19.6 Site Elevation: 139.3 ft

2.19.1 ILS Type: Glide Slope for runway 06L. Magnetic variation: 12E
2.19.2 ILS Identification: UWU
2.19.5 Coordinates: 33–56–54.5859N / 118–25–39.8249W
2.19.6 Site Elevation: 110.5 ft

2.19.1 ILS Type: Localizer for runway 06L. Magnetic variation: 12E
2.19.2 ILS Identification: UWU
2.19.5 Coordinates: 33–57–8.5767N / 118–23–57.1965W
2.19.6 Site Elevation: 108.5 ft

2.19.1 ILS Type: DME for runway 24R. Magnetic variation: 12E
2.19.2 ILS Identification: OSS
2.19.5 Coordinates: 33–56–50.7522N / 118–26–26.6221W
2.19.6 Site Elevation: 139.3 ft

2.19.1 ILS Type: Glide Slope for runway 24R. Magnetic variation: 12E
2.19.2 ILS Identification: OSS
2.19.5 Coordinates: 33–57–2.4082N / 118–24–18.522W
2.19.6 Site Elevation: 116.7 ft

2.19.1 ILS Type: Localizer for runway 24R. Magnetic variation: 12E
2.19.2 ILS Identification: OSS
2.19.5 Coordinates: 33–56–53.1648N / 118–26–27.6839W
2.19.6 Site Elevation: 125.5 ft

2.19.1 ILS Type: DME for runway 06R. Magnetic variation: 12E
2.19.2 ILS Identification: GPE
2.19.5 Coordinates: 33–56–49.9191N / 118–26–22.7714W
2.19.6 Site Elevation: 134.3 ft

2.19.1 ILS Type: Glide Slope for runway 06R. Magnetic variation: 12E 2.19.2 ILS Identification: GPE 2.19.5 Coordinates: 33-56-53.3646N / 118-25-47.3623W 2.19.6 Site Elevation: 108 ft 2.19.1 ILS Type: Localizer for runway 06R. Magnetic variation: 12E 2.19.2 ILS Identification: GPE 2.19.5 Coordinates: 33-57-2.4125N / 118-23-49.2874W 2.19.6 Site Elevation: 106.3 ft 2.19.1 ILS Type: DME for runway 24L. Magnetic variation: 12E 2.19.2 ILS Identification: HQB 2.19.5 Coordinates: 33-56-49.9191N / 118-26-22.7714W 2.19.6 Site Elevation: 134.3 ft 2.19.1 ILS Type: Glide Slope for runway 24L. Magnetic variation: 12E 2.19.2 ILS Identification: HQB 2.19.5 Coordinates: 33-57-2.31N / 118-24-18.51W 2.19.6 Site Elevation: 116.7 ft 2.19.1 ILS Type: Localizer for runway 24L. Magnetic variation: 12E 2.19.2 ILS Identification: HOB 2.19.5 Coordinates: 33-56-46.746N / 118-26-22.2482W 2.19.6 Site Elevation: 123.4 ft 2.19.1 ILS Type: DME for runway 07L. Magnetic variation: 12E 2.19.2 ILS Identification: IAS 2.19.5 Coordinates: 33-56-4.8698N / 118-25-24.8206W 2.19.6 Site Elevation: 104.3 ft 2.19.1 ILS Type: Glide Slope for runway 07L. Magnetic variation: 12E 2.19.2 ILS Identification: IAS 2.19.5 Coordinates: 33-56-7.743N / 118-24-56.7237W 2.19.6 Site Elevation: 119.8 ft 2.19.1 ILS Type: Localizer for runway 07L. Magnetic variation: 12E 2.19.2 ILS Identification: IAS 2.19.5 Coordinates: 33-56-24.7529N / 118-22-35.5432W 2.19.6 Site Elevation: 90 ft 2.19.1 ILS Type: DME for runway 25R. Magnetic variation: 12E 2.19.2 ILS Identification: CFN 2.19.5 Coordinates: 33-56-4.8698N / 118-25-24.8206W 2.19.6 Site Elevation: 104.3 ft 2.19.1 ILS Type: Glide Slope for runway 25R. Magnetic variation: 12E 2.19.2 ILS Identification: CFN 2.19.5 Coordinates: 33-56-17.8773N / 118-23-10.1796W 2.19.6 Site Elevation: 97.5 ft

2.19.1 ILS Type: Localizer for runway 25R. Magnetic variation: 12E
2.19.2 ILS Identification: CFN
2.19.5 Coordinates: 33–56–7.2503N / 118–25–26.6262W
2.19.6 Site Elevation: 119.3 ft
2.19.1 ILS Type: DME for runway 07R. Magnetic variation: 12E
2.19.2 ILS Identification: MKZ
2.19.5 Coordinates: 33–56–3.1899N / 118–25–20.7882W
2.19.6 Site Elevation: 126 ft

2.19.1 ILS Type: Glide Slope for runway 07R. Magnetic variation: 12E
2.19.2 ILS Identification: MKZ
2.19.5 Coordinates: 33–55–59.9253N / 118–24–55.0492W
2.19.6 Site Elevation: 118.2 ft

2.19.1 ILS Type: Localizer for runway 07R. Magnetic variation: 12E
2.19.2 ILS Identification: MKZ
2.19.5 Coordinates: 33–56–15.7853N / 118–22–45.2443W
2.19.6 Site Elevation: 92.5 ft

2.19.1 ILS Type: DME for runway 25L. Magnetic variation: 12E
2.19.2 ILS Identification: LAX
2.19.5 Coordinates: 33–56–3.1899N / 118–25–20.7882W
2.19.6 Site Elevation: 126 ft

2.19.1 ILS Type: Glide Slope for runway 25L. Magnetic variation: 12E
2.19.2 ILS Identification: LAX
2.19.5 Coordinates: 33–56–17.7739N / 118–23–10.2139W
2.19.6 Site Elevation: 97.3 ft

2.19.1 ILS Type: Localizer for runway 25L. Magnetic variation: 12E
2.19.2 ILS Identification: LAX
2.19.5 Coordinates: 33–55–59.8649N / 118–25–20.8676W
2.19.6 Site Elevation: 118.4 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 15E
2.19.2 Navigation Aid Identification: LAX
2.19.5 Coordinates: 33–55–59.3368N / 118–25–55.246W
2.19.6 Site Elevation: 185 ft

### **General Remarks:**

TWY D BTN TWY D7 AND D8 (N OF TRML ONE) CLSD TO ACFT WITH WINGSPAN GTR THAN 157 FT.

SIMUL ACFT OPNS PROHIBITED ON TWYS L AND H9 BTWN RWYS 07L/25R AND 07R/25L.

SBND TURN NOT AVBL FROM WEST REMOTE GATE 408 AND WEST REMOTE GATE 409

RWY STATUS LGTS IN OPN.

RWY 7R/25L PREFERRED EMERG RWY.

AMERICAN EAGLE TRML SOUTHBOUND TAXING ACFT USE MNM PWR DUE TO BLAST HAZ.

ANY ACFT THAT COMES TO A STOP OR HAS ITS MOMENTUM INTRPD WHILE TURNING AND TAXING INTO ITS PRKG PSN, MUST STOP AND BE TOWED.

LAX SVC TXL M LAWA RAMP TWR OPN CTC LAWA RAMP TWR 131.975.

TURB MAY BE DEFLECTED UPWARD FM THE BLAST FENCE 180 FT E OF RWY 25R.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

PRACTICE INSTRUMENT APPROACHES & TOUCH AND GO LANDINGS ARE PROHIBITED.

NMRS BIRDS ON AND IN VCNTY OF ARPT.

WEST REMOTE GATES: ACFT USE OF OPEN GATES AS TAXI PATH IS PROHIBITED (GATES 406, 407, 408, 409).

NOISE SENS ARPT ON WESTERLY TAKEOFFS NO TURNS BEFORE CROSSING SHORELINE OVER-OCEAN APCHS UTILIZED 0000-0630.

ACFT USE MINIMAL PWR WHEN TXG VCNTY TRMLS DUE BLAST HAZ.

PILOTS SHOULD USE CTN FOR POSS LASER ACT IN THE LAX AREA.

MILITARY RSTD: ALL MIL ACFT OFFL BUS ONLY, MIN 24 HR PPR, CTC 61 ABW/CP FLT OPS DSN 633–3779/4014,C310–653–3779/4014.

ACFT WITH LEN GTR THAN 240 FT ARE PROHIBITED ON TXLS C7, C8 AND C9 BTN TXL C AND TWY B.

ACFT WITH WINGSPAN GTR THAN 198 FT OBND FM TXL D8 MAY NOT TURN WBND ONTO TXL D.

MILITARY AF: ALL MIL AIRCREWS MUST CTC 61 ABW/CP FLT OPS FOR PRKG LCTN/INSTRNS. NO GOVT TRNSPN, QTRS OR SECURITY AVBL. VIP NOTIFICATION PROCS APPLY. USER FEES ASSESSED USING AVCARD CREDIT. CTC SIGNATURE FLIGHT SUPPORT FBO 130.6 INBD. INBD RELAY ETA, VIP CODE, SVC REQ 30 MIN PRIOR TO ARR.

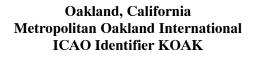
ACFT WITH WINGSPAN GTR THAN 155 FT WB ON TXL C ARE NOT AUTHD TO MAKE LEFT TURN ON TWY C10 UNDER PWR.

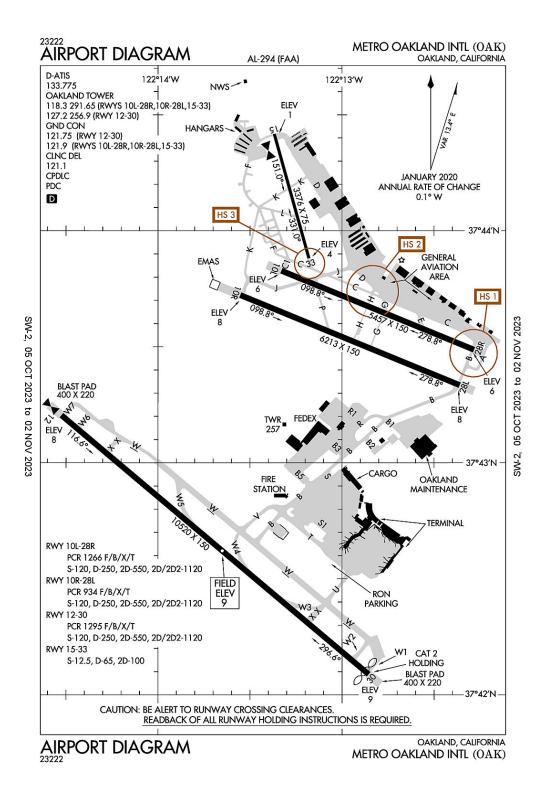
FOR ACFT WITH WINGSPAN GTR THAN 214 FT CTC LAX AIRSIDE OPS (424)-646-5292 FOR ARPT RESTRICTIONS.

MAJOR CONSTRUCTION ON AIRPORT, DAILY.

LAX SVC TXL K AND TXL L LAWA RAMP TWR OPN CTC LAWA RAMP TWR 131.075.

SIMUL ACFT OPNS PROHIBITED ON TWY H2 AND G BTN RWYS 07L/25R AND 07R/25L.





Metropolitan Oakland Intl ICAO Identifier KOAK

**Oakland**. CA

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 37–43–16.541N / 122–13–16.142W
2.2.2 From City: 4 miles S of OAKLAND, CA
2.2.3 Elevation: 9 ft
2.2.5 Magnetic Variation: 14E (2015)
2.2.6 Airport Contact: MATT DAVIS METROPOLITAN OAKLAND INTL ARPT OAKLAND, CA 94621 (510–563–6436)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–D

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 28R
2.12.2 True Bearing: 292
2.12.3 Dimensions: 5457 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 37–43–29.3324N / 122–12–16.9514W
2.12.6 Threshold Elevation: 5.8 ft
2.12.6 Touchdown Zone Elevation: 6.8 ft

2.12.1 Designation: 10L
2.12.2 True Bearing: 112
2.12.3 Dimensions: 5457 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 37–43–49.6892N / 122–13–19.8482W
2.12.6 Threshold Elevation: 5.5 ft
2.12.6 Touchdown Zone Elevation: 6.3 ft

2.12.1 Designation: 28L
2.12.2 True Bearing: 292
2.12.3 Dimensions: 6213 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 37–43–20.1859N / 122–12–21.6335W
2.12.6 Threshold Elevation: 8.2 ft
2.12.6 Touchdown Zone Elevation: 8.6 ft

2.12.1 Designation: 10R 2.12.2 True Bearing: 112 2.12.3 Dimensions: 6213 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 37-43-43.3496N / 122-13-33.2487W 2.12.6 Threshold Elevation: 8 ft 2.12.6 Touchdown Zone Elevation: 8.9 ft 2.12.1 Designation: 30 2.12.2 True Bearing: 310 2.12.3 Dimensions: 10520 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 37-42-5.3755N / 122-12-51.3287W 2.12.6 Threshold Elevation: 9 ft 2.12.6 Touchdown Zone Elevation: 9 ft 2.12.1 Designation: 12 2.12.2 True Bearing: 130 2.12.3 Dimensions: 10520 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 37-43-12.2254N / 122-14-31.6144W 2.12.6 Threshold Elevation: 8.3 ft 2.12.6 Touchdown Zone Elevation: 8.6 ft 2.12.1 Designation: 15 2.12.2 True Bearing: 164 2.12.3 Dimensions: 3376 ft x 75 ft 2.12.4 PCN: 2.12.5 Coordinates: 37-44-25.0534N / 122-13-22.1141W 2.12.6 Threshold Elevation: 1.4 ft 2.12.6 Touchdown Zone Elevation: 4.6 ft 2.12.1 Designation: 33 2.12.2 True Bearing: 344 2.12.3 Dimensions: 3376 ft x 75 ft 2.12.4 PCN: 2.12.5 Coordinates: 37-43-52.9059N / 122-13-10.8261W 2.12.6 Threshold Elevation: 3.9 ft 2.12.6 Touchdown Zone Elevation: 4.6 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 28R
2.13.2 Take-off Run Available: 5457
2.13.3 Take-off Distance Available: 5457
2.13.4 Accelerate-Stop Distance Available: 5457
2.13.5 Landing Distance Available: 5457

2.13.1 Designation: 10L2.13.2 Take-off Run Available: 5457

2.13.3 Take-off Distance Available: 5457 2.13.4 Accelerate-Stop Distance Available: 5336 2.13.5 Landing Distance Available: 5336 2.13.1 Designation: 28L 2.13.2 Take-off Run Available: 6213 2.13.3 Take-off Distance Available: 6213 2.13.4 Accelerate–Stop Distance Available: 6213 2.13.5 Landing Distance Available: 6213 2.13.1 Designation: 10R 2.13.2 Take-off Run Available: 6213 2.13.3 Take-off Distance Available: 6213 2.13.4 Accelerate-Stop Distance Available: 6213 2.13.5 Landing Distance Available: 6213 2.13.1 Designation: 30 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 12 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 15 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate-Stop Distance Available: 2.13.5 Landing Distance Available:

2.13.1 Designation: 33
2.13.2 Take-off Run Available:
2.13.3 Take-off Distance Available:
2.13.4 Accelerate-Stop Distance Available:
2.13.5 Landing Distance Available:

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 28R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10L 2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 28L

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 10R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 302.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 122.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 152.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 332.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 133.7752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (RWY 12/30)2.18.3 Channel: 121.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 10L/28R, 10R/28L, 15/33)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10L/28R, 10R/28L, 15/33)2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12/30) 2.18.3 Channel: 127.2 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12/30)2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10L/28R, 10R/28L, 15/33)2.18.3 Channel: 291.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 124.92.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 14E
2.19.2 ILS Identification: OAK
2.19.5 Coordinates: 37–43–28.5969N / 122–12–30.6109W
2.19.6 Site Elevation: 3.5 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 14E
2.19.2 ILS Identification: OAK
2.19.5 Coordinates: 37–43–54.5477N / 122–13–34.872W
2.19.6 Site Elevation: 3.2 ft

2.19.1 ILS Type: Glide Slope for runway 12. Magnetic variation: 14E
2.19.2 ILS Identification: AAZ
2.19.5 Coordinates: 37–43–2.9271N / 122–14–22.8372W
2.19.6 Site Elevation: 3.2 ft

2.19.1 ILS Type: Localizer for runway 12. Magnetic variation: 14E
2.19.2 ILS Identification: AAZ
2.19.5 Coordinates: 37–42–2.2566N / 122–12–46.6504W
2.19.6 Site Elevation: 7.2 ft

2.19.1 ILS Type: DME for runway 30. Magnetic variation: 14E
2.19.2 ILS Identification: INB
2.19.5 Coordinates: 37–43–33.0786N / 122–14–59.0097W
2.19.6 Site Elevation: 22.7 ft

2.19.1 ILS Type: Glide Slope for runway 30. Magnetic variation: 14E
2.19.2 ILS Identification: INB
2.19.5 Coordinates: 37-42-9.7498N / 122-13-5.6377W
2.19.6 Site Elevation: 4.1 ft

2.19.1 ILS Type: Localizer for runway 30. Magnetic variation: 14E
2.19.2 ILS Identification: INB
2.19.5 Coordinates: 37–43–29.8615N / 122–14–58.0858W
2.19.6 Site Elevation: 9.3 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 17E
2.19.2 Navigation Aid Identification: OAK
2.19.5 Coordinates: 37–43–33.332N / 122–13–24.9305W
2.19.6 Site Elevation: 13.2 ft

#### **General Remarks:**

100 FT LGTD MICROWAVE ANT TWR LCTD 1320 FT WSW OF OAK VORTAC; S OF UPWIND END OF RWY 28L.

TWY A, E, G, H BTN RWY 28R AND TWY C MAX ACFT WT 150,000 LBS.

PREFERENTIAL RWY USE PROGRAM IN EFFECT 2200–0600. NORTH FLD PREF ARR RWY 28L, NORTH FLD PREF DEP RWYS 10R OR 28R. IF THESE RWYS UNACCEPTABLE FOR SAFETY OR ATC INSTRN THEN RWY 12/30 MUST BE USED.

TWY C BTN TWY G & J MAX ACFT WEIGHT 90,000 LBS SINGLE; 144,000 LBS DUAL; 257,000 LBS TANDEM.

400 FT BY 220 FT BLAST PAD RWY 12 AND RWY 30.

TWY P MAX ACFT WT 116,000 LBS SINGLE; 190,000 LBS DUAL; 305,000 LBS DUAL TANDEM; 735,000 LBS DOUBLE DUAL TANDEM.

NOISE ABATEMENT PROCS N/A IN EMERGS OR WHENEVER RWY 12/30 IS CLSD DUE TO MAINT, SAFETY, WINDS OR WX.

RWY 15/33 CLSD TO ACR ACFT.

FOR NOISE ABATEMENT INFO CTC NOISE ABATEMENT OFC AT (510) 563-6463.

TWY C BTN RWY 28R & TWY G AND TWYS B, J, AND D MAX ACFT WT 861,000 LBS.

TWY K BTN TWY J AND INT TWYS F, L, K MAX ACFT WT 33000 LBS SINGLE; 45000 LBS DUAL; TANDEM NA.

24 HR NOISE ABATEMENT PROCEDURE – TBJT AND TURBOFAN PWRD ACFT, TURBOROPS OVER 17,000 LBS, FOUR–ENGINE RECIPROCATING PWRD ACFT, AND SURPLUS MIL ACFT OVER 12,500 POUNDS SHOULD NOT DEP RWYS 28L & 28R OR LAND ON RWYS 10R & 10L.

TWY C BTN TWY J & F MAX ACFT WEIGHT 76,000 LBS SINGLE; 115,000 LBS DUAL; 257,000 LBS TANDEM (DUAL TANDEM NA).

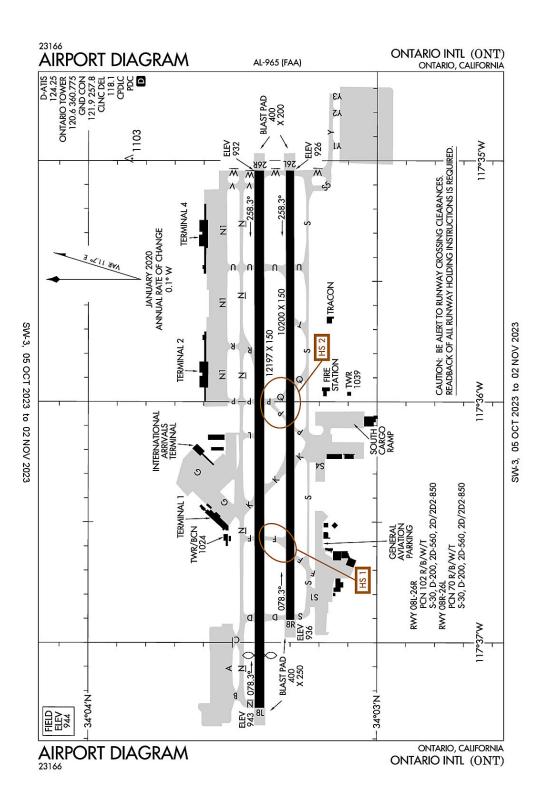
RWYS 30, 28R AND RWY 28L DIST RMNG SIGNS L SIDE.

ACFT WITH EXPERIMENTAL OR LTD CERTIF HAVING OVER 1000 HORSEPOWER OR 4000 LBS ARE RSTRD TO RWY 12/30.

BIRDS ON & INVOF ARPT.

TWY G & H BTN RWY 28L & 28R: MAX ACFT WT 12,500 LBS.

TWY K BTN TWY D & INT TWYS F, L, K MAX ACFT WEIGHT 56,000 LBS SINGLE; 70,000 LBS DUAL; 130,000 LBS TANDEM.



# Ontario, California Ontario International ICAO Identifier KONT

# Ontario, CA Ontario Intl ICAO Identifier KONT

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 34–3–21.651N / 117–36–4.275W 2.2.2 From City: 2 miles E of ONTARIO, CA 2.2.3 Elevation: 944.1 ft 2.2.5 Magnetic Variation: 12E (2020) 2.2.6 Airport Contact: ATIF ELKADI 1923 EAST AVION STREET ONTARIO, CA 91761 (909–544–5432) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,J2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08L
2.12.2 True Bearing: 90
2.12.3 Dimensions: 12197 ft x 150 ft
2.12.4 PCN: 102 R/B/W/T
2.12.5 Coordinates: 34–3–24.7651N / 117–37–22.1586W
2.12.6 Threshold Elevation: 943.2 ft
2.12.6 Touchdown Zone Elevation: 944.1 ft

2.12.1 Designation: 26R
2.12.2 True Bearing: 270
2.12.3 Dimensions: 12197 ft x 150 ft
2.12.4 PCN: 102 R/B/W/T
2.12.5 Coordinates: 34–3–24.8259N / 117–34–57.2057W
2.12.6 Threshold Elevation: 931.8 ft
2.12.6 Touchdown Zone Elevation: 931.8 ft

2.12.1 Designation: 08R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 10200 ft x 150 ft
2.12.4 PCN: 70 R/B/W/T
2.12.5 Coordinates: 34–3–17.8579N / 117–36–58.4219W
2.12.6 Threshold Elevation: 936 ft
2.12.6 Touchdown Zone Elevation: 936 ft

2.12.1 Designation: 26L 2.12.2 True Bearing: 270 2.12.3 Dimensions: 10200 ft x 150 ft 2.12.4 PCN: 70 R/B/W/T 2.12.5 Coordinates: 34–3–17.9013N / 117–34–57.1985W 2.12.6 Threshold Elevation: 926.2 ft 2.12.6 Touchdown Zone Elevation: 926.2 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 08L
2.13.2 Take-off Run Available: 12197
2.13.3 Take-off Distance Available: 12197
2.13.4 Accelerate-Stop Distance Available: 12197
2.13.5 Landing Distance Available: 11200

2.13.1 Designation: 26R

2.13.2 Take–off Run Available: 12197

2.13.3 Take-off Distance Available: 12197

2.13.4 Accelerate–Stop Distance Available: 12197

2.13.5 Landing Distance Available: 12197

2.13.1 Designation: 08R

2.13.2 Take-off Run Available: 10200

2.13.3 Take-off Distance Available: 10200

2.13.4 Accelerate–Stop Distance Available: 10200

2.13.5 Landing Distance Available: 10200

2.13.1 Designation: 26L

2.13.2 Take-off Run Available: 10200

2.13.3 Take-off Distance Available: 10200

2.13.4 Accelerate-Stop Distance Available: 10200

2.13.5 Landing Distance Available: 10200

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 08L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: ALSF2

2.14.4 Visual Approach Slope Indicator System: P4R

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 118.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 124.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 120.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 360.7752.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 08L. Magnetic variation: 12E
2.19.2 ILS Identification: AOD
2.19.5 Coordinates: 34–3–21.2425N / 117–36–59.9428W
2.19.6 Site Elevation: 935.9 ft

2.19.1 ILS Type: Localizer for runway 08L. Magnetic variation: 12E
2.19.2 ILS Identification: AOD
2.19.5 Coordinates: 34–3–24.8274N / 117–34–45.0837W
2.19.6 Site Elevation: 929.1 ft

2.19.1 ILS Type: DME for runway 26R. Magnetic variation: 12E2.19.2 ILS Identification: ONT2.19.5 Coordinates: 34–3–22.0428N / 117–37–33.7049W

2.19.6 Site Elevation: 955 ft

2.19.1 ILS Type: Glide Slope for runway 26R. Magnetic variation: 12E
2.19.2 ILS Identification: ONT
2.19.5 Coordinates: 34–3–22.0256N / 117–35–11.0293W
2.19.6 Site Elevation: 925.2 ft

2.19.1 ILS Type: Localizer for runway 26R. Magnetic variation: 12E
2.19.2 ILS Identification: ONT
2.19.5 Coordinates: 34–3–24.7616N / 117–37–34.6764W
2.19.6 Site Elevation: 946.2 ft

2.19.1 ILS Type: DME for runway 26L. Magnetic variation: 12E
2.19.2 ILS Identification: TWO
2.19.5 Coordinates: 34–3–20.4777N / 117–37–8.8646W
2.19.6 Site Elevation: 947.7 ft

2.19.1 ILS Type: Glide Slope for runway 26L. Magnetic variation: 12E
2.19.2 ILS Identification: TWO
2.19.5 Coordinates: 34–3–21.9048N / 117–35–11.0216W
2.19.6 Site Elevation: 925.2 ft

2.19.1 ILS Type: Inner Marker for runway 26L. Magnetic variation: 12E
2.19.2 ILS Identification: TWO
2.19.5 Coordinates: 34–3–17.924N / 117–34–47.8618W
2.19.6 Site Elevation: 923.6 ft

2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 12E
2.19.2 ILS Identification: TWO
2.19.5 Coordinates: 34–3–17.8524N / 117–37–10.2711W
2.19.6 Site Elevation: 931.1 ft

#### **General Remarks:**

ALL MILITARY AND GENERAL AVIATION (FIXED OR ROTOR WING) ACFT OPS ARE RESTRICTED TO FBO FACILITIES WITH ADVANCE COORDINATION; OVERNIGHT TIEDOWN AND PARKING FEE.

PILOTS SHOULD USE JUDGEMENTAL OVERSTEER ON TWY S-4.

ACFT PRKG AND CONTR GND SVCS ARE LTD FOR UNSKED OPS. FOR SKED INFO CALL AIRFIELD OPS (909) 214–7682/7683.

EASTBOUND B747, B777, A330, A340 OR LARGER ACFT ON TWY S PROHIBITED FROM NORTHBOUND TURNS ONTO TWY K.

TWY S-4 RSTD TO ACFT WITH WINGSPAN 117 FT OR SMALLER.

FBO ON FREQ 130.75.

B747, B777, A330, A340 OR LARGER ACFT ON TWY S PROHIBITED FROM NORTHBOUND TURNS ONTO TWY P.

NOISE ABATEMENT PROCEDURES IN EFFECT; FULL–LENGTH TURBOJET DEP ENCOURAGED, NIGHTLY PREFERENTIAL RWY USAGE, 2200–0700.

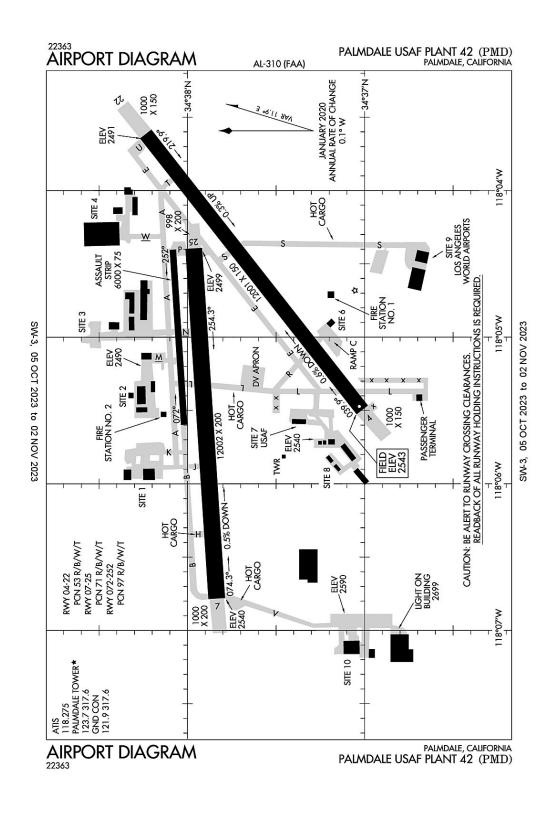
TWY Y EAST OF TWY W IS A NON-MOVEMENT AREA; ALL ACFT CTC RAMP CTL 131.325 FOR ACCESS.

PTNS OF TWY S IN THE VCY OF TWY F ARE NOT VSB FM ATCT; PILOTS USE CTN ENTERING TWY F SOUTH OF TWY S.

WILDLIFE HAZARD MGT PLAN IN EFFECT; POTENTIAL BIRD HAZARDS MAY EXIST ON AND INVOF ARPT; BE ALERT TO LARGE NUMBERS OF STARLINGS AND CROWS POSSIBLE ON APCH TO RY 26L AND RY 26R, HAWKS, EAGLES, FALCONS AND OWLS SPOTTED ON OCCASION.

ACFT ACCESS TO TWY R FROM RWY 26R PROHIBITED

TWY F SOUTH OF TWY S RSTRD TO ACFT WITH 117 FT WINGSPAN AND SMALLER. TWY F SOUTH OF RWY 26L RSTRD TO ACFT WITH 180 FT WINGSPAN.



Palmdale, California Palmdale Regional/USAF Plant 42 ICAO Identifier KPMD

AD 2–98 5 OCT 23

# Palmdale, CA Palmdale Rgnl/USAF Plant 42 ICAO Identifier KPMD

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 34–37–45.8N / 118–5–4.39W 2.2.2 From City: 3 miles NE of PALMDALE, CA 2.2.3 Elevation: 2542.5 ft 2.2.5 Magnetic Variation: 12E (2020) 2.2.6 Airport Contact: MATT FISHER 2503 E AVE P PALMDALE, CA 93550 (661–275–9342) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, 1330–0600Z++ Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types:2.4.5 Hangar Space:2.4.6 Repair Facilities: None

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: None2.6.2 Rescue and Firefighting Services: None

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 04 2.12.2 True Bearing: 52 2.12.3 Dimensions: 12001 ft x 150 ft 2.12.4 PCN: 53 R/B/W/T 2.12.5 Coordinates: 34–37–0.842N / 118–5–29.802W 2.12.6 Threshold Elevation: 2542.5 ft 2.12.6 Touchdown Zone Elevation: 2542.5 ft

2.12.1 Designation: 22 2.12.2 True Bearing: 232 2.12.3 Dimensions: 12001 ft x 150 ft 2.12.4 PCN: 53 R/B/W/T 2.12.5 Coordinates: 34–38–14.236N / 118–3–36.966W 2.12.6 Threshold Elevation: 2491.1 ft 2.12.6 Touchdown Zone Elevation: 2497.9 ft

2.12.1 Designation: 25 2.12.2 True Bearing: 266 2.12.3 Dimensions: 12002 ft x 200 ft 2.12.4 PCN: 71 R/B/W/T 2.12.5 Coordinates: 34–37–57.991N / 118–4–23.743W 2.12.6 Threshold Elevation: 2498.7 ft 2.12.6 Touchdown Zone Elevation: 2503.4 ft 2.12.1 Designation: 07
2.12.2 True Bearing: 86
2.12.3 Dimensions: 12002 ft x 200 ft
2.12.4 PCN: 71 R/B/W/T
2.12.5 Coordinates: 34–37–50.106N / 118–6–47.029W
2.12.6 Threshold Elevation: 2540.2 ft
2.12.6 Touchdown Zone Elevation: 2540.2 ft

2.12.1 Designation: 252 2.12.2 True Bearing: 2.12.3 Dimensions: 6000 ft x 75 ft 2.12.4 PCN: 97 R/B/W/T 2.12.5 Coordinates: -- / --2.12.6 Threshold Elevation: ft 2.12.6 Touchdown Zone Elevation: ft

2.12.1 Designation: 072
2.12.2 True Bearing:
2.12.3 Dimensions: 6000 ft x 75 ft
2.12.4 PCN: 97 R/B/W/T
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 042.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 222.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 252.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 072.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 2522.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 0722.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 042.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 222.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 252.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 072.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 2522.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 0722.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 118.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: OPR 1330–0600Z++.

2.18.1 Service Designation: GND/P2.18.3 Channel: 317.62.18.5 Hours of Operation: OPR 1330–0600Z++.

2.18.1 Service Designation: LCL/P2.18.3 Channel: 123.72.18.5 Hours of Operation: OPR 1330–0600Z++.

2.18.1 Service Designation: LCL/P2.18.3 Channel: 317.62.18.5 Hours of Operation: OPR 1330–0600Z++.

2.18.1 Service Designation: LCL/S2.18.3 Channel: 236.62.18.5 Hours of Operation: OPR 1330–0600Z++.

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 25. Magnetic variation: 12E
2.19.2 ILS Identification: PMD
2.19.5 Coordinates: 34–38–1.256N / 118–4–40.078W
2.19.6 Site Elevation: 2491.8 ft

2.19.1 ILS Type: Localizer for runway 25. Magnetic variation: 12E
2.19.2 ILS Identification: PMD
2.19.5 Coordinates: 34–37–48.786N / 118–7–10.911W
2.19.6 Site Elevation: 2552.2 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 15E
2.19.2 Navigation Aid Identification: PMD
2.19.5 Coordinates: 34–37–53.0341N / 118–3–49.7607W
2.19.6 Site Elevation: 2498 ft

**General Remarks:** PRKG RAMP LCTD S OF RWY 22 & TWY V NOT VSB FM ATCT.

MISC: COMSEC STORAGE UNAVBL.

MISC: WINDS ARE EST DUE TO FMQ–13 WIND SENSORS BEING ACCURATE TO WITHIN ONLY +/- 2 KT. ATC/WX WILL NOT INCL/RELAY WIND CORR INTO FCST/PHRASEOLOGY. THEREFORE, AIRCREWS WILL INCORPORATE A +/- 2 KT ACCURACY INTO THEIR DECISION MAKING PROCESS FOR FLYING OPR.

CAUTION: RWY 25 NSTD MRK: SPOT LDG ZONE MRK LCTD AT 6000 FT REMAINING MRK. RWY 07–25 DECEPTIVE SFC MRK EXCEED STANDARD BY APPROX 50 FT.

ALL DEPT ACFT MUST FILE FPL WITH P42 AFLD MGMT OPS.

MISC: BASE OPS OPR 1330-0600Z++, CLSD FEDERAL HOL.

CAUTION: USE EXTREME CAUTION FOR UNMANNED AERIAL SYSTEMS (UAS) OPS IN VCNTY.

MILITARY USE: ASSAULT LDG ZONE LCTD 1ST 6,000 EAST END OF TWY B. RWY 252 MRK ONLY FOR C-130 ASSAULT OPR; ONE–WAY LDG ONLY.

RSTD: OVERNIGHT PRK UNAUTHD ON C-RAMP.

TRAN ALERT (2 OF 2): UNABLE TO SVC ACFT WITH ORDNANCE. LTD GRD SUPPORT EQUIPMENT AVBL. NO POTABLE WATER SVC. NO TRAN MAINT AVBL. GND SVC UNAVBL WHEN LIGHTNING WITHIN 5 NM.

CAUTION: CONTRACTOR LEASED SITES ARE INTENDED FOR ACFT BASED THEREIN; ENTRY GATES AND APRONS MAY NOT MEET AF OBST STDS.

BIRD HAZ POTENTIAL EXISTS. MIGRATORY SEASON PHASE II 1 OCT – 31 MAR. DURG BWC MODERATE, TKOF AND LNDG PERMITTED. DURG BWC SEVERE, TKOF AND LNDG PROHIBITED.

FUEL: A++ AVBL. NO TRANS ACFT FUEL SVC AVBL. LTD FUELING AVBL; GOVT ACFT ONLY 1600–2300Z++ MON–FRI. 24 HR PN WITH AFLD MGR RQR; NO SAME DAY REQ; GAS AND GO UNAVBL. EXPECT 2+ HR DELAY FOR FUEL.

RSTD – OFFL BUS ONLY. MIL ARPT. CIVIL USE RQR USAF APVL AND DD FORM 2400/01/02. PPR RQR FOR FULL STOP LDG ONLY. CALL C661–275–9342.

SERVICE-JASU: POWER CARS UNAVBL.

DRAINAGE DITCHES PARL RWY 22 FM TWY S TO TWY U.

MISC: FLT PLANS MUST BE FILED AND ACTIVATED WITH P42 AFLD MGMT. USE FLT SVC WHEN P42 AFLD MGMT CLSD.

CAUTION: VARIOUS ACFT TEST OPS MARKINGS PAINTED IN WHITE ON TAXIWAY UNIFORM.

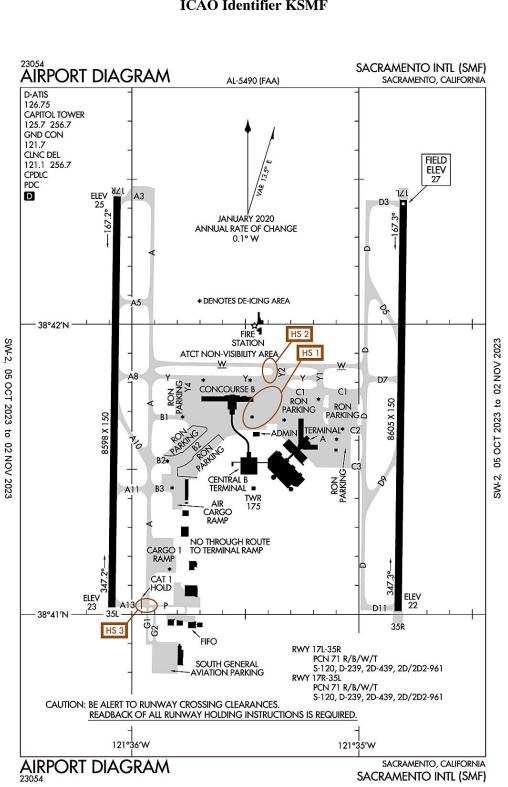
CAUTION: CIV ACFT MAY NOT BE GRANTED ACCESS TO KPMD CLASS D FOR PRACTICE APCH OR TRSN OVER ARPT BDRYS.

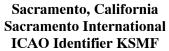
TRAN ALERT (1 OF 2): NO FLEET SVC AVBL. NO FLW ME SVC AVBL. EXP PROGRESSIVE TAXI TO PRK. AIRCREW RESPONSIBLE FOR ACFT PINNING/SAFING.

UNLGT OBSTN SURROUND AFLD.

MISC: INDUS INSTLN – NO TRNSPN, LODGING OR NML SVC AVBL ON SITE.

RSTD: TWY L BTN RWY 04/22 AND PAX TRML UNLGTD AND USABLE FOR DAYLT VFR ONLY.





# Sacramento, CA Sacramento Intl ICAO Identifier KSMF

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 38–41–43.6N / 121–35–26.8W
2.2.2 From City: 10 miles NW of SACRAMENTO, CA
2.2.3 Elevation: 26.9 ft
2.2.5 Magnetic Variation: 13E (2020)
2.2.6 Airport Contact: SHERI THOMPSON–DUARTE 6900 AIRPORT BLVD SACRAMENTO, CA 95837 ((916) 874–0560)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MINOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 17L
2.12.2 True Bearing: 181
2.12.3 Dimensions: 8605 ft x 150 ft
2.12.4 PCN: 71 R/B/W/T
2.12.5 Coordinates: 38-42-25.6973N / 121-34-48.2125W
2.12.6 Threshold Elevation: 26.9 ft
2.12.6 Touchdown Zone Elevation: 26.9 ft

2.12.1 Designation: 35R 2.12.2 True Bearing: 1 2.12.3 Dimensions: 8605 ft x 150 ft 2.12.4 PCN: 71 R/B/W/T 2.12.5 Coordinates: 38–41–0.6506N / 121–34–49.642W 2.12.6 Threshold Elevation: 22.1 ft 2.12.6 Touchdown Zone Elevation: 23.8 ft

2.12.1 Designation: 17R
2.12.2 True Bearing: 181
2.12.3 Dimensions: 8598 ft x 150 ft
2.12.4 PCN: 71 R/B/W/T
2.12.5 Coordinates: 38–42–26.4236N / 121–36–3.8961W
2.12.6 Threshold Elevation: 24.8 ft
2.12.6 Touchdown Zone Elevation: 25.3 ft

2.12.1 Designation: 35L 2.12.2 True Bearing: 1 2.12.3 Dimensions: 8598 ft x 150 ft 2.12.4 PCN: 71 R/B/W/T 2.12.5 Coordinates: 38–41–1.439N / 121–36–5.3075W 2.12.6 Threshold Elevation: 22.5 ft 2.12.6 Touchdown Zone Elevation: 23.9 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 17L
2.13.2 Take-off Run Available: 8605
2.13.3 Take-off Distance Available: 8605
2.13.4 Accelerate-Stop Distance Available: 8605
2.13.5 Landing Distance Available: 8605

2.13.1 Designation: 35R2.13.2 Take-off Run Available: 8605

2.13.3 Take–off Distance Available: 8605

2.13.4 Accelerate–Stop Distance Available: 8605

2.13.5 Landing Distance Available: 8605

2.13.1 Designation: 17R

2.13.2 Take-off Run Available: 8598

2.13.3 Take–off Distance Available: 8598

2.13.4 Accelerate–Stop Distance Available: 8598

2.13.5 Landing Distance Available: 8598

2.13.1 Designation: 35L

2.13.2 Take-off Run Available: 8598

2.13.3 Take-off Distance Available: 8598

2.13.4 Accelerate–Stop Distance Available: 8598

2.13.5 Landing Distance Available: 8598

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 17L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 17R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 35L2.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4R

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 256.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 126.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 256.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 256.72.18.5 Hours of Operation: 24

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 17L. Magnetic variation: 13E
2.19.2 ILS Identification: MDK
2.19.5 Coordinates: 38–40–50.2189N / 121–34–46.3009W
2.19.6 Site Elevation: 30.9 ft

2.19.1 ILS Type: Glide Slope for runway 17L. Magnetic variation: 13E
2.19.2 ILS Identification: MDK
2.19.5 Coordinates: 38-42-15.18N / 121-34-43.22W
2.19.6 Site Elevation: 21.7 ft

2.19.1 ILS Type: Localizer for runway 17L. Magnetic variation: 13E
2.19.2 ILS Identification: MDK
2.19.5 Coordinates: 38-40-50.67N / 121-34-49.81W
2.19.6 Site Elevation: 17.4 ft

2.19.1 ILS Type: DME for runway 17R. Magnetic variation: 13E 2.19.2 ILS Identification: SMF

2.19.5 Coordinates: 38-40-34.7038N / 121-36-3.046W 2.19.6 Site Elevation: 34 ft 2.19.1 ILS Type: Glide Slope for runway 17R. Magnetic variation: 13E 2.19.2 ILS Identification: SMF 2.19.5 Coordinates: 38-42-15.8608N / 121-36-9.106W 2.19.6 Site Elevation: 22.9 ft 2.19.1 ILS Type: Inner Marker for runway 17R. Magnetic variation: 13E 2.19.2 ILS Identification: SMF 2.19.5 Coordinates: 38-42-34.0974N / 121-36-3.7746W 2.19.6 Site Elevation: 23 ft 2.19.1 ILS Type: Localizer for runway 17R. Magnetic variation: 13E 2.19.2 ILS Identification: SMF 2.19.5 Coordinates: 38-40-35.7492N / 121-36-5.7322W 2.19.6 Site Elevation: 19.6 ft 2.19.1 ILS Type: DME for runway 35L. Magnetic variation: 13E 2.19.2 ILS Identification: HUX 2.19.5 Coordinates: 38-40-34.7038N / 121-36-3.046W 2.19.6 Site Elevation: 34 ft

2.19.1 ILS Type: Glide Slope for runway 35L. Magnetic variation: 13E
2.19.2 ILS Identification: HUX
2.19.5 Coordinates: 38-41-12.5012N / 121-36-0.0807W
2.19.6 Site Elevation: 21.7 ft

2.19.1 ILS Type: Localizer for runway 35L. Magnetic variation: 13E
2.19.2 ILS Identification: HUX
2.19.5 Coordinates: 38-42-36.65N / 121-36-3.72W
2.19.6 Site Elevation: 22 ft

# General Remarks:

WEST RAMP SPOTS 56–60 & F1 RSTRD TO TOW IN AND TOW OUT ONLY FROM TXL B2. WHEN PUSHING BACK FOR DEP FROM WEST RAMP SPOTS 56–60 & F1 EACH ACFT IS TO PUSH BACK ON TO TXL B2 AND PULL FWD TO THE "ENGINE START LINE" PRIOR TO STARTING ENGS.

CROP DUSTERS OPER INVOF ARPT AT OR BELOW 200 FT AGL.

MILITARY AIRCRAFT PARKING LIMITED. CONTACT ARPT OPNS IF PARKING IS REQUIRED (916) 806–5309.

NOISE SENSITIVE AREAS W OF ARPT ON SAC RIVER. LCL TURN DISCOURAGED FOR JET ACFT. WHEN CONDUCTING IFR APCH IN VFR CONDITIONS EXECUTE MISSED APCH AT DEP END OF RYS. PLAN VFR PATTERNS TO E. USE MIN POWER SETTINGS.

UNPAVED SFC NORTH OF TWY P AND EAST OF TWY A AND SOUTH OF CARGO 1 RAMP CLSD TO HEL.

TWY B1 CLSD TO CARGO ACFT.

PORTION OF TWY W 500 FT EAST OF TWY A TO 2100 FT EAST OF TWY A IS NOT VISIBLE FROM ATCT.

TWY Y4 RESTRICTED TO AIRCRAFT WITH A WINGSPAN OF LESS THAN 118 FT (GROUP III).

ALL ACFT CTC ATC GND CTL PRIOR TO MOVEMENT ON RAMP.

TWY RMK #2: THE MAXIMUM ALLOWABLE GROSS AIRCRAFT LOAD FOR TWYS G1, G2, AND THE GENERAL AVIATION PARKING APRON IS: 70,000 LBS FOR SINGLE GEAR AIRCRAFT; 170,000 LBS FOR DUAL GEAR AIRCRAFT; AND 250,000 LBS FOR DUAL TANDEM GEAR AIRCRAFT.

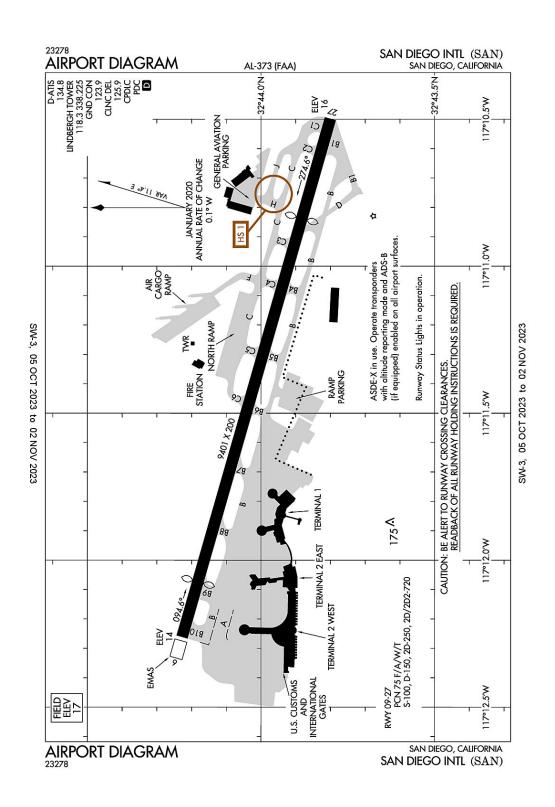
FAA GWT STRENGTH EVALUATION MD-11 = 590,000 LBS.

ACFT MUST PUSH BACK TAIL TO THE NORTH FROM TRML GATES A1, A3 AND A5.

GND VEHICLE SURVEILLANCE SYS IN USE. OPR TRANSPONDERS WITH ALT RPRTG MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AP SFCS.

BIRDS ON AND IN VICINITY OF ARPT.

TWY RMK #2 CONT'D: AN AIRCRAFT CANNOT EXCEED THE AIRPLANE DESIGN GROUP III CRITERIA AND MUST HAVE A WHEEL BASE OF LESS THAN 60 FT.



# San Diego, California San Diego International ICAO Identifier KSAN

# San Diego, CA San Diego Intl ICAO Identifier KSAN

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 32–44–0.826N / 117–11–22.788W
2.2.2 From City: 2 miles W of SAN DIEGO, CA
2.2.3 Elevation: 16.8 ft
2.2.5 Magnetic Variation: 11E (2020)
2.2.6 Airport Contact: DEAN ROBBINS 3225 N HARBOR DRIVE SAN DIEGO, CA 92101 (619–400–2718)
2.2.7 Traffic: UED (MED)

2.2.7 Traffic: IFR/VFR

## AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MINOR

#### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–D

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 27 2.12.2 True Bearing: 286 2.12.3 Dimensions: 9401 ft x 200 ft 2.12.4 PCN: 75 F/A/W/T 2.12.5 Coordinates: 32–43–48.0054N / 117–10–29.8979W 2.12.6 Threshold Elevation: 16.4 ft 2.12.6 Touchdown Zone Elevation: 16.8 ft

2.12.1 Designation: 09 2.12.2 True Bearing: 106 2.12.3 Dimensions: 9401 ft x 200 ft 2.12.4 PCN: 75 F/A/W/T 2.12.5 Coordinates: 32–44–13.6407N / 117–12–15.6832W 2.12.6 Threshold Elevation: 13.9 ft 2.12.6 Touchdown Zone Elevation: 16.7 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 27
2.13.2 Take-off Run Available: 9401
2.13.3 Take-off Distance Available: 9401
2.13.4 Accelerate-Stop Distance Available: 9401
2.13.5 Landing Distance Available: 7591

2.13.1 Designation: 09
2.13.2 Take-off Run Available: 8280
2.13.3 Take-off Distance Available: 9401
2.13.4 Accelerate-Stop Distance Available: 8280
2.13.5 Landing Distance Available: 7280

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 272.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 092.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 125.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 134.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 123.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 338.2252.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 09. Magnetic variation: 11E
2.19.2 ILS Identification: SAN
2.19.5 Coordinates: 32–43–46.8256N / 117–10–28.5519W
2.19.6 Site Elevation: 34 ft

2.19.1 ILS Type: Glide Slope for runway 09. Magnetic variation: 11E
2.19.2 ILS Identification: SAN
2.19.5 Coordinates: 32-44-10.7741N / 117-11-52.1594W
2.19.6 Site Elevation: 13.1 ft

2.19.1 ILS Type: Localizer for runway 09. Magnetic variation: 11E
2.19.2 ILS Identification: SAN
2.19.5 Coordinates: 32–43–47.605N / 117–10–28.2382W
2.19.6 Site Elevation: 26.4 ft

2.19.1 ILS Type: DME for runway 27. Magnetic variation: 11E
2.19.2 ILS Identification: UBR
2.19.5 Coordinates: 32–44–11.4186N / 117–12–19.9319W
2.19.6 Site Elevation: 25.9 ft

2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 11E
2.19.2 ILS Identification: UBR
2.19.5 Coordinates: 32–44–14.7918N / 117–12–20.4335W
2.19.6 Site Elevation: 10.9 ft

#### **General Remarks:**

CROSS-BLEED ENGINE STARTS PERMITTED ONLY ON PARALLEL TWY WITH ACFT ALIGNED ON TWY CNTRLN.

RWY STATUS LGTS IN OPN.

DEP CURFEW IN EFCT. DEPS PROHIBITED 2330–0630. SGFNT FINES. MED FLTS EXEMPT WITH FORM. NOISE OFC 619–400–2660.

747 AND LARGER ACFT ARE PROHIBITED FM MAKING INTERSECTION TKOFS.

INTERMITTENT PRESENCE OF BIRDS ON AND INVOF OF ARPT.

ACFT WITH WINGSPANS GTR THAN 171 FT (52M) RSTD FROM USING TWY D SOUTH OF TWY B, AND WHEN EXITING RWY 09 WB ON TWY B.

DUE TO PAEW ON RY 09–27, 30 MINUTE PPR 0830–1230Z FOR ALL LANDINGS AND DEPARTURES CALL 619–400–2710.

IN THE EVENT OF A DIVERSION OR IRREGULAR OPERATIONS EVENTS, ACFT OPERATORS CONTACT THE APT DUTY MGR (619) 400–2710 FOR PPR DUE TO LIMITATIONS ASSOCIATED WITH HANDLING DIVERTED FLTS. LIMITATIONS INCLUDE RESTRICTED GATE SPACE, CUSTOMS SERVICES AS WELL AS ACFT SERVICING & PARKING.

MILITARY ACFT ON OFFICIAL BUSINESS ONLY CONTACT ARPT OPS AT 619-400-2710 FOR PPR.

TERRAIN & BLDGS TO 500' MSL N & E WITHIN 1 1/2 MI.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

PILOTS REQUIRED TO CTC ATCT GROUND CONTROLLER PRIOR TO PUSHBACK, TOW OUT AND TAXI FOR TRAFFIC ADVISORIES.

30 MIN PPR (619–400–2710) FOR ACFT WITH OVER 171 FT WINGSPAN.

ACFT CROSSING RY 09/27 ON TWY C6, HOLD SHORT OF TWY C6 FACING WEST ON TWY C, PARALLEL TO RY.

ULTRALIGHT ACFT PROHIBITED ON AP.

TAXIING ACFT ARE PROHIBITED FROM PASSING TO THE SOUTH OF ACFT LCTD ON TWY B INTO ALLEY LCTD BTWN GATES 7 AND 14.

TAXILANE A RSTRD TO ACFT WITH WINGSPANS OF 135 FT OR LESS.

TWY C EDGE LGTS OTS INDEFLY.

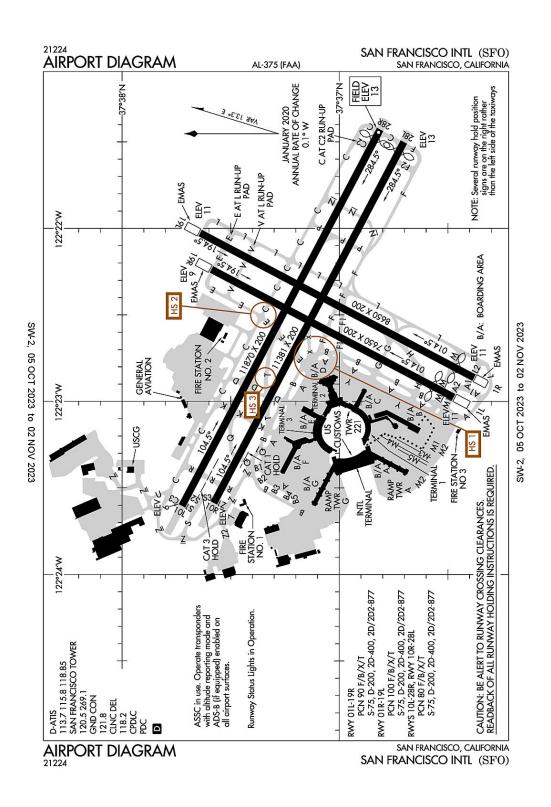
OUTBOARD ENGINES OF FOUR-ENGINE ACFT ARE TO BE KEPT AT IDLE POWER FOR ALL GND MANEUVERING.

TAXIING ACFT SHALL FOLLOW LEAD–IN LINES UNTIL THE NOSE WHEEL OF THE ACFT HAS ENTERED THE NON–MOVEMENT AREA OF THE ALLEY.

TO REDUCE JET BLAST IMPACT AT N END OF TWY F ACFT WILL NOT START ENG UNTIL 800 FT FM N END OF TWY F; ABEAM THE SECOND PARKING PAD.

PRACTICE APPROACHES AND TGL PROHIBITED.

FOR ACCESS TO/FR TERMINAL 2: GATES 23, 25, 27, 29, 31, 33–51 AND THE ISLAND AND WEST RON PRKG RAMPS, CTC RAMP CTL ON 129.775 SRY 131.975 FR 0600–2400. FR 0000–0600 CTC GROUND CTL ON 123.9.



# San Francisco, California San Francisco International ICAO Identifier KSFO

AD 2–115 5 OCT 23

# San Francisco, CA San Francisco Intl ICAO Identifier KSFO

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 37–37–7.7N / 122–22–31.5W
2.2.2 From City: 8 miles SE of SAN FRANCISCO, CA
2.2.3 Elevation: 13.1 ft
2.2.5 Magnetic Variation: 14E (2015)
2.2.6 Airport Contact: IVAR SATERO PO BOX 8097 SAN FRANCISCO, CA 94128 ((650) 821–3355)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A++2.4.5 Hangar Space: YES2.4.6 Repair Facilities: NONE

# **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 01L
2.12.2 True Bearing: 28
2.12.3 Dimensions: 7650 ft x 200 ft
2.12.4 PCN: 90 F/B/X/T
2.12.5 Coordinates: 37–36–28.4323N / 122–22–58.5426W
2.12.6 Threshold Elevation: 10.7 ft
2.12.6 Touchdown Zone Elevation: 10.9 ft

2.12.1 Designation: 19R
2.12.2 True Bearing: 208
2.12.3 Dimensions: 7650 ft x 200 ft
2.12.4 PCN: 90 F/B/X/T
2.12.5 Coordinates: 37–37–35.3329N / 122–22–14.1939W
2.12.6 Threshold Elevation: 9.2 ft
2.12.6 Touchdown Zone Elevation: 11.2 ft

2.12.1 Designation: 01R
2.12.2 True Bearing: 28
2.12.3 Dimensions: 8650 ft x 200 ft
2.12.4 PCN: 100 F/B/X/T
2.12.5 Coordinates: 37–36–22.7876N / 122–22–51.7467W
2.12.6 Threshold Elevation: 11.4 ft
2.12.6 Touchdown Zone Elevation: 11.2 ft

2.12.1 Designation: 19L

2.12.2 True Bearing: 208 2.12.3 Dimensions: 8650 ft x 200 ft 2.12.4 PCN: 100 F/B/X/T 2.12.5 Coordinates: 37-37-38.4319N / 122-22-1.599W 2.12.6 Threshold Elevation: 10.5 ft 2.12.6 Touchdown Zone Elevation: 11 ft 2.12.1 Designation: 10L 2.12.2 True Bearing: 118 2.12.3 Dimensions: 11870 ft x 200 ft 2.12.4 PCN: 80 F/B/X/T 2.12.5 Coordinates: 37-37-43.4594N / 122-23-36.2107W 2.12.6 Threshold Elevation: 5.5 ft 2.12.6 Touchdown Zone Elevation: 7 ft 2.12.1 Designation: 28R 2.12.2 True Bearing: 298 2.12.3 Dimensions: 11870 ft x 200 ft 2.12.4 PCN: 80 F/B/X/T 2.12.5 Coordinates: 37-36-48.721N / 122-21-25.708W 2.12.6 Threshold Elevation: 13 ft 2.12.6 Touchdown Zone Elevation: 12.9 ft 2.12.1 Designation: 10R 2.12.2 True Bearing: 118 2.12.3 Dimensions: 11381 ft x 200 ft 2.12.4 PCN: 80 F/B/X/T 2.12.5 Coordinates: 37-37-34.648N / 122-23-35.1796W 2.12.6 Threshold Elevation: 7.1 ft 2.12.6 Touchdown Zone Elevation: 8 ft

2.12.1 Designation: 28L 2.12.2 True Bearing: 298 2.12.3 Dimensions: 11381 ft x 200 ft 2.12.4 PCN: 80 F/B/X/T 2.12.5 Coordinates: 37–36–42.163N / 122–21–30.057W 2.12.6 Threshold Elevation: 12.6 ft 2.12.6 Touchdown Zone Elevation: 12.6 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 01L
2.13.2 Take-off Run Available: 7650
2.13.3 Take-off Distance Available: 7650
2.13.4 Accelerate-Stop Distance Available: 7650
2.13.5 Landing Distance Available: 7010

2.13.1 Designation: 19R2.13.2 Take-off Run Available: 7650

2.13.3 Take-off Distance Available: 7650 2.13.4 Accelerate-Stop Distance Available: 7650 2.13.5 Landing Distance Available: 7650 2.13.1 Designation: 01R 2.13.2 Take-off Run Available: 8650 2.13.3 Take-off Distance Available: 8650 2.13.4 Accelerate–Stop Distance Available: 8650 2.13.5 Landing Distance Available: 8090 2.13.1 Designation: 19L 2.13.2 Take-off Run Available: 8650 2.13.3 Take-off Distance Available: 8650 2.13.4 Accelerate-Stop Distance Available: 8650 2.13.5 Landing Distance Available: 8650 2.13.1 Designation: 10L 2.13.2 Take-off Run Available: 11870 2.13.3 Take-off Distance Available: 11870 2.13.4 Accelerate-Stop Distance Available: 11193 2.13.5 Landing Distance Available: 11193 2.13.1 Designation: 28R 2.13.2 Take-off Run Available: 11870 2.13.3 Take-off Distance Available: 11870 2.13.4 Accelerate-Stop Distance Available: 11870 2.13.5 Landing Distance Available: 11236 2.13.1 Designation: 10R 2.13.2 Take-off Run Available: 11381 2.13.3 Take-off Distance Available: 11381 2.13.4 Accelerate-Stop Distance Available: 10704 2.13.5 Landing Distance Available: 10704 2.13.1 Designation: 28L 2.13.2 Take-off Run Available: 11381

2.13.2 Take-off Distance Available: 11381 2.13.3 Take-off Distance Available: 11381 2.13.4 Accelerate-Stop Distance Available: 10981

2.13.5 Landing Distance Available: 10275

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 01L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 19R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01R

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 19L2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 118.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 113.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 115.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 118.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 120.5

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 19L. Magnetic variation: 14E
2.19.2 ILS Identification: SIA
2.19.5 Coordinates: 37–36–18.7188N / 122–22–59.4082W
2.19.6 Site Elevation: 20.6 ft

2.19.1 ILS Type: Glide Slope for runway 19L. Magnetic variation: 14E
2.19.2 ILS Identification: SIA
2.19.5 Coordinates: 37–37–30.7381N / 122–22–11.0577W
2.19.6 Site Elevation: 6.3 ft

2.19.1 ILS Type: Localizer for runway 19L. Magnetic variation: 14E
2.19.2 ILS Identification: SIA
2.19.5 Coordinates: 37–36–16.2796N / 122–22–56.0614W
2.19.6 Site Elevation: 19 ft

2.19.1 ILS Type: DME for runway 28R. Magnetic variation: 14E
2.19.2 ILS Identification: GWQ
2.19.5 Coordinates: 37–37–48.1978N / 122–23–40.6085W
2.19.6 Site Elevation: 17.7 ft

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 14E
2.19.2 ILS Identification: GWQ
2.19.5 Coordinates: 37–36–51.3989N / 122–21–43.1171W
2.19.6 Site Elevation: 8.2 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 14E
2.19.2 ILS Identification: GWQ
2.19.5 Coordinates: 37–37–46.3566N / 122–23–43.1194W
2.19.6 Site Elevation: 5.3 ft

2.19.1 ILS Type: DME for runway 28L. Magnetic variation: 14E
2.19.2 ILS Identification: SFO
2.19.5 Coordinates: 37–37–39.5363N / 122–23–41.4575W
2.19.6 Site Elevation: 20.3 ft

2.19.1 ILS Type: Glide Slope for runway 28L. Magnetic variation: 14E
2.19.2 ILS Identification: SFO
2.19.5 Coordinates: 37–36–51.2769N / 122–21–43.1999W
2.19.6 Site Elevation: 8.2 ft

2.19.1 ILS Type: Localizer for runway 28L. Magnetic variation: 14E
2.19.2 ILS Identification: SFO
2.19.5 Coordinates: 37–37–37.471N / 122–23–41.9198W

2.19.6 Site Elevation: 9.3 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 17E
2.19.2 Navigation Aid Identification: SFO
2.19.5 Coordinates: 37–37–10.1465N / 122–22–26.0165W
2.19.6 Site Elevation: 6 ft

#### **General Remarks:**

SEVERAL RY HOLD POSITION SIGNS ARE ON THE RIGHT RATHER THAN THE LEFT SIDE OF THE TWYS.

NOISE SENSITIVE ARPT; FOR NOISE ABATEMENT PROCEDURES CTC ARPT NOISE OFFICE MON-FRI 0800–1700 BY CALLING 650–821–5100.

RWY STATUS LGTS IN OPN.

PAEW APCH END RYS 28L, 28R, 19L INDEFLY.

TWY S BTN TWY Z AND TWY S2 CLSD TO ACFT WITH WINGSPAN OVER 215 FT.

ALL OUBD TWY ZULU 2 HVY ACFT WITH A WINGSPAN OF 171 FT OR GTR UNDER PWR PROHIBITED FROM ENTERING WB TWY ZULU.

RWY 1L CLSD TO DEPARTING TRIJET ACFT WITH WINGSPAN GREATER THAN 155 FT.

AIRLINE PILOTS SHALL STRICTLY FOLLOW THE PAINTED NOSE GEAR LINES AND NO OVERSTEERING ADJUSTMENT IS PERMITTED.

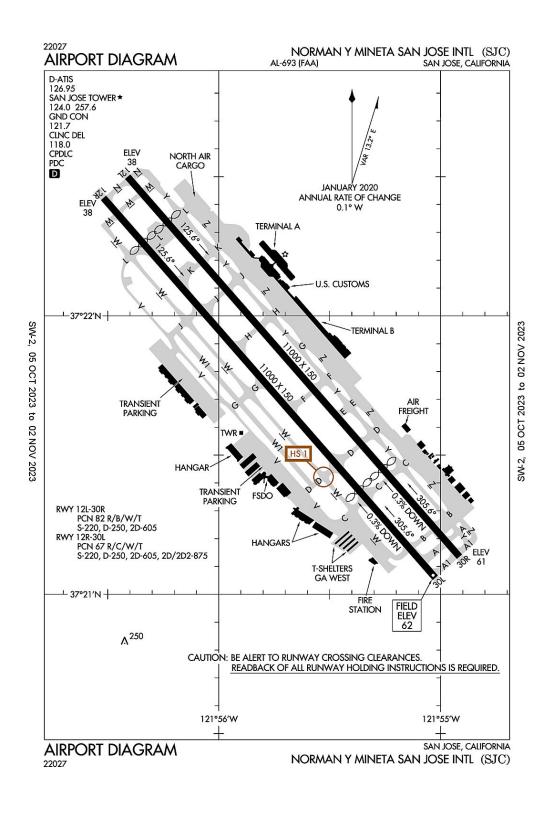
ASSC IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

FLOCKS OF BIRDS FEEDING ALONG SHORELINE ADJ TO ARPT; ON OCCASIONS FLY ACROSS VARIOUS PARTS OF THE ARPT.

HIGH SPEED TWY (T) GRVD FULL WIDTH BTN RWY 28R AND 28L.

RY 10 PREFERRED RY BTWN 0100-0600 WEATHER AND FLIGHT CONDITIONS PERMITTING.

SIMULTANEOUS OPERATIONS IN EFFECT ALL RYS.



# San Jose, California Norman Y. Mineta San Jose International ICAO Identifier KSJC

AD 2–122 5 OCT 23

San Jose, CA Norman Y. Mineta San Jose Intl ICAO Identifier KSJC

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 37–21–46.781N / 121–55–43.034W 2.2.2 From City: 2 miles NW of SAN JOSE, CA 2.2.3 Elevation: 62.2 ft 2.2.5 Magnetic Variation: 13E (2020) 2.2.6 Airport Contact: JOHN AITKEN 1701 AIRPORT BLVD., SUITE B–1130 SAN JOSE, CA 95110 ((408) 277–5100) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–D

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 12L
2.12.2 True Bearing: 139
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 82 R/B/W/T
2.12.5 Coordinates: 37–22–29.9801N / 121–56–24.6377W
2.12.6 Threshold Elevation: 37.7 ft
2.12.6 Touchdown Zone Elevation: 43.8 ft

2.12.1 Designation: 30R
2.12.2 True Bearing: 319
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 82 R/B/W/T
2.12.5 Coordinates: 37–21–8.1324N / 121–54–54.9212W
2.12.6 Threshold Elevation: 61.1 ft
2.12.6 Touchdown Zone Elevation: 55.2 ft

2.12.1 Designation: 12R
2.12.2 True Bearing: 139
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 67 R/C/W/T
2.12.5 Coordinates: 37–22–25.4266N / 121–56–31.1597W
2.12.6 Threshold Elevation: 38.2 ft
2.12.6 Touchdown Zone Elevation: 45.6 ft

2.12.1 Designation: 30L 2.12.2 True Bearing: 319 2.12.3 Dimensions: 11000 ft x 150 ft 2.12.4 PCN: 67 R/C/W/T 2.12.5 Coordinates: 37–21–3.5766N / 121–55–1.4432W 2.12.6 Threshold Elevation: 62.1 ft 2.12.6 Touchdown Zone Elevation: 57 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 12L
2.13.2 Take-off Run Available: 10139
2.13.3 Take-off Distance Available: 11000
2.13.4 Accelerate-Stop Distance Available: 10139
2.13.5 Landing Distance Available: 8831

2.13.1 Designation: 30R2.13.2 Take-off Run Available: 101342.13.3 Take-off Distance Available: 110002.13.4 Accelerate-Stop Distance Available: 10134

2.13.5 Landing Distance Available: 7597

2.13.1 Designation: 12R

2.13.2 Take-off Run Available: 9883 2.13.3 Take-off Distance Available: 11000

2.13.4 Accelerate-Stop Distance Available: 9883

2.13.5 Landing Distance Available: 8587

2.13.1 Designation: 30L

2.13.2 Take-off Run Available: 10152

2.13.3 Take-off Distance Available: 11000

2.13.4 Accelerate-Stop Distance Available: 10152

2.13.5 Landing Distance Available: 7614

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 12L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 30R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 12R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 30L2.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 1182.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 126.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: LCL/P2.18.3 Channel: 1242.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: LCL/P IC 2.18.3 Channel: 257.6 2.18.5 Hours of Operation: 0600–0000

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 12R. Magnetic variation: 13E
2.19.2 ILS Identification: SLV
2.19.5 Coordinates: 37–21–2.6639N / 121–55–1.3459W
2.19.6 Site Elevation: 81.4 ft

2.19.1 ILS Type: Glide Slope for runway 12R. Magnetic variation: 13E
2.19.2 ILS Identification: SLV
2.19.5 Coordinates: 37–22–6.0334N / 121–56–14.5901W
2.19.6 Site Elevation: 36.8 ft

2.19.1 ILS Type: Localizer for runway 12R. Magnetic variation: 13E
2.19.2 ILS Identification: SLV
2.19.5 Coordinates: 37–21–3.0434N / 121–55–0.8585W
2.19.6 Site Elevation: 75.1 ft

2.19.1 ILS Type: DME for runway 30L. Magnetic variation: 13E
2.19.2 ILS Identification: SJC
2.19.5 Coordinates: 37–22–27.575N / 121–56–32.6145W
2.19.6 Site Elevation: 56 ft

2.19.1 ILS Type: Glide Slope for runway 30L. Magnetic variation: 13E
2.19.2 ILS Identification: SJC
2.19.5 Coordinates: 37–21–33.0094N / 121–55–27.8798W
2.19.6 Site Elevation: 48.6 ft

2.19.1 ILS Type: Localizer for runway 30L. Magnetic variation: 13E
2.19.2 ILS Identification: SJC
2.19.5 Coordinates: 37–22–27.1917N / 121–56–33.1047W
2.19.6 Site Elevation: 49.6 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 16E
2.19.2 Navigation Aid Identification: SJC
2.19.5 Coordinates: 37–22–28.9638N / 121–56–40.8069W
2.19.6 Site Elevation: 34.5 ft

## General Remarks:

UNSCHEDULED OPNS BY GROUP 5 ACFT (B747) AND LARGER NOT AUTH EXCEPT WITH PRIOR ARPT APPROVAL CTC AMGR (408) 392–3500.

CURFEW HRS 2300–0700 FAR 36 STAGE II, 2330–0630 FAR 36 STAGE III ACFT LISTED ON THE SCHEDULE OF AUTHORIZED AIRCRAFT ISSUED BY THE DIRECTOR OF AVIATION. DELAYED SCHEDULED FLIGHTS, AND ALTERNATE/EMERGENCY OPERATIONS MAY BE EXEMPT FROM CURFEW HOUR RESTRICTIONS.

PRIOR AIRPORT NOTIFICATION IS REQUIRED FOR ALL LATE/EARLY ARRIVALS. CONTACT MANAGER ON DUTY AT (408) 392–3500.

FIRST 400 FT RY 30R & RY 30L CLSD FOR TKOF DC10, MD11, L1011.

TWY V LTD TO ACFT WITH WINGSPAN OF LESS THAN 118 FT (B-737-900 OR SMALLER).

TWY W BETWEEN TWY J AND TWY L CAN SUPPORT GROUP IV ACFT.

RRP RQRD FM FBO FOR TSNT HEL OPS.

FOR CD WHEN ATCT IS CLSD CTC NORCAL APCH AT 916–361–3748.

TWY Y WILL BE PERIODICALLY RSTRD TO ACFT WITH A WINGSPAN OF LESS THAN 171 FT (MD–11 OR SMALLER) DRG B–787 AND B–747 OPNS ON RWY 12L/30R.

TWY D BETWEEN TWY W AND TWY V LIMITED TO ACFT WITH A WINGSPAN OF LESS THAN 118 FT (B-737-900 OR SMALLER).

TWY Z WILL BE PERIODICALLY RSTRD TO ACFT WITH A WINGSPAN OF LESS THAN 118 FT (B–737–900 OR SMALLER) DRG B–787 AND B–747 OPNS. TWY Z BTN 200 FT NW OF TWY H AND 200 FT NW OF TWY K LTD TO ACFT WITH WINGSPAN OF LESS THAN 135 FT (B–757–300 OR SMALLER).

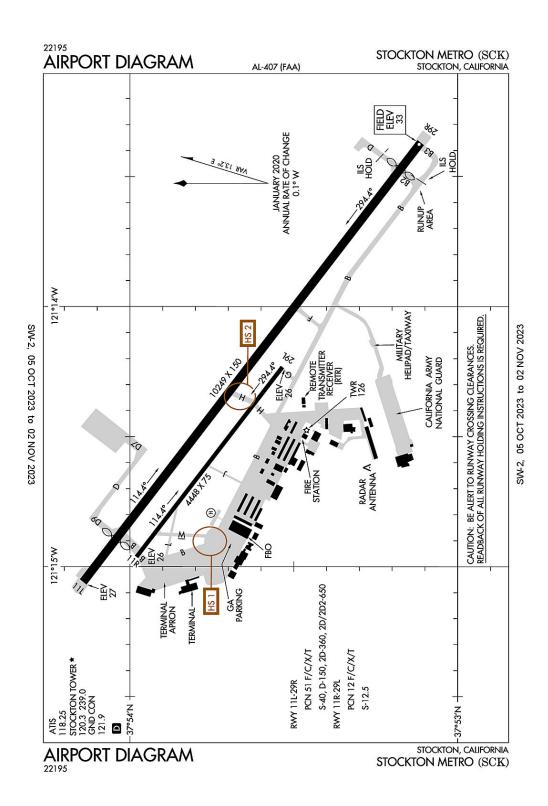
HIGH INTENSITY LIGHT ACTIVITY: HIGH INTENSITY LIGHTS (LASERS AND LARGE MEDIA SCREENS) MAY BE VISIBLE TO ARR AND DEP ACFT TO SAN JOSE INTERNATIONAL AIRPORT DURING EVENTS AT THE LEVI STADIUM COMPLEX (37–24–15N/121–58–14W, SJC VORTAC R–303/2.1 DME). FLIGHT CREWS SHOULD USE CAUTION WHEN OPERATING IN THIS AREA DURING STADIUM EVENTS. COCKPIT ILLUMINATION AND GLARE EFFECT REDUCING VIS MAY BE INTENSIFIED DURING ARR AND DEP OPS ESPECIALLY AT NIGHT.

BIRDS FREQUENTLY ON OR IN VICINITY OF AIRPORT.

ALL TURBINE ENGINE RUN–UPS REQUIRE PRIOR AIRPORT APPROVAL, CONTACT MGR ON DUTY (408) 392–3500.

NOISE ABATEMENT PROCEDURE: RY 30L/12R IS PREFERRED ARRIVAL RY FOR JET ACFT AND RY 12L/30R

IS THE PREFERRED DEP RY FOR JET ACFT. ALL JET ACFT TKOFS ARE TO BE INITIATED FM EOR UNLESS DIRECTED OTHERWISE BY ATCT.



# Stockton, California Stockton Metropolitan ICAO Identifier KSCK

# Stockton, CA Stockton Metropolitan ICAO Identifier KSCK

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 37–53–39.877N / 121–14–19.464W 2.2.2 From City: 3 miles SE of STOCKTON, CA 2.2.3 Elevation: 33.2 ft 2.2.5 Magnetic Variation: 14E (2010) 2.2.6 Airport Contact: RICHARD SOKOL 5000 S. AIRPORT WAY ROOM 202 STOCKTON, CA 95206 (209–468–4700)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100,100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–B

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 29R 2.12.2 True Bearing: 308 2.12.3 Dimensions: 10249 ft x 150 ft 2.12.4 PCN: 51 F/C/X/T 2.12.5 Coordinates: 37–53–6.64N / 121–13–21.88W 2.12.6 Threshold Elevation: 33.2 ft 2.12.6 Touchdown Zone Elevation: 32.3 ft

2.12.1 Designation: 11L
2.12.2 True Bearing: 128
2.12.3 Dimensions: 10249 ft x 150 ft
2.12.4 PCN: 51 F/C/X/T
2.12.5 Coordinates: 37–54–8.4321N / 121–15–3.2005W
2.12.6 Threshold Elevation: 26.5 ft
2.12.6 Touchdown Zone Elevation: 29.1 ft

2.12.1 Designation: 29L 2.12.2 True Bearing: 308 2.12.3 Dimensions: 4448 ft x 75 ft 2.12.4 PCN: 12 F/C/X/T 2.12.5 Coordinates: 37–53–31.8561N / 121–14–13.4466W 2.12.6 Threshold Elevation: 25.9 ft 2.12.6 Touchdown Zone Elevation: 26.6 ft 2.12.1 Designation: 11R 2.12.2 True Bearing: 128 2.12.3 Dimensions: 4448 ft x 75 ft 2.12.4 PCN: 12 F/C/X/T 2.12.5 Coordinates: 37–53–58.6715N / 121–14–57.4211W 2.12.6 Threshold Elevation: 26.2 ft 2.12.6 Touchdown Zone Elevation: 26.4 ft

2.12.1 Designation: H1
2.12.2 True Bearing:
2.12.3 Dimensions: 70 ft x 70 ft
2.12.4 PCN:
2.12.5 Coordinates: 37–53–45.27N / 121–14–47.57W
2.12.6 Threshold Elevation: 26 ft
2.12.6 Touchdown Zone Elevation: ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 29R
2.13.2 Take-off Run Available: 8856
2.13.3 Take-off Distance Available: 9856
2.13.4 Accelerate-Stop Distance Available: 9210
2.13.5 Landing Distance Available: 8650

2.13.1 Designation: 11L
2.13.2 Take-off Run Available: 8474
2.13.3 Take-off Distance Available: 9474
2.13.4 Accelerate-Stop Distance Available: 8604
2.13.5 Landing Distance Available: 8650

2.13.1 Designation: 29L
2.13.2 Take-off Run Available: 4448
2.13.3 Take-off Distance Available: 4448
2.13.4 Accelerate-Stop Distance Available: 4448
2.13.5 Landing Distance Available: 3386

2.13.1 Designation: 11R
2.13.2 Take-off Run Available: 4448
2.13.3 Take-off Distance Available: 4448
2.13.4 Accelerate-Stop Distance Available: 4448
2.13.5 Landing Distance Available: 4448
2.13.1 Designation: H1
2.13.2 Take-off Run Available:
2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 29R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 11L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 29L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 11R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: H12.14.2 Approach Lighting System: ODALS2.14.4 Visual Approach Slope Indicator System:

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 492.18.5 Hours of Operation:

2.18.1 Service Designation: ATIS2.18.3 Channel: 118.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 120.3 2.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: LCL/P2.18.3 Channel: 2392.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: NG OPS2.18.3 Channel: 139.42.18.5 Hours of Operation:

2.18.1 Service Designation: NG OPS2.18.3 Channel: 356.92.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 29R. Magnetic variation: 14E
2.19.2 ILS Identification: SCK
2.19.5 Coordinates: 37–54–12.58N / 121–15–15.2W
2.19.6 Site Elevation: 22 ft

2.19.1 ILS Type: Glide Slope for runway 29R. Magnetic variation: 14E
2.19.2 ILS Identification: SCK
2.19.5 Coordinates: 37–53–19.8816N / 121–13–35.2049W
2.19.6 Site Elevation: 29.3 ft

2.19.1 ILS Type: Localizer for runway 29R. Magnetic variation: 14E
2.19.2 ILS Identification: SCK
2.19.5 Coordinates: 37–54–14.48N / 121–15–13.13W
2.19.6 Site Elevation: 23.5 ft

#### **General Remarks:**

PRACTICE CIRCLING APPROACHES TO RWYS 11L/11R NA FOR ANY TURBINE POWERED ACFT/PROP DRIVEN ACFT EXCEEDING 12500 LBS EXCP BY PPR FM AMGR.

TSNT PILOTS USE CTN; DO NOT ENTER THE TSA RSTRD AREA ADJ TO THE TSNT PRKG AREA.

BE ALERT TO ELEVD MALSR APCH END RWY 29R LCTD ON BLAST PAD.

PAVEMENT PRIOR TO THLD OF RWY 11L NOT AVBL FOR TAXI BACK OPS.

ARPT CLSD TO TGL & PLANNED LOW APCHS FOR TURBOJET ACFT 2200–0700 EXCEPT BY PPR FM AMGR PART 36 STAGE 3 ACFT.

TRANSIENT PARKING AVBL AT FBO.

THE FLWG AREAS NOT VISIBLE FM ATCT: TWY B FM TRML APN TO INT AT TWY M; TWY B FM 300 FT W OF TWY J TO 375 FT E OF TWY J; NON MOVEMENT AREA S OF TWY B FROM TRML APN TO 200 FT W OF TWY H; SE HALF OF TRML APN; TSNT PRKG APN.

AVOID OVERFLYING SAN JOAQUIN GENERAL HOSPITAL & THE CITY OF MANTECA.

TWY F RSTRD TO ACFT WINGSPAN LESS THAN 118 FT.

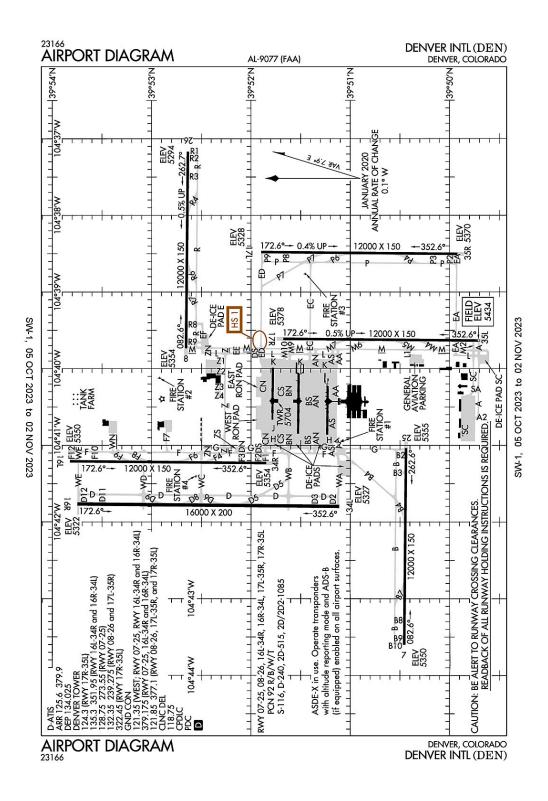
FOR CD WHEN ATCT CLSD CTC NORCAL APCH AT 916–361–0516.

MILITARY USE: ARNG OPR 1500–2330Z++ MON–FRI. DSN 466–5319, C209–983–5319, FAX 5391. PPR REQUIRED. LDTD TRAN SVC AND MAINT AVBL FOR CH47.

SEAGULLS ON AND IN VCNTY OF ARPT MOSTLY DURING RAINY WEATHER.

TRML APN, CARGO APN, TWYS B, B2, B3, F, D, D7, D9, AND H FOR ACFT OVER 12500 LBS. ALL OTR TWYS RSTRD TO ACFT LESS THAN 12500 LBS.





Denver, CO Denver Intl ICAO Identifier KDEN

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–51–42N / 104–40–23.4W
2.2.2 From City: 16 miles NE of DENVER, CO
2.2.3 Elevation: 5433.8 ft
2.2.5 Magnetic Variation: 8E (2015)
2.2.6 Airport Contact: PHIL WASHINGTON ADMIN BLDG, 8500 PENA BLVD DENVER, CO 80249 ((303) 342–2206)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 2/1/1995 2.6.2 Rescue and Firefighting Services: ARFF Index–E

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 25 2.12.2 True Bearing: 271 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39–50–26.3667N / 104–41–2.1712W 2.12.6 Threshold Elevation: 5355 ft 2.12.6 Touchdown Zone Elevation: 5355 ft

2.12.1 Designation: 07 2.12.2 True Bearing: 90 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39–50–27.4022N / 104–43–35.963W 2.12.6 Threshold Elevation: 5350.2 ft 2.12.6 Touchdown Zone Elevation: 5351.6 ft

2.12.1 Designation: 26 2.12.2 True Bearing: 271 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39–52–38.0769N / 104–37–10.1479W 2.12.6 Threshold Elevation: 5294.4 ft 2.12.6 Touchdown Zone Elevation: 5309.4 ft 2.12.1 Designation: 08 2.12.2 True Bearing: 91 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39-52-39.2009N / 104-39-44.0267W 2.12.6 Threshold Elevation: 5354.3 ft 2.12.6 Touchdown Zone Elevation: 5354.3 ft 2.12.1 Designation: 16L 2.12.2 True Bearing: 181 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39-53-49.3301N / 104-41-12.4998W 2.12.6 Threshold Elevation: 5349.9 ft 2.12.6 Touchdown Zone Elevation: 5357.1 ft 2.12.1 Designation: 34R 2.12.2 True Bearing: 1 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39-51-50.7743N / 104-41-13.8782W 2.12.6 Threshold Elevation: 5353.7 ft 2.12.6 Touchdown Zone Elevation: 5353.7 ft 2.12.1 Designation: 16R 2.12.2 True Bearing: 181 2.12.3 Dimensions: 16000 ft x 200 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39-53-44.869N / 104-41-45.9006W 2.12.6 Threshold Elevation: 5321.8 ft 2.12.6 Touchdown Zone Elevation: 5326.3 ft 2.12.1 Designation: 34L 2.12.2 True Bearing: 1 2.12.3 Dimensions: 16000 ft x 200 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39-51-6.7926N / 104-41-47.7166W 2.12.6 Threshold Elevation: 5327 ft 2.12.6 Touchdown Zone Elevation: 5327 ft 2.12.1 Designation: 17L 2.12.2 True Bearing: 181 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39-51-53.8287N / 104-38-28.6959W 2.12.6 Threshold Elevation: 5328.1 ft 2.12.6 Touchdown Zone Elevation: 5338.5 ft

2.12.1 Designation: 35R 2.12.2 True Bearing: 1 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39–49–55.2707N / 104–38–30.1554W 2.12.6 Threshold Elevation: 5370 ft 2.12.6 Touchdown Zone Elevation: 5370 ft

2.12.1 Designation: 17R 2.12.2 True Bearing: 181 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39–51–40.4821N / 104–39–36.5561W 2.12.6 Threshold Elevation: 5377.9 ft 2.12.6 Touchdown Zone Elevation: 5391.9 ft

2.12.1 Designation: 35L 2.12.2 True Bearing: 1 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 39–49–41.9262N / 104–39–37.9841W 2.12.6 Threshold Elevation: 5433.8 ft 2.12.6 Touchdown Zone Elevation: 5433.8 ft

# AD 2.13 Declared Distances

2.13.1 Designation: 25
2.13.2 Take-off Run Available: 12000
2.13.3 Take-off Distance Available: 13000
2.13.4 Accelerate-Stop Distance Available: 12000
2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 072.13.2 Take-off Run Available: 120002.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate-Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 26

2.13.2 Take-off Run Available: 12000

2.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate-Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 08

2.13.2 Take-off Run Available: 12000

2.13.3 Take-off Distance Available: 13000

2.13.4 Accelerate–Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 16L2.13.2 Take-off Run Available: 120002.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate-Stop Distance Available: 12000 2.13.5 Landing Distance Available: 12000 2.13.1 Designation: 34R 2.13.2 Take-off Run Available: 12000 2.13.3 Take-off Distance Available: 13000 2.13.4 Accelerate-Stop Distance Available: 12000 2.13.5 Landing Distance Available: 12000 2.13.1 Designation: 16R 2.13.2 Take-off Run Available: 16000 2.13.3 Take-off Distance Available: 16000 2.13.4 Accelerate-Stop Distance Available: 16000 2.13.5 Landing Distance Available: 16000 2.13.1 Designation: 34L 2.13.2 Take-off Run Available: 16000 2.13.3 Take-off Distance Available: 16000 2.13.4 Accelerate–Stop Distance Available: 16000 2.13.5 Landing Distance Available: 16000 2.13.1 Designation: 17L 2.13.2 Take-off Run Available: 12000 2.13.3 Take-off Distance Available: 12000 2.13.4 Accelerate-Stop Distance Available: 12000 2.13.5 Landing Distance Available: 12000 2.13.1 Designation: 35R 2.13.2 Take-off Run Available: 12000 2.13.3 Take-off Distance Available: 12000 2.13.4 Accelerate–Stop Distance Available: 12000 2.13.5 Landing Distance Available: 12000 2.13.1 Designation: 17R 2.13.2 Take-off Run Available: 12000 2.13.3 Take-off Distance Available: 12000 2.13.4 Accelerate-Stop Distance Available: 12000 2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 35L2.13.2 Take-off Run Available: 120002.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate–Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 252.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 072.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 262.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 082.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 34R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 34L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 17L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 17R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 118.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P

2.18.3 Channel: 118.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 125.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 125.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 134.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 134.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 379.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 379.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (WEST; RWY 07/25, RWY 16L/34R, RWY 16R/34L)
2.18.3 Channel: 121.35
2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (WEST; RWY 07/25, RWY 16L/34R, RWY 16R/34L) 2.18.3 Channel: 121.35 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (RWY 08/26, 17L/35R, 17R/35L) 2.18.3 Channel: 121.85 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (RWY 08/26, 17L/35R, 17R/35L) 2.18.3 Channel: 121.85 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (RWY 08/26, 17L/35R, 17R/35L) 2.18.3 Channel: 377.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (RWY 08/26, 17L/35R, 17R/35L) 2.18.3 Channel: 377.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (RWY 07/25, 16L/34R, 16R/34L) 2.18.3 Channel: 379.175 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (RWY 07/25, 16L/34R, 16R/34L) 2.18.3 Channel: 379.175 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 17R/35L) 2.18.3 Channel: 124.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 17R/35L) 2.18.3 Channel: 124.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 07/25) 2.18.3 Channel: 128.75 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 07/25) 2.18.3 Channel: 128.75 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 08/26, 17L/35R) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 08/26, 17L/35R) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 16L/34R, 16R/34L) 2.18.3 Channel: 135.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16L/34R, 16R/34L) 2.18.3 Channel: 135.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08/26, 17L/35R)2.18.3 Channel: 239.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08/26, 17L/35R) 2.18.3 Channel: 239.275 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 07/25) 2.18.3 Channel: 273.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 07/25) 2.18.3 Channel: 273.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 17R/35L)2.18.3 Channel: 322.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 17R/35L)2.18.3 Channel: 322.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16L/34R, 16R/34L) 2.18.3 Channel: 351.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16L/34R, 16R/34L)2.18.3 Channel: 351.952.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 07. Magnetic variation: 8E
2.19.2 ILS Identification: DZG
2.19.5 Coordinates: 39–50–23.6632N / 104–40–48.6232W
2.19.6 Site Elevation: 5359.1 ft

2.19.1 ILS Type: Glide Slope for runway 07. Magnetic variation: 8E
2.19.2 ILS Identification: DZG
2.19.5 Coordinates: 39–50–23.2656N / 104–43–22.6558W
2.19.6 Site Elevation: 5340.5 ft

2.19.1 ILS Type: Localizer for runway 07. Magnetic variation: 8E 2.19.2 ILS Identification: DZG

2.19.5 Coordinates: 39–50–26.2755N / 104–40–49.0613W 2.19.6 Site Elevation: 5354.9 ft

2.19.1 ILS Type: DME for runway 25. Magnetic variation: 8E
2.19.2 ILS Identification: ERP
2.19.5 Coordinates: 39–50–23.6632N / 104–40–48.6232W
2.19.6 Site Elevation: 5359.1 ft

2.19.1 ILS Type: Glide Slope for runway 25. Magnetic variation: 8E
2.19.2 ILS Identification: ERP
2.19.5 Coordinates: 39–50–22.4098N / 104–41–15.7881W
2.19.6 Site Elevation: 5344.2 ft

2.19.1 ILS Type: Localizer for runway 25. Magnetic variation: 8E 2.19.2 ILS Identification: ERP 2.19.5 Coordinates: 39–50–27.4883N / 104–43–49.0723W 2.19.6 Site Elevation: 5348.9 ft

2.19.1 ILS Type: DME for runway 08. Magnetic variation: 8E
2.19.2 ILS Identification: FUI
2.19.5 Coordinates: 39–52–41.8784N / 104–39–57.5078W
2.19.6 Site Elevation: 5360.2 ft

2.19.1 ILS Type: Glide Slope for runway 08. Magnetic variation: 8E
2.19.2 ILS Identification: FUI
2.19.5 Coordinates: 39–52–43.1529N / 104–39–29.8599W
2.19.6 Site Elevation: 5342.2 ft

2.19.1 ILS Type: Localizer for runway 08. Magnetic variation: 8E
2.19.2 ILS Identification: FUI
2.19.5 Coordinates: 39–52–37.9791N / 104–36–57.0352W
2.19.6 Site Elevation: 5283.1 ft

2.19.1 ILS Type: DME for runway 26. Magnetic variation: 8E
2.19.2 ILS Identification: JOY
2.19.5 Coordinates: 39–52–41.8784N / 104–39–57.5078W
2.19.6 Site Elevation: 5360.2 ft

2.19.1 ILS Type: Glide Slope for runway 26. Magnetic variation: 8E
2.19.2 ILS Identification: JOY
2.19.5 Coordinates: 39–52–42.2239N / 104–37–22.3854W
2.19.6 Site Elevation: 5293.2 ft

2.19.1 ILS Type: Localizer for runway 26. Magnetic variation: 8E
2.19.2 ILS Identification: JOY
2.19.5 Coordinates: 39–52–39.2968N / 104–39–57.142W
2.19.6 Site Elevation: 5347.6 ft

2.19.1 ILS Type: DME for runway 16L. Magnetic variation: 8E 2.19.2 ILS Identification: LTT 2.19.5 Coordinates: 39–53–59.6091N / 104–41–15.7719W 2.19.6 Site Elevation: 5357 ft

2.19.1 ILS Type: Glide Slope for runway 16L. Magnetic variation: 8E
2.19.2 ILS Identification: LTT
2.19.5 Coordinates: 39–53–39.5473N / 104–41–17.8695W
2.19.6 Site Elevation: 5346.5 ft

2.19.1 ILS Type: Localizer for runway 16L. Magnetic variation: 8E
2.19.2 ILS Identification: LTT
2.19.5 Coordinates: 39–51–40.6701N / 104–41–13.996W
2.19.6 Site Elevation: 5343.2 ft

2.19.1 ILS Type: DME for runway 34R. Magnetic variation: 8E
2.19.2 ILS Identification: OUF
2.19.5 Coordinates: 39–53–59.6091N / 104–41–15.7719W
2.19.6 Site Elevation: 5357 ft

2.19.1 ILS Type: Glide Slope for runway 34R. Magnetic variation: 8E
2.19.2 ILS Identification: OUF
2.19.5 Coordinates: 39–52–1.3925N / 104–41–19.0115W
2.19.6 Site Elevation: 5346.4 ft

2.19.1 ILS Type: Inner Marker for runway 34R. Magnetic variation: 8E
2.19.2 ILS Identification: OUF
2.19.5 Coordinates: 39–51–42.2879N / 104–41–13.9788W
2.19.6 Site Elevation: 5345 ft

2.19.1 ILS Type: Localizer for runway 34R. Magnetic variation: 8E
2.19.2 ILS Identification: OUF
2.19.5 Coordinates: 39–53–59.4426N / 104–41–12.3812W
2.19.6 Site Elevation: 5349.7 ft

2.19.1 ILS Type: DME for runway 16R. Magnetic variation: 8E
2.19.2 ILS Identification: DQQ
2.19.5 Coordinates: 39–53–55.7414N / 104–41–50.8967W
2.19.6 Site Elevation: 5323.5 ft

2.19.1 ILS Type: Glide Slope for runway 16R. Magnetic variation: 8E
2.19.2 ILS Identification: DQQ
2.19.5 Coordinates: 39–53–34.8236N / 104–41–51.2764W
2.19.6 Site Elevation: 5316.8 ft

2.19.1 ILS Type: Localizer for runway 16R. Magnetic variation: 8E
2.19.2 ILS Identification: DQQ
2.19.5 Coordinates: 39–50–56.7831N / 104–41–47.8336W
2.19.6 Site Elevation: 5320.8 ft

2.19.1 ILS Type: DME for runway 34L. Magnetic variation: 8E
2.19.2 ILS Identification: DXU
2.19.5 Coordinates: 39–53–55.7414N / 104–41–50.8967W
2.19.6 Site Elevation: 5323.5 ft

2.19.1 ILS Type: Glide Slope for runway 34L. Magnetic variation: 8E 2.19.2 ILS Identification: DXU 2.19.5 Coordinates: 39-51-17.5994N / 104-41-52.8493W 2.19.6 Site Elevation: 5317.6 ft 2.19.1 ILS Type: Inner Marker for runway 34L. Magnetic variation: 8E 2.19.2 ILS Identification: DXU 2.19.5 Coordinates: 39-50-58.2971N / 104-41-47.8092W 2.19.6 Site Elevation: 5321.4 ft 2.19.1 ILS Type: Localizer for runway 34L. Magnetic variation: 8E 2.19.2 ILS Identification: DXU 2.19.5 Coordinates: 39-53-54.875N / 104-41-45.7848W 2.19.6 Site Elevation: 5320.1 ft 2.19.1 ILS Type: DME for runway 17L. Magnetic variation: 8E 2.19.2 ILS Identification: BXP 2.19.5 Coordinates: 39-52-4.266N / 104-38-25.1893W 2.19.6 Site Elevation: 5345.1 ft 2.19.1 ILS Type: Glide Slope for runway 17L. Magnetic variation: 8E 2.19.2 ILS Identification: BXP 2.19.5 Coordinates: 39-51-44.0596N / 104-38-23.5605W 2.19.6 Site Elevation: 5326 ft 2.19.1 ILS Type: Localizer for runway 17L. Magnetic variation: 8E 2.19.2 ILS Identification: BXP 2.19.5 Coordinates: 39-49-45.1652N / 104-38-30.282W 2.19.6 Site Elevation: 5362.9 ft 2.19.1 ILS Type: DME for runway 35R. Magnetic variation: 8E 2.19.2 ILS Identification: DPP 2.19.5 Coordinates: 39-52-4.266N / 104-38-25.1893W 2.19.6 Site Elevation: 5345.1 ft 2.19.1 ILS Type: Glide Slope for runway 35R. Magnetic variation: 8E 2.19.2 ILS Identification: DPP 2.19.5 Coordinates: 39-50-6.3585N / 104-38-24.7651W 2.19.6 Site Elevation: 5359.9 ft 2.19.1 ILS Type: Inner Marker for runway 35R. Magnetic variation: 8E 2.19.2 ILS Identification: DPP 2.19.5 Coordinates: 39-49-46.7811N / 104-38-30.2697W 2.19.6 Site Elevation: 5364.5 ft 2.19.1 ILS Type: Localizer for runway 35R. Magnetic variation: 8E 2.19.2 ILS Identification: DPP 2.19.5 Coordinates: 39-52-3.9404N / 104-38-28.572W 2.19.6 Site Elevation: 5335.5 ft

2.19.1 ILS Type: DME for runway 17R. Magnetic variation: 8E
2.19.2 ILS Identification: ACX
2.19.5 Coordinates: 39–51–50.9244N / 104–39–33.0513W
2.19.6 Site Elevation: 5388 ft

2.19.1 ILS Type: Glide Slope for runway 17R. Magnetic variation: 8E
2.19.2 ILS Identification: ACX
2.19.5 Coordinates: 39–51–30.9128N / 104–39–31.4164W
2.19.6 Site Elevation: 5378 ft

2.19.1 ILS Type: Localizer for runway 17R. Magnetic variation: 8E
2.19.2 ILS Identification: ACX
2.19.5 Coordinates: 39–49–31.8218N / 104–39–38.1041W
2.19.6 Site Elevation: 5427.6 ft

2.19.1 ILS Type: DME for runway 35L. Magnetic variation: 8E
2.19.2 ILS Identification: AQD
2.19.5 Coordinates: 39–51–50.9244N / 104–39–33.0513W
2.19.6 Site Elevation: 5388 ft

2.19.1 ILS Type: Glide Slope for runway 35L. Magnetic variation: 8E
2.19.2 ILS Identification: AQD
2.19.5 Coordinates: 39–49–52.7648N / 104–39–32.5991W
2.19.6 Site Elevation: 5422.6 ft

2.19.1 ILS Type: Localizer for runway 35L. Magnetic variation: 8E
2.19.2 ILS Identification: AQD
2.19.5 Coordinates: 39–51–50.5996N / 104–39–36.4352W
2.19.6 Site Elevation: 5377.3 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 8E
2.19.2 Navigation Aid Identification: DEN
2.19.5 Coordinates: 39–48–45.0506N / 104–39–38.6643W
2.19.6 Site Elevation: 5452.1 ft

# General Remarks:

TWY F7 CLSD TO ACFT WINGSPAN MORE THAN 118 FT.

INFORMAL RWY USE PROGRAM IN EFCT H24; NOISE ABATEMENT INFO – ARPT MGMT 303–342–4200.

OVHD PAX BRIDGE S SIDE OF CONCOURSE–A PRVDS 42 FT TAIL & 118 FT WINGSPAN CLNC WHEN ON TWY CNTRLN.

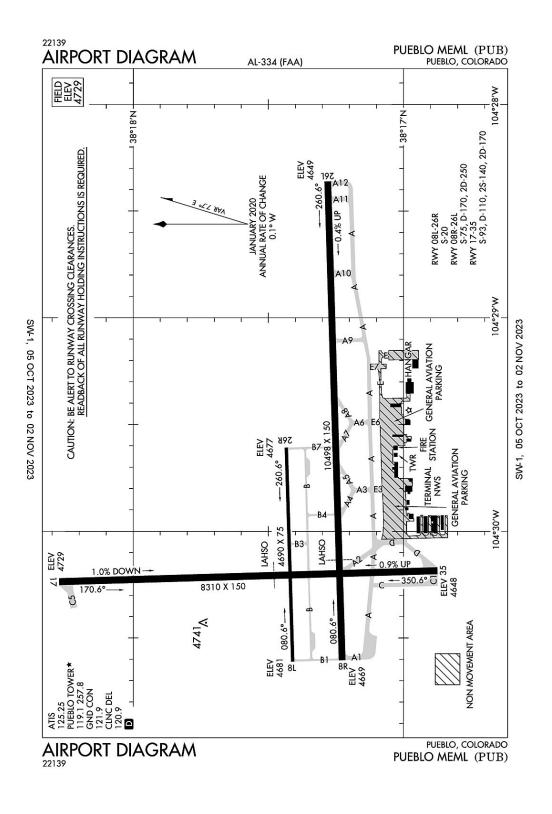
ASDE–X IN USE; OPR TRANSPONDERS WITH ALT RPRTG MODE & ADS–B IF EQUIPPED ENABLED ON ALL ARPT SFCS.

WATERFOWL & BIRDS INVOF ARPT.

CUSTOMS AVBL PPR.

DEP RWY 08, 25 & 34R HAS MNTND CWY 500 X 1000 FT 1.25 SLOPE.

Pueblo, Colorado Pueblo Memorial ICAO Identifier KPUB



# Pueblo, CO Pueblo Memorial ICAO Identifier KPUB

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 38–17–23.811N / 104–29–52.901W 2.2.2 From City: 5 miles E of PUEBLO, CO 2.2.3 Elevation: 4729.3 ft 2.2.5 Magnetic Variation: 8E (2015) 2.2.6 Airport Contact: GREG PEDROZA 31201 BRYAN CIRCLE PUEBLO, CO 81001 (719–553–2744) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, 0500–2200 Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–A

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08L
2.12.2 True Bearing: 88
2.12.3 Dimensions: 4690 ft x 75 ft
2.12.4 PCN:
2.12.5 Coordinates: 38–17–24.3081N / 104–30–36.6451W
2.12.6 Threshold Elevation: 4681.2 ft
2.12.6 Touchdown Zone Elevation: 4681.2 ft

2.12.1 Designation: 26R
2.12.2 True Bearing: 268
2.12.3 Dimensions: 4690 ft x 75 ft
2.12.4 PCN:
2.12.5 Coordinates: 38–17–25.7014N / 104–29–37.865W
2.12.6 Threshold Elevation: 4677 ft
2.12.6 Touchdown Zone Elevation: 4678.1 ft

2.12.1 Designation: 08R
2.12.2 True Bearing: 88
2.12.3 Dimensions: 10498 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 38–17–13.6348N / 104–30–36.2409W
2.12.6 Threshold Elevation: 4669.4 ft
2.12.6 Touchdown Zone Elevation: 4671.4 ft

2.12.1 Designation: 26L
2.12.2 True Bearing: 268
2.12.3 Dimensions: 10498 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 38–17–16.7526N / 104–28–24.6616W
2.12.6 Threshold Elevation: 4648.8 ft
2.12.6 Touchdown Zone Elevation: 4658.9 ft

2.12.1 Designation: 17
2.12.2 True Bearing: 178
2.12.3 Dimensions: 8310 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 38–18–15.0609N / 104–30–14.6942W
2.12.6 Threshold Elevation: 4729.3 ft
2.12.6 Touchdown Zone Elevation: 4729.3 ft

2.12.1 Designation: 35
2.12.2 True Bearing: 358
2.12.3 Dimensions: 8310 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 38–16–52.9717N / 104–30–11.6348W
2.12.6 Threshold Elevation: 4648.1 ft
2.12.6 Touchdown Zone Elevation: 4676.9 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 08L
2.13.2 Take-off Run Available: 4690
2.13.3 Take-off Distance Available: 4690
2.13.4 Accelerate-Stop Distance Available: 4690
2.13.5 Landing Distance Available: 4690
2.13.1 Designation: 26R
2.13.2 Take-off Run Available: 4690
2.13.2 Take-off Run Available: 4690

2.13.3 Take-off Distance Available: 4690

2.13.4 Accelerate–Stop Distance Available: 4690

2.13.5 Landing Distance Available: 4690

2.13.1 Designation: 08R

2.13.2 Take-off Run Available: 10496

2.13.3 Take-off Distance Available: 10496

2.13.4 Accelerate–Stop Distance Available: 10496

2.13.5 Landing Distance Available: 10496

2.13.1 Designation: 26L

2.13.2 Take–off Run Available: 10496

2.13.3 Take-off Distance Available: 10496

2.13.4 Accelerate-Stop Distance Available: 10496

2.13.5 Landing Distance Available: 10496

2.13.1 Designation: 17
2.13.2 Take-off Run Available: 8308
2.13.3 Take-off Distance Available: 8308
2.13.4 Accelerate-Stop Distance Available: 8308
2.13.5 Landing Distance Available: 8308

2.13.1 Designation: 35
2.13.2 Take-off Run Available: 8308
2.13.3 Take-off Distance Available: 8308
2.13.4 Accelerate-Stop Distance Available: 8308
2.13.5 Landing Distance Available: 8308

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 08L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 172.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 352.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 125.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P 2.18.3 Channel: 120.9 2.18.5 Hours of Operation: 0600–2200

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 0600–2200

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 119.1 2.18.5 Hours of Operation: 0600–2200

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 0600–2200

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 08R. Magnetic variation: 8E
2.19.2 ILS Identification: PUB
2.19.5 Coordinates: 38–17–18.9334N / 104–30–21.5794W
2.19.6 Site Elevation: 4672.8 ft

2.19.1 ILS Type: Localizer for runway 08R. Magnetic variation: 8E
2.19.2 ILS Identification: PUB
2.19.5 Coordinates: 38–17–17.2016N / 104–28–6.1097W
2.19.6 Site Elevation: 4653.1 ft

2.19.1 ILS Type: Glide Slope for runway 26L. Magnetic variation: 8E
2.19.2 ILS Identification: TFR
2.19.5 Coordinates: 38–17–21.3596N / 104–28–39.1966W
2.19.6 Site Elevation: 4649.4 ft

2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 8E
2.19.2 ILS Identification: TFR
2.19.5 Coordinates: 38–17–13.2497N / 104–30–52.5582W
2.19.6 Site Elevation: 4668 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 8E
2.19.2 Navigation Aid Identification: PUB
2.19.5 Coordinates: 38–17–39.3132N / 104–25–46.0107W
2.19.6 Site Elevation: 4755.5 ft

#### General Remarks:

HIGH VOLUME TRNG DA-20 ACFT SR-SS MON-FRI. OVERHEAD PATTERN DURG TRNG. EXTENSIVE USE OF TRNG AREA 12–28 DME N–SW OF ARPT 500 FT AGL–8500 FT MSL.

BE ALERT; INTENSIVE USAF STUDENT TRAINING IN VICINITY OF COLORADO SPRINGS & PUEBLO COLORADO.

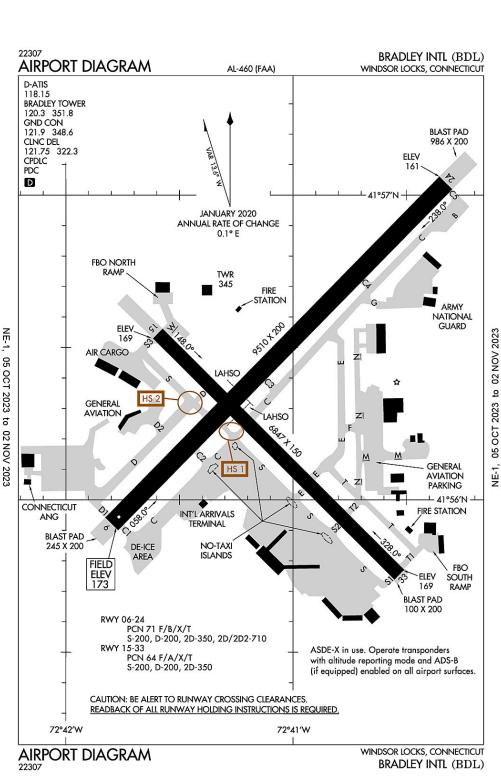
CONDITIONS NOT MONITORED 2200L-0500L.

SEE FLIP AP/1 SUPPLEMENTARY ARPT INFO.

RAMP-TAXI LANE E EXTD 30 FT WIDE FM EAST RAMP TO TWY E7.

TWY A BTN TWY A2 AND A6 50 FT WID.

FOR CD CTC PUEBLO APCH AT 303–342–1916, WHEN APCH CLSD CTC DENVER ARTCC AT 303–651–4257.



# Windsor Locks, Connecticut Bradley International ICAO Identifier KBDL

# Windsor Locks, CT Bradley Intl ICAO Identifier KBDL

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 41–56–20.516N / 72–41–3.537W
2.2.2 From City: 3 miles W of WINDSOR LOCKS, CT
2.2.3 Elevation: 173.3 ft
2.2.5 Magnetic Variation: 14W (1980)
2.2.6 Airport Contact: KEVIN DILLON, AAE BRADLEY INTL AIRPORT WINDSOR LOCKS, CT 6096 (860–292–2000)

2.2.7 Traffic: IFR/VFR

# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 06 2.12.2 True Bearing: 44 2.12.3 Dimensions: 9510 ft x 200 ft 2.12.4 PCN: 71 F/B/X/T 2.12.5 Coordinates: 41–55–55.25N / 72–41–47.6885W 2.12.6 Threshold Elevation: 173 ft 2.12.6 Touchdown Zone Elevation: 173.3 ft

2.12.1 Designation: 24 2.12.2 True Bearing: 224 2.12.3 Dimensions: 9510 ft x 200 ft 2.12.4 PCN: 71 F/B/X/T 2.12.5 Coordinates: 41–57–2.3952N / 72–40–19.6697W 2.12.6 Threshold Elevation: 160.9 ft 2.12.6 Touchdown Zone Elevation: 170 ft

2.12.1 Designation: 15
2.12.2 True Bearing: 134
2.12.3 Dimensions: 6847 ft x 150 ft
2.12.4 PCN: 64 F/A/X/T
2.12.5 Coordinates: 41–56–32.6254N / 72–41–35.7104W
2.12.6 Threshold Elevation: 168.8 ft
2.12.6 Touchdown Zone Elevation: 170.8 ft

2.12.1 Designation: 33 2.12.2 True Bearing: 314 2.12.3 Dimensions: 6847 ft x 150 ft 2.12.4 PCN: 64 F/A/X/T 2.12.5 Coordinates: 41–55–45.3238N / 72–40–30.9557W 2.12.6 Threshold Elevation: 168.5 ft 2.12.6 Touchdown Zone Elevation: 171.4 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 06
2.13.2 Take-off Run Available: 9509
2.13.3 Take-off Distance Available: 9509
2.13.4 Accelerate-Stop Distance Available: 9509
2.13.5 Landing Distance Available: 9509

2.13.1 Designation: 24

2.13.2 Take-off Run Available: 9509

2.13.3 Take-off Distance Available: 9509

2.13.4 Accelerate-Stop Distance Available: 9509

2.13.5 Landing Distance Available: 9509

2.13.1 Designation: 15

2.13.2 Take-off Run Available: 6847

2.13.3 Take-off Distance Available: 6847

2.13.4 Accelerate-Stop Distance Available: 6847

2.13.5 Landing Distance Available: 6847

2.13.1 Designation: 33

2.13.2 Take-off Run Available: 6847

2.13.3 Take-off Distance Available: 6847

2.13.4 Accelerate–Stop Distance Available: 6847

2.13.5 Landing Distance Available: 6847

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 062.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 242.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 152.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 332.14.2 Approach Lighting System: MALSF

2.14.4 Visual Approach Slope Indicator System: P4R

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 138.552.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 349.72.18.5 Hours of Operation:

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 322.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 118.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 120.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 351.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: NG OPS2.18.3 Channel: 41.92.18.5 Hours of Operation:

2.18.1 Service Designation: NG OPS2.18.3 Channel: 123.452.18.5 Hours of Operation:

2.18.1 Service Designation: NG OPS2.18.3 Channel: 243.92.18.5 Hours of Operation:

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 06. Magnetic variation: 14W
2.19.2 ILS Identification: BDL
2.19.5 Coordinates: 41–57–17.2894N / 72–39–56.5118W
2.19.6 Site Elevation: 163.8 ft

2.19.1 ILS Type: Glide Slope for runway 06. Magnetic variation: 14W
2.19.2 ILS Identification: BDL
2.19.5 Coordinates: 41–56–5.5448N / 72–41–41.8869W
2.19.6 Site Elevation: 169.3 ft

2.19.1 ILS Type: Localizer for runway 06. Magnetic variation: 14W
2.19.2 ILS Identification: BDL
2.19.5 Coordinates: 41–57–17.8499N / 72–39–59.4045W
2.19.6 Site Elevation: 149.5 ft

2.19.1 ILS Type: DME for runway 24. Magnetic variation: 14W
2.19.2 ILS Identification: MYQ
2.19.5 Coordinates: 41–57–17.2894N / 72–39–56.5118W
2.19.6 Site Elevation: 163.8 ft

2.19.1 ILS Type: Glide Slope for runway 24. Magnetic variation: 14W
2.19.2 ILS Identification: MYQ
2.19.5 Coordinates: 41–56–53.5757N / 72–40–25.9626W
2.19.6 Site Elevation: 156.7 ft

2.19.1 ILS Type: Localizer for runway 24. Magnetic variation: 14W
2.19.2 ILS Identification: MYQ
2.19.5 Coordinates: 41–55–47.661N / 72–41–57.6296W
2.19.6 Site Elevation: 170.3 ft

2.19.1 ILS Type: DME for runway 33. Magnetic variation: 14W
2.19.2 ILS Identification: IKX
2.19.5 Coordinates: 41–56–37.9724N / 72–41–47.432W
2.19.6 Site Elevation: 181.8 ft

2.19.1 ILS Type: Glide Slope for runway 33. Magnetic variation: 14W
2.19.2 ILS Identification: IKX
2.19.5 Coordinates: 41–55–54.7672N / 72–40–38.5896W
2.19.6 Site Elevation: 167.6 ft

2.19.1 ILS Type: Localizer for runway 33. Magnetic variation: 14W
2.19.2 ILS Identification: IKX
2.19.5 Coordinates: 41–56–40.2961N / 72–41–46.2065W
2.19.6 Site Elevation: 168.3 ft

# **General Remarks:**

TWY D CLSD BTN S & D1 TO ACFT WITH WING SPANS IN EXCESS OF 170 FT.

ASDE-X IN USE. OPR TRANSPONDERS WITH ALT RPRTG MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL ARPT SFCS.

TWY C BTN TWY B & TWY C4 ACFT TAX SPD RSTRN OF 8 KTS/10 MPH MAX FOR ACFT WITH WING-SPAN 214 FT OR GTR.

LGTD OBST ANT 36 FT AGL/205 FT MSL (RWY 24 ILS/GS ANT) 162 FT NW OF TWY C CNTRLN MARKING BTN TWY B & TWY C4.

CAUTION: ANG RAMP MRK MAY NOT BE APPROPRIATE FOR LARGE ACFT: FLW MARSHALLERS INSTR.

OPS CTC AUTOVON 636-8385; COML 860-627-3001.

NMRS BIRDS FQTLY ON OR INVOF ARPT.

MILITARY: ANG: WHEN CKG ATIS, BIRDS IN VCY MAY INDC HEIGHTENED BIRD WATCH CONDITION (BWC). USAF ACFT CTC ANG AIRFIELD OPS ON UHF FOR CURRENT BWC & ANY ASSOCD RSTRNS.

MILITARY: ARNG - DSN 636-7519/7520. C860-292-4519/4520.

MILITARY: ANG: OG/CC WAIVER ON FILE FOR C–130H/J WITH OPR WT UP TO 155000 LB. ALL OTHER ACFT OVR ANG RAMP PCN RQR WAIVER FR OG/CC THRU AFLD MGMT.

MILITARY: ANG: AFLD MGR DOES NOT ISSUE OR STORE COMSEC FOR TRAN CREWS.

MILITARY: ANG: PPR V220-2356.

FUEL: A++ (MIL).

NON–BASED DVRSN ACRS CTC ARPT OPS 860–627–3001 PRIOR TO DIVG & PRVD CO FLT OPS CTC INFO, ACFT TYPE, POB, INTL OR DOM FLT & GND OPS AGRMTS. ONLY 1 INTL ACR JETBRIDGE AVBL FOR PAX.

MILITARY: ARNG: OPR 1200–2030Z++ MON, TUE, FRI; 1200–0400++ WED, THU. 41.9 149.825 335.775 (HAV-OC OPS).

NO DE-ICING AVBL AT ANG.

MILITARY: ANG: NSTD YELLOW AEROSPACE GND EQPT AND FIRE BOTTLE BOXES PAINTED ON ANG RAMP.

RWY 6 DE–ICE PAD CLSD TO ACFT WITH WINGSPAN 171 FT OR GTR EXC WITH FOLLOW–ME ESCORT BY ARPT OPS.

NO TRNG FLTS, NO PLAS, NO TGLS BTN: 2300 - 0700 MON THRU SAT & 2300 - 1200 SUN.

MILITARY: ANG: OPR 1200–2030Z++ MON–FRI (SAT, SUN UTA).

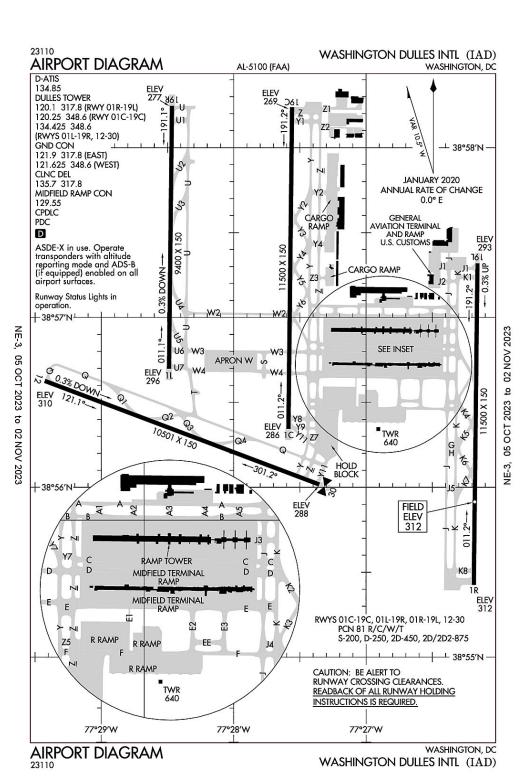
FIXED WING ACFT USE LOW IDLE FOR TAXI, NO ENGINE CHECKS OR POWER RUNS ALLOWED ON THE ARNG RAMP DUE TO POSSIBLE FOD HAZARD.

BASH PHASE II INCRD BIRD ACTVTY SEP-OCT AND MAR-APR.

PARL TWY OPS ON TWY C & TWY B RSTRD TO ACFT WITH WINGSPANS OF 171 FT OR LESS.

(E117) CT ANG AND U.S. ARMY NG.

ACFT REQG US CUST SVCS MUST PARK ON THE CUST SPOT W/ THE NOSE OF THE ACFT FACING SW. CTC CUST AT 860–292–1314 WHEN PARKED.



# Washington, District of Columbia Washington Dulles International ICAO Identifier KIAD

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 38–56–50.843N / 77–27–35.743W 2.2.2 From City: 20 miles W of WASHINGTON, VA 2.2.3 Elevation: 312.3 ft 2.2.5 Magnetic Variation: 10W (2000) 2.2.6 Airport Contact: RICHARD GOLINOWSKI 1 SAARINEN CIRCLE DULLES, VA 20166 (703–572–2730) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 19C
2.12.2 True Bearing: 181
2.12.3 Dimensions: 11500 ft x 150 ft
2.12.4 PCN: 81 R/C/W/T
2.12.5 Coordinates: 38–58–14.3073N / 77–27–33.5451W
2.12.6 Threshold Elevation: 268.6 ft
2.12.6 Touchdown Zone Elevation: 271.8 ft

2.12.1 Designation: 01C
2.12.2 True Bearing: 1
2.12.3 Dimensions: 11500 ft x 150 ft
2.12.4 PCN: 81 R/C/W/T
2.12.5 Coordinates: 38–56–20.6385N / 77–27–35.199W
2.12.6 Threshold Elevation: 286.1 ft
2.12.6 Touchdown Zone Elevation: 286.1 ft

2.12.1 Designation: 01L
2.12.2 True Bearing: 1
2.12.3 Dimensions: 9400 ft x 150 ft
2.12.4 PCN: 81 R/C/W/T
2.12.5 Coordinates: 38–56–41.8795N / 77–28–29.3169W
2.12.6 Threshold Elevation: 296 ft
2.12.6 Touchdown Zone Elevation: 296 ft

2.12.1 Designation: 19R 2.12.2 True Bearing: 181 2.12.3 Dimensions: 9400 ft x 150 ft 2.12.4 PCN: 81 R/C/W/T 2.12.5 Coordinates: 38-58-14.784N / 77-28-27.984W 2.12.6 Threshold Elevation: 277 ft 2.12.6 Touchdown Zone Elevation: 278.3 ft 2.12.1 Designation: 01R 2.12.2 True Bearing: 1 2.12.3 Dimensions: 11500 ft x 150 ft 2.12.4 PCN: 81 R/C/W/T 2.12.5 Coordinates: 38-55-25.5244N / 77-26-11.2132W 2.12.6 Threshold Elevation: 311.7 ft 2.12.6 Touchdown Zone Elevation: 312.3 ft 2.12.1 Designation: 19L 2.12.2 True Bearing: 181 2.12.3 Dimensions: 11500 ft x 150 ft 2.12.4 PCN: 81 R/C/W/T 2.12.5 Coordinates: 38-57-19.1867N / 77-26-9.5086W

2.12.6 Threshold Elevation: 293 ft2.12.6 Touchdown Zone Elevation: 302 ft

2.12.1 Designation: 30 2.12.2 True Bearing: 291 2.12.3 Dimensions: 10501 ft x 150 ft 2.12.4 PCN: 81 R/C/W/T 2.12.5 Coordinates: 38–56–0.9996N / 77–27–21.2257W 2.12.6 Threshold Elevation: 287.6 ft 2.12.6 Touchdown Zone Elevation: 287.7 ft

2.12.1 Designation: 12
2.12.2 True Bearing: 111
2.12.3 Dimensions: 10501 ft x 150 ft
2.12.4 PCN: 81 R/C/W/T
2.12.5 Coordinates: 38–56–37.5897N / 77–29–25.5882W
2.12.6 Threshold Elevation: 309.9 ft
2.12.6 Touchdown Zone Elevation: 309.9 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 19C
2.13.2 Take-off Run Available: 11500
2.13.3 Take-off Distance Available: 11500
2.13.4 Accelerate-Stop Distance Available: 11500
2.13.5 Landing Distance Available: 11089

2.13.1 Designation: 01C2.13.2 Take-off Run Available: 11500

2.13.3 Take-off Distance Available: 11500 2.13.4 Accelerate-Stop Distance Available: 11500 2.13.5 Landing Distance Available: 11500 2.13.1 Designation: 01L 2.13.2 Take-off Run Available: 9400 2.13.3 Take-off Distance Available: 9400 2.13.4 Accelerate–Stop Distance Available: 9400 2.13.5 Landing Distance Available: 9400 2.13.1 Designation: 19R 2.13.2 Take-off Run Available: 9400 2.13.3 Take-off Distance Available: 9400 2.13.4 Accelerate-Stop Distance Available: 9400 2.13.5 Landing Distance Available: 9400 2.13.1 Designation: 01R 2.13.2 Take-off Run Available: 11500 2.13.3 Take-off Distance Available: 11500 2.13.4 Accelerate-Stop Distance Available: 11500 2.13.5 Landing Distance Available: 11500 2.13.1 Designation: 19L 2.13.2 Take-off Run Available: 11500 2.13.3 Take-off Distance Available: 11500 2.13.4 Accelerate-Stop Distance Available: 11500 2.13.5 Landing Distance Available: 11500 2.13.1 Designation: 30 2.13.2 Take-off Run Available: 10501 2.13.3 Take-off Distance Available: 10501 2.13.4 Accelerate-Stop Distance Available: 10501 2.13.5 Landing Distance Available: 10501 2.13.1 Designation: 12 2.13.2 Take-off Run Available: 10501 2.13.3 Take-off Distance Available: 10501

2.13.4 Accelerate-Stop Distance Available: 10501

2.13.5 Landing Distance Available: 10501

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 19C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 01C2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01L

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 19R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 19L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 302.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 122.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 135.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 317.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 134.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (WEST)2.18.3 Channel: 121.6252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (EAST) 2.18.3 Channel: 121.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (EAST) 2.18.3 Channel: 317.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P (WEST) 2.18.3 Channel: 348.6 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 01R/19L) 2.18.3 Channel: 120.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 01C/19C) 2.18.3 Channel: 120.25 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 01L/19R, RWY 12/30) 2.18.3 Channel: 134.425 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 01R/19L) 2.18.3 Channel: 317.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 01C/19C) 2.18.3 Channel: 348.6 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 01L/19R, RWY 12/30) 2.18.3 Channel: 348.6 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: RAMP CTL (MIDFLD) 2.18.3 Channel: 129.55 2.18.5 Hours of Operation: 24 AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 01C. Magnetic variation: 10W
2.19.2 ILS Identification: OSZ
2.19.5 Coordinates: 38–56–31.0626N / 77–27–40.739W
2.19.6 Site Elevation: 281.7 ft

2.19.1 ILS Type: Localizer for runway 01C. Magnetic variation: 10W
2.19.2 ILS Identification: OSZ
2.19.5 Coordinates: 38–58–24.6804N / 77–27–33.3938W
2.19.6 Site Elevation: 263.3 ft

2.19.1 ILS Type: Glide Slope for runway 19C. Magnetic variation: 10W

2.19.2 ILS Identification: DLX 2.19.5 Coordinates: 38–58–4.1642N / 77–27–37.9988W 2.19.6 Site Elevation: 264.9 ft

2.19.1 ILS Type: Inner Marker for runway 19C. Magnetic variation: 10W
2.19.2 ILS Identification: DLX
2.19.5 Coordinates: 38–58–22.945N / 77–27–33.4229W
2.19.6 Site Elevation: 263.5 ft

2.19.1 ILS Type: Localizer for runway 19C. Magnetic variation: 10W
2.19.2 ILS Identification: DLX
2.19.5 Coordinates: 38–56–14.5833N / 77–27–35.2871W
2.19.6 Site Elevation: 283.8 ft

2.19.1 ILS Type: DME for runway 01L. Magnetic variation: 10W
2.19.2 ILS Identification: OIU
2.19.5 Coordinates: 38–58–25.077N / 77–28–31.1445W
2.19.6 Site Elevation: 288.2 ft

2.19.1 ILS Type: Glide Slope for runway 01L. Magnetic variation: 10W
2.19.2 ILS Identification: OIU
2.19.5 Coordinates: 38–56–52.8758N / 77–28–34.3489W
2.19.6 Site Elevation: 288.1 ft

2.19.1 ILS Type: Inner Marker for runway 01L. Magnetic variation: 10W
2.19.2 ILS Identification: OIU
2.19.5 Coordinates: 38–56–33.3882N / 77–28–29.4318W
2.19.6 Site Elevation: 298.4 ft

2.19.1 ILS Type: Localizer for runway 01L. Magnetic variation: 10W
2.19.2 ILS Identification: OIU
2.19.5 Coordinates: 38–58–24.7952N / 77–28–27.8419W
2.19.6 Site Elevation: 276.9 ft

2.19.1 ILS Type: DME for runway 19R. Magnetic variation: 10W
2.19.2 ILS Identification: ISU
2.19.5 Coordinates: 38–58–25.077N / 77–28–31.1445W
2.19.6 Site Elevation: 288.2 ft

2.19.1 ILS Type: Glide Slope for runway 19R. Magnetic variation: 10W
2.19.2 ILS Identification: ISU
2.19.5 Coordinates: 38–58–4.4532N / 77–28–33.3236W
2.19.6 Site Elevation: 272 ft

2.19.1 ILS Type: Inner Marker for runway 19R. Magnetic variation: 10W
2.19.2 ILS Identification: ISU
2.19.5 Coordinates: 38–58–23.5162N / 77–28–27.8521W
2.19.6 Site Elevation: 275 ft

2.19.1 ILS Type: Localizer for runway 19R. Magnetic variation: 10W 2.19.2 ILS Identification: ISU

2.19.5 Coordinates: 38-56-31.869N / 77-28-29.461W 2.19.6 Site Elevation: 298.3 ft 2.19.1 ILS Type: DME for runway 01R. Magnetic variation: 10W 2.19.2 ILS Identification: IAD 2.19.5 Coordinates: 38-55-11.037N / 77-26-8.2071W 2.19.6 Site Elevation: 326.3 ft 2.19.1 ILS Type: Glide Slope for runway 01R. Magnetic variation: 10W 2.19.2 ILS Identification: IAD 2.19.5 Coordinates: 38-55-35.8487N / 77-26-4.7355W 2.19.6 Site Elevation: 306.4 ft 2.19.1 ILS Type: Localizer for runway 01R. Magnetic variation: 10W 2.19.2 ILS Identification: IAD 2.19.5 Coordinates: 38-57-30.8651N / 77-26-9.3346W 2.19.6 Site Elevation: 301.5 ft 2.19.1 ILS Type: DME for runway 19L. Magnetic variation: 10W 2.19.2 ILS Identification: SGC 2.19.5 Coordinates: 38-55-11.037N / 77-26-8.2071W 2.19.6 Site Elevation: 326.3 ft 2.19.1 ILS Type: Glide Slope for runway 19L. Magnetic variation: 10W 2.19.2 ILS Identification: SGC 2.19.5 Coordinates: 38-57-9.2652N / 77-26-4.5983W 2.19.6 Site Elevation: 290.9 ft 2.19.1 ILS Type: Localizer for runway 19L. Magnetic variation: 10W 2.19.2 ILS Identification: SGC 2.19.5 Coordinates: 38-55-11.8054N / 77-26-11.4157W 2.19.6 Site Elevation: 315.1 ft 2.19.1 ILS Type: Glide Slope for runway 12. Magnetic variation: 10W 2.19.2 ILS Identification: AJU 2.19.5 Coordinates: 38-56-30.4069N / 77-29-15.5183W 2.19.6 Site Elevation: 303.4 ft 2.19.1 ILS Type: Localizer for runway 12. Magnetic variation: 10W 2.19.2 ILS Identification: AJU 2.19.5 Coordinates: 38-55-57.2399N / 77-27-8.4716W

2.19.6 Site Elevation: 281 ft

# **General Remarks:**

TAXILANE 'C' ACTIVE; PUSHBACK CLNCS ON NORTH SIDE OF MIDFIELD TERMINAL ARE ONTO TAXILANE 'D' ONLY UNLESS OTHERWISE AUTH.

RWY STATUS LGTS ARE IN OPN.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

ENGINE RUN-UPS BTW 2200L & 0700L REQUIRE PRIOR APPROVAL FM ARPT OPS.

LARGE FLOCKS OF BIRDS ON & INVOF ARPT/DEER INVOF ARPT.

B747-8 RESTRICTED TO MAXIMUM TAXI SPEED 17 KTS (20 MPH) ON TWY J.

RUNUP BLX FOR RWY 30 DSGND AS NON-MOVEMENT AREA.

RWY 30 DEPARTURES USE UPPER ANTENNA FOR ATC COMMUNICATIONS.

ACR PUSH BACKS & PWR FM ALL APRON PSNS REQUIRE CLNC FM MWAA RAMP TWR.

ALL AIRCRAFT WITH WINGSPAN EXCEEDING 118 FT ARE RESTRICTED FROM USING TAXILANE A BTN A1 & A5.

ALL 180 DEG TURNS OUT OF APRON POSITIONS SHALL BE MADE USING MINIMUM POWER.

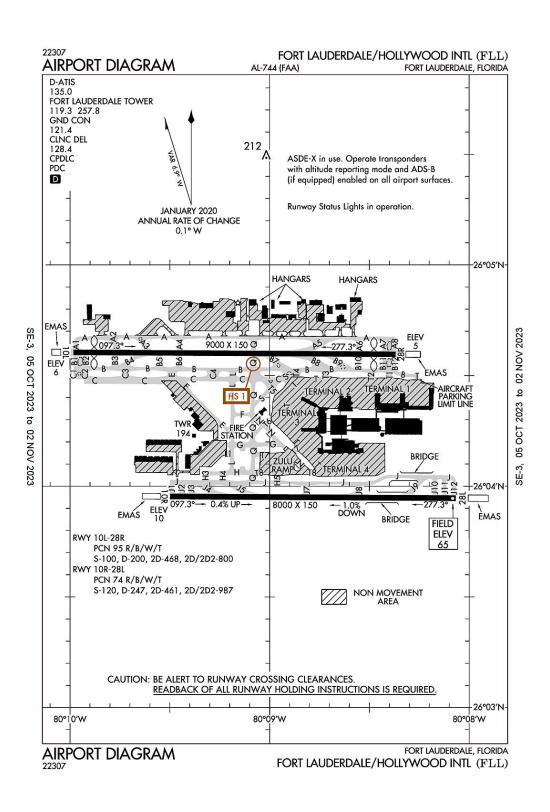
TWY E1 RESTRICTED TO ACFT WITH A WINGSPAN LESS THAN 79 FT.

FLIGHT TRAINING BETWEEN 2200–0700 IS PROHIBITED.

DURING PERIODS OF ACFT SATURATION LONG TERM PARKING MAY NOT BE AVAILABLE. SERVICES FOR FUEL AND GO ONLY WILL BE AVAILABLE.

ITNRNT ACFT CTC FBO ON 122.95 OR 129.77 FOR SVCS.

LDG FEE. FLIGHT NOTIFICATION SERVICE (ADCUS) AVBL. NOTE: SEE SPECIAL NOTICES -- CONTINUOUS POWER FACILITIES.



## Fort Lauderdale, Florida Fort Lauderdale–Hollywood International ICAO Identifier KFLL

# Fort Lauderdale, FL Fort Lauderdale/Hollywood Intl ICAO Identifier KFLL

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 26-4-18N / 80-8-58.9W
2.2.2 From City: 3 miles SW of FORT LAUDERDALE, FL
2.2.3 Elevation: 65 ft
2.2.5 Magnetic Variation: 6W (2015)
2.2.6 Airport Contact: MARK GALE
320 TERMINAL DRIVE SUITE 200
FORT LAUDERDALE, FL 33315 (954-359-6100)

2.2.7 Traffic: IFR/VFR

# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/21/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 10L 2.12.2 True Bearing: 90 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 95 R/B/W/T 2.12.5 Coordinates: 26–4–37.0166N / 80–9–59.5381W 2.12.6 Threshold Elevation: 5.6 ft 2.12.6 Touchdown Zone Elevation: 7.1 ft

2.12.1 Designation: 28R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 95 R/B/W/T 2.12.5 Coordinates: 26-4-36.4507N / 80-8-20.835W 2.12.6 Threshold Elevation: 5.3 ft 2.12.6 Touchdown Zone Elevation: 6.7 ft

2.12.1 Designation: 10R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 8000 ft x 150 ft
2.12.4 PCN: 74 R/B/W/T
2.12.5 Coordinates: 26–3–57.1919N / 80–9–30.056W
2.12.6 Threshold Elevation: 10.1 ft
2.12.6 Touchdown Zone Elevation: 14.3 ft

2.12.1 Designation: 28L 2.12.2 True Bearing: 270 2.12.3 Dimensions: 8000 ft x 150 ft 2.12.4 PCN: 74 R/B/W/T 2.12.5 Coordinates: 26–3–56.6718N / 80–8–2.3388W 2.12.6 Threshold Elevation: 65 ft 2.12.6 Touchdown Zone Elevation: 65 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 10L
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 8424

2.13.1 Designation: 28R

2.13.2 Take-off Run Available: 9000

2.13.3 Take-off Distance Available: 9000

2.13.4 Accelerate-Stop Distance Available: 9000

2.13.5 Landing Distance Available: 8394

2.13.1 Designation: 10R

2.13.2 Take-off Run Available: 8000

2.13.3 Take-off Distance Available: 8000

2.13.4 Accelerate–Stop Distance Available: 8000

2.13.5 Landing Distance Available: 8000

2.13.1 Designation: 28L

2.13.2 Take-off Run Available: 8000

2.13.3 Take-off Distance Available: 8000

2.13.4 Accelerate–Stop Distance Available: 8000

2.13.5 Landing Distance Available: 8000

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 10L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10R2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 28L2.14.2 Approach Lighting System: MALSF

2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 128.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 1352.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 119.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 120.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (NORTH)2.18.3 Channel: 118.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (SOUTH)2.18.3 Channel: 129.8752.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 10L. Magnetic variation: 6W
2.19.2 ILS Identification: LHI
2.19.5 Coordinates: 26-4-40.1757N / 80-8-15.6721W
2.19.6 Site Elevation: 11.3 ft

2.19.1 ILS Type: Glide Slope for runway 10L. Magnetic variation: 6W
2.19.2 ILS Identification: LHI
2.19.5 Coordinates: 26-4-39.6411N / 80-9-42.3329W
2.19.6 Site Elevation: 2.9 ft

2.19.1 ILS Type: Localizer for runway 10L. Magnetic variation: 6W 2.19.2 ILS Identification: LHI 2.19.5 Coordinates: 26-4-36.4066N / 80-8-13.1434W 2.19.6 Site Elevation: 4.3 ft 2.19.1 ILS Type: DME for runway 28R. Magnetic variation: 6W 2.19.2 ILS Identification: UDL 2.19.5 Coordinates: 26-4-34.5346N / 80-10-2.4136W 2.19.6 Site Elevation: 10.4 ft 2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 6W 2.19.2 ILS Identification: UDL 2.19.5 Coordinates: 26-4-39.627N / 80-8-39.0644W 2.19.6 Site Elevation: 5 ft 2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 6W 2.19.2 ILS Identification: UDL 2.19.5 Coordinates: 26-4-37.0351N / 80-10-2.8297W 2.19.6 Site Elevation: 4.6 ft 2.19.1 ILS Type: DME for runway 10R. Magnetic variation: 6W 2.19.2 ILS Identification: FLL 2.19.5 Coordinates: 26-3-58.8348N / 80-7-55.7162W 2.19.6 Site Elevation: 68.3 ft 2.19.1 ILS Type: Glide Slope for runway 10R. Magnetic variation: 6W 2.19.2 ILS Identification: FLL 2.19.5 Coordinates: 26-3-53.1134N / 80-9-18.5896W 2.19.6 Site Elevation: 5.7 ft 2.19.1 ILS Type: Localizer for runway 10R. Magnetic variation: 6W 2.19.2 ILS Identification: FLL 2.19.5 Coordinates: 26-3-56.6314N / 80-7-55.5666W 2.19.6 Site Elevation: 64.4 ft 2.19.1 ILS Type: DME for runway 28L. Magnetic variation: 6W 2.19.2 ILS Identification: ADI 2.19.5 Coordinates: 26-3-59.4802N / 80-9-40.4489W

2.19.6 Site Elevation: 14.7 ft

2.19.1 ILS Type: Glide Slope for runway 28L. Magnetic variation: 6W
2.19.2 ILS Identification: ADI
2.19.5 Coordinates: 26–3–52.7404N / 80–8–15.5298W
2.19.6 Site Elevation: 45 ft

2.19.1 ILS Type: Localizer for runway 28L. Magnetic variation: 6W
2.19.2 ILS Identification: ADI
2.19.5 Coordinates: 26–3–57.2361N / 80–9–37.7655W
2.19.6 Site Elevation: 7.5 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 6W
2.19.2 Navigation Aid Identification: FLL
2.19.5 Coordinates: 26-4-26.1833N / 80-9-59.1921W
2.19.6 Site Elevation: 5.6 ft

#### **General Remarks:**

PPR FOR ACFT WITH EXPLOSIVES.

ASDE-X IN USE; OPR PARROT WITH ALT RPRTG MODE & ADS-B (IF EQUIPPED) ENABLED ON ARPT SFCS.

TWY E BTN TWY C & TWY L CLSD TO ACFT WINGSPAN MORE THAN 118 FT EXC 10 MIN PPR 954–816–3179.

ARR FM N & W MNTN 6000 FT UNTIL ABM RWY 28R ON DOWNWIND; ARR FM N MNTN 6000 FT UNTIL ABM RWY 10L ON DOWNWIND.

EAST SIDE OF CONCOURSE B AVBL TO ACFT WITH WINGSPAN LESS THAN 124.9 FT.

ALL RWYS NOISE SENSITIVE; NOISE ABATEMENT IN EFCT – 954–359–6181.

RWY STATUS LIGHTS IN OPRN.

NO VFR APCHS OR BASE LEGS UNTIL OFFSHORE.

TURB BLW 1000 FT OVR LANDFILL LCTD 2 NM W.

JET RUNUPS NA 2300-0700.

ACFT OPRG FROM TRML 1, 2, 3, 4 MUST CTC RAMP CTL. RAMP CTL EFF – CTC ARPT OPS FOR HRS.

IR CARRIER ACFT USE RAMP PUSH BACK PROCS PRESCRIBED BY ARPT OPS.

TWY J BGN TO ELEV 900 FT EAST OF TWY Q. DUE TO ELEV ALL ACFT REMAIN ON CNTRLN; TWY T8 & TAXILANE T NOT ACCESSIBLE FM TWY J.

ACFT LDG RWY 10R & EXITING J9 FOLLOW TWY LEAD OFF LINE ONTO J9.

NMRS TREES SW QUADRANT OF ARPT.

BIRDS ON & INVOF ARPT; CONCENTRATION OF BIRDS BLW 500 FT 2.0 NM W OF 10L & 10R AER.

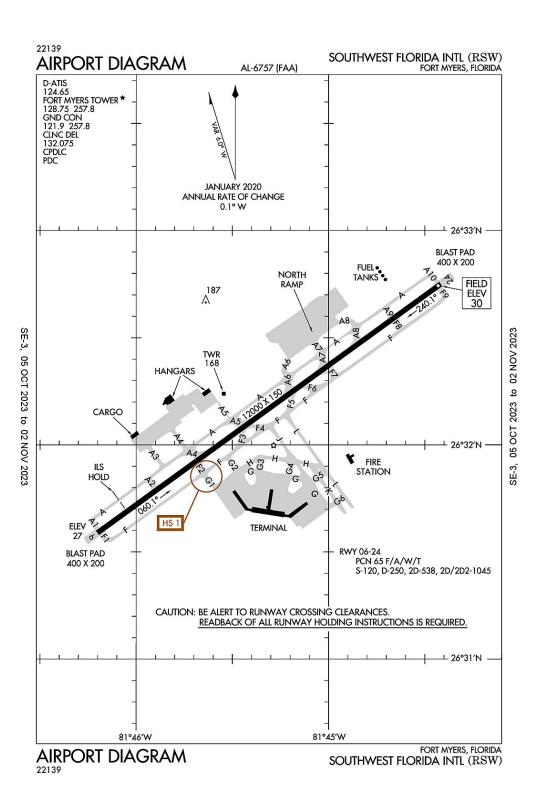
CLSD TO ACR TRAINING; LRG ACFT TRNG OVER 58000 LBS MAX CERTD GROSS TKOF WEIGHT; ALL TRNG 2300–0700.

PREFERENTIAL RWY USE PROGRAM IN EFCT; CTC NOISE ABATEMENT OFFICE.

TWY B EAST OF TWY B12 & TAXILANE T EAST OF TWY T1 CLSD TO ACFT WITH WINGSPAN GTR THAN 118 FT & TAIL HGT GTR THAN 45 FT. TWY A BTN TWY A2 & TWY A3 CLSD TO ACFT WINGSPAN MORE THAN 170 FT & TAIL HGT MORE THAN 59 FT EXC 10 MIN PPR 954–816–3179.

PPR FOR ACFT WITH WINGSPAN GTR THAN 171 FT & TAIL HGT GTR THAN 60 FT ON TWY N BTWN TWY Q & TWY T6

HIGH LIGHT MASTS WNW APCH END RWY 28L.



# Fort Myers, Florida Southwest Florida International ICAO Identifier KRSW

# Fort Myers, FL Southwest Florida Intl ICAO Identifier KRSW

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 26–32–10.19N / 81–45–18.558W
2.2.2 From City: 10 miles SE of FORT MYERS, FL
2.2.3 Elevation: 29.9 ft
2.2.5 Magnetic Variation: 4W (2000)
2.2.6 Airport Contact: BEN SIEGEL

11000 TERMINAL ACCESS RD.
FORT MYERS, FL 33913 (239–590–4400)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, 0700–0100 Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1983 2.6.2 Rescue and Firefighting Services: ARFF Index–D

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 24
2.12.2 True Bearing: 234
2.12.3 Dimensions: 12000 ft x 150 ft
2.12.4 PCN: 65 F/A/W/T
2.12.5 Coordinates: 26–32–45.0262N / 81–44–25.0374W
2.12.6 Threshold Elevation: 29.8 ft
2.12.6 Touchdown Zone Elevation: 29.9 ft

2.12.1 Designation: 06
2.12.2 True Bearing: 54
2.12.3 Dimensions: 12000 ft x 150 ft
2.12.4 PCN: 65 F/A/W/T
2.12.5 Coordinates: 26–31–35.3489N / 81–46–12.0692W
2.12.6 Threshold Elevation: 26.6 ft
2.12.6 Touchdown Zone Elevation: 27 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 242.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 062.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 242.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 062.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ALICO DP (RWY 06)2.18.3 Channel: 126.82.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: ALICO DP (RWY 24)2.18.3 Channel: 134.4252.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: ALICO DP (RWY 06/24)2.18.3 Channel: 306.22.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P DEP/P (121–240) 2.18.3 Channel: 124.125 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P DEP/P (001–120) 2.18.3 Channel: 126.8 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P DEP/P (301–360) 2.18.3 Channel: 127.05 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P DEP/P (241–300) 2.18.3 Channel: 134.425 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P DEP/P (241–120) 2.18.3 Channel: 306.2 2.18.5 Hours of Operation: 0600–0000 2.18.1 Service Designation: APCH/P DEP/P (121–240) 2.18.3 Channel: 371.85 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 306.22.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P IC (RWY 06) 2.18.3 Channel: 125.15 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: APCH/P IC (RWY 24)2.18.3 Channel: 126.82.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CD/P 2.18.3 Channel: 132.075 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CLASS C (121–240) 2.18.3 Channel: 124.125 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CLASS C (001–120) 2.18.3 Channel: 126.8 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CLASS C (301–360) 2.18.3 Channel: 127.05 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CLASS C (241–300) 2.18.3 Channel: 134.425 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CLASS C (241–120) 2.18.3 Channel: 306.2 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CLASS C (121–240) 2.18.3 Channel: 371.85 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CSHEL DP (RWY 06)2.18.3 Channel: 126.82.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CSHEL DP (RWY 24)2.18.3 Channel: 134.4252.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: CSHEL DP (RWY 06/24)2.18.3 Channel: 306.22.18.5 Hours of Operation: 0600-0000

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 124.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: GND/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: JOSFF STAR2.18.3 Channel: 134.4252.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: JOSFF STAR2.18.3 Channel: 306.22.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: LCL/P2.18.3 Channel: 128.752.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 257.8 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: MOOKY DP (RWY 06) 2.18.3 Channel: 124.125 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: MOOKY DP (RWY 24) 2.18.3 Channel: 134.425 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: MOOKY DP (RWY 24)2.18.3 Channel: 306.22.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: MOOKY DP (RWY 06) 2.18.3 Channel: 371.85 2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: SCUBY DP 2.18.3 Channel: 124.125

2.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: SCUBY DP2.18.3 Channel: 371.852.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: SHFTY STAR2.18.3 Channel: 126.82.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: TYNEE STAR2.18.3 Channel: 134.4252.18.5 Hours of Operation: 0600–0000

2.18.1 Service Designation: TYNEE STAR2.18.3 Channel: 306.22.18.5 Hours of Operation: 0600–0000

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 06. Magnetic variation: 4W
2.19.2 ILS Identification: RSW
2.19.5 Coordinates: 26–32–53.339N / 81–44–17.5144W
2.19.6 Site Elevation: 38 ft

2.19.1 ILS Type: Glide Slope for runway 06. Magnetic variation: 4W
2.19.2 ILS Identification: RSW
2.19.5 Coordinates: 26–31–43.5444N / 81–46–4.4222W
2.19.6 Site Elevation: 25.2 ft

2.19.1 ILS Type: Localizer for runway 06. Magnetic variation: 4W
2.19.2 ILS Identification: RSW
2.19.5 Coordinates: 26–32–51.1355N / 81–44–15.6428W
2.19.6 Site Elevation: 27.6 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 2W
2.19.2 Navigation Aid Identification: RSW
2.19.5 Coordinates: 26–31–47.5921N / 81–46–32.7666W
2.19.6 Site Elevation: 24.8 ft

#### General Remarks:

ACR USE RAMP PROC PRESCRIBED BY ARPT OPS.

CAUTION: OPEN BAGGAGE BAYS & CONST WITHIN TERMINAL RAMP AREA. AIRCREWS USE MINIMUM THRUST SETTINGS IN THESE AREAS, SPCLY DURG SINGLE ENG TAXI. CROSS-BLEED STARTS ONLY ALLOWED AFT REACHING THE TUG RELEASE POINT.

TWY A5 BTN FBO RAMP AND TWY A CLSD TO ACFT WINGSPAN MORE THAN 118 FT.

FOR CD IFUN TO CTC ON MIAMI CTR FREQ, CTC MIAMI ARTCC AT 305-716-1731 (0100-0700).

GND CLNC RQRD PRIOR TO ENTERING TWY G.

OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

DEP ACFT OBTAIN APVL FM GND CTL PRIOR TO PUSHBACK FM GATES B7, B9, C8, C9 & D10A. PILOTS ADVISE TUG OPR OF OBTAINED CLNC FM GND CTL PRIOR TO ENTERING TWY G. DEP CTC GND CTL PRIOR TO LEAVING THE COMMUTER RAMP FROM GATES D9A & D9B.

GATES B7 & B9 EXP CALL SPOT #7. GATES C8 & C9 EXP CALL SPOT #4. GATE D10A EXP CALL SPOT #2.

LGTS ON PARALLEL ROAD & PARKING LOT NW OF RWY 06/24 CAN BE MISTAKEN FOR RWY & APCH ENVIRONMENT.

ALL ACFT ON RAMP EXP CLOCKWISE FLOW. OUTBOUND TRAFFIC FROM GATES D2, D4, D6, D8 & D10 PROCEED TO CALL SPOT 1; OUTBOUND TRAFFIC FROM GATES C2, C4, C6, D1, D3, D5 & D7 PROCEED TO CALL SPOT 3; OUTBOUND TRAFFIC FROM GATES B2, B4, B6, B8, C1, C3, C5 & C7 PROCEED TO CALL SPOT 5; OUTBOUND TRAFFIC FROM GATES B1, B3 & B5 PROCEED TO CALL SPOT 9; ALL OUTBOUND TRAFFIC REQUEST TAXI INSTRUCTIONS.

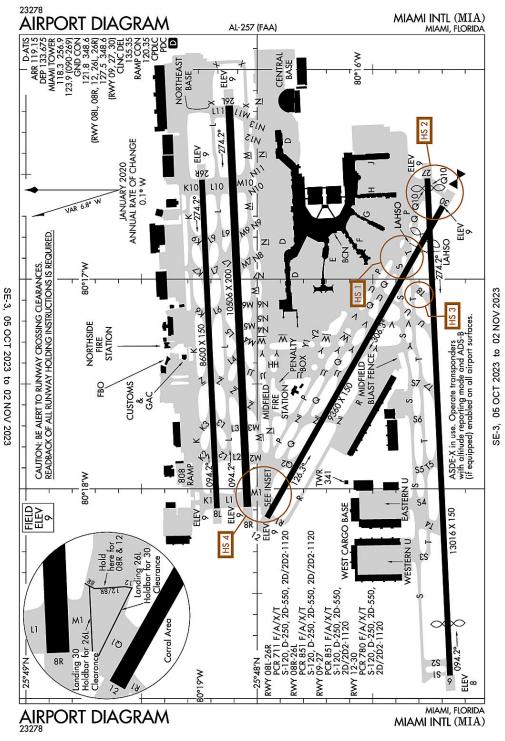
NO HELI OPS PERMITTED ON TRML APRON.

TFC PROCD DRCTLY TO GATE UNLESS DRCTD BY ATC; ADVISE ATC IF GATE IS NOT AVBL.

CAUTION: GS ANT 130 FT SW OF TWY A CNTRLN BTN TWY A1 & TWY A2.

RWY USE PROGRAM IN EFFECT; USE DISTANT NOISE ABATEMENT DEP PROFILE. VISUAL APCH TO RWY 06 W OF FORT MYERS BEACH MAINTAIN 3000 FT UNTIL CROSSING SHORELINE 12 NM SW OF ARPT. RWY 24 PREFERRED BTN 2200–0600. FOR NOISE ABATEMENT PROC CTC AMGR.





AD 2–181 5 OCT 23

# Miami, FL Miami Intl ICAO Identifier KMIA

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 25–47–43.3N / 80–17–24.417W
2.2.2 From City: 8 miles NW of MIAMI, FL
2.2.3 Elevation: 9.3 ft
2.2.5 Magnetic Variation: 5W (2000)
2.2.6 Airport Contact: RALPH CUTIE MIAMI–DADE AVIATION DEPARTMENT MIAMI, FL 33102 (305–876–7038)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 26R
2.12.2 True Bearing: 267
2.12.3 Dimensions: 8600 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 25-48-14.3204N / 80-16-31.5499W
2.12.6 Threshold Elevation: 8.8 ft
2.12.6 Touchdown Zone Elevation: 9 ft

2.12.1 Designation: 08L 2.12.2 True Bearing: 87 2.12.3 Dimensions: 8600 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 25–48–10.432N / 80–18–5.5508W 2.12.6 Threshold Elevation: 8.9 ft 2.12.6 Touchdown Zone Elevation: 9.1 ft

2.12.1 Designation: 08R
2.12.2 True Bearing: 87
2.12.3 Dimensions: 10506 ft x 200 ft
2.12.4 PCN:
2.12.5 Coordinates: 25-48-2.5177N / 80-18-5.1588W
2.12.6 Threshold Elevation: 8.5 ft
2.12.6 Touchdown Zone Elevation: 9.1 ft

2.12.1 Designation: 26L 2.12.2 True Bearing: 267 2.12.3 Dimensions: 10506 ft x 200 ft 2.12.4 PCN: 2.12.5 Coordinates: 25-48-7.2652N / 80-16-10.3282W 2.12.6 Threshold Elevation: 8.9 ft 2.12.6 Touchdown Zone Elevation: 9 ft 2.12.1 Designation: 09 2.12.2 True Bearing: 87 2.12.3 Dimensions: 13016 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 25-47-9.9421N / 80-18-53.4173W 2.12.6 Threshold Elevation: 8.1 ft 2.12.6 Touchdown Zone Elevation: 8.2 ft 2.12.1 Designation: 27 2.12.2 True Bearing: 267 2.12.3 Dimensions: 13016 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 25-47-15.8328N / 80-16-31.1711W 2.12.6 Threshold Elevation: 9 ft 2.12.6 Touchdown Zone Elevation: 9.1 ft 2.12.1 Designation: 30 2.12.2 True Bearing: 299 2.12.3 Dimensions: 9360 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 25-47-11.8224N / 80-16-39.0805W 2.12.6 Threshold Elevation: 8.7 ft 2.12.6 Touchdown Zone Elevation: 9.3 ft 2.12.1 Designation: 12 2.12.2 True Bearing: 119 2.12.3 Dimensions: 9360 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 25-47-57.4262N / 80-18-8.2439W 2.12.6 Threshold Elevation: 9.1 ft 2.12.6 Touchdown Zone Elevation: 9.2 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 26R
2.13.2 Take-off Run Available: 8600
2.13.3 Take-off Distance Available: 8600
2.13.4 Accelerate-Stop Distance Available: 8600
2.13.5 Landing Distance Available: 8600

2.13.1 Designation: 08L2.13.2 Take-off Run Available: 8600

2.13.3 Take-off Distance Available: 8600 2.13.4 Accelerate-Stop Distance Available: 8600 2.13.5 Landing Distance Available: 8600 2.13.1 Designation: 08R 2.13.2 Take-off Run Available: 10506 2.13.3 Take-off Distance Available: 10506 2.13.4 Accelerate–Stop Distance Available: 10506 2.13.5 Landing Distance Available: 10506 2.13.1 Designation: 26L 2.13.2 Take-off Run Available: 10506 2.13.3 Take-off Distance Available: 10506 2.13.4 Accelerate-Stop Distance Available: 10220 2.13.5 Landing Distance Available: 10220 2.13.1 Designation: 09 2.13.2 Take-off Run Available: 13016 2.13.3 Take-off Distance Available: 13016 2.13.4 Accelerate–Stop Distance Available: 12755 2.13.5 Landing Distance Available: 11397 2.13.1 Designation: 27 2.13.2 Take-off Run Available: 13016 2.13.3 Take-off Distance Available: 13016 2.13.4 Accelerate-Stop Distance Available: 13016 2.13.5 Landing Distance Available: 12755 2.13.1 Designation: 30 2.13.2 Take-off Run Available: 9355 2.13.3 Take-off Distance Available: 9355 2.13.4 Accelerate-Stop Distance Available: 8853 2.13.5 Landing Distance Available: 7913 2.13.1 Designation: 12 2.13.2 Take-off Run Available: 9355 2.13.3 Take-off Distance Available: 9355 2.13.4 Accelerate–Stop Distance Available: 8579

2.13.5 Landing Distance Available: 8579

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 26R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08L 2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 092.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 272.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 302.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 122.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ALTNN DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALTNN DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALTNN DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALTNN DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: ANNEY STAR2.18.3 Channel: 125.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: ANNEY STAR2.18.3 Channel: 125.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: ANNEY STAR2.18.3 Channel: 322.3

2.18.5 Hours of Operation: 24 2.18.1 Service Designation: ANNEY STAR 2.18.3 Channel: 322.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (090-269) 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (090-269) 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (270-089) 2.18.3 Channel: 125.75 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (270-089) 2.18.3 Channel: 125.75 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (090-269) 2.18.3 Channel: 379.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (090-269) 2.18.3 Channel: 379.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P IC (270-089) 2.18.3 Channel: 124.85 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P IC (270–089) 2.18.3 Channel: 124.85 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P IC (270-089) 2.18.3 Channel: 322.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P IC (270-089) 2.18.3 Channel: 322.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/S 2.18.3 Channel: 125.75 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S

2.18.3 Channel: 125.75 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S (270–089) 2.18.3 Channel: 263.025 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S (270–089) 2.18.3 Channel: 263.025 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLUFI STAR2.18.3 Channel: 125.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLUFI STAR2.18.3 Channel: 125.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLUFI STAR2.18.3 Channel: 322.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLUFI STAR2.18.3 Channel: 322.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNFSH STAR2.18.3 Channel: 124.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNFSH STAR2.18.3 Channel: 124.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNFSH STAR2.18.3 Channel: 263.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNFSH STAR2.18.3 Channel: 263.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNGOS DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNGOS DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNGOS DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: BNGOS DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 135.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 135.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (090–269) 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (090–269) 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (270–089)2.18.3 Channel: 125.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (270–089)2.18.3 Channel: 125.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (270–089) 2.18.3 Channel: 322.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (270–089) 2.18.3 Channel: 322.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (090–269)2.18.3 Channel: 379.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (090–269) 2.18.3 Channel: 379.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CSTAL STAR2.18.3 Channel: 124.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CSTAL STAR2.18.3 Channel: 124.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CSTAL STAR2.18.3 Channel: 263.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CSTAL STAR2.18.3 Channel: 263.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARRIVAL)2.18.3 Channel: 119.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARRIVAL)2.18.3 Channel: 119.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEPART)2.18.3 Channel: 133.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEPART)2.18.3 Channel: 133.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (090–269) 2.18.3 Channel: 125.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (090–269) 2.18.3 Channel: 125.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (270–089) 2.18.3 Channel: 290.325 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (270–089) 2.18.3 Channel: 290.325 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (090–269) 2.18.3 Channel: 354.1 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (090–269) 2.18.3 Channel: 354.1 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P IC (270–089) 2.18.3 Channel: 119.45 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P IC (270–089) 2.18.3 Channel: 119.45 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DORRL DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: DORRL DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: DORRL DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: DORRL DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: DVALL STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: DVALL STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: DVALL STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: DVALL STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: FLMGO DP

2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: FLMGO DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: FLMGO DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FLMGO DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOLZZ DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOLZZ DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOLZZ DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOLZZ DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOWEE STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOWEE STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOWEE STAR2.18.3 Channel: 124.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOWEE STAR2.18.3 Channel: 124.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOWEE STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FOWEE STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FROGZ STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: FROGZ STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: FROGZ STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FROGZ STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GLADZ DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: GLADZ DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: GLADZ DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GLADZ DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC (RWY 08L/26R, 08R/26L, 12)2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC (RWY 08L/26R, 08R/26L, 12)
2.18.3 Channel: 121.8
2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC (RWY 09/27, 30)2.18.3 Channel: 127.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC (RWY 09/27, 30)2.18.3 Channel: 127.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: GWAVA DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: GWAVA DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: GWAVA DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: GWAVA DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: HURCN DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: HURCN DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: HURCN DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: HURCN DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: HUSIL DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: HUSIL DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: HUSIL DP 2.18.3 Channel: 290.325

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: HUSIL DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: KLADA DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: KLADA DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: KLADA DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: KLADA DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (090–269) 2.18.3 Channel: 123.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (090–269) 2.18.3 Channel: 123.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P IC (270–089) 2.18.3 Channel: 118.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P IC (270–089) 2.18.3 Channel: 118.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P IC2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P IC2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIFRR DP2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIFRR DP

2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIFRR DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIFRR DP2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (9000 FT)2.18.3 Channel: 126.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (9000 FT)2.18.3 Channel: 126.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (7000 FT)2.18.3 Channel: 133.7752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (7000 FT)2.18.3 Channel: 133.7752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (9000 FT)2.18.3 Channel: 251.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (9000 FT)2.18.3 Channel: 251.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (7000 FT)2.18.3 Channel: 371.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LUUCE STAR (7000 FT)2.18.3 Channel: 371.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAYNR DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAYNR DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAYNR DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAYNR DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (ALTNN,BEECH,BNGOS,DORRL,FLMGO,HURCN,FOLZZ,ZFP)2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (ALTNN, BEECH, BNGOS, DORRL, FLMGO, HURCN, FOLZZ, ZFP)2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (GWAVA, KETLL, MAYNR TRANSITIONS)2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (GWAVA, KETLL, MAYNR TRANSITIONS)2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (ALTNN, BEECH, BNGOS, DORRL, FLMGO, HURCN, FOLZZ, ZFP)2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (ALTNN, BEECH, BNGOS, DORRL, FLMGO, HURCN, FOLZZ, ZFP)2.18.3 Channel: 290.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (GWAVA, KETLL, MAYNR TRANSITIONS)2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIAMI DP (GWAVA, KETLL, MAYNR TRANSITIONS)2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: NNOCE DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: NNOCE DP2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: NNOCE DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: NNOCE DP2.18.3 Channel: 354.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALMZ STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALMZ STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALMZ STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALMZ STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL2.18.3 Channel: 120.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL2.18.3 Channel: 120.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: RTIS (120–300 WITHIN 25 NM)2.18.3 Channel: 125.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: RTIS (120–300 WITHIN 25 NM)2.18.3 Channel: 125.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: SNDBR STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: SNDBR STAR2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: SNDBR STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: SNDBR STAR2.18.3 Channel: 350.225

2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (9000 FT) 2.18.3 Channel: 126.05 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (9000 FT) 2.18.3 Channel: 126.05 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (7000 FT) 2.18.3 Channel: 133.775 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (7000 FT) 2.18.3 Channel: 133.775 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (9000 FT) 2.18.3 Channel: 251.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (9000 FT) 2.18.3 Channel: 251.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (7000 FT) 2.18.3 Channel: 371.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: TARPN STAR (7000 FT) 2.18.3 Channel: 371.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: VIICE STAR 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: VIICE STAR 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: VIICE STAR 2.18.3 Channel: 350.225 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: VIICE STAR2.18.3 Channel: 350.2252.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 08L. Magnetic variation: 5W
2.19.2 ILS Identification: ROY
2.19.5 Coordinates: 25-48-16.3597N / 80-16-18.3104W
2.19.6 Site Elevation: 20.1 ft

2.19.1 ILS Type: Localizer for runway 08L. Magnetic variation: 5W
2.19.2 ILS Identification: ROY
2.19.5 Coordinates: 25–48–14.865N / 80–16–18.3941W
2.19.6 Site Elevation: 6.8 ft

2.19.1 ILS Type: DME for runway 26R. Magnetic variation: 5W
2.19.2 ILS Identification: CNV
2.19.5 Coordinates: 25-48-7.1241N / 80-18-16.4684W
2.19.6 Site Elevation: 20.3 ft

2.19.1 ILS Type: Localizer for runway 26R. Magnetic variation: 5W
2.19.2 ILS Identification: CNV
2.19.5 Coordinates: 25–48–9.969N / 80–18–16.6983W
2.19.6 Site Elevation: 7.4 ft

2.19.1 ILS Type: DME for runway 08R. Magnetic variation: 5W
2.19.2 ILS Identification: MFA
2.19.5 Coordinates: 25-48-5.0878N / 80-16-0.575W
2.19.6 Site Elevation: 15.6 ft

2.19.1 ILS Type: Glide Slope for runway 08R. Magnetic variation: 5W
2.19.2 ILS Identification: MFA
2.19.5 Coordinates: 25-48-6.1715N / 80-17-54.807W
2.19.6 Site Elevation: 5 ft

2.19.1 ILS Type: Localizer for runway 08R. Magnetic variation: 5W
2.19.2 ILS Identification: MFA
2.19.5 Coordinates: 25–48–7.688N / 80–16–0.0426W
2.19.6 Site Elevation: 6.3 ft

2.19.1 ILS Type: DME for runway 26L. Magnetic variation: 5W
2.19.2 ILS Identification: VIN
2.19.5 Coordinates: 25–48–5.8074N / 80–18–14.9415W
2.19.6 Site Elevation: 14.3 ft

2.19.1 ILS Type: Glide Slope for runway 26L. Magnetic variation: 5W
2.19.2 ILS Identification: VIN
2.19.5 Coordinates: 25–48–9.7347N / 80–16–22.5043W
2.19.6 Site Elevation: 5.9 ft

2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 5W
2.19.2 ILS Identification: VIN
2.19.5 Coordinates: 25–48–2.1576N / 80–18–13.7966W
2.19.6 Site Elevation: 7.6 ft

2.19.1 ILS Type: DME for runway 09. Magnetic variation: 5W 2.19.2 ILS Identification: BUL 2.19.5 Coordinates: 25-47-15.8249N / 80-16-17.2451W 2.19.6 Site Elevation: 20.1 ft 2.19.1 ILS Type: Glide Slope for runway 09. Magnetic variation: 5W 2.19.2 ILS Identification: BUL 2.19.5 Coordinates: 25-47-7.8388N / 80-18-26.7053W 2.19.6 Site Elevation: 7.5 ft 2.19.1 ILS Type: Localizer for runway 09. Magnetic variation: 5W 2.19.2 ILS Identification: BUL 2.19.5 Coordinates: 25-47-16.4165N / 80-16-17.1006W 2.19.6 Site Elevation: 18.4 ft 2.19.1 ILS Type: Glide Slope for runway 27. Magnetic variation: 5W 2.19.2 ILS Identification: MIA 2.19.5 Coordinates: 25-47-11.7269N / 80-16-45.3981W 2.19.6 Site Elevation: 4.7 ft 2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 5W 2.19.2 ILS Identification: MIA 2.19.5 Coordinates: 25-47-9.3891N / 80-19-6.6406W 2.19.6 Site Elevation: 7.1 ft 2.19.1 ILS Type: DME for runway 12. Magnetic variation: 5W 2.19.2 ILS Identification: GEM 2.19.5 Coordinates: 25-47-11.2767N / 80-16-32.4152W 2.19.6 Site Elevation: 15.9 ft 2.19.1 ILS Type: Glide Slope for runway 12. Magnetic variation: 5W 2.19.2 ILS Identification: GEM 2.19.5 Coordinates: 25-47-50.78N / 80-17-58.58W 2.19.6 Site Elevation: 7 ft 2.19.1 ILS Type: Localizer for runway 12. Magnetic variation: 5W 2.19.2 ILS Identification: GEM 2.19.5 Coordinates: 25-47-9.6403N / 80-16-34.8108W 2.19.6 Site Elevation: 8.3 ft 2.19.1 ILS Type: DME for runway 30. Magnetic variation: 5W 2.19.2 ILS Identification: DCX 2.19.5 Coordinates: 25-47-57.7789N / 80-18-14.5127W 2.19.6 Site Elevation: 14.7 ft 2.19.1 ILS Type: Glide Slope for runway 30. Magnetic variation: 5W 2.19.2 ILS Identification: DCX 2.19.5 Coordinates: 25-47-17.643N / 80-16-59.572W 2.19.6 Site Elevation: 7.1 ft

2.19.1 ILS Type: Localizer for runway 30. Magnetic variation: 5W

2.19.2 ILS Identification: DCX 2.19.5 Coordinates: 25–47–59.8764N / 80–18–13.0372W 2.19.6 Site Elevation: 8.9 ft

#### General Remarks:

ACFT WITH A WINGSPAN GTR THAN 171 FT ARE PROHIBITED FM TXG ON TWY P EAST OF TWY U.

ALL MEDICAL EMERGENCIES ARRIVALS, WITH THE EXCEPTION OF AIR AMBULANCE FLIGHTS, MUST SECURE DOORS UNTIL ARFF IS ON SCENE.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

AIRPORT MANAGER: 305-876-7038.

US CBP AND EAPIS AVBL.

ALL DIVERSION CTC FREQ 130.5 UPON ARR.

ALL TURBOJET ACFT USE DSNT NOISE ABATEMENT DEP PROFILE FROM ALL RYS EXC A320, B727, B737–800, B767–400, AND DC9 WHICH SHOULD USE CLOSE–IN NOISE ABATEMENT ABATEMENT PROFILE.

PPR 3 HRS PRIOR TO ALL ARRIVALS ON THE GENERAL AVIATION CENTER (GAC) RAMP 305–876–7550 CTC RAMP CONTROL UPON ARRIVAL ON FREQUENCY 131.600. ACFT WITH WINGSPAN GREATER THAN 78 FT ARE PROHIBITED FROM ENTERING THE GAC RAMP.

NO INT DEP AUTH WO PPR FM AMGR.

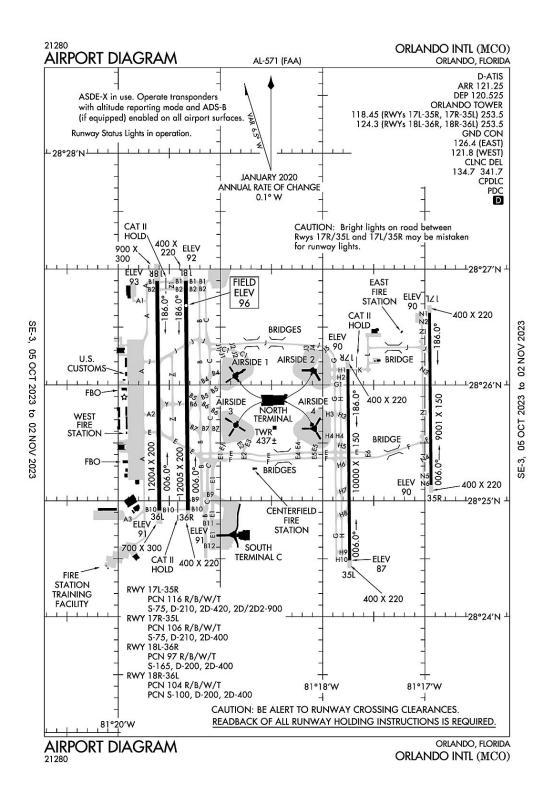
AIRPORT OPS 305-876-7550.

CLSD NON ENG ACFT.

BIRDS ON & INVOF ARPT.

PPR FOR INBOUND MILITARY FLIGHTS 100 NM ON FREQ 130.5.

# Orlando, Florida Orlando International ICAO Identifier KMCO



# Orlando, FL Orlando Intl ICAO Identifier KMCO

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 28–25–45.8N / 81–18–32.4W
2.2.2 From City: 6 miles SE of ORLANDO, FL
2.2.3 Elevation: 96.4 ft
2.2.5 Magnetic Variation: 6W (2015)
2.2.6 Airport Contact: KEVIN J. THIBAULT, P.E. 1 JEFF FUQUA BLVD ORLANDO, FL 32827 (407–825–7445)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MINOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/21/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 17L
2.12.2 True Bearing: 179
2.12.3 Dimensions: 9001 ft x 150 ft
2.12.4 PCN: 116 R/B/W/T
2.12.5 Coordinates: 28–26–37.308N / 81–16–57.2924W
2.12.6 Threshold Elevation: 89.7 ft
2.12.6 Touchdown Zone Elevation: 89.9 ft

2.12.1 Designation: 35R 2.12.2 True Bearing: 359 2.12.3 Dimensions: 9001 ft x 150 ft 2.12.4 PCN: 116 R/B/W/T 2.12.5 Coordinates: 28–25–8.1974N / 81–16–56.3802W 2.12.6 Threshold Elevation: 89.7 ft 2.12.6 Touchdown Zone Elevation: 89.8 ft

2.12.1 Designation: 17R 2.12.2 True Bearing: 179 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 106 R/B/W/T 2.12.5 Coordinates: 28–26–8.2029N / 81–17–45.1656W 2.12.6 Threshold Elevation: 90.1 ft 2.12.6 Touchdown Zone Elevation: 90.2 ft

AD 2–203 5 OCT 23

2.12.1 Designation: 35L
2.12.2 True Bearing: 359
2.12.3 Dimensions: 10000 ft x 150 ft
2.12.4 PCN: 106 R/B/W/T
2.12.5 Coordinates: 28–24–29.1952N / 81–17–44.1335W
2.12.6 Threshold Elevation: 86.7 ft
2.12.6 Touchdown Zone Elevation: 88.3 ft
2.12.1 Designation: 36R
2.12.2 True Bearing: 359

2.12.3 Dimensions: 12005 ft x 200 ft 2.12.4 PCN: 97 R/B/W/T 2.12.5 Coordinates: 28–24–55.1469N / 81–19–19.0358W 2.12.6 Threshold Elevation: 91 ft 2.12.6 Touchdown Zone Elevation: 92.3 ft

2.12.1 Designation: 18L
2.12.2 True Bearing: 179
2.12.3 Dimensions: 12005 ft x 200 ft
2.12.4 PCN: 97 R/B/W/T
2.12.5 Coordinates: 28–26–54.0038N / 81–19–20.3022W
2.12.6 Threshold Elevation: 92.4 ft
2.12.6 Touchdown Zone Elevation: 96.4 ft

2.12.1 Designation: 18R 2.12.2 True Bearing: 179 2.12.3 Dimensions: 12004 ft x 200 ft 2.12.4 PCN: 104 R/B/W/T 2.12.5 Coordinates: 28–26–53.8569N / 81–19–37.1091W 2.12.6 Threshold Elevation: 92.5 ft 2.12.6 Touchdown Zone Elevation: 93.5 ft

2.12.1 Designation: 36L 2.12.2 True Bearing: 359 2.12.3 Dimensions: 12004 ft x 200 ft 2.12.4 PCN: 104 R/B/W/T 2.12.5 Coordinates: 28–24–55.007N / 81–19–35.8294W 2.12.6 Threshold Elevation: 91.1 ft 2.12.6 Touchdown Zone Elevation: 92.6 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 17L
2.13.2 Take-off Run Available: 9001
2.13.3 Take-off Distance Available: 9001
2.13.4 Accelerate-Stop Distance Available: 9001
2.13.5 Landing Distance Available: 9001

2.13.1 Designation: 35R2.13.2 Take-off Run Available: 9001

2.13.3 Take-off Distance Available: 9001 2.13.4 Accelerate-Stop Distance Available: 9001 2.13.5 Landing Distance Available: 9001 2.13.1 Designation: 17R 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate–Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 35L 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 36R 2.13.2 Take-off Run Available: 12005 2.13.3 Take-off Distance Available: 12005 2.13.4 Accelerate-Stop Distance Available: 11601 2.13.5 Landing Distance Available: 11601 2.13.1 Designation: 18L 2.13.2 Take-off Run Available: 12005 2.13.3 Take-off Distance Available: 12005 2.13.4 Accelerate-Stop Distance Available: 12005 2.13.5 Landing Distance Available: 12005 2.13.1 Designation: 18R 2.13.2 Take-off Run Available: 12004 2.13.3 Take-off Distance Available: 12004 2.13.4 Accelerate–Stop Distance Available: 12004 2.13.5 Landing Distance Available: 12004 2.13.1 Designation: 36L 2.13.2 Take-off Run Available: 12004 2.13.3 Take-off Distance Available: 12004 2.13.4 Accelerate–Stop Distance Available: 11621 2.13.5 Landing Distance Available: 11621

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 17L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 17R

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 36R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: AR OPS2.18.3 Channel: 41.52.18.5 Hours of Operation:

2.18.1 Service Designation: AR OPS2.18.3 Channel: 148.82.18.5 Hours of Operation:

2.18.1 Service Designation: CD/P2.18.3 Channel: 134.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 341.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 120.5252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 121.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG 2.18.3 Channel: 121.5

2.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (WEST)2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (EAST)2.18.3 Channel: 126.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 17L/35R, 17R/35L) 2.18.3 Channel: 118.45 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18L/36R, 18R/36L)2.18.3 Channel: 124.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 253.52.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 17L. Magnetic variation: 6W
2.19.2 ILS Identification: ARK
2.19.5 Coordinates: 28–24–57.9921N / 81–16–51.737W
2.19.6 Site Elevation: 97 ft

2.19.1 ILS Type: Glide Slope for runway 17L. Magnetic variation: 6W
2.19.2 ILS Identification: ARK
2.19.5 Coordinates: 28–26–27.0479N / 81–16–52.5933W
2.19.6 Site Elevation: 94.4 ft

2.19.1 ILS Type: Localizer for runway 17L. Magnetic variation: 6W
2.19.2 ILS Identification: ARK
2.19.5 Coordinates: 28–24–57.8892N / 81–16–56.2728W
2.19.6 Site Elevation: 89.1 ft

2.19.1 ILS Type: DME for runway 35R. Magnetic variation: 6W
2.19.2 ILS Identification: CER
2.19.5 Coordinates: 28–26–48.2377N / 81–16–52.8447W
2.19.6 Site Elevation: 98.3 ft

2.19.1 ILS Type: Glide Slope for runway 35R. Magnetic variation: 6W
2.19.2 ILS Identification: CER
2.19.5 Coordinates: 28–25–18.6301N / 81–16–51.8726W

2.19.6 Site Elevation: 87.3 ft

2.19.1 ILS Type: Localizer for runway 35R. Magnetic variation: 6W
2.19.2 ILS Identification: CER
2.19.5 Coordinates: 28–26–47.6103N / 81–16–57.3979W
2.19.6 Site Elevation: 89.6 ft

2.19.1 ILS Type: DME for runway 17R. Magnetic variation: 6W
2.19.2 ILS Identification: DIZ
2.19.5 Coordinates: 28–24–18.9549N / 81–17–47.0755W
2.19.6 Site Elevation: 86.4 ft

2.19.1 ILS Type: Glide Slope for runway 17R. Magnetic variation: 6W
2.19.2 ILS Identification: DIZ
2.19.5 Coordinates: 28–25–57.8375N / 81–17–40.5783W
2.19.6 Site Elevation: 92.7 ft

2.19.1 ILS Type: Localizer for runway 17R. Magnetic variation: 6W
2.19.2 ILS Identification: DIZ
2.19.5 Coordinates: 28–24–18.7729N / 81–17–44.0255W
2.19.6 Site Elevation: 81.6 ft

2.19.1 ILS Type: DME for runway 35L. Magnetic variation: 6W
2.19.2 ILS Identification: DDO
2.19.5 Coordinates: 28-26-18.3948N / 81-17-48.1528W
2.19.6 Site Elevation: 95.5 ft

2.19.1 ILS Type: Glide Slope for runway 35L. Magnetic variation: 6W
2.19.2 ILS Identification: DDO
2.19.5 Coordinates: 28–24–39.5307N / 81–17–39.7618W
2.19.6 Site Elevation: 83.7 ft

2.19.1 ILS Type: Localizer for runway 35L. Magnetic variation: 6W
2.19.2 ILS Identification: DDO
2.19.5 Coordinates: 28–26–18.5959N / 81–17–45.2712W
2.19.6 Site Elevation: 87.7 ft

2.19.1 ILS Type: DME for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: OJP
2.19.5 Coordinates: 28–27–0.7626N / 81–19–18.0064W
2.19.6 Site Elevation: 96.2 ft

2.19.1 ILS Type: Glide Slope for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: OJP
2.19.5 Coordinates: 28–25–5.5139N / 81–19–23.6289W
2.19.6 Site Elevation: 87.7 ft

2.19.1 ILS Type: Localizer for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: OJP
2.19.5 Coordinates: 28–27–1.4488N / 81–19–20.3839W
2.19.6 Site Elevation: 90.8 ft

2.19.1 ILS Type: DME for runway 18R. Magnetic variation: 6W
2.19.2 ILS Identification: TFE
2.19.5 Coordinates: 28–24–42.2043N / 81–19–38.5819W
2.19.6 Site Elevation: 94.7 ft

2.19.1 ILS Type: Glide Slope for runway 18R. Magnetic variation: 6W
2.19.2 ILS Identification: TFE
2.19.5 Coordinates: 28–26–43.5N / 81–19–32.21W
2.19.6 Site Elevation: 89 ft

2.19.1 ILS Type: Localizer for runway 18R. Magnetic variation: 6W
2.19.2 ILS Identification: TFE
2.19.5 Coordinates: 28–24–41.97N / 81–19–35.69W
2.19.6 Site Elevation: 86 ft

### **General Remarks:**

WHEN ORL ILS RY 7 AND MCO ILS RYS 17 & 18R SIMULTANEOUS OPERATIONS ARE CONDUCTED, ATC RADAR REQUIRED.

WEST RAMP CUSTOMS INSPECTION PRKG AREA RSTD TO ACFT WINGSPAN LESS THAN 118'

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

UNLESS ADV BY ATIS, DEP FLTS ON INITIAL CTC WITH GND CTL: ACFT ON WEST RAMP, AIRSIDE 1 & 3 (GATES 1–59) USE GND CTL 121.8. ACFT AT AIRSIDE 2 & 4 (GATES 60 AND HIGHER), USE GND CTL 126.4.

TWY A, BTN W RAMP S END AND TWY B10, RSTRD TO ACFT WINGSPAN LESS THAN 171 FT. PPR FOR ACFT WINGSPAN 171 FT OR GTR.

TWY J3 AND TWY J4 RSTD TO WINGSPAN OF LESS THAN 118 FT.

RUNWAY STATUS LIGHTS ARE IN OPERATION.

BRIGHT LGTS ON ROAD BTN RY 17R/35L AND RY 17L/35R MAY BE MISTAKEN FOR RY LGTS.

AVOID CONTACT WITH TAXIWAY EDGE LIGHTS; ALL AIRCRAFT DETERMINED TO BE FAA DESIGN GROUP IV AND ABOVE MUST PERFORM JUDGEMENTAL OVERSTEERING INSTEAD OF COCKPIT CENTERLINE STEERING WHEN TAXIING.

TWY A, SOUTH OF TWY A3 RSTD TO WINGSPAN OF LESS THAN 118 FT. PPR REQUIRED FOR WINGSPAN 118 FT OR GREATER.

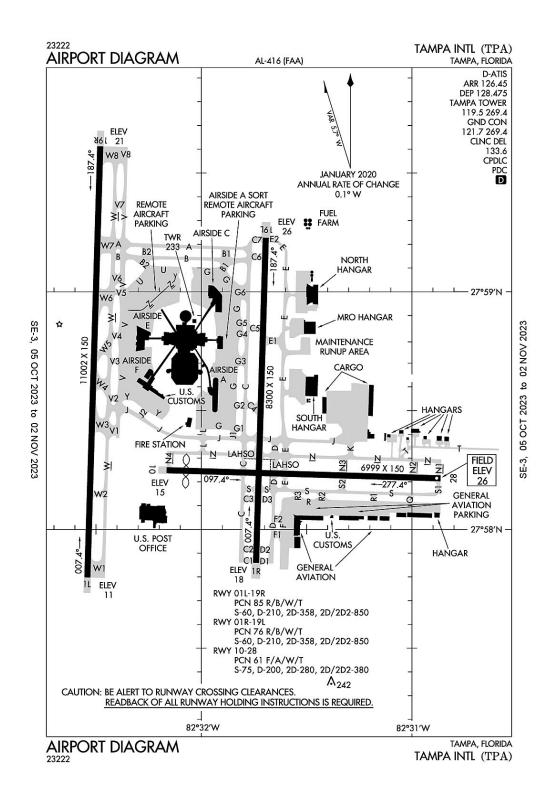
RY 17L-35R UNLIT 0400-1100Z.

USE CAUTION IN VCNTY OF TWY "A" ALONG WEST RAMP.

BIRDS & DEER ON & INVOF ARPT.

ACFT WITH WINGSPAN GREATER THAN 214 FT MUST ADHERE TO SPECIFIC RY AND TAXI ROUTES. CONTACT AIRFIELD OPS AT 407–825–2036 FOR DETAILS.

# Tampa, Florida Tampa International ICAO Identifier KTPA



# Tampa, FL Tampa Intl ICAO Identifier KTPA

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 27–58–31.7N / 82–31–59.7W 2.2.2 From City: 6 miles W of TAMPA, FL 2.2.3 Elevation: 26.4 ft 2.2.5 Magnetic Variation: 5W (2010) 2.2.6 Airport Contact: JOHN TILIACOS PO BOX 22287 TAMPA, FL 33622 (813–870–8700) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 19R
2.12.2 True Bearing: 182
2.12.3 Dimensions: 11002 ft x 150 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 27–59–36.7423N / 82–32–28.7801W
2.12.6 Threshold Elevation: 21 ft
2.12.6 Touchdown Zone Elevation: 21 ft

2.12.1 Designation: 01L
2.12.2 True Bearing: 2
2.12.3 Dimensions: 11002 ft x 150 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 27–57–47.8596N / 82–32–32.4793W
2.12.6 Threshold Elevation: 10.7 ft
2.12.6 Touchdown Zone Elevation: 10.8 ft

2.12.1 Designation: 19L
2.12.2 True Bearing: 182
2.12.3 Dimensions: 8300 ft x 150 ft
2.12.4 PCN: 76 R/B/W/T
2.12.5 Coordinates: 27–59–13.6607N / 82–31–41.5739W
2.12.6 Threshold Elevation: 26 ft
2.12.6 Touchdown Zone Elevation: 26.1 ft

2.12.1 Designation: 01R
2.12.2 True Bearing: 2
2.12.3 Dimensions: 8300 ft x 150 ft
2.12.4 PCN: 76 R/B/W/T
2.12.5 Coordinates: 27–57–51.5169N / 82–31–44.3687W
2.12.6 Threshold Elevation: 17.7 ft
2.12.6 Touchdown Zone Elevation: 20.5 ft

2.12.1 Designation: 10 2.12.2 True Bearing: 92 2.12.3 Dimensions: 6999 ft x 150 ft 2.12.4 PCN: 61 F/A/W/T 2.12.5 Coordinates: 27–58–14.9917N / 82–32–9.9027W 2.12.6 Threshold Elevation: 14.5 ft 2.12.6 Touchdown Zone Elevation: 21.8 ft

2.12.1 Designation: 28
2.12.2 True Bearing: 272
2.12.3 Dimensions: 6999 ft x 150 ft
2.12.4 PCN: 61 F/A/W/T
2.12.5 Coordinates: 27–58–12.8902N / 82–30–51.8781W
2.12.6 Threshold Elevation: 26.4 ft
2.12.6 Touchdown Zone Elevation: 26.4 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 19R
2.13.2 Take-off Run Available: 11002
2.13.3 Take-off Distance Available: 11002
2.13.4 Accelerate-Stop Distance Available: 11002
2.13.5 Landing Distance Available: 11002

2.13.1 Designation: 01L
2.13.2 Take-off Run Available: 11002
2.13.3 Take-off Distance Available: 11002
2.13.4 Accelerate-Stop Distance Available: 10800
2.13.5 Landing Distance Available: 10800

2.13.1 Designation: 19L
2.13.2 Take-off Run Available: 8300
2.13.3 Take-off Distance Available: 8300
2.13.4 Accelerate-Stop Distance Available: 8300
2.13.5 Landing Distance Available: 8300

2.13.1 Designation: 01R

2.13.2 Take-off Run Available: 8300

2.13.3 Take-off Distance Available: 8300

2.13.4 Accelerate–Stop Distance Available: 8300

2.13.5 Landing Distance Available: 8300

2.13.1 Designation: 10
2.13.2 Take-off Run Available: 6999
2.13.3 Take-off Distance Available: 6999
2.13.4 Accelerate-Stop Distance Available: 6999
2.13.5 Landing Distance Available: 6501

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 6999
2.13.3 Take-off Distance Available: 6999
2.13.4 Accelerate-Stop Distance Available: 6501
2.13.5 Landing Distance Available: 6501

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 19R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 19L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 102.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 282.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/DEP/P (151–219) 2.18.3 Channel: 134.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (001–150) 2.18.3 Channel: 118.15 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (220–360) 2.18.3 Channel: 239.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (001–150) 2.18.3 Channel: 279.6 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (151–219) 2.18.3 Channel: 353.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 307.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC2.18.3 Channel: 118.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 353.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: BAYPO DP2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: BAYPO DP2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLFRG STAR2.18.3 Channel: 119.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLFRG STAR2.18.3 Channel: 353.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRDGE STAR2.18.3 Channel: 119.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRDGE STAR2.18.3 Channel: 353.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 133.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (151–219) 2.18.3 Channel: 119.65 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (001–150) 2.18.3 Channel: 119.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (220–360) 2.18.3 Channel: 125.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (001–150) 2.18.3 Channel: 290.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (220–360) 2.18.3 Channel: 316.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (151–219) 2.18.3 Channel: 353.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CROWD DP2.18.3 Channel: 135.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: CROWD DP2.18.3 Channel: 279.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 126.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 128.4752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DADES STAR2.18.3 Channel: 135.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: DADES STAR2.18.3 Channel: 279.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P IC (220–360) 2.18.3 Channel: 118.8 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DORMR DP

2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: DORMR DP2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: ENDED DP2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: ENDED DP2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: GANDY DP2.18.3 Channel: 119.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: GANDY DP2.18.3 Channel: 353.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 269.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 121.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNOST DP2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNOST DP2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 119.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 269.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 119.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: LGTNG DP2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LGTNG DP2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAATY STAR2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAATY STAR2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAYZZ STAR2.18.3 Channel: 118.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAYZZ STAR2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: TAMPA DP2.18.3 Channel: 134.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: TAMPA DP2.18.3 Channel: 279.62.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 01L. Magnetic variation: 5W
2.19.2 ILS Identification: AMP
2.19.5 Coordinates: 27–59–43.4N / 82–32–25.65W
2.19.6 Site Elevation: 20 ft

2.19.1 ILS Type: Glide Slope for runway 01L. Magnetic variation: 5W 2.19.2 ILS Identification: AMP 2.19.5 Coordinates: 27-57-58.2392N / 82-32-36.5897W 2.19.6 Site Elevation: 7.6 ft 2.19.1 ILS Type: Inner Marker for runway 01L. Magnetic variation: 5W 2.19.2 ILS Identification: AMP 2.19.5 Coordinates: 27-57-39.6244N / 82-32-32.7564W 2.19.6 Site Elevation: 6.4 ft 2.19.1 ILS Type: Localizer for runway 01L. Magnetic variation: 5W 2.19.2 ILS Identification: AMP 2.19.5 Coordinates: 27-59-44.7869N / 82-32-28.5048W 2.19.6 Site Elevation: 20.6 ft 2.19.1 ILS Type: DME for runway 19R. Magnetic variation: 5W 2.19.2 ILS Identification: JRT 2.19.5 Coordinates: 27-57-37.34N / 82-32-31.94W 2.19.6 Site Elevation: 5 ft 2.19.1 ILS Type: Glide Slope for runway 19R. Magnetic variation: 5W 2.19.2 ILS Identification: JRT 2.19.5 Coordinates: 27-59-26.4582N / 82-32-33.5927W 2.19.6 Site Elevation: 17.2 ft 2.19.1 ILS Type: Localizer for runway 19R. Magnetic variation: 5W 2.19.2 ILS Identification: JRT 2.19.5 Coordinates: 27-57-37.46N / 82-32-32.84W 2.19.6 Site Elevation: 5 ft 2.19.1 ILS Type: DME for runway 01R. Magnetic variation: 5W 2.19.2 ILS Identification: TWJ 2.19.5 Coordinates: 27-59-22.9831N / 82-31-38.4291W 2.19.6 Site Elevation: 35.9 ft 2.19.1 ILS Type: Localizer for runway 01R. Magnetic variation: 5W 2.19.2 ILS Identification: TWJ 2.19.5 Coordinates: 27-59-23.9328N / 82-31-41.2197W 2.19.6 Site Elevation: 25.6 ft 2.19.1 ILS Type: DME for runway 19L. Magnetic variation: 5W 2.19.2 ILS Identification: TPA 2.19.5 Coordinates: 27-57-40.42N / 82-31-40.5W 2.19.6 Site Elevation: 10 ft 2.19.1 ILS Type: Glide Slope for runway 19L. Magnetic variation: 5W 2.19.2 ILS Identification: TPA 2.19.5 Coordinates: 27-59-3.1644N / 82-31-37.4636W 2.19.6 Site Elevation: 23.8 ft 2.19.1 ILS Type: Inner Marker for runway 19L. Magnetic variation: 5W 2.19.2 ILS Identification: TPA 2.19.5 Coordinates: 27–59–23.6601N / 82–31–41.2251W 2.19.6 Site Elevation: 25.7 ft

2.19.1 ILS Type: Localizer for runway 19L. Magnetic variation: 5W
2.19.2 ILS Identification: TPA
2.19.5 Coordinates: 27–57–40.972N / 82–31–44.7284W
2.19.6 Site Elevation: 13.7 ft

### **General Remarks:**

TAXILANE G WEST OF TWY B1 CLSD TO WINGSPAN GTR THAN 118 FT – PPR APT OPS.

RWY 19L IS NOISE SENSITIVE TO TBJT DEPARTURES. RWY 01R IS NOISE SENSITIVE TO TBJT ARRIVALS. PUBLD NOISE ABATEMENT PROCS IN EFCT.

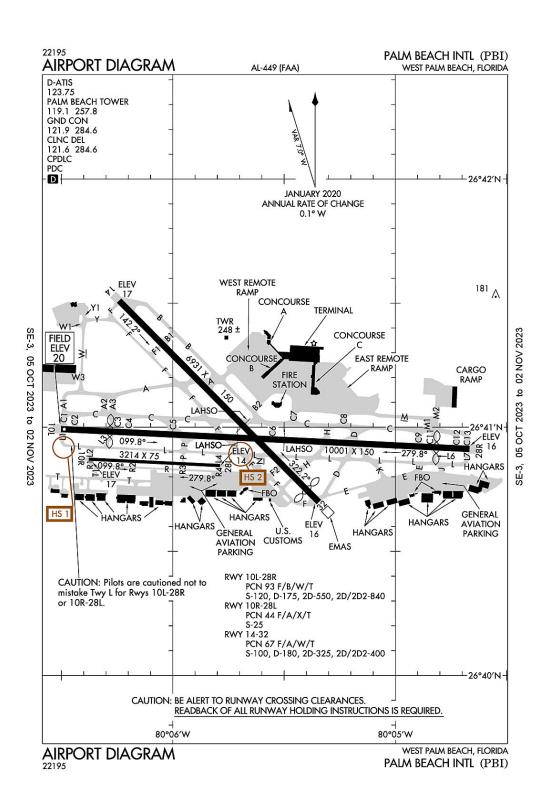
BIRD ACT ON AND INVOF ARPT.

TWY F AND TWY R ARE NON–MOVEMENT AREAS. BOTH LOCATONS ARE UNAVBL FOR GROUP IV ACFT WITH A WINGSPAN GTR THAN 117 FT WO PPR FM ARPT OPS. TWY T PPR FROM ARPT OPS RQRD FOR ACFT WITH A WINGSPAN GTR THAN 90 FT.

ONLY ACFT WITH PRIOR PMSN MAY USE TRML APN; ALL OTRS USE GA APN.

RSTRS TO ADG IV OR LGR: TWY E1.

RSTRS TO DESIGN GROUP V OR LGR; TWY J BTN TWY J1 AND TWY J2; TWY N WEST OF TWY L AND TWY E NORTH OF TWY J UNAVBL; TAXILANE Z CLSD TO WINGSPAN GTR THAN 171 FT – PPR ARPT OPS.





# West Palm Beach, FL Palm Beach Intl ICAO Identifier KPBI

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 26-40-59.382N / 80-5-44.131W
2.2.2 From City: 3 miles W of WEST PALM BEACH, FL
2.2.3 Elevation: 19.6 ft
2.2.5 Magnetic Variation: 6W (2010)
2.2.6 Airport Contact: LAURA BEEBE 846 PALM BEACH INTL AIRPORT WEST PALM BEACH, FL 33406 (561-471-7420)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/21/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 10L
2.12.2 True Bearing: 93
2.12.3 Dimensions: 10001 ft x 150 ft
2.12.4 PCN: 93 F/B/W/T
2.12.5 Coordinates: 26–40–59.5493N / 80–6–30.1296W
2.12.6 Threshold Elevation: 19.6 ft
2.12.6 Touchdown Zone Elevation: 16.3 ft

2.12.1 Designation: 28R 2.12.2 True Bearing: 273 2.12.3 Dimensions: 10001 ft x 150 ft 2.12.4 PCN: 93 F/B/W/T 2.12.5 Coordinates: 26–40–54.7438N / 80–4–40.0137W 2.12.6 Threshold Elevation: 16.4 ft 2.12.6 Touchdown Zone Elevation: 18.3 ft

2.12.1 Designation: 10R 2.12.2 True Bearing: 93 2.12.3 Dimensions: 3214 ft x 75 ft 2.12.4 PCN: 44 F/A/X/T 2.12.5 Coordinates: 26–40–52.282N / 80–6–22.6416W 2.12.6 Threshold Elevation: 17.1 ft 2.12.6 Touchdown Zone Elevation: 17.2 ft 2.12.1 Designation: 28L 2.12.2 True Bearing: 273 2.12.3 Dimensions: 3214 ft x 75 ft 2.12.4 PCN: 44 F/A/X/T 2.12.5 Coordinates: 26–40–50.7327N / 80–5–47.2501W 2.12.6 Threshold Elevation: 13.6 ft 2.12.6 Touchdown Zone Elevation: 16.9 ft

2.12.1 Designation: 14 2.12.2 True Bearing: 135 2.12.3 Dimensions: 6931 ft x 150 ft 2.12.4 PCN: 67 F/A/W/T 2.12.5 Coordinates: 26–41–30.596N / 80–6–14.482W 2.12.6 Threshold Elevation: 17 ft 2.12.6 Touchdown Zone Elevation: 17.3 ft

2.12.1 Designation: 32 2.12.2 True Bearing: 315 2.12.3 Dimensions: 6931 ft x 150 ft 2.12.4 PCN: 67 F/A/W/T 2.12.5 Coordinates: 26–40–41.913N / 80–5–20.622W 2.12.6 Threshold Elevation: 15.8 ft 2.12.6 Touchdown Zone Elevation: 15.9 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 10L
2.13.2 Take-off Run Available: 10001
2.13.3 Take-off Distance Available: 10001
2.13.4 Accelerate-Stop Distance Available: 10001
2.13.5 Landing Distance Available: 8800

2.13.1 Designation: 28R
2.13.2 Take-off Run Available: 10001
2.13.3 Take-off Distance Available: 10001
2.13.4 Accelerate-Stop Distance Available: 10001
2.13.5 Landing Distance Available: 9189

2.13.1 Designation: 10R
2.13.2 Take-off Run Available: 3214
2.13.3 Take-off Distance Available: 3214
2.13.4 Accelerate-Stop Distance Available: 3214
2.13.5 Landing Distance Available: 3214

2.13.1 Designation: 28L

2.13.2 Take–off Run Available: 3214 2.13.3 Take–off Distance Available: 3214

2.13.3 Take-off Distance Available: 3214 2.13.4 Accelerate-Stop Distance Available: 3214

2.13.5 Landing Distance Available: 3214

2.13.1 Designation: 14
2.13.2 Take-off Run Available: 6926
2.13.3 Take-off Distance Available: 6926
2.13.4 Accelerate-Stop Distance Available: 6000
2.13.5 Landing Distance Available: 6000

2.13.1 Designation: 32
2.13.2 Take-off Run Available: 6926
2.13.3 Take-off Distance Available: 6926
2.13.4 Accelerate-Stop Distance Available: 6926
2.13.5 Landing Distance Available: 6513

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 10L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 28R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 28L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 142.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 322.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P (SOUTH)2.18.3 Channel: 125.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (SOUTH)2.18.3 Channel: 343.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 284.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (SOUTH)2.18.3 Channel: 125.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (NORTH)2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (NORTH)2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (SOUTH)2.18.3 Channel: 343.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLMNT STAR2.18.3 Channel: 124.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLMNT STAR2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CPTAN STAR2.18.3 Channel: 124.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CPTAN STAR2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 123.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG 2.18.3 Channel: 121.5

2.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 284.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: JESTR STAR2.18.3 Channel: 124.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: JESTR STAR2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 119.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 118.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 384.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAHHI STAR2.18.3 Channel: 127.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAHHI STAR2.18.3 Channel: 343.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: MELBOURNE STAR2.18.3 Channel: 124.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: MELBOURNE STAR

2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIXAE DP (RWY 10L, 14)2.18.3 Channel: 127.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIXAE DP (RWY 28R, 32)2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIXAE DP (RWY 28R, 32)2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: MIXAE DP (RWY 10L, 14)2.18.3 Channel: 343.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: OLAKE DP2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: OLAKE DP2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALM BEACH DP (SOUTH)2.18.3 Channel: 127.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALM BEACH DP (NORTH)2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALM BEACH DP (NORTH)2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALM BEACH DP (SOUTH)2.18.3 Channel: 343.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: SLIDZ DP2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: SLIDZ DP2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: STOOP STAR2.18.3 Channel: 124.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: STOOP STAR2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: TBIRD DP2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: TBIRD DP2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: TTYLR STAR2.18.3 Channel: 125.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: TTYLR STAR2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: VUUDU STAR2.18.3 Channel: 127.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: VUUDU STAR2.18.3 Channel: 317.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: WELLY DP2.18.3 Channel: 127.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: WELLY DP2.18.3 Channel: 343.62.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 10L. Magnetic variation: 6W
2.19.2 ILS Identification: PBI
2.19.5 Coordinates: 26-40-51.4319N / 80-4-29.0092W
2.19.6 Site Elevation: 23.3 ft

2.19.1 ILS Type: Glide Slope for runway 10L. Magnetic variation: 6W
2.19.2 ILS Identification: PBI
2.19.5 Coordinates: 26–40–55.9795N / 80–6–6.0748W
2.19.6 Site Elevation: 14.5 ft

2.19.1 ILS Type: Localizer for runway 10L. Magnetic variation: 6W
2.19.2 ILS Identification: PBI
2.19.5 Coordinates: 26-40-54.2434N / 80-4-28.6079W
2.19.6 Site Elevation: 13 ft

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 6W
2.19.2 ILS Identification: PWB
2.19.5 Coordinates: 26-40-53.0853N / 80-5-1.7298W
2.19.6 Site Elevation: 13.5 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 6W
2.19.2 ILS Identification: PWB
2.19.5 Coordinates: 26-40-59.9773N / 80-6-39.9822W
2.19.6 Site Elevation: 18.5 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 3W
2.19.2 Navigation Aid Identification: PBI
2.19.5 Coordinates: 26–40–48.198N / 80–5–11.3586W
2.19.6 Site Elevation: 15.7 ft

### **General Remarks:**

BE ALERT: TWY L IS LCTD BTWN RYS 10L/28R & 10R/28L. TWY L IS WIDER AND LONGER THAN RY 10R/28L – DO NOT CONFUSE TWY L FOR RY. AIRCRAFT WITH WINGSPAN OF 118 FT OR GREATER IS PROHIBITED ON TWY L.

ACFT WITH WINGSPANS GTR THAN 118 FT MAY NOT OPR ON TWY E, TWY W, TWY Y AND TWY F NW OF TWY A.

ACFT WITH WINGSPANS GTR THAN 49 MAY NOT OPER SIMUL ON RWY 10R/28L AND TWY R.

24 HR PPR FOR ACFT WITH WINGSPANS GTR THAN 171 FT.

RWY 10R/28L NOT AVBL FOR SKED ACR OPS WITH MORE THAN 9 PAX SEATS OR UNSKED ACR AT LEAST 31 PAX SEATS.

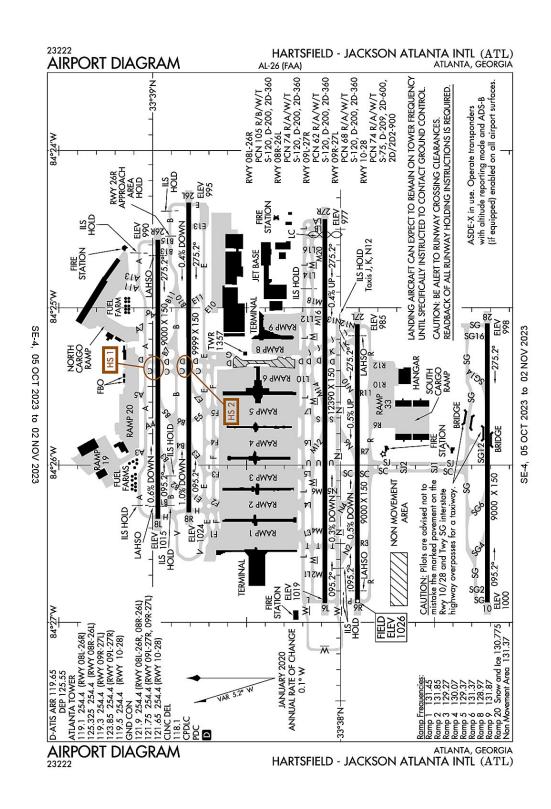
RWY 10L/28R SAFETY AREA NOT STD SFC VARNS.

NOISE ABATEMENT PROCEDURES IN EFFECT. MULTIENGINE FLIGHT TRAINING PROHIBITED SS TO SR SUN AND HOLIDAY; STRICT ENVIRONMENTAL OPERATING STAGE 2 ACFT 0300–1200Z CALL NOISE ABATEMENT OFFICER 561–471–7467.

BE ALERT; RYS 28L & 28R THLDS STAGGERED BY 5400 FT.

RWY 14/32 SAFETY AREA NOT STD SFC VARNS.

MIGRATORY BIRDS ON AND INVOF ARPT.



Atlanta, Georgia Hartsfield–Jackson Atlanta International ICAO Identifier KATL

## Atlanta, GA Hartsfield – Jackson Atlanta Intl ICAO Identifier KATL

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 33-38-12.1186N / 84-25-40.3104W

2.2.2 From City: 7 miles S of ATLANTA, GA

2.2.3 Elevation: 1026.2 ft

2.2.5 Magnetic Variation: 5W (2015)

2.2.6 Airport Contact: BALRAM BHEODARI

PO BOX 20509

ATLANTA, GA 30320 (404-530-6600)

2.2.7 Traffic: IFR/VFR

# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08L
2.12.2 True Bearing: 90
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 105 R/B/W/T
2.12.5 Coordinates: 33–38–58.3238N / 84–26–20.4923W
2.12.6 Threshold Elevation: 1014.6 ft
2.12.6 Touchdown Zone Elevation: 1014.6 ft

2.12.1 Designation: 26R
2.12.2 True Bearing: 270
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 105 R/B/W/T
2.12.5 Coordinates: 33–38–58.3515N / 84–24–34.0341W
2.12.6 Threshold Elevation: 990 ft
2.12.6 Touchdown Zone Elevation: 990 ft

2.12.1 Designation: 08R

2.12.2 True Bearing: 90
2.12.3 Dimensions: 9999 ft x 150 ft
2.12.4 PCN: 74 R/A/W/T
2.12.5 Coordinates: 33–38–48.432N / 84–26–18.1035W
2.12.6 Threshold Elevation: 1023.7 ft
2.12.6 Touchdown Zone Elevation: 1023.8 ft

2.12.1 Designation: 26L
2.12.2 True Bearing: 270
2.12.3 Dimensions: 9999 ft x 150 ft
2.12.4 PCN: 74 R/A/W/T
2.12.5 Coordinates: 33–38–48.4612N / 84–24–19.8313W
2.12.6 Threshold Elevation: 995.4 ft
2.12.6 Touchdown Zone Elevation: 995.5 ft

2.12.1 Designation: 27R
2.12.2 True Bearing: 270
2.12.3 Dimensions: 12390 ft x 150 ft
2.12.4 PCN: 62 R/A/W/T
2.12.5 Coordinates: 33–38–4.929N / 84–24–26.158W
2.12.6 Threshold Elevation: 977.2 ft
2.12.6 Touchdown Zone Elevation: 984.6 ft

2.12.1 Designation: 09L
2.12.2 True Bearing: 90
2.12.3 Dimensions: 12390 ft x 150 ft
2.12.4 PCN: 62 R/A/W/T
2.12.5 Coordinates: 33–38–4.936N / 84–26–52.6807W
2.12.6 Threshold Elevation: 1018.7 ft
2.12.6 Touchdown Zone Elevation: 1018.7 ft

2.12.1 Designation: 09R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 68 R/A/W/T
2.12.5 Coordinates: 33–37–54.5282N / 84–26–52.6768W
2.12.6 Threshold Elevation: 1026.1 ft
2.12.6 Touchdown Zone Elevation: 1026.2 ft

2.12.1 Designation: 27L 2.12.2 True Bearing: 270 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 68 R/A/W/T 2.12.5 Coordinates: 33–37–54.5649N / 84–25–6.243W 2.12.6 Threshold Elevation: 984.7 ft2.12.6 Touchdown Zone Elevation: 998.9 ft

2.12.1 Designation: 28
2.12.2 True Bearing: 270
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 74 R/A/W/T
2.12.5 Coordinates: 33–37–13.0275N / 84–25–5.9358W
2.12.6 Threshold Elevation: 997.5 ft
2.12.6 Touchdown Zone Elevation: 997.5 ft

2.12.1 Designation: 10
2.12.2 True Bearing: 90
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 74 R/A/W/T
2.12.5 Coordinates: 33–37–12.9808N / 84–26–52.3574W
2.12.6 Threshold Elevation: 1000.3 ft
2.12.6 Touchdown Zone Elevation: 1000.3 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 08L
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 8800
2.13.5 Landing Distance Available: 8800

2.13.1 Designation: 26R
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 8500
2.13.5 Landing Distance Available: 8500

2.13.1 Designation: 08R

2.13.2 Take-off Run Available: 9999

2.13.3 Take-off Distance Available: 10999

2.13.4 Accelerate–Stop Distance Available: 9999

2.13.5 Landing Distance Available: 9999

2.13.1 Designation: 26L
2.13.2 Take-off Run Available: 9999
2.13.3 Take-off Distance Available: 9999
2.13.4 Accelerate-Stop Distance Available: 9999
2.13.5 Landing Distance Available: 9999

2.13.1 Designation: 27R
2.13.2 Take-off Run Available: 12390
2.13.3 Take-off Distance Available: 12390
2.13.4 Accelerate-Stop Distance Available: 12390
2.13.5 Landing Distance Available: 11890

2.13.1 Designation: 09L

2.13.2 Take-off Run Available: 12390

2.13.3 Take-off Distance Available: 12390

2.13.4 Accelerate–Stop Distance Available: 11730

2.13.5 Landing Distance Available: 11730

2.13.1 Designation: 09R

2.13.2 Take-off Run Available: 9000

2.13.3 Take-off Distance Available: 9000

2.13.4 Accelerate–Stop Distance Available: 9000

2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 27L

2.13.2 Take–off Run Available: 9000 2.13.3 Take–off Distance Available: 9000

2.13.4 Accelerate-Stop Distance Available: 8865

2.13.5 Landing Distance Available: 8865

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 102.13.2 Take-off Run Available: 90002.13.3 Take-off Distance Available: 9000

2.13.4 Accelerate-Stop Distance Available: 9000

2.13.5 Landing Distance Available: 9000

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 08L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08R

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 27R2.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 09L

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 09R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 27L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 282.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 102.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 118.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 119.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 125.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (RWY 10/28)2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 09L/27R, 09R/27L)2.18.3 Channel: 121.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 08L/26R, 08R/26L)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 254.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08L/26R)2.18.3 Channel: 119.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09R/27L)2.18.3 Channel: 119.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10/28)2.18.3 Channel: 119.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09L/27R)2.18.3 Channel: 123.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08R/26L)2.18.3 Channel: 125.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 254.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 08L/26R, 08R/26L)2.18.3 Channel: 126.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 09L/27R, 09R/27L)2.18.3 Channel: 132.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 10/28)2.18.3 Channel: 133.4252.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 08L. Magnetic variation: 5W
2.19.2 ILS Identification: HFW
2.19.5 Coordinates: 33–39–1.782N / 84–24–24.7032W
2.19.6 Site Elevation: 977.2 ft

2.19.1 ILS Type: Glide Slope for runway 08L. Magnetic variation: 5W
2.19.2 ILS Identification: HFW
2.19.5 Coordinates: 33–39–2.288N / 84–26–6.3042W
2.19.6 Site Elevation: 1001.7 ft

2.19.1 ILS Type: Inner Marker for runway 08L. Magnetic variation: 5W
2.19.2 ILS Identification: HFW
2.19.5 Coordinates: 33–38–58.3145N / 84–26–30.5173W
2.19.6 Site Elevation: 1017.7 ft

2.19.1 ILS Type: Localizer for runway 08L. Magnetic variation: 5W
2.19.2 ILS Identification: HFW
2.19.5 Coordinates: 33–38–58.3506N / 84–24–23.3901W
2.19.6 Site Elevation: 985.2 ft

2.19.1 ILS Type: DME for runway 26R. Magnetic variation: 5W

2.19.2 ILS Identification: GXZ 2.19.5 Coordinates: 33–38–53.87N / 84–26–32.61W 2.19.6 Site Elevation: 1008 ft

2.19.1 ILS Type: Glide Slope for runway 26R. Magnetic variation: 5W
2.19.2 ILS Identification: GXZ
2.19.5 Coordinates: 33–39–2.3139N / 84–24–47.6304W
2.19.6 Site Elevation: 983.8 ft

2.19.1 ILS Type: Localizer for runway 26R. Magnetic variation: 5W
2.19.2 ILS Identification: GXZ
2.19.5 Coordinates: 33–38–58.32N / 84–26–30.19W
2.19.6 Site Elevation: 1016 ft

2.19.1 ILS Type: DME for runway 08R. Magnetic variation: 5W
2.19.2 ILS Identification: ATL
2.19.5 Coordinates: 33–38–45.7727N / 84–24–7.5608W
2.19.6 Site Elevation: 992.1 ft

2.19.1 ILS Type: Glide Slope for runway 08R. Magnetic variation: 5W
2.19.2 ILS Identification: ATL
2.19.5 Coordinates: 33–38–52.4042N / 84–26–3.334W
2.19.6 Site Elevation: 1005 ft

2.19.1 ILS Type: Localizer for runway 08R. Magnetic variation: 5W
2.19.2 ILS Identification: ATL
2.19.5 Coordinates: 33–38–48.4575N / 84–24–7.5394W
2.19.6 Site Elevation: 986.8 ft

2.19.1 ILS Type: DME for runway 26L. Magnetic variation: 5W
2.19.2 ILS Identification: BRU
2.19.5 Coordinates: 33–38–49.0988N / 84–26–30.1749W
2.19.6 Site Elevation: 1030.3 ft

2.19.1 ILS Type: Glide Slope for runway 26L. Magnetic variation: 5W
2.19.2 ILS Identification: BRU
2.19.5 Coordinates: 33–38–52.4111N / 84–24–32.8404W
2.19.6 Site Elevation: 993.7 ft

2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 5W
2.19.2 ILS Identification: BRU
2.19.5 Coordinates: 33–38–48.4526N / 84–26–30.1664W
2.19.6 Site Elevation: 1021 ft

2.19.1 ILS Type: DME for runway 09L. Magnetic variation: 5W
2.19.2 ILS Identification: HZK
2.19.5 Coordinates: 33–38–7.48N / 84–24–44.38W
2.19.6 Site Elevation: 978 ft

2.19.1 ILS Type: Glide Slope for runway 09L. Magnetic variation: 5W
2.19.2 ILS Identification: HZK
2.19.5 Coordinates: 33–38–2.42N / 84–26–39.67W
2.19.6 Site Elevation: 1014.6 ft

2.19.1 ILS Type: Localizer for runway 09L. Magnetic variation: 5W
2.19.2 ILS Identification: HZK
2.19.5 Coordinates: 33–38–4.94N / 84–24–19.08W
2.19.6 Site Elevation: 949.5 ft

2.19.1 ILS Type: Outer Marker for runway 09L. Magnetic variation: 5W
2.19.2 ILS Identification: HZK
2.19.5 Coordinates: 33–37–57.073N / 84–32–3.073W
2.19.6 Site Elevation:

2.19.1 ILS Type: Glide Slope for runway 27R. Magnetic variation: 5W
2.19.2 ILS Identification: AFA
2.19.5 Coordinates: 33–38–7.45N / 84–24–44.13W
2.19.6 Site Elevation: 977.7 ft

2.19.1 ILS Type: Localizer for runway 27R. Magnetic variation: 5W
2.19.2 ILS Identification: AFA
2.19.5 Coordinates: 33–38–4.931N / 84–27–2.2719W
2.19.6 Site Elevation: 1019.5 ft

2.19.1 ILS Type: DME for runway 09R. Magnetic variation: 5W
2.19.2 ILS Identification: FUN
2.19.5 Coordinates: 33–37–56.6292N / 84–24–54.2376W
2.19.6 Site Elevation: 995.5 ft

2.19.1 ILS Type: Glide Slope for runway 09R. Magnetic variation: 5W
2.19.2 ILS Identification: FUN
2.19.5 Coordinates: 33–37–58.482N / 84–26–39.0507W
2.19.6 Site Elevation: 1019.1 ft

2.19.1 ILS Type: Inner Marker for runway 09R. Magnetic variation: 5W
2.19.2 ILS Identification: FUN
2.19.5 Coordinates: 33–37–54.5222N / 84–27–2.5364W
2.19.6 Site Elevation: 1029.2 ft

2.19.1 ILS Type: Localizer for runway 09R. Magnetic variation: 5W
2.19.2 ILS Identification: FUN
2.19.5 Coordinates: 33–37–54.5664N / 84–24–52.6064W
2.19.6 Site Elevation: 976.2 ft

2.19.1 ILS Type: DME for runway 27L. Magnetic variation: 5W
2.19.2 ILS Identification: FSQ
2.19.5 Coordinates: 33–37–53.7N / 84–27–3.53W
2.19.6 Site Elevation: 1003.8 ft

2.19.1 ILS Type: Glide Slope for runway 27L. Magnetic variation: 5W
2.19.2 ILS Identification: FSQ
2.19.5 Coordinates: 33–37–58.5048N / 84–25–18.9643W
2.19.6 Site Elevation: 986.7 ft

2.19.1 ILS Type: Inner Marker for runway 27L. Magnetic variation: 5W
2.19.2 ILS Identification: FSQ
2.19.5 Coordinates: 33–37–54.59N / 84–24–52.99W
2.19.6 Site Elevation: 983 ft

2.19.1 ILS Type: Localizer for runway 27L. Magnetic variation: 5W
2.19.2 ILS Identification: FSQ
2.19.5 Coordinates: 33–37–54.53N / 84–27–3.03W
2.19.6 Site Elevation: 1015.7 ft

2.19.1 ILS Type: DME for runway 10. Magnetic variation: 5W
2.19.2 ILS Identification: OMO
2.19.5 Coordinates: 33–37–12.4476N / 84–24–53.9549W
2.19.6 Site Elevation: 999.7 ft

2.19.1 ILS Type: Glide Slope for runway 10. Magnetic variation: 5W
2.19.2 ILS Identification: OMO
2.19.5 Coordinates: 33–37–8.9408N / 84–26–38.7669W
2.19.6 Site Elevation: 985.4 ft

2.19.1 ILS Type: Inner Marker for runway 10. Magnetic variation: 5W
2.19.2 ILS Identification: OMO
2.19.5 Coordinates: 33–37–12.9816N / 84–27–2.5224W
2.19.6 Site Elevation: 1001 ft

2.19.1 ILS Type: Localizer for runway 10. Magnetic variation: 5W
2.19.2 ILS Identification: OMO
2.19.5 Coordinates: 33–37–13.0192N / 84–24–53.9594W

2.19.6 Site Elevation: 991.1 ft

2.19.1 ILS Type: DME for runway 28. Magnetic variation: 5W
2.19.2 ILS Identification: PKU
2.19.5 Coordinates: 33–37–12.4016N / 84–27–5.3143W
2.19.6 Site Elevation: 1003.5 ft

2.19.1 ILS Type: Glide Slope for runway 28. Magnetic variation: 5W
2.19.2 ILS Identification: PKU
2.19.5 Coordinates: 33–37–17.0569N / 84–25–18.9449W
2.19.6 Site Elevation: 989.2 ft

2.19.1 ILS Type: Inner Marker for runway 28. Magnetic variation: 5W
2.19.2 ILS Identification: PKU
2.19.5 Coordinates: 33–37–13.0151N / 84–24–55.769W
2.19.6 Site Elevation: 982.2 ft

2.19.1 ILS Type: Localizer for runway 28. Magnetic variation: 5W
2.19.2 ILS Identification: PKU
2.19.5 Coordinates: 33–37–12.9761N / 84–27–5.3149W
2.19.6 Site Elevation: 994.5 ft

### General Remarks:

ALL RWYS, TOUCH AND GO OPERATIONS, LOW APPROACHES, AND PRACTICE INSTRUMENT APPROACHES NOT PERMITTED.

ACFT WITH WINGSPAN GREATER THAN 214 FT SHOULD EXPECT TO USE RWYS 09L/27R AND 9R/27L.

NO ACFT WITH WINGSPAN GEATER THAN OR EQUAL TO 225 FT MAY TAXI ON TWY M BETWEEN L14 AND L16, TWY N BETWEEN P AND SC, AND TWY N BETWEEN U AND K.

ALL ACFT WITH WINGSPANS GREATER THAN 214 FT ARE REQUIRED TO USE TAXI SPEEDS NOT GREATER THAN 15 MPH ON TWYS A, L, M, AND SJ.

WHEN ACFT WITH WINGSPANS GREATER THAN 214 FT ARE PRESENT ON THE FIELD, ALL OTHER ACFT MUST ADHERE TO THE TWY CENTERLINE ON TWYS L AND M, TWYS E AND F, AND TWYS SC AND SJ BETWEEN SG AND R DUE TO SEPARATION BETWEEN THE PARALLEL TWYS.

RUNUPS ARE PERMITTED AT VARIOUS SITES; COORD USE OF CITY FACS, MOVEMENT AREAS, ALLOWABLE NON–MOVEMENT AREAS WITH DEPT OF AVN OPNS, 404–787–6095; AND COORD THE USE OF THE AIRLINES FACS WITH THEM.

NOISE & OPNS MONITORING SYSTEM (NOMS) PROGRAM IN EFFECT; CALL THE ATLANTA DEPT OF AVIATION 770–43–NOISE OR 770–436–6473 FOR MORE INFO.

BE ALERT TO RWY CROSSING CLEARANCES. READBACK OF ALL RWY HOLDING INSTRUCTIONS IS REQUIRED.

ACFT WITH WINGSPAN GTR THAN 171 FT AND/OR TAIL HGT GTR THAN 45 FT ARE RSTD FROM USING TWY W. DURG TWY W OPNS RWY 27R INTXN DEPS FROM TWY LB OR TWY LC CAN EXPC THE FLWG DSTCS

WITH RWY RMNG: FROM TWY LB 11,040 FT (TORA/TODA) AND 12,140 FT (ASDA); FROM TWY LC 10,810 FT (TODA/TODA) AND 11,910 FT (ASDA). ACFT MAY REQ THE FULL LEN OF RWY 27R FOR DEP UPON INITIAL CTC WITH ATC.

GROUP VI ACFT (LOCKHEED GALAXY C–5; ANTONOV AN–124 & AN–125) WITH A WINGSPAN OF GREATER THAN 214 FT ARE RESTRICTED FM USING TWY F EAST OF RAMP 5 NORTH AND WEST OF TWY D.

RWY 9L DEPARTURES CAN EXPECT INTERSECTION DEPARTURE FM M2 WITH RWY REMAINING 11,440 FT (TORA/TODA) AND 10,780 (ASDA).

TWO ACFT WITH WINGSPANS GREATER THAN OR EQUAL TO 225 FT MAY NOT TAXISIMULTANEOUSLY ON ADJACENT PARALLEL TWYS L/M EXCEPT WEST OF L7 AT SPEEDS LESS THAN 15 MPH.

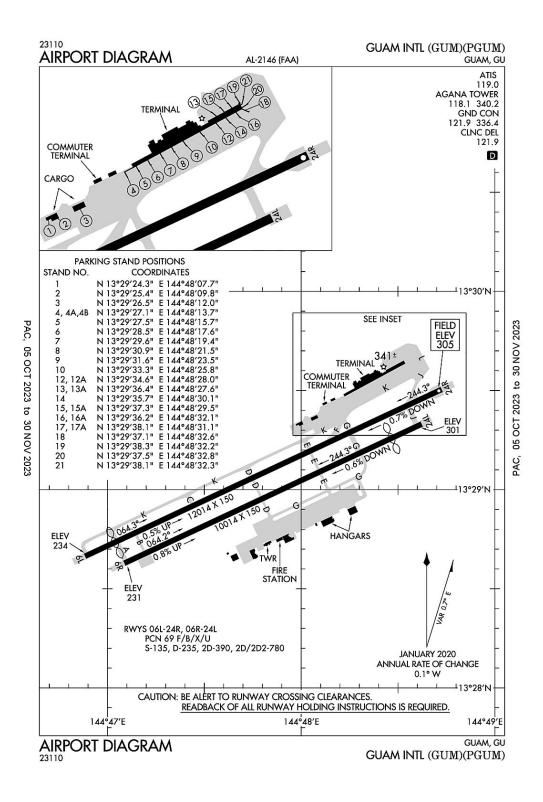
PREFERENTIAL RWY USE IN EFFECT, EXPECT TO USE RWYS 08R/26L, 09L/27R FOR DEPS; RWYS 08L/26R, 09R/27L ARE USED PRIMARILY FOR ARRIVALS.

NO ACFT WITH WINGSPAN GREATER THAN 213 FT MAY PASS ANOTHER ACFT WITH WINGSPAN GREATER THAN OR EQUAL TO 225 FT ON TWY L/M EAST OF L7.

ACFT WITH WINGSPAN GREATER THAN 171 FT ARE RSTRD FROM USING TWY V. ACFT WITH WINGSPAN GREATER THAN 171 FT ARE REQUIRED TO USE TAXI SPEEDS LESS THAN 15 MPH WHEN PASSING ACFT WITH WINGSPAN GREATER THAN 214FT ON TXWY L/M (EAST OF L7).

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

# Agana, Guam Guam International ICAO Identifier PGUM



# Agana, GU Guam Intl ICAO Identifier PGUM

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 13–29–2.227N / 144–47–49.666E 2.2.2 From City: 3 miles NE of GUAM, GU 2.2.3 Elevation: 305 ft 2.2.5 Magnetic Variation: 2E (2000) 2.2.6 Airport Contact: JOHN QUINATA P.O. BOX 8770 TAMUNING, GU 96931 (671–646–0300) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A12.4.5 Hangar Space: YES2.4.6 Repair Facilities: MINOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 4/1/1995 2.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 06L 2.12.2 True Bearing: 65 2.12.3 Dimensions: 12014 ft x 150 ft 2.12.4 PCN: 69 F/B/X/U 2.12.5 Coordinates: 13–28–39.8644N / 144–46–53.1529E 2.12.6 Threshold Elevation: 233.7 ft 2.12.6 Touchdown Zone Elevation: 256.1 ft

2.12.1 Designation: 24R 2.12.2 True Bearing: 245 2.12.3 Dimensions: 12014 ft x 150 ft 2.12.4 PCN: 69 F/B/X/U 2.12.5 Coordinates: 13–29–30.3045N / 144–48–43.4542E 2.12.6 Threshold Elevation: 305 ft 2.12.6 Touchdown Zone Elevation: 305 ft

2.12.1 Designation: 06R 2.12.2 True Bearing: 65 2.12.3 Dimensions: 10014 ft x 150 ft 2.12.4 PCN: 69 F/B/X/U 2.12.5 Coordinates: 13–28–37.7705N / 144–47–5.333E 2.12.6 Threshold Elevation: 231 ft 2.12.6 Touchdown Zone Elevation: 257.9 ft 2.12.1 Designation: 24L
2.12.2 True Bearing: 245
2.12.3 Dimensions: 10014 ft x 150 ft
2.12.4 PCN: 69 F/B/X/U
2.12.5 Coordinates: 13–29–19.8209N / 144–48–37.2751E
2.12.6 Threshold Elevation: 301 ft
2.12.6 Touchdown Zone Elevation: 293 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 06L
2.13.2 Take-off Run Available: 12014
2.13.3 Take-off Distance Available: 12014
2.13.4 Accelerate-Stop Distance Available: 12014
2.13.5 Landing Distance Available: 11014

2.13.1 Designation: 24R

2.13.2 Take–off Run Available: 12014

2.13.3 Take-off Distance Available: 12014

2.13.4 Accelerate-Stop Distance Available: 12014

2.13.5 Landing Distance Available: 12014

2.13.1 Designation: 06R

2.13.2 Take-off Run Available: 10014

2.13.3 Take-off Distance Available: 10014

2.13.4 Accelerate–Stop Distance Available: 10014

2.13.5 Landing Distance Available: 10014

2.13.1 Designation: 24L

2.13.2 Take-off Run Available: 9714

2.13.3 Take-off Distance Available: 9714

2.13.4 Accelerate–Stop Distance Available: 9714

2.13.5 Landing Distance Available: 8710

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 06L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 06R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 24L2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 1192.18.5 Hours of Operation:

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 336.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 340.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL2.18.3 Channel: 121.62.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 06L. Magnetic variation: 2E
2.19.2 ILS Identification: GUM
2.19.5 Coordinates: 13–29–38.0751N / 144–48–51.492E
2.19.6 Site Elevation: 345.6 ft

2.19.1 ILS Type: Glide Slope for runway 06L. Magnetic variation: 2E
2.19.2 ILS Identification: GUM
2.19.5 Coordinates: 13–28–53.074N / 144–47–8.5127E
2.19.6 Site Elevation: 245.8 ft

2.19.1 ILS Type: Localizer for runway 06L. Magnetic variation: 2E
2.19.2 ILS Identification: GUM
2.19.5 Coordinates: 13–29–34.711N / 144–48–53.0959E
2.19.6 Site Elevation: 312.4 ft

2.19.1 ILS Type: DME for runway 06R. Magnetic variation: 2E
2.19.2 ILS Identification: AWD
2.19.5 Coordinates: 13–29–21.7429N / 144–48–48.0979E
2.19.6 Site Elevation: 329.8 ft

2.19.1 ILS Type: Glide Slope for runway 06R. Magnetic variation: 2E
2.19.2 ILS Identification: AWD
2.19.5 Coordinates: 13–28–37.9922N / 144–47–15.3932E
2.19.6 Site Elevation: 236.5 ft

2.19.1 ILS Type: Localizer for runway 06R. Magnetic variation: 2E
2.19.2 ILS Identification: AWD
2.19.5 Coordinates: 13–29–24.2258N / 144–48–46.9153E
2.19.6 Site Elevation: 310.5 ft

### **General Remarks:**

TSNT ACFT PRVD 24 HRS ADVN INFO TO EXEC MGR GUAM INTL ARPT AUTHORITY; 1–671–642–4455 MON–FRI 0800–1700 OR FAX 1–671–646–8567.

<1000' OVRN S END & 450' OVRN N END RWY 6L-24R.

CLASS III ACFT ARE PROHIBITED FROM MAKING ANY TURNS ONTO OR OFF TWY GOLF (SOUTH) WHILE UTILIZING TWY ECHO.

THE FIRST 500 FT OF THE LEFT SHOULDER OF RWY 24L IS NOT VISIBLE FROM THE TWR. PILOTS ARE ADVISED TO CAUTION FOR ANY PRESENCE OF WILDLIFE IN THAT AREA.

FOR PARKING INFORMATION ALL ACFT CTC RAMP CTL. ALL ACFT DEP TERMINAL PARKING CTC RAMP CTL FOR ENGINE START AND PUSHBACK.

ADG–VI AIRPLANES MAY DEPART ON RWY 6L AND RWY 24R WITH ACFT ON PARL TWY K AS LONG AS NO ADG–VI ACFT OCCUPIES THE PARL TWY BYD 1500 FT OF THE POINT OF TKOF ROLL.

FOR TAXG B747–8 ACFT ON TWY K FRONTING THE ACFT PRKG APN FROM GATES 5 – 16 AT THE MAIN TRML, MAX TAXG SPEED SHALL BE NO MORE THAN 15 MPH.

DRG TAXG OF THE B747–8 BTN GATES 5 – 16, ALL VEHICLES SHALL YIELD AND RMN CLEAR OF THE VEHICLE TFC PAT AND ARE RSTRD TO A MAX HGT OF 14 FT.

RWY 06 AND RWY 24 WIND CONE NSTD.

EFFECTIVE RY GRADIENT RY 06L 0.46% UP NE; RY 24R 0.70% DOWN SW; RY 06R 0.80 % UP NE; RY 24L 0.52% DOWN SW.

RISING TERRAIN 75 FT FM RY 24L THLD 140 FT EAST OF CNTRLN EXTENDED +8 FT.

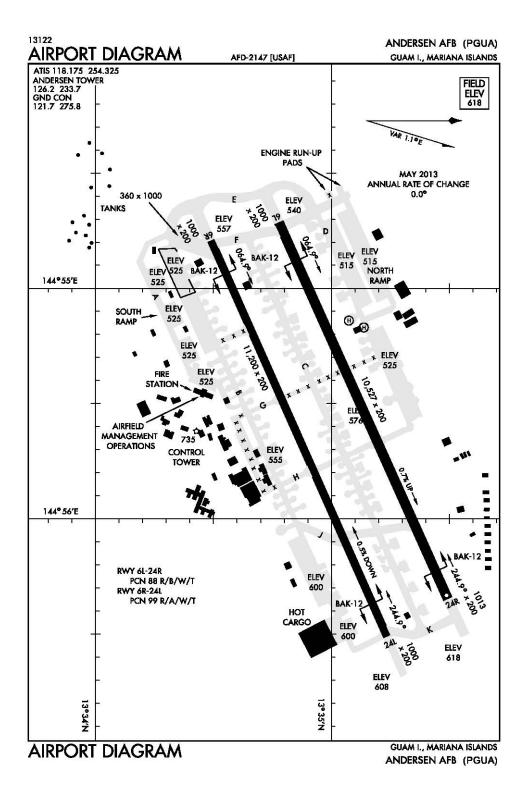
DEP VFR ACFT MAINT RY HDG TIL PAST DEP END OF RY AND REACHING 1000 FT AGL; RGT PAT 24L/R DO NOT EXCEED 1500 FT AGL IN TFC PAT.

FOR ALL ARRS, THE B747–8 AIRLINE WILL TOW THE ACFT INTO GATES 4 OR 18 FROM TWY K AND AIRLINE TO PRVD WING–WALKERS AS THE ACFT IS BEING TOWED INTO GATES 4 OR 18.

LGTD TWR 780 FT 1.3 NM ENE OF RY 24L THLD .

FOR THE B747–8, DRG RWY 24L & 24R OPS AND DUE TO JET BLAST EFCTS AT GATES 14, 16 & 18, THE B747–8 WILL BE TOWED FROM GATE 4 ON TWY K TO TWY J WITH THE ACFT PSND ON TWY J FACING TWD RWY 24R.

## Andersen, Mariana Island, GU Andersen AFB ICAO Identifier PGUA



# Andersen, Mariana Island, GU Andersen AFB ICAO Identifier PGUA

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 13–35–1.99N / 144–55–48.2E 2.2.2 From City: 0 miles N of YIGO, GU 2.2.3 Elevation: 617.4 ft 2.2.5 Magnetic Variation: 2E (1980) 2.2.6 Airport Contact: MAJOR BILLY G TOWLES 3 AD ANDERSEN AFB, GUAM, 69912 () 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

#### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types:2.4.5 Hangar Space: YES2.4.6 Repair Facilities: NONE

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: None2.6.2 Rescue and Firefighting Services: None

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 06L
2.12.2 True Bearing:
2.12.3 Dimensions: 10528 ft x 200 ft
2.12.4 PCN: 98 R/A/W/T
2.12.5 Coordinates: 13–34–49.281N / 144–54–56.32E
2.12.6 Threshold Elevation: 539.1 ft
2.12.6 Touchdown Zone Elevation: 539.3 ft

2.12.1 Designation: 24R
2.12.2 True Bearing:
2.12.3 Dimensions: 10528 ft x 200 ft
2.12.4 PCN: 98 R/A/W/T
2.12.5 Coordinates: 13–35–31.93N / 144–56–33.74E
2.12.6 Threshold Elevation: 617.4 ft
2.12.6 Touchdown Zone Elevation: 617.4 ft

2.12.1 Designation: 06R
2.12.2 True Bearing:
2.12.3 Dimensions: 11200 ft x 200 ft
2.12.4 PCN: 98 R/A/W/T
2.12.5 Coordinates: 13–34–31.18N / 144–54–59.38E
2.12.6 Threshold Elevation: 556.8 ft
2.12.6 Touchdown Zone Elevation: 556.8 ft

2.12.1 Designation: 24L
2.12.2 True Bearing:
2.12.3 Dimensions: 11200 ft x 200 ft
2.12.4 PCN: 98 R/A/W/T
2.12.5 Coordinates: 13–35–16.59N / 144–56–43E
2.12.6 Threshold Elevation: 607.2 ft
2.12.6 Touchdown Zone Elevation: 607.2 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 06L2.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 24R

2.13.2 Take-off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 06R 2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 24L

2.13.2 Take-off Run Available:

2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 06L2.14.2 Approach Lighting System: SALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24R2.14.2 Approach Lighting System: ALSF12.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 06R2.14.2 Approach Lighting System: ALSF12.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24L2.14.2 Approach Lighting System: SALS

2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 118.1752.18.5 Hours of Operation:

2.18.1 Service Designation: ATIS2.18.3 Channel: 254.3252.18.5 Hours of Operation:

2.18.1 Service Designation: CD/P2.18.3 Channel: 126.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 256.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: COMD POST (36 WG BOONIE OPS)2.18.3 Channel: 3212.18.5 Hours of Operation:

2.18.1 Service Designation: COMD POST (36 WG BOONIE OPS)2.18.3 Channel: 349.42.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 275.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 126.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 233.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: PMSV METRO2.18.3 Channel: 346.62.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 372.22.18.5 Hours of Operation:

2.18.1 Service Designation: SFA2.18.3 Channel: 281.42.18.5 Hours of Operation:

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 24R. Magnetic variation: 2E
2.19.2 ILS Identification: YIG
2.19.5 Coordinates: 13–35–30.26N / 144–56–17.53E
2.19.6 Site Elevation: 593.6 ft

2.19.1 ILS Type: Localizer for runway 24R. Magnetic variation: 2E
2.19.2 ILS Identification: YIG
2.19.5 Coordinates: 13–34–43.23N / 144–54–42.5E
2.19.6 Site Elevation: 533.6 ft

2.19.1 ILS Type: Glide Slope for runway 06R. Magnetic variation: 2E
2.19.2 ILS Identification: UAM
2.19.5 Coordinates: 13-34-40.04N / 144-55-7.21E
2.19.6 Site Elevation: 544.6 ft

2.19.1 ILS Type: Localizer for runway 06R. Magnetic variation: 2E
2.19.2 ILS Identification: UAM
2.19.5 Coordinates: 13–35–21.67N / 144–56–54.64E
2.19.6 Site Elevation: 606.6 ft

2.19.1 ILS Type: Glide Slope for runway 24L. Magnetic variation: 2E
2.19.2 ILS Identification: PMY
2.19.5 Coordinates: 13–35–15.55N / 144–56–29.18E
2.19.6 Site Elevation: 596.1 ft

2.19.1 ILS Type: Localizer for runway 24L. Magnetic variation: 2E
2.19.2 ILS Identification: PMY
2.19.5 Coordinates: 13-34-25.7N / 144-54-46.9E
2.19.6 Site Elevation: 568.8 ft

2.19.1 Navigation Aid Type: TACAN. Magnetic variation: 2E
2.19.2 Navigation Aid Identification: UAM
2.19.5 Coordinates: 13–35–28.39N / 144–56–47.68E
2.19.6 Site Elevation: 614.8 ft

#### General Remarks:

FREQUENT RAIN SHOWERS OF SHORT DURATION, EXPECT WET RWY BRAKEING ACTION.

RSTD: ALL ACFT CTC 36 WG COMD POST 90 MIN OUT AND AT 30 MIN OUT PRIOR TO ARR.

MISC: AIRCRAFT EXCEEDING AFLD WEIGHTS MUST REQUEST WEIGHT BEARING CAPACITY WAIVER WITH 24 HR NOTICE TO AIRFIELD OPS TO PROCESS ANY APPROVALS NEEDED. IF REQUESTS ARE NOT MADE WITHIN 24 HRS EXPECT DELAYS.

RSTD: ACFT MUST ADHERE TO PPR ARR +/- 30 MIN. ACFT WITH WINGSPANS GREATER THAN 261' NOT AUTHORIZED.

HAZUS AIR TURB FINAL APCH RWYS 24L/24R. NO VSBY REF AVBL ON NGT TKOF BYD END RWY 6.

MISC: RWY 06L/24R CLSD SECOND WED EACH MONTH 2000–2300Z(0600–0900L THU). RWY 06R/24L CLSD FOURTH WED EACH MONTH 2000–23000Z (0600–0900L THU).

ILS/RADAR-ILS: ILS CRITICAL AREAS NOT PROTECTED.

RSTD: ALL AEROMEDICAL EVAC MSN ARE RQRD TO CTC COMD POST (DSN 366–2961, C671–366–2961) BY ANY MEANS AVAIL 3 HRS PRIOR TO ARR. ALL ACFT RQRD TO MAKE CALL 30 MIN PRIOR TO ARR.

RSTD: ALL OPR MUST OBTAIN APVL FR GND AND AMOPS PRIOR TO ENG RUNUP.

MISC: ANDERSEN AFB DOES NOT HAVE CAPABILITY TO STORE REFRIGERATED CARGO.

RSTD: RESTRICTIONS TO FLT OPNS DUR EA BWC. MOD: NO TOUCH AND GO LDG. RSTD LOW APPCH NO LOWER THAN 200' OR AS DETERMINED BY SOF. SEVERE: RSTD LOW APPCH NO LOWER THAN 200' OR AS DETERMINED BY SOF. EMERG LDG AND 36 OG/CC APV DEP ONLY. PHASE I: PHASE I:1 APR – 31 JUL. PHASE II: 1 AUG – 31 MAR.

SERVICE-LGT: ARPT BCN 763 FT MSL LCTD 1.4 NM SSW OF AFLD.

MISC: "NO VHF CAPABILITIES WITH AFLD MGMT."

ALL INBD ACFT TO INCL TACC/GDSS MSNS MUST COORD PPR REQ WITH AFLD MGMT AND HAVE VALID PPR NUMBER APV PRIOR TO ARR. PPR REQ MUST BE MADE MORE THAN 24 HR IN ADVANCE AND NO EARLIER THAN 14 DAYS PRIOR TO ARR/DEP. PPR REQ GIVEN WITHIN 24 HR WILL NOT BE APV.

A-GEAR BAK-12 RWYS 06L & 06R 30 MIN NTC RQR.

TWY B AND C BTN TWY J AND K CLSD DUE TO CONSTRUCTION.

SERVICE-A-GEAR: CONTACT CONTROL TOWER 30 MIN PRIOR FOR DEPARTURE END BAK12 CABLE CONFIGURATION. 60 MIN PN FOR CHG IN CONFIGURATION. BAK12 HOUSING LCTD 317' FROM RY CENTERLINE, 217' FROM RY EDGE, MAX HEIGHT 8'. NO ARRESTING-GEAR MARKER LCTD ON LEFT SIDE OF ALL APPROACH END BARRIERS.

MISC: RWY 06L AND 06R UNDERRUNS 1000' AVBL FOR TWY/TKOF. RWY 24R UNDERRUN AVBL 500' FOR TAXI/TKOF.

BASE OPS V366-4188; FAX V366-6217.

CAUTION: USE EXTREME CAUTION FOR EXTV UAS OPS IN VCNTY OF ANDERSEN AFB.

SERVICE-FLUID: C-5 NITROGEN SVC CAPABILITY UNAVBL.

MAINT AVBL 0100-0400 WEEKDAY ONLY; CLOSED WEEKEND & HOL.

RSTD: PPR REQ DSN: AFLD MGMT 315-366-4188.

NO ARRESTING GEAR MARKERS LOCATED ON THE LEFT SIDE OF ALL APPROACH END BARRIERS.

MISC: ALL AIRCREWS TO RON MUST CK INTO AFLD MGT OPS AND PROVIDE POC INFO UPON ARR.

MISC: PAVEMENT PRIOR TO RY 06R AND RY 06L THLDS AVBL FOR TKOF RUN WHEN NECESSARY FOR MSN ACCOMPLISHMENT.

MISC: ATTN: ALL DRY ICE REQ MUST BE MADE THRU 734TH MS/ATOC DSN 315–366–3125/3137/3162 OR C671–366–3125/3137/3162. REQ MUST BE MADE AT LEAST 24 HR IN ADVANCE FOR ACFT LDG TUE–FRI AND 72 HR IN ADVANCE FOR ACFT LDG SAT–MON. DUR HOL, ADD 2 HR TO COORD TIME.

NS ABTMT: QUIET HR 1200–2000Z (2200–0600L) DLY. NO AFTERBURNER, OR OVR FLT OF BASE AND LCL POPULATED AREAS. OTHER RESTRICTIONS BY NOTAM.

CAUTION: 47' TACAN ANTENNAE LCTD 1,300 FT NE OF RY 24L & 1,300 FT SE OF RY 24R THLDS.

MISC: AFLD MGT HAS NO COMSEC STORAGE AVBL FOR TRAN AIRCREWS. TRANS AIRCREWS CAN STORE COMSEC UP TO TOP–SECRET AT 36 WG CP.

MISC: WX OPR H24, DSN 315–366–5230. AUTOMATED SENSOR PRVDS OBSN; AUGMENTED DUR HAZ WX & SENSOR OUTAGES. HUMAN WX OBSN VIEW OBSTD BY BLDG N–SSE. WX STN PRVDS LTD WX BRIEF SUPPORT. REMOTE WX BRIEF AVBL H24 FR 17 OWS AT DSN 315–449–8333/7950, C808–448–3809; 2 HR NTC RQRD FOR TIMELY BRIEF.

RSTD 1 OF 2: THERE WILL BE NO OVFT OF MARIANA CROW TERRITORIES BLW 1,000 FT AGL FROM SEP-MAY. OVFT BLW 1,000 FT AGL IS ALLOWED BTN JUNE AND AUG, THE CROW NON-BREEDING SEASON.

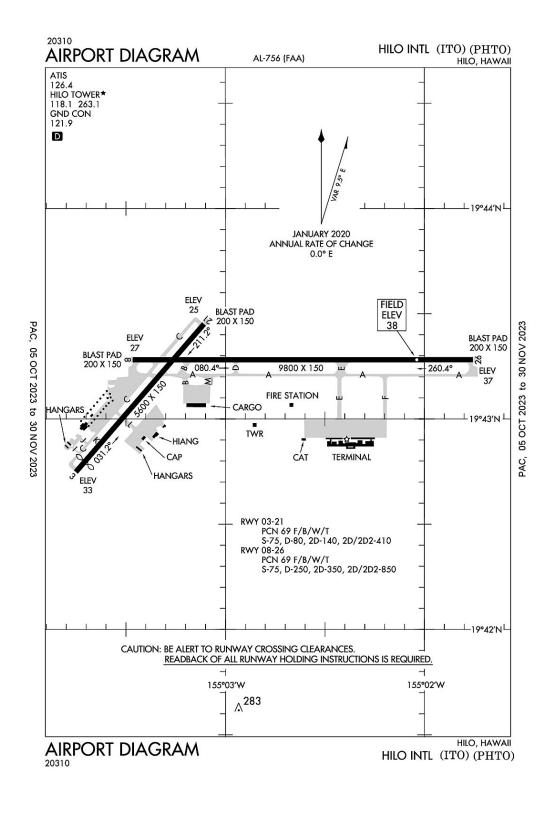
AREA BTN 1000' ROLL BAR AND THU LGT RWY 06R AND 06L UNLGTD. LAST 642' PRIOR TO THU LGT 24R UNLGTD.

ANY CREW RQRG ASSISTANCE FR AGENCIES OUTSIDE OF AFLD SUPPORT, CTC WING RECEPTIONS DSN 315–366–3464, C671–366–3464.

SERVICE-LGT: RAMP LGT UNAVBL FOR NGT TIME OPS, AND UNSAFE ACFT MVMT COND EXIST ON NORTH RAMP 3; ACFT TAXI AT THEIR OWN RISK. ALL AFLD ILS STOP LGT UNSVC. VEGETATION OBST RWY 06R AND RWY 24R APCH LGT SYS.

RSTD: BA ON BOTH RWYS MAY BE LESS THAN EXP DUE TO RUBBER BUILD-UP; PROBABILITY OF HYDROPLANING EXISTS.

Hilo, Hawaii Hilo International ICAO Identifier PHTO



# Hilo, HI Hilo Intl ICAO Identifier PHTO

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 19–43–12.9468N / 155–2–54.4925W
2.2.2 From City: 2 miles E of HILO, HI
2.2.3 Elevation: 37.6 ft
2.2.5 Magnetic Variation: 11E (1985)
2.2.6 Airport Contact: CHAUNCEY WONG YUEN HAWAII AIRPORTS DISTRICT MANAGER HILO, HI 96720 (808–961–9300)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, 0700-2030 Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MINOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 03 2.12.2 True Bearing: 41 2.12.3 Dimensions: 5600 ft x 150 ft 2.12.4 PCN: 69 F/B/W/T 2.12.5 Coordinates: 19–42–44.9639N / 155–3–44.7803W 2.12.6 Threshold Elevation: 33.3 ft 2.12.6 Touchdown Zone Elevation: 33.7 ft

2.12.1 Designation: 21 2.12.2 True Bearing: 221 2.12.3 Dimensions: 5600 ft x 150 ft 2.12.4 PCN: 69 F/B/W/T 2.12.5 Coordinates: 19–43–26.9946N / 155–3–6.4865W 2.12.6 Threshold Elevation: 25.4 ft 2.12.6 Touchdown Zone Elevation: 31.4 ft

2.12.1 Designation: 08
2.12.2 True Bearing: 90
2.12.3 Dimensions: 9800 ft x 150 ft
2.12.4 PCN: 69 F/B/W/T
2.12.5 Coordinates: 19–43–16.9328N / 155–3–27.9882W
2.12.6 Threshold Elevation: 27.3 ft
2.12.6 Touchdown Zone Elevation: 30.1 ft

AIP United States of America

AD 2–256 5 OCT 23

2.12.1 Designation: 26 2.12.2 True Bearing: 270 2.12.3 Dimensions: 9800 ft x 150 ft 2.12.4 PCN: 69 F/B/W/T 2.12.5 Coordinates: 19–43–16.9196N / 155–1–45.4051W 2.12.6 Threshold Elevation: 37 ft 2.12.6 Touchdown Zone Elevation: 37.6 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 03
2.13.2 Take-off Run Available: 5600
2.13.3 Take-off Distance Available: 5600
2.13.4 Accelerate-Stop Distance Available: 5600
2.13.5 Landing Distance Available: 5251

2.13.1 Designation: 21

2.13.2 Take–off Run Available: 5251 2.13.3 Take–off Distance Available: 5251

2.13.4 Accelerate–Stop Distance Available: 5510

2.13.5 Landing Distance Available: 5510

2.13.1 Designation: 08

2.13.2 Take-off Run Available: 9800

2.13.3 Take-off Distance Available: 9800

2.13.4 Accelerate–Stop Distance Available: 9800

2.13.5 Landing Distance Available: 9800

2.13.1 Designation: 26

2.13.2 Take-off Run Available: 9800

2.13.3 Take-off Distance Available: 9800

2.13.4 Accelerate–Stop Distance Available: 9800

2.13.5 Landing Distance Available: 9800

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 032.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: V4L

2.14.1 Designation: 212.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 082.14.2 Approach Lighting System: ODALS2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 262.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P2.18.3 Channel: 119.72.18.5 Hours of Operation: 0600-2200

2.18.1 Service Designation: APCH/P DEP/P2.18.3 Channel: 269.22.18.5 Hours of Operation: 0600-2200

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 120.252.18.5 Hours of Operation: 0600-2200

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 3232.18.5 Hours of Operation: 0600-2200

2.18.1 Service Designation: ATIS2.18.3 Channel: 126.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P 2.18.3 Channel: 121.9 2.18.5 Hours of Operation: 0600–2200

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 118.1 2.18.5 Hours of Operation: 0600–2200

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 263.1 2.18.5 Hours of Operation: 0600–2200

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 26. Magnetic variation: 11E
2.19.2 ILS Identification: ITO
2.19.5 Coordinates: 19–43–13.742N / 155–3–39.505W
2.19.6 Site Elevation: 39 ft

2.19.1 ILS Type: Glide Slope for runway 26. Magnetic variation: 11E
2.19.2 ILS Identification: ITO
2.19.5 Coordinates: 19–43–20.887N / 155–1–58.099W
2.19.6 Site Elevation: 32.5 ft

2.19.1 ILS Type: Localizer for runway 26. Magnetic variation: 11E
2.19.2 ILS Identification: ITO
2.19.5 Coordinates: 19–43–16.933N / 155–3–38.784W
2.19.6 Site Elevation: 25.8 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 11E
2.19.2 Navigation Aid Identification: ITO
2.19.5 Coordinates: 19–43–16.862N / 155–0–39.435W
2.19.6 Site Elevation: 23 ft

**General Remarks:** ATCT CTLS ENTRY/EXIT TFC ON TWYS F&E TO EAST TRML RAMP.

BE ALERT OCNL BIRD FLOCKS ON ARPT AND IN FLT ACROSS RWY 08/26 AND 03/21.

PPR FROM ARPT MGR FOR TRANSIENT PARKING.

FOR CD WHEN ATCT IS CLSD CTC HONOLULU CONTROL FACILITY AT 808-840-6262.

181' LGTD SMOKE STACK 1/2 SM SOUTH OF FLD.

RY 08/26 SINGLE-BELLY TWIN TANDEM (SBTT) GWT 450,000 LBS.

RY 03/21 SINGLE-BELLY TWIN TANDEM (SBTT) GWT 230,000 LBS.

NOISE ABATEMENT: AVOID OVERFLIGHT OF NOISE SENSITIVE RESIDENTIAL AREAS N, W AND SW OF AIRPORT.

RY 3/21 CLSD TO TURBINE ACFT 1800–0600.

TWY E BTN TWY A AND RWY 08/26 PONDING DRG HVY RAINS.

RWY 08 PVD 1325' MKD BY CHEVRONS, UNUSBL FOR LNDG/TKOF/OVRN/STY; CANNOT BE USED IN COMPUTING TKOF DATA.

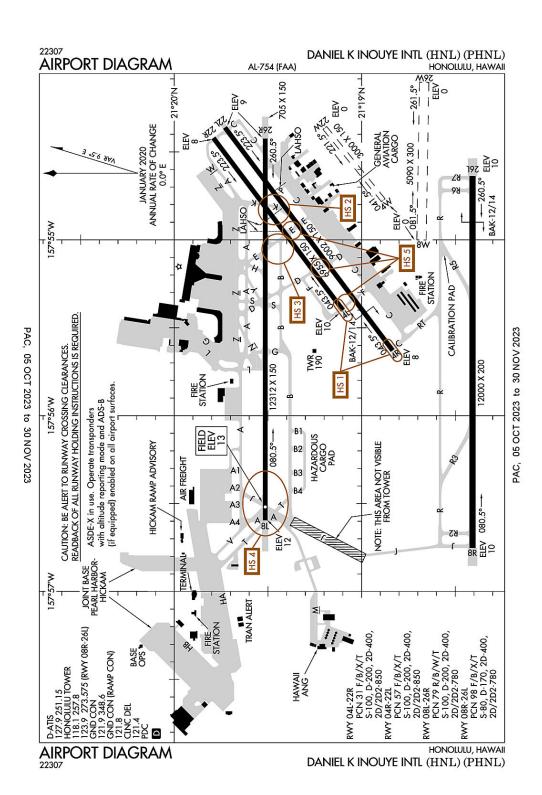
DIVISION 1.1, 1.2, 1.3 EXPLOSIVES PROHIBITED.

RWYS 8, 21 AND 26 WIND CONES ARE LCTD IN THE ROFA.

(A70A) JET FUEL AVBL MON-SAT 0800-1700 CALL (808) 935-6881/6122 OR 961-6601.

(E93) NO MKD PAD, HEL OPER FM FBO HANGER AREA.

PPR FROM AIRPORT MANAGER FOR TRANSPORTATION OF DIVISION 1.4 EXPLOSIVES AND HAZARDOUS MATERIAL IN OR OUT OF AIRPORT.



# Honolulu, Hawaii Honolulu International ICAO Identifier PHNL

# Honolulu, HI Honolulu Intl ICAO Identifier PHNL

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 21–19–4.142N / 157–55–12.819W 2.2.2 From City: 3 miles NW of HONOLULU, HI 2.2.3 Elevation: 12.6 ft 2.2.5 Magnetic Variation: 11E (1990) 2.2.6 Airport Contact: MALCOM SMITH 300 RODGERS BLVD. #12 HONOLULU, HI 96819 (808–836–6434) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A,A1+2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 04L
2.12.2 True Bearing: 53
2.12.3 Dimensions: 6955 ft x 150 ft
2.12.4 PCN: 31 F/B/X/T
2.12.5 Coordinates: 21–19–5.9954N / 157–55–23.9541W
2.12.6 Threshold Elevation: 9.8 ft
2.12.6 Touchdown Zone Elevation: 10.2 ft

2.12.1 Designation: 22R 2.12.2 True Bearing: 233 2.12.3 Dimensions: 6955 ft x 150 ft 2.12.4 PCN: 31 F/B/X/T 2.12.5 Coordinates: 21–19–47.4694N / 157–54–25.1972W 2.12.6 Threshold Elevation: 7.5 ft 2.12.6 Touchdown Zone Elevation: 9.6 ft

2.12.1 Designation: 04R 2.12.2 True Bearing: 53 2.12.3 Dimensions: 9002 ft x 150 ft 2.12.4 PCN: 57 F/B/X/T 2.12.5 Coordinates: 21–18–50.1044N / 157–55–37.685W 2.12.6 Threshold Elevation: 8.1 ft 2.12.6 Touchdown Zone Elevation: 8.4 ft

AD 2–261 5 OCT 23

2.12.1 Designation: 22L 2.12.2 True Bearing: 233 2.12.3 Dimensions: 9002 ft x 150 ft 2.12.4 PCN: 57 F/B/X/T 2.12.5 Coordinates: 21-19-43.7762N / 157-54-21.6299W 2.12.6 Threshold Elevation: 8.5 ft 2.12.6 Touchdown Zone Elevation: 8.6 ft 2.12.1 Designation: 04W 2.12.2 True Bearing: 51 2.12.3 Dimensions: 3000 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 21-18-53.09N / 157-54-46.44W 2.12.6 Threshold Elevation: 0 ft 2.12.6 Touchdown Zone Elevation: ft 2.12.1 Designation: 22W 2.12.2 True Bearing: 231 2.12.3 Dimensions: 3000 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 21-19-11.7999N / 157-54-21.78W 2.12.6 Threshold Elevation: 0 ft 2.12.6 Touchdown Zone Elevation: ft 2.12.1 Designation: 08L 2.12.2 True Bearing: 89 2.12.3 Dimensions: 12312 ft x 150 ft 2.12.4 PCN: 79 R/B/W/T 2.12.5 Coordinates: 21-19-30.8826N / 157-56-35.6573W 2.12.6 Threshold Elevation: 11.8 ft 2.12.6 Touchdown Zone Elevation: 12.6 ft 2.12.1 Designation: 26R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 12312 ft x 150 ft 2.12.4 PCN: 79 R/B/W/T 2.12.5 Coordinates: 21-19-30.884N / 157-54-25.4326W 2.12.6 Threshold Elevation: 8.4 ft 2.12.6 Touchdown Zone Elevation: 8.8 ft 2.12.1 Designation: 08R 2.12.2 True Bearing: 90 2.12.3 Dimensions: 12000 ft x 200 ft 2.12.4 PCN: 98 F/B/X/T 2.12.5 Coordinates: 21-18-24.4938N / 157-56-45.061W 2.12.6 Threshold Elevation: 9.9 ft 2.12.6 Touchdown Zone Elevation: 10 ft

2.12.1 Designation: 26L2.12.2 True Bearing: 270

2.12.3 Dimensions: 12000 ft x 200 ft
2.12.4 PCN: 98 F/B/X/T
2.12.5 Coordinates: 21–18–24.4867N / 157–54–38.152W
2.12.6 Threshold Elevation: 9.8 ft
2.12.6 Touchdown Zone Elevation: 9.8 ft

2.12.1 Designation: 08W
2.12.2 True Bearing: 91
2.12.3 Dimensions: 5090 ft x 300 ft
2.12.4 PCN:
2.12.5 Coordinates: 21–18–40.85N / 157–55–0W
2.12.6 Threshold Elevation: 0 ft
2.12.6 Touchdown Zone Elevation: ft

2.12.1 Designation: 26W
2.12.2 True Bearing: 271
2.12.3 Dimensions: 5090 ft x 300 ft
2.12.4 PCN:
2.12.5 Coordinates: 21–18–39.9794N / 157–54–6.1782W
2.12.6 Threshold Elevation: 0 ft
2.12.6 Touchdown Zone Elevation: ft

#### AD 2.13 Declared Distances

2.13.1 Designation: 04L
2.13.2 Take-off Run Available: 6952
2.13.3 Take-off Distance Available: 6952
2.13.4 Accelerate-Stop Distance Available: 6952
2.13.5 Landing Distance Available: 6952

2.13.1 Designation: 22R
2.13.2 Take-off Run Available: 6952
2.13.3 Take-off Distance Available: 6952
2.13.4 Accelerate-Stop Distance Available: 6952
2.13.5 Landing Distance Available: 6952

2.13.1 Designation: 04R

2.13.2 Take-off Run Available: 9000

2.13.3 Take-off Distance Available: 9000

2.13.4 Accelerate–Stop Distance Available: 8950

2.13.5 Landing Distance Available: 8950

2.13.1 Designation: 22L2.13.2 Take-off Run Available: 90002.13.3 Take-off Distance Available: 9000

2.13.4 Accelerate-Stop Distance Available: 8937

2.13.5 Landing Distance Available: 8937

2.13.1 Designation: 04W

2.13.2 Take–off Run Available: 2.13.3 Take–off Distance Available: 2.13.4 Accelerate–Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 22W2.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 08L
2.13.2 Take-off Run Available: 12312
2.13.3 Take-off Distance Available: 12312
2.13.4 Accelerate-Stop Distance Available: 12312
2.13.5 Landing Distance Available: 12312

2.13.1 Designation: 26R

2.13.2 Take-off Run Available: 12300

2.13.3 Take-off Distance Available: 12300

2.13.4 Accelerate–Stop Distance Available: 12300

2.13.5 Landing Distance Available: 12300

2.13.1 Designation: 08R

2.13.2 Take-off Run Available: 12000

2.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate–Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 26L

2.13.2 Take–off Run Available: 12000

2.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate-Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 08W

2.13.2 Take–off Run Available:

2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 26W

2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 04L2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 04R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 04W2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 22W2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 08L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08W

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 26W2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ADZY (HONOLULU RAMP ADZY)2.18.3 Channel: 121.82.18.5 Hours of Operation:

2.18.1 Service Designation: ADZY (HICKAM RAMP ADZY)

2.18.3 Channel: 133.6 2.18.5 Hours of Operation:

2.18.1 Service Designation: ADZY (HICKAM RAMP ADZY)2.18.3 Channel: 254.42.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 293.72.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P2.18.3 Channel: 317.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (WEST)2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (WEST)2.18.3 Channel: 2692.18.5 Hours of Operation: 24

2.18.1 Service Designation: BANZI RNAV DP2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: BANZI RNAV DP2.18.3 Channel: 2692.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 281.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (ARR E/NW DEP NW)2.18.3 Channel: 119.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (EAST)2.18.3 Channel: 124.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (ARR E/NW DEP NW)2.18.3 Channel: 239.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: COMD POST2.18.3 Channel: 141.82.18.5 Hours of Operation:

2.18.1 Service Designation: COMD POST (15 AW COMD POST)2.18.3 Channel: 1682.18.5 Hours of Operation:

2.18.1 Service Designation: COMD POST2.18.3 Channel: 292.52.18.5 Hours of Operation:

2.18.1 Service Designation: COMD POST (15 AW COMD POST)2.18.3 Channel: 295.52.18.5 Hours of Operation:

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 127.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 251.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (EAST)2.18.3 Channel: 124.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P CLASS B (EAST)2.18.3 Channel: 317.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: KEAHI DP (JORDA,LANAI, UPOLU TRNS.)2.18.3 Channel: 124.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: KEAHI DP (JORDA, LANAI, UPOLU TRNS.) 2.18.3 Channel: 317.6 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: KEOLA DP (KATHS,LIHUE,LILIA,NONNI,PUPPI, SOUTH KAUAI TRNS.) 2.18.3 Channel: 118.3 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: KEOLA DP (KATHS,LIHUE,LILIA,PUPPI,SOUTH KAUAI TRNS.) 2.18.3 Channel: 269 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P 2.18.3 Channel: 118.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 08R/26L) 2.18.3 Channel: 123.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P 2.18.3 Channel: 257.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P (RWY 08R/26L) 2.18.3 Channel: 273.575 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: MOLOKAI DP (APACK, CLUTS , EBBER, FITES, PULPS, ZIGIE TRNS.) 2.18.3 Channel: 124.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: MOLOKAI DP (APACK, CLUTS, EBBER, FITIES, PULPS, ZIGIE TRNS.) 2.18.3 Channel: 317.6 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: OPS (SHAKA OPS) 2.18.3 Channel: 125.3 2.18.5 Hours of Operation: 2.18.1 Service Designation: OPS (SAC OPS) 2.18.3 Channel: 311 2.18.5 Hours of Operation: 2.18.1 Service Designation: OPS (SHAKA OPS) 2.18.3 Channel: 349.4 2.18.5 Hours of Operation:

2.18.1 Service Designation: PALAY DP (LANAI, MOLOKAI TRNS.) 2.18.3 Channel: 124.8 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: PALAY DP (LANAI, MOLOKAI TRNS.)2.18.3 Channel: 317.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: PIPLN RNAV DP2.18.3 Channel: 124.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: PIPLN RNAV DP2.18.3 Channel: 317.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: PTD (HICKAM)2.18.3 Channel: 133.62.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 372.22.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 04R. Magnetic variation: 11E
2.19.2 ILS Identification: IUM
2.19.5 Coordinates: 21–19–47.9018N / 157–54–10.9794W
2.19.6 Site Elevation: 19.5 ft

2.19.1 ILS Type: Glide Slope for runway 04R. Magnetic variation: 11E
2.19.2 ILS Identification: IUM
2.19.5 Coordinates: 21–18–53.9933N / 157–55–26.9028W
2.19.6 Site Elevation: 5.6 ft

2.19.1 ILS Type: Localizer for runway 04R. Magnetic variation: 11E
2.19.2 ILS Identification: IUM
2.19.5 Coordinates: 21–19–49.8152N / 157–54–13.0662W
2.19.6 Site Elevation: 5.1 ft

2.19.1 ILS Type: DME for runway 08L. Magnetic variation: 11E
2.19.2 ILS Identification: HNL
2.19.5 Coordinates: 21–19–27.8674N / 157–54–17.1566W
2.19.6 Site Elevation: 21.2 ft

2.19.1 ILS Type: Glide Slope for runway 08L. Magnetic variation: 11E
2.19.2 ILS Identification: HNL
2.19.5 Coordinates: 21–19–26.6745N / 157–56–24.533W
2.19.6 Site Elevation: 6.7 ft

2.19.1 ILS Type: Localizer for runway 08L. Magnetic variation: 11E 2.19.2 ILS Identification: HNL

2.19.5 Coordinates: 21–19–30.8788N / 157–54–14.7214W 2.19.6 Site Elevation: 5.4 ft

2.19.1 ILS Type: Outer Marker for runway 08L. Magnetic variation: 11E
2.19.2 ILS Identification: HNL
2.19.5 Coordinates: 21–19–28.9934N / 158–2–56.1122W
2.19.6 Site Elevation: 43.5 ft

2.19.1 ILS Type: DME for runway 26L. Magnetic variation: 11E
2.19.2 ILS Identification: EPC
2.19.5 Coordinates: 21–19–37.0011N / 157–54–25.9888W
2.19.6 Site Elevation: 24 ft

2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 11E
2.19.2 ILS Identification: EPC
2.19.5 Coordinates: 21–19–35.0845N / 157–54–28.3182W
2.19.6 Site Elevation: 6.5 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 11E
2.19.2 Navigation Aid Identification: HNL
2.19.5 Coordinates: 21–18–29.9581N / 157–55–49.4801W
2.19.6 Site Elevation: 5.1 ft

### **General Remarks:**

MILITARY RSTD: JBPH-H IS PPR TO ALL NON-TFWC MSN, AMC TRNG MSN AND KC-135 8 UN & 8 EN MSN CALL 735TH MOC AT DSN (315) 499–6970 FOR PPR. ALL AMC PPR WILL BE COORD MON–FRI 1700–0400Z ONLY. ALL NON–AMC ACFT SUCH AS FOREIGN, SISTER SVC, TSNT ACFT, AND OTR MSN MUST CTC 15 OSS/OSA (AMOPS) AT DSN (315) 449–0046/0048 FOR PPR COORD. ALL PPR WILL BE APVD NO EARLIER THAN 72 HR BUT NO LATER THAN 24 HR PRIOR.

CAUTION: DURING PERIODS OF REPEATED PRECIPITATION ANTICIPATE WET RY CONDITIONS, IF CURRENT CONDITIONS RQR CONFIRMATION CTC HONOLULU TWR ON INITIAL CONTACT.

CAUTION: RECREATIONAL BOATING ACTIVITIES ON AND INVOF WATERWAYS.

MILITARY: ALL MIL ACFT RQR CSTMS/AG/IMG INSPECTION MUST CTC 15WG COMMAND POST OR IF AMC CTC HICKAM AMCC, NLT 3 HRS PRIOR TO ARR WITH DEPARTURE LOCATION, EST BLOCK TIME, NR OF AIRCREW, CIV/MIL PAX, FOREIGN NATIONALS, AND DV CODES.\*

ALL JET ACFT CTC RAMP CONTROL PRIOR TO ENGINE START AT GATE OR HARD STAND.

MILITARY MISC: ALL FPL MUST BE FILED WITH PHNL AS DESTN. IF MIL SIDE OF ARPT IS FINAL DESTN, PLACE "DESTINATION HIK" IN RMKS OF FPL. FOR NOTAM USE PHNL IDENT.

MILITARY CAUTION: NO FIGHTER TRANSIENT SUPPORT AVAILABLE IN ACCORDANCE WITH ACC LSET FLASH SAFETY 06–02. TRANSIENT FIGHTER UNITS SHOULD PROVIDE THEIR OWN MAINTENANCE SUPPORT.

BIRD STRIKE HAZARD ALL RUNWAYS.

MILITARY/COMMUNICATIONS: BEDTIME (ALL CORONET W TANKERS USE 311.0 FOR TANKER-FTR INTER-PLANE ON LAUNCH DAY. AFT DUTY HR DSN 448–8888 613AOC/AMD, FLT MGMT).

MILITARY MISC: WX OPR H24, DSN 449-2251, C808-658-9961.

PPR FM AMGR FOR TRANSPORATION OF CLASS A OR B EXPLOS IN AND/OR OUT OF HNL.

TFC PAT OVHD ALT 2000 FT, RESTRICTED TO HIANG AND SENTRY ALOHA ACFT.

APRON TAXILANE 2 EAST END 360 FT CLSD.

MILITARY MISC: ANG – HI ANG AFLD OPS OPR 1500–0300Z MON–FRI AND UTA WKENDS; CLSD SAT, SUN AND HOL.

MILITARY CAUTION: FOD HAZARD EXISTS ON ALL MOVEMENT AREAS E OF TWY S. FIGHTER AIRCRAFT EXERCISE EXTREME CTN WHEN TAXIING.

MILITARY MISC 2 OF 2: WAIVERS WILL BE GRANTED ON EXTREME NEC. IF SHORT NOTICE MSN ESSENTIAL WAIVERS ARE NEC, CTC 150G/CC BY FONE THRU 15 WG COMD POST(15 WG/CP) OR 154 OG/CC FOR HIANG AIRCRAFT. 15 WG COMMAND POST WILL PASS APVL TO HICKAM FLT SVC AND HICKAM RAMP ADZY.

MILITARY RSTD: MIL ACFT OPR DUR BIRD WATCH COND MODERATE (INITIAL TKOF OR FULL STOP LDG ONLY, NO MULTIPLE IFR/VFR APCH) AND SEVERE (TKOF AND LDG PROH WO 15 OG/CC APVL OR 154 OG/CC APVL FOR HIANG ACFT) CTC HIK RAMP, PTD, 15 WG COMD POST, 735 AMC COMD POST, 154 WG COMD POST FOR CURRENT COND.

MILITARY A-GEAR: HOOK MB100(B) LCTD 200 FT FM THLD RY 26R.

MILITARY TRAN ALERT: 15 WG CAN PROVIDE EQPT BUT CREWS MUST PROVIDE OWN PERS WHEN NEEDED.

TWYS G ADG V AND BELOW POWER IN W/PPR.

MILITARY CAUTION: A FOD HAZARD EXISTS ON ALL TAXIWAYS AND RUNWAYS BUT ESPECIALLY ON RUNWAY 4L/22R AND TAXIWAYS NORTH OF RUNWAY 8L/26R.

MILITARY RSTD: UPON ARR, CREWS WILL PRVD CREW ORDER/EAL TO 647 SFS PATROL AND PROCD DRCTLY TO COMMAND POST (BLDG 2050) AND CMPLT AN OUBD SETUP SHEET TO FACILITATE DEP RQMNTS.

DUE TO NON–VISIBILITY TWR UNA TO DTRM IF THE FLWG AREAS ARE CLEAR OF OBSTNS AND/OR TFC: PTNS OF TWY J BTN TWY B & RWY 08R; PTNS OF INTER–ISLAND ACFT PRKG RAMP.

MILITARY MISC: AFLD OPS DSN 449-0046/0048 FAX DSN 449-7624.

RYS 04W/22W AND 08W/26W RECREATIONAL BOATING ACTIVITIESON AND INVOF WATERWAYS.

MILITARY MISC 1 OF 2: DUE TO SENSITIVITIES OF CITIZENS, FTR ACFT DEP ONLY AUTHORIZED FR 1700–0700Z MON–SAT, AND 1800–0700Z SUN AND HOL. ALL REQ FOR WAIVERS WILL BE SENT TO THE 15/OG/CC OR 154 OG/CC FOR HIANG AIRCRAFT AT LEAST 5 WORKING DAYS IN ADVANCE.

MILITARY MISC: NO COMSEC MATERIAL AVBL THRU HICKAM AIRFIELD OPS.

RMN AT LEAST 1 MILE OFF SHORE OF WAIKIKI DIAMOND HEAD KOKO HEAD & EWA BEACH. ARR RWY 08L; FLY ILS APCH PROC OR A CLOSE–IN BASE LEG RMNG OVER CNTR OF PEARL HARBOR CHNL. ARR 26L/R; RNM AT TFC PAT ALTS AS LONG AS PSBL BFR BGNG DSCNT FOR LNDG.

MILITARY RSTD: ALL TRAN ACFT NOT ON AN AMC/TWCF MSN AND HOME STN ACFT TERMINATING AT JBPH-H, WILL PROVIDE A 3 HR OUT CALL (COMM 808–448–6900) AS WELL AS A 20–30 MIN OUT CALL ON

292.5 TO THE 15 WG/CP (KOA CONTROL).

DUE TO LOCATION OF ATCT, CONTROLLERS UNABLE TO DETERMINE WHETHER ACFT ARE ON CORRECT FINAL APCH TO RYS 04L–04R AND 22L–22R.

MILITARY RSTD: IF ACFT IS CARRYING HAZ CARGO, CARGO MANIFEST IS ALSO RQRD. AVBL TIMES TO ACCEPT HAZ CARGO ARE 0400–1600Z; ALL HAZ CARGO MUST COORDINATE WITH AMOPS 449–0046/48 48 HRS PRIOR TO MSN.

MILITARY SERVICE–A–GEAR: RWY 4R/22L AND 8R/26L SFC GROOVED WITHIN 10 FT OF A–G SYSTEM. POTENTIAL FOR FTR ACFT TAIL HOOK SKIP EXISTS.

MILITARY SERVICE-FUEL: A++ (MIL; AVBL H24).

WIDE BODY AND 4 ENGINE TBJTS LDG ON RY 04R ROLL TO END OF RY, NO LEFT TURN AT TWY K WO APVL.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

MILITARY: ALL MIL ACFT WITH VIP CODE 7 OR ABV CTC 15WG COMMAND POST OR RELAY THRU HF/SSB AWY 1 HR OUT TO CFM BLOCKTIME.

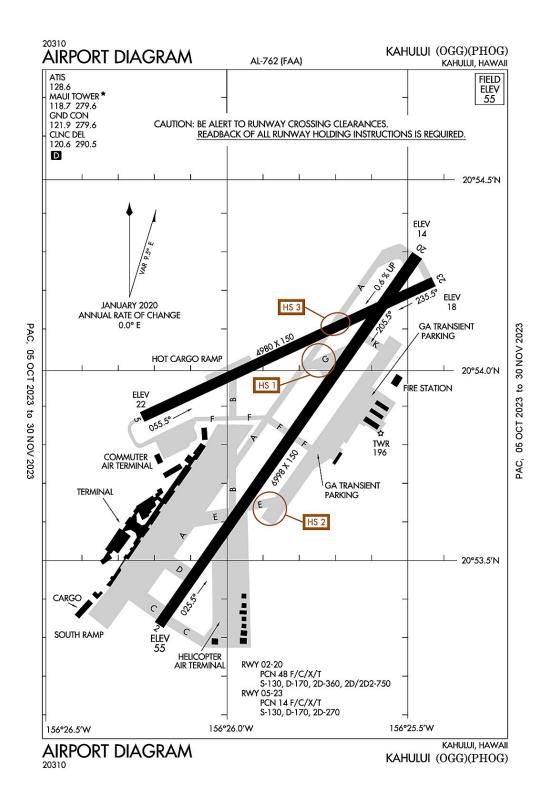
MILITARY REMARKS: SEE FLIP AP/3 SUPPLEMENTARY APRT INFO, RTE AND AREA RSTD, AND OAKLAND FIR FLT HAZ.

MILITARY MISC (2 OF 2 CONT'D): LTD WX BRIEF SUPPORT.REMOTE FLT WX BRIEFINGS CTC 17TH WX SQ H24, DSN 315–449–7950/8333, FAX DSN 315–449–8336; 2 HR PN RQR FOR TIMELY BRIEF.OFFICIAL OBSN TAKEN BY FAA. COOPERATIVE WX WATCH PROCEDURES DO NOT EXIST BTW WX AND ATC.

MILITARY RSTD: TWR APVL RQRD TO USE TWY KILO FROM RWY 4R. HOLD LINE IN EFCT FOR TWY R7 BTN PTN OF TWY XNG APCH ZONE FOR RWY 04L/R. TWY P CLSD TO ACFT OVER 12500 LBS.

APRON TAXILANE 6 BTWN TWY C AND SOUTH RAMP CLSD EXCEPT GA/FIXED WING LOADING/UNLOAD-ING ONLY.

# Kahului, Hawaii Kahului ICAO Identifier PHOG



### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 20–53–55.135N / 156–25–49.651W
2.2.2 From City: 3 miles E of KAHULUI, HI
2.2.3 Elevation: 55.4 ft
2.2.5 Magnetic Variation: 11E (1990)
2.2.6 Airport Contact: MARVIN MONIZ

1 KAHULUI AIRPORT ROAD, UNIT 5
KAHULUI, HI 96732 (808–872–3808)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MINOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 02 2.12.2 True Bearing: 35 2.12.3 Dimensions: 6998 ft x 150 ft 2.12.4 PCN: 48 F/C/X/T 2.12.5 Coordinates: 20–53–20.9058N / 156–26–10.7497W 2.12.6 Threshold Elevation: 55.3 ft 2.12.6 Touchdown Zone Elevation: 55.4 ft

2.12.1 Designation: 20 2.12.2 True Bearing: 215 2.12.3 Dimensions: 6998 ft x 150 ft 2.12.4 PCN: 48 F/C/X/T 2.12.5 Coordinates: 20–54–17.7389N / 156–25–28.4443W 2.12.6 Threshold Elevation: 14.3 ft 2.12.6 Touchdown Zone Elevation: 27 ft

2.12.1 Designation: 05 2.12.2 True Bearing: 65 2.12.3 Dimensions: 4980 ft x 150 ft 2.12.4 PCN: 14 F/C/X/T 2.12.5 Coordinates: 20–53–52.8965N / 156–26–13.521W 2.12.6 Threshold Elevation: 22.1 ft 2.12.6 Touchdown Zone Elevation: 22.2 ft AD 2–274 5 OCT 23

2.12.1 Designation: 23
2.12.2 True Bearing: 245
2.12.3 Dimensions: 4980 ft x 150 ft
2.12.4 PCN: 14 F/C/X/T
2.12.5 Coordinates: 20–54–13.7155N / 156–25–25.928W
2.12.6 Threshold Elevation: 17.6 ft
2.12.6 Touchdown Zone Elevation: 18.9 ft

2.12.1 Designation: H1
2.12.2 True Bearing:
2.12.3 Dimensions: 125 ft x 125 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 02
2.13.2 Take-off Run Available: 6995
2.13.3 Take-off Distance Available: 6995
2.13.4 Accelerate-Stop Distance Available: 6995
2.13.5 Landing Distance Available: 6995

2.13.1 Designation: 20
2.13.2 Take-off Run Available: 6995
2.13.3 Take-off Distance Available: 6995
2.13.4 Accelerate-Stop Distance Available: 6995
2.13.5 Landing Distance Available: 6995

2.13.1 Designation: 05
2.13.2 Take-off Run Available: 4990
2.13.3 Take-off Distance Available: 4990
2.13.4 Accelerate-Stop Distance Available: 4990
2.13.5 Landing Distance Available: 4990
2.13.1 Designation: 23
2.13.2 Take-off Run Available: 4990

2.13.3 Take-off Distance Available: 4990

2.13.4 Accelerate–Stop Distance Available: 4990

2.13.5 Landing Distance Available: 4990

2.13.1 Designation: H12.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 022.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 202.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 052.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 232.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: H12.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P IC (SOUTH)2.18.3 Channel: 119.52.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: APCH/P DEP/P IC (NORTH)2.18.3 Channel: 120.22.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: APCH/P DEP/P IC (SOUTH)2.18.3 Channel: 225.42.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: APCH/P DEP/P IC (NORTH)2.18.3 Channel: 322.42.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: ATIS2.18.3 Channel: 128.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P 2.18.3 Channel: 120.6 2.18.5 Hours of Operation: 0600–2300 (MAR–NOV) 0600–2400 (NOV–MAR) 2.18.1 Service Designation: CD/P 2.18.3 Channel: 290.5 2.18.5 Hours of Operation: 0600–2300 (MAR–NOV) 0600–2400 (NOV–MAR)

2.18.1 Service Designation: CLASS C (SOUTH)2.18.3 Channel: 119.52.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: CLASS C (NORTH)2.18.3 Channel: 120.22.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: CLASS C (SOUTH)2.18.3 Channel: 225.42.18.5 Hours of Operation: 0600–2300 (MAR–NOV)0600–2400 (NOV–MAR)

2.18.1 Service Designation: CLASS C (NORTH) 2.18.3 Channel: 322.4 2.18.5 Hours of Operation: 0600–2300 (MAR–NOV) 0600–2400 (NOV–MAR)

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P 2.18.3 Channel: 121.9 2.18.5 Hours of Operation: 0600–2300 (MAR–NOV) 0600–2400 (NOV–MAR)

2.18.1 Service Designation: GND/P 2.18.3 Channel: 279.6 2.18.5 Hours of Operation: 0600–2300 (MAR–NOV) 0600–2400 (NOV–MAR)

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 118.7 2.18.5 Hours of Operation: 0600–2300 (MAR–NOV) 0600–2400 (NOV–MAR)

2.18.1 Service Designation: LCL/P2.18.3 Channel: 279.62.18.5 Hours of Operation: 0600–2300 (MAR–NOV)

0600-2400 (NOV-MAR)

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 02. Magnetic variation: 11E
2.19.2 ILS Identification: OGG
2.19.5 Coordinates: 20–54–27.3859N / 156–25–23.7568W
2.19.6 Site Elevation: 22 ft

2.19.1 ILS Type: Glide Slope for runway 02. Magnetic variation: 11E
2.19.2 ILS Identification: OGG
2.19.5 Coordinates: 20-53-29.5489N / 156-25-59.2238W
2.19.6 Site Elevation: 49.5 ft

2.19.1 ILS Type: Localizer for runway 02. Magnetic variation: 11E
2.19.2 ILS Identification: OGG
2.19.5 Coordinates: 20-54-25.9395N / 156-25-22.344W
2.19.6 Site Elevation: 11.1 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 11E
2.19.2 Navigation Aid Identification: OGG
2.19.5 Coordinates: 20–54–23.2995N / 156–25–15.4249W
2.19.6 Site Elevation: 24.3 ft

#### General Remarks: ACCESS TO HELIPAD FM TWY C ONLY.

ACFT OVR 30,000 LB LDG ON RY 02/20 UNA TO TURN OFF ONTO RY 05/23 DUE TO PAVEMENT COND.

MIGRATORY BIRD ACTIVITY BLO 1500 FT WI 5 NM RADIUS OF ARPT DURG AUG-MAY.

570' LGTD TWR APRX 3 MI. W.

COMMUTER AIR TRML RSTRD TO PART 121 AND PART 135 OPRS ONLY. ACFT AT THE TRML SHALL CALL THE TWR ON 121.9 PRIOR TO PUSHBACK.

FOR CD WHEN ATCT IS CLSD CTC HONOLULU CONTROL FACILITY AT 808-840-6262.

RY 02/20 SINGLE-BELLY TWIN TANDEM (SBTT) GWT 460,000 LBS.

TSNT PARKING LCTD ON NE SECTION OF E RAMP.

PPR FOR FIXED WING ACFT OPNS ON HELIPAD DURG NON-OPERATIONAL HRS CALL (808) 872–3880 5:15A–10:00P.

COMMUTER TERMINAL RAMP RESTRICTED TO ACFT 140000 LBS OR LESS.

DUE TO NONVISIBILITY ATCT UNABLE TO DETERMINE IF FLWG AREA IS CLEAR OF OBSTNS AND/OR TFC: PORTION OF TWY F BTN THE COMMUTER AIR TERMINAL & APCH END RY 05.

DUE TO NONVISIBILITY ATCT UNABLE TO PROVIDE ATC SVC BTN ACFT & GROUND VEHICLES ON THE COMMUTER AIR TERMINAL S OF TWY F AND THE HELICOPTER AIR TERMINAL E OF APCH END RY 02.

AREA E OF APCH END RY 02 DESIGNATED AS HELICOPTER OPER AREA. NO FIXED WING ACFT MAY OPER

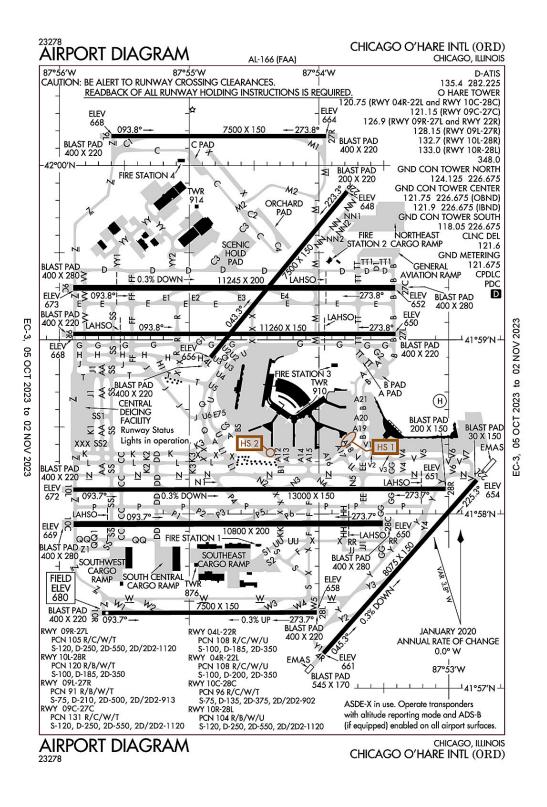
ON HELIPAD DURG OPNL HRS SR-SS.

RAMP AREA E SIDE RY 02 UNDER STATE AUTHORITY. FAA NOT RESPONSIBLE FOR DIRECTION & CTL GND TFC IN AREA.

MIL HEL OPS WITH PPR RSTRD TO THE SW CORNER OF HOT CARGO APRON (HAZMAT) N OF RWY 05/23.

24 HRS PPR FOR DIVISION 1.1,1.2,1.3 EXPLOSIVES AND 4 HRS PPR FOR OTHER HAZARDOUS CARGO IN/OUT OF ARPT; CTC (808) 872–3830 0745–1630 OTHER TIMES (808) 872–3888.

# Chicago, Illinois Chicago–O'Hare International ICAO Identifier KORD



# Chicago, IL Chicago O'Hare Intl ICAO Identifier KORD

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 41–58–36.985N / 87–54–29.339W 2.2.2 From City: 14 miles NW of CHICAGO, IL 2.2.3 Elevation: 680 ft 2.2.5 Magnetic Variation: 3W (2010) 2.2.6 Airport Contact: JAMIE RHEE 10510 WEST ZEMKE RO CHICAGO, IL 60666 (773–686–8060) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 04L
2.12.2 True Bearing: 39
2.12.3 Dimensions: 7500 ft x 150 ft
2.12.4 PCN: 108 R/C/W/U
2.12.5 Coordinates: 41–58–53.9601N / 87–54–50.1039W
2.12.6 Threshold Elevation: 655.7 ft
2.12.6 Touchdown Zone Elevation: 658.2 ft

2.12.1 Designation: 22R 2.12.2 True Bearing: 219 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 108 R/C/W/U 2.12.5 Coordinates: 41–59–51.1336N / 87–53–46.9364W 2.12.6 Threshold Elevation: 647.7 ft 2.12.6 Touchdown Zone Elevation: 651.5 ft

2.12.1 Designation: 04R 2.12.2 True Bearing: 42 2.12.3 Dimensions: 8075 ft x 150 ft 2.12.4 PCN: 108 R/C/W/U 2.12.5 Coordinates: 41–57–11.9778N / 87–53–57.9066W 2.12.6 Threshold Elevation: 661.4 ft 2.12.6 Touchdown Zone Elevation: 661.4 ft

AD 2–281 5 OCT 23

2.12.1 Designation: 22L 2.12.2 True Bearing: 222 2.12.3 Dimensions: 8075 ft x 150 ft 2.12.4 PCN: 108 R/C/W/U 2.12.5 Coordinates: 41-58-11.718N / 87-52-47.0759W 2.12.6 Threshold Elevation: 654.4 ft 2.12.6 Touchdown Zone Elevation: 654.4 ft 2.12.1 Designation: 09C 2.12.2 True Bearing: 90 2.12.3 Dimensions: 11245 ft x 200 ft 2.12.4 PCN: 131 R/C/W/T 2.12.5 Coordinates: 41-59-17.8916N / 87-55-53.6564W 2.12.6 Threshold Elevation: 673.3 ft 2.12.6 Touchdown Zone Elevation: 673.3 ft 2.12.1 Designation: 27C 2.12.2 True Bearing: 270 2.12.3 Dimensions: 11245 ft x 200 ft 2.12.4 PCN: 131 R/C/W/T 2.12.5 Coordinates: 41-59-17.9172N / 87-53-24.7562W 2.12.6 Threshold Elevation: 652.4 ft 2.12.6 Touchdown Zone Elevation: 652.8 ft 2.12.1 Designation: 27R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 91 R/B/W/T 2.12.5 Coordinates: 42-0-10.1909N / 87-53-56.6997W 2.12.6 Threshold Elevation: 663.6 ft 2.12.6 Touchdown Zone Elevation: 663.6 ft 2.12.1 Designation: 09L 2.12.2 True Bearing: 90

2.12.2 The Bearing: 90 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 91 R/B/W/T 2.12.5 Coordinates: 42–0–10.1954N / 87–55–36.0339W 2.12.6 Threshold Elevation: 668 ft 2.12.6 Touchdown Zone Elevation: 668 ft

2.12.1 Designation: 09R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 11260 ft x 150 ft
2.12.4 PCN: 105 R/C/W/T
2.12.5 Coordinates: 41–59–2.0171N / 87–55–53.6481W
2.12.6 Threshold Elevation: 668.2 ft
2.12.6 Touchdown Zone Elevation: 668.2 ft

2.12.1 Designation: 27L2.12.2 True Bearing: 270

2.12.3 Dimensions: 11260 ft x 150 ft 2.12.4 PCN: 105 R/C/W/T 2.12.5 Coordinates: 41–59–2.0417N / 87–53–24.5558W 2.12.6 Threshold Elevation: 650.3 ft 2.12.6 Touchdown Zone Elevation: 653.9 ft

2.12.1 Designation: 10C
2.12.2 True Bearing: 90
2.12.3 Dimensions: 10800 ft x 200 ft
2.12.4 PCN: 96 R/C/W/T
2.12.5 Coordinates: 41–57–56.5251N / 87–55–53.4778W
2.12.6 Threshold Elevation: 669.4 ft
2.12.6 Touchdown Zone Elevation: 669.4 ft

2.12.1 Designation: 28C
2.12.2 True Bearing: 270
2.12.3 Dimensions: 10800 ft x 200 ft
2.12.4 PCN: 96 R/C/W/T
2.12.5 Coordinates: 41–57–56.7568N / 87–53–30.5171W
2.12.6 Threshold Elevation: 650.1 ft
2.12.6 Touchdown Zone Elevation: 651.1 ft

2.12.1 Designation: 28R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 13000 ft x 150 ft 2.12.4 PCN: 120 R/B/W/T 2.12.5 Coordinates: 41–58–8.6529N / 87–53–1.4244W 2.12.6 Threshold Elevation: 651.4 ft 2.12.6 Touchdown Zone Elevation: 651.4 ft

2.12.1 Designation: 10L 2.12.2 True Bearing: 90 2.12.3 Dimensions: 13000 ft x 150 ft 2.12.4 PCN: 120 R/B/W/T 2.12.5 Coordinates: 41–58–8.3816N / 87–55–53.5142W 2.12.6 Threshold Elevation: 672.1 ft 2.12.6 Touchdown Zone Elevation: 672.1 ft

2.12.1 Designation: 28L
2.12.2 True Bearing: 270
2.12.3 Dimensions: 7500 ft x 150 ft
2.12.4 PCN: 104 R/B/W/U
2.12.5 Coordinates: 41–57–26.0865N / 87–54–1.0355W
2.12.6 Threshold Elevation: 658 ft
2.12.6 Touchdown Zone Elevation: 666.8 ft

2.12.1 Designation: 10R 2.12.2 True Bearing: 90 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 104 R/B/W/U 2.12.5 Coordinates: 41–57–25.924N / 87–55–40.3004W 2.12.6 Threshold Elevation: 680 ft 2.12.6 Touchdown Zone Elevation: 680 ft

2.12.1 Designation: 10X
2.12.2 True Bearing:
2.12.3 Dimensions: 0 ft x 0 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

2.12.1 Designation: H1
2.12.2 True Bearing:
2.12.3 Dimensions: 200 ft x 100 ft
2.12.4 PCN:
2.12.5 Coordinates: 41–58–39.0644N / 87–53–4.0081W
2.12.6 Threshold Elevation: 649.7 ft
2.12.6 Touchdown Zone Elevation: ft

### AD 2.13 Declared Distances

2.13.1 Designation: 04L
2.13.2 Take-off Run Available: 7500
2.13.3 Take-off Distance Available: 7500
2.13.4 Accelerate-Stop Distance Available: 7500
2.13.5 Landing Distance Available:

2.13.1 Designation: 22R

- 2.13.2 Take-off Run Available:
- 2.13.3 Take-off Distance Available:
- 2.13.4 Accelerate–Stop Distance Available:
- 2.13.5 Landing Distance Available: 7300

2.13.1 Designation: 04R 2.13.2 Take-off Run Available: 8075

- 2.13.2 Take-off Distance Available: 8075
- 2.13.4 Accelerate–Stop Distance Available: 8075
- 2.13.5 Landing Distance Available: 8075

2.13.1 Designation: 22L

- 2.13.2 Take-off Run Available: 8075
- 2.13.3 Take-off Distance Available: 8075
- 2.13.4 Accelerate–Stop Distance Available: 8075
- 2.13.5 Landing Distance Available: 8075

2.13.1 Designation: 09C

- 2.13.2 Take-off Run Available: 11245
- 2.13.3 Take-off Distance Available: 11245
- 2.13.4 Accelerate–Stop Distance Available: 11245
- 2.13.5 Landing Distance Available: 11245

2.13.1 Designation: 27C 2.13.2 Take-off Run Available: 11245 2.13.3 Take-off Distance Available: 11245 2.13.4 Accelerate-Stop Distance Available: 11245 2.13.5 Landing Distance Available: 11245 2.13.1 Designation: 27R 2.13.2 Take-off Run Available: 7500 2.13.3 Take-off Distance Available: 7500 2.13.4 Accelerate-Stop Distance Available: 7500 2.13.5 Landing Distance Available: 7500 2.13.1 Designation: 09L 2.13.2 Take-off Run Available: 7500 2.13.3 Take-off Distance Available: 7500 2.13.4 Accelerate–Stop Distance Available: 7500 2.13.5 Landing Distance Available: 7500 2.13.1 Designation: 09R 2.13.2 Take-off Run Available: 11260 2.13.3 Take-off Distance Available: 11260 2.13.4 Accelerate-Stop Distance Available: 11260 2.13.5 Landing Distance Available: 11260 2.13.1 Designation: 27L 2.13.2 Take-off Run Available: 11260 2.13.3 Take-off Distance Available: 11260 2.13.4 Accelerate–Stop Distance Available: 11260 2.13.5 Landing Distance Available: 11260 2.13.1 Designation: 10C 2.13.2 Take-off Run Available: 10800 2.13.3 Take-off Distance Available: 10800 2.13.4 Accelerate-Stop Distance Available: 10540 2.13.5 Landing Distance Available: 10540 2.13.1 Designation: 28C 2.13.2 Take-off Run Available: 10800 2.13.3 Take-off Distance Available: 10800 2.13.4 Accelerate–Stop Distance Available: 10800 2.13.5 Landing Distance Available: 10800 2.13.1 Designation: 28R 2.13.2 Take-off Run Available: 13000 2.13.3 Take-off Distance Available: 13000 2.13.4 Accelerate-Stop Distance Available: 13000 2.13.5 Landing Distance Available: 13000 2.13.1 Designation: 10L

2.13.4 Accelerate–Stop Distance Available: 130002.13.5 Landing Distance Available: 12246

2.13.1 Designation: 28L
2.13.2 Take-off Run Available: 7500
2.13.3 Take-off Distance Available: 7500
2.13.4 Accelerate-Stop Distance Available: 7500
2.13.5 Landing Distance Available: 7500

2.13.1 Designation: 10R
2.13.2 Take-off Run Available: 7500
2.13.3 Take-off Distance Available: 7500
2.13.4 Accelerate-Stop Distance Available: 7500
2.13.5 Landing Distance Available: 7500

2.13.1 Designation: 10X

2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: H12.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 04L2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 22R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 04R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 22L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 09C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 27C2.14.2 Approach Lighting System: ALSF2

2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 27R 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: 2.14.1 Designation: 09L 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: 2.14.1 Designation: 09R 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 27L 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4R 2.14.1 Designation: 10C 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 28C 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 28R 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 10L 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 28L 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: 2.14.1 Designation: 10R 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: 2.14.1 Designation: 10X 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: H12.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ALCP2.18.3 Channel: 252.12.18.5 Hours of Operation:

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 121.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 121.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/S2.18.3 Channel: 119.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 135.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 282.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND METERING2.18.3 Channel: 121.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (TWR SOUTH)2.18.3 Channel: 118.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (TWR CENTER OUTBOUND)2.18.3 Channel: 121.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (TWR CENTER INBOUND)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (TWR NORTH) 2.18.3 Channel: 124.125 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 226.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S (TWR CENTER)2.18.3 Channel: 134.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 04R/22L)2.18.3 Channel: 120.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10C/28C)2.18.3 Channel: 120.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09C/27C) 2.18.3 Channel: 121.15 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09R/27L)2.18.3 Channel: 126.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 22R)2.18.3 Channel: 126.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09L/27R)2.18.3 Channel: 128.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10L/28R)2.18.3 Channel: 132.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10R/28L)2.18.3 Channel: 1332.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 3482.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 10C/28C)2.18.3 Channel: 119.6252.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 10R/28L)

2.18.3 Channel: 128.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: VFR ADZY2.18.3 Channel: 126.82.18.5 Hours of Operation:

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 22R. Magnetic variation: 3W
2.19.2 ILS Identification: RXZ
2.19.5 Coordinates: 41–59–46.5114N / 87–53–59.027W
2.19.6 Site Elevation: 645.1 ft

2.19.1 ILS Type: Localizer for runway 22R. Magnetic variation: 3W
2.19.2 ILS Identification: RXZ
2.19.5 Coordinates: 41–58–47.729N / 87–54–56.987W
2.19.6 Site Elevation: 656.5 ft

2.19.1 ILS Type: Glide Slope for runway 04R. Magnetic variation: 3W
2.19.2 ILS Identification: FJU
2.19.5 Coordinates: 41–57–16.8552N / 87–53–44.3489W
2.19.6 Site Elevation: 654.1 ft

2.19.1 ILS Type: Localizer for runway 04R. Magnetic variation: 3W
2.19.2 ILS Identification: FJU
2.19.5 Coordinates: 41–58–16.1967N / 87–52–41.7631W
2.19.6 Site Elevation: 646.6 ft

2.19.1 ILS Type: Glide Slope for runway 22L. Magnetic variation: 3W
2.19.2 ILS Identification: LQQ
2.19.5 Coordinates: 41–58–0.7989N / 87–52–52.6077W
2.19.6 Site Elevation: 645.9 ft

2.19.1 ILS Type: Localizer for runway 22L. Magnetic variation: 3W
2.19.2 ILS Identification: LQQ
2.19.5 Coordinates: 41–57–5.6133N / 87–54–5.4506W
2.19.6 Site Elevation: 653 ft

2.19.1 ILS Type: DME for runway 09C. Magnetic variation: 3W
2.19.2 ILS Identification: OYG
2.19.5 Coordinates: 41–59–22.1969N / 87–56–7.1574W
2.19.6 Site Elevation: 688.1 ft

2.19.1 ILS Type: Glide Slope for runway 09C. Magnetic variation: 3W
2.19.2 ILS Identification: OYG
2.19.5 Coordinates: 41–59–21.8824N / 87–55–38.9074W
2.19.6 Site Elevation: 667.2 ft

2.19.1 ILS Type: Inner Marker for runway 09C. Magnetic variation: 3W 2.19.2 ILS Identification: OYG

2.19.5 Coordinates: 41-59-17.8812N / 87-56-5.0452W 2.19.6 Site Elevation: 680.4 ft 2.19.1 ILS Type: Localizer for runway 09C. Magnetic variation: 3W 2.19.2 ILS Identification: OYG 2.19.5 Coordinates: 41-59-17.9161N / 87-53-10.9443W 2.19.6 Site Elevation: 656.3 ft 2.19.1 ILS Type: DME for runway 27C. Magnetic variation: 3W 2.19.2 ILS Identification: UYJ 2.19.5 Coordinates: 41-59-22.1969N / 87-56-7.1574W 2.19.6 Site Elevation: 688.1 ft 2.19.1 ILS Type: Glide Slope for runway 27C. Magnetic variation: 3W 2.19.2 ILS Identification: UYJ 2.19.5 Coordinates: 41-59-21.9024N / 87-53-38.9227W 2.19.6 Site Elevation: 646.1 ft 2.19.1 ILS Type: Inner Marker for runway 27C. Magnetic variation: 3W 2.19.2 ILS Identification: UYJ 2.19.5 Coordinates: 41-59-17.9169N / 87-53-13.3671W 2.19.6 Site Elevation: 656.3 ft 2.19.1 ILS Type: Localizer for runway 27C. Magnetic variation: 3W 2.19.2 ILS Identification: UYJ 2.19.5 Coordinates: 41-59-17.8863N / 87-56-7.0691W 2.19.6 Site Elevation: 681.9 ft 2.19.1 ILS Type: DME for runway 09L. Magnetic variation: 3W 2.19.2 ILS Identification: SAJ 2.19.5 Coordinates: 42-0-14.0985N / 87-55-48.2323W 2.19.6 Site Elevation: 669.5 ft 2.19.1 ILS Type: Glide Slope for runway 09L. Magnetic variation: 3W 2.19.2 ILS Identification: SAJ 2.19.5 Coordinates: 42-0-14.2182N / 87-55-20.6714W 2.19.6 Site Elevation: 651.3 ft 2.19.1 ILS Type: Inner Marker for runway 09L. Magnetic variation: 3W 2.19.2 ILS Identification: SAJ 2.19.5 Coordinates: 42-0-10.1934N / 87-55-47.4231W 2.19.6 Site Elevation: 668.8 ft 2.19.1 ILS Type: Localizer for runway 09L. Magnetic variation: 3W 2.19.2 ILS Identification: SAJ 2.19.5 Coordinates: 42-0-10.1874N / 87-53-43.3254W 2.19.6 Site Elevation: 660.9 ft 2.19.1 ILS Type: DME for runway 27R. Magnetic variation: 3W 2.19.2 ILS Identification: ABU 2.19.5 Coordinates: 42-0-14.0985N / 87-55-48.2323W

2.19.6 Site Elevation: 669.5 ft

2.19.1 ILS Type: Glide Slope for runway 27R. Magnetic variation: 3W
2.19.2 ILS Identification: ABU
2.19.5 Coordinates: 42–0–14.2137N / 87–54–11.7412W
2.19.6 Site Elevation: 648.4 ft

2.19.1 ILS Type: Inner Marker for runway 27R. Magnetic variation: 3W
2.19.2 ILS Identification: ABU
2.19.5 Coordinates: 42–0–9.9864N / 87–53–45.3008W
2.19.6 Site Elevation: 663.1 ft

2.19.1 ILS Type: Localizer for runway 27R. Magnetic variation: 3W
2.19.2 ILS Identification: ABU
2.19.5 Coordinates: 42–0–10.1939N / 87–55–50.1994W
2.19.6 Site Elevation: 668.1 ft

2.19.1 ILS Type: DME for runway 09R. Magnetic variation: 3W
2.19.2 ILS Identification: JAV
2.19.5 Coordinates: 41–58–57.74N / 87–53–13.65W
2.19.6 Site Elevation: 673 ft

2.19.1 ILS Type: Glide Slope for runway 09R. Magnetic variation: 3W
2.19.2 ILS Identification: JAV
2.19.5 Coordinates: 41–59–6.96N / 87–55–38.39W
2.19.6 Site Elevation: 661.9 ft

2.19.1 ILS Type: Inner Marker for runway 09R. Magnetic variation: 3W
2.19.2 ILS Identification: JAV
2.19.5 Coordinates: 41–59–2.01N / 87–56–4.01W
2.19.6 Site Elevation: 669.1 ft

2.19.1 ILS Type: Localizer for runway 09R. Magnetic variation: 3W
2.19.2 ILS Identification: JAV
2.19.5 Coordinates: 41–59–2.04N / 87–53–10.79W
2.19.6 Site Elevation: 642 ft

2.19.1 ILS Type: DME for runway 27L. Magnetic variation: 3W
2.19.2 ILS Identification: IAC
2.19.5 Coordinates: 41–58–57.74N / 87–53–13.65W
2.19.6 Site Elevation: 673 ft

2.19.1 ILS Type: Glide Slope for runway 27L. Magnetic variation: 3W
2.19.2 ILS Identification: IAC
2.19.5 Coordinates: 41–59–6.98N / 87–53–38.67W
2.19.6 Site Elevation: 647.3 ft

2.19.1 ILS Type: Inner Marker for runway 27L. Magnetic variation: 3W
2.19.2 ILS Identification: IAC
2.19.5 Coordinates: 41–59–2.04N / 87–53–13.53W
2.19.6 Site Elevation: 645 ft

2.19.1 ILS Type: Localizer for runway 27L. Magnetic variation: 3W 2.19.2 ILS Identification: IAC 2.19.5 Coordinates: 41-59-2.01N / 87-56-7.22W 2.19.6 Site Elevation: 673 ft 2.19.1 ILS Type: DME for runway 10C. Magnetic variation: 3W 2.19.2 ILS Identification: SXH 2.19.5 Coordinates: 41-58-0.9714N / 87-56-9.15W 2.19.6 Site Elevation: 689.3 ft 2.19.1 ILS Type: Glide Slope for runway 10C. Magnetic variation: 3W 2.19.2 ILS Identification: SXH 2.19.5 Coordinates: 41-57-52.8465N / 87-55-39.0226W 2.19.6 Site Elevation: 663 ft 2.19.1 ILS Type: Inner Marker for runway 10C. Magnetic variation: 3W 2.19.2 ILS Identification: SXH 2.19.5 Coordinates: 41-57-56.5015N / 87-56-4.8681W 2.19.6 Site Elevation: 674.3 ft 2.19.1 ILS Type: Localizer for runway 10C. Magnetic variation: 3W 2.19.2 ILS Identification: SXH 2.19.5 Coordinates: 41-57-56.803N / 87-52-57.2925W 2.19.6 Site Elevation: 646.3 ft 2.19.1 ILS Type: DME for runway 28C. Magnetic variation: 3W 2.19.2 ILS Identification: VZE 2.19.5 Coordinates: 41-58-0.9714N / 87-56-9.15W 2.19.6 Site Elevation: 689.3 ft 2.19.1 ILS Type: Glide Slope for runway 28C. Magnetic variation: 3W 2.19.2 ILS Identification: VZE 2.19.5 Coordinates: 41-57-53.0321N / 87-53-44.3196W 2.19.6 Site Elevation: 642.4 ft 2.19.1 ILS Type: Inner Marker for runway 28C. Magnetic variation: 3W 2.19.2 ILS Identification: VZE 2.19.5 Coordinates: 41-57-58.7451N / 87-53-19.1677W 2.19.6 Site Elevation: 648 ft 2.19.1 ILS Type: Localizer for runway 28C. Magnetic variation: 3W 2.19.2 ILS Identification: VZE 2.19.5 Coordinates: 41-57-56.5013N / 87-56-6.8848W 2.19.6 Site Elevation: 676.4 ft 2.19.1 ILS Type: DME for runway 10L. Magnetic variation: 3W 2.19.2 ILS Identification: MED 2.19.5 Coordinates: 41-58-5.6721N / 87-52-41.6845W 2.19.6 Site Elevation: 656 ft

2.19.1 ILS Type: Glide Slope for runway 10L. Magnetic variation: 3W 2.19.2 ILS Identification: MED 2.19.5 Coordinates: 41-58-4.3877N / 87-55-38.7659W 2.19.6 Site Elevation: 665.3 ft 2.19.1 ILS Type: Inner Marker for runway 10L. Magnetic variation: 3W 2.19.2 ILS Identification: MED 2.19.5 Coordinates: 41-58-8.5523N / 87-56-4.8866W 2.19.6 Site Elevation: 676.8 ft 2.19.1 ILS Type: Localizer for runway 10L. Magnetic variation: 3W 2.19.2 ILS Identification: MED 2.19.5 Coordinates: 41-58-8.6818N / 87-52-39.6951W 2.19.6 Site Elevation: 644.9 ft 2.19.1 ILS Type: DME for runway 28R. Magnetic variation: 3W 2.19.2 ILS Identification: TSL 2.19.5 Coordinates: 41-58-5.6721N / 87-52-41.6845W 2.19.6 Site Elevation: 656 ft 2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 3W 2.19.2 ILS Identification: TSL 2.19.5 Coordinates: 41-58-4.4701N / 87-53-15.0487W 2.19.6 Site Elevation: 648.2 ft 2.19.1 ILS Type: Inner Marker for runway 28R. Magnetic variation: 3W 2.19.2 ILS Identification: TSL 2.19.5 Coordinates: 41-58-6.1128N / 87-52-49.1235W 2.19.6 Site Elevation: 649.5 ft 2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 3W 2.19.2 ILS Identification: TSL 2.19.5 Coordinates: 41-58-8.356N / 87-56-6.8801W 2.19.6 Site Elevation: 679.1 ft 2.19.1 ILS Type: DME for runway 10R. Magnetic variation: 4W 2.19.2 ILS Identification: BYW 2.19.5 Coordinates: 41-57-28.3399N / 87-53-27.4609W 2.19.6 Site Elevation: 669.6 ft 2.19.1 ILS Type: Glide Slope for runway 10R. Magnetic variation: 4W 2.19.2 ILS Identification: BYW 2.19.5 Coordinates: 41-57-21.909N / 87-55-25.5702W 2.19.6 Site Elevation: 671.7 ft 2.19.1 ILS Type: Localizer for runway 10R. Magnetic variation: 4W 2.19.2 ILS Identification: BYW 2.19.5 Coordinates: 41-57-31.6045N / 87-53-26.3741W 2.19.6 Site Elevation: 649.9 ft

2.19.1 ILS Type: DME for runway 28L. Magnetic variation: 4W

2.19.2 ILS Identification: VQX 2.19.5 Coordinates: 41–57–22.2251N / 87–53–34.2417W 2.19.6 Site Elevation: 656.1 ft

2.19.1 ILS Type: Glide Slope for runway 28L. Magnetic variation: 4W
2.19.2 ILS Identification: VQX
2.19.5 Coordinates: 41–57–22.0258N / 87–54–14.1801W
2.19.6 Site Elevation: 654 ft

2.19.1 ILS Type: Inner Marker for runway 28L. Magnetic variation: 4W
2.19.2 ILS Identification: VQX
2.19.5 Coordinates: 41–57–26.9517N / 87–53–47.4584W
2.19.6 Site Elevation: 650.4 ft

2.19.1 ILS Type: Localizer for runway 28L. Magnetic variation: 4W
2.19.2 ILS Identification: VQX
2.19.5 Coordinates: 41–57–25.8994N / 87–55–53.7065W
2.19.6 Site Elevation: 680.2 ft

2.19.1 ILS Type: DME for runway 10X. Magnetic variation: 4W
2.19.2 ILS Identification: IZJ
2.19.5 Coordinates: 41–57–22.2251N / 87–53–34.2417W
2.19.6 Site Elevation: 656.1 ft

2.19.1 ILS Type: Glide Slope for runway 10X. Magnetic variation: 4W
2.19.2 ILS Identification: IZJ
2.19.5 Coordinates: 41–57–22.1087N / 87–55–25.5572W
2.19.6 Site Elevation: 671.8 ft

2.19.1 ILS Type: Inner Marker for runway 10X. Magnetic variation: 4W
2.19.2 ILS Identification: IZJ
2.19.5 Coordinates: 41–57–25.9088N / 87–55–51.6695W
2.19.6 Site Elevation: 680 ft

2.19.1 ILS Type: Localizer for runway 10X. Magnetic variation: 4W
2.19.2 ILS Identification: IZJ
2.19.5 Coordinates: 41–57–26.1287N / 87–53–32.5409W
2.19.6 Site Elevation: 652.2 ft

**General Remarks:** A380–800 OPR CONSTRAINTS EXIST ON RWYS, TWYS, & RAMPS – CTC ARPT OPS FOR INFO 773–686–2255.

BIRDS ON & INVOF ARPT; PYROTECHNICS & BIRD CANNONS IN USE.

BE ALERT: THE NORTHEAST/SOUTHWEST PORTION OF TWY YY IS NOT VSBL FM THE CENTER ATCT.

RWY STATUS LGTS ARE IN OPN.

MAG DEVIATION PSBL IMT W OF TWY Y & RWY 22L APCH ON TWY N.

EAST AND WEST GATES ARE MANNED 24 HRS A DAY.

ACFT ARE NOT PMTD TO STOP ON EITHER TWY A OR B BRIDGES.

BE ALERT: TWY S1 OBND OR EB ONLY, TWY S2 INBD OR WB ONLY, TWY P1, P2, P3, P5, AND P6 NB ONLY, TWY E1, E2, E3 & E4 SB ONLY. TWY E3 WB ONLY FM RWY 09C/27C.

ALERT: DUPE ALPHA–NUMERIC TWY DESIGNATORS & TRML GATE DESIGNATIONS INVOLVING THE LTRS B, C, G, H, K, L & M.

SEE LND & HOLD SHORT OPS SECTION.

PAEW NEAR VARIOUS TWYS.

ACFT WITH WINGSPAN GREATER THAN 214 FT RQR 48 HRS PPR - 773-686-2255.

LINE UP AND WAIT AUTHORIZATION IN EFF BTWN SS AND SR AT THE FLWG INTS: RWY 28R AT TWY GG, TWY EE AND TWY N5; RWY 10L AT TWY DD AND TWY CC AND TWY SS; RWY 27C AT TWY TT; RWY 9C AT TWY FF; RWY 27L AT TWY TT; RWY 9R AT TWY SS AND FF. THESE RWYS WILL BE USED FOR DEPS ONLY WHEN EXERCISING THE PROVISIONS OF THIS AUTHORIZATION.

ATCT IS AUTH TO CONDUCT SIMUL DEPS FM RWY 04L/04R, RWY 22L/22R, RWY 09R WITH RWY 09L OR RWY 10L, RWY 09C WITH RWY 09L OR RWY 10L, RWY 10C WITH RWY 09R OR RWY 09C, RWY 27L WITH RWY 27R OR RWY 28R, RWY 28R, RWY 28C WITH RWY 27L OR RWY 27C WITH CRS DIVERGENCE BEGINNING NO LATER THAN 4 MILES FM RWY END.

B747-8 OPS NOT AUTHORIZED ON RWY 09R/27L, 09L/27R & 10R/28L.

PERIODIC FIRE DEPT TRNG AT N SECTOR OF THE ARPT.

NOISE ABATEMENT PROC IN EFFECT FM 2200 TO 0700; CTC AMGR - 773-686-2255.

TWY NN1 INBD/EB ONLY; TWY NN2 OUBD/WB ONLY.

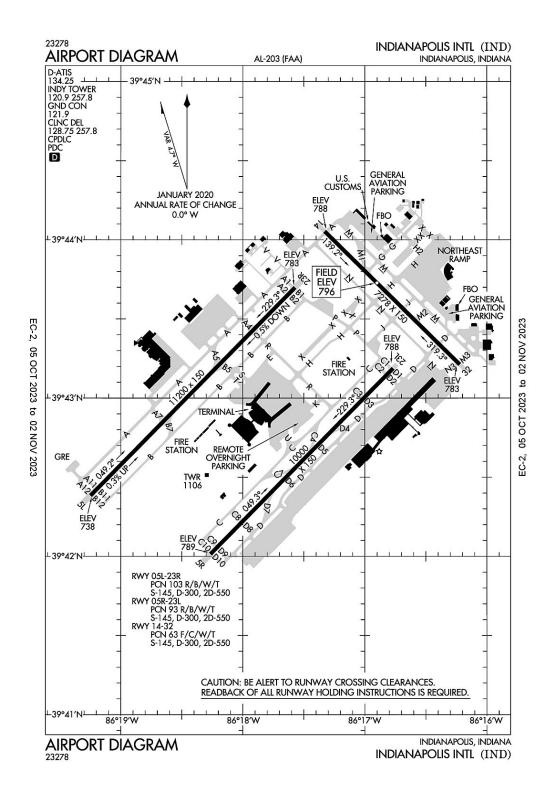
DVRSN ACRS WO A PRESENCE AT ORD SHOULD CTC ARPT OPNS 773–686–2255 PRIOR TO DIVERTING TO THE EXTENT PRACTICAL AND PRVD: CO, FLIGHT OPS CTC INFO, ACFT TYPE, PERSONS OB, INTL OR DOMESTIC, ANY GND HANDLER AGRMTS IN PLACE.

PRIM RUN–UP LOCATION GROUND RUN UP ENCLOSURE; SECONDARY RUN UP LOCATIONS AVBL UPON REQ – CTC CITY OPS 773–686–2255.

ALL PART 91 & UNSKED PART 125, 133 & 135 CHARTER OPERATORS CTC SIGNATURE FLIGHT SUPPORT AT 773–686–7000 REGARDING NEW SECURITY REGULATIONS PRIOR TO DEP.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.





Indianapolis, IN Indianapolis Intl ICAO Identifier KIND

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–43–2.3N / 86–17–40.7W
2.2.2 From City: 7 miles SW of INDIANAPOLIS, IN
2.2.3 Elevation: 796.2 ft
2.2.5 Magnetic Variation: 5W (2015)
2.2.6 Airport Contact: MARIO RODRIGUEZ 7800 COL. H. WEIR COOK MEMORIAL DR. INDIANAPOLIS, IN 46241 (317–487–9594)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A1+2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–D

### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 05L
2.12.2 True Bearing: 45
2.12.3 Dimensions: 11200 ft x 150 ft
2.12.4 PCN: 103 R/B/W/T
2.12.5 Coordinates: 39–42–23.0337N / 86–19–14.9025W
2.12.6 Threshold Elevation: 738 ft
2.12.6 Touchdown Zone Elevation: 747.3 ft

2.12.1 Designation: 23R 2.12.2 True Bearing: 225 2.12.3 Dimensions: 11200 ft x 150 ft 2.12.4 PCN: 103 R/B/W/T 2.12.5 Coordinates: 39–43–41.9101N / 86–17–34.3591W 2.12.6 Threshold Elevation: 782.9 ft 2.12.6 Touchdown Zone Elevation: 782.9 ft

2.12.1 Designation: 05R 2.12.2 True Bearing: 45 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 93 R/B/W/T 2.12.5 Coordinates: 39–42–0.873N / 86–18–15.906W 2.12.6 Threshold Elevation: 788.8 ft 2.12.6 Touchdown Zone Elevation: 790.7 ft 2.12.1 Designation: 23L 2.12.2 True Bearing: 225 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 93 R/B/W/T 2.12.5 Coordinates: 39–43–11.2875N / 86–16–46.1248W 2.12.6 Threshold Elevation: 787.6 ft 2.12.6 Touchdown Zone Elevation: 790.1 ft

2.12.1 Designation: 14 2.12.2 True Bearing: 135 2.12.3 Dimensions: 7278 ft x 150 ft 2.12.4 PCN: 63 F/C/W/T 2.12.5 Coordinates: 39–44–3.2059N / 86–17–19.7638W 2.12.6 Threshold Elevation: 787.5 ft 2.12.6 Touchdown Zone Elevation: 796.2 ft

2.12.1 Designation: 32 2.12.2 True Bearing: 315 2.12.3 Dimensions: 7278 ft x 150 ft 2.12.4 PCN: 63 F/C/W/T 2.12.5 Coordinates: 39–43–12.7458N / 86–16–13.3895W 2.12.6 Threshold Elevation: 782.6 ft 2.12.6 Touchdown Zone Elevation: 792.9 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 05L
2.13.2 Take-off Run Available: 11200
2.13.3 Take-off Distance Available: 11200
2.13.4 Accelerate-Stop Distance Available: 11200
2.13.5 Landing Distance Available: 11200

2.13.1 Designation: 23R
2.13.2 Take-off Run Available: 11200
2.13.3 Take-off Distance Available: 11200
2.13.4 Accelerate-Stop Distance Available: 11200
2.13.5 Landing Distance Available: 11200

2.13.1 Designation: 05R
2.13.2 Take-off Run Available: 10000
2.13.3 Take-off Distance Available: 10000
2.13.4 Accelerate-Stop Distance Available: 10000
2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 23L

2.13.2 Take–off Run Available: 10000 2.13.3 Take–off Distance Available: 10000

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 14
2.13.2 Take-off Run Available: 7278
2.13.3 Take-off Distance Available: 7278
2.13.4 Accelerate-Stop Distance Available: 7278
2.13.5 Landing Distance Available: 7278

2.13.1 Designation: 32
2.13.2 Take-off Run Available: 7278
2.13.3 Take-off Distance Available: 7278
2.13.4 Accelerate-Stop Distance Available: 7278
2.13.5 Landing Distance Available: 7278

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 05L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 23R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 05R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 23L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 142.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 322.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P (WEST OF ACTIVE RWY)2.18.3 Channel: 124.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (EAST OF ACTIVE RWY)2.18.3 Channel: 127.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P2.18.3 Channel: 317.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC2.18.3 Channel: 128.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 128.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLANG STAR2.18.3 Channel: 128.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLANG STAR2.18.3 Channel: 317.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (WEST OF ACTIVE RWY)2.18.3 Channel: 124.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (EAST)2.18.3 Channel: 124.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (EAST OF ACTIVE RWY)2.18.3 Channel: 127.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C2.18.3 Channel: 317.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 134.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (WEST)2.18.3 Channel: 119.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (EAST)2.18.3 Channel: 124.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG 2.18.3 Channel: 121.5

2.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 120.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: RACYR STAR2.18.3 Channel: 128.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: RACYR STAR2.18.3 Channel: 317.82.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 05L. Magnetic variation: 5W
2.19.2 ILS Identification: IND
2.19.5 Coordinates: 39–43–51.3513N / 86–17–27.5671W
2.19.6 Site Elevation: 797.6 ft

2.19.1 ILS Type: Glide Slope for runway 05L. Magnetic variation: 5W
2.19.2 ILS Identification: IND
2.19.5 Coordinates: 39-42-32.7741N / 86-19-9.6768W
2.19.6 Site Elevation: 735.4 ft

2.19.1 ILS Type: Inner Marker for runway 05L. Magnetic variation: 5W
2.19.2 ILS Identification: IND
2.19.5 Coordinates: 39-42-15.7098N / 86-19-24.4367W
2.19.6 Site Elevation: 735.9 ft

2.19.1 ILS Type: Localizer for runway 05L. Magnetic variation: 5W
2.19.2 ILS Identification: IND
2.19.5 Coordinates: 39–43–49.0283N / 86–17–25.2797W
2.19.6 Site Elevation: 787.8 ft

2.19.1 ILS Type: DME for runway 23R. Magnetic variation: 5W 2.19.2 ILS Identification: UZK 2.19.5 Coordinates: 39-43-51.3513N / 86-17-27.5671W 2.19.6 Site Elevation: 797.6 ft 2.19.1 ILS Type: Glide Slope for runway 23R. Magnetic variation: 5W 2.19.2 ILS Identification: UZK 2.19.5 Coordinates: 39-43-36.5113N / 86-17-48.4342W 2.19.6 Site Elevation: 772.4 ft 2.19.1 ILS Type: Localizer for runway 23R. Magnetic variation: 5W 2.19.2 ILS Identification: UZK 2.19.5 Coordinates: 39-42-15.9186N / 86-19-23.9666W 2.19.6 Site Elevation: 736.6 ft 2.19.1 ILS Type: DME for runway 05R. Magnetic variation: 5W 2.19.2 ILS Identification: OQV 2.19.5 Coordinates: 39-43-20.1868N / 86-16-39.5353W 2.19.6 Site Elevation: 802 ft 2.19.1 ILS Type: Glide Slope for runway 05R. Magnetic variation: 5W 2.19.2 ILS Identification: OOV 2.19.5 Coordinates: 39-42-5.3627N / 86-18-2.9983W 2.19.6 Site Elevation: 788.5 ft 2.19.1 ILS Type: Inner Marker for runway 05R. Magnetic variation: 5W 2.19.2 ILS Identification: OOV 2.19.5 Coordinates: 39-41-52.07N / 86-18-27.12W 2.19.6 Site Elevation: 784.4 ft 2.19.1 ILS Type: Localizer for runway 05R. Magnetic variation: 5W 2.19.2 ILS Identification: OQV 2.19.5 Coordinates: 39-43-18.3778N / 86-16-37.0825W 2.19.6 Site Elevation: 785.5 ft 2.19.1 ILS Type: DME for runway 23L. Magnetic variation: 5W 2.19.2 ILS Identification: FVJ 2.19.5 Coordinates: 39-43-20.1868N / 86-16-39.5353W 2.19.6 Site Elevation: 802 ft 2.19.1 ILS Type: Glide Slope for runway 23L. Magnetic variation: 5W 2.19.2 ILS Identification: FVJ 2.19.5 Coordinates: 39-43-2.4585N / 86-16-54.2858W 2.19.6 Site Elevation: 785 ft 2.19.1 ILS Type: Localizer for runway 23L. Magnetic variation: 5W 2.19.2 ILS Identification: FVJ 2.19.5 Coordinates: 39-41-53.5322N / 86-18-25.2565W 2.19.6 Site Elevation: 777.3 ft

2.19.1 ILS Type: Glide Slope for runway 14. Magnetic variation: 5W
2.19.2 ILS Identification: BJP
2.19.5 Coordinates: 39–43–59.3065N / 86–17–7.3342W
2.19.6 Site Elevation: 790 ft

2.19.1 ILS Type: Localizer for runway 14. Magnetic variation: 5W
2.19.2 ILS Identification: BJP
2.19.5 Coordinates: 39–43–5.64N / 86–16–4.06W
2.19.6 Site Elevation: 768.5 ft

2.19.1 ILS Type: Glide Slope for runway 32. Magnetic variation: 5W
2.19.2 ILS Identification: COA
2.19.5 Coordinates: 39-43-16.2751N / 86-16-25.5096W
2.19.6 Site Elevation: 781.7 ft

2.19.1 ILS Type: Localizer for runway 32. Magnetic variation: 5W
2.19.2 ILS Identification: COA
2.19.5 Coordinates: 39–44–10.3487N / 86–17–29.1696W
2.19.6 Site Elevation: 782.3 ft

**General Remarks:** TWY V IS NOT AVBL FOR ACR OPS.

TWY H RUNS CONTIGUOUS AT NORTHEAST RAMP.

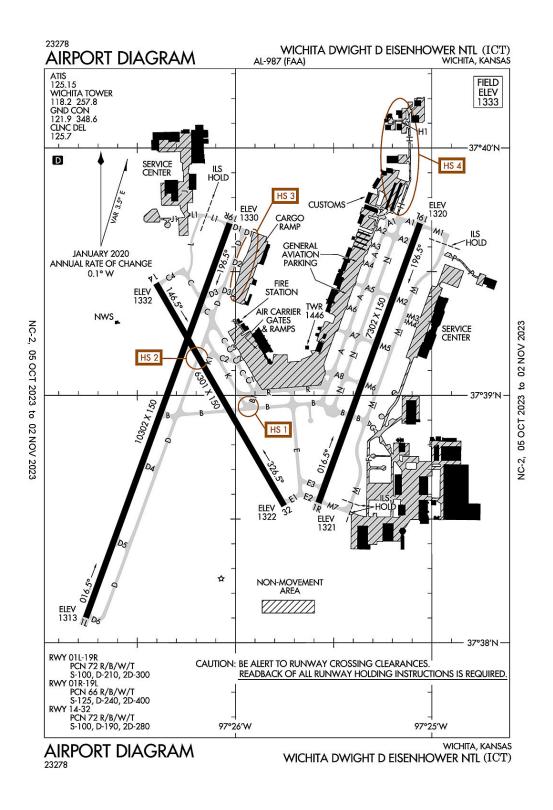
LARGE FLOCKS OF BIRDS ON & INVOF ARPT.

NOISE ABATEMENT PROCEDURES IN EFFECT CTC ARPT MGR.

PRIM STUDENT TGL NOT PMTD.

BE ALERT TO CLOSE PROXIMITY OF RWY 14/32 TO NORTHEAST RAMP.





## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 37–38–59.829N / 97–25–58.954W 2.2.2 From City: 5 miles SW of WICHITA, KS 2.2.3 Elevation: 1332.6 ft 2.2.5 Magnetic Variation: 4E (2015) 2.2.6 Airport Contact: MR. JESSE ROMO, A.A.E. 2173 AIR CARGO ROAD WICHITA, KS 67209 (316–946–4700) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 01L
2.12.2 True Bearing: 20
2.12.3 Dimensions: 10302 ft x 150 ft
2.12.4 PCN: 72 R/B/W/T
2.12.5 Coordinates: 37–38–6.0645N / 97–26–45.5906W
2.12.6 Threshold Elevation: 1312.5 ft
2.12.6 Touchdown Zone Elevation: 1314.1 ft

2.12.1 Designation: 19R
2.12.2 True Bearing: 200
2.12.3 Dimensions: 10302 ft x 150 ft
2.12.4 PCN: 72 R/B/W/T
2.12.5 Coordinates: 37–39–41.7663N / 97–26–1.7916W
2.12.6 Threshold Elevation: 1329.6 ft
2.12.6 Touchdown Zone Elevation: 1329.7 ft

2.12.1 Designation: 19L
2.12.2 True Bearing: 200
2.12.3 Dimensions: 7302 ft x 150 ft
2.12.4 PCN: 66 R/B/W/T
2.12.5 Coordinates: 37–39–41.7709N / 97–25–3.5648W
2.12.6 Threshold Elevation: 1319.8 ft
2.12.6 Touchdown Zone Elevation: 1320.1 ft

2.12.1 Designation: 01R
2.12.2 True Bearing: 20
2.12.3 Dimensions: 7302 ft x 150 ft
2.12.4 PCN: 66 R/B/W/T
2.12.5 Coordinates: 37–38–33.9441N / 97–25–34.6296W
2.12.6 Threshold Elevation: 1321 ft
2.12.6 Touchdown Zone Elevation: 1321.1 ft

2.12.1 Designation: 32 2.12.2 True Bearing: 330 2.12.3 Dimensions: 6301 ft x 150 ft 2.12.4 PCN: 72 R/B/W/T 2.12.5 Coordinates: 37–38–33.2136N / 97–25–45.1001W 2.12.6 Threshold Elevation: 1321.6 ft 2.12.6 Touchdown Zone Elevation: 1321.8 ft

2.12.1 Designation: 14 2.12.2 True Bearing: 150 2.12.3 Dimensions: 6301 ft x 150 ft 2.12.4 PCN: 72 R/B/W/T 2.12.5 Coordinates: 37–39–27.162N / 97–26–24.273W 2.12.6 Threshold Elevation: 1332.1 ft 2.12.6 Touchdown Zone Elevation: 1332.6 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 01L
2.13.2 Take-off Run Available: 10301
2.13.3 Take-off Distance Available: 10301
2.13.4 Accelerate-Stop Distance Available: 10301
2.13.5 Landing Distance Available: 10301

2.13.1 Designation: 19R
2.13.2 Take-off Run Available: 10301
2.13.3 Take-off Distance Available: 10301
2.13.4 Accelerate-Stop Distance Available: 10301
2.13.5 Landing Distance Available: 10301

2.13.1 Designation: 19L
2.13.2 Take-off Run Available: 7302
2.13.3 Take-off Distance Available: 7302
2.13.4 Accelerate-Stop Distance Available: 7302
2.13.5 Landing Distance Available: 7302

2.13.1 Designation: 01R
2.13.2 Take-off Run Available: 7302
2.13.3 Take-off Distance Available: 7302
2.13.4 Accelerate-Stop Distance Available: 7302
2.13.5 Landing Distance Available: 7302

2.13.1 Designation: 32
2.13.2 Take-off Run Available: 6301
2.13.3 Take-off Distance Available: 6301
2.13.4 Accelerate-Stop Distance Available: 6301
2.13.5 Landing Distance Available: 6301

2.13.1 Designation: 14
2.13.2 Take-off Run Available: 6301
2.13.3 Take-off Distance Available: 6301
2.13.4 Accelerate-Stop Distance Available: 6301
2.13.5 Landing Distance Available: 6301

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 01L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 19R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 19L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 322.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 142.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P (270–009 BLW 5000 FT & BYD 20 NM) 2.18.3 Channel: 125.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (E IAB BLW 5000 FT)2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–009 BLW 5000 FT & BYD 20 NM) 2.18.3 Channel: 325.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P DEP/P (010–190) 2.18.3 Channel: 134.85 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (010–190) 2.18.3 Channel: 290.275 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (191–009) 2.18.3 Channel: 126.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (191–009) 2.18.3 Channel: 353.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 327.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 125.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (191–009) 2.18.3 Channel: 126.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (010–190 4000 FT & BLW) 2.18.3 Channel: 134.8 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (010–190 ABV 4000 FT) 2.18.3 Channel: 134.85 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (010–190 ABV 4000 FT) 2.18.3 Channel: 290.275 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (191–009) 2.18.3 Channel: 353.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG 2.18.3 Channel: 121.5

2.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 01L. Magnetic variation: 4E
2.19.2 ILS Identification: TWI
2.19.5 Coordinates: 37–38–16.7093N / 97–26–46.0091W
2.19.6 Site Elevation: 1310.5 ft

2.19.1 ILS Type: Inner Marker for runway 01L. Magnetic variation: 4E
2.19.2 ILS Identification: TWI
2.19.5 Coordinates: 37–37–57.139N / 97–26–49.6801W
2.19.6 Site Elevation: 1317.9 ft

2.19.1 ILS Type: Localizer for runway 01L. Magnetic variation: 4E
2.19.2 ILS Identification: TWI
2.19.5 Coordinates: 37–39–51.3411N / 97–25–57.406W
2.19.6 Site Elevation: 1319.7 ft

2.19.1 ILS Type: Outer Marker for runway 01L. Magnetic variation: 4E
2.19.2 ILS Identification: TWI
2.19.5 Coordinates: 37–33–33.9381N / 97–28–51.7772W
2.19.6 Site Elevation: 1311.2 ft

2.19.1 ILS Type: Glide Slope for runway 19R. Magnetic variation: 4E
2.19.2 ILS Identification: HOV
2.19.5 Coordinates: 37–39–33.8636N / 97–26–10.8356W
2.19.6 Site Elevation: 1327.4 ft

2.19.1 ILS Type: Localizer for runway 19R. Magnetic variation: 4E 2.19.2 ILS Identification: HOV

2.19.5 Coordinates: 37-37-54.7075N / 97-26-50.7862W 2.19.6 Site Elevation: 1320.8 ft 2.19.1 ILS Type: Outer Marker for runway 19R. Magnetic variation: 4E 2.19.2 ILS Identification: HOV 2.19.5 Coordinates: 37-44-16.6003N / 97-24-0.9982W 2.19.6 Site Elevation: 1325.3 ft 2.19.1 ILS Type: DME for runway 01R. Magnetic variation: 4E 2.19.2 ILS Identification: ICT 2.19.5 Coordinates: 37-39-52.0431N / 97-25-2.8236W 2.19.6 Site Elevation: 1327.1 ft 2.19.1 ILS Type: Glide Slope for runway 01R. Magnetic variation: 4E 2.19.2 ILS Identification: ICT 2.19.5 Coordinates: 37-38-42.6366N / 97-25-24.6949W 2.19.6 Site Elevation: 1314.7 ft 2.19.1 ILS Type: Localizer for runway 01R. Magnetic variation: 4E 2.19.2 ILS Identification: ICT 2.19.5 Coordinates: 37-39-52.0134N / 97-24-58.8717W 2.19.6 Site Elevation: 1309.6 ft 2.19.1 ILS Type: Outer Marker for runway 01R. Magnetic variation: 4E 2.19.2 ILS Identification: ICT 2.19.5 Coordinates: 37-34-41.4784N / 97-27-21.1454W 2.19.6 Site Elevation: 1315.2 ft 2.19.1 ILS Type: DME for runway 19L. Magnetic variation: 4E 2.19.2 ILS Identification: MVP 2.19.5 Coordinates: 37-38-21.5439N / 97-25-43.3444W 2.19.6 Site Elevation: 1320 ft 2.19.1 ILS Type: Glide Slope for runway 19L. Magnetic variation: 4E 2.19.2 ILS Identification: MVP 2.19.5 Coordinates: 37-39-30.7714N / 97-25-3.1731W 2.19.6 Site Elevation: 1313.6 ft 2.19.1 ILS Type: Localizer for runway 19L. Magnetic variation: 4E 2.19.2 ILS Identification: MVP 2.19.5 Coordinates: 37-38-21.2844N / 97-25-40.4224W

2.19.6 Site Elevation: 1319.3 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 7E
2.19.2 Navigation Aid Identification: ICT
2.19.5 Coordinates: 37–44–42.9259N / 97–35–1.782W
2.19.6 Site Elevation: 1472 ft

**General Remarks:** TWY L AND L1 CLSD TO ACFT WITH WINGSPAN MORE THAN 118. AIR CARGO RAMP CLSD TO ACFT WINGSPAN MORE THAN 148 FT.

AIRCRAFT ENGINE RUNS ABOVE IDLE NOT APPROVED ON AIRCRAFT PARKING RAMPS.

PPR REQUIRED FOR ACFT CARRYING CLASS 1DIVISION 1.1, 1.2 OR 1.3 EXPLOSIVES AS DEFINED BY 49 CFR 173.50 OR AS AMENDED.

ACFT PARKING BAS CONTACT 132.00 FOR PARKING INSTRUCTIONS PRIOR TO EXITING TWY L1.

TWYS F, G, H, J, P AND ALL ACFT PARKING RAMPS ARE NONMOVEMENT AREAS.

ATCT HAS LTD VIS OF TRML GATES 1 THRU 8, TWY H, AND CUSTOMS PRKG RAMP.

ATTENDED CONTINUOUSLY.

CALL FOR GATE PUSHBACK NOT REQUIRED.

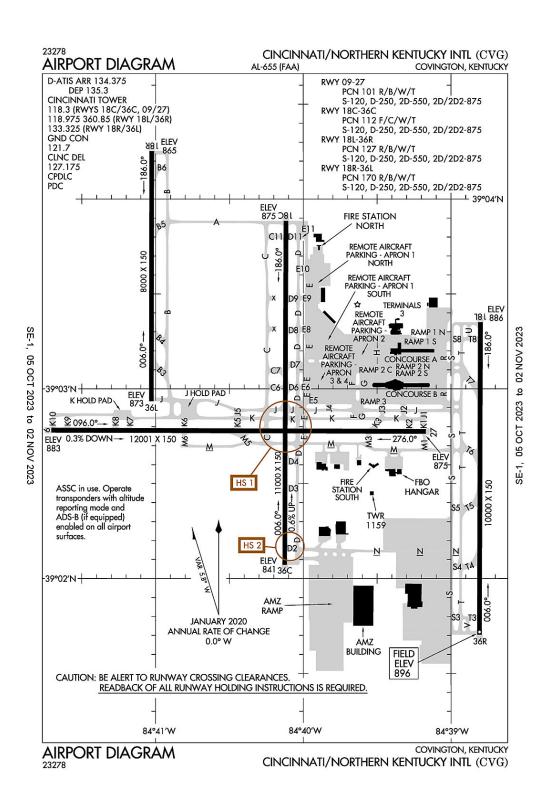
TWY P CLSD TO ACFT WITH WINGSPAN MORE THAN 79.

TWY H CLSD TO ACFT WITH WINGSPAN MORE THAN 79.

MIGRATORY BIRDS ON AND IN VICINITY OF ARPT, ALL QUADS.

FLIGHT NOTIFICATION SERVICE (ADCUS) AVBL.





# Covington, Kentucky Cincinnati/Northern Kentucky International ICAO Identifier KCVG

# Covington, KY Cincinnati/Northern Kentucky Intl ICAO Identifier KCVG

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–2–55.815N / 84–40–4.155W
2.2.2 From City: 8 miles SW of COVINGTON, KY
2.2.3 Elevation: 896.1 ft
2.2.5 Magnetic Variation: 6W (2025)
2.2.6 Airport Contact: CANDACE MCGRAW PO BOX 752000 CINCINNATI, OH 45275 (859–767–3151)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 09 2.12.2 True Bearing: 90 2.12.3 Dimensions: 12001 ft x 150 ft 2.12.4 PCN: 101 R/B/W/T 2.12.5 Coordinates: 39–2–46.9049N / 84–41–42.3528W 2.12.6 Threshold Elevation: 883.1 ft 2.12.6 Touchdown Zone Elevation: 883.2 ft

2.12.1 Designation: 27 2.12.2 True Bearing: 270 2.12.3 Dimensions: 12001 ft x 150 ft 2.12.4 PCN: 101 R/B/W/T 2.12.5 Coordinates: 39–2–46.5417N / 84–39–10.2436W 2.12.6 Threshold Elevation: 874.8 ft 2.12.6 Touchdown Zone Elevation: 874.8 ft

2.12.1 Designation: 36C 2.12.2 True Bearing: 0 2.12.3 Dimensions: 11000 ft x 150 ft 2.12.4 PCN: 112 F/C/W/T 2.12.5 Coordinates: 39–2–4.3552N / 84–40–7.4709W 2.12.6 Threshold Elevation: 840.7 ft 2.12.6 Touchdown Zone Elevation: 850.3 ft AD 2-314

5 OCT 23

2.12.1 Designation: 18C
2.12.2 True Bearing: 180
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 112 F/C/W/T
2.12.5 Coordinates: 39–3–53.0734N / 84–40–7.0233W
2.12.6 Threshold Elevation: 874.6 ft
2.12.6 Touchdown Zone Elevation: 874.6 ft
2.12.1 Designation: 18L

2.12.2 True Bearing: 180 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 127 R/B/W/T 2.12.5 Coordinates: 39–3–21.0781N / 84–38–48.0048W 2.12.6 Threshold Elevation: 886.3 ft 2.12.6 Touchdown Zone Elevation: 889.1 ft

2.12.1 Designation: 36R 2.12.2 True Bearing: 0 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 127 R/B/W/T 2.12.5 Coordinates: 39–1–42.2406N / 84–38–48.4562W 2.12.6 Threshold Elevation: 896.1 ft 2.12.6 Touchdown Zone Elevation: 896.1 ft

2.12.1 Designation: 36L 2.12.2 True Bearing: 0 2.12.3 Dimensions: 8000 ft x 150 ft 2.12.4 PCN: 170 R/B/W/T 2.12.5 Coordinates: 39–2–56.1037N / 84–41–1.7608W 2.12.6 Threshold Elevation: 872.6 ft 2.12.6 Touchdown Zone Elevation: 872.7 ft

2.12.1 Designation: 18R
2.12.2 True Bearing: 180
2.12.3 Dimensions: 8000 ft x 150 ft
2.12.4 PCN: 170 R/B/W/T
2.12.5 Coordinates: 39–4–15.1736N / 84–41–1.4552W
2.12.6 Threshold Elevation: 864.7 ft
2.12.6 Touchdown Zone Elevation: 867.8 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 092.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 272.13.2 Take-off Run Available:

2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 36C 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 18C 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 18L 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate–Stop Distance Available: 2.13.5 Landing Distance Available: 2.13.1 Designation: 36R 2.13.2 Take-off Run Available: 2.13.3 Take-off Distance Available: 2.13.4 Accelerate-Stop Distance Available: 2.13.5 Landing Distance Available:

2.13.1 Designation: 36L

- 2.13.2 Take–off Run Available:
- 2.13.3 Take–off Distance Available:
- 2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: 18R2.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:

2.13.5 Landing Distance Available:

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 092.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 272.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36C

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18C2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 18L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 36L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 18R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P (090–269) 2.18.3 Channel: 119.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–089) 2.18.3 Channel: 123.875 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P2.18.3 Channel: 363.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 127.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CINCE STAR2.18.3 Channel: 123.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CINCE STAR2.18.3 Channel: 254.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (001–180) 2.18.3 Channel: 121 2.18.5 Hours of Operation: 24
2.18.1 Service Designation: CLASS B (181–360)
2.18.3 Channel: 128.7
2.18.5 Hours of Operation: 24
2.18.1 Service Designation: CLASS B
2.18.3 Channel: 254.25
2.18.5 Hours of Operation: 24
2.18.1 Service Designation: D-ATIS (ARR)
2.18.3 Channel: 134.375
2.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 135.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (001–180) 2.18.3 Channel: 126.65 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (181–360) 2.18.3 Channel: 128.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P2.18.3 Channel: 254.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: HARDU STAR (090–269)2.18.3 Channel: 119.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: HARDU STAR (270–089)2.18.3 Channel: 123.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: HARDU STAR

2.18.3 Channel: 363.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: JAKIE STAR2.18.3 Channel: 119.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: JAKIE STAR2.18.3 Channel: 254.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09/27, 18C/36C) 2.18.3 Channel: 118.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18L/36R)2.18.3 Channel: 118.9752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18R/36L)2.18.3 Channel: 133.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18L/36R)2.18.3 Channel: 360.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: SHELBYVILLE STAR (090–269)2.18.3 Channel: 119.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: SHELBYVILLE STAR (270–089)2.18.3 Channel: 123.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: SHELBYVILLE STAR2.18.3 Channel: 363.152.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 09. Magnetic variation: 6W
2.19.2 ILS Identification: URN
2.19.5 Coordinates: 39–2–42.9147N / 84–39–2.0835W
2.19.6 Site Elevation: 886.8 ft

2.19.1 ILS Type: Glide Slope for runway 09. Magnetic variation: 6W
2.19.2 ILS Identification: URN
2.19.5 Coordinates: 39–2–42.9226N / 84–41–28.2646W
2.19.6 Site Elevation: 873.4 ft

2.19.1 ILS Type: Localizer for runway 09. Magnetic variation: 6W
2.19.2 ILS Identification: URN
2.19.5 Coordinates: 39–2–46.5213N / 84–39–2.0181W
2.19.6 Site Elevation: 877.4 ft

2.19.1 ILS Type: Glide Slope for runway 27. Magnetic variation: 6W
2.19.2 ILS Identification: JDP
2.19.5 Coordinates: 39–2–42.6295N / 84–39–25.1643W
2.19.6 Site Elevation: 866.4 ft

2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 6W
2.19.2 ILS Identification: JDP
2.19.5 Coordinates: 39–2–46.9321N / 84–41–55.3805W
2.19.6 Site Elevation: 883.3 ft

2.19.1 ILS Type: DME for runway 18C. Magnetic variation: 6W
2.19.2 ILS Identification: SIC
2.19.5 Coordinates: 39–1–54.1461N / 84–40–8.213W
2.19.6 Site Elevation: 843.6 ft

2.19.1 ILS Type: Glide Slope for runway 18C. Magnetic variation: 6W
2.19.2 ILS Identification: SIC
2.19.5 Coordinates: 39–3–42.6496N / 84–40–12.1363W
2.19.6 Site Elevation: 868 ft

2.19.1 ILS Type: Localizer for runway 18C. Magnetic variation: 6W
2.19.2 ILS Identification: SIC
2.19.5 Coordinates: 39–1–54.1433N / 84–40–7.5139W
2.19.6 Site Elevation: 838.2 ft

2.19.1 ILS Type: DME for runway 36C. Magnetic variation: 6W
2.19.2 ILS Identification: CVG
2.19.5 Coordinates: 39-4-3.9117N / 84-40-10.1702W
2.19.6 Site Elevation: 883 ft

2.19.1 ILS Type: Glide Slope for runway 36C. Magnetic variation: 6W
2.19.2 ILS Identification: CVG
2.19.5 Coordinates: 39–2–15.4827N / 84–40–12.493W
2.19.6 Site Elevation: 834.2 ft

2.19.1 ILS Type: Inner Marker for runway 36C. Magnetic variation: 6W
2.19.2 ILS Identification: CVG
2.19.5 Coordinates: 39–1–53.9241N / 84–40–7.5094W
2.19.6 Site Elevation: 818.2 ft

2.19.1 ILS Type: Localizer for runway 36C. Magnetic variation: 6W
2.19.2 ILS Identification: CVG
2.19.5 Coordinates: 39-4-3.6949N / 84-40-6.9785W
2.19.6 Site Elevation: 882.1 ft

2.19.1 ILS Type: DME for runway 18L. Magnetic variation: 6W

2.19.2 ILS Identification: CIZ 2.19.5 Coordinates: 39–1–31.5713N / 84–38–45.4036W 2.19.6 Site Elevation: 910.4 ft

2.19.1 ILS Type: Glide Slope for runway 18L. Magnetic variation: 6W
2.19.2 ILS Identification: CIZ
2.19.5 Coordinates: 39–3–10.8831N / 84–38–42.976W
2.19.6 Site Elevation: 881.2 ft

2.19.1 ILS Type: Localizer for runway 18L. Magnetic variation: 6W
2.19.2 ILS Identification: CIZ
2.19.5 Coordinates: 39–1–31.787N / 84–38–48.5019W
2.19.6 Site Elevation: 899 ft

2.19.1 ILS Type: DME for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: EEI
2.19.5 Coordinates: 39–3–30.8826N / 84–38–51.18W
2.19.6 Site Elevation: 900.1 ft

2.19.1 ILS Type: Glide Slope for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: EEI
2.19.5 Coordinates: 39–1–52.8044N / 84–38–43.3385W
2.19.6 Site Elevation: 889.9 ft

2.19.1 ILS Type: Inner Marker for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: EEI
2.19.5 Coordinates: 39–1–33.5681N / 84–38–48.5005W
2.19.6 Site Elevation: 898.7 ft

2.19.1 ILS Type: Localizer for runway 36R. Magnetic variation: 6W
2.19.2 ILS Identification: EEI
2.19.5 Coordinates: 39–3–31.4843N / 84–38–47.9544W
2.19.6 Site Elevation: 892.1 ft

2.19.1 ILS Type: DME for runway 18R. Magnetic variation: 6W
2.19.2 ILS Identification: CJN
2.19.5 Coordinates: 39–2–41.52N / 84–41–5.2W
2.19.6 Site Elevation: 869 ft

2.19.1 ILS Type: Glide Slope for runway 18R. Magnetic variation: 6W
2.19.2 ILS Identification: CJN
2.19.5 Coordinates: 39-4-3.91N / 84-41-6.57W
2.19.6 Site Elevation: 860.5 ft

2.19.1 ILS Type: Inner Marker for runway 18R. Magnetic variation: 6W
2.19.2 ILS Identification: CJN
2.19.5 Coordinates: 39–4–23.57N / 84–41–1.42W
2.19.6 Site Elevation: 856 ft

2.19.1 ILS Type: Localizer for runway 18R. Magnetic variation: 6W 2.19.2 ILS Identification: CJN

2.19.5 Coordinates: 39–2–41.27N / 84–41–1.83W 2.19.6 Site Elevation: 871 ft

2.19.1 ILS Type: DME for runway 36L. Magnetic variation: 6W
2.19.2 ILS Identification: VAC
2.19.5 Coordinates: 39-4-25.0237N / 84-41-4.7924W
2.19.6 Site Elevation: 854.5 ft

2.19.1 ILS Type: Glide Slope for runway 36L. Magnetic variation: 6W
2.19.2 ILS Identification: VAC
2.19.5 Coordinates: 39–3–6.5542N / 84–41–6.7898W
2.19.6 Site Elevation: 865.8 ft

2.19.1 ILS Type: Inner Marker for runway 36L. Magnetic variation: 6W
2.19.2 ILS Identification: VAC
2.19.5 Coordinates: 39–2–44.323N / 84–41–1.8019W
2.19.6 Site Elevation: 868.2 ft

2.19.1 ILS Type: Localizer for runway 36L. Magnetic variation: 6W
2.19.2 ILS Identification: VAC
2.19.5 Coordinates: 39-4-25.5032N / 84-41-1.4165W
2.19.6 Site Elevation: 860.3 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 4W
2.19.2 Navigation Aid Identification: CVG
2.19.5 Coordinates: 39–0–57.5308N / 84–42–12.0468W
2.19.6 Site Elevation: 878 ft

**General Remarks:** SUCCESSIVE OR SIMUL DEP FM RWY 18L, 18C, 36L, 36C & 36R APVD WITH COURSE DVRG BGN NO FURTHER THAN 2 MI FM EOR DUE TO NOISE ABATEMENT.

NOISE SENS AREA N & S OF ARPT; RWY ASGN 2200-0700 BASED ON NOISE ABATEMENT.

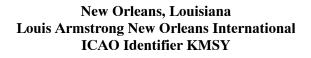
TWYS RSTRD TO 15 MPH OR LESS WITH WINGSPAN 214 FT OR MORE.

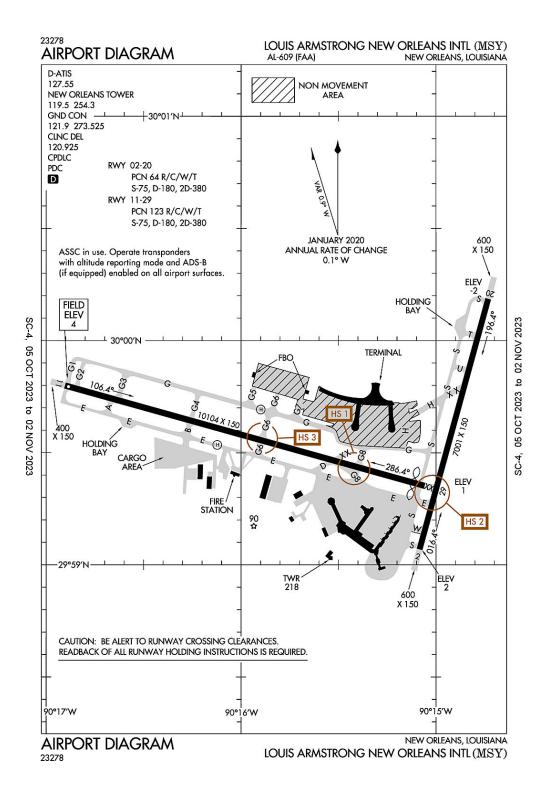
RWY 18R/36L CLSD TO AIR CARRIER ACFT WINGSPAN MORE THAN 140FT

OPR PARROT WITH ALT RPRTG MODE & ADS-B ENABLED ON ARPT SFCS.

BIRDS ON & INVOF THE ARPT.

RAMP CTL: RAMP 1N / 1S TXL & RAMP 2N / 2S TXL – 130.90, RAMP 3 TXL & N TXL – 130.375; DHL RAMP CTL: 129.475; AMZ RAMP CTL: 130.5.





# New Orleans, LA Louis Armstrong New Orleans Intl ICAO Identifier KMSY

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 29–59–35.8N / 90–15–32.5W
2.2.2 From City: 10 miles W of NEW ORLEANS, LA
2.2.3 Elevation: 3.7 ft
2.2.5 Magnetic Variation: 1W (2020)
2.2.6 Airport Contact: KEVIN DOLLIOLE PO BOX 20007 NEW ORLEANS, LA 70141 ((504) 303–7652)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: NONE

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 02 2.12.2 True Bearing: 15 2.12.3 Dimensions: 7001 ft x 150 ft 2.12.4 PCN: 64 R/C/W/T 2.12.5 Coordinates: 29–59–4.2055N / 90–15–5.094W 2.12.6 Threshold Elevation: 1.8 ft 2.12.6 Touchdown Zone Elevation: 2.1 ft

2.12.1 Designation: 20 2.12.2 True Bearing: 195 2.12.3 Dimensions: 7001 ft x 150 ft 2.12.4 PCN: 64 R/C/W/T 2.12.5 Coordinates: 30–0–10.9924N / 90–14–43.8363W 2.12.6 Threshold Elevation: –2.4 ft 2.12.6 Touchdown Zone Elevation: –0.6 ft

2.12.1 Designation: 11 2.12.2 True Bearing: 105 2.12.3 Dimensions: 10104 ft x 150 ft 2.12.4 PCN: 123 R/C/W/T 2.12.5 Coordinates: 29–59–47.8556N / 90–16–54.2241W 2.12.6 Threshold Elevation: 3.7 ft 2.12.6 Touchdown Zone Elevation: 3.7 ft AD 2-324 5 OCT 23

2.12.1 Designation: 29 2.12.2 True Bearing: 285 2.12.3 Dimensions: 10104 ft x 150 ft 2.12.4 PCN: 123 R/C/W/T 2.12.5 Coordinates: 29–59–21.1654N / 90–15–3.4894W 2.12.6 Threshold Elevation: 1.3 ft 2.12.6 Touchdown Zone Elevation: 2 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 02
2.13.2 Take-off Run Available: 7001
2.13.3 Take-off Distance Available: 7001
2.13.4 Accelerate-Stop Distance Available: 7001
2.13.5 Landing Distance Available: 7001

2.13.1 Designation: 20
2.13.2 Take-off Run Available: 7001
2.13.3 Take-off Distance Available: 7001
2.13.4 Accelerate-Stop Distance Available: 7001
2.13.5 Landing Distance Available: 7001

2.13.1 Designation: 11
2.13.2 Take-off Run Available: 10104
2.13.3 Take-off Distance Available: 10104
2.13.4 Accelerate-Stop Distance Available: 9800
2.13.5 Landing Distance Available: 9800

2.13.1 Designation: 29

2.13.2 Take-off Run Available: 10104

2.13.3 Take-off Distance Available: 10104

2.13.4 Accelerate-Stop Distance Available: 10104

2.13.5 Landing Distance Available: 9800

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 022.14.2 Approach Lighting System: RLLS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 202.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 112.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 292.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4R

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P (WEST)2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (EAST)2.18.3 Channel: 133.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (EAST)2.18.3 Channel: 290.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (WEST)2.18.3 Channel: 350.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S2.18.3 Channel: 269.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: AWDAD STAR (WEST)2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: AWDAD STAR (WEST)2.18.3 Channel: 350.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 120.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 120.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SE & SOUTH)2.18.3 Channel: 123.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (WEST)2.18.3 Channel: 125.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NORTH & EAST)2.18.3 Channel: 133.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SE & SOUTH)2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NORTH & EAST)2.18.3 Channel: 290.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (WEST)2.18.3 Channel: 350.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 127.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 273.5252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 119.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 254.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: MNSTR STAR (EAST)2.18.3 Channel: 133.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: MNSTR STAR (EAST)2.18.3 Channel: 290.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: OLEDD STAR (WEST) 2.18.3 Channel: 125.5

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: OLEDD STAR (WEST)2.18.3 Channel: 350.352.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 02. Magnetic variation: 1W
2.19.2 ILS Identification: JFI
2.19.5 Coordinates: 30–0–21.6577N / 90–14–43.2465W
2.19.6 Site Elevation: 1.3 ft

2.19.1 ILS Type: Glide Slope for runway 02. Magnetic variation: 1W
2.19.2 ILS Identification: JFI
2.19.5 Coordinates: 29–59–13.6093N / 90–14–58.5588W
2.19.6 Site Elevation: -0.9 ft

2.19.1 ILS Type: Localizer for runway 02. Magnetic variation: 1W
2.19.2 ILS Identification: JFI
2.19.5 Coordinates: 30–0–20.5102N / 90–14–40.8078W
2.19.6 Site Elevation: -4.2 ft

2.19.1 ILS Type: DME for runway 20. Magnetic variation: 1W
2.19.2 ILS Identification: ONW
2.19.5 Coordinates: 30–0–21.6577N / 90–14–43.2465W
2.19.6 Site Elevation: 1.3 ft

2.19.1 ILS Type: Localizer for runway 20. Magnetic variation: 1W
2.19.2 ILS Identification: ONW
2.19.5 Coordinates: 29–58–55.148N / 90–15–7.973W
2.19.6 Site Elevation: 2.3 ft

2.19.1 ILS Type: DME for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: MSY
2.19.5 Coordinates: 29–59–17.2127N / 90–14–55.7209W
2.19.6 Site Elevation: 12.4 ft

2.19.1 ILS Type: Glide Slope for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: MSY
2.19.5 Coordinates: 29–59–48.6197N / 90–16–39.2497W
2.19.6 Site Elevation: -3.1 ft

2.19.1 ILS Type: Inner Marker for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: MSY
2.19.5 Coordinates: 29–59–50.256N / 90–17–4.1742W
2.19.6 Site Elevation: 4.4 ft

2.19.1 ILS Type: Localizer for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: MSY
2.19.5 Coordinates: 29–59–19.3211N / 90–14–55.8537W

2.19.6 Site Elevation: -0.5 ft

2.19.1 ILS Type: DME for runway 29. Magnetic variation: 1W
2.19.2 ILS Identification: HOX
2.19.5 Coordinates: 29–59–17.2127N / 90–14–55.7209W
2.19.6 Site Elevation: 12.4 ft

2.19.1 ILS Type: Glide Slope for runway 29. Magnetic variation: 1W
2.19.2 ILS Identification: HOX
2.19.5 Coordinates: 29–59–27.9656N / 90–15–16.7865W
2.19.6 Site Elevation: 0.1 ft

2.19.1 ILS Type: Localizer for runway 29. Magnetic variation: 1W
2.19.2 ILS Identification: HOX
2.19.5 Coordinates: 29–59–50.5168N / 90–17–5.2703W
2.19.6 Site Elevation: 4.4 ft

**General Remarks:** 180 DEG & LOCKED WHEEL TURNS PROHIBITED ON ASPH SFC ACFT 12500 LBS & OVER.

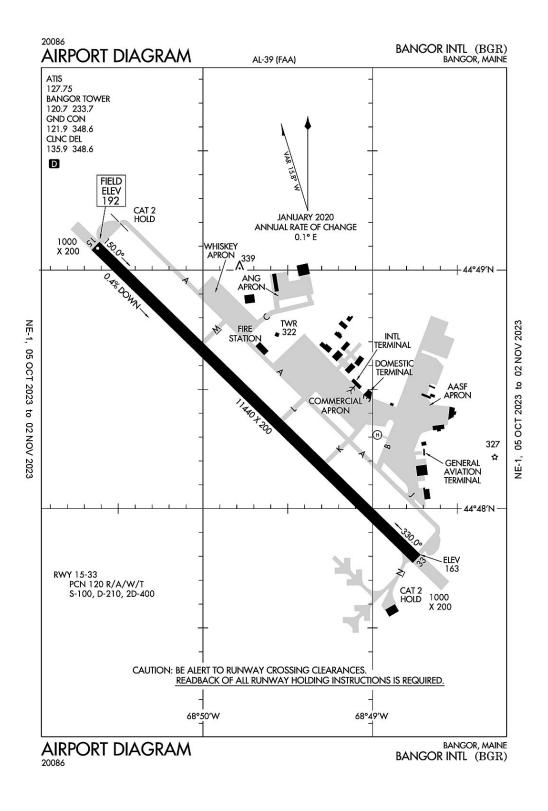
FLOCKS OF BIRDS ON & IN VICINITY OF ARPT.

ASSC IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

TWY G BTN RWY 11/29 AND TWY S SFC MOV GUIDANCE AND CTL SYSTEM U/S PERM

RY 11 NOISE SENSITIVE FOR DEP; AVBL FOR OPNL NECESSITY. ALL RYS NOISE SENSITIVE FOR ARR. ARRIVING TURBOJETS MUST MAKE 5 MILE FINAL APCH TO MINIMIZE NOISE.





# Bangor, ME Bangor Intl ICAO Identifier KBGR

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 44–48–26.8N / 68–49–41.3W
2.2.2 From City: 3 miles W of BANGOR, ME
2.2.3 Elevation: 192.1 ft
2.2.5 Magnetic Variation: 16W (2020)
2.2.6 Airport Contact: TONY CARUSO BANGOR INTERNATIONAL ARPT BANGOR, ME 4401 (207–992–4600)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–B

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 15
2.12.2 True Bearing: 134
2.12.3 Dimensions: 11440 ft x 200 ft
2.12.4 PCN: 120 R/A/W/T
2.12.5 Coordinates: 44–49–6.1369N / 68–50–38.1522W
2.12.6 Threshold Elevation: 192.1 ft
2.12.6 Touchdown Zone Elevation: 192.1 ft

2.12.1 Designation: 33 2.12.2 True Bearing: 314 2.12.3 Dimensions: 11440 ft x 200 ft 2.12.4 PCN: 120 R/A/W/T 2.12.5 Coordinates: 44–47–47.4136N / 68–48–44.3618W 2.12.6 Threshold Elevation: 162.9 ft 2.12.6 Touchdown Zone Elevation: 162.9 ft

2.12.1 Designation: H1
2.12.2 True Bearing:
2.12.3 Dimensions: 100 ft x 100 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 15
2.13.2 Take-off Run Available: 11440
2.13.3 Take-off Distance Available: 11440
2.13.4 Accelerate-Stop Distance Available: 11440
2.13.5 Landing Distance Available: 11440

2.13.1 Designation: 33
2.13.2 Take-off Run Available: 11440
2.13.3 Take-off Distance Available: 11440
2.13.4 Accelerate-Stop Distance Available: 11440
2.13.5 Landing Distance Available: 11440

2.13.1 Designation: H1

2.13.2 Take–off Run Available: 2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 152.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 332.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: H12.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 118.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 124.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 127.75

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 135.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C2.18.3 Channel: 118.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C/S2.18.3 Channel: 124.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 120.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 233.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: NG OPS2.18.3 Channel: 41.22.18.5 Hours of Operation:

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 15. Magnetic variation: 16W
2.19.2 ILS Identification: JVH
2.19.5 Coordinates: 44–47–42.4986N / 68–48–31.8082W
2.19.6 Site Elevation: 166.2 ft

2.19.1 ILS Type: Glide Slope for runway 15. Magnetic variation: 16W
2.19.2 ILS Identification: JVH
2.19.5 Coordinates: 44–49–2.1756N / 68–50–22.4761W
2.19.6 Site Elevation: 187.7 ft

2.19.1 ILS Type: Inner Marker for runway 15. Magnetic variation: 16W
2.19.2 ILS Identification: JVH
2.19.5 Coordinates: 44–49–12.0633N / 68–50–46.7197W
2.19.6 Site Elevation: 184 ft

2.19.1 ILS Type: Localizer for runway 15. Magnetic variation: 16W
2.19.2 ILS Identification: JVH
2.19.5 Coordinates: 44–47–40.3704N / 68–48–34.1931W
2.19.6 Site Elevation: 161.7 ft

2.19.1 ILS Type: Middle Marker for runway 15. Magnetic variation: 16W
2.19.2 ILS Identification: JVH
2.19.5 Coordinates: 44–49–23.6858N / 68–51–3.4639W
2.19.6 Site Elevation: 158 ft

2.19.1 ILS Type: DME for runway 33. Magnetic variation: 16W
2.19.2 ILS Identification: BGR
2.19.5 Coordinates: 44–47–42.4986N / 68–48–31.8082W
2.19.6 Site Elevation: 166.2 ft

2.19.1 ILS Type: Glide Slope for runway 33. Magnetic variation: 16W
2.19.2 ILS Identification: BGR
2.19.5 Coordinates: 44–47–53.7039N / 68–48–59.7081W
2.19.6 Site Elevation: 148.8 ft

2.19.1 ILS Type: Localizer for runway 33. Magnetic variation: 16W
2.19.2 ILS Identification: BGR
2.19.5 Coordinates: 44–49–13.6222N / 68–50–48.9786W
2.19.6 Site Elevation: 181.7 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 19W
2.19.2 Navigation Aid Identification: BGR
2.19.5 Coordinates: 44–50–30.4619N / 68–52–26.2752W
2.19.6 Site Elevation: 360.1 ft

#### General Remarks:

ANG: PPR VALID +/- 1 HR UNLESS PRIOR CDN. 3 HR OUT CALL, 30 MIN OUT CALL 311.0 TO CFM CSTMS/AG AND TRAN SVC. COMMAND POST C207-404-7788 H24.

FUEL: A++ (MIL).

TWY L CLSD.

ANG: CAUTION: BASH PHASE II PERIOD SEP–NOV, APR–MAY. EXPECT INCREASED BIRD ACTIVITY. CONTACT BASE OPS/COMMAND POST/SOF FOR CURRENT BIRDWATCH COND.

ANG: OPR 1100–1930Z++ MON–FRI, CLSD WKEND AND HOL. PPR RQRD FOR ANG RAMP. CTC AFLD MGMT DSN 698–7232, C207–404–7232 FOR PPR DURG OPR HRS. PRE–COORD ALL TRNSPN RQMNTS AND HAZ CARGO WITH PPR REQ.

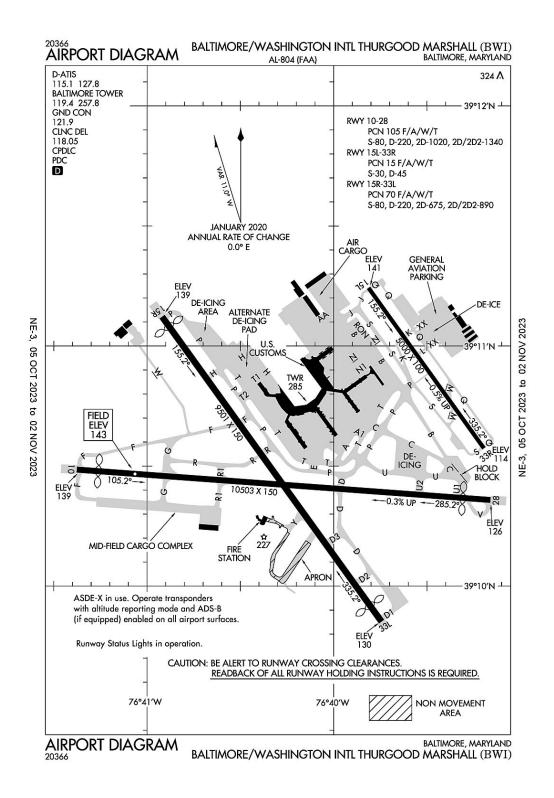
ARNG: OPR 1230–2100Z++ MON–FRI EXC HOL. LTD MAINT. J8. PPR MAY–OCT SVC DSN 626–1100.

MISC: RWY 15–33 GROOVED.

SVC MIL-FLUID: OFF-BASE CONTRACTED LOX AVBL H24-RQR 24 HR NOTICE.

ANG: TRANSIENT ACFT MAY BE DIVERTED TO CIVILIAN SIDE DURING NON–DUTY HRS & WEEKENDS. FEE REQUIRED; NO ANG TRANSIENT ALERT.

TFC PAT: RWY 33 LEFT TFC, TURBO JET TFC 2000' MSL UNLESS OTHERWISE INSTR.



Baltimore, Maryland Baltimore–Washington International Thurgood Marshall ICAO Identifier KBWI

# Baltimore, MD Baltimore/Washington Intl Thurgood Marshal ICAO Identifier KBWI

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–10–32.622N / 76–40–8.368W 2.2.2 From City: 9 miles S of BALTIMORE, MD 2.2.3 Elevation: 143.4 ft 2.2.5 Magnetic Variation: 11W (2000) 2.2.6 Airport Contact: GREGORY SOLEK PO BOX 8766 BWI AIRPORT, MD 21240 (410–859–7024) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 10
2.12.2 True Bearing: 94
2.12.3 Dimensions: 10503 ft x 150 ft
2.12.4 PCN: 105 F/A/W/T
2.12.5 Coordinates: 39–10–29.0895N / 76–41–22.6248W
2.12.6 Threshold Elevation: 139 ft
2.12.6 Touchdown Zone Elevation: 143.4 ft

2.12.1 Designation: 28 2.12.2 True Bearing: 274 2.12.3 Dimensions: 10503 ft x 150 ft 2.12.4 PCN: 105 F/A/W/T 2.12.5 Coordinates: 39–10–21.4754N / 76–39–9.6234W 2.12.6 Threshold Elevation: 126.4 ft 2.12.6 Touchdown Zone Elevation: 142.7 ft

2.12.1 Designation: 33R 2.12.2 True Bearing: 324 2.12.3 Dimensions: 5000 ft x 100 ft 2.12.4 PCN: 15 F/A/W/T 2.12.5 Coordinates: 39–10–34.4468N / 76–39–11.6307W 2.12.6 Threshold Elevation: 114 ft 2.12.6 Touchdown Zone Elevation: 124.4 ft 2.12.1 Designation: 15L
2.12.2 True Bearing: 144
2.12.3 Dimensions: 5000 ft x 100 ft
2.12.4 PCN: 15 F/A/W/T
2.12.5 Coordinates: 39–11–14.5431N / 76–39–48.7441W
2.12.6 Threshold Elevation: 141.4 ft
2.12.6 Touchdown Zone Elevation: 141.5 ft

2.12.1 Designation: 33L 2.12.2 True Bearing: 324 2.12.3 Dimensions: 9501 ft x 150 ft 2.12.4 PCN: 70 F/A/W/T 2.12.5 Coordinates: 39–9–51.1311N / 76–39–44.6134W 2.12.6 Threshold Elevation: 129.6 ft 2.12.6 Touchdown Zone Elevation: 142.7 ft

2.12.1 Designation: 15R 2.12.2 True Bearing: 144 2.12.3 Dimensions: 9501 ft x 150 ft 2.12.4 PCN: 70 F/A/W/T 2.12.5 Coordinates: 39–11–7.3007N / 76–40–55.1704W 2.12.6 Threshold Elevation: 139 ft 2.12.6 Touchdown Zone Elevation: 138.3 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 10
2.13.2 Take-off Run Available: 10503
2.13.3 Take-off Distance Available: 10503
2.13.4 Accelerate-Stop Distance Available: 10503
2.13.5 Landing Distance Available: 9953

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 10503
2.13.3 Take-off Distance Available: 10503
2.13.4 Accelerate-Stop Distance Available: 10503
2.13.5 Landing Distance Available: 9803

2.13.1 Designation: 33R
2.13.2 Take-off Run Available: 5000
2.13.3 Take-off Distance Available: 5000
2.13.4 Accelerate-Stop Distance Available: 5000
2.13.5 Landing Distance Available: 5000

2.13.1 Designation: 15L

- 2.13.2 Take-off Run Available: 5000
- 2.13.3 Take-off Distance Available: 5000
- 2.13.4 Accelerate–Stop Distance Available: 5000
- 2.13.5 Landing Distance Available: 5000

2.13.1 Designation: 33L
2.13.2 Take-off Run Available: 9501
2.13.3 Take-off Distance Available: 9501
2.13.4 Accelerate-Stop Distance Available: 8801
2.13.5 Landing Distance Available: 8301

2.13.1 Designation: 15R
2.13.2 Take-off Run Available: 9501
2.13.3 Take-off Distance Available: 9501
2.13.4 Accelerate-Stop Distance Available: 8601
2.13.5 Landing Distance Available: 8301

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 102.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 282.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 33R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 15L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 33L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 15R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 118.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 115.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 127.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 119.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 10. Magnetic variation: 11W
2.19.2 ILS Identification: BAL
2.19.5 Coordinates: 39–10–23.557N / 76–41–3.233W
2.19.6 Site Elevation: 137.6 ft

2.19.1 ILS Type: Localizer for runway 10. Magnetic variation: 11W
2.19.2 ILS Identification: BAL
2.19.5 Coordinates: 39–10–20.5919N / 76–38–54.2857W
2.19.6 Site Elevation: 137.5 ft

2.19.1 ILS Type: Glide Slope for runway 28. Magnetic variation: 11W
2.19.2 ILS Identification: OEH
2.19.5 Coordinates: 39–10–18.64N / 76–39–31.024W
2.19.6 Site Elevation: 129.2 ft

2.19.1 ILS Type: Localizer for runway 28. Magnetic variation: 11W
2.19.2 ILS Identification: OEH
2.19.5 Coordinates: 39–10–29.8183N / 76–41–35.4222W
2.19.6 Site Elevation: 134 ft

2.19.1 ILS Type: Glide Slope for runway 15L. Magnetic variation: 11W
2.19.2 ILS Identification: UQC
2.19.5 Coordinates: 39–11–3.67N / 76–39–44.24W
2.19.6 Site Elevation: 138.1 ft

2.19.1 ILS Type: Localizer for runway 15L. Magnetic variation: 11W
2.19.2 ILS Identification: UQC
2.19.5 Coordinates: 39–10–29.3978N / 76–39–6.9539W

2.19.6 Site Elevation: 94 ft

2.19.1 ILS Type: Glide Slope for runway 33R. Magnetic variation: 11W
2.19.2 ILS Identification: BWI
2.19.5 Coordinates: 39–10–40.05N / 76–39–21.19W
2.19.6 Site Elevation: 110.3 ft

2.19.1 ILS Type: Localizer for runway 33R. Magnetic variation: 11W
2.19.2 ILS Identification: BWI
2.19.5 Coordinates: 39–11–19.7555N / 76–39–53.5728W
2.19.6 Site Elevation: 133 ft

2.19.1 ILS Type: Glide Slope for runway 15R. Magnetic variation: 11W
2.19.2 ILS Identification: FND
2.19.5 Coordinates: 39–10–53.6029N / 76–40–48.8976W
2.19.6 Site Elevation: 130.2 ft

2.19.1 ILS Type: Localizer for runway 15R. Magnetic variation: 11W
2.19.2 ILS Identification: FND
2.19.5 Coordinates: 39–9–39.0861N / 76–39–33.4607W
2.19.6 Site Elevation: 115.9 ft

2.19.1 ILS Type: Glide Slope for runway 33L. Magnetic variation: 11W
2.19.2 ILS Identification: RUX
2.19.5 Coordinates: 39–10–0.5283N / 76–39–59.734W
2.19.6 Site Elevation: 125.6 ft

2.19.1 ILS Type: Localizer for runway 33L. Magnetic variation: 11W
2.19.2 ILS Identification: RUX
2.19.5 Coordinates: 39–11–12.2145N / 76–40–59.7239W
2.19.6 Site Elevation: 133 ft

# General Remarks:

NO APRON PARKING FOR UNSKED ACR.

GENERAL AVIATION ACFT CTC UNICOM PRIOR TO ARRIVING AT GENERAL AVIATION RAMP FOR SECURITY PURPOSES.

ASDE–X IN USE. OPERATE TRANSPONDERS WITH ALT REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL ARPT SURFACES.

TWY 'A' IS RSTRD TO GROUP IV ACFT WINGSPAN 171 FT OR LESS.

RWY STATUS LGTS IN OPN.

DISTRACTING LGTS (GOLF DRIVING RANGE) RIGHT SIDE EXTDD CNTRLN RWY 33L FM AER TO 1/4 MI FINAL.

ACFT DEPARTING RWY 28 EXP DEP FM TWY U1.

DURING ATC ZERO EVENTS, UNICOM 119.4.

ACFT ON VISUAL APCHS EXPECT TO MAINTAIN 3000 FT UNTIL 10 DME FM BAL VORTAC; DEP ACFT

SHOULD EXPECT TURNS BASED ON BALTIMORE DME.

DEER & BIRDS OCNLLY ON & INVOF ARPT.

PRACTICE LNDG & APCH BY TURBO–PWRD ACFT PROHIBITED 2200–0600; PRACTICE LNDG & TKOF BY B-747 ACFT PROHIBITED RWY 15R/33L.

RWY 28 DE–ICE PAD LANE 1 RSTRD TO ACFT WITH WINGSPAN 171 FT OR LESS, LANE 2 RSTRD TO ACFT WITH WINGSPAN 135 FT OR LESS, LANE 3 IS USED BY LARGE ACFT MAX WINGSPAN 215 FT AND WHEN IN USE– LANES 2 AND 4 ARE UNAVBL. LANES 4, 5 & 6 ARE RSTRD TO ACFT WINGSPAN 135 FT OR LESS.

RWY 15R DEICE PAD, POSITION # 1, RSTRD TO ACFT WITH WINGSPAN OF 156 FT 1 INCH OR LESS & LENGTH OF 180 FT 3 INCHES OR LESS. PSN'S #2 & #3 ARE RSTD TO ACFT WITH A WINGSPAN OF 156 FT 1 INCH OR LESS, POSITION #3 IS RSTRD TO ACFT WITH A WINGSPAN OF 156 FT 1 INCH OR LESS & LENGTH OF 180 FT 3 INCHES OR LESS; POSITION 4 RSTRD TO ACFT WITH WINGSPAN OF 213 FT OR LESS & LENGTH OF 229 FT 2 INCHES OR LESS.

RWY LEN AVBL FOR RWY 28 DEPS FM TWY U1 IS 9802 FT.

MAJOR CONSTR ON ARPT DLY; ACFT MOV & PRKG AREAS SUBJECT TO SHORT NOTICE CHANGE/CLOSURE. FOR CURRENT INFO PHONE BWI OPNS CNTR 410–859–7018.

CONCOURSE A ALT DEICING AREA IS RSTRD TO B737–800 SIZE ACFT WITH WINGLETS OR SMLR ON SPOTS 6, 7 AND 8.

TAXIING PROHIBITED BTN CONCOURSE C & ADJ BLDG STRUCTURE SW OF CONCOURSE C. ACCESS TO GATE C12 MUST BE VIA TWY A.

TWY T BTN TWY H AND TWY E RSTD TO GROUP IV ACFT WITH WINGSPAN LESS THAN 171 FT. TWY T BTN TWY E AND TWY B RSTRD TO GROUP V ACFT WITH WINGSPAN LESS THAN 214 FT; WHEN GROUP V ACFT ARE ON TWY T, TWY A IS RSTRD TO MAX WINGSPANS OF 110 FT.

TWY "S", SOUTH OF TWY "P", RSTRD TO ACFT 60000 LBS & LESS.

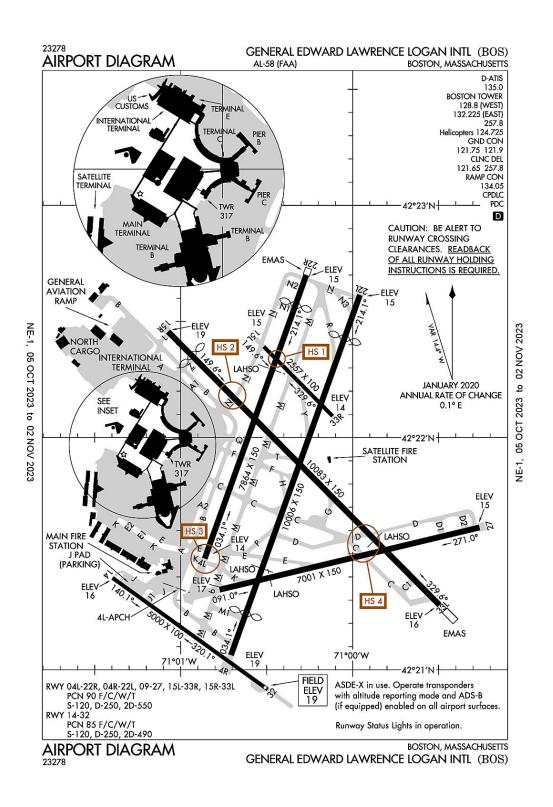
TAXILANES 'T-1' & "H" RSTRD TO GROUP III ACFT WITH MAX WINGSPAN OF 118 FEET.

NOISE ABATEMENT PROCEDURES IN EFFECT – RSTRN FOR RWY 15L/33R EXCEPT FOR EMERG OR MERCY FLIGHTS CTC AMGR FOR INFO.

CONT MOWING OPERATIONS ADJ ALL RWYS & TWYS – APR THRU NOV.

UNICOM 119.4.

DUAL PARALLEL TAXILANES HAVE BEEN ADDED TO THE 'D'/'E' ALLEYWAY; TAXILANE 'N' AND TAXILANE 'N1'. TAXILANE 'N' IS DESIGNATED A "GROUP V" TAXILANE WITH MAX WINGSPAN OF 213 FT. TAXILANE 'N1' IS DESIGNATED A "GROUP IV" TAXILANE WITH MAX WINGSPAN OF 170 FT.



# Boston, Massachusetts General Edward Lawrence Logan International ICAO Identifier KBOS

## Boston, MA General Edward Lawrence Logan Intl ICAO Identifier KBOS

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 42–21–46.6N / 71–0–23W
2.2.2 From City: 1 miles E of BOSTON, MA
2.2.3 Elevation: 19.1 ft
2.2.5 Magnetic Variation: 15W (2020)
2.2.6 Airport Contact: EDWARD FRENI LOGAN INTERNATIONAL AIRPORT EAST BOSTON, MA 2128 (617–567–5400)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 9/1/19722.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 04L 2.12.2 True Bearing: 20 2.12.3 Dimensions: 7864 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42–21–28.7577N / 71–0–51.6187W 2.12.6 Threshold Elevation: 13.9 ft 2.12.6 Touchdown Zone Elevation: 13.9 ft

2.12.1 Designation: 22R 2.12.2 True Bearing: 200 2.12.3 Dimensions: 7864 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42–22–41.8759N / 71–0–16.2499W 2.12.6 Threshold Elevation: 14.9 ft 2.12.6 Touchdown Zone Elevation: 15.2 ft

2.12.1 Designation: 04R 2.12.2 True Bearing: 20 2.12.3 Dimensions: 10006 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42–21–3.8094N / 71–0–42.458W 2.12.6 Threshold Elevation: 18.8 ft 2.12.6 Touchdown Zone Elevation: 17.6 ft 2.12.1 Designation: 22L 2.12.2 True Bearing: 200 2.12.3 Dimensions: 10006 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42-22-36.8399N / 70-59-57.4473W 2.12.6 Threshold Elevation: 14.5 ft 2.12.6 Touchdown Zone Elevation: 15.6 ft 2.12.1 Designation: 09 2.12.2 True Bearing: 77 2.12.3 Dimensions: 7001 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42-21-20.715N / 71-0-46.4187W 2.12.6 Threshold Elevation: 16.7 ft 2.12.6 Touchdown Zone Elevation: 16.8 ft 2.12.1 Designation: 27 2.12.2 True Bearing: 257 2.12.3 Dimensions: 7001 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42-21-36.7767N / 70-59-15.7276W 2.12.6 Threshold Elevation: 14.8 ft 2.12.6 Touchdown Zone Elevation: 17.2 ft 2.12.1 Designation: 14 2.12.2 True Bearing: 125 2.12.3 Dimensions: 5000 ft x 100 ft 2.12.4 PCN: 85 F/C/W/T 2.12.5 Coordinates: 42-21-23.7521N / 71-1-23.7886W 2.12.6 Threshold Elevation: 16 ft 2.12.6 Touchdown Zone Elevation: 19.1 ft 2.12.1 Designation: 32 2.12.2 True Bearing: 305 2.12.3 Dimensions: 5000 ft x 100 ft 2.12.4 PCN: 85 F/C/W/T 2.12.5 Coordinates: 42-20-54.9565N / 71-0-29.6841W 2.12.6 Threshold Elevation: 19.1 ft 2.12.6 Touchdown Zone Elevation: 19.1 ft 2.12.1 Designation: 15L 2.12.2 True Bearing: 135 2.12.3 Dimensions: 2557 ft x 100 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42-22-23.5008N / 71-0-31.0047W 2.12.6 Threshold Elevation: 14.8 ft 2.12.6 Touchdown Zone Elevation: 15.8 ft

2.12.1 Designation: 33R 2.12.2 True Bearing: 315 2.12.3 Dimensions: 2557 ft x 100 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42–22–5.5791N / 71–0–7.0008W 2.12.6 Threshold Elevation: 14 ft 2.12.6 Touchdown Zone Elevation: 15.8 ft

2.12.1 Designation: 15R 2.12.2 True Bearing: 135 2.12.3 Dimensions: 10083 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42–22–27.3749N / 71–1–4.4117W 2.12.6 Threshold Elevation: 18.9 ft 2.12.6 Touchdown Zone Elevation: 17 ft

2.12.1 Designation: 33L 2.12.2 True Bearing: 315 2.12.3 Dimensions: 10083 ft x 150 ft 2.12.4 PCN: 90 F/C/W/T 2.12.5 Coordinates: 42–21–16.7428N / 70–59–29.7098W 2.12.6 Threshold Elevation: 15.7 ft 2.12.6 Touchdown Zone Elevation: 16.2 ft

### AD 2.13 Declared Distances

2.13.1 Designation: 04L
2.13.2 Take-off Run Available: 7864
2.13.3 Take-off Distance Available: 7864
2.13.4 Accelerate-Stop Distance Available: 7864
2.13.5 Landing Distance Available: 7864

2.13.1 Designation: 22R
2.13.2 Take-off Run Available: 7864
2.13.3 Take-off Distance Available: 7864
2.13.4 Accelerate-Stop Distance Available: 7864
2.13.5 Landing Distance Available: 7046

2.13.1 Designation: 04R

2.13.2 Take-off Run Available: 10006

2.13.3 Take-off Distance Available: 10006

2.13.4 Accelerate-Stop Distance Available: 10006

2.13.5 Landing Distance Available: 8851

2.13.1 Designation: 22L

2.13.2 Take-off Run Available: 10006

2.13.3 Take-off Distance Available: 10006

2.13.4 Accelerate–Stop Distance Available: 10006

2.13.5 Landing Distance Available: 8806

2.13.1 Designation: 092.13.2 Take-off Run Available: 70012.13.3 Take-off Distance Available: 7001

2.13.4 Accelerate-Stop Distance Available: 7001 2.13.5 Landing Distance Available: 7001 2.13.1 Designation: 27 2.13.2 Take-off Run Available: 7001 2.13.3 Take-off Distance Available: 7001 2.13.4 Accelerate-Stop Distance Available: 7001 2.13.5 Landing Distance Available: 7001 2.13.1 Designation: 14 2.13.2 Take-off Run Available: 5000 2.13.3 Take-off Distance Available: 5000 2.13.4 Accelerate-Stop Distance Available: 5000 2.13.5 Landing Distance Available: 5000 2.13.1 Designation: 32 2.13.2 Take-off Run Available: 5000 2.13.3 Take-off Distance Available: 5000 2.13.4 Accelerate-Stop Distance Available: 5000 2.13.5 Landing Distance Available: 5000 2.13.1 Designation: 15L 2.13.2 Take-off Run Available: 2557 2.13.3 Take-off Distance Available: 2557 2.13.4 Accelerate-Stop Distance Available: 2557 2.13.5 Landing Distance Available: 2557 2.13.1 Designation: 33R 2.13.2 Take-off Run Available: 2557 2.13.3 Take-off Distance Available: 2557 2.13.4 Accelerate–Stop Distance Available: 2557 2.13.5 Landing Distance Available: 2557 2.13.1 Designation: 15R 2.13.2 Take-off Run Available: 10083 2.13.3 Take-off Distance Available: 10083 2.13.4 Accelerate-Stop Distance Available: 10083 2.13.5 Landing Distance Available: 9202 2.13.1 Designation: 33L

2.13.2 Take-off Run Available: 100832.13.3 Take-off Distance Available: 100832.13.4 Accelerate-Stop Distance Available: 100832.13.5 Landing Distance Available: 10083

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 04L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22R 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 04R 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 22L 2.14.2 Approach Lighting System: MALSF 2.14.4 Visual Approach Slope Indicator System: P4R 2.14.1 Designation: 09 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: 2.14.1 Designation: 27 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 14 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: 2.14.1 Designation: 32 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4L 2.14.1 Designation: 15L

2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 33R 2.14.2 Approach Lighting System: 2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 15R 2.14.2 Approach Lighting System: MALSR 2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 33L 2.14.2 Approach Lighting System: ALSF2 2.14.4 Visual Approach Slope Indicator System: P4R

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC 2.18.3 Channel: 121.65 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P

2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 1352.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 1352.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (HELICOPTERS)2.18.3 Channel: 124.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (WEST)2.18.3 Channel: 128.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (EAST)2.18.3 Channel: 132.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL2.18.3 Channel: 134.052.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 04R. Magnetic variation: 15W 2.19.2 ILS Identification: BOS

2.19.5 Coordinates: 42-22-57.4695N / 70-59-50.8873W 2.19.6 Site Elevation: 34.5 ft 2.19.1 ILS Type: Glide Slope for runway 04R. Magnetic variation: 15W 2.19.2 ILS Identification: BOS 2.19.5 Coordinates: 42-21-21.8231N / 71-0-24.5483W 2.19.6 Site Elevation: 10.1 ft 2.19.1 ILS Type: Localizer for runway 04R. Magnetic variation: 15W 2.19.2 ILS Identification: BOS 2.19.5 Coordinates: 42-22-55.9736N / 70-59-48.1884W 2.19.6 Site Elevation: 17.6 ft 2.19.1 ILS Type: DME for runway 22L. Magnetic variation: 15W 2.19.2 ILS Identification: LQN 2.19.5 Coordinates: 42-22-57.4695N / 70-59-50.8873W 2.19.6 Site Elevation: 34.5 ft 2.19.1 ILS Type: Glide Slope for runway 22L. Magnetic variation: 15W 2.19.2 ILS Identification: LQN 2.19.5 Coordinates: 42-22-17.0026N / 71-0-11.9878W 2.19.6 Site Elevation: 11.1 ft 2.19.1 ILS Type: Localizer for runway 22L. Magnetic variation: 15W 2.19.2 ILS Identification: LON 2.19.5 Coordinates: 42-21-0.0409N / 71-0-44.2844W 2.19.6 Site Elevation: 14.6 ft 2.19.1 ILS Type: DME for runway 27. Magnetic variation: 15W 2.19.2 ILS Identification: DGU 2.19.5 Coordinates: 42-21-15.6955N / 71-0-55.7791W 2.19.6 Site Elevation: 30.5 ft 2.19.1 ILS Type: Glide Slope for runway 27. Magnetic variation: 15W 2.19.2 ILS Identification: DGU 2.19.5 Coordinates: 42-21-31.2953N / 70-59-28.3545W 2.19.6 Site Elevation: 12.3 ft 2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 15W 2.19.2 ILS Identification: DGU 2.19.5 Coordinates: 42-21-18.4751N / 71-0-59.0489W 2.19.6 Site Elevation: 16.5 ft 2.19.1 ILS Type: DME for runway 15R. Magnetic variation: 15W 2.19.2 ILS Identification: MDC 2.19.5 Coordinates: 42-21-26.5111N / 70-59-35.0574W 2.19.6 Site Elevation: 26.4 ft 2.19.1 ILS Type: Glide Slope for runway 15R. Magnetic variation: 15W

2.19.2 ILS Identification: MDC

2.19.5 Coordinates: 42-22-14.6947N / 71-0-42.4209W

2.19.6 Site Elevation: 11.2 ft

2.19.1 ILS Type: Localizer for runway 15R. Magnetic variation: 15W
2.19.2 ILS Identification: MDC
2.19.5 Coordinates: 42–21–26.3592N / 70–59–37.052W
2.19.6 Site Elevation: 11.1 ft

2.19.1 ILS Type: DME for runway 33L. Magnetic variation: 15W
2.19.2 ILS Identification: LIP
2.19.5 Coordinates: 42–21–26.5111N / 70–59–35.0574W
2.19.6 Site Elevation: 26.4 ft

2.19.1 ILS Type: Glide Slope for runway 33L. Magnetic variation: 15W
2.19.2 ILS Identification: LIP
2.19.5 Coordinates: 42–21–26.6446N / 70–59–34.7132W
2.19.6 Site Elevation: 11.3 ft

2.19.1 ILS Type: Localizer for runway 33L. Magnetic variation: 15W
2.19.2 ILS Identification: LIP
2.19.5 Coordinates: 42–22–37.5624N / 71–1–18.0895W
2.19.6 Site Elevation: 15.9 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 16W
2.19.2 Navigation Aid Identification: BOS
2.19.5 Coordinates: 42–21–26.8197N / 70–59–22.3742W
2.19.6 Site Elevation: 18.4 ft

**General Remarks:** RWY STATUS LGTS IN OPN.

NOISE SENSITIVE AREA – HELS OPNG WITHIN THE CTZL ARE REQD TO MAINT THE HIGHEST POSSIBLE ALT.

NO RON PARKING FOR NON-TENANT CHARTER AIRCRAFT WITHOUT PRIOR MASSPORT PERMISSION.

PILOTS SHOULD COMPLETE ALL CALCULATIONS PRIOR TO PUSHBACK FROM GATE.

BTN 0000–0600 LCL – RY 15R IS PREFERENTIAL NGT RY FOR TKOF & RY 33L IS PREFERENTIAL NGT RY FOR LNDG.

RWY 14/32 UNIDIRECTIONAL; NO LDGS RWY 14; NO TKOFS RWY 32.

NMRS CRANES ON AND INVOF ARPT.

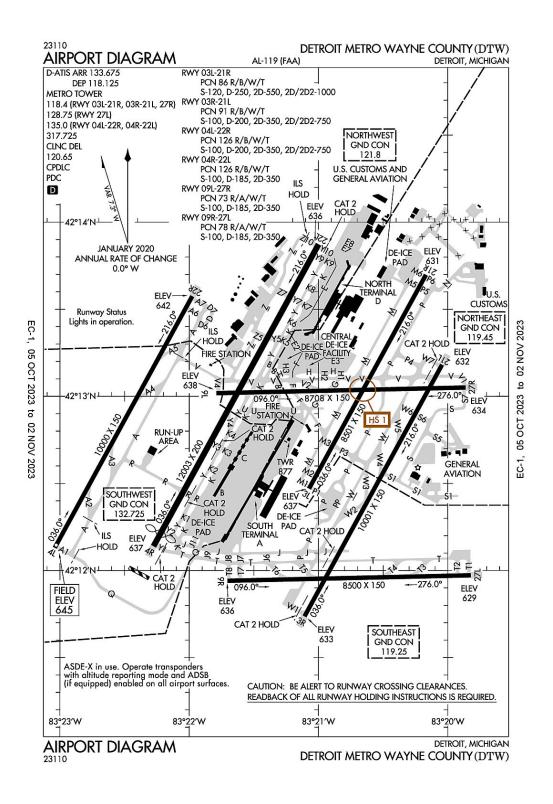
TERMINAL E; NORTH & SOUTH CARGO ARRIVALS CTC MASSPORT GATE CONTROL ON FREQ 131.1 BEFORE ENTERING/DEPARTING RAMP AREA.

FOR NOISE ABATEMENT PROCEDURES CALL 617-561-1636 0900-1700 MON-FRI.

BIRDS ON & INVOF ARPT.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

## Detroit, Michigan Detroit Metropolitan Wayne County ICAO Identifier KDTW



## Detroit, MI Detroit Metropolitan Wayne County ICAO Identifier KDTW

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 42–12–44.752N / 83–21–12.216W 2.2.2 From City: 15 miles S of DETROIT, MI 2.2.3 Elevation: 645.2 ft 2.2.5 Magnetic Variation: 7W (2020) 2.2.6 Airport Contact: CHAD NEWTON 11050 ROGELL DR #602 DETROIT, MI 48242 (734–942–3685) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: NONE

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 03L 2.12.2 True Bearing: 29 2.12.3 Dimensions: 8501 ft x 150 ft 2.12.4 PCN: 86 R/B/W/T 2.12.5 Coordinates: 42–12–28.2081N / 83–21–4.3881W 2.12.6 Threshold Elevation: 636.5 ft 2.12.6 Touchdown Zone Elevation: 636.9 ft

2.12.1 Designation: 21R 2.12.2 True Bearing: 209 2.12.3 Dimensions: 8501 ft x 150 ft 2.12.4 PCN: 86 R/B/W/T 2.12.5 Coordinates: 42–13–41.8586N / 83–20–10.107W 2.12.6 Threshold Elevation: 631.4 ft 2.12.6 Touchdown Zone Elevation: 634.5 ft

2.12.1 Designation: 03R 2.12.2 True Bearing: 29 2.12.3 Dimensions: 10001 ft x 150 ft 2.12.4 PCN: 91 R/B/W/T 2.12.5 Coordinates: 42–11–44.2115N / 83–21–6.4868W 2.12.6 Threshold Elevation: 632.8 ft 2.12.6 Touchdown Zone Elevation: 633.1 ft 2.12.1 Designation: 21L2.12.2 True Bearing: 209

2.12.3 Dimensions: 10001 ft x 150 ft 2.12.4 PCN: 91 R/B/W/T 2.12.5 Coordinates: 42-13-10.8552N / 83-20-2.6517W 2.12.6 Threshold Elevation: 631.8 ft 2.12.6 Touchdown Zone Elevation: 632.3 ft 2.12.1 Designation: 04L 2.12.2 True Bearing: 29 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 126 R/B/W/T 2.12.5 Coordinates: 42-12-7.8216N / 83-23-2.4003W 2.12.6 Threshold Elevation: 645.2 ft 2.12.6 Touchdown Zone Elevation: 645.2 ft 2.12.1 Designation: 22R 2.12.2 True Bearing: 209 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 126 R/B/W/T 2.12.5 Coordinates: 42-13-34.4821N / 83-21-58.6115W 2.12.6 Threshold Elevation: 642.1 ft 2.12.6 Touchdown Zone Elevation: 642.1 ft 2.12.1 Designation: 22L

2.12.2 True Bearing: 209 2.12.3 Dimensions: 12003 ft x 200 ft 2.12.4 PCN: 126 R/B/W/T 2.12.5 Coordinates: 42–13–52.3644N / 83–20–59.9655W 2.12.6 Threshold Elevation: 635.8 ft 2.12.6 Touchdown Zone Elevation: 637.4 ft

2.12.1 Designation: 04R 2.12.2 True Bearing: 29 2.12.3 Dimensions: 12003 ft x 200 ft 2.12.4 PCN: 126 R/B/W/T 2.12.5 Coordinates: 42–12–8.3656N / 83–22–16.5697W 2.12.6 Threshold Elevation: 637 ft 2.12.6 Touchdown Zone Elevation: 639.5 ft

2.12.1 Designation: 22X
2.12.2 True Bearing: 209
2.12.3 Dimensions: 0 ft x 0 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

2.12.1 Designation: 04X2.12.2 True Bearing: 29

2.12.3 Dimensions: 0 ft x 0 ft
2.12.4 PCN:
2.12.5 Coordinates: -- / -2.12.6 Threshold Elevation: ft
2.12.6 Touchdown Zone Elevation: ft

2.12.1 Designation: 09L 2.12.2 True Bearing: 89 2.12.3 Dimensions: 8708 ft x 150 ft 2.12.4 PCN: 73 R/A/W/T 2.12.5 Coordinates: 42–13–1.0821N / 83–21–47.4044W 2.12.6 Threshold Elevation: 638 ft 2.12.6 Touchdown Zone Elevation: 639.6 ft

2.12.1 Designation: 27R 2.12.2 True Bearing: 269 2.12.3 Dimensions: 8708 ft x 150 ft 2.12.4 PCN: 73 R/A/W/T 2.12.5 Coordinates: 42–13–3.0219N / 83–19–51.7146W 2.12.6 Threshold Elevation: 634.3 ft 2.12.6 Touchdown Zone Elevation: 634.7 ft

2.12.1 Designation: 09R
2.12.2 True Bearing: 89
2.12.3 Dimensions: 8500 ft x 150 ft
2.12.4 PCN: 78 R/A/W/T
2.12.5 Coordinates: 42–11–56.4542N / 83–21–42.2248W
2.12.6 Threshold Elevation: 636 ft
2.12.6 Touchdown Zone Elevation: 636.1 ft

2.12.1 Designation: 27L
2.12.2 True Bearing: 269
2.12.3 Dimensions: 8500 ft x 150 ft
2.12.4 PCN: 78 R/A/W/T
2.12.5 Coordinates: 42–11–58.3372N / 83–19–49.3276W
2.12.6 Threshold Elevation: 629 ft
2.12.6 Touchdown Zone Elevation: 630.1 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 03L
2.13.2 Take-off Run Available: 8501
2.13.3 Take-off Distance Available: 8501
2.13.4 Accelerate-Stop Distance Available: 8501
2.13.5 Landing Distance Available: 8501

2.13.1 Designation: 21R
2.13.2 Take-off Run Available: 8501
2.13.3 Take-off Distance Available: 8501
2.13.4 Accelerate-Stop Distance Available: 8501
2.13.5 Landing Distance Available: 8501

2.13.1 Designation: 03R 2.13.2 Take-off Run Available: 10001 2.13.3 Take-off Distance Available: 10001 2.13.4 Accelerate-Stop Distance Available: 10001 2.13.5 Landing Distance Available: 10001 2.13.1 Designation: 21L 2.13.2 Take-off Run Available: 10001 2.13.3 Take-off Distance Available: 10001 2.13.4 Accelerate-Stop Distance Available: 10001 2.13.5 Landing Distance Available: 10001 2.13.1 Designation: 04L 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 22R 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 22L 2.13.2 Take-off Run Available: 12003

2.13.2 Take-off Run Available: 12003
2.13.3 Take-off Distance Available: 12003
2.13.4 Accelerate-Stop Distance Available: 12003
2.13.5 Landing Distance Available: 12003

2.13.1 Designation: 04R
2.13.2 Take-off Run Available: 12003
2.13.3 Take-off Distance Available: 12003
2.13.4 Accelerate-Stop Distance Available: 12003
2.13.5 Landing Distance Available: 11494
2.13.1 Designation: 22X
2.13.2 Take-off Run Available:
2.13.3 Take-off Distance Available:
2.13.4 Accelerate-Stop Distance Available:
2.13.5 Landing Distance Available:
2.13.4 Accelerate-Stop Distance Available:
2.13.5 Landing Distance Available:
2.13.1 Designation: 04X
2.13.2 Take-off Run Available:
2.13.3 Take-off Distance Available:
2.13.4 Accelerate-Stop Distance Available:
2.13.5 Landing Distance Available:
2.13.5 Take-off Distance Available:
2.13.5 Landing Distance Available:
2.13.5 Landing Distance Available:

2.13.1 Designation: 09L2.13.2 Take-off Run Available: 8708

2.13.3 Take-off Distance Available: 87082.13.4 Accelerate-Stop Distance Available: 86182.13.5 Landing Distance Available: 8618

2.13.1 Designation: 27R
2.13.2 Take-off Run Available: 8708
2.13.3 Take-off Distance Available: 8708
2.13.4 Accelerate-Stop Distance Available: 8708
2.13.5 Landing Distance Available: 8708

2.13.1 Designation: 09R
2.13.2 Take-off Run Available: 8500
2.13.3 Take-off Distance Available: 8500
2.13.4 Accelerate-Stop Distance Available: 8500
2.13.5 Landing Distance Available: 8500
2.13.1 Designation: 27L
2.13.2 Take-off Run Available: 8500

2.13.3 Take-off Distance Available: 85002.13.4 Accelerate-Stop Distance Available: 8500

2.13.5 Landing Distance Available: 8500

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 03L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 21R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 03R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 21L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 04L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 22L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 04R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 22X2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 04X2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 09L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 27R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 09R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 27L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 120.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 118.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 133.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (SOUTHEAST)2.18.3 Channel: 119.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (NORTHEAST)2.18.3 Channel: 119.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (NORTHWEST)2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (SOUTHWEST)2.18.3 Channel: 132.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (ARRIVAL RWY 03R/21L, 27R)2.18.3 Channel: 118.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (DEP, ARPT DIAG RWY 03L/21R, 03R/21L, 27R)2.18.3 Channel: 118.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (ARRIVAL RWY 04R/22L)2.18.3 Channel: 128.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (DEP, ARPT DIAG RWY 27L)2.18.3 Channel: 128.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (ARRIVAL RWY 03L/21R, 27L)2.18.3 Channel: 128.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (ARRIVAL RWY 04L/22R)2.18.3 Channel: 1352.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (DEP, ARPT DIAG RWY 04L/22R, 04R/22L)2.18.3 Channel: 1352.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 317.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: MEDEVAC2.18.3 Channel: 259.62.18.5 Hours of Operation:

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 03R. Magnetic variation: 7W
2.19.2 ILS Identification: HUU
2.19.5 Coordinates: 42–11–34.2185N / 83–21–9.5792W
2.19.6 Site Elevation: 638.7 ft

2.19.1 ILS Type: Glide Slope for runway 03R. Magnetic variation: 7W
2.19.2 ILS Identification: HUU
2.19.5 Coordinates: 42–11–51.1266N / 83–20–54.979W
2.19.6 Site Elevation: 630.1 ft

2.19.1 ILS Type: Inner Marker for runway 03R. Magnetic variation: 7W
2.19.2 ILS Identification: HUU
2.19.5 Coordinates: 42–11–36.5551N / 83–21–12.137W
2.19.6 Site Elevation: 631.1 ft

2.19.1 ILS Type: Localizer for runway 03R. Magnetic variation: 7W
2.19.2 ILS Identification: HUU
2.19.5 Coordinates: 42–13–20.4082N / 83–19–55.609W
2.19.6 Site Elevation: 634 ft

2.19.1 ILS Type: DME for runway 21L. Magnetic variation: 7W
2.19.2 ILS Identification: EJR
2.19.5 Coordinates: 42–11–34.2185N / 83–21–9.5792W
2.19.6 Site Elevation: 638.7 ft

2.19.1 ILS Type: Glide Slope for runway 21L. Magnetic variation: 7W
2.19.2 ILS Identification: EJR
2.19.5 Coordinates: 42–12–58.4945N / 83–20–5.1867W
2.19.6 Site Elevation: 628.9 ft

2.19.1 ILS Type: Localizer for runway 21L. Magnetic variation: 7W
2.19.2 ILS Identification: EJR
2.19.5 Coordinates: 42–11–34.9459N / 83–21–13.3158W
2.19.6 Site Elevation: 631.1 ft

2.19.1 ILS Type: DME for runway 04L. Magnetic variation: 7W
2.19.2 ILS Identification: HJT
2.19.5 Coordinates: 42–13–41.8988N / 83–21–48.7254W
2.19.6 Site Elevation: 649.7 ft

2.19.1 ILS Type: Glide Slope for runway 04L. Magnetic variation: 7W
2.19.2 ILS Identification: HJT
2.19.5 Coordinates: 42–12–18.9498N / 83–23–0.2665W
2.19.6 Site Elevation: 640.6 ft

2.19.1 ILS Type: Inner Marker for runway 04L. Magnetic variation: 7W
2.19.2 ILS Identification: HJT
2.19.5 Coordinates: 42–12–0.3838N / 83–23–7.8811W

2.19.6 Site Elevation: 645.2 ft

2.19.1 ILS Type: Localizer for runway 04L. Magnetic variation: 7W
2.19.2 ILS Identification: HJT
2.19.5 Coordinates: 42–13–43.2279N / 83–21–52.161W
2.19.6 Site Elevation: 642 ft

2.19.1 ILS Type: DME for runway 22R. Magnetic variation: 7W
2.19.2 ILS Identification: JKI
2.19.5 Coordinates: 42–13–41.8988N / 83–21–48.7254W
2.19.6 Site Elevation: 649.7 ft

2.19.1 ILS Type: Glide Slope for runway 22R. Magnetic variation: 7W
2.19.2 ILS Identification: JKI
2.19.5 Coordinates: 42–13–27.2272N / 83–22–10.0062W
2.19.6 Site Elevation: 636.7 ft

2.19.1 ILS Type: Localizer for runway 22R. Magnetic variation: 7W
2.19.2 ILS Identification: JKI
2.19.5 Coordinates: 42–11–59.0707N / 83–23–8.842W
2.19.6 Site Elevation: 644.6 ft

2.19.1 ILS Type: DME for runway 04R. Magnetic variation: 7W
2.19.2 ILS Identification: DTW
2.19.5 Coordinates: 42–13–59.7252N / 83–20–50.3339W
2.19.6 Site Elevation: 645.3 ft

2.19.1 ILS Type: Glide Slope for runway 04R. Magnetic variation: 7W
2.19.2 ILS Identification: DTW
2.19.5 Coordinates: 42–12–23.21N / 83–22–11.85W
2.19.6 Site Elevation: 633.1 ft

2.19.1 ILS Type: Inner Marker for runway 04R. Magnetic variation: 7W
2.19.2 ILS Identification: DTW
2.19.5 Coordinates: 42–12–4.547N / 83–22–19.3737W
2.19.6 Site Elevation: 637.1 ft

2.19.1 ILS Type: Localizer for runway 04R. Magnetic variation: 7W
2.19.2 ILS Identification: DTW
2.19.5 Coordinates: 42–14–1.3028N / 83–20–53.3772W
2.19.6 Site Elevation: 636.5 ft

2.19.1 ILS Type: DME for runway 22L. Magnetic variation: 7W 2.19.2 ILS Identification: DWC 2.19.5 Coordinates: 42–13–59.7252N / 83–20–50.3339W 2.19.6 Site Elevation: 645.3 ft

2.19.1 ILS Type: Glide Slope for runway 22L. Magnetic variation: 7W
2.19.2 ILS Identification: DWC
2.19.5 Coordinates: 42–13–43.8552N / 83–21–12.2894W
2.19.6 Site Elevation: 635.6 ft

2.19.1 ILS Type: Localizer for runway 22L. Magnetic variation: 7W 2.19.2 ILS Identification: DWC 2.19.5 Coordinates: 42-11-59.5406N / 83-22-23.0644W 2.19.6 Site Elevation: 636.1 ft 2.19.1 ILS Type: DME for runway 04X. Magnetic variation: 7W 2.19.2 ILS Identification: ALA 2.19.5 Coordinates: 42-11-57.1056N / 83-23-6.1821W 2.19.6 Site Elevation: 656.6 ft 2.19.1 ILS Type: Glide Slope for runway 04X. Magnetic variation: 7W 2.19.2 ILS Identification: ALA 2.19.5 Coordinates: 42-12-19.0378N / 83-23-0.5079W 2.19.6 Site Elevation: 640.7 ft 2.19.1 ILS Type: Localizer for runway 04X. Magnetic variation: 7W 2.19.2 ILS Identification: ALA 2.19.5 Coordinates: 42-13-33.4002N / 83-21-50.9401W 2.19.6 Site Elevation: 638.5 ft 2.19.1 ILS Type: DME for runway 22X. Magnetic variation: 7W 2.19.2 ILS Identification: BZB 2.19.5 Coordinates: 42-11-57.1056N / 83-23-6.1821W 2.19.6 Site Elevation: 656.6 ft 2.19.1 ILS Type: Glide Slope for runway 22X. Magnetic variation: 7W 2.19.2 ILS Identification: BZB 2.19.5 Coordinates: 42-13-27.3517N / 83-22-10.3013W 2.19.6 Site Elevation: 636.8 ft 2.19.1 ILS Type: Localizer for runway 22X. Magnetic variation: 7W 2.19.2 ILS Identification: BZB 2.19.5 Coordinates: 42-11-56.2259N / 83-23-1.9618W 2.19.6 Site Elevation: 646.3 ft 2.19.1 ILS Type: Glide Slope for runway 27R. Magnetic variation: 7W 2.19.2 ILS Identification: DMI 2.19.5 Coordinates: 42-12-58.3552N / 83-20-4.8574W 2.19.6 Site Elevation: 629 ft 2.19.1 ILS Type: Localizer for runway 27R. Magnetic variation: 7W 2.19.2 ILS Identification: DMI 2.19.5 Coordinates: 42-13-0.7158N / 83-22-9.2988W 2.19.6 Site Elevation: 639.3 ft 2.19.1 ILS Type: DME for runway 27L. Magnetic variation: 7W 2.19.2 ILS Identification: EPA 2.19.5 Coordinates: 42-11-53.6723N / 83-21-55.0763W 2.19.6 Site Elevation: 645.8 ft

2.19.1 ILS Type: Glide Slope for runway 27L. Magnetic variation: 7W
2.19.2 ILS Identification: EPA
2.19.5 Coordinates: 42–11–54.6653N / 83–20–2.5117W
2.19.6 Site Elevation: 625.9 ft

2.19.1 ILS Type: Localizer for runway 27L. Magnetic variation: 7W
2.19.2 ILS Identification: EPA
2.19.5 Coordinates: 42–11–56.2294N / 83–21–55.6348W
2.19.6 Site Elevation: 634.1 ft

### General Remarks:

BRIGHTLY LIGHTED PARKING LOT 2.6 NM SW OF ARPT.

RWY VISUAL SCREEN 20 FT AGL 1150 FT S. AER 04R

TURNING RESTRICTION TWY B TO TWY K RESTRICTED TO AIRCRAFT WITH WINGSPAN 171 FT OR LESS.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

PPR FOR B747–8 OPRS DUE TO CONSTRAINTS ON RWYS, TWYS AND RAMPS CTC AIRFIELD OPRS AT 734–942–3685.

TAXI ON RWY 09L/27R LTD TO: EXITING FM RWY 04R/22L, 03L/21R, & 03R/21L EXC NO TAXI BTN RWY 03L/21R & TWY W; TWO–WAY TAXI BTN TWY Y & TWY M WHEN RED STOP BAR LGTS ARE LGTD AT RWY 04R/22L & 03L/21R OR WHEN BARRICADES ARE USED INSTEAD AT THE RESPECTIVE INTS. TAXI BTN SS–SR OR IN CONDS WITH VIS LESS THAN 1 SM RQRS GREEN CNTRLN LGT TO BE OPR.

BE ALERT BIRDS, WATERFOWL, ON & INVOF ARPT.

RY STATUS LGTS ARE IN OPN.

ACFT WITH WINGSPAN GTR THAN 171 FT ARE RSTRD FM USING TWY P BTN TWY J & TWY P3.

TURNING RSTRD TO WINGSPAN 135 FT OR LESS TWY G NORTH TO TWY V EAST.

ACFT WITH WINGSPAN GTR THAN 171 FT ARE RSTRD FM USING TWY H BTN TWY B & TWY F.

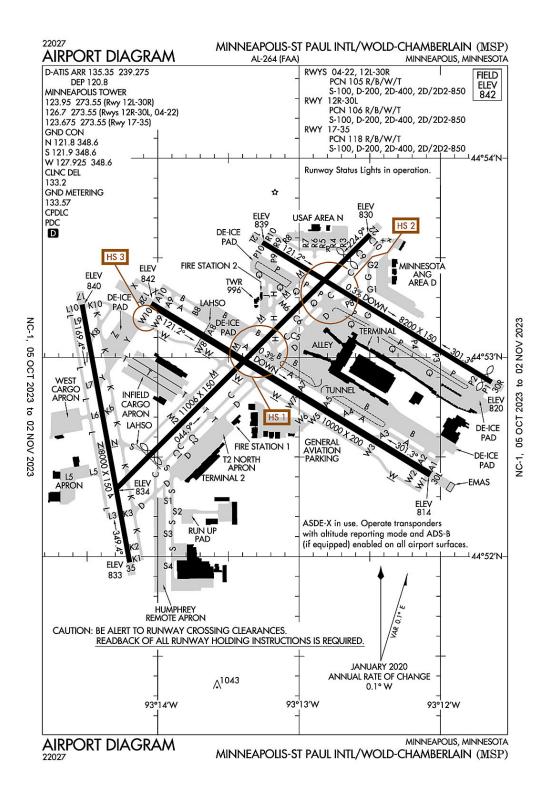
AIRCRAFT WITH WINGSPAN GREATER THAN 171 FT CANNOT PASS EACH OTHER ON TWYS Y AND K BETWEEN TWYS U AND K6 INSUFFICIENT WINGTIP CLEARANCE.

ACFT ON TWY 'F' AND TWY 'V' DO NOT BLOCK FIRE STATION EXITS.

DIVERSIONAIR CARRIERS WITHOUT A PRESENCE AT DTW SHOULD CTC AIRFIELD OPRS 734–942–3685 PRIOR TO DIVERTING TO THE EXTENT PRACTICAL AND PROVIDE COMPANY, FLT OPRS, CTC INFO, AIRCRAFT TYPE, PERSONS ONBOARD, INTERNATIONAL OR DOMESTIC, ANY GRND HANDLER AGGREEMENTS IN PLACE.

AUTH TO CONDUCT SIMUL INDEPENDENT INSTR APCHS TO PARL RWY 04L/22R & 03R/21L WO FINAL MONITORS, RWY CNTRLNS SEPARATED BY 8800 FT.





AD 2–364 5 OCT 23

## Minneapolis, MN Minneapolis-St Paul Intl/Wold-Chamberlain ICAO Identifier KMSP

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 44–52–55.1N / 93–13–18.4W
2.2.2 From City: 6 miles S of MINNEAPOLIS, MN
2.2.3 Elevation: 841.8 ft
2.2.5 Magnetic Variation: 0E (2015)
2.2.6 Airport Contact: BRIAN RYKS

6040 28TH AVE S
MINNEAPOLIS, MN 55450 (612–726–8100)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A++2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–E

### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 04 2.12.2 True Bearing: 45 2.12.3 Dimensions: 11006 ft x 150 ft 2.12.4 PCN: 105 R/B/W/T 2.12.5 Coordinates: 44–52–20.158N / 93–14–17.9427W 2.12.6 Threshold Elevation: 833.5 ft 2.12.6 Touchdown Zone Elevation: 831.7 ft

2.12.1 Designation: 22
2.12.2 True Bearing: 225
2.12.3 Dimensions: 11006 ft x 150 ft
2.12.4 PCN: 105 R/B/W/T
2.12.5 Coordinates: 44–53–36.9917N / 93–12–29.8434W
2.12.6 Threshold Elevation: 830.3 ft
2.12.6 Touchdown Zone Elevation: 828.3 ft

2.12.1 Designation: 30R 2.12.2 True Bearing: 301 2.12.3 Dimensions: 8200 ft x 150 ft 2.12.4 PCN: 105 R/B/W/T 2.12.5 Coordinates: 44–52–52.5152N / 93–11–38.296W 2.12.6 Threshold Elevation: 819.5 ft 2.12.6 Touchdown Zone Elevation: 822.4 ft

AD 2–365 5 OCT 23

2.12.1 Designation: 12L
2.12.2 True Bearing: 121
2.12.3 Dimensions: 8200 ft x 150 ft
2.12.4 PCN: 105 R/B/W/T
2.12.5 Coordinates: 44–53–34.6287N / 93–13–15.5666W
2.12.6 Threshold Elevation: 838.6 ft
2.12.6 Touchdown Zone Elevation: 840.7 ft

2.12.1 Designation: 12R
2.12.2 True Bearing: 121
2.12.3 Dimensions: 10000 ft x 200 ft
2.12.4 PCN: 106 R/B/W/T
2.12.5 Coordinates: 44–53–16.0438N / 93–14–2.8731W
2.12.6 Threshold Elevation: 841.8 ft
2.12.6 Touchdown Zone Elevation: 841.8 ft

2.12.1 Designation: 30L
2.12.2 True Bearing: 301
2.12.3 Dimensions: 10000 ft x 200 ft
2.12.4 PCN: 106 R/B/W/T
2.12.5 Coordinates: 44–52–24.68N / 93–12–4.2689W
2.12.6 Threshold Elevation: 814.4 ft
2.12.6 Touchdown Zone Elevation: 823 ft

2.12.1 Designation: 17
2.12.2 True Bearing: 170
2.12.3 Dimensions: 8000 ft x 150 ft
2.12.4 PCN: 118 R/B/W/T
2.12.5 Coordinates: 44–53–15.9127N / 93–14–32.1137W
2.12.6 Threshold Elevation: 840.4 ft
2.12.6 Touchdown Zone Elevation: 840.4 ft

2.12.1 Designation: 35 2.12.2 True Bearing: 350 2.12.3 Dimensions: 8000 ft x 150 ft 2.12.4 PCN: 118 R/B/W/T 2.12.5 Coordinates: 44–51–58.2366N / 93–14–11.9205W 2.12.6 Threshold Elevation: 833.3 ft 2.12.6 Touchdown Zone Elevation: 834.4 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 04
2.13.2 Take-off Run Available: 11006
2.13.3 Take-off Distance Available: 11006
2.13.4 Accelerate-Stop Distance Available: 11006
2.13.5 Landing Distance Available: 9456

2.13.1 Designation: 222.13.2 Take-off Run Available: 11006

2.13.3 Take-off Distance Available: 11006 2.13.4 Accelerate-Stop Distance Available: 11006 2.13.5 Landing Distance Available: 10006 2.13.1 Designation: 30R 2.13.2 Take-off Run Available: 8200 2.13.3 Take-off Distance Available: 8200 2.13.4 Accelerate–Stop Distance Available: 8200 2.13.5 Landing Distance Available: 8000 2.13.1 Designation: 12L 2.13.2 Take-off Run Available: 8200 2.13.3 Take-off Distance Available: 8200 2.13.4 Accelerate-Stop Distance Available: 7620 2.13.5 Landing Distance Available: 7620 2.13.1 Designation: 12R 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 30L 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate–Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 17 2.13.2 Take-off Run Available: 8000 2.13.3 Take-off Distance Available: 8000 2.13.4 Accelerate–Stop Distance Available: 8000 2.13.5 Landing Distance Available: 8000 2.13.1 Designation: 35 2.13.2 Take-off Run Available: 8000 2.13.3 Take-off Distance Available: 8000

2.13.4 Accelerate-Stop Distance Available: 8000

2.13.5 Landing Distance Available: 8000

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 042.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 222.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 30R

2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 12L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 12R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 30L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 172.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 352.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 133.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 120.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 135.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 239.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND METERING 2.18.3 Channel: 133.575

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (N)2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (S)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (W)2.18.3 Channel: 127.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 17/35)2.18.3 Channel: 123.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12L/30R)2.18.3 Channel: 123.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 04/22, 12R/30L)2.18.3 Channel: 126.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 273.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: PTD2.18.3 Channel: 282.6752.18.5 Hours of Operation:

2.18.1 Service Designation: PTD2.18.3 Channel: 324.12.18.5 Hours of Operation:

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Localizer for runway 04. Magnetic variation: 0E
2.19.2 ILS Identification: APL
2.19.5 Coordinates: 44–53–44.0038N / 93–12–19.9688W
2.19.6 Site Elevation: 832.1 ft

2.19.1 ILS Type: Localizer for runway 22. Magnetic variation: 0E 2.19.2 ILS Identification: SIJ

2.19.5 Coordinates: 44-52-12.792N / 93-14-28.3006W 2.19.6 Site Elevation: 831.4 ft 2.19.1 ILS Type: DME for runway 12L. Magnetic variation: 0E 2.19.2 ILS Identification: PJL 2.19.5 Coordinates: 44-53-3.674N / 93-11-48.8687W 2.19.6 Site Elevation: 824 ft 2.19.1 ILS Type: Glide Slope for runway 12L. Magnetic variation: 0E 2.19.2 ILS Identification: PJL 2.19.5 Coordinates: 44-53-31.1153N / 93-12-56.6941W 2.19.6 Site Elevation: 831 ft 2.19.1 ILS Type: Inner Marker for runway 12L. Magnetic variation: 0E 2.19.2 ILS Identification: PJL 2.19.5 Coordinates: 44-53-39.694N / 93-13-25.8963W 2.19.6 Site Elevation: 845.3 ft 2.19.1 ILS Type: Localizer for runway 12L. Magnetic variation: 0E 2.19.2 ILS Identification: PJL 2.19.5 Coordinates: 44-52-50.3312N / 93-11-33.2418W 2.19.6 Site Elevation: 813 ft 2.19.1 ILS Type: DME for runway 30R. Magnetic variation: 0E 2.19.2 ILS Identification: INN 2.19.5 Coordinates: 44-53-3.674N / 93-11-48.8687W 2.19.6 Site Elevation: 824 ft 2.19.1 ILS Type: Glide Slope for runway 30R. Magnetic variation: 0E 2.19.2 ILS Identification: INN 2.19.5 Coordinates: 44-53-3.4471N / 93-11-48.8472W 2.19.6 Site Elevation: 813.2 ft 2.19.1 ILS Type: Localizer for runway 30R. Magnetic variation: 0E 2.19.2 ILS Identification: INN 2.19.5 Coordinates: 44-53-40.841N / 93-13-29.92W 2.19.6 Site Elevation: 843.1 ft 2.19.1 ILS Type: DME for runway 12R. Magnetic variation: 0E 2.19.2 ILS Identification: HKZ 2.19.5 Coordinates: 44-52-26.9244N / 93-12-20.5476W 2.19.6 Site Elevation: 825.4 ft 2.19.1 ILS Type: Glide Slope for runway 12R. Magnetic variation: 0E 2.19.2 ILS Identification: HKZ 2.19.5 Coordinates: 44-53-7.28N / 93-13-53.62W 2.19.6 Site Elevation: 835.1 ft 2.19.1 ILS Type: Inner Marker for runway 12R. Magnetic variation: 0E 2.19.2 ILS Identification: HKZ 2.19.5 Coordinates: 44-53-20.8698N / 93-14-12.7019W

2.19.6 Site Elevation: 840 ft

2.19.1 ILS Type: Localizer for runway 12R. Magnetic variation: 0E
2.19.2 ILS Identification: HKZ
2.19.5 Coordinates: 44–52–20.3796N / 93–11–54.3455W
2.19.6 Site Elevation: 812.8 ft

2.19.1 ILS Type: DME for runway 30L. Magnetic variation: 0E
2.19.2 ILS Identification: MSP
2.19.5 Coordinates: 44–52–26.9244N / 93–12–20.5476W
2.19.6 Site Elevation: 825.4 ft

2.19.1 ILS Type: Glide Slope for runway 30L. Magnetic variation: 0E
2.19.2 ILS Identification: MSP
2.19.5 Coordinates: 44–52–27.0021N / 93–12–20.2067W
2.19.6 Site Elevation: 812.1 ft

2.19.1 ILS Type: Inner Marker for runway 30L. Magnetic variation: 0E
2.19.2 ILS Identification: MSP
2.19.5 Coordinates: 44–52–19.4377N / 93–11–52.1826W
2.19.6 Site Elevation: 808.1 ft

2.19.1 ILS Type: Localizer for runway 30L. Magnetic variation: 0E
2.19.2 ILS Identification: MSP
2.19.5 Coordinates: 44–53–22.4589N / 93–14–17.688W
2.19.6 Site Elevation: 840 ft

2.19.1 ILS Type: DME for runway 17. Magnetic variation: 0E
2.19.2 ILS Identification: TJZ
2.19.5 Coordinates: 44–53–24.6166N / 93–14–38.0356W
2.19.6 Site Elevation: 832.5 ft

2.19.1 ILS Type: Localizer for runway 17. Magnetic variation: 0E
2.19.2 ILS Identification: TJZ
2.19.5 Coordinates: 44–51–48.4327N / 93–14–9.3727W
2.19.6 Site Elevation: 830.4 ft

2.19.1 ILS Type: DME for runway 35. Magnetic variation: 0E
2.19.2 ILS Identification: BMA
2.19.5 Coordinates: 44–53–24.6166N / 93–14–38.0356W
2.19.6 Site Elevation: 832.5 ft

2.19.1 ILS Type: Glide Slope for runway 35. Magnetic variation: 0E
2.19.2 ILS Identification: BMA
2.19.5 Coordinates: 44–52–7.7086N / 93–14–20.1127W
2.19.6 Site Elevation: 829.9 ft

2.19.1 ILS Type: Inner Marker for runway 35. Magnetic variation: 0E
2.19.2 ILS Identification: BMA
2.19.5 Coordinates: 44–51–49.9075N / 93–14–9.7433W
2.19.6 Site Elevation: 832.6 ft

2.19.1 ILS Type: Localizer for runway 35. Magnetic variation: 0E
2.19.2 ILS Identification: BMA
2.19.5 Coordinates: 44–53–25.7158N / 93–14–34.6512W
2.19.6 Site Elevation: 845.3 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 2E
2.19.2 Navigation Aid Identification: MSP
2.19.5 Coordinates: 44–53–47.3958N / 93–14–11.5137W
2.19.6 Site Elevation: 831.6 ft

### General Remarks:

NOISE ABATEMENT PROCEDURES – 612–726–9411. NO STAGE 1 CAT CIVIL ACFT. NIGHT HR 2230–0600.

TRNG FLTS PROHIBITED. GA FLTS MUST TRMT AT THE FBO OR US CUSTOMS UNLESS APVD BY AMGR.

MILITARY RSTD: NO HAZ CL/DIV1.1 OR 1.2 EXPLOSIVES PERMITTED. LOADING OR UNLOADING OF HAZ CL/DIV 1.3, 1.4, 1.5 OR 1.6 MUST BE APV BY ARPT DRCT PRIOR TO FLT.

ASDE-X IN USE; OPR TRANSPONDERS WITH ALT RPRT MODE & ADS-B ENABLED ON ALL ARPT SFCS.

RWY STATUS LGTS IN OPRN.

133 AW AFLD MGMT – 324.1 REMARKS: CALL LIGHTHOUSE.

REMARKS: ALL ACFT MUST CTC NORTHSTAR ON FREQ 252.1 20 MIN PRIOR ARR.

UNSKED ACFT AT TRML 2-HUMPHREY REQ TO CTC TRML 2 GATE CONTROL ON 122.95 OR CALL 612–726–5742 PRIOR TO ARR.

SIGNATURE FLIGHT SUPPORT 128.95

MILITARY: ARFC 934 AW OPS 1300–0400Z++ MON–THUR, 1300–2200Z++ FRI, CLSD WKEND AND FEDERAL HOL. UNIT TRNG ASSEMBLY (UTA) WKEND 1330–2200Z++. ALL TRANS ACFT MUST RECEIVE PPR 48 HR PRIOR TO ETA – CTC AIRFIELD MGMT.

COMMUNICATIONS: MINNEAPOLIS AIR RESERVE STATION JOINT COMD POST – 252.1 REMARKS: CALL NORTHSTAR.

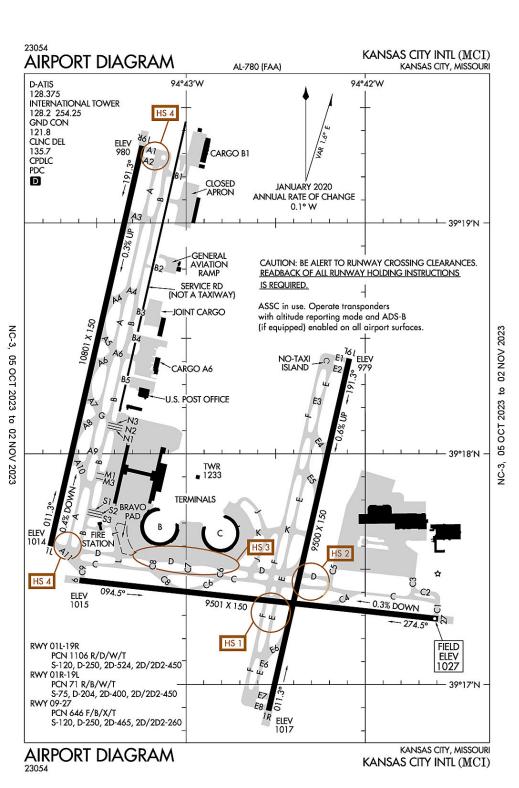
ALL GROUP VI ACFT WITH WINGSPAN GREATER THAN 214 FT PPR REQ PRIOR TO ARR – CTC AIRSIDE OPS 612–726–5111.

934 AW AFLD MGMT – PTD 282.675 REMARKS: CALL VIKING OPS.

BIRDS ON & INVOF ARPT.

ALL GROUP IV AND LRGR ACFT OPRG ON THE PTN OF TWY S ADJ TO DELTA BLDG C RQR THE USE OF WINGWALKERS AND THAT THE VEHICLE SVC ROAD BE CLEAR OF VEHICLES.

ALL GA ACFT WITH LESS THAN 20 PAX THAT NEED TO CLEAR US CUSTOMS SHOULD CTC SIGNATURE FLT SUPPORT 128.95 OR 612–726–5700 PRIOR TO ARR.



## Kansas City, Missouri Kansas City International ICAO Identifier KMCI

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–17–51.4N / 94–42–50W 2.2.2 From City: 15 miles NW of KANSAS CITY, MO 2.2.3 Elevation: 1026.9 ft 2.2.5 Magnetic Variation: 2E (2015) 2.2.6 Airport Contact: MR. LUKE MAWHIRTER P.O. BOX 20047 KANSAS CITY, MO 64195 (816–243–5248) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: NONE

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

### AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 01L
2.12.2 True Bearing: 13
2.12.3 Dimensions: 10801 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 39–17–36.0029N / 94–43–45.5433W
2.12.6 Threshold Elevation: 1014.4 ft
2.12.6 Touchdown Zone Elevation: 1014.4 ft

2.12.1 Designation: 19R
2.12.2 True Bearing: 193
2.12.3 Dimensions: 10801 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 39–19–20.0396N / 94–43–14.7835W
2.12.6 Threshold Elevation: 979.6 ft
2.12.6 Touchdown Zone Elevation: 990.5 ft

2.12.1 Designation: 19L
2.12.2 True Bearing: 193
2.12.3 Dimensions: 9500 ft x 150 ft
2.12.4 PCN: 71 R/B/W/T
2.12.5 Coordinates: 39–18–24.7369N / 94–42–5.3226W
2.12.6 Threshold Elevation: 978.5 ft
2.12.6 Touchdown Zone Elevation: 995.2 ft

2.12.1 Designation: 01R
2.12.2 True Bearing: 13
2.12.3 Dimensions: 9500 ft x 150 ft
2.12.4 PCN: 71 R/B/W/T
2.12.5 Coordinates: 39–16–53.2341N / 94–42–32.3935W
2.12.6 Threshold Elevation: 1017.2 ft
2.12.6 Touchdown Zone Elevation: 1017.4 ft

2.12.1 Designation: 27
2.12.2 True Bearing: 276
2.12.3 Dimensions: 9501 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 39–17–17.0716N / 94–41–35.5978W
2.12.6 Threshold Elevation: 1026.9 ft
2.12.6 Touchdown Zone Elevation: 1026.9 ft

2.12.1 Designation: 09
2.12.2 True Bearing: 96
2.12.3 Dimensions: 9501 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 39–17–27.099N / 94–43–35.7371W
2.12.6 Threshold Elevation: 1015.3 ft
2.12.6 Touchdown Zone Elevation: 1015.7 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 01L
2.13.2 Take-off Run Available: 10801
2.13.3 Take-off Distance Available: 10801
2.13.4 Accelerate-Stop Distance Available: 10801
2.13.5 Landing Distance Available: 10801

2.13.1 Designation: 19R
2.13.2 Take-off Run Available: 10801
2.13.3 Take-off Distance Available: 10801
2.13.4 Accelerate-Stop Distance Available: 10801
2.13.5 Landing Distance Available: 10801

2.13.4 Accelerate–Stop Distance Available: 10801
2.13.5 Landing Distance Available: 10801
2.13.1 Designation: 19L
2.13.2 Take–off Run Available: 9500
2.13.3 Take–off Distance Available: 9500
2.13.4 Accelerate–Stop Distance Available: 9500
2.13.5 Landing Distance Available: 9500

2.13.1 Designation: 01R

- 2.13.2 Take-off Run Available: 9500
- 2.13.3 Take-off Distance Available: 9500
- 2.13.4 Accelerate–Stop Distance Available: 9500
- 2.13.5 Landing Distance Available: 9500

2.13.1 Designation: 27
2.13.2 Take-off Run Available: 9501
2.13.3 Take-off Distance Available: 9501
2.13.4 Accelerate-Stop Distance Available: 9501
2.13.5 Landing Distance Available: 9501

2.13.1 Designation: 09
2.13.2 Take-off Run Available: 9501
2.13.3 Take-off Distance Available: 9501
2.13.4 Accelerate-Stop Distance Available: 9501
2.13.5 Landing Distance Available: 9501

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 01L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 19R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 19L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 01R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 272.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 092.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P2.18.3 Channel: 120.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRAYMER STAR2.18.3 Channel: 120.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRAYMER STAR2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 135.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHIEF DP2.18.3 Channel: 124.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHIEF DP2.18.3 Channel: 284.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (EAST OF RWY 01/19)2.18.3 Channel: 118.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (S OF A LINE FROM LWC ARPT TO 3GV ARPT)2.18.3 Channel: 118.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (WEST OF RWY 01/19)2.18.3 Channel: 124.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (EAST OF RWY 01–19)2.18.3 Channel: 294.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (S OF A LINE FROM LWC ARPT TO 3GV ARPT)2.18.3 Channel: 294.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (WEST OF RWY 01/19)2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 128.3752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (010–190) 2.18.3 Channel: 123.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (191–009) 2.18.3 Channel: 124.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (191–009)2.18.3 Channel: 284.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (010–190) 2.18.3 Channel: 318.1 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: JHAWK STAR2.18.3 Channel: 120.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: JHAWK STAR2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LAKES DP2.18.3 Channel: 123.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: LAKES DP2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 128.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 254.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S

2.18.3 Channel: 125.75 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: RACER DP (BUTLER/SPRINGFIELD TRANSITION)2.18.3 Channel: 123.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: RACER DP (DOSOA TRANSITION)2.18.3 Channel: 124.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: RACER DP (DOSOA TRANSITION)2.18.3 Channel: 284.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: RACER DP (BUTLER/SPRINGFIELD TRANSITION)2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROYAL DP (ARENZ/BODYN TRANSITION)2.18.3 Channel: 123.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROYAL DP (TONCE TRANSITION)2.18.3 Channel: 124.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROYAL DP (TONCE TRANSITION)2.18.3 Channel: 284.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROYAL DP (ARENZ/BODYN TRANSITION)2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: TIFTO DP2.18.3 Channel: 124.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: TIFTO DP2.18.3 Channel: 284.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: TYGER STAR2.18.3 Channel: 120.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: TYGER STAR2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: WILDCAT DP2.18.3 Channel: 124.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: WILDCAT DP2.18.3 Channel: 284.72.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 01L. Magnetic variation: 2E
2.19.2 ILS Identification: DOT
2.19.5 Coordinates: 39–19–30.0746N / 94–43–8.2388W
2.19.6 Site Elevation: 988.8 ft

2.19.1 ILS Type: Glide Slope for runway 01L. Magnetic variation: 2E
2.19.2 ILS Identification: DOT
2.19.5 Coordinates: 39–17–48.2654N / 94–43–47.1321W
2.19.6 Site Elevation: 1002.8 ft

2.19.1 ILS Type: Localizer for runway 01L. Magnetic variation: 2E
2.19.2 ILS Identification: DOT
2.19.5 Coordinates: 39–19–31.1181N / 94–43–11.5232W
2.19.6 Site Elevation: 972.3 ft

2.19.1 ILS Type: DME for runway 19R. Magnetic variation: 2E
2.19.2 ILS Identification: PAJ
2.19.5 Coordinates: 39–17–25.7846N / 94–43–51.9618W
2.19.6 Site Elevation: 1026 ft

2.19.1 ILS Type: Glide Slope for runway 19R. Magnetic variation: 2E
2.19.2 ILS Identification: PAJ
2.19.5 Coordinates: 39–19–11.0536N / 94–43–22.6772W
2.19.6 Site Elevation: 976.8 ft

2.19.1 ILS Type: Inner Marker for runway 19R. Magnetic variation: 2E
2.19.2 ILS Identification: PAJ
2.19.5 Coordinates: 39–19–30.1157N / 94–43–11.8201W
2.19.6 Site Elevation: 972.4 ft

2.19.1 ILS Type: Localizer for runway 19R. Magnetic variation: 2E
2.19.2 ILS Identification: PAJ
2.19.5 Coordinates: 39–17–23.1222N / 94–43–49.3464W
2.19.6 Site Elevation: 1017.6 ft

2.19.1 ILS Type: Middle Marker for runway 19R. Magnetic variation: 2E
2.19.2 ILS Identification: PAJ
2.19.5 Coordinates: 39–19–49.2587N / 94–43–6.2032W
2.19.6 Site Elevation: 965.1 ft

2.19.1 ILS Type: DME for runway 01R. Magnetic variation: 2E

2.19.2 ILS Identification: PVL 2.19.5 Coordinates: 39–18–35.6272N / 94–42–5.4664W 2.19.6 Site Elevation: 960 ft

2.19.1 ILS Type: Glide Slope for runway 01R. Magnetic variation: 2E
2.19.2 ILS Identification: PVL
2.19.5 Coordinates: 39–17–3.1905N / 94–42–24.2292W
2.19.6 Site Elevation: 1010.8 ft

2.19.1 ILS Type: Inner Marker for runway 01R. Magnetic variation: 2E
2.19.2 ILS Identification: PVL
2.19.5 Coordinates: 39–16–45.0995N / 94–42–34.8009W
2.19.6 Site Elevation: 1011.1 ft

2.19.1 ILS Type: Localizer for runway 01R. Magnetic variation: 2E
2.19.2 ILS Identification: PVL
2.19.5 Coordinates: 39–18–34.4013N / 94–42–2.4648W
2.19.6 Site Elevation: 963.3 ft

2.19.1 ILS Type: Middle Marker for runway 01R. Magnetic variation: 2E
2.19.2 ILS Identification: PVL
2.19.5 Coordinates: 39–16–27.6318N / 94–42–39.9693W
2.19.6 Site Elevation: 994.9 ft

2.19.1 ILS Type: DME for runway 19L. Magnetic variation: 2E
2.19.2 ILS Identification: DYH
2.19.5 Coordinates: 39–16–43.6236N / 94–42–38.5532W
2.19.6 Site Elevation: 1017.5 ft

2.19.1 ILS Type: Glide Slope for runway 19L. Magnetic variation: 2E
2.19.2 ILS Identification: DYH
2.19.5 Coordinates: 39–18–13.9534N / 94–42–3.2934W
2.19.6 Site Elevation: 977.9 ft

2.19.1 ILS Type: Localizer for runway 19L. Magnetic variation: 2E
2.19.2 ILS Identification: DYH
2.19.5 Coordinates: 39–16–43.575N / 94–42–35.2495W
2.19.6 Site Elevation: 1011.8 ft

2.19.1 ILS Type: DME for runway 09. Magnetic variation: 2E
2.19.2 ILS Identification: RNI
2.19.5 Coordinates: 39–17–18.904N / 94–41–21.7047W
2.19.6 Site Elevation: 1032.1 ft

2.19.1 ILS Type: Glide Slope for runway 09. Magnetic variation: 2E
2.19.2 ILS Identification: RNI
2.19.5 Coordinates: 39–17–21.0763N / 94–43–22.949W
2.19.6 Site Elevation: 1010.7 ft

2.19.1 ILS Type: Localizer for runway 09. Magnetic variation: 2E 2.19.2 ILS Identification: RNI

2.19.5 Coordinates: 39–17–16.0109N / 94–41–22.9272W 2.19.6 Site Elevation: 1020.2 ft

2.19.1 ILS Type: DME for runway 27. Magnetic variation: 2E
2.19.2 ILS Identification: UQY
2.19.5 Coordinates: 39–17–25.6745N / 94–43–54.5943W
2.19.6 Site Elevation: 1024.3 ft

2.19.1 ILS Type: Glide Slope for runway 27. Magnetic variation: 2E
2.19.2 ILS Identification: UQY
2.19.5 Coordinates: 39–17–15.7129N / 94–41–50.2717W
2.19.6 Site Elevation: 1021.4 ft

2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 2E
2.19.2 ILS Identification: UQY
2.19.5 Coordinates: 39–17–28.6283N / 94–43–54.0717W
2.19.6 Site Elevation: 1015.3 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 5E
2.19.2 Navigation Aid Identification: MCI
2.19.5 Coordinates: 39–17–7.02N / 94–44–13.42W
2.19.6 Site Elevation: 1017 ft

# General Remarks:

S RAMP CTL FREQ: 130.825

TXL W, N1, N3, M1, M3, S1, S3 WINGSPAN RESTRICTION OF 118 FT.

PPR TO PARK AT AIRLINE GATES CTC RESPECTIVE AIRLINE.

WHEN USING HIGH–SPEED EXITS C5 & C6 CONTINUE UNTIL FIRST PARALLEL TWY, THEN USE EXTREME CARE WHEN TURNING IN EXCESS OF 90 DEGREES.

NOISE ABATEMENT PROCEDURES IN EFFECT 2200–0600 WITH LANDING ON RYS 01L & 19L; TAKEOFFS ON RYS 01R & 19R.

ASSC IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

DESIGN GROUP V AND VI ACFT RQR AN ARPT ESCORT ON TWY DELTA BTN TWYS JULIET AND LIMA.

NO ACFT PARKING ON POSTAL APRON.

MIL ACFT MAY BE CHARGED RAMP/PARKING FEES.

TWY B1 BTN TWY B AND FEDEX APN COCKPIT OVER CNTRLN STEERING RQRD

N RAMP CTL FREQ: 128.975

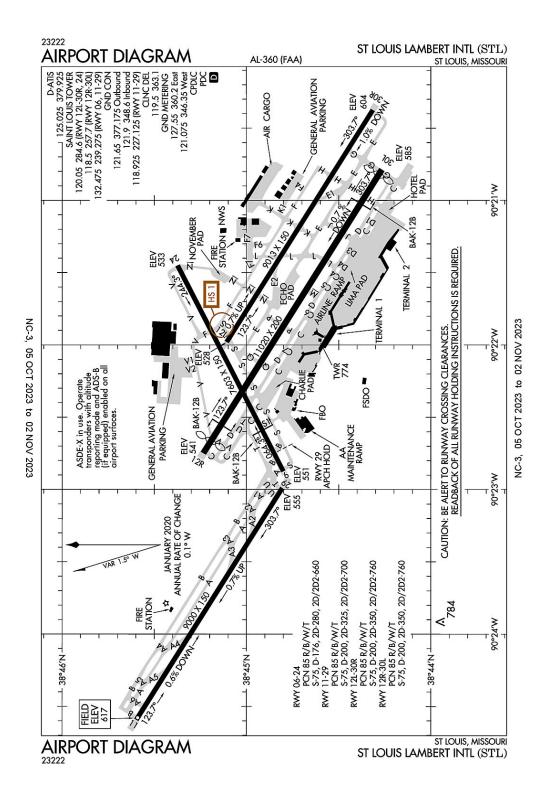
TWY L BTN TWY L1 AND TWY D WINGSPAN RESTRICTION OF 118 FT. TWY C2 BTN TWY C3 AND TWY C1 WINGSPAN RESTRICTION OF 118 FT.

WINDSHEAR ALERT SYSTEM ON ARPT.

WATERFOWL ON AND INVOF ARPT.

FLIGHT NOTIFICATION SVC (ADCUS) AVBL AT GATE 90.

St. Louis, Missouri Lambert–St. Louis International ICAO Identifier KSTL



St Louis, MO Lambert–St Louis Intl ICAO Identifier KSTL

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 38–44–55.3136N / 90–22–12.0926W 2.2.2 From City: 10 miles NW of ST LOUIS, MO 2.2.3 Elevation: 617.3 ft 2.2.5 Magnetic Variation: 1W (2020) 2.2.6 Airport Contact: MS. RHONDA HAMM–NIEBRUEGGE BOX 10212 ST LOUIS, MO 63145 (314–426–8000)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–D

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 06
2.12.2 True Bearing: 63
2.12.3 Dimensions: 7603 ft x 150 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 38–44–48.0621N / 90–22–52.3834W
2.12.6 Threshold Elevation: 550.6 ft
2.12.6 Touchdown Zone Elevation: 550.9 ft

2.12.1 Designation: 24 2.12.2 True Bearing: 243 2.12.3 Dimensions: 7603 ft x 150 ft 2.12.4 PCN: 85 R/B/W/T 2.12.5 Coordinates: 38–45–22.3829N / 90–21–27.014W 2.12.6 Threshold Elevation: 533.2 ft 2.12.6 Touchdown Zone Elevation: 533.7 ft

2.12.1 Designation: 11
2.12.2 True Bearing: 122
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 38–45–35.8282N / 90–24–35.5403W
2.12.6 Threshold Elevation: 616.8 ft
2.12.6 Touchdown Zone Elevation: 617.3 ft

2.12.1 Designation: 29

2.12.2 True Bearing: 302
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 38–44–48.4521N / 90–22–59.3854W
2.12.6 Threshold Elevation: 555.2 ft
2.12.6 Touchdown Zone Elevation: 579.6 ft
2.12.1 Designation: 30R
2.12.2 True Bearing: 302
2.12.3 Dimensions: 9013 ft x 150 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 38–44–18.9859N / 90–20–22.5077W
2.12.6 Threshold Elevation: 604.3 ft
2.12.1 Designation: 12L
2.12.2 True Bearing: 122

2.12.3 Dimensions: 9013 ft x 150 ft 2.12.4 PCN: 85 R/B/W/T 2.12.5 Coordinates: 38–45–6.4559N / 90–21–58.7582W 2.12.6 Threshold Elevation: 527.7 ft 2.12.6 Touchdown Zone Elevation: 540.6 ft

2.12.1 Designation: 12R
2.12.2 True Bearing: 122
2.12.3 Dimensions: 11020 ft x 200 ft
2.12.4 PCN: 85 R/B/W/T
2.12.5 Coordinates: 38–45–14.0539N / 90–22–44.9719W
2.12.6 Threshold Elevation: 541.3 ft
2.12.6 Touchdown Zone Elevation: 539.7 ft

2.12.1 Designation: 30L 2.12.2 True Bearing: 302 2.12.3 Dimensions: 11020 ft x 200 ft 2.12.4 PCN: 85 R/B/W/T 2.12.5 Coordinates: 38–44–16.0145N / 90–20–47.272W 2.12.6 Threshold Elevation: 585.3 ft 2.12.6 Touchdown Zone Elevation: 582.5 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 06
2.13.2 Take-off Run Available: 7603
2.13.3 Take-off Distance Available: 7603
2.13.4 Accelerate-Stop Distance Available: 7323
2.13.5 Landing Distance Available: 7323

2.13.1 Designation: 242.13.2 Take-off Run Available: 7603

2.13.3 Take-off Distance Available: 7603 2.13.4 Accelerate-Stop Distance Available: 7603 2.13.5 Landing Distance Available: 7603 2.13.1 Designation: 11 2.13.2 Take-off Run Available: 9000 2.13.3 Take-off Distance Available: 9000 2.13.4 Accelerate–Stop Distance Available: 9000 2.13.5 Landing Distance Available: 9000 2.13.1 Designation: 29 2.13.2 Take-off Run Available: 9000 2.13.3 Take-off Distance Available: 9000 2.13.4 Accelerate-Stop Distance Available: 9000 2.13.5 Landing Distance Available: 9000 2.13.1 Designation: 30R 2.13.2 Take-off Run Available: 9013 2.13.3 Take-off Distance Available: 9013 2.13.4 Accelerate-Stop Distance Available: 9013 2.13.5 Landing Distance Available: 9013 2.13.1 Designation: 12L 2.13.2 Take-off Run Available: 9013 2.13.3 Take-off Distance Available: 9013 2.13.4 Accelerate-Stop Distance Available: 8956 2.13.5 Landing Distance Available: 8956 2.13.1 Designation: 12R 2.13.2 Take-off Run Available: 11020 2.13.3 Take-off Distance Available: 11020 2.13.4 Accelerate–Stop Distance Available: 11020 2.13.5 Landing Distance Available: 10553 2.13.1 Designation: 30L 2.13.2 Take-off Run Available: 11020 2.13.3 Take-off Distance Available: 11020 2.13.4 Accelerate–Stop Distance Available: 10880 2.13.5 Landing Distance Available: 10679

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 062.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 242.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 11

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 292.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 30R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 12L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 12R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 30L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 119.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 363.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 125.0252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 379.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND METERING (WEST) 2.18.3 Channel: 121.075

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND METERING (EAST)2.18.3 Channel: 127.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND METERING (WEST)2.18.3 Channel: 346.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND METERING (EAST)2.18.3 Channel: 360.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 11/29)2.18.3 Channel: 118.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (OUTBOUND)2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (INBOUND)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 11/29)2.18.3 Channel: 227.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (INBOUND)2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (OUTBOUND)2.18.3 Channel: 377.1752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12R/30L)2.18.3 Channel: 118.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12L/30R, 24)2.18.3 Channel: 120.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 06, 11/29)2.18.3 Channel: 132.4752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 06, 11/29)

2.18.3 Channel: 239.275 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12R/30L)2.18.3 Channel: 257.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 12L/30R, 24)2.18.3 Channel: 284.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 30R)2.18.3 Channel: 278.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 30L)2.18.3 Channel: 351.92.18.5 Hours of Operation: 24

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 06. Magnetic variation: 1W
2.19.2 ILS Identification: JAK
2.19.5 Coordinates: 38-44-40.533N / 90-22-58.4278W
2.19.6 Site Elevation: 555.1 ft

2.19.1 ILS Type: Glide Slope for runway 06. Magnetic variation: 1W
2.19.2 ILS Identification: JAK
2.19.5 Coordinates: 38-44-54.582N / 90-22-40.1291W
2.19.6 Site Elevation: 537.6 ft

2.19.1 ILS Type: Localizer for runway 06. Magnetic variation: 1W
2.19.2 ILS Identification: JAK
2.19.5 Coordinates: 38-45-27.2803N / 90-21-14.821W
2.19.6 Site Elevation: 547.5 ft

2.19.1 ILS Type: DME for runway 24. Magnetic variation: 1W
2.19.2 ILS Identification: STL
2.19.5 Coordinates: 38-44-40.533N / 90-22-58.4278W
2.19.6 Site Elevation: 555.1 ft

2.19.1 ILS Type: Glide Slope for runway 24. Magnetic variation: 1W
2.19.2 ILS Identification: STL
2.19.5 Coordinates: 38-45-13.5951N / 90-21-37.573W
2.19.6 Site Elevation: 528.6 ft

2.19.1 ILS Type: Localizer for runway 24. Magnetic variation: 1W
2.19.2 ILS Identification: STL
2.19.5 Coordinates: 38-44-43.5036N / 90-23-3.7184W
2.19.6 Site Elevation: 545.7 ft

2.19.1 ILS Type: DME for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: OGZ
2.19.5 Coordinates: 38-44-36.5929N / 90-22-41.4734W
2.19.6 Site Elevation: 562.6 ft

2.19.1 ILS Type: Glide Slope for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: OGZ
2.19.5 Coordinates: 38-45-26.0348N / 90-24-25.3788W
2.19.6 Site Elevation: 598.2 ft

2.19.1 ILS Type: Inner Marker for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: OGZ
2.19.5 Coordinates: 38-45-40.3474N / 90-24-44.7374W
2.19.6 Site Elevation: 613.3 ft

2.19.1 ILS Type: Localizer for runway 11. Magnetic variation: 1W
2.19.2 ILS Identification: OGZ
2.19.5 Coordinates: 38-44-38.7168N / 90-22-39.6283W
2.19.6 Site Elevation: 544.8 ft

2.19.1 ILS Type: DME for runway 29. Magnetic variation: 1W
2.19.2 ILS Identification: RQN
2.19.5 Coordinates: 38-45-43.8773N / 90-24-45.2373W
2.19.6 Site Elevation: 628 ft

2.19.1 ILS Type: Glide Slope for runway 29. Magnetic variation: 1W
2.19.2 ILS Identification: RQN
2.19.5 Coordinates: 38-44-49.8126N / 90-23-11.853W
2.19.6 Site Elevation: 555.6 ft

2.19.1 ILS Type: Localizer for runway 29. Magnetic variation: 1W
2.19.2 ILS Identification: RQN
2.19.5 Coordinates: 38-45-41.3528N / 90-24-46.7635W
2.19.6 Site Elevation: 612.3 ft

2.19.1 ILS Type: DME for runway 12L. Magnetic variation: 1W
2.19.2 ILS Identification: LDZ
2.19.5 Coordinates: 38-44-10.3827N / 90-20-12.0493W
2.19.6 Site Elevation: 614.1 ft

2.19.1 ILS Type: Glide Slope for runway 12L. Magnetic variation: 1W
2.19.2 ILS Identification: LDZ
2.19.5 Coordinates: 38-44-58.2183N / 90-21-50.3412W
2.19.6 Site Elevation: 533.8 ft

2.19.1 ILS Type: Inner Marker for runway 12L. Magnetic variation: 1W
2.19.2 ILS Identification: LDZ
2.19.5 Coordinates: 38-45-11.9417N / 90-22-9.8845W
2.19.6 Site Elevation: 531.1 ft

2.19.1 ILS Type: Localizer for runway 12L. Magnetic variation: 1W

2.19.2 ILS Identification: LDZ 2.19.5 Coordinates: 38-44-13.6664N / 90-20-11.7277W 2.19.6 Site Elevation: 601.7 ft 2.19.1 ILS Type: DME for runway 30R. Magnetic variation: 1W 2.19.2 ILS Identification: SJW 2.19.5 Coordinates: 38-45-14.1233N / 90-22-7.9077W 2.19.6 Site Elevation: 541 ft 2.19.1 ILS Type: Glide Slope for runway 30R. Magnetic variation: 1W 2.19.2 ILS Identification: SJW 2.19.5 Coordinates: 38-44-21.9637N / 90-20-38.0149W 2.19.6 Site Elevation: 592.5 ft 2.19.1 ILS Type: Inner Marker for runway 30R. Magnetic variation: 1W 2.19.2 ILS Identification: SJW 2.19.5 Coordinates: 38-44-14.6573N / 90-20-13.7268W 2.19.6 Site Elevation: 600.9 ft 2.19.1 ILS Type: Localizer for runway 30R. Magnetic variation: 1W 2.19.2 ILS Identification: SJW 2.19.5 Coordinates: 38-45-12.1188N / 90-22-10.2369W 2.19.6 Site Elevation: 531.7 ft 2.19.1 ILS Type: DME for runway 12R. Magnetic variation: 1W 2.19.2 ILS Identification: LMR 2.19.5 Coordinates: 38-44-7.6656N / 90-20-39.8597W 2.19.6 Site Elevation: 606.5 ft 2.19.1 ILS Type: Glide Slope for runway 12R. Magnetic variation: 1W 2.19.2 ILS Identification: LMR 2.19.5 Coordinates: 38-45-8.9361N / 90-22-24.8753W 2.19.6 Site Elevation: 532 ft 2.19.1 ILS Type: Localizer for runway 12R. Magnetic variation: 1W 2.19.2 ILS Identification: LMR 2.19.5 Coordinates: 38-44-10.2182N / 90-20-35.5392W 2.19.6 Site Elevation: 595.6 ft 2.19.1 ILS Type: Glide Slope for runway 30L. Magnetic variation: 1W 2.19.2 ILS Identification: BKY 2.19.5 Coordinates: 38-44-28.0656N / 90-21-1.7914W 2.19.6 Site Elevation: 564.5 ft 2.19.1 ILS Type: Localizer for runway 30L. Magnetic variation: 1W 2.19.2 ILS Identification: BKY 2.19.5 Coordinates: 38-45-19.3841N / 90-22-55.7958W

2.19.6 Site Elevation: 550.8 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 1E 2.19.2 Navigation Aid Identification: STL

2.19.5 Coordinates: 38–51–38.6039N / 90–28–56.456W 2.19.6 Site Elevation: 445.5 ft

#### **General Remarks:**

TWY DELTA OR TAXILANE CHARLIE FM TWY SIERRA TO TWY GOLF, B–747S ARE NOT AUTH TO PASS OR BE PASSED BY B767 OR OTR LRGR ACFT OPRG ON THE PARL TWY/TAXILANE.

TWY CHARLIE, FM TWY SIERRA TO TWY QUEBEC, RSTRD TO B–767 OR SMLR ACFT (156 FT AVBL) WHEN ACFT ARE PARKED IN THE CHARLIE PAD. RSTRN IS FOR TAX ACFT, LRGR ACFT MAY BE TOWED THRU THE AREA.

TWY CHARLIE, FROM TWY CHARLIE SIX TO TWY DELTA FOUR, RSTRD TO B757–300 SERIES OR SMLR WHEN PASSING BHND ACFT THAT HAVE MADE THE INITIAL 10 FT PUSHBACK.

TWY ALPHA EAST OF TWY TANGO, TWY SIERRA AND RWY 6/24 SOUTH OF TWY BRAVO, NO ACFT OR VEHICLE OPNS WHEN ARRIVING OR DEPG RWY 11 OR ARRIVING RWY 29.

TWY LIMA, NORTH OF RWY 12L/30R, ACFT LRGR THAN A GULFSTREAM VI TAX NBND ARE PROHIBITED FM MAKING A RIGHT TURN EBND ON TWY FOXTROT.

TWY KILO 1 IS UNAVBL TO B-767 OR LRGR ACFT (WINGSPAN 118 FT OR GTR).

TWY ECHO, BTN TWY NOVEMBER AND TWY LIMA RSTRD TO B–767 OR SMLR ACFT (WINGSPAN LESS THAN 171 FT) WHEN ACFT ARE PARKED ON THE ECHO PAD.

TWY CHARLIE, FROM TWY CHARLIE SEVEN TO TWY CHARLIE SIX, RSTRD TO A B757–300 SERIES OR SMLR.

ASDE-X IN USE. OPER TRANSPONDERS WITH ALT REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL ARPT SURFACES.

TWY VICTOR 2 IS UNAVBL TO B-767 OR LRGR ACFT (WINGSPAN 118 FT OR GTR).

WAIVER TO CONDUCT SIMUL APCHS TO PARL RYS SEPARATED BY 1,300 FT IN EFCT.

WG TIP CLNC WITH GND VEH NOT ADQT ALG N SIDE OF MAIN TRML APN.

TWY NOVEMBER BTN RWY 24 AND FOXTROT, RSTRD TO ACFT WITH A WINGSPAN OF LESS THAN 79 FT (CRJ–900 OR SMLR) WHEN ACFT ARE PARKED ON THE NOVEMBER PAD. THIS AREA IS RSTRD TO ALL OPNS WHEN ACFT ARE PERFORMING END RUN–UPS IN THE NOVEMBER PAD.

TWY VICTOR, UNDERLYING THE RWY 12L FNA CRS, IS RSTRD TO ACFT WITH A TAIL HGT OF 25 FT OR LESS (CRJ–700 OR SMLR) WHEN ACFT ARE LNDG ON RWY 12L.

TWY CHARLIE, FM TWY SIERRA TO TWY CHARLIE SEVEN, RSTRD TO B–767 OR SMLR ACFT (156 FT AVBL) WHEN ACFT ARE PARKED IN THE CHARLIE PAD. RSTRN IS FOR TAX ACFT, LRGR ACFT MAY BE TOWED THRU AREA.

TWY CHARLIE, EAST OF TWY DELTA ONE TO THE AER 30L, RSTRD TO B–737 OR SMLR ACFT (WINGSPAN LESS THAN 118 FT) WHEN ACFT ARE PARKED ON THE HOTEL PAD.

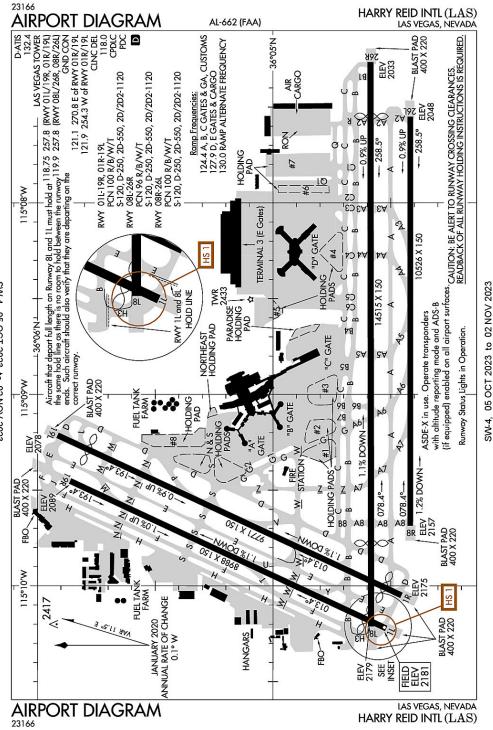
TWY CHARLIE, FROM TWY PAPA TO TWY CHARLIE SEVEN, RSTRD TO A B757-300 SERIES OR SMLR.

A–GEAR: A–G ARE KEPT IN RECESSED POSN TIL REQ FOR USE. TWR MUST BE NOTIFIED AT LEAST 5 SEC PRIOR TO ENGAGEMENT SO THAT CABLE MAY BE RAISED.

TWY ECHO, BTN TWY PAPA AND TWY LIMA, RSTRD TO B–767 OR SMLR ACFT (WINGSPAN LESS THAN 171 FT) WHEN ACFT ARE PARKED ON THE ECHO PAD.

TWY VICTOR 2, B–737 (WINGSPAN GTR THAN 79 FT BUT LESS THAN 118 FT) MUST PERFORM JUDGMENTAL OVERSTEERING INSTEAD OF COCKPIT OVR CNTRLN STEERING WHEN TAX.





SW-4, 05 OCT 2023 to 02 NOV 2023

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 36–4–48.158N / 115–9–8.045W
2.2.2 From City: 5 miles S of LAS VEGAS, NV
2.2.3 Elevation: 2181.2 ft
2.2.5 Magnetic Variation: 11E (2020)
2.2.6 Airport Contact: ROSEMARY A. VASSILIADIS 5757 WAYNE NEWTON BLVD LAS VEGAS, NV 89119 (702–261–5211)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,100LL,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 01L 2.12.2 True Bearing: 25 2.12.3 Dimensions: 8988 ft x 150 ft 2.12.4 PCN: 100 R/B/W/T 2.12.5 Coordinates: 36–4–31.1684N / 115–10–13.3148W 2.12.6 Threshold Elevation: 2181.2 ft 2.12.6 Touchdown Zone Elevation: 2176.1 ft

2.12.1 Designation: 19R 2.12.2 True Bearing: 205 2.12.3 Dimensions: 8988 ft x 150 ft 2.12.4 PCN: 100 R/B/W/T 2.12.5 Coordinates: 36–5–51.7658N / 115–9–27.1851W 2.12.6 Threshold Elevation: 2088.5 ft 2.12.6 Touchdown Zone Elevation: 2116.6 ft

2.12.1 Designation: 01R 2.12.2 True Bearing: 25 2.12.3 Dimensions: 9771 ft x 150 ft 2.12.4 PCN: 100 R/B/W/T 2.12.5 Coordinates: 36–4–27.264N / 115–10–2.9581W 2.12.6 Threshold Elevation: 2175.1 ft 2.12.6 Touchdown Zone Elevation: 2169.8 ft 2.12.1 Designation: 19L 2.12.2 True Bearing: 205 2.12.3 Dimensions: 9771 ft x 150 ft 2.12.4 PCN: 100 R/B/W/T 2.12.5 Coordinates: 36-5-54.8814N / 115-9-12.8055W 2.12.6 Threshold Elevation: 2077.6 ft 2.12.6 Touchdown Zone Elevation: 2112.1 ft 2.12.1 Designation: 08L 2.12.2 True Bearing: 90 2.12.3 Dimensions: 14515 ft x 150 ft 2.12.4 PCN: 96 R/B/W/T 2.12.5 Coordinates: 36-4-34.9211N / 115-10-12.6889W 2.12.6 Threshold Elevation: 2179.2 ft 2.12.6 Touchdown Zone Elevation: 2154.9 ft 2.12.1 Designation: 26R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 14515 ft x 150 ft 2.12.4 PCN: 96 R/B/W/T 2.12.5 Coordinates: 36-4-35.0633N / 115-7-15.8989W 2.12.6 Threshold Elevation: 2033 ft 2.12.6 Touchdown Zone Elevation: 2067.1 ft 2.12.1 Designation: 08R 2.12.2 True Bearing: 90 2.12.3 Dimensions: 10526 ft x 150 ft 2.12.4 PCN: 100 R/B/W/T 2.12.5 Coordinates: 36-4-25.0637N / 115-9-41.1617W 2.12.6 Threshold Elevation: 2156.9 ft 2.12.6 Touchdown Zone Elevation: 2156.9 ft

2.12.1 Designation: 26L 2.12.2 True Bearing: 270 2.12.3 Dimensions: 10526 ft x 150 ft 2.12.4 PCN: 100 R/B/W/T 2.12.5 Coordinates: 36–4–25.1671N / 115–7–32.9665W 2.12.6 Threshold Elevation: 2048.4 ft 2.12.6 Touchdown Zone Elevation: 2069 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 01L
2.13.2 Take-off Run Available: 8988
2.13.3 Take-off Distance Available: 8988
2.13.4 Accelerate-Stop Distance Available: 8988
2.13.5 Landing Distance Available: 8401

2.13.1 Designation: 19R2.13.2 Take-off Run Available: 8988

2.13.3 Take-off Distance Available: 9400 2.13.4 Accelerate-Stop Distance Available: 8417 2.13.5 Landing Distance Available: 8417 2.13.1 Designation: 01R 2.13.2 Take-off Run Available: 9771 2.13.3 Take-off Distance Available: 10168 2.13.4 Accelerate–Stop Distance Available: 9276 2.13.5 Landing Distance Available: 8785 2.13.1 Designation: 19L 2.13.2 Take-off Run Available: 9771 2.13.3 Take-off Distance Available: 10171 2.13.4 Accelerate-Stop Distance Available: 9686 2.13.5 Landing Distance Available: 8808 2.13.1 Designation: 08L 2.13.2 Take-off Run Available: 14515 2.13.3 Take-off Distance Available: 15099 2.13.4 Accelerate-Stop Distance Available: 14099 2.13.5 Landing Distance Available: 11960 2.13.1 Designation: 26R 2.13.2 Take-off Run Available: 14515 2.13.3 Take-off Distance Available: 15037 2.13.4 Accelerate–Stop Distance Available: 14037 2.13.5 Landing Distance Available: 12638 2.13.1 Designation: 08R 2.13.2 Take-off Run Available: 10526 2.13.3 Take-off Distance Available: 10526 2.13.4 Accelerate-Stop Distance Available: 10526 2.13.5 Landing Distance Available: 10526 2.13.1 Designation: 26L 2.13.2 Take-off Run Available: 10526 2.13.3 Take-off Distance Available: 10526 2.13.4 Accelerate–Stop Distance Available: 10526 2.13.5 Landing Distance Available: 10526

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 01L2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 19R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 01R

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 19L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26R2.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 08R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 1182.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR/DEP)2.18.3 Channel: 132.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (E OF RWY 01R/19L)2.18.3 Channel: 121.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (W OF RWY 01R/19L)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (W OF RWY 01L/19R) 2.18.3 Channel: 254.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (E OF RWY 01R/19L)2.18.3 Channel: 270.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 01L/19R, 01R/19L)2.18.3 Channel: 118.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08L/26R, 08R/26L)2.18.3 Channel: 119.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (A, B, C GATES & GA, CUSTOMS.)2.18.3 Channel: 124.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (D, E GATES & CARGO.)2.18.3 Channel: 127.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (RAMP ALTERNATE FREQUENCY)2.18.3 Channel: 1302.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 01L. Magnetic variation: 11E
2.19.2 ILS Identification: CUA
2.19.5 Coordinates: 36–6–1.7244N / 115–9–25.0625W
2.19.6 Site Elevation: 2089.4 ft

2.19.1 ILS Type: Glide Slope for runway 01L. Magnetic variation: 11E
2.19.2 ILS Identification: CUA
2.19.5 Coordinates: 36-4-49.142N / 115-10-6.5151W
2.19.6 Site Elevation: 2158.4 ft

2.19.1 ILS Type: Localizer for runway 01L. Magnetic variation: 11E
2.19.2 ILS Identification: CUA
2.19.5 Coordinates: 36–6–0.8259N / 115–9–22W
2.19.6 Site Elevation: 2078.9 ft

2.19.1 ILS Type: DME for runway 26R. Magnetic variation: 11E
2.19.2 ILS Identification: LAS
2.19.5 Coordinates: 36–4–30.5228N / 115–10–19.1659W
2.19.6 Site Elevation: 2201.5 ft

2.19.1 ILS Type: Glide Slope for runway 26R. Magnetic variation: 11E
2.19.2 ILS Identification: LAS
2.19.5 Coordinates: 36–4–32.0826N / 115–7–46.6759W
2.19.6 Site Elevation: 2046.5 ft

2.19.1 ILS Type: Localizer for runway 26R. Magnetic variation: 11E
2.19.2 ILS Identification: LAS
2.19.5 Coordinates: 36-4-34.9114N / 115-10-19.1797W
2.19.6 Site Elevation: 2186.3 ft

2.19.1 ILS Type: DME for runway 26L. Magnetic variation: 11E
2.19.2 ILS Identification: RLE
2.19.5 Coordinates: 36–4–22.2517N / 115–9–53.2672W
2.19.6 Site Elevation: 2182.2 ft

2.19.1 ILS Type: Glide Slope for runway 26L. Magnetic variation: 11E
2.19.2 ILS Identification: RLE
2.19.5 Coordinates: 36-4-21.996N / 115-7-46.6672W
2.19.6 Site Elevation: 2050.4 ft

2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 11E
2.19.2 ILS Identification: RLE
2.19.5 Coordinates: 36-4-25.0515N / 115-9-53.3413W
2.19.6 Site Elevation: 2168.2 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 15E
2.19.2 Navigation Aid Identification: LAS
2.19.5 Coordinates: 36–4–46.9253N / 115–9–35.2725W
2.19.6 Site Elevation: 2136 ft

#### **General Remarks:**

ACFT OPER NEAR THE INT OF TWYS S, D, G AND THE N END OF TWY Z SHOULD BE ALERT AS THERE ARE CLOSELY ALIGNED TWY CNTRLN AND RADIUS TURNS.

ACFT WITH WINGSPAN GTR THAN 135 FT PPR FM DEPT OF AVN TO USE TWY H.

ACFT THAT DEP FULL LENGTH OF RWYS 01L AND 08L MUST HOLD AT THE SAME HOLD LINE AS THERE IS NO ROOM TO HOLD BTN THE RWY ENDS AND SUCH ACFT SHOULD VERIFY THAT THEY ARE ON THE CORRECT RWY.

WHEN SPL EVENT PRKG PPR PROGRAM NOTAM IS ACTV, TSNT ACFT OPERS NOT PERM BASED NEED TO OBTAIN A PPR NR FM AN FBO FOR EA LDG. PPR APPVL & CONFIRMATION NRS CAN BE OBTAINED FM THE SEL FBO AT 702–261–7775. PPR CONFIRMATION NRS SHOULD BE ENTERED IN THE RMKS SECTION OF EACH FLT PLAN.

GA CUST AND IMG LCTD WEST SIDE OF AFLD BTWN FBO'S.

ACFT TAX WB ON TWY B NEAR TWY E USE CARE NOT TO ENTER THE RWY ON TWY Y, ACFT TAX WB ON TWY W NEAR TWY E USE CARE NOT TO ENTER THE RWY ON TWY U.

ACFT MAY EXPERIENCE REFLECTION OF SUN FM GLASS HOTELS LCTD NW OF ARPT. REFLECTION MAY OCCUR AT VARIOUS ALTS, HDGS, & DSTCS FM ARPT.

ALL NON-STD RWY OPNS PPR FM DEPT OF AVN.

RWY STS LGTS ARE IN OPN.

ACFT DEPG RWY 19R USE MINIMAL PWR UNTIL PASSING THE RWY THLD. RWY 19R THLD HAS STD RWY MARKINGS AND IS 780 FT S OF THE BLAST PAD.

PLA AUZD BTN 0200 & 0600.

LGTD GOLF RANGE 1400 FT S OF RWYS 01L/19R AND 01R/19L.

RWY 08L 589 FT CWY; RWY 26R 645 FT CWY.

ALL ACFT CTC RAMP CTL ON FREQ 124.4 FOR OPS AT A, B, C GATES, AND GA, CUSTOMS; CTC RAMP CTL FREQ 127.9 FOR OPNS AT D AND E GATES AND CARGO RAMP PRIOR TO ENTERING RAMP OR PUSHING BACK FM GATE OR PRKG SPOT. RAMP CTL OPR HRS 0530–0100. CTC ATC FM 0100–0530 FOR RAMP OPS.

GA CBP RSVNS ARE RQRD TO BE SMTD A MIN OF 12 HOURS IN ADVN (OTHER CONDS APPLY). RSVNS MUST BE MADE ONLINE AT WWW.MCCARRAN.COM/GACBP . QNS CAN BE DCTD TO CBP559@MCCARRAN.COM.

LRG NR OF BIRDS AND BATS INVOF OF ARPT BTWN SS AND SR.

TBJT DEPS NOT PMTD ON RWY 01R/19L OR RWY 01L/19R 2000-0800. XCPNS FOR WX OR OPNL NECESSITY.

EXTSV GLDR/SOARING OPNS WKENDS & HOLS; SR–SS; LAS R187/020; ALTS UP TO BUT NOT INCLG FL180. GLDRS RMN CLEAR OF THE TCA BUT OTHERWISE OPR WI THE ENTIRE SW QUAD OF THE TCA VEIL.

(E98) PLUS 64 SHELTERS & 24 SHEDS.

TIEDOWN FEE.

GA PRKG VERY LTD. FOR PRKG AVAILABILITY CTC EITHER FBO (702) 736–1830 OR (702) 739–1100.

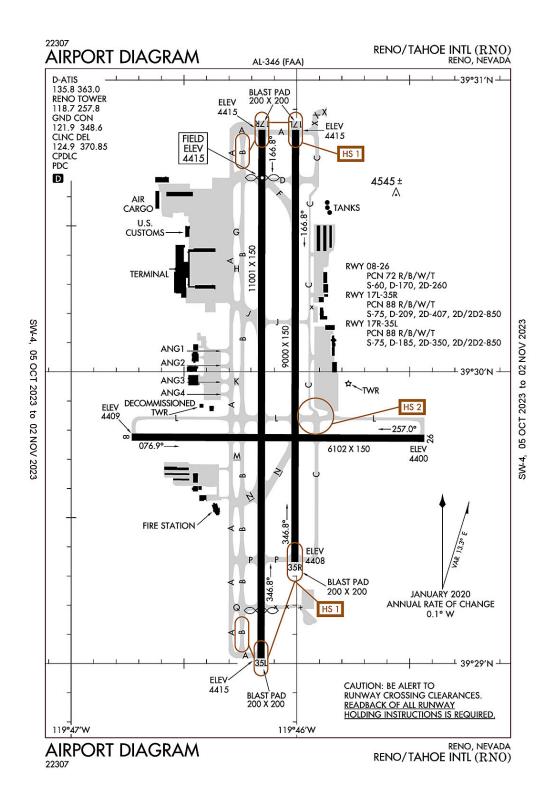
ACFT USING FULL LEN DEP ON RWY 08L USE MINIMAL PWR TIL PASSING THE PWR–UP POINT ON RWY. PWR–UP POINT IS 348 FT EAST OF BLAST PAD AND MKD WITH SIGN AND STD MARKINGS FOR BGNG OF RWY.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

NMRS HOP ON WEST SIDE OF ARPT.

CTN PAJA INVOF ARPT.

Reno, Nevada Reno/Tahoe International ICAO Identifier KRNO



### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–29–56.8N / 119–46–5.2W 2.2.2 From City: 3 miles SE of RENO, NV 2.2.3 Elevation: 4414.9 ft 2.2.5 Magnetic Variation: 13E (2020) 2.2.6 Airport Contact: DAREN GRIFFIN, A.A.E. P O BOX 12490 RENO, NV 89510 (775–328–6550) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A1+2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 08
2.12.2 True Bearing: 90
2.12.3 Dimensions: 6102 ft x 150 ft
2.12.4 PCN: 72 R/B/W/T
2.12.5 Coordinates: 39–29–46.6299N / 119–46–43.822W
2.12.6 Threshold Elevation: 4409.2 ft
2.12.6 Touchdown Zone Elevation: 4409.3 ft

2.12.1 Designation: 26 2.12.2 True Bearing: 270 2.12.3 Dimensions: 6102 ft x 150 ft 2.12.4 PCN: 72 R/B/W/T 2.12.5 Coordinates: 39–29–46.3739N / 119–45–25.9978W 2.12.6 Threshold Elevation: 4399.6 ft 2.12.6 Touchdown Zone Elevation: 4401.8 ft

2.12.1 Designation: 17L
2.12.2 True Bearing: 180
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 88 R/B/W/T
2.12.5 Coordinates: 39–30–49.8258N / 119–46–0.266W
2.12.6 Threshold Elevation: 4414.8 ft
2.12.6 Touchdown Zone Elevation: 4414.8 ft

2.12.1 Designation: 35R
2.12.2 True Bearing: 0
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 88 R/B/W/T
2.12.5 Coordinates: 39–29–20.8949N / 119–46–0.4971W
2.12.6 Threshold Elevation: 4408.3 ft
2.12.6 Touchdown Zone Elevation: 4408.3 ft

2.12.1 Designation: 17R
2.12.2 True Bearing: 180
2.12.3 Dimensions: 11001 ft x 150 ft
2.12.4 PCN: 88 R/B/W/T
2.12.5 Coordinates: 39–30–49.8381N / 119–46–9.1937W
2.12.6 Threshold Elevation: 4414.8 ft
2.12.6 Touchdown Zone Elevation: 4414.8 ft

2.12.1 Designation: 35L 2.12.2 True Bearing: 0 2.12.3 Dimensions: 11001 ft x 150 ft 2.12.4 PCN: 88 R/B/W/T 2.12.5 Coordinates: 39–29–1.1337N / 119–46–9.475W 2.12.6 Threshold Elevation: 4414.5 ft 2.12.6 Touchdown Zone Elevation: 4410.2 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 08
2.13.2 Take-off Run Available: 5854
2.13.3 Take-off Distance Available: 5854
2.13.4 Accelerate-Stop Distance Available: 6102
2.13.5 Landing Distance Available: 5854

2.13.1 Designation: 26
2.13.2 Take-off Run Available: 6102
2.13.3 Take-off Distance Available: 6102
2.13.4 Accelerate-Stop Distance Available: 6102
2.13.5 Landing Distance Available: 6102

2.13.1 Designation: 17L
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 9000
2.13.1 Designation: 35P

2.13.1 Designation: 35R

- 2.13.2 Take-off Run Available: 9000
- 2.13.3 Take–off Distance Available: 9000

2.13.4 Accelerate–Stop Distance Available: 9000

2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 17R
2.13.2 Take-off Run Available: 11001
2.13.3 Take-off Distance Available: 11001
2.13.4 Accelerate-Stop Distance Available: 11001
2.13.5 Landing Distance Available: 10001

2.13.1 Designation: 35L
2.13.2 Take-off Run Available: 11001
2.13.3 Take-off Distance Available: 11001
2.13.4 Accelerate-Stop Distance Available: 11001
2.13.5 Landing Distance Available: 10011

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 082.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 262.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 17L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 17R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG COMD POST (CALLSIGN-ROLLER OPS.)2.18.3 Channel: 378.42.18.5 Hours of Operation:

2.18.1 Service Designation: ANG COMD POST (CALLSIGN-ROLLER OPS.)2.18.3 Channel: 87802.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 2802.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS (CALLSIGN-ROLLER OPS.) 2.18.3 Channel: 378.4 2.18.5 Hours of Operation: 2.18.1 Service Designation: ANG OPS (CALLSIGN-ROLLER OPS.) 2.18.3 Channel: 8780 2.18.5 Hours of Operation: 2.18.1 Service Designation: CD/P 2.18.3 Channel: 124.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CD/P 2.18.3 Channel: 370.85 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: D-ATIS 2.18.3 Channel: 135.8 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: D-ATIS 2.18.3 Channel: 363 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: EMERG 2.18.3 Channel: 121.5 2.18.5 Hours of Operation: 2.18.1 Service Designation: EMERG 2.18.3 Channel: 243 2.18.5 Hours of Operation: 2.18.1 Service Designation: GND/P 2.18.3 Channel: 121.9 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: GND/P 2.18.3 Channel: 348.6 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P 2.18.3 Channel: 118.7 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: LCL/P 2.18.3 Channel: 257.8 2.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 17R. Magnetic variation: 13E 2.19.2 ILS Identification: RNO 2.19.5 Coordinates: 39–28–48.3183N / 119–46–6.1675W 2.19.6 Site Elevation: 4433.4 ft

2.19.1 ILS Type: Glide Slope for runway 17R. Magnetic variation: 13E
2.19.2 ILS Identification: RNO
2.19.5 Coordinates: 39–30–28.0958N / 119–46–5.6655W
2.19.6 Site Elevation: 4408.4 ft

2.19.1 ILS Type: Localizer for runway 17R. Magnetic variation: 13E
2.19.2 ILS Identification: RNO
2.19.5 Coordinates: 39–28–49.5342N / 119–46–9.505W
2.19.6 Site Elevation: 4419.7 ft

2.19.1 ILS Type: DME for runway 35L. Magnetic variation: 13E 2.19.2 ILS Identification: AGY 2.19.5 Coordinates: 39–31–0.2724N / 119–46–12.5676W 2.19.6 Site Elevation: 4434.8 ft

2.19.1 ILS Type: Glide Slope for runway 35L. Magnetic variation: 13E
2.19.2 ILS Identification: AGY
2.19.5 Coordinates: 39–29–19.6039N / 119–46–5.3446W
2.19.6 Site Elevation: 4403.3 ft

2.19.1 ILS Type: Localizer for runway 35L. Magnetic variation: 13E
2.19.2 ILS Identification: AGY
2.19.5 Coordinates: 39–30–59.9826N / 119–46–9.1647W
2.19.6 Site Elevation: 4433.1 ft

### General Remarks:

ANG: APN HAS 22 FT X 6 FT ACFT GND EQUIP (AGE) BOXES LCTD TO THE EAST OF EA PKG SPOT.

INTENSIVE GLIDER ACTIVITY INVOF ARPT AND SURROUNDING AREAS UP TO 18000 FT.

ACFT OVR 12500 LBS: WRITTEN PPR FOR TRNG FLIGHTS; FOR MORE INFO CTC ARPT OPS 1-775-328-6490.

MIL ACFT: TSNT ACFT EXECUTE STRAIGHT–IN FULL STOP APCH. OVERHEAD PAT NOT AUTH FOR TSNT ACFT.

ANG: PPR 24 HR PN RQRD.

NOISE SENSITIVE AREA ALL QUADS. PILOTS OF TBJT ACFT USE RCMDD NOISE ABATEMENT PROCS; AVBL ON REQ.

TWY C BTN TWY L & TWY D RSTRD TO ACFT 100000 LBS OR LESS.

PRESIDENT / CEO OF RENO-TAHOE ARPT AUTHORITY–DARREN GRIFFIN, CARRIE GUEDEA, AMGR (775) 328–6446.

TWY A BETWEEN NORTH TWY B AND TWY D CLSD TO ACFT WITH WINGSPAN GREATER THAN 149 FT.

MIL ACFT: NOISE ABTMT CRITICAL TERMINATE AFTERBURNER ASAP THEN CLIMB TO 6500 FT MSL ASAP.

TWY M CLSD TO AIR CARRIER ACFT.

ALL COMMERCIAL AIRCRAFT CONTACT GROUND CONTROL FOR ADVISORIES PRIOR TO PUSH BACK ON THE TERMINAL RAMP.

NOISE NOTE CONT: PILOTS OF NON–TBJT ACFT USE BEST ABATEMENT PROCS AND SETTINGS. AVOID AS MUCH AS FEASIBLE FLYING OVER POPULATED AREAS.

TWY J EAST OF RY 16L/34R CLSD TO AIR CARRIER ACFT.

ANG: COMSEC MTRL STORAGE AVBL WITH PRIOR CDN AT 152 CF/SCXS, DSN 830-4798.

24 HRS PPR FOR TSNT ACFT PARKING WITH WINGSPANS GREATER THAN 75 FT.

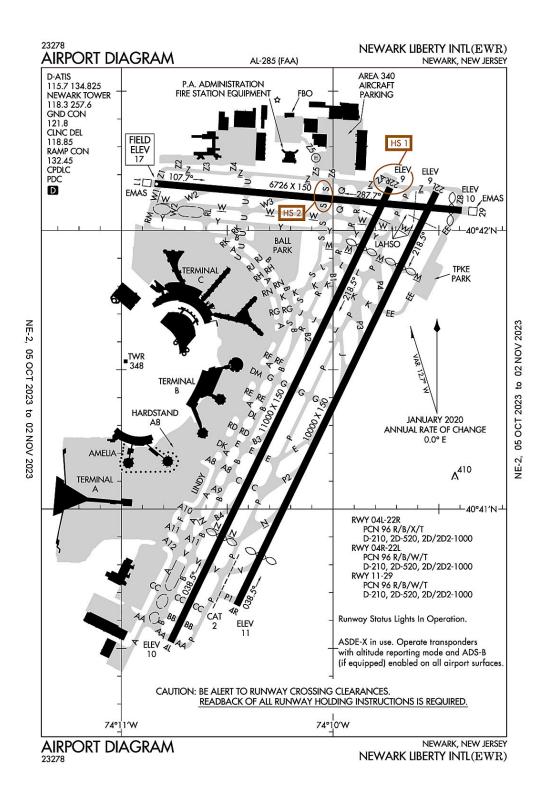
WATERFOWL ALL QUADRANTS ALL SEASONS. CONCENTRATED NW OF RWY 17R AND EAST OF RWY 17L.

GLIDER/SOARING OPER 30–50 MILES SOUTH OF ARPT DURING VFR WEATHER & MOUNTAIN WAVE WIND CONDITIONS 1100 TO SS.

ANG: ANG OPS 1430–2359Z++ MON–FRI EXC HOL AND SKED DAYS OFF; OTR TIMES BY NOTAM; DSN 830–4709 OR C775–788–4709.

TWY C BTN TWY L AND TWY D CLSD TO AIR CARRIER ACFT.

# Newark, New Jersey Newark Liberty International ICAO Identifier KEWR



### Newark, NJ Newark Liberty Intl ICAO Identifier KEWR

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 40–41–32.9274N / 74–10–7.2724W 2.2.2 From City: 3 miles S of NEWARK, NJ 2.2.3 Elevation: 17.4 ft 2.2.5 Magnetic Variation: 13W (1985) 2.2.6 Airport Contact: SARAH K. MCKEON BUILDING #1– CONRAD ROAD NEWARK, NJ 7114 (973–961–6161) 2.2.7 Traffic: IFR/VFR

### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 04L
2.12.2 True Bearing: 26
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 96 R/B/X/T
2.12.5 Coordinates: 40–40–31.3716N / 74–10–46.0209W
2.12.6 Threshold Elevation: 10.1 ft
2.12.6 Touchdown Zone Elevation: 10.4 ft

2.12.1 Designation: 22R
2.12.2 True Bearing: 206
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 96 R/B/X/T
2.12.5 Coordinates: 40–42–9.2091N / 74–9–43.8255W
2.12.6 Threshold Elevation: 8.9 ft
2.12.6 Touchdown Zone Elevation: 10.4 ft

2.12.1 Designation: 22L

2.12.2 True Bearing: 206
2.12.3 Dimensions: 10000 ft x 150 ft
2.12.4 PCN: 96 R/B/W/T
2.12.5 Coordinates: 40-42-8.2438N / 74-9-30.7308W
2.12.6 Threshold Elevation: 9.4 ft
2.12.6 Touchdown Zone Elevation: 10.7 ft
2.12.1 Designation: 04R

2.12.2 True Bearing: 26 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 96 R/B/W/T 2.12.5 Coordinates: 40–40–39.2984N / 74–10–27.2835W 2.12.6 Threshold Elevation: 11.1 ft 2.12.6 Touchdown Zone Elevation: 11.3 ft

2.12.1 Designation: 29
2.12.2 True Bearing: 275
2.12.3 Dimensions: 6726 ft x 150 ft
2.12.4 PCN: 96 R/B/W/T
2.12.5 Coordinates: 40–42–4.3181N / 74–9–23.5515W
2.12.6 Threshold Elevation: 9.7 ft
2.12.6 Touchdown Zone Elevation: 9.8 ft

2.12.1 Designation: 11
2.12.2 True Bearing: 95
2.12.3 Dimensions: 6726 ft x 150 ft
2.12.4 PCN: 96 R/B/W/T
2.12.5 Coordinates: 40–42–10.0955N / 74–10–50.5467W
2.12.6 Threshold Elevation: 17.4 ft
2.12.6 Touchdown Zone Elevation: 17.4 ft

2.12.1 Designation: H1
2.12.2 True Bearing:
2.12.3 Dimensions: 54 ft x 54 ft
2.12.4 PCN:
2.12.5 Coordinates: 40-42-15.85N / 74-10-5W
2.12.6 Threshold Elevation: 8 ft
2.12.6 Touchdown Zone Elevation: ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 04L2.13.2 Take-off Run Available: 110002.13.3 Take-off Distance Available: 11000

2.13.4 Accelerate–Stop Distance Available: 110002.13.5 Landing Distance Available: 8460

2.13.1 Designation: 22R

2.13.2 Take-off Run Available: 110002.13.3 Take-off Distance Available: 110002.13.4 Accelerate-Stop Distance Available: 110002.13.5 Landing Distance Available: 9560

2.13.1 Designation: 22L

2.13.2 Take-off Run Available: 10000

2.13.3 Take-off Distance Available: 10000

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 8207

2.13.1 Designation: 04R

2.13.2 Take-off Run Available: 10000

2.13.3 Take-off Distance Available: 10000

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 8810

2.13.1 Designation: 29
2.13.2 Take-off Run Available: 6726
2.13.3 Take-off Distance Available: 6726
2.13.4 Accelerate-Stop Distance Available: 6726
2.13.5 Landing Distance Available: 6502

2.13.1 Designation: 11
2.13.2 Take-off Run Available: 6726
2.13.3 Take-off Distance Available: 6726
2.13.4 Accelerate-Stop Distance Available: 6726
2.13.5 Landing Distance Available: 6726

2.13.1 Designation: H1

2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 04L2.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 04R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 292.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 112.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: H12.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 118.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (WITHIN 6.5 NM ARE TWR CONTROLLED FREQS)2.18.3 Channel: 127.852.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (WITHIN 6.5 NM ARE TWR CONTROLLED FREQS)2.18.3 Channel: 257.62.18.5 Hours of Operation:

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 115.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS

2.18.3 Channel: 134.8252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (WITHIN 6.5 NM ARE TWR CONTROLLED FREQS)2.18.3 Channel: 257.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/S2.18.3 Channel: 134.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL2.18.3 Channel: 132.452.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 04L. Magnetic variation: 13W
2.19.2 ILS Identification: EWR
2.19.5 Coordinates: 40-42-15.686N / 74-9-33.736W
2.19.6 Site Elevation: 34.3 ft

2.19.1 ILS Type: Glide Slope for runway 04L. Magnetic variation: 13W2.19.2 ILS Identification: EWR

2.19.5 Coordinates: 40–41–2.167N / 74–10–22.759W 2.19.6 Site Elevation: 7.4 ft

2.19.1 ILS Type: Localizer for runway 04L. Magnetic variation: 13W
2.19.2 ILS Identification: EWR
2.19.5 Coordinates: 40-42-18.192N / 74-9-38.112W
2.19.6 Site Elevation: 8.7 ft

2.19.1 ILS Type: DME for runway 22R. Magnetic variation: 13W
2.19.2 ILS Identification: JNN
2.19.5 Coordinates: 40-42-15.686N / 74-9-33.736W
2.19.6 Site Elevation: 34.3 ft

2.19.1 ILS Type: Glide Slope for runway 22R. Magnetic variation: 13W
2.19.2 ILS Identification: JNN
2.19.5 Coordinates: 40-41-47.5592N / 74-9-53.883W
2.19.6 Site Elevation: 8 ft

2.19.1 ILS Type: Localizer for runway 22R. Magnetic variation: 13W
2.19.2 ILS Identification: JNN
2.19.5 Coordinates: 40–40–22.392N / 74–10–51.726W
2.19.6 Site Elevation: 9.1 ft

2.19.1 ILS Type: DME for runway 04R. Magnetic variation: 13W
2.19.2 ILS Identification: EZA
2.19.5 Coordinates: 40-41-43.5471N / 74-9-41.6275W
2.19.6 Site Elevation: 33.5 ft

2.19.1 ILS Type: Glide Slope for runway 04R. Magnetic variation: 13W
2.19.2 ILS Identification: EZA
2.19.5 Coordinates: 40-40-57.598N / 74-10-9.8776W
2.19.6 Site Elevation: 6 ft

2.19.1 ILS Type: Localizer for runway 04R. Magnetic variation: 13W
2.19.2 ILS Identification: EZA
2.19.5 Coordinates: 40-42-15.9432N / 74-9-25.8352W
2.19.6 Site Elevation: 8.1 ft

2.19.1 ILS Type: DME for runway 22L. Magnetic variation: 13W
2.19.2 ILS Identification: LSQ
2.19.5 Coordinates: 40–41–43.5471N / 74–9–41.6275W
2.19.6 Site Elevation: 33.5 ft

2.19.1 ILS Type: Glide Slope for runway 22L. Magnetic variation: 13W

2.19.2 ILS Identification: LSQ 2.19.5 Coordinates: 40–41–43.6732N / 74–9–41.7368W 2.19.6 Site Elevation: 7.4 ft

2.19.1 ILS Type: Localizer for runway 22L. Magnetic variation: 13W
2.19.2 ILS Identification: LSQ
2.19.5 Coordinates: 40-40-28.9529N / 74-10-33.8654W
2.19.6 Site Elevation: 9.4 ft

2.19.1 ILS Type: DME for runway 11. Magnetic variation: 13W
2.19.2 ILS Identification: GPR
2.19.5 Coordinates: 40-42-9.5406N / 74-10-4.0694W
2.19.6 Site Elevation: 7.1 ft

2.19.1 ILS Type: Glide Slope for runway 11. Magnetic variation: 13W
2.19.2 ILS Identification: GPR
2.19.5 Coordinates: 40–42–10.837N / 74–10–35.03W
2.19.6 Site Elevation: 9.5 ft

2.19.1 ILS Type: Localizer for runway 11. Magnetic variation: 13W
2.19.2 ILS Identification: GPR
2.19.5 Coordinates: 40-42-9.2938N / 74-10-4.9852W
2.19.6 Site Elevation: 7 ft

2.19.1 Navigation Aid Type: DME. Magnetic variation:
2.19.2 Navigation Aid Identification: EWR
2.19.5 Coordinates: 40-40-27.64N / 74-10-40.68W
2.19.6 Site Elevation: 9 ft

2.19.1 Navigation Aid Type: FAN MARKER. Magnetic variation: 11W
2.19.2 Navigation Aid Identification: EWR
2.19.5 Coordinates: 40-42-12.1824N / 74-11-14.7211W
2.19.6 Site Elevation: 9.5 ft

#### **General Remarks:** DURNG ATC ZERO EVENTS; ARPT OPS WILL MNT 118.3 AND PROVIDE EMERG NOTIFICATIONS TO ARFF

HIGH VOLUME OF LOW LEVEL HEL TFC ARR AND DEP HELO KEARNY HELI (65NJ) LCTD 3.5 MILES NE OF ARPT.

TWY Z5 CLSD TO ACFT WITH WINGSPANS IN EXCESS OF 118 FT.

TWY Z BTN TWY Z2 & Z4 CLSD TO ACFT WITH WINGSPANS IN EXCESS OF 171 FT.

TWY A11 W OF TWY A ACFT SPD RSTR OF 17 KTS/20 MPH MAX FOR ALL ACFT WITH WINGSPANS IN EXCESS OF 171 FT.

ADG IV ACFT RSTR FM PSG TWY Z3 ON Z

TWY EE BTN RWY 4R–22L AND RWY 11–29 CLSD TO AFCT WITH WINGSPANS IN EXCESS OF 171 FT.

NOISE RSTR CALL 212–435–3784 DRG NML BUS HRS.

FLOCKS OF BIRDS ON & INVOF ARPT.

TWY A BTN TWY AA AND RAMP CLSD TO ACFT WITH WINGSPANS IN EXCESS OF 171 FT.

RWY STATUS LIGHTS IN OPR

TWY Y BTN RM AND TWY U, SPEED RESTRICTION OF 17KT (20MPH).

PARA–SAIL & BANNER TOWING OPS 1000 FT & BLO IN UPPER & LOWER NY BAYS INCLUDING ROCKAWAY INLET INDEF.

CPDLC DEPARTURE CLEARANCE SERVICE AVAILABLE.

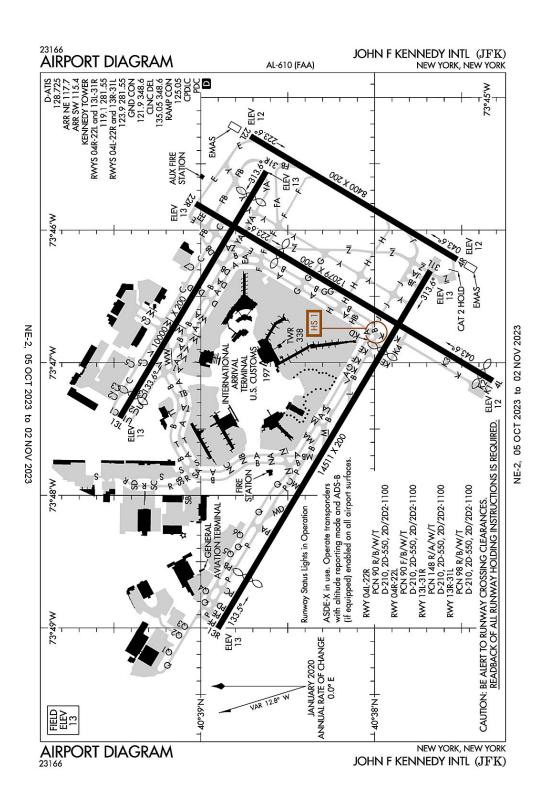
ACFT WITH WINGSPANS IN EXCESS OF 118 FEET PROHIBITED FROM TURNING S ON TWY R FROM TWY B1.

ALL TWYS SURROUNDING "BALLPARK" PRKG AREA (TWY Y BTN TWY S AND TWY U, TWY S BTN TWY Y AND TWY K, TWAY K BTN TWY S AND TWY B, TWY B BTN TWY K AND TWY U, AND TWY U BTN TWY B AND TWY Y) ACFT SPEED RSTR OF 17KTS/20MPH FOR ALL AFCT WITH WINGSPANS IN EXCESS OF 171 FT.

RWY 4R & 4L DEP USE UPPER ANT FOR ATC COM.

ASDE-X IN USE. OPER TRANSPONDER WITH ALT REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL ARPT SFCS.

TWY Z EAST OF TWY U ACFT SPEED RSTR OF 17 KTS/20 MPH MAX FOR ALL ACFT WITH WINGSPANS IN EXCESS OF 171 FT.



## New York, New York John F. Kennedy International ICAO Identifier KJFK

New York, NY John F Kennedy Intl ICAO Identifier KJFK

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 40–38–23.741N / 73–46–43.292W 2.2.2 From City: 13 miles SE of NEW YORK, NY 2.2.3 Elevation: 13 ft 2.2.5 Magnetic Variation: 13W (2020) 2.2.6 Airport Contact: TERESA RIZZUTO BLDG 14 JAMAICA, NY 11430 ((718) 244–3501) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 04L
2.12.2 True Bearing: 31
2.12.3 Dimensions: 12079 ft x 200 ft
2.12.4 PCN: 90 R/B/W/T
2.12.5 Coordinates: 40–37–19.2754N / 73–47–8.1029W
2.12.6 Threshold Elevation: 11.9 ft
2.12.6 Touchdown Zone Elevation: 12.7 ft

2.12.1 Designation: 22R 2.12.2 True Bearing: 211 2.12.3 Dimensions: 12079 ft x 200 ft 2.12.4 PCN: 90 R/B/W/T 2.12.5 Coordinates: 40–39–1.8338N / 73–45–47.9596W 2.12.6 Threshold Elevation: 12.5 ft 2.12.6 Touchdown Zone Elevation: 12.7 ft

2.12.1 Designation: 04R 2.12.2 True Bearing: 31 2.12.3 Dimensions: 8400 ft x 200 ft 2.12.4 PCN: 90 F/B/W/T 2.12.5 Coordinates: 40–37–31.5418N / 73–46–13.2441W 2.12.6 Threshold Elevation: 11.9 ft 2.12.6 Touchdown Zone Elevation: 12 ft 2.12.1 Designation: 22L

2.12.2 True Bearing: 211 2.12.3 Dimensions: 8400 ft x 200 ft 2.12.4 PCN: 90 F/B/W/T 2.12.5 Coordinates: 40-38-42.8531N / 73-45-17.5027W 2.12.6 Threshold Elevation: 11.9 ft 2.12.6 Touchdown Zone Elevation: 12 ft 2.12.1 Designation: 13L 2.12.2 True Bearing: 121 2.12.3 Dimensions: 10000 ft x 200 ft 2.12.4 PCN: 148 R/A/W/T 2.12.5 Coordinates: 40-39-27.952N / 73-47-24.8606W 2.12.6 Threshold Elevation: 12.9 ft 2.12.6 Touchdown Zone Elevation: 13 ft 2.12.1 Designation: 31R 2.12.2 True Bearing: 301 2.12.3 Dimensions: 10000 ft x 200 ft 2.12.4 PCN: 148 R/A/W/T 2.12.5 Coordinates: 40-38-37.4085N / 73-45-33.3818W 2.12.6 Threshold Elevation: 12.6 ft 2.12.6 Touchdown Zone Elevation: 13 ft 2.12.1 Designation: 13R 2.12.2 True Bearing: 121 2.12.3 Dimensions: 14511 ft x 200 ft 2.12.4 PCN: 98 R/B/W/T 2.12.5 Coordinates: 40-38-54.1008N / 73-49-0.173W 2.12.6 Threshold Elevation: 12.5 ft 2.12.6 Touchdown Zone Elevation: 12.6 ft

2.12.1 Designation: 31L 2.12.2 True Bearing: 301 2.12.3 Dimensions: 14511 ft x 200 ft 2.12.4 PCN: 98 R/B/W/T 2.12.5 Coordinates: 40–37–40.7799N / 73–46–18.4107W 2.12.6 Threshold Elevation: 12.6 ft 2.12.6 Touchdown Zone Elevation: 12.7 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 04L
2.13.2 Take-off Run Available: 11351
2.13.3 Take-off Distance Available: 11351
2.13.4 Accelerate-Stop Distance Available: 11470
2.13.5 Landing Distance Available: 11010

2.13.1 Designation: 22R2.13.2 Take-off Run Available: 12079

2.13.3 Take-off Distance Available: 12079 2.13.4 Accelerate-Stop Distance Available: 11219 2.13.5 Landing Distance Available: 7794 2.13.1 Designation: 04R 2.13.2 Take-off Run Available: 8400 2.13.3 Take-off Distance Available: 8400 2.13.4 Accelerate–Stop Distance Available: 8400 2.13.5 Landing Distance Available: 8400 2.13.1 Designation: 22L 2.13.2 Take-off Run Available: 8400 2.13.3 Take-off Distance Available: 8400 2.13.4 Accelerate-Stop Distance Available: 8400 2.13.5 Landing Distance Available: 8400 2.13.1 Designation: 13L 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 9093 2.13.1 Designation: 31R 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 9513 2.13.5 Landing Distance Available: 8486 2.13.1 Designation: 13R 2.13.2 Take-off Run Available: 14511 2.13.3 Take-off Distance Available: 14511 2.13.4 Accelerate-Stop Distance Available: 14511 2.13.5 Landing Distance Available: 12468 2.13.1 Designation: 31L 2.13.2 Take-off Run Available: 14511 2.13.3 Take-off Distance Available: 14511 2.13.4 Accelerate–Stop Distance Available: 14511

2.13.5 Landing Distance Available: 11248

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 04L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 04R

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 22L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 13L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 31R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 13R2.14.2 Approach Lighting System: RLLS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 31L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P2.18.3 Channel: 125.72.18.5 Hours of Operation:

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 135.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC (NORTH & SOUTH)2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (FREQS 2000 FT & BLW W/N 8 NM ARE TWR CNTRLD FREQS)2.18.3 Channel: 125.252.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (FREQS 2000 FT & BLW W/N 8 NM ARE TWR CNTRLD FREQS)2.18.3 Channel: 281.552.18.5 Hours of Operation:

2.18.1 Service Designation: D-ATIS (ARR-SW)2.18.3 Channel: 115.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR-NE) 2.18.3 Channel: 117.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR/DEP)2.18.3 Channel: 128.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 04R/22L, 13L/31R)2.18.3 Channel: 119.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 04L/22R, 13R/31L) 2.18.3 Channel: 123.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 04L/22R, 13R/31L) 2.18.3 Channel: 281.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 04R/22L, 13L/31R) 2.18.3 Channel: 281.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: PARCH STAR2.18.3 Channel: 125.72.18.5 Hours of Operation:

2.18.1 Service Designation: RAMP CTL2.18.3 Channel: 125.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROBER STAR

2.18.3 Channel: 125.72.18.5 Hours of Operation:

AD 2.19 Radio Navigation and Landing Aids 2.19.1 ILS Type: DME for runway 04L. Magnetic variation: 13W 2.19.2 ILS Identification: HIQ 2.19.5 Coordinates: 40–37–43.8179N / 73–46–40.579W 2.19.6 Site Elevation: 22.6 ft

2.19.1 ILS Type: Glide Slope for runway 04L. Magnetic variation: 13W
2.19.2 ILS Identification: HIQ
2.19.5 Coordinates: 40–37–31.0909N / 73–46–54.8905W
2.19.6 Site Elevation: 9.9 ft

2.19.1 ILS Type: Localizer for runway 04L. Magnetic variation: 13W
2.19.2 ILS Identification: HIQ
2.19.5 Coordinates: 40–39–6.9661N / 73–45–43.9445W
2.19.6 Site Elevation: 10.9 ft

2.19.1 ILS Type: DME for runway 22R. Magnetic variation: 13W
2.19.2 ILS Identification: JOC
2.19.5 Coordinates: 40–38–53.285N / 73–45–13.1901W
2.19.6 Site Elevation: 27.4 ft

2.19.1 ILS Type: Glide Slope for runway 22R. Magnetic variation: 13W
2.19.2 ILS Identification: JOC
2.19.5 Coordinates: 40–38–21.2838N / 73–46–13.9271W
2.19.6 Site Elevation: 8.7 ft

2.19.1 ILS Type: Localizer for runway 22R. Magnetic variation: 13W
2.19.2 ILS Identification: JOC
2.19.5 Coordinates: 40–37–44.4774N / 73–46–43.1068W
2.19.6 Site Elevation: 8.3 ft

2.19.1 ILS Type: DME for runway 04R. Magnetic variation: 13W
2.19.2 ILS Identification: JFK
2.19.5 Coordinates: 40–38–53.285N / 73–45–13.1901W
2.19.6 Site Elevation: 27.4 ft

2.19.1 ILS Type: Glide Slope for runway 04R. Magnetic variation: 13W
2.19.2 ILS Identification: JFK
2.19.5 Coordinates: 40–37–42.101N / 73–46–11.0314W
2.19.6 Site Elevation: 12.6 ft

2.19.1 ILS Type: Inner Marker for runway 04R. Magnetic variation: 13W
2.19.2 ILS Identification: JFK
2.19.5 Coordinates: 40–37–23.8334N / 73–46–19.1548W
2.19.6 Site Elevation: 11.9 ft

2.19.1 ILS Type: Localizer for runway 04R. Magnetic variation: 13W

2.19.2 ILS Identification: JFK 2.19.5 Coordinates: 40–38–51.5906N / 73–45–10.6721W 2.19.6 Site Elevation: 11.3 ft

2.19.1 ILS Type: DME for runway 22L. Magnetic variation: 13W
2.19.2 ILS Identification: IWY
2.19.5 Coordinates: 40–37–43.8179N / 73–46–40.579W
2.19.6 Site Elevation: 22.6 ft

2.19.1 ILS Type: Glide Slope for runway 22L. Magnetic variation: 13W
2.19.2 ILS Identification: IWY
2.19.5 Coordinates: 40–38–32.9341N / 73–45–19.9803W
2.19.6 Site Elevation: 13 ft

2.19.1 ILS Type: Inner Marker for runway 22L. Magnetic variation: 13W
2.19.2 ILS Identification: IWY
2.19.5 Coordinates: 40–38–51.125N / 73–45–11.0314W
2.19.6 Site Elevation: 9.4 ft

2.19.1 ILS Type: Localizer for runway 22L. Magnetic variation: 13W
2.19.2 ILS Identification: IWY
2.19.5 Coordinates: 40–37–27.4935N / 73–46–16.4069W
2.19.6 Site Elevation: 9.4 ft

2.19.1 ILS Type: DME for runway 13L. Magnetic variation: 13W
2.19.2 ILS Identification: TLK
2.19.5 Coordinates: 40–38–33.5365N / 73–45–18.2409W
2.19.6 Site Elevation: 29.5 ft

2.19.1 ILS Type: Glide Slope for runway 13L. Magnetic variation: 13W
2.19.2 ILS Identification: TLK
2.19.5 Coordinates: 40–39–14.7492N / 73–47–4.86W
2.19.6 Site Elevation: 10 ft

2.19.1 ILS Type: Localizer for runway 13L. Magnetic variation: 13W
2.19.2 ILS Identification: TLK
2.19.5 Coordinates: 40–38–30.6889N / 73–45–18.5787W
2.19.6 Site Elevation: 13.4 ft

2.19.1 ILS Type: DME for runway 31R. Magnetic variation: 13W
2.19.2 ILS Identification: RTH
2.19.5 Coordinates: 40–38–33.5365N / 73–45–18.2409W
2.19.6 Site Elevation: 29.5 ft

2.19.1 ILS Type: Glide Slope for runway 31R. Magnetic variation: 13W
2.19.2 ILS Identification: RTH
2.19.5 Coordinates: 40–38–50.3296N / 73–45–51.0221W
2.19.6 Site Elevation: 9.6 ft

2.19.1 ILS Type: Localizer for runway 31R. Magnetic variation: 13W2.19.2 ILS Identification: RTH

2.19.5 Coordinates: 40–39–30.7866N / 73–47–31.1174W 2.19.6 Site Elevation: 11.5 ft

2.19.1 ILS Type: Glide Slope for runway 31L. Magnetic variation: 13W
2.19.2 ILS Identification: MOH
2.19.5 Coordinates: 40–37–59.8724N / 73–47–9.4083W
2.19.6 Site Elevation: 8.6 ft

2.19.1 ILS Type: Localizer for runway 31L. Magnetic variation: 13W
2.19.2 ILS Identification: MOH
2.19.5 Coordinates: 40–38–59.6562N / 73–49–12.4887W
2.19.6 Site Elevation: 12.4 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 12W
2.19.2 Navigation Aid Identification: JFK
2.19.5 Coordinates: 40–37–58.3816N / 73–46–17.0103W
2.19.6 Site Elevation: 9.5 ft

#### **General Remarks:**

TWY Z BTN RWY 04L & 22R AND TWY Y CLSD UFN.

PERIODIC FIRE DEPT TRNG ADJACENT APCH END OF RWYS 22L & 22R.

CONTINUOUS TAXIWAY MAINTENANCE ACTIVITIES AT NUMEROUS LOCATIONS

JFK APN BLDG 73 RAMP CLSD TO ACFT WINGSPAN MORE THAN 171FT EXC UNDER TOW.

RY 13R HAS TWO (2) PAPI – P4L SYSTEMS. (RY 13R) OFFSET PAPI SUPPORTS VOR OR GPS RWY 13R & PARKWAY VISUAL RY 13R.

METERING PROCEDURES IN EFFECT- CONTACT RAMP CONTROL PRIOR TO PUSHBACK 1200Z–1500Z DAILY/1900Z–0300Z DAILY.

NON-STD MARKINGS IN GA APN, CTC FBO ON UNICOM OR 347-566-6620 FOR WING WALKERS.

TWY 'H' CL LGTS BTN TWY 'A' & RY 4L/22R OTS.

TWY Q3 CNTRLN LGTS OTS.

ACFT ARE NOT PMTD TO STOP ON EITHER TWY A OR B BRIDGES.

CONVERGING OPNS ON RYS 13R AND 22L CONDUCTED VIA ARRIVAL DISTANCE WINDOW.

PARA–SAIL & BANNER TOWING OPNS 1000 FT & BLO IN UPPER & LOWER NEW YORK BAYS INCLUDING ROCKAWAY INLET INDEFLY.

FLOCKS OF BIRDS ON & INVOF ARPT.

NON–STANDARD ENGINEERED MATERIALS ARRESTING SYSTEM (EMAS) 393 FT IN LENGTH BY 226 FT IN WIDTH LCTD AT THE DER 4R.

NON–STANDARD ENGINEERED MATERIALS ARRESTING SYSTEM (EMAS) 405 FT IN LENGTH BY 226 FT IN WIDTH LCTD AT THE DER 22L.

A380 AND B747-800 ACFT TAX SPD RESTRICTED TO MAX 17KTS/20MPH ON ALL TWYS.

GAT HELIPAD NON-STANDARD MARKINGS & LIGHTING.

HIGH VOLUME OF LOW LEVEL VFR TRAFFIC, 500 FT AND BLO, ALONG SHORELINE SOUTH OF JFK.

SPECIAL AIR TFC RULES–PART 93 HIGH DENSITY ARPT. PROR RESERVATION REQUIRED. SEE AERONAUTICAL INFORMATION MANUAL.

TWY 'H' CL LGTS BTN TERMINAL 4 RAMP AND TWY A OTS.

RY 31R HOLDING POSITION MARKINGS AT RY 4L/22R 'SE' SIDE OBSC.

TWY NB CLSD TO SB TURNS AT TWY A.

UFN TWY 'D' BTN TWY 'C' AND HANGAR 7 CLOSED.

OBST BLDG LGT OTS 6.3 NM ESE JFK 222 FT MSL (220 FT AGL).

FOR NOISE ABATEMENT RSTRNS CALL 212-435-3782 DURG NML BUS HRS.

OBST PARKED ACFT (ASN 2020-AEA-1302-NRA) 403933 N0734749W (1.4NM NW JFK) 74 (64FT AGL) U/S 1200-0100 DLY.

RWY 31R 1000 FT DIST REMAINING SIGN MISG.

RWY STATUS LGTS IN OPS.

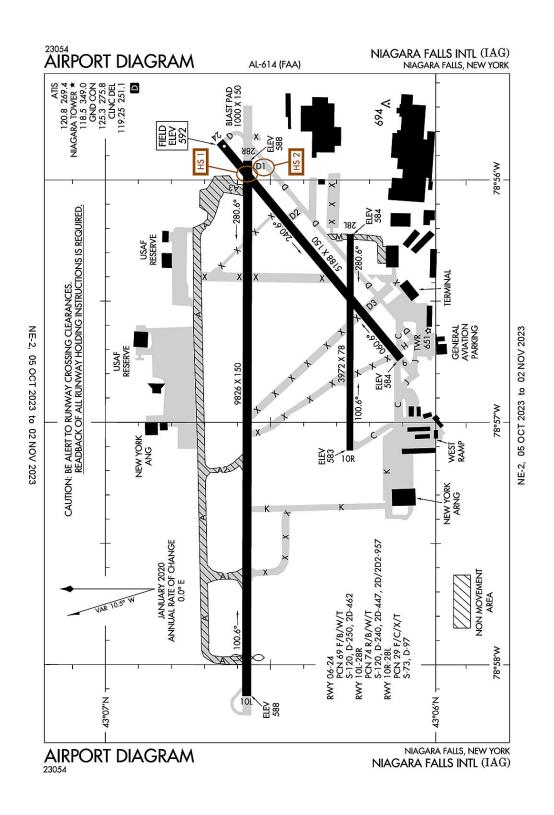
RLLS RY 13L USES 1000 FT LGT STN OF THE ALS ONLY WITH CRI VOR APCHS & IS ANGLED TOWARD AQUEDUCT; ALSO 5 SFL FM 1200–2000 FT & A 5 SFL GROUPING APROXLY 1 MI FM RY +1 ADJ FORMING APCH. APCH GATE ANGLED 35 DEGS S OF RY 13L CNTRLN DESIGNED TO PRVD EARLIER IDENT OF RY ENVI.

ACFT OPS & TWY RESTRICTIONS EXIST FOR A380, B747–800, B777–300ER, A340–600 AND A350–1000. PLEASE CTC JFK ARPT OPS FOR MORE INFO.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

TWY 'A' BTN TWY 'NA' & TWY 'NB' ARCFT SPEED RESTRICTION OF 17KTS/20MPH MAXIMUM FOR A380, B747-800, B747-400, B777-300ER, B777-200, A340,A330, B787, AND A350

RY 13L HOLDING POSITION MARKINGS AT RY 4L/22R 'NW' SIDE OBSC.



## Niagara Falls, New York Niagara Falls International ICAO Identifier KIAG

# Niagara Falls, NY Niagara Falls Intl ICAO Identifier KIAG

AD 2.2 Aerodrome geographical and administrative data 2.2.1 Reference Point: 43–6–27.2065N / 78–56–45.048W 2.2.2 From City: 4 miles E of NIAGARA FALLS, NY 2.2.3 Elevation: 592.3 ft 2.2.5 Magnetic Variation: 10W (1985) 2.2.6 Airport Contact: MR. ROBERT STONE 2035 NIAGARA FALLS BLVD NIAGARA FALLS, NY 14304 ((716) 297–4494)

2.2.7 Traffic: IFR/VFR

## AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A+2.4.5 Hangar Space:2.4.6 Repair Facilities: MINOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 7/1/19742.6.2 Rescue and Firefighting Services: ARFF Index–B

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 06
2.12.2 True Bearing: 50
2.12.3 Dimensions: 5188 ft x 150 ft
2.12.4 PCN: 69 F/B/W/T
2.12.5 Coordinates: 43–6–6.3587N / 78–56–44.2955W
2.12.6 Threshold Elevation: 584.3 ft
2.12.6 Touchdown Zone Elevation: 585.8 ft

2.12.1 Designation: 24
2.12.2 True Bearing: 230
2.12.3 Dimensions: 5188 ft x 150 ft
2.12.4 PCN: 69 F/B/W/T
2.12.5 Coordinates: 43–6–39.1997N / 78–55–50.6072W
2.12.6 Threshold Elevation: 592.2 ft
2.12.6 Touchdown Zone Elevation: 592.3 ft

2.12.1 Designation: 10L

2.12.2 True Bearing: 90 2.12.3 Dimensions: 9826 ft x 150 ft 2.12.4 PCN: 74 R/B/W/T 2.12.5 Coordinates: 43–6–34.3453N / 78–58–7.7703W 2.12.6 Threshold Elevation: 588.2 ft 2.12.6 Touchdown Zone Elevation: 588.8 ft

2.12.1 Designation: 28R
2.12.2 True Bearing: 270
2.12.3 Dimensions: 9826 ft x 150 ft
2.12.4 PCN: 74 R/B/W/T
2.12.5 Coordinates: 43–6–34.1594N / 78–55–55.3156W
2.12.6 Threshold Elevation: 587.9 ft
2.12.6 Touchdown Zone Elevation: 588.3 ft

2.12.1 Designation: 10R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 3972 ft x 78 ft
2.12.4 PCN: 29 F/C/X/T
2.12.5 Coordinates: 43–6–15.6025N / 78–57–7.0063W
2.12.6 Threshold Elevation: 582.6 ft
2.12.6 Touchdown Zone Elevation: 584.1 ft

2.12.1 Designation: 28L
2.12.2 True Bearing: 270
2.12.3 Dimensions: 3972 ft x 78 ft
2.12.4 PCN: 29 F/C/X/T
2.12.5 Coordinates: 43–6–15.507N / 78–56–13.4609W
2.12.6 Threshold Elevation: 584.2 ft
2.12.6 Touchdown Zone Elevation: 584.8 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 06
2.13.2 Take-off Run Available: 5188
2.13.3 Take-off Distance Available: 5188
2.13.4 Accelerate-Stop Distance Available: 5188
2.13.5 Landing Distance Available: 5188

2.13.1 Designation: 24
2.13.2 Take-off Run Available: 5188
2.13.3 Take-off Distance Available: 5188
2.13.4 Accelerate-Stop Distance Available: 5108
2.13.5 Landing Distance Available: 5108

2.13.1 Designation: 10L
2.13.2 Take-off Run Available: 9829
2.13.3 Take-off Distance Available: 10829
2.13.4 Accelerate-Stop Distance Available: 9829
2.13.5 Landing Distance Available: 9129

2.13.1 Designation: 28R

2.13.2 Take-off Run Available: 9829

2.13.3 Take-off Distance Available: 10529

2.13.4 Accelerate–Stop Distance Available: 9129

2.13.5 Landing Distance Available: 9129

2.13.1 Designation: 10R

2.13.2 Take-off Run Available: 3973

2.13.3 Take-off Distance Available: 3973

2.13.4 Accelerate–Stop Distance Available: 3973

2.13.5 Landing Distance Available: 3973

2.13.1 Designation: 28L
2.13.2 Take-off Run Available: 3973
2.13.3 Take-off Distance Available: 3973
2.13.4 Accelerate-Stop Distance Available: 3973
2.13.5 Landing Distance Available: 3973

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 062.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 242.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: V4L

2.14.1 Designation: 28R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10R

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P2L

2.14.1 Designation: 28L

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P2L

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: AFRC OPS2.18.3 Channel: 340.242.18.5 Hours of Operation:

2.18.1 Service Designation: ATIS2.18.3 Channel: 120.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 269.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 119.252.18.5 Hours of Operation: 0700–2300

2.18.1 Service Designation: CD/P2.18.3 Channel: 251.12.18.5 Hours of Operation: 0700–2300

2.18.1 Service Designation: COMD POST (914 AW COMD POST/AFLD MGMT)2.18.3 Channel: 340.0252.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 125.32.18.5 Hours of Operation: 0700–2300

2.18.1 Service Designation: GND/P2.18.3 Channel: 275.82.18.5 Hours of Operation: 0700–2300

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.52.18.5 Hours of Operation: 0700-2300

2.18.1 Service Designation: LCL/P2.18.3 Channel: 3492.18.5 Hours of Operation: 0700–2300

2.18.1 Service Designation: NG OPS2.18.3 Channel: 412.18.5 Hours of Operation:

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 10W
2.19.2 ILS Identification: IAG
2.19.5 Coordinates: 43–6–30.0921N / 78–56–16.6451W
2.19.6 Site Elevation: 582.8 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 10W
2.19.2 ILS Identification: IAG
2.19.5 Coordinates: 43–6–34.3589N / 78–58–18.8146W
2.19.6 Site Elevation: 585.1 ft

2.19.1 ILS Type: Outer Marker for runway 28R. Magnetic variation: 10W
2.19.2 ILS Identification: IAG
2.19.5 Coordinates: 43–6–32.5184N / 78–50–18.2195W
2.19.6 Site Elevation: 614.9 ft

2.19.1 Navigation Aid Type: TACAN. Magnetic variation: 10W
2.19.2 Navigation Aid Identification: IAG
2.19.5 Coordinates: 43–6–45.1638N / 78–57–36.8623W
2.19.6 Site Elevation: 591.5 ft

#### **General Remarks:**

CAUTION: HEAVY CONCENTRATIONS OF GULLS–BLACKBIRDS–STARLINGS UP TO 5000 AGL ON & INVOF ARPT. BASH PHASE II OPERATIONS AT KIAG MAR–MAY AND SEP–NOV.

FLUID: SP.

JASU: 2(A/M32A-86) 1(AM32A-60) 1(MA-1A).

FUEL: J8, A++ (MIL).

MISC: LOCAL MISSION AIRCRAFT HAVE PRIORITY FOR DEICING; FULL AIRCRAFT DEICING FOR C–17 AND C–5 AIRCRAFT NOT AVAILABLE.

INTXN DEPS RWY 24 AT TWY D1 ARE NA.

ALL MIL ACFT ONLY MINIMAL CLASSIFIED MATERIALS AVBL; AIRCREWS SHOULD ARRIVE WITH APPROPRIATE AMOUNT TO COMPLETE THEIR MISSION.

EXTSV ACFT ACTIVITY OPERATING INVOF US/CANADIAN FALLS ALL ALTS.

RWY 28R 1000 FT BY 150 FT BLAST PAD

AFLD MGMT DOES NOT ISSUE OR STORE COMSEC, FOR COMSEC STORAGE CTC COMMAND POST DSN 238–2150, C716–236–2150.

OIL: O-148(MIL).

BEARING STRENGTH RWY 06/24: ST110 TT145 SBTT281TDT415 TRT252.

PILOTS ARE REMINDED TO REVIEW ARPT HOTSPOT INFO BFR TXG FOR DEP & BFR LNDG. SEE TPP ARPT DIAGRAM AND CHART SUPPL SXN ON HOTSPOTS FOR ADDNL INFO.

REMARKS: SEE FLIP AP/1 SUPPLEMENTARY ARPT RMK.

AFRC/ANG: CSTMS/AG/IMG SVC NOT LCTD ON NIAGARA FALLS ARS. SVC AVBL H24.

AFRC/ANG: NSTD OPS APN MRKS IDENTIFYING PRKG ROW AND PRKG LCTN. NSTD MAIN APN MRKS PRKG STOP BAR AND ACFT GND EQPT (AGE) BOX.

ALL MIL ACFT ONLY OPNS RESTRICTED DURING BIRD WATCH CONDITIONS. MODERATE – TKOF & LDG PERMISSION ONLY WNEN DEP/ARR RTE AVOIDS IDENTIFIED BIRD ACTIVITY; NO LCL IFR/VFR TFC PAT ACTIVITY. SEVERE – TKOF & LDG PHOHIBITED WO OG/CC APPROVAL; CTC COMMAND POST FOR CURRENT BIRD WATCH CONDITIONS.

TWY D3 RSTRD TO 12500 LBS OR LESS.

MILITARY: MISC: FOR CURRENT MIL RWY CONDITION READING (RCR) CALL OR CTC 914 ARW COMD POST OR 914TH ARW AFLD MANAGEMENT.

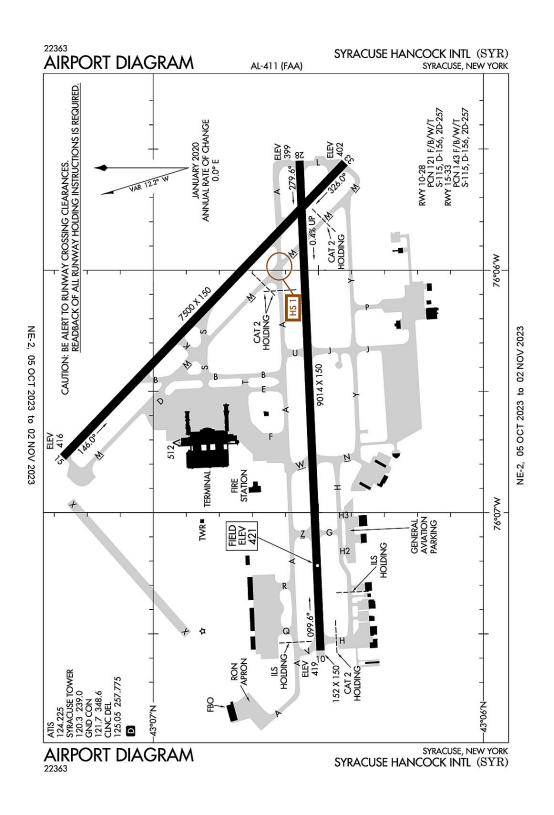
RWY 10R/28L CLSD TO SKED ACR OPS MORE THAN 9 PAX SEATS AND NON SKED ACR OPS MORE THAN 30 PAX SEATS EXC TAX.

PPR CTC AFLD MGT DSN: 238–2176, C716–236–2176. AFLD MGMT RQR 48 HR ADVANCE NOTICE FOR PPR AND WILL ARRANGE U.S. CUSTOMS IF NEEDED. U.S. CUSTOMS NOT ON STATION.

MILITARY: AFRC/ANG: AIRFIELD OPS SVC 1200–0400Z++ MON–FRI EXC HOL. TWYS A, A1, A2, AND A3 PAINTED MRK FADED AND RETRO–REFLECTIVITY INEFFECTIVE.

TWY A, A1, A2, A3, M & L NON-MOV AREAS.

FOR CD WHEN ATCT CLSD CTC BUFFALO ATCT ON FREQ OR 716–626–6920.



Syracuse, New York Syracuse Hancock International ICAO Identifier KSYR

# Syracuse, NY Syracuse Hancock Intl ICAO Identifier KSYR

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 43–6–40.252N / 76–6–22.753W
2.2.2 From City: 4 miles NE of SYRACUSE, NY
2.2.3 Elevation: 421.4 ft
2.2.5 Magnetic Variation: 13W (2000)
2.2.6 Airport Contact: JASON TERRERI 1000 COL EILEEN COLLINS BLVD SYRACUSE, NY 13212 (315–454–3263)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 10 2.12.2 True Bearing: 87 2.12.3 Dimensions: 9014 ft x 150 ft 2.12.4 PCN: 121 F/B/W/T 2.12.5 Coordinates: 43–6–29.5015N / 76–7–34.2763W 2.12.6 Threshold Elevation: 418.5 ft 2.12.6 Touchdown Zone Elevation: 421.4 ft

2.12.1 Designation: 28 2.12.2 True Bearing: 267 2.12.3 Dimensions: 9014 ft x 150 ft 2.12.4 PCN: 121 F/B/W/T 2.12.5 Coordinates: 43–6–33.4984N / 76–5–32.8925W 2.12.6 Threshold Elevation: 399 ft 2.12.6 Touchdown Zone Elevation: 412.3 ft

2.12.1 Designation: 15 2.12.2 True Bearing: 134 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 143 F/B/W/T 2.12.5 Coordinates: 43–7–16.4185N / 76–6–46.2005W 2.12.6 Threshold Elevation: 415.5 ft 2.12.6 Touchdown Zone Elevation: 416.8 ft 2.12.1 Designation: 33 2.12.2 True Bearing: 314 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 143 F/B/W/T 2.12.5 Coordinates: 43–6–25.1095N / 76–5–33.2753W 2.12.6 Threshold Elevation: 401.7 ft 2.12.6 Touchdown Zone Elevation: 409.4 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 10
2.13.2 Take-off Run Available: 9014
2.13.3 Take-off Distance Available: 9014
2.13.4 Accelerate-Stop Distance Available: 9014
2.13.5 Landing Distance Available: 9014

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 9014
2.13.3 Take-off Distance Available: 9014
2.13.4 Accelerate-Stop Distance Available: 9014
2.13.5 Landing Distance Available: 9014

2.13.1 Designation: 15
2.13.2 Take-off Run Available: 7500
2.13.3 Take-off Distance Available: 7500
2.13.4 Accelerate-Stop Distance Available: 7500
2.13.5 Landing Distance Available: 7500

2.13.1 Designation: 33

2.13.2 Take–off Run Available: 7500

2.13.3 Take-off Distance Available: 7500

2.13.4 Accelerate-Stop Distance Available: 7500

2.13.5 Landing Distance Available: 7500

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 102.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: V4L

2.14.1 Designation: 282.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 152.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: V4L

2.14.1 Designation: 332.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 379.52.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P DEP/P2.18.3 Channel: 134.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P2.18.3 Channel: 279.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 126.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 269.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: AR OPS2.18.3 Channel: 245.32.18.5 Hours of Operation:

2.18.1 Service Designation: ATIS2.18.3 Channel: 124.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 125.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 257.7752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C2.18.3 Channel: 126.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C2.18.3 Channel: 269.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 120.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 2392.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: MRZ
2.19.5 Coordinates: 43–6–31.27N / 76–5–20.92W
2.19.6 Site Elevation: 390.5 ft

2.19.1 ILS Type: Glide Slope for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: MRZ
2.19.5 Coordinates: 43–6–26.02N / 76–7–20.146W
2.19.6 Site Elevation: 422.6 ft

2.19.1 ILS Type: Localizer for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: MRZ
2.19.5 Coordinates: 43–6–33.96N / 76–5–19.01W
2.19.6 Site Elevation: 395.6 ft

2.19.1 ILS Type: DME for runway 28. Magnetic variation: 13W
2.19.2 ILS Identification: SYR
2.19.5 Coordinates: 43–6–31.27N / 76–5–20.92W
2.19.6 Site Elevation: 390.5 ft

2.19.1 ILS Type: Glide Slope for runway 28. Magnetic variation: 13W
2.19.2 ILS Identification: SYR
2.19.5 Coordinates: 43–6–39.474N / 76–5–46.433W
2.19.6 Site Elevation: 404.1 ft

2.19.1 ILS Type: Inner Marker for runway 28. Magnetic variation: 13W
2.19.2 ILS Identification: SYR
2.19.5 Coordinates: 43–6–34.1N / 76–5–18.52W

2.19.6 Site Elevation: 395 ft

2.19.1 ILS Type: Localizer for runway 28. Magnetic variation: 13W
2.19.2 ILS Identification: SYR
2.19.5 Coordinates: 43–6–28.943N / 76–7–51.655W
2.19.6 Site Elevation: 416.8 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 11W
2.19.2 Navigation Aid Identification: SYR
2.19.5 Coordinates: 43–9–37.8684N / 76–12–16.4106W
2.19.6 Site Elevation: 453.2 ft

#### **General Remarks:**

DEER/COYOTE/BIRDS ON INVOF ARPT.

NON-STD MKG ON MIL RAMP.

ANG: HVY ACFT CTC ARPT COMMISSIONER FOR PRK AVBL AT C315–455–3666. ALL TRAN ACFT RQR NS ABTMT BRIEFING.

UAS OPS IN SYRACUSE APCH/DEP AIRSPACE WILL BE CONTROLLED BY SYR ATC AT ALL TIMES.

NO TSNT ACFT PARKING ON MAIN TERMINAL RAMP.

DIRECT CUSTOM NOTIFICATION IS REQUIRED. HOURS OF NOTIFICATION ARE MON–SAT 0800–1700. ARRIVALS OUTSIDE OF THESE HRS MUST MAKE ARRANGEMENTS DURING REGULAR WORK HRS; CALL 315–455–2271.

HVY ACFT CTC ARPT COMMISSIONER FOR PRK AVBL AT C315–455–3263. LIMITED METRO AVAIL AT DSN 243–2185. C315–233–2185 OR CTC OWS DSN 576–9755/9702. ALL TRAN ACFT REQ NOISE ABATEMENT BRIEFING.

NO CHARTER OPER THRU PASSENGER TERMINAL BLDG WITHOUT PRIOR PERMISSION.

RSTD: TWY J AND P SOUTH OF TWY Y CLSD TO CIV OPS.

NOISE ABATEMENT PROCEDURES IN EFFECT.

MILITARY: COMMUNICATIONS – ANG – OPS – 140.425 379.5 REMARKS: (COBRA OPS) CTC ANG OPS 15 MIN PRIOR TO ARR.

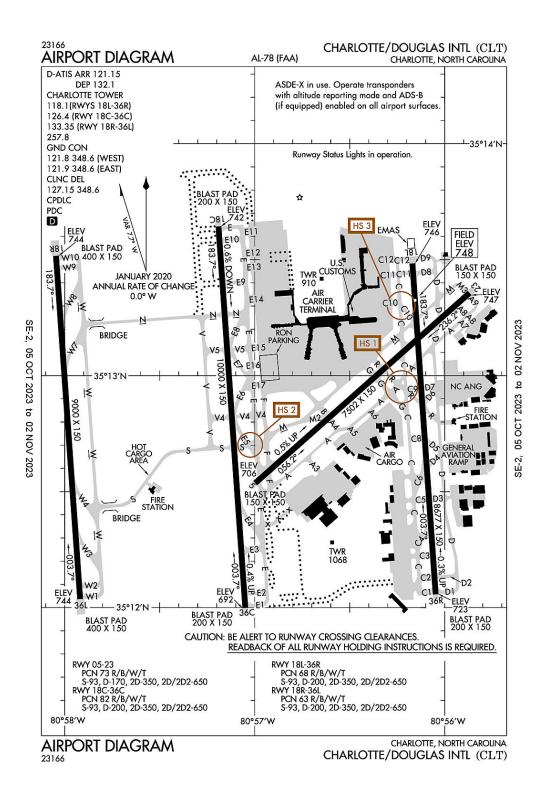
NO JET ENGINE MAINT RUNS ABOVE IDLE BTWN 2300-0600.

CAUTION: TWY J AND P SOUTH OF TWY Y AND ANG RAMP HAVE UNCTL VEH AND EQPT TFC.

UAS OPERATE WITHIN THE CONFINES OF THE SYRACUSE CLASS C, TIMES VARY.

MILITARY: ANG: OPR 1030–2100Z++ MON–THUR EXC HOL. PPR TRANS ACFT OFFL BUS ONLY. AFLD MGR DSN 243–2398, C315–233–2398, AFT DUTY HR CTC C315–233–2398. PPR REQ FOR ALL TRAN ACFT DUE LTD TRANS SVC. NTFY AFLD MGR OF ETA DELAY OVER 30 MIN OR MSN CNL IS RQR.

## Charlotte, North Carolina Charlotte/Douglas International ICAO Identifier KCLT



# Charlotte, NC Charlotte/Douglas Intl ICAO Identifier KCLT

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 35–12–49.5N / 80–56–56.6W
2.2.2 From City: 5 miles W of CHARLOTTE, NC
2.2.3 Elevation: 747.9 ft
2.2.5 Magnetic Variation: 7W (2000)
2.2.6 Airport Contact: HALEY GENTRY 5601 WILKINSON BLVD. CHARLOTTE, NC 28208 (704–359–4000)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 23 2.12.2 True Bearing: 228 2.12.3 Dimensions: 7502 ft x 150 ft 2.12.4 PCN: 73 R/B/W/T 2.12.5 Coordinates: 35–13–21.4183N / 80–55–52.1235W 2.12.6 Threshold Elevation: 746.7 ft 2.12.6 Touchdown Zone Elevation: 746.7 ft

2.12.1 Designation: 05 2.12.2 True Bearing: 48 2.12.3 Dimensions: 7502 ft x 150 ft 2.12.4 PCN: 73 R/B/W/T 2.12.5 Coordinates: 35–12–32.2287N / 80–56–59.8045W 2.12.6 Threshold Elevation: 705.9 ft 2.12.6 Touchdown Zone Elevation: 715.6 ft

2.12.1 Designation: 18C
2.12.2 True Bearing: 176
2.12.3 Dimensions: 10000 ft x 150 ft
2.12.4 PCN: 82 R/B/W/T
2.12.5 Coordinates: 35–13–38.6269N / 80–57–11.4094W
2.12.6 Threshold Elevation: 742 ft
2.12.6 Touchdown Zone Elevation: 742 ft

2.12.1 Designation: 36C 2.12.2 True Bearing: 356

2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 82 R/B/W/T 2.12.5 Coordinates: 35-11-59.9721N / 80-57-2.9217W 2.12.6 Threshold Elevation: 692.2 ft 2.12.6 Touchdown Zone Elevation: 706.7 ft 2.12.1 Designation: 18L 2.12.2 True Bearing: 176 2.12.3 Dimensions: 8677 ft x 150 ft 2.12.4 PCN: 68 R/B/W/T 2.12.5 Coordinates: 35-13-29.0474N / 80-56-10.1652W 2.12.6 Threshold Elevation: 746 ft 2.12.6 Touchdown Zone Elevation: 747.9 ft 2.12.1 Designation: 36R 2.12.2 True Bearing: 356 2.12.3 Dimensions: 8677 ft x 150 ft 2.12.4 PCN: 68 R/B/W/T 2.12.5 Coordinates: 35-12-3.4456N / 80-56-2.822W 2.12.6 Threshold Elevation: 723.4 ft

2.12.6 Touchdown Zone Elevation: 726.9 ft

2.12.1 Designation: 18R
2.12.2 True Bearing: 176
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 63 R/B/W/T
2.12.5 Coordinates: 35–13–31.0182N / 80–58–2.707W
2.12.6 Threshold Elevation: 744 ft
2.12.6 Touchdown Zone Elevation: 744 ft

2.12.1 Designation: 36L 2.12.2 True Bearing: 356 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 63 R/B/W/T 2.12.5 Coordinates: 35–12–2.2277N / 80–57–55.0671W 2.12.6 Threshold Elevation: 743.9 ft 2.12.6 Touchdown Zone Elevation: 743.9 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 23
2.13.2 Take-off Run Available: 7502
2.13.3 Take-off Distance Available: 7502
2.13.4 Accelerate-Stop Distance Available: 7502
2.13.5 Landing Distance Available: 7502

2.13.1 Designation: 052.13.2 Take-off Run Available: 7502

2.13.3 Take-off Distance Available: 7502 2.13.4 Accelerate-Stop Distance Available: 7092 2.13.5 Landing Distance Available: 7092 2.13.1 Designation: 18C 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate–Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 36C 2.13.2 Take-off Run Available: 10000 2.13.3 Take-off Distance Available: 10000 2.13.4 Accelerate-Stop Distance Available: 10000 2.13.5 Landing Distance Available: 10000 2.13.1 Designation: 18L 2.13.2 Take-off Run Available: 8676 2.13.3 Take-off Distance Available: 8676 2.13.4 Accelerate-Stop Distance Available: 8676 2.13.5 Landing Distance Available: 8676 2.13.1 Designation: 36R 2.13.2 Take-off Run Available: 8676 2.13.3 Take-off Distance Available: 8676 2.13.4 Accelerate-Stop Distance Available: 8390 2.13.5 Landing Distance Available: 8390 2.13.1 Designation: 18R 2.13.2 Take-off Run Available: 9000 2.13.3 Take-off Distance Available: 9000 2.13.4 Accelerate–Stop Distance Available: 9000 2.13.5 Landing Distance Available: 9000 2.13.1 Designation: 36L 2.13.2 Take-off Run Available: 9000 2.13.3 Take-off Distance Available: 9000 2.13.4 Accelerate–Stop Distance Available: 9000 2.13.5 Landing Distance Available: 9000

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 232.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 052.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18C

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 36C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 18R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 36L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ALCP2.18.3 Channel: 292.252.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (120–295 8000 FT & BLW) 2.18.3 Channel: 120.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (246–074 ABV 8000 FT) 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (075–245 ABV 8000 FT) 2.18.3 Channel: 124 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (001–119 8000 FT & BLW) 2.18.3 Channel: 128.325 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (296–360 8000 FT & BLW) 2.18.3 Channel: 134.75

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (180–359)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (360–179)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: BANKR STAR2.18.3 Channel: 135.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: BANKR STAR2.18.3 Channel: 377.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: BARMY DP2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: BARMY DP2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: BEAVY DP (RWY 36L, 36C)2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: BEAVY DP (RWY 18L, 18R, 18C, 36R)2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: BEAVY DP (RWY 36L, 36C)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: BEAVY DP (RWY 18R, 18L, 18C, 36R)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOBZY DP2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOBZY DP2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: BTSEY STAR

2.18.3 Channel: 125.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 127.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHARLOTTE DP (BUCKL TRANSITION, RWY 18L, 18R, 18C, 36R)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHARLOTTE DP (HARAY & PITTY TRANSITIONS. RWY 36L, 36C)2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHARLOTTE DP (RWY 18L, 18R, 18C, 36R)2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHARLOTTE DP (BUCKL, GANTS, LILLS & RUNIE TRANSITIONS.)2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHARLOTTE DP (HARAY & PITTY TRANSITION. RWY 36L, 36C)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHARLOTTE DP (GANTS, LILLS & RUNIE TRANSITIONS)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHSLY STAR2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CHSLY STAR2.18.3 Channel: 282.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (120–295 8000 FT & BLW) 2.18.3 Channel: 120.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (246–074 ABV 8000 FT) 2.18.3 Channel: 120.5 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (075–245 ABV 8000 FT)
2.18.3 Channel: 124
2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (001–119 8000 FT & BLW) 2.18.3 Channel: 128.325 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (296–360 8000 FT & BLW)2.18.3 Channel: 134.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (180–359)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (360–179)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 121.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 132.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: ESTRR DP2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: ESTRR DP2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: FILPZ STAR2.18.3 Channel: 125.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: FILPZ STAR2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (WEST)2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (EAST)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: ICONS DP (RWY 36L, 36C)2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: ICONS DP (RWY 18L, 18R, 18C, 36R)2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: ICONS DP (RWY 36L, 36C)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: ICONS DP (RWY 18R, 18L, 18C, 36R)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: JOJJO DP2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: JOJJO DP2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: JONZE STAR2.18.3 Channel: 135.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: JONZE STAR2.18.3 Channel: 377.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: JOOLS STAR2.18.3 Channel: 135.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: JOOLS STAR 2.18.3 Channel: 377.15

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: KERMIT DP (235–055)2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: KERMIT DP (055–235)2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: KERMIT DP (235–055)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: KERMIT DP (055–235)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: KILNS DP2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: KILNS DP2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (DEBIE, NEANO TRANSITIONS)2.18.3 Channel: 120.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (FLYYN, CEGAL TRANSITIONS, 18L, 18C, 18R)2.18.3 Channel: 120.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (FLYYN, CEGAL TRANSITIONS RWY 36L, 36C, 36R)2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (055–235) 2.18.3 Channel: 128.325 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (PEKNN, LILLS, HAMLN, ANDYS TRANSITIONS)2.18.3 Channel: 128.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (235–055)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: KNIGHTS DP (055–235)

2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: KRITR DP2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: KRITR DP2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: KWEEN DP (RWY 36L, 36C)2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: KWEEN DP (RWY 18L, 18R, 18C, 36R)2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: KWEEN DP (RWY 36L, 36C)2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: KWEEN DP (RWY 18R, 18L, 18C, 36R)2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18L/36R)2.18.3 Channel: 118.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18C/36C)2.18.3 Channel: 126.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18R/36L) 2.18.3 Channel: 133.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIILS DP2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIINN STAR2.18.3 Channel: 125.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: LIINN STAR2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LILLS DP2.18.3 Channel: 307.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAJIC STAR2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: MAJIC STAR2.18.3 Channel: 282.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: MLLET STAR2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: MLLET STAR2.18.3 Channel: 282.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: PARQR STAR2.18.3 Channel: 125.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: PARQR STAR2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: RASLN STAR2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: RASLN STAR2.18.3 Channel: 282.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: STOCR STAR2.18.3 Channel: 126.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: STOCR STAR2.18.3 Channel: 282.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: UNARM STAR2.18.3 Channel: 135.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: UNARM STAR2.18.3 Channel: 377.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: WEAZL DP2.18.3 Channel: 120.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: WEAZL DP2.18.3 Channel: 257.22.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 05. Magnetic variation: 7W
2.19.2 ILS Identification: CLT
2.19.5 Coordinates: 35–12–43.05N / 80–56–52.18W
2.19.6 Site Elevation: 695.1 ft

2.19.1 ILS Type: Localizer for runway 05. Magnetic variation: 7W
2.19.2 ILS Identification: CLT
2.19.5 Coordinates: 35–13–26.34N / 80–55–45.36W
2.19.6 Site Elevation: 738.2 ft

2.19.1 ILS Type: DME for runway 23. Magnetic variation: 7W
2.19.2 ILS Identification: APU
2.19.5 Coordinates: 35–12–21.2833N / 80–57–10.052W
2.19.6 Site Elevation: 699.4 ft

2.19.1 ILS Type: Glide Slope for runway 23. Magnetic variation: 7W
2.19.2 ILS Identification: APU
2.19.5 Coordinates: 35–13–12.1531N / 80–56–0.0758W
2.19.6 Site Elevation: 737.7 ft

2.19.1 ILS Type: Localizer for runway 23. Magnetic variation: 7W
2.19.2 ILS Identification: APU
2.19.5 Coordinates: 35–12–23.38N / 80–57–11.99W
2.19.6 Site Elevation: 704 ft

2.19.1 ILS Type: DME for runway 18C. Magnetic variation: 7W
2.19.2 ILS Identification: PEP
2.19.5 Coordinates: 35–11–50.2369N / 80–56–58.6363W
2.19.6 Site Elevation: 684.4 ft

2.19.1 ILS Type: Glide Slope for runway 18C. Magnetic variation: 7W
2.19.2 ILS Identification: PEP
2.19.5 Coordinates: 35–13–26.9102N / 80–57–15.2356W
2.19.6 Site Elevation: 731.4 ft

2.19.1 ILS Type: Localizer for runway 18C. Magnetic variation: 7W

2.19.2 ILS Identification: PEP 2.19.5 Coordinates: 35–11–48.5979N / 80–57–1.9439W 2.19.6 Site Elevation: 683.3 ft

2.19.1 ILS Type: Glide Slope for runway 36C. Magnetic variation: 7W
2.19.2 ILS Identification: DQG
2.19.5 Coordinates: 35–12–9.1687N / 80–57–8.5431W
2.19.6 Site Elevation: 691.1 ft

2.19.1 ILS Type: Inner Marker for runway 36C. Magnetic variation: 7W
2.19.2 ILS Identification: DQG
2.19.5 Coordinates: 35–11–48.7253N / 80–57–1.9507W
2.19.6 Site Elevation: 682.9 ft

2.19.1 ILS Type: Localizer for runway 36C. Magnetic variation: 7W
2.19.2 ILS Identification: DQG
2.19.5 Coordinates: 35–13–49.83N / 80–57–12.38W
2.19.6 Site Elevation: 748.3 ft

2.19.1 ILS Type: DME for runway 18L. Magnetic variation: 7W
2.19.2 ILS Identification: VKQ
2.19.5 Coordinates: 35–11–50.25N / 80–56–4.63W
2.19.6 Site Elevation: 710 ft

2.19.1 ILS Type: Glide Slope for runway 18L. Magnetic variation: 7W
2.19.2 ILS Identification: VKQ
2.19.5 Coordinates: 35–13–19.2609N / 80–56–5.097W
2.19.6 Site Elevation: 743.5 ft

2.19.1 ILS Type: Localizer for runway 18L. Magnetic variation: 7W
2.19.2 ILS Identification: VKQ
2.19.5 Coordinates: 35–11–50.5994N / 80–56–1.7186W
2.19.6 Site Elevation: 719.2 ft

2.19.1 ILS Type: DME for runway 36R. Magnetic variation: 7W
2.19.2 ILS Identification: BQC
2.19.5 Coordinates: 35–13–33.1089N / 80–56–6.903W
2.19.6 Site Elevation: 752.3 ft

2.19.1 ILS Type: Glide Slope for runway 36R. Magnetic variation: 7W
2.19.2 ILS Identification: BQC
2.19.5 Coordinates: 35–12–14.0034N / 80–55–58.8923W
2.19.6 Site Elevation: 717.3 ft

2.19.1 ILS Type: Localizer for runway 36R. Magnetic variation: 7W
2.19.2 ILS Identification: BQC
2.19.5 Coordinates: 35–13–33.7034N / 80–56–10.5664W
2.19.6 Site Elevation: 741.2 ft

2.19.1 ILS Type: DME for runway 18R. Magnetic variation: 7W 2.19.2 ILS Identification: RGS

2.19.5 Coordinates: 35-12-13.2565N / 80-58-1.0908W 2.19.6 Site Elevation: 743.8 ft 2.19.1 ILS Type: Glide Slope for runway 18R. Magnetic variation: 7W 2.19.2 ILS Identification: RGS 2.19.5 Coordinates: 35-13-20.0955N / 80-58-6.7207W 2.19.6 Site Elevation: 733.9 ft 2.19.1 ILS Type: Inner Marker for runway 18R. Magnetic variation: 7W 2.19.2 ILS Identification: RGS 2.19.5 Coordinates: 35-13-38.8124N / 80-58-3.3825W 2.19.6 Site Elevation: 738.6 ft 2.19.1 ILS Type: Localizer for runway 18R. Magnetic variation: 7W 2.19.2 ILS Identification: RGS 2.19.5 Coordinates: 35-11-51.8431N / 80-57-54.1735W 2.19.6 Site Elevation: 738.1 ft 2.19.1 ILS Type: DME for runway 36L. Magnetic variation: 7W 2.19.2 ILS Identification: XUU 2.19.5 Coordinates: 35-13-19.8318N / 80-58-6.8193W 2.19.6 Site Elevation: 738.9 ft 2.19.1 ILS Type: Glide Slope for runway 36L. Magnetic variation: 7W 2.19.2 ILS Identification: XUU 2.19.5 Coordinates: 35-12-12.9817N / 80-58-0.9403W 2.19.6 Site Elevation: 732.3 ft 2.19.1 ILS Type: Inner Marker for runway 36L. Magnetic variation: 7W 2.19.2 ILS Identification: XUU 2.19.5 Coordinates: 35-11-54.4339N / 80-57-54.3965W 2.19.6 Site Elevation: 738.8 ft 2.19.1 ILS Type: Localizer for runway 36L. Magnetic variation: 7W 2.19.2 ILS Identification: XUU 2.19.5 Coordinates: 35-13-41.4048N / 80-58-3.6016W 2.19.6 Site Elevation: 737.3 ft 2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 5W 2.19.2 Navigation Aid Identification: CLT 2.19.5 Coordinates: 35-11-25.0392N / 80-57-6.3124W

2.19.6 Site Elevation: 731.7 ft

**General Remarks:** TWY C10 RSTRD TO ACFT WITH WINGSPAN LESS THAN 171 FT WHEN EXITING RWY.

CLT RAMP, NON-MOVMT AREA, IS CTLD RAMP; CTC RAMP CTL PRIOR TO ENTERING.

TWY C10 UNUSBL FOR TXG ONTO RWY 18L/36R.

MILITARY: ANG: CTC COMD POST 30 MIN PRIOR LDG. AMOPS/COMD POST - 292.25 (CALL NEWSREEL).

SUCCESSIVE OR SIMULTANEOUS DEPARTURES FROM RWY 18L AND RWY 18C ARE APPROVED WITH COURSE DIVERGENCE BEGINNING NO FURTHER THAN 4 MILES FROM END OF RWY.

TRML RAMP ORANGE TXL AT SPOT 28N BETWEEN CONCOURSE D & E ALLEY MAX WINGSPAN 94 FT.

DUAL TAXI BTN DEP CALL SPOTS 11/12 AND 13N/13S RSTRD TO ONE ACFT LESS THAN 214 FT AND ONE ACFT LESS THAN 118 FT OR TWO ACFT LESS THAN 171 FT.

RWY SFC COND INFO DURG DUTY HRS PHONE ANG OPS V583–9177/9144 OR AIRBORNE 292.2.

TWY M BETWEEN THE TERMINAL RAMP AND TWY C, AS WELL AS TWY C NORTH OF TWY M, ARE RESTRICTED TO GROUP V AIRCRAFT WITH A WINGSPAN LESS THAN 214 FT (65M).

TRML RAMP BLUE TXL AT SPOT 28S BTN CONCOURSE D & E ALLEY MAX WINGSPAN 118 FT.

DUAL TAXI BTN DEP CALL SPOTS 22/23 AND 24N/24S RSTRD TO ACFT WITH WINGSPANS LESS THAN 118 FT.

TRML RAMP BLUE TXL FROM SPOT 29W TO SPOT 34S MAX WINGSPAN 82 FT.

ALL ACFT ARE PROHIBITED FM EXITING RWY 36R SEBD AT TWY R.

RWY STATUS LGTS IN OPR.

TWY C4 AND C6: WHEN TAXIING AIRCRAFT WITH COCKPIT TO MAIN GEAR DISTANCE GREATER THAN 90 FT, PILOT MUST PERFORM JUDGEMENTAL OVERSTEERING INSTEAD OF COCKPIT OVER CENTERLINE STEERING.

TWY D, RESTRICTED TO 15 MPH OR LESS WITH WINGSPAN 171 FT AND GREATER.

AIRPLANE DESIGN GROUP-V AND ABV ACFT ARE PROHIBITED FM DEP RWY 18L.

TRML RAMP ORANGE TXL FROM SPOT 26S TO SPOT 27E MAX WINGSPAN 118 FT.

GROUP IV ACFT WITH A WINGSPAN GTR THAN 118 FT ARE PROHIBITED FM EXITING RWY 18L/36R AT TWY C10.

GROUP III ACFT WITH A WINGSPAN GTR THAN 79 FT ARE PROHIBITED FM MAKING A NBND TURN ONTO TWY C WHEN TAXIING WB ON TWY A.

15 MPH SPEED RESTRICTION ON TWY C FROM THE APPROACH OF RWY 18L TO RWY 05/23, AND TWY M FROM THE APRON TO RWY 18L/36R.

TRML RAMP BLUE TXL FROM SPOT 26N TO SPOT 27W MAX WINGSPAN 118 FT.

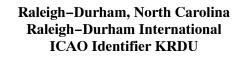
BE ALERT FOR FLOCKS OF MIGRATORY BIRDS ON & INVOF ARPT.

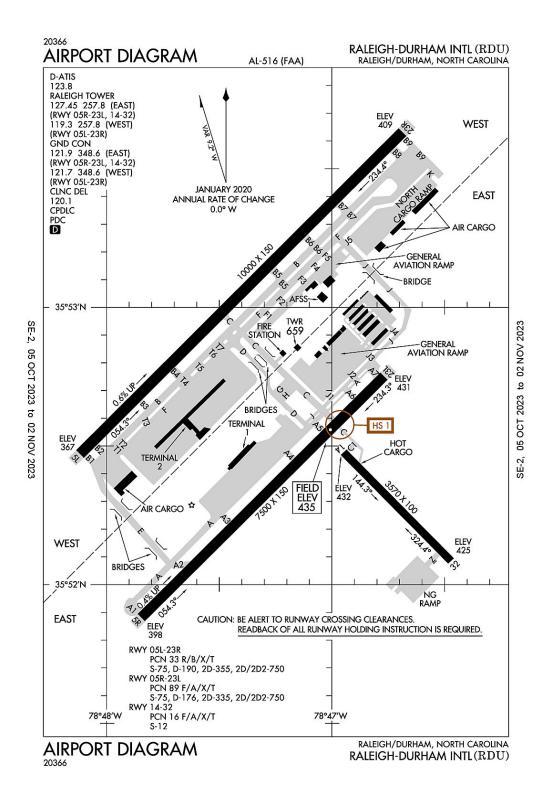
GROUP III ACFT WITH A WINGSPAN GTR THAN 79 FT ARE PROHIBITED FM MAKING A SBND TURN ONTO TWY C WHEN TAXIING NWBND ON TWY R.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

TRML RAMP YELLOW TXL FROM SPOT 29C TO SPOT 33C MAX WINGSPAN 118 FT.

TRML RAMP ORANGE TXL FROM SPOT 29E TO SPOT 34N MAX WINGSPAN 82 FT.





# Raleigh/Durham, NC Raleigh–Durham Intl ICAO Identifier KRDU

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 35–52–39.5N / 78–47–14.9W
2.2.2 From City: 9 miles NW of RALEIGH/DURHAM, NC
2.2.3 Elevation: 435.2 ft
2.2.5 Magnetic Variation: 9W (2020)
2.2.6 Airport Contact: MICHAEL LANDGUTH RALEIGH–DURHAM ARPT AUTH RDU AIRPORT, NC 27623 ((919) 840–7701)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 05L 2.12.2 True Bearing: 45 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 33 R/B/X/T 2.12.5 Coordinates: 35–52–28.016N / 78–48–7.069W 2.12.6 Threshold Elevation: 366.8 ft 2.12.6 Touchdown Zone Elevation: 384.3 ft

2.12.1 Designation: 23R 2.12.2 True Bearing: 225 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 33 R/B/X/T 2.12.5 Coordinates: 35–53–37.7657N / 78–46–40.9198W 2.12.6 Threshold Elevation: 408.6 ft 2.12.6 Touchdown Zone Elevation: 408.6 ft

2.12.1 Designation: 05R 2.12.2 True Bearing: 45 2.12.3 Dimensions: 7500 ft x 150 ft 2.12.4 PCN: 89 F/A/X/T 2.12.5 Coordinates: 35–51–52.6684N / 78–47–50.4174W 2.12.6 Threshold Elevation: 397.5 ft 2.12.6 Touchdown Zone Elevation: 419.8 ft 2.12.1 Designation: 23L
2.12.2 True Bearing: 225
2.12.3 Dimensions: 7500 ft x 150 ft
2.12.4 PCN: 89 F/A/X/T
2.12.5 Coordinates: 35–52–44.9832N / 78–46–45.8171W
2.12.6 Threshold Elevation: 430.7 ft
2.12.6 Touchdown Zone Elevation: 435.2 ft

2.12.1 Designation: 14
2.12.2 True Bearing: 135
2.12.3 Dimensions: 3570 ft x 100 ft
2.12.4 PCN: 16 F/A/X/T
2.12.5 Coordinates: 35–52–30.1119N / 78–46–57.6427W
2.12.6 Threshold Elevation: 432.1 ft
2.12.6 Touchdown Zone Elevation: 432.1 ft

2.12.1 Designation: 32 2.12.2 True Bearing: 315 2.12.3 Dimensions: 3570 ft x 100 ft 2.12.4 PCN: 16 F/A/X/T 2.12.5 Coordinates: 35–52–5.0792N / 78–46–27.0499W 2.12.6 Threshold Elevation: 424.7 ft 2.12.6 Touchdown Zone Elevation: 428.7 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 05L
2.13.2 Take-off Run Available: 10000
2.13.3 Take-off Distance Available: 10000
2.13.4 Accelerate-Stop Distance Available: 10000
2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 23R
2.13.2 Take-off Run Available: 10000
2.13.3 Take-off Distance Available: 10000
2.13.4 Accelerate-Stop Distance Available: 10000
2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 05R
2.13.2 Take-off Run Available: 7500
2.13.3 Take-off Distance Available: 7500
2.13.4 Accelerate-Stop Distance Available: 7500
2.13.5 Landing Distance Available: 7500

2.13.1 Designation: 23L

2.13.2 Take-off Run Available: 7500

2.13.3 Take-off Distance Available: 7500

2.13.4 Accelerate–Stop Distance Available: 7500

2.13.5 Landing Distance Available: 7500

2.13.1 Designation: 142.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 322.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 05L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 23R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 05R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 23L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 142.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 322.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P (055–229) 2.18.3 Channel: 124.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (055–229) 2.18.3 Channel: 318.2 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (230–054) 2.18.3 Channel: 127.675 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: APCH/P IC (230–054) 2.18.3 Channel: 307.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: BEXGO DP2.18.3 Channel: 132.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: BEXGO DP2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLOGS STAR2.18.3 Channel: 124.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: BLOGS STAR2.18.3 Channel: 318.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRADE STAR2.18.3 Channel: 124.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRADE STAR2.18.3 Channel: 318.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: BUZZY STAR2.18.3 Channel: 127.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: BUZZY STAR2.18.3 Channel: 307.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 120.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (055–229) 2.18.3 Channel: 125.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (230–054) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (230–054) 2.18.3 Channel: 256.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (055–229) 2.18.3 Channel: 353.675 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 123.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (055–229) 2.18.3 Channel: 125.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (230–054) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (230–054) 2.18.3 Channel: 256.9 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (055–229) 2.18.3 Channel: 353.675 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (SOUTH)2.18.3 Channel: 353.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DMSTR STAR2.18.3 Channel: 127.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DMSTR STAR2.18.3 Channel: 307.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: FINAL (EAST)2.18.3 Channel: 285.4252.18.5 Hours of Operation: 24

2.18.1 Service Designation: FINAL CTL2.18.3 Channel: 124.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (WEST, RWY 05L/23R)

2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (EAST, RWY 05R/23L, 14/32)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: HOOKZ DP2.18.3 Channel: 125.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: HOOKZ DP2.18.3 Channel: 353.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: HURIC DP2.18.3 Channel: 125.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: HURIC DP2.18.3 Channel: 353.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (WEST, RWY 05L/23R)2.18.3 Channel: 119.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (EAST, RWY 05R/23L, 14/32)2.18.3 Channel: 127.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LWOOD DP2.18.3 Channel: 132.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: LWOOD DP2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: OXFRD DP2.18.3 Channel: 132.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: OXFRD DP2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: PACKK DP (055–229) 2.18.3 Channel: 125.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: PACKK DP (230–054) 2.18.3 Channel: 132.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: PACKK DP (230–054)2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: PACKK DP (055–229) 2.18.3 Channel: 353.675 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: RALEIGH DP (055–229)2.18.3 Channel: 125.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: RALEIGH DP (230–054)2.18.3 Channel: 132.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: RALEIGH DP (230–054)2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: RALEIGH DP (055–229)2.18.3 Channel: 353.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROZBO DP2.18.3 Channel: 125.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: ROZBO DP2.18.3 Channel: 353.6752.18.5 Hours of Operation: 24

2.18.1 Service Designation: SHPRD DP2.18.3 Channel: 132.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: SHPRD DP2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: TAQLE STAR2.18.3 Channel: 124.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: TAQLE STAR2.18.3 Channel: 318.22.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 05L. Magnetic variation: 9W
2.19.2 ILS Identification: GKK
2.19.5 Coordinates: 35–53–46.25N / 78–46–25.87W
2.19.6 Site Elevation: 403 ft

2.19.1 ILS Type: Glide Slope for runway 05L. Magnetic variation: 9W
2.19.2 ILS Identification: GKK
2.19.5 Coordinates: 35–52–37.7972N / 78–48–1.884W
2.19.6 Site Elevation: 365.5 ft

2.19.1 ILS Type: Localizer for runway 05L. Magnetic variation: 9W
2.19.2 ILS Identification: GKK
2.19.5 Coordinates: 35–53–48.0693N / 78–46–28.1855W
2.19.6 Site Elevation: 408.6 ft

2.19.1 ILS Type: DME for runway 23R. Magnetic variation: 9W
2.19.2 ILS Identification: DMP
2.19.5 Coordinates: 35–52–20.25N / 78–48–15.21W
2.19.6 Site Elevation: 358 ft

2.19.1 ILS Type: Glide Slope for runway 23R. Magnetic variation: 9W
2.19.2 ILS Identification: DMP
2.19.5 Coordinates: 35–53–32.4744N / 78–46–54.3483W
2.19.6 Site Elevation: 396.2 ft

2.19.1 ILS Type: Localizer for runway 23R. Magnetic variation: 9W
2.19.2 ILS Identification: DMP
2.19.5 Coordinates: 35–52–20.84N / 78–48–15.93W
2.19.6 Site Elevation: 358.8 ft

2.19.1 ILS Type: DME for runway 05R. Magnetic variation: 9W
2.19.2 ILS Identification: RDU
2.19.5 Coordinates: 35–52–54.38N / 78–46–41.19W
2.19.6 Site Elevation: 412 ft

2.19.1 ILS Type: Glide Slope for runway 05R. Magnetic variation: 9W
2.19.2 ILS Identification: RDU
2.19.5 Coordinates: 35–51–57.0189N / 78–47–38.1689W
2.19.6 Site Elevation: 400.1 ft

2.19.1 ILS Type: Localizer for runway 05R. Magnetic variation: 9W
2.19.2 ILS Identification: RDU
2.19.5 Coordinates: 35–52–52.1055N / 78–46–37.0152W
2.19.6 Site Elevation: 423.6 ft

2.19.1 ILS Type: DME for runway 23L. Magnetic variation: 9W
2.19.2 ILS Identification: LEI
2.19.5 Coordinates: 35–51–43.52N / 78–47–54.49W
2.19.6 Site Elevation: 386 ft

2.19.1 ILS Type: Glide Slope for runway 23L. Magnetic variation: 9W
2.19.2 ILS Identification: LEI
2.19.5 Coordinates: 35–52–36.18N / 78–46–52.21W
2.19.6 Site Elevation: 430.2 ft

2.19.1 ILS Type: Localizer for runway 23L. Magnetic variation: 9W
2.19.2 ILS Identification: LEI
2.19.5 Coordinates: 35–51–45.6108N / 78–47–59.1266W
2.19.6 Site Elevation: 381 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 9W
2.19.2 Navigation Aid Identification: RDU
2.19.5 Coordinates: 35–52–21.0761N / 78–47–0.0316W
2.19.6 Site Elevation: 429.2 ft

#### **General Remarks:** NG 24 HR PPR FOR JET ACFT & TRANS MIL ACFT – 919–840–7510.

TWY E BEHIND SOUTH CARGO 4 & TWY J BEHIND CORPORATE HANGARS NOT VSBL FM ATCT.

TWY F5 IS CLSD UFN.

TRML 1 ACFT MUST CTC GC ON 121.9 PRIOR TO PUSH. TERMINAL 2 ACFT MUST CTC RAMP TWR ON 130.175 PRIOR TO PUSH.

NO JET ENGINE MAINTENANCE RUNS BETWEEN 0000-0600.

ARPT CLSD TO AIRSHIPS.

NG PPR FOR LDG CTC V582-9181 C(919)664-9181.

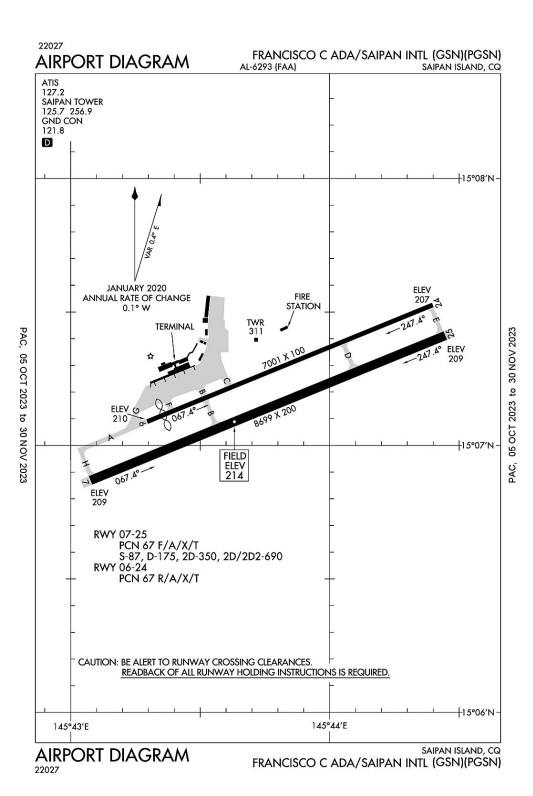
ARNG: LTD PRK. ARNG OPS C984–661–6200. CTC FORECAST BASE 10 MIN PRIOR LDG. RAMP CLSD TO ALL F/W EXCEPT ARMY & MIL TRANSPORT WITH PPR, FACILITY HRS 1300–2130Z++ MON–FRI EXC HOL. MAKE APPT FOR AFTER DUTY HRS. OSACOM FLT DET C984–661–6202.

TWY D CLSD TO ACFT WITH WINGSPAN MORE THAN 171 FT WHEN TWY G AND H ARE OCCUPIED.

APN TXL F BTN TWY T1 AND TWY T7 CLSD TO ACFT WITH WINGSPAN MORE THAN 171 FT.

ALL TDG V AIRCRAFT TXG ON TWY A ARE RSTD TO TAXI SPD OF 15 MPH.

RSTD: PPR FOR ALL MILITARY AIRCRAFT F/W – R/W & UNSCHEDULED CHARTER FLIGHTS WITH 30 OR MORE PASSENGERS. 24 HR PN RQR FOR MIL PRACTICE APCH. CTC ARPT OPS 919–840–7510 OR RDU APP C919–380–3125. 24 HR PN RQR FOR PPR FOR ALL F/W AND R/W MIL ACFT GOING TO ARNG RAMP, POC C984–661–6200. OSACOM FLT DET C984–661–6202.



# North Mariana Islands, Saipan Island Francisco C. Ada/Saipan International ICAO Identifier PGSN

# Saipan Island, CQ Francisco C. Ada/Saipan Intl ICAO Identifier PGSN

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 15–7–12.895N / 145–43–47.951E 2.2.2 From City: 4 miles SW of SAIPAN ISLAND, MP 2.2.3 Elevation: 214 ft 2.2.5 Magnetic Variation: 2E (1985) 2.2.6 Airport Contact: CHRISTOPHER S. TENORIO PO BOX 501055 SAIPAN, MP 96950 (670–285–2504)

2.2.7 Traffic: IFR/VFR

### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,100LL,A1+2.4.5 Hangar Space:2.4.6 Repair Facilities: NONE

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 1/1/1978 2.6.2 Rescue and Firefighting Services: ARFF Index–D

## **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 06
2.12.2 True Bearing: 68
2.12.3 Dimensions: 7001 ft x 100 ft
2.12.4 PCN: 67 R/A/X/T
2.12.5 Coordinates: 15–7–5.3655N / 145–43–17.7212E
2.12.6 Threshold Elevation: 209.8 ft
2.12.6 Touchdown Zone Elevation: 212.7 ft

2.12.1 Designation: 24
2.12.2 True Bearing: 248
2.12.3 Dimensions: 7001 ft x 100 ft
2.12.4 PCN: 67 R/A/X/T
2.12.5 Coordinates: 15–7–31.5859N / 145–44–23.8908E
2.12.6 Threshold Elevation: 206.5 ft
2.12.6 Touchdown Zone Elevation: 206.8 ft

2.12.1 Designation: 07

2.12.2 True Bearing: 68
2.12.3 Dimensions: 8699 ft x 200 ft
2.12.4 PCN: 67 F/A/X/T
2.12.5 Coordinates: 15–6–52.1086N / 145–43–4.5454E
2.12.6 Threshold Elevation: 209 ft
2.12.6 Touchdown Zone Elevation: 214 ft

2.12.1 Designation: 25
2.12.2 True Bearing: 248
2.12.3 Dimensions: 8699 ft x 200 ft
2.12.4 PCN: 67 F/A/X/T
2.12.5 Coordinates: 15–7–24.6959N / 145–44–26.7638E
2.12.6 Threshold Elevation: 209 ft
2.12.6 Touchdown Zone Elevation: 209 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 06
2.13.2 Take-off Run Available: 7001
2.13.3 Take-off Distance Available: 6800
2.13.4 Accelerate-Stop Distance Available: 6645
2.13.5 Landing Distance Available: 6600

2.13.1 Designation: 24

2.13.2 Take–off Run Available: 6400

2.13.3 Take-off Distance Available: 7001

2.13.4 Accelerate-Stop Distance Available: 6302

2.13.5 Landing Distance Available: 7000

2.13.1 Designation: 07
2.13.2 Take-off Run Available: 8699
2.13.3 Take-off Distance Available: 8669
2.13.4 Accelerate-Stop Distance Available: 8664
2.13.5 Landing Distance Available: 8010

2.13.1 Designation: 25
2.13.2 Take-off Run Available: 8699
2.13.3 Take-off Distance Available: 8699
2.13.4 Accelerate-Stop Distance Available: 8045
2.13.5 Landing Distance Available: 8010

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 06

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 242.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 072.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 252.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 127.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 256.92.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 07. Magnetic variation: 2E
2.19.2 ILS Identification: GSN
2.19.5 Coordinates: 15–7–30.4581N / 145–44–34.0368E
2.19.6 Site Elevation: 211.1 ft

2.19.1 ILS Type: Glide Slope for runway 07. Magnetic variation: 2E
2.19.2 ILS Identification: GSN
2.19.5 Coordinates: 15–6–58.6872N / 145–43–13.0288E
2.19.6 Site Elevation: 206.5 ft

2.19.1 ILS Type: Localizer for runway 07. Magnetic variation: 2E
2.19.2 ILS Identification: GSN
2.19.5 Coordinates: 15–7–28.4649N / 145–44–36.3028E
2.19.6 Site Elevation: 205.8 ft

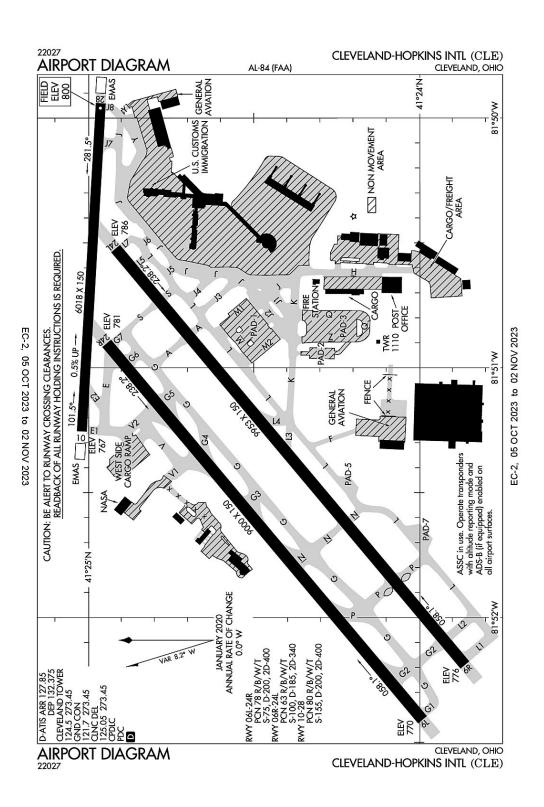
#### **General Remarks:**

FOR ARPT SECURITY CALL (670) 237-6529.

RWY 06/24 OPEN FOR TAXIING ONLY (NOT AVBL FOR LDG AND TKOF). OPEN FOR LDG AND TKOF WHEN RWY 7/25 CLSD.

PPR FM EXECUTIVE DIRECTOR COMMONWEALTH PORTS AUTHORITY SAIPAN CALL (670) 237–6500 MON–FRI 0730–1630 OTHER TIMES CALL (670) 237–6535.

IMMIGRATION & CUSTOMS AVBL DURG SCHEDULED OPNS. OTHER TIMES PRIOR ARRANGEMENTS MUST BE MADE WITH CBP PORT DIRECTOR CALL (670)288–0025/26.



Cleveland, Ohio Cleveland–Hopkins International ICAO Identifier KCLE

# Cleveland, OH Cleveland–Hopkins Intl ICAO Identifier KCLE

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 41–24–33.865N / 81–51–16.888W 2.2.2 From City: 9 miles SW of CLEVELAND, OH 2.2.3 Elevation: 799.5 ft 2.2.5 Magnetic Variation: 8W (2020) 2.2.6 Airport Contact: DINA WILSON PO BOX 81009 CLEVELAND, OH 44181 (216–265–6963) 2.2.7 Traffic: IFR/VFR

**AD 2.3 Attendance Schedule** 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100LL,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 06L
2.12.2 True Bearing: 50
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 78 R/B/W/T
2.12.5 Coordinates: 41–23–59.5393N / 81–52–24.5622W
2.12.6 Threshold Elevation: 770.1 ft
2.12.6 Touchdown Zone Elevation: 772.6 ft

2.12.1 Designation: 24R 2.12.2 True Bearing: 230 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 78 R/B/W/T 2.12.5 Coordinates: 41–24–56.7503N / 81–50–54.1515W 2.12.6 Threshold Elevation: 781.1 ft 2.12.6 Touchdown Zone Elevation: 781.1 ft

2.12.1 Designation: 06R 2.12.2 True Bearing: 50 2.12.3 Dimensions: 9953 ft x 150 ft 2.12.4 PCN: 63 R/B/W/T 2.12.5 Coordinates: 41–23–51.8742N / 81–52–11.3519W 2.12.6 Threshold Elevation: 775.5 ft 2.12.6 Touchdown Zone Elevation: 776.5 ft 2.12.1 Designation: 24L 2.12.2 True Bearing: 230 2.12.3 Dimensions: 9953 ft x 150 ft 2.12.4 PCN: 63 R/B/W/T 2.12.5 Coordinates: 41–24–55.141N / 81–50–31.3701W 2.12.6 Threshold Elevation: 785.7 ft 2.12.6 Touchdown Zone Elevation: 785.8 ft

2.12.1 Designation: 10 2.12.2 True Bearing: 93 2.12.3 Dimensions: 6018 ft x 150 ft 2.12.4 PCN: 80 R/B/W/T 2.12.5 Coordinates: 41–25–1.2562N / 81–51–15.2842W 2.12.6 Threshold Elevation: 767.1 ft 2.12.6 Touchdown Zone Elevation: 782.8 ft

2.12.1 Designation: 28
2.12.2 True Bearing: 273
2.12.3 Dimensions: 6018 ft x 150 ft
2.12.4 PCN: 80 R/B/W/T
2.12.5 Coordinates: 41–24–57.8208N / 81–49–56.4392W
2.12.6 Threshold Elevation: 799.5 ft
2.12.6 Touchdown Zone Elevation: 799.5 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 06L
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 24R
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 06R
2.13.2 Take-off Run Available: 9956
2.13.3 Take-off Distance Available: 9956
2.13.4 Accelerate-Stop Distance Available: 9956
2.13.5 Landing Distance Available: 8029

2.13.1 Designation: 24L

- 2.13.2 Take-off Run Available: 9956
- 2.13.3 Take-off Distance Available: 9956
- 2.13.4 Accelerate–Stop Distance Available: 9956
- 2.13.5 Landing Distance Available: 9956

2.13.1 Designation: 102.13.2 Take-off Run Available: 60182.13.3 Take-off Distance Available: 60182.13.4 Accelerate-Stop Distance Available: 60182.13.5 Landing Distance Available: 6018

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 6018
2.13.3 Take-off Distance Available: 6018
2.13.4 Accelerate-Stop Distance Available: 6018
2.13.5 Landing Distance Available: 6018

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 06L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 06R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 24L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 102.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 282.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4R

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P2.18.3 Channel: 126.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P2.18.3 Channel: 346.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CAVVS DP2.18.3 Channel: 135.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 125.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 273.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (340–200) 2.18.3 Channel: 125.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (201–339) 2.18.3 Channel: 126.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 127.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 132.3752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P2.18.3 Channel: 128.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P2.18.3 Channel: 135.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 273.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: GTLKE DP 2.18.3 Channel: 128.25

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: KKIDS DP2.18.3 Channel: 135.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 124.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 273.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: PFLYD DP2.18.3 Channel: 128.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: ZAAPA DP2.18.3 Channel: 128.252.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 06L. Magnetic variation: 8W
2.19.2 ILS Identification: LIZ
2.19.5 Coordinates: 41–25–11.9443N / 81–50–35.682W
2.19.6 Site Elevation: 783.4 ft

2.19.1 ILS Type: Glide Slope for runway 06L. Magnetic variation: 8W
2.19.2 ILS Identification: LIZ
2.19.5 Coordinates: 41–24–9.1461N / 81–52–17.5279W
2.19.6 Site Elevation: 764.3 ft

2.19.1 ILS Type: Inner Marker for runway 06L. Magnetic variation: 8W
2.19.2 ILS Identification: LIZ
2.19.5 Coordinates: 41–23–53.9363N / 81–52–33.3994W
2.19.6 Site Elevation: 761.5 ft

2.19.1 ILS Type: Localizer for runway 06L. Magnetic variation: 8W
2.19.2 ILS Identification: LIZ
2.19.5 Coordinates: 41–25–10.1943N / 81–50–32.8939W
2.19.6 Site Elevation: 778.7 ft

2.19.1 ILS Type: DME for runway 24R. Magnetic variation: 8W
2.19.2 ILS Identification: PVY
2.19.5 Coordinates: 41–25–11.9443N / 81–50–35.682W
2.19.6 Site Elevation: 783.4 ft

2.19.1 ILS Type: Glide Slope for runway 24R. Magnetic variation: 8W 2.19.2 ILS Identification: PVY

2.19.5 Coordinates: 41-24-53.0116N / 81-51-8.214W 2.19.6 Site Elevation: 768.4 ft 2.19.1 ILS Type: Inner Marker for runway 24R. Magnetic variation: 8W 2.19.2 ILS Identification: PVY 2.19.5 Coordinates: 41-25-3.7844N / 81-50-47.3046W 2.19.6 Site Elevation: 777.9 ft 2.19.1 ILS Type: Localizer for runway 24R. Magnetic variation: 8W 2.19.2 ILS Identification: PVY 2.19.5 Coordinates: 41-23-53.0789N / 81-52-34.7494W 2.19.6 Site Elevation: 760.6 ft 2.19.1 ILS Type: DME for runway 06R. Magnetic variation: 8W 2.19.2 ILS Identification: CLE 2.19.5 Coordinates: 41-25-4.0601N / 81-50-11.0982W 2.19.6 Site Elevation: 794.1 ft 2.19.1 ILS Type: Glide Slope for runway 06R. Magnetic variation: 8W 2.19.2 ILS Identification: CLE 2.19.5 Coordinates: 41-24-13.6551N / 81-51-45.2101W 2.19.6 Site Elevation: 766 ft 2.19.1 ILS Type: Localizer for runway 06R. Magnetic variation: 8W 2.19.2 ILS Identification: CLE 2.19.5 Coordinates: 41-25-5.1773N / 81-50-15.5025W 2.19.6 Site Elevation: 785.5 ft 2.19.1 ILS Type: DME for runway 24L. Magnetic variation: 8W 2.19.2 ILS Identification: HPI 2.19.5 Coordinates: 41-23-44.3404N / 81-52-18.0729W 2.19.6 Site Elevation: 778.9 ft 2.19.1 ILS Type: Glide Slope for runway 24L. Magnetic variation: 8W 2.19.2 ILS Identification: HPI 2.19.5 Coordinates: 41-24-51.9504N / 81-50-45.3186W 2.19.6 Site Elevation: 782.2 ft 2.19.1 ILS Type: Localizer for runway 24L. Magnetic variation: 8W 2.19.2 ILS Identification: HPI 2.19.5 Coordinates: 41-23-45.4329N / 81-52-21.5252W 2.19.6 Site Elevation: 771.7 ft 2.19.1 ILS Type: DME for runway 28. Magnetic variation: 8W 2.19.2 ILS Identification: PXP 2.19.5 Coordinates: 41-24-58.7198N / 81-51-23.8351W 2.19.6 Site Elevation: 766.3 ft 2.19.1 ILS Type: Glide Slope for runway 28. Magnetic variation: 8W 2.19.2 ILS Identification: PXP 2.19.5 Coordinates: 41-25-3.4337N / 81-50-9.415W

2.19.6 Site Elevation: 786.3 ft

2.19.1 ILS Type: Localizer for runway 28. Magnetic variation: 8W
2.19.2 ILS Identification: PXP
2.19.5 Coordinates: 41–25–1.5177N / 81–51–21.2475W
2.19.6 Site Elevation: 756.3 ft

#### General Remarks:

NASA GLENN RESEARCH CENTER; NASA RAMP PPR CALL 216–433–2031; 0800–1730 MON–FRI. CONTACT NASA OPNS ON FREQ 122.925 WITHIN 50 NM.

RAMP AREA CONCOURSE D BTN GATES D1, D28 CLSD EXC ACFT WINGSPAN LESS THAN 86 FT.

TXL H CLSD TO ACFT WITH WINGSPAN OVR 171 FT.

PAD 3 BAYS 1–5 CLOSED TO ACFT WITH WINGSPAN OVER 134 FT.

PAD 2 AND TAXILANE Y1 RSTRD TO GROUP II ACFT LESS THAN 79 FT WINGSPAN.

DEER, COYOTES, & BIRDS INCLG WATERFOWL ON & INVOF ARPT.

ASSC IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

ADCUS AVBL DLY 0700–1900, LTD AVBLTY DURG OFF HRS; ALL REQS FOR SVC MUST BE MADE WITH THE US CUST SVC OFC LCTD AT GATE A–14, CALL 216–267–3600 DURG LISTED HRS.

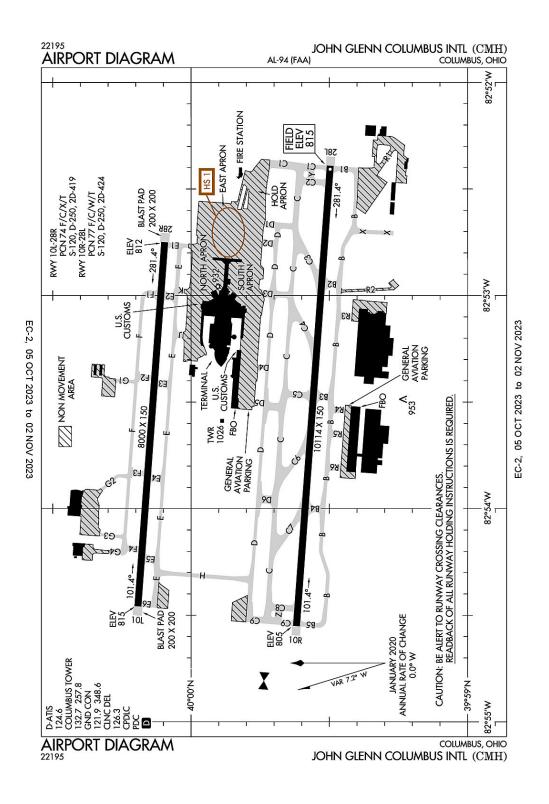
PAD 3 BAY 6 CLOSED TO ACFT WITH WINGSPAN OVER 94 FT.

ALL APCHS ARE OVR NOISE SENSITIVE AREAS. ARPT LATE NGT NOISE ABATEMENT PROCEDURES ARE IN EFFECT 2300–0600. ADDITIONAL NOISE ABATEMENT PROCEDURES ARE IN EFFECT CALL AMGR NORMAL BUSINESS HRS AT 216–265–6090.

TWY F CLSD TO ACFT WITH WINGSPAN OVR 118 FT.

TWYS CLSD OCT–APR TO SUPPORT DEICING OPS: TWY M; TWY J2; TWY M1 BTN TWY L & TWY J1; TWY M2 BTN TWY L & TWY J1.

# Columbus, Ohio Port Columbus International ICAO Identifier KCMH



# Columbus, OH Port Columbus Intl ICAO Identifier KCMH

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–59–49.008N / 82–53–31.773W
2.2.2 From City: 6 miles E of COLUMBUS, OH
2.2.3 Elevation: 815 ft
2.2.5 Magnetic Variation: 7W (2015)
2.2.6 Airport Contact: JOE NARDONE

COLUMBUS REGIONAL AIRPORT AUTHORITY
COLUMBUS, OH 43219 (614–239–4004)

2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 10L 2.12.2 True Bearing: 94 2.12.3 Dimensions: 8000 ft x 150 ft 2.12.4 PCN: 74 F/C/X/T 2.12.5 Coordinates: 40–0–11.5307N / 82–54–27.4941W 2.12.6 Threshold Elevation: 814.7 ft 2.12.6 Touchdown Zone Elevation: 814.8 ft

2.12.1 Designation: 28R 2.12.2 True Bearing: 274 2.12.3 Dimensions: 8000 ft x 150 ft 2.12.4 PCN: 74 F/C/X/T 2.12.5 Coordinates: 40–0–5.7308N / 82–52–44.9692W 2.12.6 Threshold Elevation: 812.3 ft 2.12.6 Touchdown Zone Elevation: 813.1 ft

2.12.1 Designation: 10R
2.12.2 True Bearing: 94
2.12.3 Dimensions: 10114 ft x 150 ft
2.12.4 PCN: 77 F/C/W/T
2.12.5 Coordinates: 39–59–37.1453N / 82–54–33.0422W
2.12.6 Threshold Elevation: 804.9 ft
2.12.6 Touchdown Zone Elevation: 809.2 ft

2.12.1 Designation: 28L 2.12.2 True Bearing: 274 2.12.3 Dimensions: 10114 ft x 150 ft 2.12.4 PCN: 77 F/C/W/T 2.12.5 Coordinates: 39–59–29.8102N / 82–52–23.4543W 2.12.6 Threshold Elevation: 815 ft 2.12.6 Touchdown Zone Elevation: 815 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 10L
2.13.2 Take-off Run Available: 8000
2.13.3 Take-off Distance Available: 8000
2.13.4 Accelerate-Stop Distance Available: 8000
2.13.5 Landing Distance Available: 8000

2.13.1 Designation: 28R

2.13.2 Take-off Run Available: 8000

2.13.3 Take-off Distance Available: 8000

2.13.4 Accelerate-Stop Distance Available: 8000

2.13.5 Landing Distance Available: 8000

2.13.1 Designation: 10R

2.13.2 Take-off Run Available: 10113

2.13.3 Take-off Distance Available: 10113

2.13.4 Accelerate-Stop Distance Available: 10113

2.13.5 Landing Distance Available: 10113

2.13.1 Designation: 28L

2.13.2 Take-off Run Available: 10113

2.13.3 Take-off Distance Available: 10113

2.13.4 Accelerate-Stop Distance Available: 10113

2.13.5 Landing Distance Available: 10113

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 10L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 10R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28L2.14.2 Approach Lighting System: MALSR

2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P (100-279)2.18.3 Channel: 1342.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (100–279) 2.18.3 Channel: 279.6 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (280–099) 2.18.3 Channel: 317.775 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (280–099) 2.18.3 Channel: 125.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (280–099) 2.18.3 Channel: 371.975 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CBUSS STAR2.18.3 Channel: 125.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: CBUSS STAR2.18.3 Channel: 371.9752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 126.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (280–099) 2.18.3 Channel: 125.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (100–279) 2.18.3 Channel: 134 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (100–279) 2.18.3 Channel: 279.6 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (280–099) 2.18.3 Channel: 317.775 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLPRR STAR2.18.3 Channel: 1342.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 124.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: DUBLN STAR2.18.3 Channel: 125.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: DUBLN STAR2.18.3 Channel: 371.9752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: JAKTZ STAR2.18.3 Channel: 1342.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 132.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: OPS (DEICE PAD CONTROL)2.18.3 Channel: 122.7752.18.5 Hours of Operation:

2.18.1 Service Designation: SCRLT STAR2.18.3 Channel: 134

2.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 10L. Magnetic variation: 7W
2.19.2 ILS Identification: CBP
2.19.5 Coordinates: 40–0–9.698N / 82–54–41.0247W
2.19.6 Site Elevation: 822.2 ft

2.19.1 ILS Type: Glide Slope for runway 10L. Magnetic variation: 7W
2.19.2 ILS Identification: CBP
2.19.5 Coordinates: 40–0–14.2837N / 82–54–14.862W
2.19.6 Site Elevation: 809.9 ft

2.19.1 ILS Type: Localizer for runway 10L. Magnetic variation: 7W
2.19.2 ILS Identification: CBP
2.19.5 Coordinates: 40–0–4.9978N / 82–52–32.0266W
2.19.6 Site Elevation: 799.2 ft

2.19.1 ILS Type: DME for runway 28R. Magnetic variation: 7W
2.19.2 ILS Identification: ONB
2.19.5 Coordinates: 40–0–9.698N / 82–54–41.0247W
2.19.6 Site Elevation: 822.2 ft

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 7W
2.19.2 ILS Identification: ONB
2.19.5 Coordinates: 40–0–9.1363N / 82–52–56.9903W
2.19.6 Site Elevation: 808.4 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 7W
2.19.2 ILS Identification: ONB
2.19.5 Coordinates: 40–0–12.2661N / 82–54–40.558W
2.19.6 Site Elevation: 811.7 ft

2.19.1 ILS Type: DME for runway 10R. Magnetic variation: 7W
2.19.2 ILS Identification: AQI
2.19.5 Coordinates: 39–59–33.7337N / 82–54–45.9278W
2.19.6 Site Elevation: 814.8 ft

2.19.1 ILS Type: Glide Slope for runway 10R. Magnetic variation: 7W
2.19.2 ILS Identification: AQI
2.19.5 Coordinates: 39–59–32.3813N / 82–54–20.6176W
2.19.6 Site Elevation: 802.7 ft

2.19.1 ILS Type: Localizer for runway 10R. Magnetic variation: 7W
2.19.2 ILS Identification: AQI
2.19.5 Coordinates: 39–59–29.072N / 82–52–10.4143W
2.19.6 Site Elevation: 814.1 ft

2.19.1 ILS Type: DME for runway 28L. Magnetic variation: 7W 2.19.2 ILS Identification: CMH

2.19.5 Coordinates: 39–59–33.7337N / 82–54–45.9278W 2.19.6 Site Elevation: 814.8 ft

2.19.1 ILS Type: Glide Slope for runway 28L. Magnetic variation: 7W
2.19.2 ILS Identification: CMH
2.19.5 Coordinates: 39–59–26.4974N / 82–52–36.6536W
2.19.6 Site Elevation: 810.7 ft

2.19.1 ILS Type: Localizer for runway 28L. Magnetic variation: 7W
2.19.2 ILS Identification: CMH
2.19.5 Coordinates: 39–59–37.8812N / 82–54–46.0853W
2.19.6 Site Elevation: 806 ft

### **General Remarks:**

TWY D-5 PAVEMENT (NORTH OF TWY D) IS RSTRD TO ACFT WITH WINGSPAN LESS THAN 79 FT.

TAXILANE CONCOURSE A BTN TWY D3 AND TWY D4 CLSD TO ACFT WINGSPAN MORE THAN 130 FT.

ALL SURFACES AROUND TERMINAL; NORTH OF TWY 'D' & SOUTH OF TWY 'E' ARE NON–MOVEMENT AREAS.

TO REQ LDG RIGHTS CTC US CUSTOMS BETWEEN 1230–0300Z, MON–FRI AT 614–497–1865.

BIRDS INVOF ARPT.

TWYS R2, R3, R4, R5 AND R6 RSTRD TO WINGSPAN LESS THAN 118 FT.

TWY F1 RSTRD TO AIRCRAFT WITH WINGSPAN LESS THAN 120 FT.

HOLD PAD FOR RWY 28L RSTRD TO ACFT WITH WINGSPAN LESS THAN 118 FT.

NOISE BARRIER LOCATED AT SE SIDE OF AIRFIELD RESTRICTED TO ACFT WITH WINGSPAN LESS THAN 79 FT.

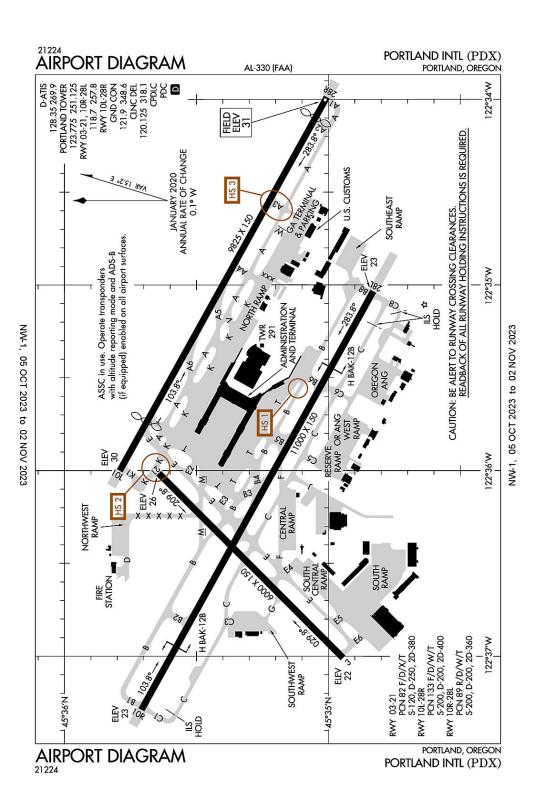
BE ALERT: RY 10L/28R RESTRICTIONS ON STAGE I & II TURBOJET ACFT 2200–0800 & ON STAGE III TURBOJET ACFT 2200–0700. PRACTICE APCHS FOR HIGH NOISE LEVEL TYPE ACFT INCLUDING NON–STAGE III MIL JET ACFT SHALL NOT BE APPROVED UNLESS RY 10R/28L IS IN USE & THE APCH TERMINATES IN A FULL STOP TAXI–BACK OPN.

MODEL ACFT TFC WITHIN A 1 NM RDS OF A POINT 8 NM ON A 010 DEG BRG FM THE ARPT; SFC – 5000 FT AGL; SR–SS DLY.

TAXILANE CONCOURSE C BTN TWY J AND TWY K CLSD TO ACFT WINGSPAN MORE THAN 135 FT.

FLIGHT NOTIFICATION SERVICE (ADCUS) AVBL.

TWY R1 RSTRD TO ACFT WITH WINGSPAN LESS THAN 79 FT.



Portland, Oregon Portland International ICAO Identifier KPDX

# Portland, OR Portland Intl ICAO Identifier KPDX

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 45–35–19.3519N / 122–35–48.7299W 2.2.2 From City: 4 miles NE of PORTLAND, OR 2.2.3 Elevation: 30.8 ft 2.2.5 Magnetic Variation: 16E (2010) 2.2.6 Airport Contact: STEPHEN NAGY 7200 NE AIRPORT WAY PORTLAND, OR 97218 (503–415–6195) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 03 2.12.2 True Bearing: 45 2.12.3 Dimensions: 6000 ft x 150 ft 2.12.4 PCN: 82 F/D/X/T 2.12.5 Coordinates: 45–34–56.73N / 122–37–0.5188W 2.12.6 Threshold Elevation: 22.2 ft 2.12.6 Touchdown Zone Elevation: 22.9 ft

2.12.1 Designation: 21
2.12.2 True Bearing: 225
2.12.3 Dimensions: 6000 ft x 150 ft
2.12.4 PCN: 82 F/D/X/T
2.12.5 Coordinates: 45–35–38.605N / 122–36–0.8463W
2.12.6 Threshold Elevation: 26.4 ft
2.12.6 Touchdown Zone Elevation: 26.4 ft

2.12.1 Designation: 10L 2.12.2 True Bearing: 119 2.12.3 Dimensions: 9825 ft x 150 ft 2.12.4 PCN: 133 F/D/W/T 2.12.5 Coordinates: 45–35–47.454N / 122–36–0.0581W 2.12.6 Threshold Elevation: 29.5 ft 2.12.6 Touchdown Zone Elevation: 30.2 ft 2.12.1 Designation: 28R
2.12.2 True Bearing: 299
2.12.3 Dimensions: 9825 ft x 150 ft
2.12.4 PCN: 133 F/D/W/T
2.12.5 Coordinates: 45–35–0.3785N / 122–33–59.2636W
2.12.6 Threshold Elevation: 30.8 ft
2.12.6 Touchdown Zone Elevation: 30.8 ft

2.12.1 Designation: 10R 2.12.2 True Bearing: 119 2.12.3 Dimensions: 11000 ft x 150 ft 2.12.4 PCN: 89 R/D/W/T 2.12.5 Coordinates: 45–35–42.5347N / 122–37–17.3022W 2.12.6 Threshold Elevation: 22.7 ft 2.12.6 Touchdown Zone Elevation: 23.7 ft

2.12.1 Designation: 28L
2.12.2 True Bearing: 299
2.12.3 Dimensions: 11000 ft x 150 ft
2.12.4 PCN: 89 R/D/W/T
2.12.5 Coordinates: 45–34–49.8531N / 122–35–2.0463W
2.12.6 Threshold Elevation: 22.7 ft
2.12.6 Touchdown Zone Elevation: 22.7 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 03
2.13.2 Take-off Run Available: 6000
2.13.3 Take-off Distance Available: 6000
2.13.4 Accelerate-Stop Distance Available: 6000
2.13.5 Landing Distance Available: 6000

2.13.1 Designation: 21
2.13.2 Take-off Run Available: 6000
2.13.3 Take-off Distance Available: 6000
2.13.4 Accelerate-Stop Distance Available: 6000
2.13.5 Landing Distance Available: 6000

2.13.1 Designation: 10L
2.13.2 Take-off Run Available: 9825
2.13.3 Take-off Distance Available: 9825
2.13.4 Accelerate-Stop Distance Available: 9825
2.13.5 Landing Distance Available: 8535
2.13.1 Designation: 28R

2.13.2 Take–off Run Available: 9825

2.13.3 Take-off Distance Available: 9825

2.13.4 Accelerate–Stop Distance Available: 9825

2.13.5 Landing Distance Available: 9290

2.13.1 Designation: 10R
2.13.2 Take-off Run Available: 11000
2.13.3 Take-off Distance Available: 11000
2.13.4 Accelerate-Stop Distance Available: 11000
2.13.5 Landing Distance Available: 11000

2.13.1 Designation: 28L
2.13.2 Take-off Run Available: 11000
2.13.3 Take-off Distance Available: 11000
2.13.4 Accelerate-Stop Distance Available: 11000
2.13.5 Landing Distance Available: 11000

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 032.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 212.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 10L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 10R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 28L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: AFRC OPS2.18.3 Channel: 138.452.18.5 Hours of Operation:

2.18.1 Service Designation: AFRC OPS2.18.3 Channel: 252.82.18.5 Hours of Operation:

2.18.1 Service Designation: ANG COMD POST (CALL STUMP TOWN)2.18.3 Channel: 288.92.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 280.52.18.5 Hours of Operation:

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 281.22.18.5 Hours of Operation:

2.18.1 Service Designation: CD/P2.18.3 Channel: 120.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 128.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 269.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 132.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10L/28R)2.18.3 Channel: 118.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 03/21, 10R/28L) 2.18.3 Channel: 123.775 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 03/21, 10R/28L)2.18.3 Channel: 251.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 10L/28R)2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 21. Magnetic variation: 16E
2.19.2 ILS Identification: GPO
2.19.5 Coordinates: 45–34–47.97N / 122–37–7.94W
2.19.6 Site Elevation: 31 ft

2.19.1 ILS Type: Localizer for runway 21. Magnetic variation: 16E
2.19.2 ILS Identification: GPO
2.19.5 Coordinates: 45–34–49.75N / 122–37–10.47W
2.19.6 Site Elevation: 11.4 ft

2.19.1 ILS Type: DME for runway 10L. Magnetic variation: 16E
2.19.2 ILS Identification: VDG
2.19.5 Coordinates: 45–35–47.9502N / 122–36–13.551W
2.19.6 Site Elevation: 25.5 ft

2.19.1 ILS Type: Glide Slope for runway 10L. Magnetic variation: 16E
2.19.2 ILS Identification: VDG
2.19.5 Coordinates: 45–35–39.7602N / 122–35–30.1707W
2.19.6 Site Elevation: 30.8 ft

2.19.1 ILS Type: Localizer for runway 10L. Magnetic variation: 16E
2.19.2 ILS Identification: VDG
2.19.5 Coordinates: 45–34–55.53N / 122–33–46.85W
2.19.6 Site Elevation: 28.9 ft

2.19.1 ILS Type: DME for runway 28R. Magnetic variation: 16E
2.19.2 ILS Identification: IAP
2.19.5 Coordinates: 45–35–47.95N / 122–36–13.551W
2.19.6 Site Elevation: 25.5 ft

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 16E
2.19.2 ILS Identification: IAP
2.19.5 Coordinates: 45–35–10.93N / 122–34–16.4W
2.19.6 Site Elevation: 30.1 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 16E
2.19.2 ILS Identification: IAP
2.19.5 Coordinates: 45–35–52.3N / 122–36–12.47W
2.19.6 Site Elevation: 25.6 ft

2.19.1 ILS Type: DME for runway 10R. Magnetic variation: 16E
2.19.2 ILS Identification: PDX
2.19.5 Coordinates: 45–34–46.7386N / 122–34–45.2294W
2.19.6 Site Elevation: 36 ft
2.19.1 ILS Type: Glide Slope for runway 10R. Magnetic variation: 16E

2.19.2 ILS Identification: PDX 2.19.5 Coordinates: 45–35–33.9026N / 122–37–7.2471W 2.19.6 Site Elevation: 16.1 ft

2.19.1 ILS Type: Inner Marker for runway 10R. Magnetic variation: 16E
2.19.2 ILS Identification: PDX
2.19.5 Coordinates: 45–35–46.7091N / 122–37–28.0266W
2.19.6 Site Elevation: 17 ft

2.19.1 ILS Type: Localizer for runway 10R. Magnetic variation: 16E
2.19.2 ILS Identification: PDX
2.19.5 Coordinates: 45–34–43.5268N / 122–34–45.8188W
2.19.6 Site Elevation: 19.5 ft

2.19.1 ILS Type: DME for runway 28L. Magnetic variation: 16E
2.19.2 ILS Identification: JMJ
2.19.5 Coordinates: 45–34–46.7386N / 122–34–45.2294W
2.19.6 Site Elevation: 36 ft

2.19.1 ILS Type: Glide Slope for runway 28L. Magnetic variation: 16E
2.19.2 ILS Identification: JMJ
2.19.5 Coordinates: 45–34–52.6331N / 122–35–16.7121W
2.19.6 Site Elevation: 19.9 ft

2.19.1 ILS Type: Localizer for runway 28L. Magnetic variation: 16E
2.19.2 ILS Identification: JMJ
2.19.5 Coordinates: 45–35–50.5155N / 122–37–37.8096W
2.19.6 Site Elevation: 24.8 ft

#### General Remarks:

FUEL - A (AIR BP - ATLANTIC AVIATION SVCS. C503-331-4220) J8(MIL) (NC-100LL, A)

BEARING STRENGTH: RWY 03-21 ST 175, RY 10L-28R ST175, RY 10R-28L ST175.

ACFT WITH WINGSPAN GREATER THAN 118 FEET ARE PROHIBITED FROM TURNING EASTBOUND ON TWY C FROM SOUTHWESTBOUND ON TWY F UNLESS UNDER TOW.

NOISE ABATEMENT PROCEDURES IN EFFECT; CALL NOISE OFFICE AT 503–460–4100. RY 28L ARRIVALS ARE NOISE SENSITIVE, EXPECT APCH TO 28R WITH TRANSITION TO 28L.

TWY T BTN EXITS B5 & B6 CLSD TO ACFT WITH WINGSPAN GTR THAN 118 FT.

OIL - O-128-133-148(MIL).

MISC: FLT NOTIFICATION SVC, ADCUS, AVBL.

AREA OF TWY T BTN M & E3 NOT VSB FM TWR.

MIGRATORY & WINTERING FLOCKS OF LRG WATERFOWL ON & INVOF APRT. HEAVY SEAGULL ACTIVITY SEP THRU APR; EXPECT HIGH NMBR OF BIRDS YEAR AROUND; CK LCL ADVISORIES.

ANG: SEE FLIP AP/1 FOR SUPPLEMENTARY ARPT INFO. HAZARDOUS BIRD COND EXIST. PHASE 1 MAY–OCT, PHASE II NOV–APR. CURRENT BIRD WATCH CONDITIONS ARE NOT REPORTED ON ATIS.

ACFT AUTHORIZED TO UTILIZE THE NORTHWEST RAMP WILL BE TOWED TO/FROM THIS RAMP.

ASSC IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

TWY K BTN TWY V & TWY A4 CLSD TO ACFT WINGSPAN MORE THAN 118 FT.

180 DEGREE TURNS BY ACFT WEIGHING IN EXCESS OF 12500 LBS PROHIBITED ON RY 10L/28R, RY 03/21 AND ALL TWYS.

ANG : PPR/OFFL BUS ONLY. BASE OPS OPR 1500–2300Z++ MON–FRI EXC HOL.; DSN 638–4390, C503–335–4390. CTC BASE OPS 15 MIN PRIOR TO LDG AND AFTER DEP ON 281.2. TRAN QUARTERS NOT AVBL. CAUTION: OBST LIGHTING IS NOT NVD COMPATIBLE. NVD NOT AUTHORIZED WHILE AIRBORNE IN VCNTY OF AFLD.

TWY K BTN TWY A5 & TWY V CLSD TO ACFT WINGSPAN MORE THAN 168 FT.

JASU - 4(A/M32A-86) (MC-11) 1(MA-1A).

FLUID – LHOXRB.

(E94) WSFO/WSO/FW/RFC.

TWY V CLSD TO ACFT WITH WINGSPAN GREATER THAN 168 FT. ACFT WITH WINGSPAN GREATER THAN 118 FT PROHIBITED FM TURNING WB ONTO TWY A FM TWY V UNLESS UNDER TOW.

TWY C BTN TWY C6 AND TWY C8 CLSD TO ACFT WITH WINGSPAN GTR THAN 200 FT.

TWY A3 BTN TWY A & THE GA RAMP CLSD TO ACFT WITH WINGSPAN GTR THAN 135 FEET UNLESS UNDER TOW.

UNCONTROLLED TFC AT PEARSON FIELD VANCOUVER WA 3 NM W OF RY 10L THLD ON EXTDD CNTRLN.

ARPT CLSD TO NON-POWERED ACFT EXCP IN EMERG.

AT THE WEST END ARM/DEARM AREA ON TWY C NO ACFT OF ANY TYPE MAY TAXI PAST THE ARM/DEARM AREA WHILE IT IS BEING USED.

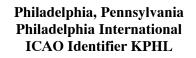
TWY C3 CLSD TO ACFT WITH WINGSPAN EQUAL TO OR GTR THAN 79 FT.

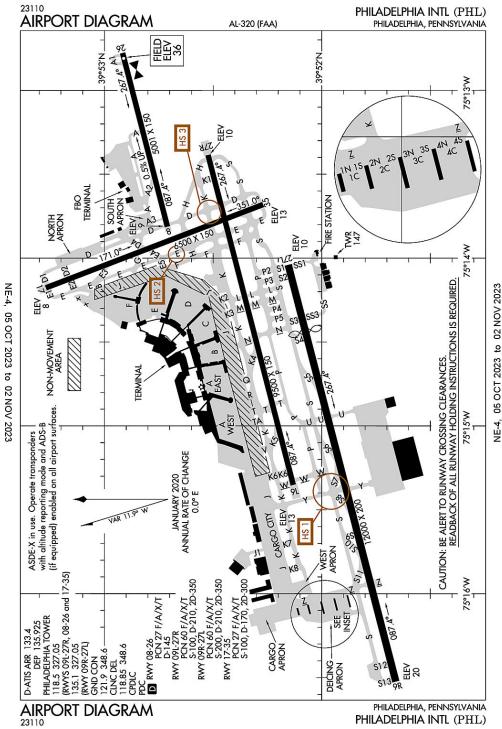
TWY W CLSD TO ACFT WITH WINGSPAN GTR THAN 118 FT UNLESS UNDER TOW.

PDX HAS FAC CONSTRAINTS THAT LMT ITS ABILITY TO ACCOMMODATE DIVD FLTS & MNTN THE ARPT SAFE OPN DUR IREG OPS. ACFT OPRS SHUD CTC THE ARPT DUTY MGR AT (503) 460–4236 TO COORD DIVD FLTS EXC IN THE CASE OF A DECLARED IN–FLT EMERG.

NSTD YELLOW PRK SPOT DESIGNATORS AND EQPT TOOL BOX LCTN PAINTED ON RAMP. PLEASE CTC BASE OPS OR REQ FOLLOW ME IF NOT FAMILIAR WITH PANGB PRK PROCEDURES.

MILITARY: ANG: OREGON ANG E RAMP SUN SHADE OBST LGTS O/S.





# Philadelphia, PA Philadelphia Intl ICAO Identifier KPHL

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 39–52–19.502N / 75–14–26.387W
2.2.2 From City: 5 miles SW of PHILADELPHIA, PA
2.2.3 Elevation: 35.9 ft
2.2.5 Magnetic Variation: 12W (2020)
2.2.6 Airport Contact: KEITH BRUNE DIV OF AVIATION TERMINAL E PHILADELPHIA, PA 19153 (215–937–6914)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08 2.12.2 True Bearing: 75 2.12.3 Dimensions: 5001 ft x 150 ft 2.12.4 PCN: 27 F/A/X/T 2.12.5 Coordinates: 39–52–42.0147N / 75–13–48.05W 2.12.6 Threshold Elevation: 9.3 ft 2.12.6 Touchdown Zone Elevation: 20.3 ft

2.12.1 Designation: 26
2.12.2 True Bearing: 256
2.12.3 Dimensions: 5001 ft x 150 ft
2.12.4 PCN: 27 F/A/X/T
2.12.5 Coordinates: 39–52–54.3825N / 75–12–45.9478W
2.12.6 Threshold Elevation: 35.9 ft
2.12.6 Touchdown Zone Elevation: 35.9 ft

2.12.1 Designation: 27R 2.12.2 True Bearing: 255 2.12.3 Dimensions: 9500 ft x 150 ft 2.12.4 PCN: 60 F/A/X/T 2.12.5 Coordinates: 39–52–30.7933N / 75–13–22.4291W 2.12.6 Threshold Elevation: 10.4 ft 2.12.6 Touchdown Zone Elevation: 10.5 ft 2.12.1 Designation: 09L

AD 2-499 5 OCT 23

2.12.2 True Bearing: 75
2.12.3 Dimensions: 9500 ft x 150 ft
2.12.4 PCN: 60 F/A/X/T
2.12.5 Coordinates: 39–52–7.2582N / 75–15–20.3809W
2.12.6 Threshold Elevation: 13.2 ft
2.12.6 Touchdown Zone Elevation: 13.3 ft
2.12.1 Designation: 09R
2.12.2 True Bearing: 75
2.12.3 Dimensions: 12000 ft x 200 ft
2.12.4 PCN: 60 F/A/X/T
2.12.5 Coordinates: 39–51–38.9137N / 75–16–30.7056W
2.12.6 Threshold Elevation: 20.1 ft
2.12.6 Touchdown Zone Elevation: 20.5 ft

2.12.1 Designation: 27L
2.12.2 True Bearing: 255
2.12.3 Dimensions: 12000 ft x 200 ft
2.12.4 PCN: 60 F/A/X/T
2.12.5 Coordinates: 39–52–8.651N / 75–14–1.719W
2.12.6 Threshold Elevation: 10.2 ft
2.12.6 Touchdown Zone Elevation: 10.1 ft

2.12.1 Designation: 17
2.12.2 True Bearing: 159
2.12.3 Dimensions: 6500 ft x 150 ft
2.12.4 PCN: 27 F/A/X/T
2.12.5 Coordinates: 39–53–15.5714N / 75–14–9.9268W
2.12.6 Threshold Elevation: 8.2 ft
2.12.6 Touchdown Zone Elevation: 10.5 ft

2.12.1 Designation: 35 2.12.2 True Bearing: 339 2.12.3 Dimensions: 6500 ft x 150 ft 2.12.4 PCN: 27 F/A/X/T 2.12.5 Coordinates: 39–52–15.5777N / 75–13–40.1314W 2.12.6 Threshold Elevation: 12.9 ft 2.12.6 Touchdown Zone Elevation: 12.9 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 08
2.13.2 Take-off Run Available: 5001
2.13.3 Take-off Distance Available: 5001
2.13.4 Accelerate-Stop Distance Available: 5001
2.13.5 Landing Distance Available: 5001

2.13.1 Designation: 262.13.2 Take-off Run Available: 5001

2.13.3 Take-off Distance Available: 5001 2.13.4 Accelerate-Stop Distance Available: 5001 2.13.5 Landing Distance Available: 5001 2.13.1 Designation: 27R 2.13.2 Take-off Run Available: 9500 2.13.3 Take-off Distance Available: 9500 2.13.4 Accelerate–Stop Distance Available: 9500 2.13.5 Landing Distance Available: 8864 2.13.1 Designation: 09L 2.13.2 Take-off Run Available: 9500 2.13.3 Take-off Distance Available: 9500 2.13.4 Accelerate-Stop Distance Available: 9500 2.13.5 Landing Distance Available: 9500 2.13.1 Designation: 09R 2.13.2 Take-off Run Available: 12000 2.13.3 Take-off Distance Available: 12000 2.13.4 Accelerate-Stop Distance Available: 12000 2.13.5 Landing Distance Available: 12000 2.13.1 Designation: 27L 2.13.2 Take-off Run Available: 12000 2.13.3 Take-off Distance Available: 12000 2.13.4 Accelerate–Stop Distance Available: 11825 2.13.5 Landing Distance Available: 9912 2.13.1 Designation: 17 2.13.2 Take-off Run Available: 6500 2.13.3 Take-off Distance Available: 6500 2.13.4 Accelerate–Stop Distance Available: 6500 2.13.5 Landing Distance Available: 6500 2.13.1 Designation: 35 2.13.2 Take-off Run Available: 6500 2.13.3 Take-off Distance Available: 6500 2.13.4 Accelerate–Stop Distance Available: 6500 2.13.5 Landing Distance Available: 6500

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 082.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 262.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 27R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 09L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 09R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 27L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 172.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 352.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: 5500 & BLO (NORTH)2.18.3 Channel: 123.82.18.5 Hours of Operation:

2.18.1 Service Designation: 5500 & BLO (NORTH)2.18.3 Channel: 291.72.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P (001–089, 5000 FT & BLW) 2.18.3 Channel: 123.8 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–360, 5000 FT & BLW) 2.18.3 Channel: 126.85 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (090–269, 5000 FT & BLW) 2.18.3 Channel: 127.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–089, ABV 5000 FT) 2.18.3 Channel: 128.4 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (090–269, 6000–8000 FT) 2.18.3 Channel: 133.875

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–360, 5000 FT & BLW) 2.18.3 Channel: 263.125 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–089, ABV 5000 FT) 2.18.3 Channel: 272.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–089, ABV 5000 FT) 2.18.3 Channel: 273.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (001–089, 5000 FT & BLW) 2.18.3 Channel: 291.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (090–269 6000–8000 FT) 2.18.3 Channel: 317.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (090–269, 5000 FT & BLW) 2.18.3 Channel: 317.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 124.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC2.18.3 Channel: 319.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: BUNTS STAR2.18.3 Channel: 128.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: BUNTS STAR2.18.3 Channel: 272.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 118.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CEDAR LAKE STAR

2.18.3 Channel: 133.875 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CEDAR LAKE STAR2.18.3 Channel: 317.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SW 6000 FT & BLW)2.18.3 Channel: 118.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SE RWY 09 ACTIVE 10000 FT & BLW)2.18.3 Channel: 119.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SE RWY 27 ACTIVE 8500–10000 FT)2.18.3 Channel: 119.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SOUTH/SOUTHWEST RWY 27 8500–10000 FT)2.18.3 Channel: 119.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NE 6500 FT & BLW)2.18.3 Channel: 123.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (W RWY 09 ACTIVE 8500–10000 FT) 2.18.3 Channel: 124.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (W RWY 27 ACTIVE 10000 FT & BLW)2.18.3 Channel: 124.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NW 8000–10000 FT) 2.18.3 Channel: 124.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NE 7000–10000 FT) 2.18.3 Channel: 124.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (5500 FT & BLW)2.18.3 Channel: 126.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (SE–SW 5000 FT & BLW)2.18.3 Channel: 127.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NORTH 6500-7500) 2.18.3 Channel: 128.4 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (WEST RWY 09 ACTIVE 8000 FT & BLW) 2.18.3 Channel: 128.4 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (6000-8000 FT) 2.18.3 Channel: 133.875 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (SOUTHEAST RWY 27 5500-7500) 2.18.3 Channel: 133.875 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (5500 FT & BLW) 2.18.3 Channel: 263.125 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (SE RWY 27 ACTIVE 8500-10000 FT) 2.18.3 Channel: 269.25 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (SE RWY 09 ACTIVE 10000 FT & BLW) 2.18.3 Channel: 269.25 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (SOUTH/SOUTHWEST RWY 27 8500-10000 FT) 2.18.3 Channel: 269.25 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (WEST RWY 09 ACTIVE 8000 FT & BLW) 2.18.3 Channel: 272.575 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (NORTH 6500-7500) 2.18.3 Channel: 272.575 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (N NE 6500-7500)

2.18.3 Channel: 273.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (W RWY 09 ACTIVE 8000 FT & BLW)2.18.3 Channel: 273.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NE RWY 27 ACTIVE 5000 FT & BLW)2.18.3 Channel: 291.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (RWY 27, 5500-7500 FT) 2.18.3 Channel: 317.55 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (SE-SW 5000 FT & BLW) 2.18.3 Channel: 317.55 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (6000-8000 FT) 2.18.3 Channel: 317.55 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (NE 7000-10000 FT) 2.18.3 Channel: 319.15 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (WEST RWY 09 ACTIVE 8500-10000 FT) 2.18.3 Channel: 319.15 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (NW 8000-10000 FT) 2.18.3 Channel: 319.15 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS B (SW 6000 FT & BLW) 2.18.3 Channel: 323.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: D-ATIS (ARR) 2.18.3 Channel: 133.4 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: D-ATIS (DEP) 2.18.3 Channel: 135.925 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (090-269) 2.18.3 Channel: 119.75 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (270-089) 2.18.3 Channel: 124.35 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (090-269) 2.18.3 Channel: 269.25 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (270-089) 2.18.3 Channel: 319.15

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: FINAL APCH2.18.3 Channel: 125.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/S2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: JIIMS STAR2.18.3 Channel: 133.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: JIIMS STAR2.18.3 Channel: 317.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08/26, 09L/27R, 17/35) 2.18.3 Channel: 118.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09R/27L)2.18.3 Channel: 135.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 327.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: PAATS STAR2.18.3 Channel: 133.8752.18.5 Hours of Operation: 24

2.18.1 Service Designation: PAATS STAR

2.18.3 Channel: 317.55 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: PHL ONE DP2.18.3 Channel: 124.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: PHL ONE DP2.18.3 Channel: 319.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 27L)2.18.3 Channel: 120.4252.18.5 Hours of Operation: 24

2.18.1 Service Designation: PRM (RWY 26)2.18.3 Channel: 123.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: SLATT STAR2.18.3 Channel: 128.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: SLATT STAR2.18.3 Channel: 273.5752.18.5 Hours of Operation: 24

2.18.1 Service Designation: SPUDS STAR2.18.3 Channel: 128.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: SPUDS STAR2.18.3 Channel: 272.5752.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 26. Magnetic variation: 12W
2.19.2 ILS Identification: LLH
2.19.5 Coordinates: 39–52–42.2207N / 75–13–32.3765W
2.19.6 Site Elevation: 28.9 ft

2.19.1 ILS Type: Glide Slope for runway 26. Magnetic variation: 12W
2.19.2 ILS Identification: LLH
2.19.5 Coordinates: 39–52–49.3706N / 75–12–58.3473W
2.19.6 Site Elevation: 21.3 ft

2.19.1 ILS Type: Localizer for runway 26. Magnetic variation: 12W
2.19.2 ILS Identification: LLH
2.19.5 Coordinates: 39–52–42.383N / 75–13–31.8279W
2.19.6 Site Elevation: 5.4 ft

2.19.1 ILS Type: DME for runway 09L. Magnetic variation: 12W
2.19.2 ILS Identification: VII
2.19.5 Coordinates: 39–52–37.1712N / 75–13–11.1396W
2.19.6 Site Elevation: 20 ft

2.19.1 ILS Type: Glide Slope for runway 09L. Magnetic variation: 12W
2.19.2 ILS Identification: VII
2.19.5 Coordinates: 39–52–6.03N / 75–15–6.06W
2.19.6 Site Elevation: 8.9 ft

2.19.1 ILS Type: Localizer for runway 09L. Magnetic variation: 12W
2.19.2 ILS Identification: VII
2.19.5 Coordinates: 39–52–33.52N / 75–13–8.777W
2.19.6 Site Elevation: 7.2 ft

2.19.1 ILS Type: DME for runway 27R. Magnetic variation: 12W
2.19.2 ILS Identification: PDP
2.19.5 Coordinates: 39–52–37.1712N / 75–13–11.1396W
2.19.6 Site Elevation: 20 ft

2.19.1 ILS Type: Glide Slope for runway 27R. Magnetic variation: 12W
2.19.2 ILS Identification: PDP
2.19.5 Coordinates: 39–52–24.0466N / 75–13–35.8144W
2.19.6 Site Elevation: 7.5 ft

2.19.1 ILS Type: Localizer for runway 27R. Magnetic variation: 12W
2.19.2 ILS Identification: PDP
2.19.5 Coordinates: 39–52–4.7498N / 75–15–32.9263W
2.19.6 Site Elevation: 8.8 ft

2.19.1 ILS Type: DME for runway 09R. Magnetic variation: 12W
2.19.2 ILS Identification: PHL
2.19.5 Coordinates: 39–52–7.3002N / 75–13–47.0459W
2.19.6 Site Elevation: 23.5 ft

2.19.1 ILS Type: Glide Slope for runway 09R. Magnetic variation: 12W
2.19.2 ILS Identification: PHL
2.19.5 Coordinates: 39–51–37.8234N / 75–16–15.7274W
2.19.6 Site Elevation: 13.3 ft

2.19.1 ILS Type: Inner Marker for runway 09R. Magnetic variation: 12W
2.19.2 ILS Identification: PHL
2.19.5 Coordinates: 39–51–36.7356N / 75–16–41.589W
2.19.6 Site Elevation: 7.2 ft

2.19.1 ILS Type: Localizer for runway 09R. Magnetic variation: 12W
2.19.2 ILS Identification: PHL
2.19.5 Coordinates: 39–52–11.1577N / 75–13–49.1415W
2.19.6 Site Elevation: 9.1 ft

2.19.1 ILS Type: DME for runway 27L. Magnetic variation: 12W
2.19.2 ILS Identification: GLC
2.19.5 Coordinates: 39–52–7.3002N / 75–13–47.0459W
2.19.6 Site Elevation: 23.5 ft

2.19.1 ILS Type: Glide Slope for runway 27L. Magnetic variation: 12W
2.19.2 ILS Identification: GLC
2.19.5 Coordinates: 39–51–57.2838N / 75–14–37.7318W
2.19.6 Site Elevation: 8.5 ft

2.19.1 ILS Type: Localizer for runway 27L. Magnetic variation: 12W
2.19.2 ILS Identification: GLC
2.19.5 Coordinates: 39–51–36.2572N / 75–16–43.9517W
2.19.6 Site Elevation: 6.8 ft

2.19.1 ILS Type: DME for runway 17. Magnetic variation: 12W
2.19.2 ILS Identification: MYY
2.19.5 Coordinates: 39–52–6.7468N / 75–13–39.3372W
2.19.6 Site Elevation: 24.5 ft

2.19.1 ILS Type: Glide Slope for runway 17. Magnetic variation: 12W
2.19.2 ILS Identification: MYY
2.19.5 Coordinates: 39–53–5.9004N / 75–14–8.6899W
2.19.6 Site Elevation: 6.2 ft

2.19.1 ILS Type: Localizer for runway 17. Magnetic variation: 12W
2.19.2 ILS Identification: MYY
2.19.5 Coordinates: 39–52–6.3204N / 75–13–35.5323W
2.19.6 Site Elevation: 12 ft

**General Remarks:** ARPT IS LCTD IN A NOISE SENSITIVE AREA. AIRPORT NOISE ABATEMENT TAKEOFF PROCEDURES ARE TO BE USED.

ONLY NOSE–IN PRKG PERMITTED ON NORTH REMOTE APNS. PPR FM ARPT OPS FOR ALL ACFT PRKG ON REMOTE APNS; CTC 215–937–6914/6800.

RY 09R ROLLOUT RVR USED FOR RY 09L MIDPOINT RVR.

RYS 27L, 27R & 35 SHIP CHNL (DELAWARE RIVER) MAX HEIGHT OF SHIPS 189 FT. RY 26 SHIP CHNL (SCHUYLKILL) MAX HEIGHT OF SHIPS 149 FT.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

ALL ACFT TRAVELING ON TWY J MUST USE MINIMUM POWER WHEN TURNING SOUTH DUE TO JETBLAST CONCERNS.

UNLGTD STACK 288 FT MSL (271 FT AGL) 2.3 NM SW OF ARPT.

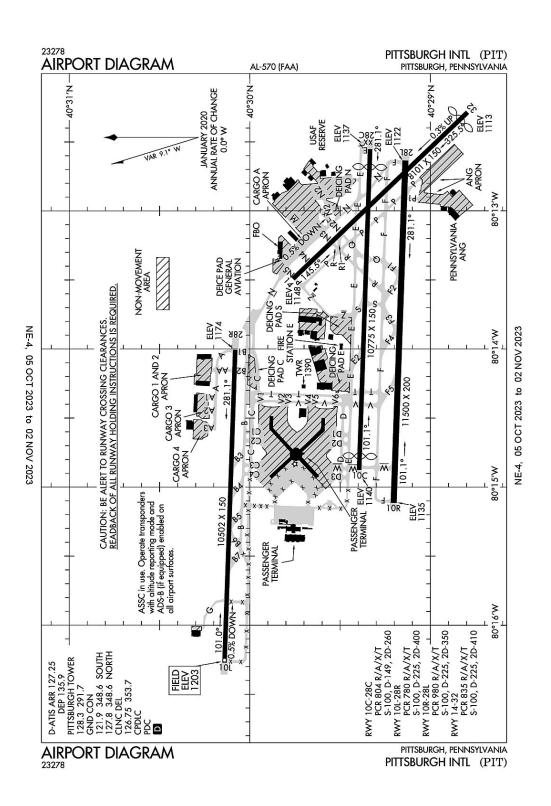
TCAS EQUIPPED ACFT–TCAS ALERT MAY BE CAUSED BY TRANSPONDER EQUIPPED SHIPS LCTD PHL NAVAL BASE 3 NM E.

TWY J BTN TWYS K3 AND Q RESTRICTED TO ACFT WITH WINGSPANS 171 FT AND LESS.

ALL ENGINE RUNUPS REQUIRE PPR FM DUTY OPNS OFFICER AT 937–6914/6800; RUNUPS 20 MIN MAXIMUM.

POSSIBLE UNMARKED SHIP OBSTRUCTION TRANSITING EAST OR WESTBOUND ALONG THE DELAWARE RIVER REACHING HEIGHTS OF 189' – BE ALERT WHEN APPROACHING PHL RUNWAY 35 AND WHENEVER CIRCLING OR VISUALLY APPROACHING ALL OTHER RUNWAYS.

BIRDS ON & INVOF ARPT.



# Pittsburgh, Pennsylvania Pittsburgh International ICAO Identifier KPIT

# Pittsburgh, PA Pittsburgh Intl ICAO Identifier KPIT

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 40–29–29.1N / 80–13–57.7W
2.2.2 From City: 12 miles NW of PITTSBURGH, PA
2.2.3 Elevation: 1202.9 ft
2.2.5 Magnetic Variation: 9W (2020)
2.2.6 Airport Contact: CHRISTINA A. CASSOTIS PO BOX 12370, SUITE 4000 PITTSBURGH, PA 15231 ((412) 472–3509)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, All Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MINOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 28C
2.12.2 True Bearing: 272
2.12.3 Dimensions: 10775 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40–29–20.0419N / 80–12–33.1754W
2.12.6 Threshold Elevation: 1136.6 ft
2.12.6 Touchdown Zone Elevation: 1133.5 ft

2.12.1 Designation: 10C
2.12.2 True Bearing: 92
2.12.3 Dimensions: 10775 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40-29-23.6989N / 80-14-52.5475W
2.12.6 Threshold Elevation: 1140.2 ft
2.12.6 Touchdown Zone Elevation: 1141.4 ft

2.12.1 Designation: 10L
2.12.2 True Bearing: 92
2.12.3 Dimensions: 10502 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40–30–8.4012N / 80–16–16.2687W
2.12.6 Threshold Elevation: 1202.9 ft
2.12.6 Touchdown Zone Elevation: 1202.9 ft

2.12.1 Designation: 28R

2.12.2 True Bearing: 272 2.12.3 Dimensions: 10502 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-30-4.8667N / 80-14-0.4048W 2.12.6 Threshold Elevation: 1174.1 ft 2.12.6 Touchdown Zone Elevation: 1174.1 ft 2.12.1 Designation: 10R 2.12.2 True Bearing: 92 2.12.3 Dimensions: 11500 ft x 200 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-29-12.2249N / 80-15-6.8568W 2.12.6 Threshold Elevation: 1134.8 ft 2.12.6 Touchdown Zone Elevation: 1134.8 ft 2.12.1 Designation: 28L 2.12.2 True Bearing: 272 2.12.3 Dimensions: 11500 ft x 200 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-29-8.3238N / 80-12-38.1249W 2.12.6 Threshold Elevation: 1121.9 ft 2.12.6 Touchdown Zone Elevation: 1125 ft 2.12.1 Designation: 32 2.12.2 True Bearing: 316 2.12.3 Dimensions: 8101 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-28-47.69N / 80-12-17.2183W 2.12.6 Threshold Elevation: 1113.4 ft 2.12.6 Touchdown Zone Elevation: 1123.6 ft

2.12.1 Designation: 14
2.12.2 True Bearing: 136
2.12.3 Dimensions: 8101 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40-29-45.6544N / 80-13-29.5187W
2.12.6 Threshold Elevation: 1147.6 ft
2.12.6 Touchdown Zone Elevation: 1147.6 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 28C
2.13.2 Take-off Run Available: 10775
2.13.3 Take-off Distance Available: 10775
2.13.4 Accelerate-Stop Distance Available: 10310
2.13.5 Landing Distance Available: 9708

2.13.1 Designation: 10C2.13.2 Take-off Run Available: 10775

2.13.3 Take-off Distance Available: 10775 2.13.4 Accelerate–Stop Distance Available: 10173 2.13.5 Landing Distance Available: 9708 2.13.1 Designation: 10L 2.13.2 Take-off Run Available: 10502 2.13.3 Take-off Distance Available: 10502 2.13.4 Accelerate–Stop Distance Available: 10502 2.13.5 Landing Distance Available: 10502 2.13.1 Designation: 28R 2.13.2 Take-off Run Available: 10502 2.13.3 Take-off Distance Available: 10502 2.13.4 Accelerate-Stop Distance Available: 10102 2.13.5 Landing Distance Available: 10102 2.13.1 Designation: 10R 2.13.2 Take-off Run Available: 11500 2.13.3 Take-off Distance Available: 11500 2.13.4 Accelerate–Stop Distance Available: 11492 2.13.5 Landing Distance Available: 11492 2.13.1 Designation: 28L 2.13.2 Take-off Run Available: 11500 2.13.3 Take-off Distance Available: 11500 2.13.4 Accelerate-Stop Distance Available: 11500 2.13.5 Landing Distance Available: 11500 2.13.1 Designation: 32 2.13.2 Take-off Run Available: 8101 2.13.3 Take-off Distance Available: 8101 2.13.4 Accelerate–Stop Distance Available: 7801 2.13.5 Landing Distance Available: 7466 2.13.1 Designation: 14 2.13.2 Take-off Run Available: 8101 2.13.3 Take-off Distance Available: 8101 2.13.4 Accelerate–Stop Distance Available: 7366 2.13.5 Landing Distance Available: 7366

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 28C2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10C2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10L

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 10R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 28L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 322.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 142.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG OPS2.18.3 Channel: 3112.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P (271–360) 2.18.3 Channel: 121.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (001–090) 2.18.3 Channel: 124.15 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (181–270) 2.18.3 Channel: 133.7 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (270–089) 2.18.3 Channel: 279.625 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (090–269) 2.18.3 Channel: 360.8 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P 2.18.3 Channel: 336.2

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (091–180) 2.18.3 Channel: 123.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 126.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 353.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (271–360) 2.18.3 Channel: 121.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (091–180) 2.18.3 Channel: 123.95 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (001–090) 2.18.3 Channel: 124.15 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (181–270)2.18.3 Channel: 133.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (270–089) 2.18.3 Channel: 279.625 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (090–269) 2.18.3 Channel: 360.8 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: COMD POST2.18.3 Channel: 252.12.18.5 Hours of Operation:

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 127.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 135.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (SOUTH)

2.18.3 Channel: 119.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (NORTH)2.18.3 Channel: 124.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (090–269) 2.18.3 Channel: 285.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P (NORTH)2.18.3 Channel: 338.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/S2.18.3 Channel: 125.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (SOUTH)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (NORTH)2.18.3 Channel: 127.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 128.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 291.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: OPS2.18.3 Channel: 36.352.18.5 Hours of Operation:

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 10L. Magnetic variation: 9W
2.19.2 ILS Identification: LXB
2.19.5 Coordinates: 40–30–11.9236N / 80–15–59.9044W
2.19.6 Site Elevation: 1195 ft

2.19.1 ILS Type: Inner Marker for runway 10L. Magnetic variation: 9W
2.19.2 ILS Identification: LXB
2.19.5 Coordinates: 40–30–8.7927N / 80–16–27.004W
2.19.6 Site Elevation: 1175.5 ft

2.19.1 ILS Type: Localizer for runway 10L. Magnetic variation: 9W
2.19.2 ILS Identification: LXB
2.19.5 Coordinates: 40–30–4.5231N / 80–13–47.1428W
2.19.6 Site Elevation: 1160.8 ft

2.19.1 ILS Type: Glide Slope for runway 28R. Magnetic variation: 9W
2.19.2 ILS Identification: HFE
2.19.5 Coordinates: 40–30–8.7192N / 80–14–14.6252W
2.19.6 Site Elevation: 1170.6 ft

2.19.1 ILS Type: Localizer for runway 28R. Magnetic variation: 9W
2.19.2 ILS Identification: HFE
2.19.5 Coordinates: 40–30–8.7888N / 80–16–31.3335W
2.19.6 Site Elevation: 1214.2 ft

2.19.1 ILS Type: Glide Slope for runway 10R. Magnetic variation: 9W
2.19.2 ILS Identification: GUT
2.19.5 Coordinates: 40–29–15.3464N / 80–14–53.775W
2.19.6 Site Elevation: 1129.2 ft

2.19.1 ILS Type: Inner Marker for runway 10R. Magnetic variation: 9W
2.19.2 ILS Identification: GUT
2.19.5 Coordinates: 40–29–12.5381N / 80–15–18.8824W
2.19.6 Site Elevation: 1144.8 ft

2.19.1 ILS Type: Localizer for runway 10R. Magnetic variation: 9W
2.19.2 ILS Identification: GUT
2.19.5 Coordinates: 40–29–8.2188N / 80–12–34.1165W
2.19.6 Site Elevation: 1116.6 ft

2.19.1 ILS Type: Glide Slope for runway 28L. Magnetic variation: 9W
2.19.2 ILS Identification: PFS
2.19.5 Coordinates: 40–29–4.7301N / 80–12–51.2688W
2.19.6 Site Elevation: 1120.3 ft

2.19.1 ILS Type: Localizer for runway 28L. Magnetic variation: 9W
2.19.2 ILS Identification: PFS
2.19.5 Coordinates: 40–29–12.6437N / 80–15–23.0275W
2.19.6 Site Elevation: 1141.2 ft

2.19.1 ILS Type: DME for runway 32. Magnetic variation: 9W
2.19.2 ILS Identification: TQW
2.19.5 Coordinates: 40–29–48.847N / 80–13–37.583W
2.19.6 Site Elevation: 1134 ft

2.19.1 ILS Type: Glide Slope for runway 32. Magnetic variation: 9W
2.19.2 ILS Identification: TQW
2.19.5 Coordinates: 40–28–52.663N / 80–12–29.1403W
2.19.6 Site Elevation: 1112.2 ft

2.19.1 ILS Type: Localizer for runway 32. Magnetic variation: 9W
2.19.2 ILS Identification: TQW
2.19.5 Coordinates: 40–29–50.4118N / 80–13–35.4629W
2.19.6 Site Elevation: 1139.1 ft

#### **General Remarks:**

TWY AA NO TURN-OFF ONTO TWY A FOR ACFT WINGSPAN 171 FT OR GREATER EXC PPR (412) 472-5630.

[MILITARY]: CAUTION: BASH PHASE II OPS IN EFFECT 1 JUL – 31 AUG ANNUALLY. UNLESS MSN REQUIREMENTS DIRECT OTHERWISE, FLIGHTS SHOULD NOT BE SKED WITHIN +/–1HR OF SS/SR. TRAN AIRCREW SHOULD REQ BIRD WATCH COND FR AFRC (PITT OPS) ON 252.1 OR ANG OPS (STEEL CTL) ON 311.0. AIRCREW WILL BE INFORMED BY STEEL CONTROL OR PITT OPS (AS APPLICABLE) IF CURRENT BWC IS OTHER THAN LOW REGARDLESS OF BASH PHASE.

SERVICE-OIL: O-156.

TERML TAXILANES E OF CONCOURSES A & B RESTRD TO GROUP 3 ACFT & SMALLER.

ACFT USING TWY 'N' PROHIBITED TO STOP ON OVERPASS AREA DUE TO POSSIBLE EMERGENCY EVACUATION HAZARD.

DEER & BIRDS ON & INVOF ARPT.

ANG: OPR 1130–2030Z++MON–FRI EXCP HOL. (CLSD EV OTH MON.)

PPR/OFFL BUS MIN 48 HR CTC AFLD MGMT DSN 277 8163, C412 474 8163. LTD TRAN SVC. AFLD MGT NML DUTY HRS 1300 0100++ MON, WED, FRI, 1300–0500++ TUE, THU, EXC HOL. UNIT TRAINING ASSEMBLY 1300 2100Z++SAT. TRAN ACFT MUST HAVE APPVL OF 9110G/CC FOR PPR DUR OFF DUTY HR. NO SVC AVBL FOR SPACE AVBL PAX DUR OFF DUTY HR. CALL PITT COMD POST (IRON CITY) BY RDO 15 MIN PRIOR TO ARRIVAL. ALFD MGMT DOES NOT ISSUE OR STOR COMSEC. COMSEC STOR CTC COMD POST DSN 277 8146.

ANG ACFT MUST CTC TANKER 303.0/FTR OPNS 293.7 BEFORE CROSSING RWY 28L TO OBTAIN CLNC TO ENTER.

ASSC IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS–B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

SERVICE-TRAN ALERT: NO PRIORITY BASIS.

FUEL: A++ PROVIDED BY ANG AND AFRC.(MIL).

LDG FEE.

TRML APN UNCONTROLLED. PUSHBACK PILOT DESCRETION. DO NOT EXIT TRML APN AT TWY C1, C4,

V3, V4, D1, W. CTC GC WHEN HLDG AT TWY C2, C3, V1, V2, V5, V6, D2, D3.

PUSHBACK CLNC REQUIRED FR GATES A100 AND A101 AT CARGO A. CTC GC. PUSHBACK FM THESE GATES ENTERS TWY N.

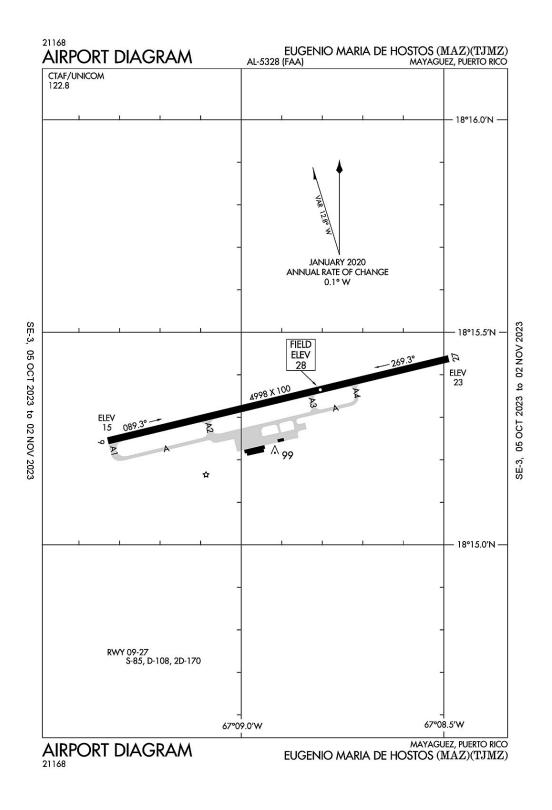
SERVICE-JASU: (ANG) (A/M32A-86) (AM 32-95; (AFRC - 2(A/M32-86 (AM32-95).

SERVICE-FLUID: LPOX LHNIT.

ATCT IS AUTHORIZED TO HAVE ACFT LINE–UP & WAIT ON RYS 28L AT TWY 'P' DURG HRS OF DARKNESS. THE SPECIFIC RY SHALL BE USED ONLY FOR DEPARTURES & THE INTXN MUST BE VSB FM ATCT.

TWY G INTXN AT RY 10L/28R RIGHT TURN NA.

# Mayaguez, Puerto Rico Eugenio Maria De Hostos ICAO Identifier TJMZ



## Mayaguez, PR Eugenio Maria De Hostos ICAO Identifier TJMZ

AD 2.2 Aerodrome geographical and administrative data 2.2.1 Reference Point: 18–15–20.5N / 67–8–54.5W 2.2.2 From City: 3 miles N of MAYAGUEZ, PR 2.2.3 Elevation: 27.7 ft 2.2.5 Magnetic Variation: 10W (1985) 2.2.6 Airport Contact: EDGAR SIERRA BOX 710 MAYAGUEZ, PR 681 (787–832–3390) 2.2.7 Traffic: IFR/VFR

## AD 2.3 Attendance Schedule

2.3.1 All Months, MON-FRI Days, 0730-1600 Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types:2.4.5 Hangar Space: NO2.4.6 Repair Facilities: NONE

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: None2.6.2 Rescue and Firefighting Services: None

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 27
2.12.2 True Bearing: 256
2.12.3 Dimensions: 4998 ft x 100 ft
2.12.4 PCN:
2.12.5 Coordinates: 18–15–26.2517N / 67–8–29.2981W
2.12.6 Threshold Elevation: 23.2 ft
2.12.6 Touchdown Zone Elevation: 27.7 ft

2.12.1 Designation: 09
2.12.2 True Bearing: 76
2.12.3 Dimensions: 4998 ft x 100 ft
2.12.4 PCN:
2.12.5 Coordinates: 18–15–14.6817N / 67–9–19.728W
2.12.6 Threshold Elevation: 15.3 ft
2.12.6 Touchdown Zone Elevation: 27.6 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 272.13.2 Take-off Run Available:2.13.3 Take-off Distance Available:2.13.4 Accelerate-Stop Distance Available:2.13.5 Landing Distance Available:

2.13.1 Designation: 09

2.13.2 Take–off Run Available:

2.13.3 Take-off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 27

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 092.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

# AD 2.18 Air Traffic Services Communication Facilities

# AD 2.19 Radio Navigation and Landing Aids

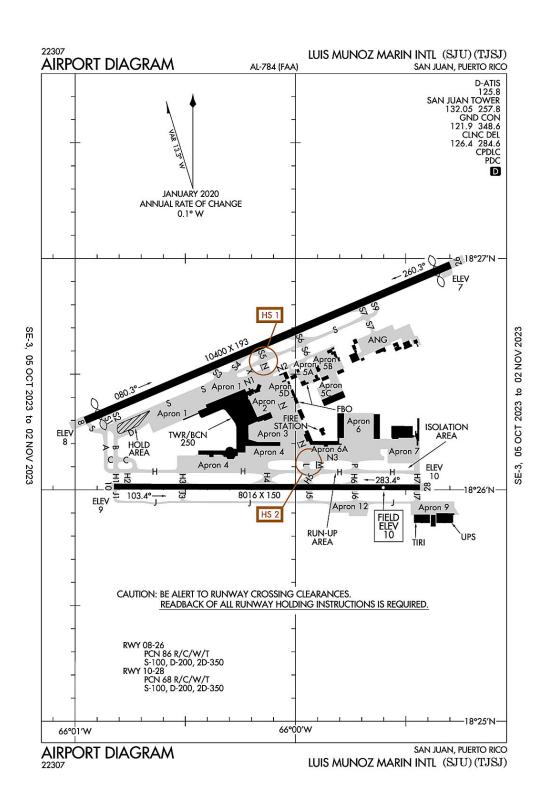
2.19.1 Navigation Aid Type: NDB. Magnetic variation: 10W
2.19.2 Navigation Aid Identification: MAZ
2.19.5 Coordinates: 18–15–13.529N / 67–9–8.947W
2.19.6 Site Elevation:

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 10W
2.19.2 Navigation Aid Identification: MAZ
2.19.5 Coordinates: 18–15–23.2293N / 67–9–3.7215W
2.19.6 Site Elevation: 18 ft

# **General Remarks:** FOR CD IF FREQ ARE OTS CTC SAN JUAN CERAP AT 787–253–8664/8667

ULTRALIGHT ACTIVITY.

BIRDS ON AND INVOF ARPT.



# San Juan, Puerto Rico Luis Munoz Marin International ICAO Identifier TJSJ

# San Juan, PR Luis Munoz Marin Intl ICAO Identifier TJSJ

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 18–26–21.837N / 66–0–7.68W 2.2.2 From City: 3 miles SE of SAN JUAN, PR 2.2.3 Elevation: 9.6 ft 2.2.5 Magnetic Variation: 11W (1985) 2.2.6 Airport Contact: MR. JORGE HERNANDEZ P. O. BOX 38085 SAN JUAN, PR 937 ((787) 289–7240) 2.2.7 Traffic: IFR/VFR

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# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,A+,A++2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/2005 2.6.2 Rescue and Firefighting Services: ARFF Index–D

# **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 08 2.12.2 True Bearing: 67 2.12.3 Dimensions: 10400 ft x 193 ft 2.12.4 PCN: 86 R/C/W/T 2.12.5 Coordinates: 18–26–17.9673N / 66–0–57.3115W 2.12.6 Threshold Elevation: 8.2 ft 2.12.6 Touchdown Zone Elevation: 9.3 ft

2.12.1 Designation: 26
2.12.2 True Bearing: 247
2.12.3 Dimensions: 10400 ft x 193 ft
2.12.4 PCN: 86 R/C/W/T
2.12.5 Coordinates: 18–26–58.2684N / 65–59–17.8783W
2.12.6 Threshold Elevation: 6.9 ft
2.12.6 Touchdown Zone Elevation: 7.4 ft

2.12.1 Designation: 10

2.12.2 True Bearing: 90
2.12.3 Dimensions: 8016 ft x 150 ft
2.12.4 PCN: 68 R/C/W/T
2.12.5 Coordinates: 18–26–0.8092N / 66–0–49.4179W
2.12.6 Threshold Elevation: 9.3 ft
2.12.6 Touchdown Zone Elevation: 9.3 ft

2.12.1 Designation: 28
2.12.2 True Bearing: 270
2.12.3 Dimensions: 8016 ft x 150 ft
2.12.4 PCN: 68 R/C/W/T
2.12.5 Coordinates: 18–26–0.6107N / 65–59–26.159W
2.12.6 Threshold Elevation: 9.5 ft
2.12.6 Touchdown Zone Elevation: 9.6 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 08
2.13.2 Take-off Run Available: 10400
2.13.3 Take-off Distance Available: 10400
2.13.4 Accelerate-Stop Distance Available: 9784
2.13.5 Landing Distance Available: 9384

2.13.1 Designation: 26

2.13.2 Take-off Run Available: 10400

2.13.3 Take-off Distance Available: 10400

2.13.4 Accelerate-Stop Distance Available: 10308

2.13.5 Landing Distance Available: 9908

2.13.1 Designation: 10
2.13.2 Take-off Run Available: 8016
2.13.3 Take-off Distance Available: 8016
2.13.4 Accelerate-Stop Distance Available: 8016
2.13.5 Landing Distance Available: 8016

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 8016
2.13.3 Take-off Distance Available: 8016
2.13.4 Accelerate-Stop Distance Available: 8016
2.13.5 Landing Distance Available: 8016

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 08

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 262.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 102.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 282.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P (WEST & SW)2.18.3 Channel: 119.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (NORTH & EAST)2.18.3 Channel: 120.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (WEST & SW)2.18.3 Channel: 269.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (NORTH & EAST)2.18.3 Channel: 290.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 126.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 284.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (WEST & SW)2.18.3 Channel: 119.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (NORTH & EAST)2.18.3 Channel: 120.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (WEST & SW)2.18.3 Channel: 269.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (NORTH & EAST)2.18.3 Channel: 290.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: COMD POST (PRANG COMD POST)2.18.3 Channel: 2352.18.5 Hours of Operation:

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 125.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 132.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 08. Magnetic variation: 11W

2.19.2 ILS Identification: SJU 2.19.5 Coordinates: 18–26–27.0397N / 66–0–45.5699W 2.19.6 Site Elevation: 4.2 ft

2.19.1 ILS Type: Localizer for runway 08. Magnetic variation: 11W
2.19.2 ILS Identification: SJU
2.19.5 Coordinates: 18–26–59.7947N / 65–59–14.1228W
2.19.6 Site Elevation: 5.6 ft

2.19.1 ILS Type: Outer Marker for runway 08. Magnetic variation: 11W
2.19.2 ILS Identification: SJU
2.19.5 Coordinates: 18–24–31.8227N / 66–5–21.8301W
2.19.6 Site Elevation: 66.5 ft

2.19.1 ILS Type: DME for runway 10. Magnetic variation: 11W
2.19.2 ILS Identification: CLA
2.19.5 Coordinates: 18–26–2.5352N / 65–59–15.6282W
2.19.6 Site Elevation: 18.2 ft

2.19.1 ILS Type: Glide Slope for runway 10. Magnetic variation: 11W
2.19.2 ILS Identification: CLA
2.19.5 Coordinates: 18-25-57.5628N / 66-0-39.041W
2.19.6 Site Elevation: 4.5 ft

2.19.1 ILS Type: Localizer for runway 10. Magnetic variation: 11W
2.19.2 ILS Identification: CLA
2.19.5 Coordinates: 18–26–0.5899N / 65–59–15.5192W
2.19.6 Site Elevation: 9 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 11W
2.19.2 Navigation Aid Identification: SJU
2.19.5 Coordinates: 18–26–46.6101N / 65–59–22.2272W
2.19.6 Site Elevation: 5.7 ft

**General Remarks:** TWY J BTN J1 AND J5 (NOT INCLUDING J5) CLSD TO ACFT WITH GREATER THAN 118 FT WINGSPAN.

ACFT 180 TURNS ON TWYS REQUIRES OPS COORDINATIONS.

FBO/GROUND HANDLER MUST SUBMIT 72 HRS PPR FOR ALL MIL ACFT TO: CCO@AEROSTARAIRPORTS.-COM OR BY PHONE TO: 787–253–0979

MILITARY: ANG: INBD ACFT ORIGINATING FR OCONUS WITH A PPR FOR MUNIZ ANGB APN MUST CLEAR CUSTOMS AND BORDER PROTECTION AT CIV SIDE. PRIOR COORD MUST BE MADE WITH ANG AMOPS, FONE 740–9629 AT LEAST ONE BUS DAY PRIOR TO ARRIVAL.

ALL PVT AND CORPORATE AIRCRAFT MUST CONTACT ARPT OPS, BEFORE ARRIVAL, FOR FBOS &

GROUND HANDLING INFO AT 787-253-0979.

ENGINE RUNUPS PROHIBITED ON GATES AREA.

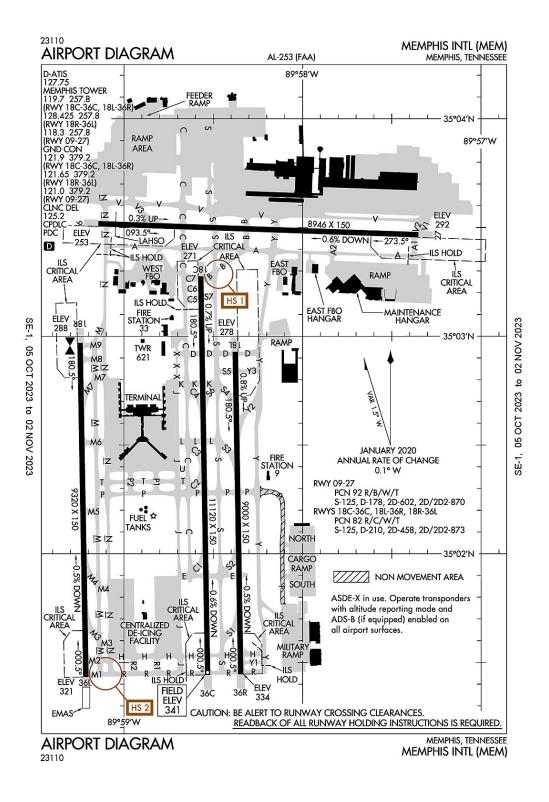
APRON 12 AVBL FOR GA ACFT ONLY.

TWY H BTN TWY C AND TWY H3 CLSD. PLEASE, CONTACT ARPT OPS AT 787–253–0979 FOR FURTHER DETAILS AND RESTRICTIONS.

BASE OPS 1130-2000Z MON-FRI, CLSD WKEND AND HOL.

TWY S BTN TWY S2 AND TWY S5 CLSD LGTD AND BARRICADED.

# Memphis, Tennessee Memphis International ICAO Identifier KMEM



# Memphis, TN Memphis Intl ICAO Identifier KMEM

# AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 35–2–32.681N / 89–58–36.045W
2.2.2 From City: 3 miles S of MEMPHIS, TN
2.2.3 Elevation: 340.9 ft
2.2.5 Magnetic Variation: 1W (2020)
2.2.6 Airport Contact: SCOTT A BROCKMAN 2491 WINCHESTER RD. MEMPHIS, TN 38116 (901–922–8000)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A,A+,A++2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/21/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 09 2.12.2 True Bearing: 92 2.12.3 Dimensions: 8946 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 35–3–31.046N / 89–59–8.6536W 2.12.6 Threshold Elevation: 253.2 ft 2.12.6 Touchdown Zone Elevation: 258.7 ft

2.12.1 Designation: 27 2.12.2 True Bearing: 272 2.12.3 Dimensions: 8946 ft x 150 ft 2.12.4 PCN: 92 R/B/W/T 2.12.5 Coordinates: 35–3–28.0128N / 89–57–21.0816W 2.12.6 Threshold Elevation: 292 ft 2.12.6 Touchdown Zone Elevation: 292 ft

2.12.1 Designation: 18C
2.12.2 True Bearing: 179
2.12.3 Dimensions: 11120 ft x 150 ft
2.12.4 PCN: 82 R/C/W/T
2.12.5 Coordinates: 35–3–16.5411N / 89–58–34.2156W
2.12.6 Threshold Elevation: 270.6 ft
2.12.6 Touchdown Zone Elevation: 290.1 ft

2.12.1 Designation: 36C 2.12.2 True Bearing: 359

2.12.3 Dimensions: 11120 ft x 150 ft 2.12.4 PCN: 82 R/C/W/T 2.12.5 Coordinates: 35-1-26.5803N / 89-58-31.8977W 2.12.6 Threshold Elevation: 340.9 ft 2.12.6 Touchdown Zone Elevation: 340.9 ft 2.12.1 Designation: 36R 2.12.2 True Bearing: 359 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 82 R/C/W/T 2.12.5 Coordinates: 35-1-26.7376N / 89-58-20.7544W 2.12.6 Threshold Elevation: 334.3 ft 2.12.6 Touchdown Zone Elevation: 334.7 ft 2.12.1 Designation: 18L 2.12.2 True Bearing: 179 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 82 R/C/W/T 2.12.5 Coordinates: 35-2-55.7402N / 89-58-22.6229W 2.12.6 Threshold Elevation: 277.6 ft 2.12.6 Touchdown Zone Elevation: 300.9 ft 2.12.1 Designation: 18R

2.12.2 True Bearing: 179 2.12.3 Dimensions: 9320 ft x 150 ft 2.12.4 PCN: 82 R/C/W/T 2.12.5 Coordinates: 35–2–58.1489N / 89–59–14.7913W 2.12.6 Threshold Elevation: 288.4 ft 2.12.6 Touchdown Zone Elevation: 294.7 ft

2.12.1 Designation: 36L 2.12.2 True Bearing: 359 2.12.3 Dimensions: 9320 ft x 150 ft 2.12.4 PCN: 82 R/C/W/T 2.12.5 Coordinates: 35–1–25.9852N / 89–59–12.8121W 2.12.6 Threshold Elevation: 320.8 ft 2.12.6 Touchdown Zone Elevation: 320.8 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 09
2.13.2 Take-off Run Available: 8946
2.13.3 Take-off Distance Available: 8946
2.13.4 Accelerate-Stop Distance Available: 8946
2.13.5 Landing Distance Available: 8946

2.13.1 Designation: 272.13.2 Take-off Run Available: 8946

2.13.3 Take-off Distance Available: 8946 2.13.4 Accelerate-Stop Distance Available: 8946 2.13.5 Landing Distance Available: 8946 2.13.1 Designation: 18C 2.13.2 Take-off Run Available: 11120 2.13.3 Take-off Distance Available: 11120 2.13.4 Accelerate–Stop Distance Available: 11120 2.13.5 Landing Distance Available: 11120 2.13.1 Designation: 36C 2.13.2 Take-off Run Available: 11120 2.13.3 Take-off Distance Available: 11120 2.13.4 Accelerate-Stop Distance Available: 10715 2.13.5 Landing Distance Available: 10715 2.13.1 Designation: 36R 2.13.2 Take-off Run Available: 9000 2.13.3 Take-off Distance Available: 9000 2.13.4 Accelerate-Stop Distance Available: 9000 2.13.5 Landing Distance Available: 9000 2.13.1 Designation: 18L 2.13.2 Take-off Run Available: 9000 2.13.3 Take-off Distance Available: 9000 2.13.4 Accelerate-Stop Distance Available: 9000 2.13.5 Landing Distance Available: 9000 2.13.1 Designation: 18R 2.13.2 Take-off Run Available: 9320 2.13.3 Take-off Distance Available: 9320 2.13.4 Accelerate–Stop Distance Available: 9320 2.13.5 Landing Distance Available: 9320 2.13.1 Designation: 36L 2.13.2 Take-off Run Available: 9320 2.13.3 Take-off Distance Available: 9320

2.13.4 Accelerate–Stop Distance Available: 9320

2.13.5 Landing Distance Available: 9320

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 092.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 272.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18C

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 36C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 18L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 36L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG COMD POST2.18.3 Channel: 138.12.18.5 Hours of Operation:

2.18.1 Service Designation: ANG COMD POST2.18.3 Channel: 353.452.18.5 Hours of Operation:

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 125.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 127.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (RWY 09/27) 2.18.3 Channel: 121 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 18R/36L)2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 18L/36R, 18C/36C)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 379.22.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09/27) 2.18.3 Channel: 118.3 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18L/36R, 18C/36C)2.18.3 Channel: 119.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 18R/36L) 2.18.3 Channel: 128.425 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 09. Magnetic variation: 1W
2.19.2 ILS Identification: MEM
2.19.5 Coordinates: 35–3–27.2174N / 89–58–56.2128W
2.19.6 Site Elevation: 252.5 ft

2.19.1 ILS Type: Localizer for runway 09. Magnetic variation: 1W
2.19.2 ILS Identification: MEM
2.19.5 Coordinates: 35–3–27.6511N / 89–57–7.9461W
2.19.6 Site Elevation: 296.5 ft

2.19.1 ILS Type: Glide Slope for runway 27. Magnetic variation: 1W
2.19.2 ILS Identification: JIM
2.19.5 Coordinates: 35–3–24.4908N / 89–57–36.2529W
2.19.6 Site Elevation: 277.2 ft

2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 1W
2.19.2 ILS Identification: JIM
2.19.5 Coordinates: 35–3–31.3982N / 89–59–20.811W
2.19.6 Site Elevation: 252.2 ft

2.19.1 ILS Type: Glide Slope for runway 18C. Magnetic variation: 1W 2.19.2 ILS Identification: SDU 2.19.5 Coordinates: 35-3-7.6024N / 89-58-37.5142W 2.19.6 Site Elevation: 273.1 ft 2.19.1 ILS Type: Localizer for runway 18C. Magnetic variation: 1W 2.19.2 ILS Identification: SDU 2.19.5 Coordinates: 35-1-10.2462N / 89-58-31.5613W 2.19.6 Site Elevation: 345.5 ft 2.19.1 ILS Type: DME for runway 36C. Magnetic variation: 1W 2.19.2 ILS Identification: TSE 2.19.5 Coordinates: 35-3-22.0479N / 89-58-37.3452W 2.19.6 Site Elevation: 268.9 ft 2.19.1 ILS Type: Glide Slope for runway 36C. Magnetic variation: 1W 2.19.2 ILS Identification: TSE 2.19.5 Coordinates: 35-1-38.095N / 89-58-36.9423W 2.19.6 Site Elevation: 329.5 ft 2.19.1 ILS Type: Localizer for runway 36C. Magnetic variation: 1W 2.19.2 ILS Identification: TSE 2.19.5 Coordinates: 35-3-22.514N / 89-58-34.3391W 2.19.6 Site Elevation: 261.2 ft 2.19.1 ILS Type: DME for runway 18L. Magnetic variation: 1W 2.19.2 ILS Identification: EXS 2.19.5 Coordinates: 35-1-16.8761N / 89-58-19.3033W 2.19.6 Site Elevation: 328.2 ft 2.19.1 ILS Type: Glide Slope for runway 18L. Magnetic variation: 1W 2.19.2 ILS Identification: EXS 2.19.5 Coordinates: 35-2-46.7849N / 89-58-17.6254W 2.19.6 Site Elevation: 278.6 ft 2.19.1 ILS Type: Localizer for runway 18L. Magnetic variation: 1W 2.19.2 ILS Identification: EXS 2.19.5 Coordinates: 35-1-16.6952N / 89-58-20.5424W 2.19.6 Site Elevation: 344.5 ft 2.19.1 ILS Type: DME for runway 36R. Magnetic variation: 1W 2.19.2 ILS Identification: MYO 2.19.5 Coordinates: 35-3-5.9229N / 89-58-19.6804W 2.19.6 Site Elevation: 282.5 ft 2.19.1 ILS Type: Glide Slope for runway 36R. Magnetic variation: 1W 2.19.2 ILS Identification: MYO 2.19.5 Coordinates: 35-1-38.0016N / 89-58-16.1795W 2.19.6 Site Elevation: 324.2 ft

2.19.1 ILS Type: Localizer for runway 36R. Magnetic variation: 1W
2.19.2 ILS Identification: MYO
2.19.5 Coordinates: 35–3–6.1649N / 89–58–22.8431W
2.19.6 Site Elevation: 278.7 ft

2.19.1 ILS Type: Glide Slope for runway 18R. Magnetic variation: 1W
2.19.2 ILS Identification: OOI
2.19.5 Coordinates: 35–2–48.6497N / 89–59–18.4713W
2.19.6 Site Elevation: 287.1 ft

2.19.1 ILS Type: Localizer for runway 18R. Magnetic variation: 1W
2.19.2 ILS Identification: OOI
2.19.5 Coordinates: 35–1–17.2969N / 89–59–12.6028W
2.19.6 Site Elevation: 321.4 ft

2.19.1 ILS Type: DME for runway 36L. Magnetic variation: 1W
2.19.2 ILS Identification: OHN
2.19.5 Coordinates: 35–3–6.901N / 89–59–10.0928W
2.19.6 Site Elevation: 285.7 ft

2.19.1 ILS Type: Glide Slope for runway 36L. Magnetic variation: 1W
2.19.2 ILS Identification: OHN
2.19.5 Coordinates: 35–1–38.7288N / 89–59–17.8741W
2.19.6 Site Elevation: 308.9 ft

2.19.1 ILS Type: Localizer for runway 36L. Magnetic variation: 1W
2.19.2 ILS Identification: OHN
2.19.5 Coordinates: 35–3–8.5885N / 89–59–14.9936W
2.19.6 Site Elevation: 277.6 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 1E
2.19.2 Navigation Aid Identification: MEM
2.19.5 Coordinates: 35–0–54.3808N / 89–58–59.5258W
2.19.6 Site Elevation: 363.4 ft

**General Remarks:** ANG RAMP OFFL BUS ONLY; PPR – V966–8131. TSNT ACFT RQR FOLLOW ME ASSIST ENTERING ANG RAMP.

ANG: PPR 24 HR PN RQR; OFFL BUS ONLY.

HOLD SHORT INSTRN READ BACK RQR.

COMMUNICATIONS-ANG COMD POST: RADIO CALL GRACELAND OPS.

TWY N BTN TWY M & TWY M7 CLSD TO WINGSPAN MORE THAN 171.5 FT EXC TAX SPEED LESS THAN 15 MPH.

ANG-PPR DSN 726-7131/7505, C901-291-7131/7505. MIL RAMP OPS 1230-0430Z++ MON-FRI; CLSD ALTN MON & HOL. MIL RAMP CLSD OUTSIDE OF PUB HR WITHOUT OG/CC APVL DSN 726-7557, C901-291-7557. TSNT ACFT MAINT NOT AVBL. REFUEL SVC FOR OTR THAN C17 ACFT RQR QUALIFIED CREW CHIEF OR CREWMEMBERS. NON-C17 ACFT SUPPORT PRVDD BY CONTRACT FBO ON FLD. SECURITY AVBL 24 HRS, DSN 726-7101, C901-291-7101. COMD POST DSN 726-7148/7311/7312, C901-291-7148/7311/7312. OPR 1230-0430Z++ MON-FRI, CLSD ALTN MON AND HOL DUE TO ALTN WORK SCHED. AFLD MGR DOES NOT

ISSUE OR STORE COMSEC FOR TRAN CRES. TMPRY STOR OF CLASSIFIED MATERIALS UP TO TOP SECRET AT COMD POST.

AIRCRAFT WITH WINGSPANS GREATER THAN 118 FEET RESTRICTED FROM TAXIING ON TWY J NORTH OF TWY U.

HELI OPS TO/FM TRML BLDG NA.

BASH PHASE II APR-MAY & AUG-OCT; CURRENT BIRD WATCH COND NOT ON ATIS.

NOISE ABATEMENT PROC IN EFCT. SUCCESSIVE AND/OR SIMUL DEP APVD ON RWY 36L–18R & RWY 36C–18C OR RWY 36L–18R & RWY 36R–18L WITH COURSE DVRGNC NO LATER THAN 2.27 NM FROM RWY END.

BIRDS INVOF ARPT.

MIL: MIL RAMP OPS AT REDUCED ARFF, DOWNGRADED TO YELLOW.

TWY V BTN TWY S & Y RSTR TO ACFT WITH TAIL HEIGHT 65 FT 10 IN OR LESS.

LRG & HVY EBND ACFT ON TWY V FOR RWY 27 HOLD SHORT AT MNM THRUST AREA SIGN.

ASDE-X IN USE. OPR PARROT WITH ALT RPRTG MODE & ADS-B ENABLED ON ARPT SFCS.

PPR FOR TAXI CLNC ON TWY N NORTH OF TWY V, TWY S NORTH TWY V & TWY C NORTH OF TWY V – FEDEX RAMP ATCT 131.5.

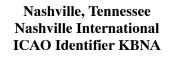
TWY N NORTH OF TWY V, TWY C NORTH OF TWY V, TWY S NORTH OF TWY V AND TWY V WEST OF TWY N DESIGNATED AS NON–MOVEMENT AREAS.

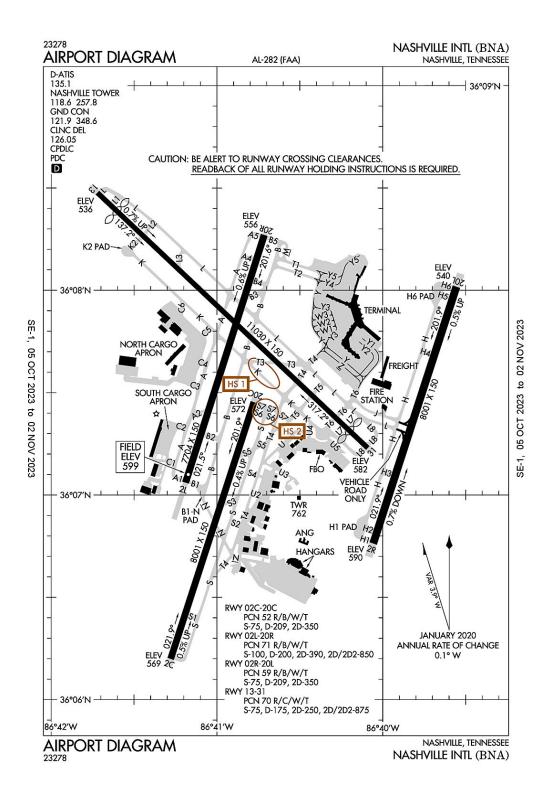
TWY V BTN SPOT 7W & RWY 27 RSTR TO ACFT WITH WINGSPAN OF 171 FT 6 IN OR LESS.

CTC RAMP CONTROL 121.8 FOR ENTRY ON ANG RAMP. ANG FREQS 138.95 353.45. AFT HR CTC COMMAND POST – DSN 726–7148; C901–291–7311/7312 OR SECURITY FORCES – DSN 726–7101; C901–291–7101/7133.

PPR FOR TAXI CLNC FM N & S CARGO RAMP PRKG – 121.9.

ANG-ATIS INFO RPRTS BIRD ACT H24.





### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 36–7–28.11N / 86–40–41.45W
2.2.2 From City: 5 miles SE of NASHVILLE, TN
2.2.3 Elevation: 599 ft
2.2.5 Magnetic Variation: 3W (2010)
2.2.6 Airport Contact: ROBERT RAMSEY

140 BNA PARK DR. SUITE 520
NASHVILLE, TN 37214 (615–275–1612)

2.2.7 Traffic: IFR/VFR

#### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–D

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 02C 2.12.2 True Bearing: 18 2.12.3 Dimensions: 8001 ft x 150 ft 2.12.4 PCN: 52 R/B/W/T 2.12.5 Coordinates: 36–6–11.9899N / 86–41–16.6591W 2.12.6 Threshold Elevation: 569.1 ft 2.12.6 Touchdown Zone Elevation: 586.7 ft

2.12.1 Designation: 20C 2.12.2 True Bearing: 198 2.12.3 Dimensions: 8001 ft x 150 ft 2.12.4 PCN: 52 R/B/W/T 2.12.5 Coordinates: 36–7–27.2406N / 86–40–46.55W 2.12.6 Threshold Elevation: 571.8 ft 2.12.6 Touchdown Zone Elevation: 587.7 ft

2.12.1 Designation: 02L 2.12.2 True Bearing: 18 2.12.3 Dimensions: 7704 ft x 150 ft 2.12.4 PCN: 71 R/B/W/T 2.12.5 Coordinates: 36–7–3.6342N / 86–41–11.3105W 2.12.6 Threshold Elevation: 598.7 ft 2.12.6 Touchdown Zone Elevation: 599 ft 2.12.1 Designation: 20R

2.12.2 True Bearing: 198
2.12.3 Dimensions: 7704 ft x 150 ft
2.12.4 PCN: 71 R/B/W/T
2.12.5 Coordinates: 36–8–16.2324N / 86–40–42.8335W
2.12.6 Threshold Elevation: 555.6 ft
2.12.6 Touchdown Zone Elevation: 578 ft
2.12.1 Designation: 02R
2.12.2 True Bearing: 18
2.12.3 Dimensions: 8001 ft x 150 ft
2.12.4 PCN: 59 R/B/W/T
2.12.5 Coordinates: 36–6–45.767N / 86–40–3.5138W
2.12.6 Threshold Elevation: 589.8 ft
2.12.1 Designation: 20L
2.12.2 True Bearing: 108

2.12.2 True Bearing: 198
2.12.3 Dimensions: 8001 ft x 150 ft
2.12.4 PCN: 59 R/B/W/T
2.12.5 Coordinates: 36–8–1.0116N / 86–39–33.3955W
2.12.6 Threshold Elevation: 540 ft
2.12.6 Touchdown Zone Elevation: 550.6 ft

2.12.1 Designation: 13 2.12.2 True Bearing: 133 2.12.3 Dimensions: 11030 ft x 150 ft 2.12.4 PCN: 70 R/C/W/T 2.12.5 Coordinates: 36–8–28.5991N / 86–41–43.2788W 2.12.6 Threshold Elevation: 535.9 ft 2.12.6 Touchdown Zone Elevation: 567.5 ft

2.12.1 Designation: 31 2.12.2 True Bearing: 313 2.12.3 Dimensions: 11030 ft x 150 ft 2.12.4 PCN: 70 R/C/W/T 2.12.5 Coordinates: 36–7–13.7852N / 86–40–5.4384W 2.12.6 Threshold Elevation: 582.3 ft 2.12.6 Touchdown Zone Elevation: 577.5 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 02C
2.13.2 Take-off Run Available: 8001
2.13.3 Take-off Distance Available: 8001
2.13.4 Accelerate-Stop Distance Available: 7601
2.13.5 Landing Distance Available: 7601

2.13.1 Designation: 20C2.13.2 Take-off Run Available: 8001

2.13.3 Take-off Distance Available: 8001 2.13.4 Accelerate-Stop Distance Available: 8001 2.13.5 Landing Distance Available: 8001 2.13.1 Designation: 02L 2.13.2 Take-off Run Available: 7702 2.13.3 Take-off Distance Available: 7702 2.13.4 Accelerate–Stop Distance Available: 7702 2.13.5 Landing Distance Available: 7702 2.13.1 Designation: 20R 2.13.2 Take-off Run Available: 7702 2.13.3 Take-off Distance Available: 7702 2.13.4 Accelerate-Stop Distance Available: 7702 2.13.5 Landing Distance Available: 7702 2.13.1 Designation: 02R 2.13.2 Take-off Run Available: 8000 2.13.3 Take-off Distance Available: 8000 2.13.4 Accelerate-Stop Distance Available: 8000 2.13.5 Landing Distance Available: 8000 2.13.1 Designation: 20L 2.13.2 Take-off Run Available: 8000 2.13.3 Take-off Distance Available: 8000 2.13.4 Accelerate-Stop Distance Available: 8000 2.13.5 Landing Distance Available: 8000 2.13.1 Designation: 13 2.13.2 Take-off Run Available: 10288 2.13.3 Take-off Distance Available: 11029 2.13.4 Accelerate-Stop Distance Available: 10288 2.13.5 Landing Distance Available: 9487 2.13.1 Designation: 31 2.13.2 Take-off Run Available: 10228 2.13.3 Take-off Distance Available: 11029

- 2.13.4 Accelerate–Stop Distance Available: 10228
- 2.13.5 Landing Distance Available: 9487

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 02C2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 20C

2.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 02L

2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 20R2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 02R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 20L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 132.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 312.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ALCP2.18.3 Channel: 314.42.18.5 Hours of Operation:

2.18.1 Service Designation: APCH/P (WEST)2.18.3 Channel: 3722.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (EAST)2.18.3 Channel: 118.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (EAST)2.18.3 Channel: 360.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 126.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (EAST)2.18.3 Channel: 118.42.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (WEST) 2.18.3 Channel: 119.35

2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS C (EAST) 2.18.3 Channel: 360.7 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: CLASS C (WEST) 2.18.3 Channel: 372 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: D-ATIS 2.18.3 Channel: 135.1 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (EAST) 2.18.3 Channel: 118.4 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (WEST) 2.18.3 Channel: 119.35 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (EAST) 2.18.3 Channel: 360.7 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: DEP/P (WEST) 2.18.3 Channel: 372 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: EMERG 2.18.3 Channel: 121.5 2.18.5 Hours of Operation: 2.18.1 Service Designation: EMERG 2.18.3 Channel: 243 2.18.5 Hours of Operation: 2.18.1 Service Designation: GND/P 2.18.3 Channel: 121.9

2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P

2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

AD 2.19 Radio Navigation and Landing Aids 2.19.1 ILS Type: Glide Slope for runway 02C. Magnetic variation: 3W 2.19.2 ILS Identification: EZN 2.19.5 Coordinates: 36–6–22.6382N / 86–41–16.8861W 2.19.6 Site Elevation: 570.5 ft

2.19.1 ILS Type: Localizer for runway 02C. Magnetic variation: 3W
2.19.2 ILS Identification: EZN
2.19.5 Coordinates: 36–7–32.9571N / 86–40–44.2611W
2.19.6 Site Elevation: 574.3 ft

2.19.1 ILS Type: DME for runway 02L. Magnetic variation: 3W
2.19.2 ILS Identification: BNA
2.19.5 Coordinates: 36–8–26.4864N / 86–40–42.3692W
2.19.6 Site Elevation: 554 ft

2.19.1 ILS Type: Glide Slope for runway 02L. Magnetic variation: 3W
2.19.2 ILS Identification: BNA
2.19.5 Coordinates: 36–7–12.9535N / 86–41–2.539W
2.19.6 Site Elevation: 589.7 ft

2.19.1 ILS Type: Inner Marker for runway 02L. Magnetic variation: 3W
2.19.2 ILS Identification: BNA
2.19.5 Coordinates: 36–6–54.829N / 86–41–14.7612W
2.19.6 Site Elevation: 594.5 ft

2.19.1 ILS Type: Localizer for runway 02L. Magnetic variation: 3W
2.19.2 ILS Identification: BNA
2.19.5 Coordinates: 36–8–25.7779N / 86–40–39.0927W
2.19.6 Site Elevation: 545.4 ft

2.19.1 ILS Type: Glide Slope for runway 20R. Magnetic variation: 3W
2.19.2 ILS Identification: VIY
2.19.5 Coordinates: 36–8–5.8196N / 86–40–42.7621W
2.19.6 Site Elevation: 554.9 ft

2.19.1 ILS Type: Localizer for runway 20R. Magnetic variation: 3W
2.19.2 ILS Identification: VIY
2.19.5 Coordinates: 36–6–49.6756N / 86–41–16.7814W
2.19.6 Site Elevation: 598.1 ft

2.19.1 ILS Type: DME for runway 02R. Magnetic variation: 3W
2.19.2 ILS Identification: UQU
2.19.5 Coordinates: 36–8–9.8916N / 86–39–35.7867W
2.19.6 Site Elevation: 537.1 ft

2.19.1 ILS Type: Glide Slope for runway 02R. Magnetic variation: 3W

2.19.2 ILS Identification: UQU 2.19.5 Coordinates: 36–6–56.0152N / 86–39–54.7364W 2.19.6 Site Elevation: 576.7 ft

2.19.1 ILS Type: Inner Marker for runway 02R. Magnetic variation: 3W
2.19.2 ILS Identification: UQU
2.19.5 Coordinates: 36–6–37.6961N / 86–40–6.7484W
2.19.6 Site Elevation: 569 ft

2.19.1 ILS Type: Localizer for runway 02R. Magnetic variation: 3W
2.19.2 ILS Identification: UQU
2.19.5 Coordinates: 36–8–10.5404N / 86–39–29.5803W
2.19.6 Site Elevation: 531 ft

2.19.1 ILS Type: DME for runway 20L. Magnetic variation: 3W
2.19.2 ILS Identification: SSX
2.19.5 Coordinates: 36–6–30.9674N / 86–40–12.8854W
2.19.6 Site Elevation: 622.2 ft

2.19.1 ILS Type: Glide Slope for runway 20L. Magnetic variation: 3W
2.19.2 ILS Identification: SSX
2.19.5 Coordinates: 36–7–50.0286N / 86–39–33.1134W
2.19.6 Site Elevation: 534.5 ft

2.19.1 ILS Type: Localizer for runway 20L. Magnetic variation: 3W
2.19.2 ILS Identification: SSX
2.19.5 Coordinates: 36–6–30.0253N / 86–40–9.8136W
2.19.6 Site Elevation: 613.4 ft

2.19.1 ILS Type: Glide Slope for runway 31. Magnetic variation: 3W
2.19.2 ILS Identification: PNO
2.19.5 Coordinates: 36–7–28.2722N / 86–40–18.5978W
2.19.6 Site Elevation: 566.4 ft

2.19.1 ILS Type: Localizer for runway 31. Magnetic variation: 3W
2.19.2 ILS Identification: PNO
2.19.5 Coordinates: 36–8–30.6518N / 86–41–45.9626W
2.19.6 Site Elevation: 539.6 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 2W
2.19.2 Navigation Aid Identification: BNA
2.19.5 Coordinates: 36–8–13.0573N / 86–41–5.1762W
2.19.6 Site Elevation: 566.4 ft

**General Remarks:** TBJT RWY NOISE ABATEMENT PROC; MIL TBJT USE RWY 13/31 FOR ARR & DEP.

MIL & ACFT MORE THAN 12500 LB PRAC APCH NA; PRAC APCH BTW 2300-0700 NA.

TRML RAMP & NON-MOVMT AREA UNCTLD; BFR USE - 122.95

PPR GA & CARGO TO PROCD TO AIRLINE TRML GATE FOR DE-ICE - ARPT OPS.

DO NOT CONFUSE TWY S FOR RWY 20C.

BIRD ACT ON & INVOF ARPT.

CTN: READ BACK & COMPLIANCE OF RWY HLDG INSTRN RQR; SPCLY TWY K & RWY 20C, TWY L AT RWY 13 & TWY H AT RWY 31.

C CONCOURSE; INNER TXL OUBD TFC; OUTER TXL INBD TFC.

TRML APRON TAX BTN ACR PUSHBACK OPS & GATES NA.

ANG: PPR - MUSIC CITY OPS 615-367-5579.

180 DEG TURNS OVR 12500 LBS NA ON ASPH SFC.

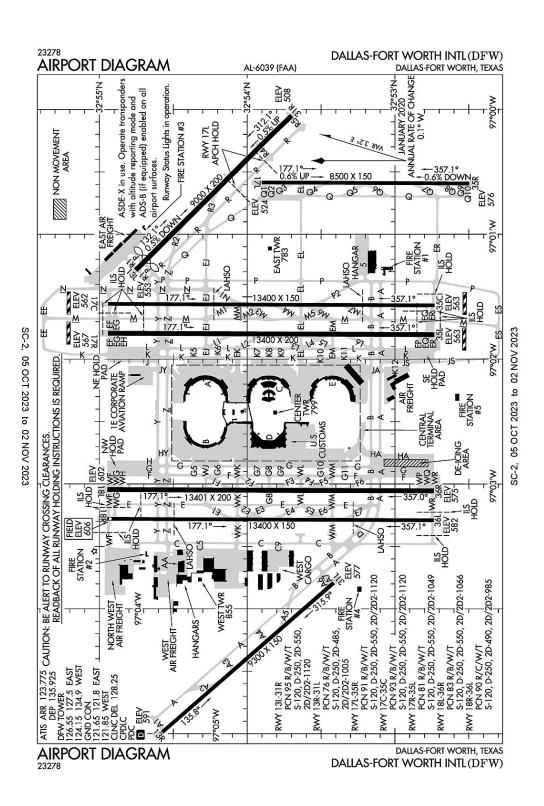
FLT NOTIFICATION SVC (ADCUS) AVBL.

PAVEMENT ON WEST SIDE OF RUNWAY 2R–20L BETWEEN TAXIWAY H3 AND TAXIWAY H4 IS MARKED AS A VEHICLE ACCESS ROAD ONLY

FLT OVR MAIN TRML NA.

ADHERE TO TWY & TXL CNTRLN WI TRML APRON.

WINGSPAN GREATER THAN 214 FT 96 HR PPR – AMGR.



Dallas, Texas Dallas–Fort Worth International ICAO Identifier KDFW

# Dallas–Fort Worth, TX Dallas/Fort Worth Intl ICAO Identifier KDFW

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 32–53–50.039N / 97–2–15.701W
2.2.2 From City: 12 miles NW of DALLAS–FORT WORTH, TX
2.2.3 Elevation: 606.4 ft
2.2.5 Magnetic Variation: 4E (2015)
2.2.6 Airport Contact: SEAN DONOHUE
PO BOX 619428
DALLAS–FT WORTH, TX 75261 (972–973–3112)

2.2.7 Traffic: IFR/VFR

### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space:2.4.6 Repair Facilities: None

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 7/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

# **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 31R 2.12.2 True Bearing: 315 2.12.3 Dimensions: 9000 ft x 200 ft 2.12.4 PCN: 95 R/B/W/T 2.12.5 Coordinates: 32–53–41.932N / 97–0–3.0376W 2.12.6 Threshold Elevation: 508.4 ft 2.12.6 Touchdown Zone Elevation: 523.4 ft

2.12.1 Designation: 13L
2.12.2 True Bearing: 135
2.12.3 Dimensions: 9000 ft x 200 ft
2.12.4 PCN: 95 R/B/W/T
2.12.5 Coordinates: 32–54–45.197N / 97–1–17.3221W
2.12.6 Threshold Elevation: 553.1 ft
2.12.6 Touchdown Zone Elevation: 550 ft

2.12.1 Designation: 13R

2.12.2 True Bearing: 139
2.12.3 Dimensions: 9300 ft x 150 ft
2.12.4 PCN: 76 R/B/W/T
2.12.5 Coordinates: 32–54–34.4723N / 97–4–59.276W
2.12.6 Threshold Elevation: 591 ft
2.12.6 Touchdown Zone Elevation: 591 ft

2.12.1 Designation: 31L
2.12.2 True Bearing: 319
2.12.3 Dimensions: 9300 ft x 150 ft
2.12.4 PCN: 76 R/B/W/T
2.12.5 Coordinates: 32–53–24.9716N / 97–3–47.7953W
2.12.6 Threshold Elevation: 577.2 ft
2.12.6 Touchdown Zone Elevation: 581.4 ft

2.12.1 Designation: 17C
2.12.2 True Bearing: 180
2.12.3 Dimensions: 13400 ft x 150 ft
2.12.4 PCN: 93 R/B/W/T
2.12.5 Coordinates: 32–54–56.5441N / 97–1–33.5097W
2.12.6 Threshold Elevation: 562.2 ft
2.12.6 Touchdown Zone Elevation: 563.2 ft

2.12.1 Designation: 35C
2.12.2 True Bearing: 0
2.12.3 Dimensions: 13400 ft x 150 ft
2.12.4 PCN: 93 R/B/W/T
2.12.5 Coordinates: 32–52–43.9636N / 97–1–34.218W
2.12.6 Threshold Elevation: 563.1 ft
2.12.6 Touchdown Zone Elevation: 563.2 ft

2.12.1 Designation: 35R 2.12.2 True Bearing: 0 2.12.3 Dimensions: 8500 ft x 150 ft 2.12.4 PCN: 91 R/B/W/T 2.12.5 Coordinates: 32–52–29.8535N / 97–0–35.6686W 2.12.6 Threshold Elevation: 575.6 ft 2.12.6 Touchdown Zone Elevation: 575.6 ft

2.12.1 Designation: 17L 2.12.2 True Bearing: 180 2.12.3 Dimensions: 8500 ft x 150 ft 2.12.4 PCN: 91 R/B/W/T 2.12.5 Coordinates: 32–53–53.9534N / 97–0–35.203W 2.12.6 Threshold Elevation: 524.3 ft2.12.6 Touchdown Zone Elevation: 545.2 ft

2.12.1 Designation: 35L

2.12.2 True Bearing: 0
2.12.3 Dimensions: 13400 ft x 200 ft
2.12.4 PCN: 81 R/B/W/T
2.12.5 Coordinates: 32–52–44.0203N / 97–1–48.2888W
2.12.6 Threshold Elevation: 563.4 ft
2.12.6 Touchdown Zone Elevation: 564 ft

2.12.1 Designation: 17R
2.12.2 True Bearing: 180
2.12.3 Dimensions: 13400 ft x 200 ft
2.12.4 PCN: 81 R/B/W/T
2.12.5 Coordinates: 32–54–56.5996N / 97–1–47.5806W
2.12.6 Threshold Elevation: 566.6 ft
2.12.6 Touchdown Zone Elevation: 566.7 ft

2.12.1 Designation: 18L
2.12.2 True Bearing: 180
2.12.3 Dimensions: 13401 ft x 200 ft
2.12.4 PCN: 83 R/B/W/T
2.12.5 Coordinates: 32–54–56.8785N / 97–3–2.6511W
2.12.6 Threshold Elevation: 601.5 ft
2.12.6 Touchdown Zone Elevation: 601.6 ft

2.12.1 Designation: 36R
2.12.2 True Bearing: 0
2.12.3 Dimensions: 13401 ft x 200 ft
2.12.4 PCN: 83 R/B/W/T
2.12.5 Coordinates: 32–52–44.2972N / 97–3–3.3332W
2.12.6 Threshold Elevation: 575.3 ft
2.12.6 Touchdown Zone Elevation: 580.7 ft

2.12.1 Designation: 36L
2.12.2 True Bearing: 0
2.12.3 Dimensions: 13400 ft x 150 ft
2.12.4 PCN: 90 R/C/W/T
2.12.5 Coordinates: 32–52–44.3493N / 97–3–17.4003W
2.12.6 Threshold Elevation: 582.2 ft
2.12.6 Touchdown Zone Elevation: 587.6 ft

2.12.1 Designation: 18R

2.12.2 True Bearing: 180 2.12.3 Dimensions: 13400 ft x 150 ft 2.12.4 PCN: 90 R/C/W/T 2.12.5 Coordinates: 32–54–56.9275N / 97–3–16.7239W 2.12.6 Threshold Elevation: 606.4 ft 2.12.6 Touchdown Zone Elevation: 606.4 ft

# AD 2.13 Declared Distances

2.13.1 Designation: 31R
2.13.2 Take-off Run Available: 8373
2.13.3 Take-off Distance Available: 8373
2.13.4 Accelerate-Stop Distance Available: 8373
2.13.5 Landing Distance Available: 8373

2.13.1 Designation: 13L
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 8373

2.13.1 Designation: 13R
2.13.2 Take-off Run Available: 9300
2.13.3 Take-off Distance Available: 9300
2.13.4 Accelerate-Stop Distance Available: 9300
2.13.5 Landing Distance Available: 9300

2.13.1 Designation: 31L
2.13.2 Take-off Run Available: 9300
2.13.3 Take-off Distance Available: 9300
2.13.4 Accelerate-Stop Distance Available: 9300
2.13.5 Landing Distance Available: 9300

2.13.1 Designation: 17C
2.13.2 Take-off Run Available: 13400
2.13.3 Take-off Distance Available: 13400
2.13.4 Accelerate-Stop Distance Available: 13400
2.13.5 Landing Distance Available: 13400

2.13.1 Designation: 35C
2.13.2 Take-off Run Available: 13400
2.13.3 Take-off Distance Available: 13400
2.13.4 Accelerate-Stop Distance Available: 13400
2.13.5 Landing Distance Available: 13400

2.13.1 Designation: 35R
2.13.2 Take-off Run Available: 8500
2.13.3 Take-off Distance Available: 8500
2.13.4 Accelerate-Stop Distance Available: 8500
2.13.5 Landing Distance Available: 8500

2.13.1 Designation: 17L

2.13.2 Take-off Run Available: 8500

2.13.3 Take-off Distance Available: 8500

2.13.4 Accelerate–Stop Distance Available: 8500

2.13.5 Landing Distance Available: 8500

2.13.1 Designation: 35L

2.13.2 Take-off Run Available: 13400

2.13.3 Take-off Distance Available: 13400

2.13.4 Accelerate–Stop Distance Available: 13400

2.13.5 Landing Distance Available: 13400

2.13.1 Designation: 17R

2.13.2 Take-off Run Available: 134002.13.3 Take-off Distance Available: 134002.13.4 Accelerate-Stop Distance Available: 13400

2.13.5 Landing Distance Available: 13400

2.13.1 Designation: 18L2.13.2 Take-off Run Available: 134012.13.3 Take-off Distance Available: 134012.13.4 Accelerate-Stop Distance Available: 13401

2.13.5 Landing Distance Available: 13401

2.13.1 Designation: 36R
2.13.2 Take-off Run Available: 13401
2.13.3 Take-off Distance Available: 13401
2.13.4 Accelerate-Stop Distance Available: 13401
2.13.5 Landing Distance Available: 13401
2.13.1 Designation: 36L

2.13.2 Take-off Run Available: 13400
2.13.3 Take-off Distance Available: 13400
2.13.4 Accelerate-Stop Distance Available: 13400
2.13.5 Landing Distance Available: 13400

2.13.1 Designation: 18R

2.13.2 Take-off Run Available: 13400

2.13.3 Take-off Distance Available: 13400

2.13.4 Accelerate–Stop Distance Available: 13400

2.13.5 Landing Distance Available: 13400

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 31R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 13L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 13R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 31L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 17C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 17L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 35L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 17R

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18L

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18R

2.14.2 Approach Lighting System: ALSF2

2.14.4 Visual Approach Slope Indicator System: P4L

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 128.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS B (NW)2.18.3 Channel: 118.12.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (NE)2.18.3 Channel: 124.32.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (SE)2.18.3 Channel: 125.22.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (SW)2.18.3 Channel: 135.9752.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (NE)2.18.3 Channel: 282.2752.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (NW)2.18.3 Channel: 306.952.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (SE)2.18.3 Channel: 343.652.18.5 Hours of Operation:

2.18.1 Service Designation: CLASS B (SW)2.18.3 Channel: 379.92.18.5 Hours of Operation:

2.18.1 Service Designation: D-ATIS (ARR)2.18.3 Channel: 123.7752.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS (DEP)2.18.3 Channel: 135.9252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (EAST)2.18.3 Channel: 121.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC (EAST)2.18.3 Channel: 121.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P IC (WEST)2.18.3 Channel: 121.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: JACKY DP (RWYS 31L/R, 36L/R, 35L/C/R)2.18.3 Channel: 118.12.18.5 Hours of Operation:

2.18.1 Service Designation: JACKY DP (RWYS 13L/R, 17L/C/R, 18L/R)2.18.3 Channel: 135.9752.18.5 Hours of Operation:

2.18.1 Service Designation: JACKY DP (RWYS 31L/R, 36L/R, 35L/C/R)2.18.3 Channel: 306.952.18.5 Hours of Operation:

2.18.1 Service Designation: JACKY DP (RWYS 13L/R, 17 L/C/R, 18L/R)2.18.3 Channel: 379.92.18.5 Hours of Operation:

2.18.1 Service Designation: LCL/P (EAST)2.18.3 Channel: 127.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (WEST)2.18.3 Channel: 134.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P IC (WEST)2.18.3 Channel: 124.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P IC (EAST)2.18.3 Channel: 126.552.18.5 Hours of Operation: 24

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 31R. Magnetic variation: 4E
2.19.2 ILS Identification: RRA
2.19.5 Coordinates: 32–54–49.6375N / 97–1–18.3123W
2.19.6 Site Elevation: 558.1 ft

2.19.1 ILS Type: Glide Slope for runway 31R. Magnetic variation: 4E
2.19.2 ILS Identification: RRA
2.19.5 Coordinates: 32–53–51.7482N / 97–0–7.9558W
2.19.6 Site Elevation: 509 ft

2.19.1 ILS Type: Localizer for runway 31R. Magnetic variation: 4E
2.19.2 ILS Identification: RRA
2.19.5 Coordinates: 32–54–48.1182N / 97–1–20.7551W
2.19.6 Site Elevation: 551.5 ft

2.19.1 ILS Type: DME for runway 13R. Magnetic variation: 4E 2.19.2 ILS Identification: LWN

2.19.5 Coordinates: 32–53–16.0647N / 97–3–42.7672W 2.19.6 Site Elevation: 588.7 ft

2.19.1 ILS Type: Glide Slope for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: LWN
2.19.5 Coordinates: 32–54–24.1329N / 97–4–54.0746W
2.19.6 Site Elevation: 587.6 ft

2.19.1 ILS Type: Localizer for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: LWN
2.19.5 Coordinates: 32–53–17.4371N / 97–3–40.0471W
2.19.6 Site Elevation: 575 ft

2.19.1 ILS Type: DME for runway 17C. Magnetic variation: 4E
2.19.2 ILS Identification: FLQ
2.19.5 Coordinates: 32–52–34.123N / 97–1–39.6491W
2.19.6 Site Elevation: 573.6 ft

2.19.1 ILS Type: Glide Slope for runway 17C. Magnetic variation: 4E
2.19.2 ILS Identification: FLQ
2.19.5 Coordinates: 32–54–45.6425N / 97–1–28.781W
2.19.6 Site Elevation: 555.8 ft

2.19.1 ILS Type: Inner Marker for runway 17C. Magnetic variation: 4E
2.19.2 ILS Identification: FLQ
2.19.5 Coordinates: 32–55–4.09N / 97–1–33.46W
2.19.6 Site Elevation: 562 ft

2.19.1 ILS Type: Localizer for runway 17C. Magnetic variation: 4E
2.19.2 ILS Identification: FLQ
2.19.5 Coordinates: 32–52–33.1505N / 97–1–34.2781W
2.19.6 Site Elevation: 562.7 ft

2.19.1 ILS Type: DME for runway 35C. Magnetic variation: 4E
2.19.2 ILS Identification: PKQ
2.19.5 Coordinates: 32–52–34.123N / 97–1–39.6491W
2.19.6 Site Elevation: 573.6 ft

2.19.1 ILS Type: Glide Slope for runway 35C. Magnetic variation: 4E
2.19.2 ILS Identification: PKQ
2.19.5 Coordinates: 32–52–54.3357N / 97–1–29.4713W
2.19.6 Site Elevation: 557.2 ft

2.19.1 ILS Type: Inner Marker for runway 35C. Magnetic variation: 4E

2.19.2 ILS Identification: PKQ 2.19.5 Coordinates: 32–52–35.3015N / 97–1–34.258W 2.19.6 Site Elevation: 562.5 ft

2.19.1 ILS Type: Localizer for runway 35C. Magnetic variation: 4E
2.19.2 ILS Identification: PKQ
2.19.5 Coordinates: 32–55–7.0371N / 97–1–33.452W
2.19.6 Site Elevation: 561.2 ft

2.19.1 ILS Type: DME for runway 17L. Magnetic variation: 4E
2.19.2 ILS Identification: PPZ
2.19.5 Coordinates: 32–52–18.7175N / 97–0–40.2982W
2.19.6 Site Elevation: 591.2 ft

2.19.1 ILS Type: Glide Slope for runway 17L. Magnetic variation: 4E
2.19.2 ILS Identification: PPZ
2.19.5 Coordinates: 32–53–45.2247N / 97–0–31.1329W
2.19.6 Site Elevation: 526.4 ft

2.19.1 ILS Type: Inner Marker for runway 17L. Magnetic variation: 4E
2.19.2 ILS Identification: PPZ
2.19.5 Coordinates: 32–54–5.3333N / 97–0–35.2536W
2.19.6 Site Elevation: 521.7 ft

2.19.1 ILS Type: Localizer for runway 17L. Magnetic variation: 4E
2.19.2 ILS Identification: PPZ
2.19.5 Coordinates: 32–52–19.4359N / 97–0–35.7267W
2.19.6 Site Elevation: 584.2 ft

2.19.1 ILS Type: DME for runway 35R. Magnetic variation: 4E
2.19.2 ILS Identification: AJQ
2.19.5 Coordinates: 32–52–18.7175N / 97–0–40.2982W
2.19.6 Site Elevation: 591.2 ft

2.19.1 ILS Type: Glide Slope for runway 35R. Magnetic variation: 4E
2.19.2 ILS Identification: AJQ
2.19.5 Coordinates: 32–52–43.4402N / 97–0–30.9032W
2.19.6 Site Elevation: 559.2 ft

2.19.1 ILS Type: Inner Marker for runway 35R. Magnetic variation: 4E
2.19.2 ILS Identification: AJQ
2.19.5 Coordinates: 32–52–22.6082N / 97–0–35.7029W
2.19.6 Site Elevation: 581.2 ft

2.19.1 ILS Type: Localizer for runway 35R. Magnetic variation: 4E
2.19.2 ILS Identification: AJQ
2.19.5 Coordinates: 32–54–4.1916N / 97–0–35.1492W
2.19.6 Site Elevation: 519.5 ft

2.19.1 ILS Type: DME for runway 17R. Magnetic variation: 4E
2.19.2 ILS Identification: JHZ
2.19.5 Coordinates: 32–52–33.6523N / 97–1–53.6029W
2.19.6 Site Elevation: 556.9 ft

2.19.1 ILS Type: Glide Slope for runway 17R. Magnetic variation: 4E
2.19.2 ILS Identification: JHZ
2.19.5 Coordinates: 32–54–45.8213N / 97–1–43.0635W
2.19.6 Site Elevation: 561.3 ft

2.19.1 ILS Type: Localizer for runway 17R. Magnetic variation: 4E
2.19.2 ILS Identification: JHZ
2.19.5 Coordinates: 32–52–33.207N / 97–1–48.3488W
2.19.6 Site Elevation: 558.2 ft

2.19.1 ILS Type: DME for runway 35L. Magnetic variation: 4E
2.19.2 ILS Identification: UWX
2.19.5 Coordinates: 32–52–33.6523N / 97–1–53.6029W
2.19.6 Site Elevation: 556.9 ft

2.19.1 ILS Type: Glide Slope for runway 35L. Magnetic variation: 4E
2.19.2 ILS Identification: UWX
2.19.5 Coordinates: 32–52–54.9854N / 97–1–43.5413W
2.19.6 Site Elevation: 559 ft

2.19.1 ILS Type: Localizer for runway 35L. Magnetic variation: 4E
2.19.2 ILS Identification: UWX
2.19.5 Coordinates: 32–55–7.3142N / 97–1–47.5225W
2.19.6 Site Elevation: 567.6 ft

2.19.1 ILS Type: DME for runway 18L. Magnetic variation: 4E
2.19.2 ILS Identification: CIX
2.19.5 Coordinates: 32–55–8.6708N / 97–3–7.2741W
2.19.6 Site Elevation: 594.7 ft

2.19.1 ILS Type: Glide Slope for runway 18L. Magnetic variation: 4E
2.19.2 ILS Identification: CIX
2.19.5 Coordinates: 32–54–45.2198N / 97–3–6.8173W
2.19.6 Site Elevation: 594.3 ft

2.19.1 ILS Type: Localizer for runway 18L. Magnetic variation: 4E
2.19.2 ILS Identification: CIX
2.19.5 Coordinates: 32–52–33.5835N / 97–3–3.3873W

2.19.6 Site Elevation: 570.1 ft

2.19.1 ILS Type: DME for runway 36R. Magnetic variation: 4E
2.19.2 ILS Identification: FJN
2.19.5 Coordinates: 32–55–8.6708N / 97–3–7.2741W
2.19.6 Site Elevation: 594.7 ft

2.19.1 ILS Type: Glide Slope for runway 36R. Magnetic variation: 4E
2.19.2 ILS Identification: FJN
2.19.5 Coordinates: 32–52–54.8518N / 97–3–7.9662W
2.19.6 Site Elevation: 577.2 ft

2.19.1 ILS Type: Localizer for runway 36R. Magnetic variation: 4E
2.19.2 ILS Identification: FJN
2.19.5 Coordinates: 32–55–6.8486N / 97–3–2.5997W
2.19.6 Site Elevation: 597.2 ft

2.19.1 ILS Type: DME for runway 18R. Magnetic variation: 4E
2.19.2 ILS Identification: VYN
2.19.5 Coordinates: 32–52–34.0875N / 97–3–12.5854W
2.19.6 Site Elevation: 582.3 ft

2.19.1 ILS Type: Glide Slope for runway 18R. Magnetic variation: 4E
2.19.2 ILS Identification: VYN
2.19.5 Coordinates: 32–54–45.4683N / 97–3–21.5693W
2.19.6 Site Elevation: 598.5 ft

2.19.1 ILS Type: Inner Marker for runway 18R. Magnetic variation: 4E
2.19.2 ILS Identification: VYN
2.19.5 Coordinates: 32–55–4.5483N / 97–3–16.6916W
2.19.6 Site Elevation: 602.6 ft

2.19.1 ILS Type: Localizer for runway 18R. Magnetic variation: 4E
2.19.2 ILS Identification: VYN
2.19.5 Coordinates: 32–52–33.9326N / 97–3–17.4526W
2.19.6 Site Elevation: 580.4 ft

2.19.1 ILS Type: DME for runway 36L. Magnetic variation: 4E
2.19.2 ILS Identification: BXN
2.19.5 Coordinates: 32–52–34.0875N / 97–3–12.5854W

2.19.6 Site Elevation: 582.3 ft

2.19.1 ILS Type: Glide Slope for runway 36L. Magnetic variation: 4E
2.19.2 ILS Identification: BXN
2.19.5 Coordinates: 32–52–54.4087N / 97–3–22.0405W
2.19.6 Site Elevation: 579.9 ft

2.19.1 ILS Type: Localizer for runway 36L. Magnetic variation: 4E
2.19.2 ILS Identification: BXN
2.19.5 Coordinates: 32–55–6.9002N / 97–3–16.6717W

2.19.6 Site Elevation: 601.9 ft

#### General Remarks:

TKOF DSTC FOR RY 35L FM TWY EQ IS 13084 FT & FM TWY EP IS 12811 FT.

ARPT UNDER CONSTRUCTION; PAEW IN MOVEMENT AREAS.

PPR ACFT WITH WINGSPAN 215 FT OR GREATER (GROUP VI) CALL ARPT OPNS 972–973–3112 FOR FOLLOW–ME SERVICES WHILE TAXIING TO & FROM RAMP & RYS.

TWY A6 CLSD TO ACFT WITH WINGSPAN 171 FT AND GREATER.

TKOF DSTC FOR RY 18R FM TWY WG IS 13,082 FT.

RY VISUAL SCREEN 20 FT AGL 1180 FT S AER 35C.

APRON ENTRANCE/EXIT POINT 3 CLSD TO ACFT WITH WINGSPAN GREATER THAN 214 FT EXCEPT PPR.

APRON ENTRANCE/EXIT POINTS 22, 24, 105, AND 107 CLSD TO ACFT WITH WINGSPAN GREATER THAN 125 FT.

ACFT USING TERMINAL A GATES A8–A39 AND TERMINAL C GATES C2–C12 MUST OBTAIN APPROVAL FROM RAMP 131.275 PRIOR TO ENTERING RAMP AND PRIOR TO PUSHBACK.

TKOF DSTC FOR RY 17L FM TWY Q2 IS 8196 FT.

ACFT USING TERMINAL C GATES C14–C39 MUST OBTAIN APPROVAL FROM RAMP 131.80 PRIOR TO ENTERING RAMP AND PRIOR TO PUSHBACK.

PPR GA OPERATIONS 0000-0500; CALL ARPT OPNS 972-973-3112.

APRON ENTRANCE/EXIT POINT 124 CLSD TO ACFT WITH WINGSPAN GREATER THAN 213 FT.

RY STATUS LGTS IN OPN.

TKOF DSTC FOR RY 35R FM TWY Q9 IS 8196 FT.

ACFT USING TERMINAL B GATES B1–B17, ALL TERMINAL D GATES, AND APRON ENTRY POINTS 117–150 MUST OBTAIN APPROVAL FROM RAMP 129.825 PRIOR TO ENTERING RAMP AND PRIOR TO PUSHBACK.

TERMINAL B APRON TAXILANE BTN APRON ENTRANCE/EXIT POINT TAXILANES 107 & 117 CLSD TO ACFT WITH WINGSPAN 94 FT AND GREATER.

TKOF DSTC FOR RY 17C FM TWY EG IS 13,082 FT.

APRON ENTRANCE/EXIT POINTS 110, 111, 112, 113, 114, 115, AND 116 CLSD TO ACFT WITH WINGSPAN GREATER THAN 94 FT.

TKOF DSTC FOR RY 18L FM TWY WG IS 13,082; FM TWY WH IS 12,815.

UNLESS OTHERWISE SPECIFIED, ALL APRON ENTRANCE/EXIT POINTS CLSD TO ACFT WITH WINGSPAN GREATER THAN 214 FT EXCEPT PPR.

PPR FROM ARPT OPNS FOR GEN AVN ACFT TO PROCD TO AIRLINE TRML GATE EXCP GEN AVN FAC.

PPR FM THE PRIMARY TENANT AIRLINES TO OPERATE WITHIN THE CENTRAL TERMINAL AREA. PROPER MINIMUM OBJECT FREE AREA DISTANCES MAY NOT BE MAINTAINED FOR RAMP/APRON TAXILANES.

TWY EDGE REFLECTORS ALONG ALL TWYS.

APRON ENTRANCE/EXIT POINTS 1 AND 2 CLSD TO ACFT WITH WINGSPAN GREATER THAN 89' EXCEPT PPR.

TKOF DSTC FOR RY 36R FM TWY WP IS 12,815 FT; FM TWY WQ IS 13,082 FT.

TKOF DSTC FOR RY 17R FM TWY EG IS 13082 FT & FM TWY EH IS 12816 FT.

LAND & HOLD SHORT SIGNS ON RY 17C AT TWY 'B' 10,460 FT S OF RY 17C THLD; RY 18R AT TWY 'B' 10,100 FT S OF RY 18R THLD; RY 35C AT TWY 'EJ' 9050 FT N OF RY 35C THLD; RY 36L AT TWY 'Z' 10,650 FT N OF RY 36L THLD; LGTD & MKD WITH IN–PAVEMENT PULSATING WHITE LGTS.

ACFT USING TWY HA NORTH OF TWY B MUST OBTAIN APPROVAL FROM RAMP 129.825 PRIOR TO ENTERING RAMP.

APRON ENTRANCE/EXIT POINTS 9, 32, 33, 34, 35, 36, 37, 38, & 53 CLSD TO ACFT WITH WINGSPAN GREATER THAN 135 FT.

APRON ENTRANCE/EXIT POINTS 5, 7, 42, 44, 48, 49, 51, 52, 117, 118 AND 122 CLSD TO ACFT WITH WINGSPAN GREATER THAN 118 FT.

APRON ENTRANCE/EXIT POINTS 31 AND 39 CLSD TO ACFT WITH WINGSPAN GREATER THAN 167 FT.

ACFT USING TERMINAL B GATES B18–B49 MUST OBTAIN APPROVAL FROM RAMP 130.10 PRIOR TO ENTERING RAMP AND PRIOR TO PUSHBACK.

TWYS MAY REQUIRE JUDGMENTAL OVERSTEERING FOR LARGE ACFT.

STD SAWED GROOVING 160 FT WIDE FULL LENGTH RYS 13L/31R; 18L/36R & 17R/35L. STD GROOVING 130 FTWIDE FULL LENGTH RYS 17L/35R; 18R/36L; 13R/31L & 17C/35C.

BIRDS ON & INVOF ARPT.

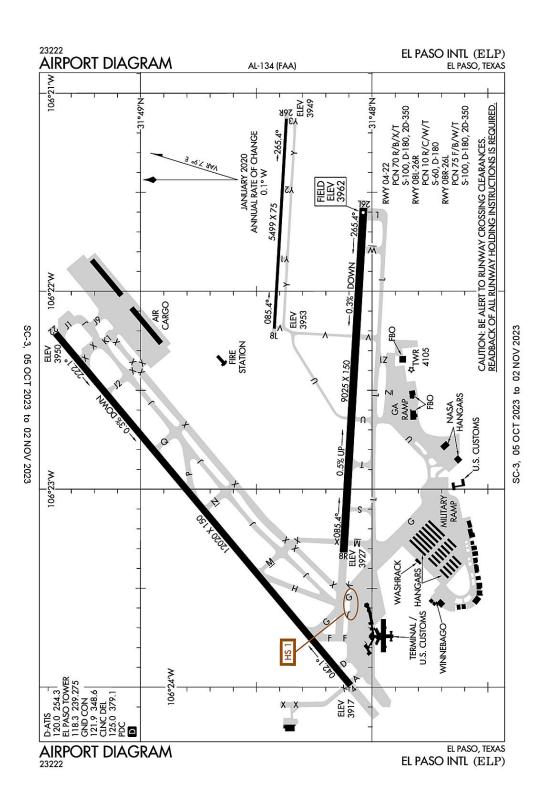
ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

RY VISUAL SCREEN 22 FT AGL 1179 FT S AER 35L.

ACFT USING TERMINAL E GATES E2–E17 MUST OBTAIN APPROVAL FROM RAMP 131.0 PRIOR TO ENTERING RAMP AND PRIOR TO PUSHBACK. ACFT USING TERMINAL E GATES E–18–E38 MUST OBTAIN

APPROVAL FROM RAMP 128.825 PRIOR TO ENTERING RAMP AND PRIOR TO PUSHBACK.

A380 OPNS ONLY AUZD ON RWYS 18R/36L AND 18L/36R. B747–8 OPNS ONLY AUZD ON RWYS 18R/36L, 18L/36R AND 17R/35L. CTC ARPT OPNS FOR ADDNL INFO.



# El Paso, Texas El Paso International ICAO Identifier KELP

# El Paso, TX El Paso Intl ICAO Identifier KELP

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 31–48–26.4N / 106–22–34.9W 2.2.2 From City: 4 miles NE of EL PASO, TX 2.2.3 Elevation: 3961.6 ft 2.2.5 Magnetic Variation: 8E (2015) 2.2.6 Airport Contact: SAM RODRIGUEZ 6701 CONVAIR RD EL PASO, TX 79925 (915–212–0333) 2.2.7 Traffic: IFR/VFR

# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

# **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 04
2.12.2 True Bearing: 50
2.12.3 Dimensions: 12020 ft x 150 ft
2.12.4 PCN: 70 R/B/X/T
2.12.5 Coordinates: 31–48–5.5605N / 106–23–59.4625W
2.12.6 Threshold Elevation: 3916.9 ft
2.12.6 Touchdown Zone Elevation: 3923.2 ft

2.12.1 Designation: 22
2.12.2 True Bearing: 230
2.12.3 Dimensions: 12020 ft x 150 ft
2.12.4 PCN: 70 R/B/X/T
2.12.5 Coordinates: 31–49–22.0112N / 106–22–12.7821W
2.12.6 Threshold Elevation: 3949.5 ft
2.12.6 Touchdown Zone Elevation: 3949.5 ft

2.12.1 Designation: 08L

2.12.2 True Bearing: 93 2.12.3 Dimensions: 5499 ft x 75 ft 2.12.4 PCN: 10 R/C/W/T 2.12.5 Coordinates: 31–48–25.3326N / 106–22–11.3796W 2.12.6 Threshold Elevation: 3952.6 ft 2.12.6 Touchdown Zone Elevation: 3952.7 ft

2.12.1 Designation: 26R
2.12.2 True Bearing: 273
2.12.3 Dimensions: 5499 ft x 75 ft
2.12.4 PCN: 10 R/C/W/T
2.12.5 Coordinates: 31–48–22.1849N / 106–21–7.7768W
2.12.6 Threshold Elevation: 3949.2 ft
2.12.6 Touchdown Zone Elevation: 3949.5 ft

2.12.1 Designation: 08R
2.12.2 True Bearing: 93
2.12.3 Dimensions: 9025 ft x 150 ft
2.12.4 PCN: 75 F/B/W/T
2.12.5 Coordinates: 31–48–7.3509N / 106–23–19.1333W
2.12.6 Threshold Elevation: 3927.1 ft
2.12.6 Touchdown Zone Elevation: 3940.3 ft

2.12.1 Designation: 26L 2.12.2 True Bearing: 273 2.12.3 Dimensions: 9025 ft x 150 ft 2.12.4 PCN: 75 F/B/W/T 2.12.5 Coordinates: 31–48–2.195N / 106–21–34.7505W 2.12.6 Threshold Elevation: 3961.6 ft 2.12.6 Touchdown Zone Elevation: 3961.6 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 04
2.13.2 Take-off Run Available: 12020
2.13.3 Take-off Distance Available: 12020
2.13.4 Accelerate-Stop Distance Available: 12020
2.13.5 Landing Distance Available: 12020

2.13.1 Designation: 22
2.13.2 Take-off Run Available: 12020
2.13.3 Take-off Distance Available: 12020
2.13.4 Accelerate-Stop Distance Available: 12020
2.13.5 Landing Distance Available: 12020

2.13.1 Designation: 08L
2.13.2 Take-off Run Available: 5499
2.13.3 Take-off Distance Available: 5499
2.13.4 Accelerate-Stop Distance Available: 5499
2.13.5 Landing Distance Available: 5499

2.13.1 Designation: 26R

2.13.2 Take-off Run Available: 5499

2.13.3 Take-off Distance Available: 5499

2.13.4 Accelerate–Stop Distance Available: 5499

2.13.5 Landing Distance Available: 5499

2.13.1 Designation: 08R

2.13.2 Take-off Run Available: 9025

2.13.3 Take-off Distance Available: 9025

2.13.4 Accelerate–Stop Distance Available: 9025

2.13.5 Landing Distance Available: 9025

2.13.1 Designation: 26L

2.13.2 Take-off Run Available: 9025

2.13.3 Take-off Distance Available: 9025

2.13.4 Accelerate–Stop Distance Available: 9025

2.13.5 Landing Distance Available: 9025

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 042.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 222.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 08L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 26R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 08R

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P (SOUTH-V16)2.18.3 Channel: 119.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (SOUTH-V16)2.18.3 Channel: 353.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (NORTH–V16)2.18.3 Channel: 124.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (NORTH–V16)2.18.3 Channel: 298.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 379.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C2.18.3 Channel: 119.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (SOUTH-V16)2.18.3 Channel: 119.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (NORTH-V16)2.18.3 Channel: 124.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (NORTH–V16)2.18.3 Channel: 298.852.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (SOUTH-V16)2.18.3 Channel: 353.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 1202.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 254.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P2.18.3 Channel: 119.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: DEP/P2.18.3 Channel: 2632.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 239.2752.18.5 Hours of Operation: 24

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 04. Magnetic variation: 8E
2.19.2 ILS Identification: ETF
2.19.5 Coordinates: 31–47–58.7232N / 106–24–13.5201W
2.19.6 Site Elevation: 3926 ft

2.19.1 ILS Type: Localizer for runway 04. Magnetic variation: 8E
2.19.2 ILS Identification: ETF
2.19.5 Coordinates: 31–49–28.4448N / 106–22–3.7979W
2.19.6 Site Elevation: 3950.4 ft

2.19.1 ILS Type: DME for runway 22. Magnetic variation: 8E
2.19.2 ILS Identification: ELP
2.19.5 Coordinates: 31–47–58.7232N / 106–24–13.5201W
2.19.6 Site Elevation: 3926 ft

2.19.1 ILS Type: Glide Slope for runway 22. Magnetic variation: 8E
2.19.2 ILS Identification: ELP
2.19.5 Coordinates: 31–49–17.2839N / 106–22–26.5917W
2.19.6 Site Elevation: 3940.3 ft

2.19.1 ILS Type: Localizer for runway 22. Magnetic variation: 8E
2.19.2 ILS Identification: ELP
2.19.5 Coordinates: 31–47–55.923N / 106–24–12.9005W
2.19.6 Site Elevation: 3910.9 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 12E
2.19.2 Navigation Aid Identification: ELP
2.19.5 Coordinates: 31–48–57.277N / 106–16–54.7782W
2.19.6 Site Elevation: 4023 ft

#### **General Remarks:**

TWY A SOUTH OF APCH END OF RWY 4; TWY J NE OF TWY K1; TWY K NE OF TWY K1 BTN TWY J & NORTH CARGO RAMP; TWYS U & V SOUTH OF TWY L; & TWY K2 NOT VISIBLE FM ATCT.

ENGINE POWER IS RSTRD TO IDLE POWER ON ONE ENGINE AT A TIME FOR MAX 5 MIN ON ANY TERMINAL OR PARKING APRONS, CROSS-BLEED STARTS OR OTHER PRE DEP ACTIVITY ON MOVEMENT AREAS ONLY, MAINT OR OTR RQRMT NEEDING LONGER OR HIGHER POWER CTC TWR FOR DIRECTIONS TO DESIGNATED RUNUP AREAS.

CTN: BIGGS AAF 2NM NW RWY 22 CAN BE MISTAKEN FOR ELP RWY 22.

COMPASS ROSE CLSD PERMLY.

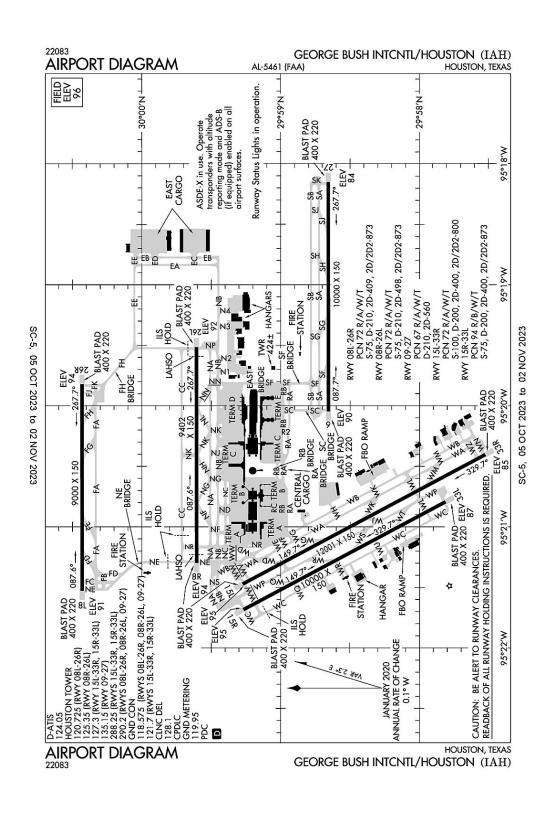
NOISE ABATEMENT PROCEDURES IN EFFECT, CTC ATCT FOR DETAILS.

HOLDING POSITION MARKINGS FOR RUNWAY 8R APPROACH AND RUNWAY 4/22 ARE IN CLOSE PROXIMITY TO THE TERMINAL APRON; REVIEW AIRPORT DIAGRAM PRIOR TO PUSHBACK FROM THE GATE.

MILITARY USERS SHOULD REVIEW NOISE ABATEMENT PROCEDURES LISTED FOR BIGGS AAF.

NORTH BOUND TFC PROHIBITED ON TWY F SOUTH OF APCH END RWY 08R.

24 HR PPR CLASS A EXPLOSIVES CTC 915-212-0333.



Houston, Texas George Bush Intercontinental/Houston ICAO Identifier KIAH

# Houston, TX George Bush Intercontinental/Houston ICAO Identifier KIAH

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 29–59–3.967N / 95–20–29.193W 2.2.2 From City: 15 miles N of HOUSTON, TX 2.2.3 Elevation: 95.8 ft 2.2.5 Magnetic Variation: 3E (2015) 2.2.6 Airport Contact: STEVEN RUNGE PO BOX 60106 HOUSTON, TX 77205 (281–233–1131) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

# AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 08L
2.12.2 True Bearing: 90
2.12.3 Dimensions: 9000 ft x 150 ft
2.12.4 PCN: 72 R/A/W/T
2.12.5 Coordinates: 30–0–25.7816N / 95–21–31.6473W
2.12.6 Threshold Elevation: 90.6 ft
2.12.6 Touchdown Zone Elevation: 94 ft

2.12.1 Designation: 26R 2.12.2 True Bearing: 270 2.12.3 Dimensions: 9000 ft x 150 ft 2.12.4 PCN: 72 R/A/W/T 2.12.5 Coordinates: 30–0–25.8612N / 95–19–49.2891W 2.12.6 Threshold Elevation: 94.2 ft 2.12.6 Touchdown Zone Elevation: 95.3 ft

2.12.1 Designation: 08R
2.12.2 True Bearing: 90
2.12.3 Dimensions: 9402 ft x 150 ft
2.12.4 PCN: 72 R/A/W/T
2.12.5 Coordinates: 29–59–36.3028N / 95–21–17.8703W
2.12.6 Threshold Elevation: 94.3 ft
2.12.6 Touchdown Zone Elevation: 95.3 ft

2.12.1 Designation: 26L 2.12.2 True Bearing: 270 2.12.3 Dimensions: 9402 ft x 150 ft 2.12.4 PCN: 72 R/A/W/T 2.12.5 Coordinates: 29-59-36.3817N / 95-19-30.9539W 2.12.6 Threshold Elevation: 92.3 ft 2.12.6 Touchdown Zone Elevation: 94.6 ft 2.12.1 Designation: 09 2.12.2 True Bearing: 90 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 67 R/A/W/T 2.12.5 Coordinates: 29-58-39.3363N / 95-20-2.7891W 2.12.6 Threshold Elevation: 89.9 ft 2.12.6 Touchdown Zone Elevation: 90.1 ft 2.12.1 Designation: 27 2.12.2 True Bearing: 270 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 67 R/A/W/T 2.12.5 Coordinates: 29-58-39.4071N / 95-18-9.0948W 2.12.6 Threshold Elevation: 84.3 ft 2.12.6 Touchdown Zone Elevation: 86.2 ft 2.12.1 Designation: 33R 2.12.2 True Bearing: 332 2.12.3 Dimensions: 12001 ft x 150 ft 2.12.4 PCN: 72 R/A/W/T 2.12.5 Coordinates: 29-57-31.5505N / 95-20-24.189W 2.12.6 Threshold Elevation: 84.9 ft 2.12.6 Touchdown Zone Elevation: 88 ft 2.12.1 Designation: 15L 2.12.2 True Bearing: 152 2.12.3 Dimensions: 12001 ft x 150 ft 2.12.4 PCN: 72 R/A/W/T 2.12.5 Coordinates: 29-59-16.4026N / 95-21-28.3335W 2.12.6 Threshold Elevation: 94.6 ft 2.12.6 Touchdown Zone Elevation: 95.2 ft 2.12.1 Designation: 33L 2.12.2 True Bearing: 332 2.12.3 Dimensions: 10000 ft x 150 ft 2.12.4 PCN: 94 R/B/W/T 2.12.5 Coordinates: 29-57-48.7474N / 95-20-47.5811W 2.12.6 Threshold Elevation: 86.5 ft 2.12.6 Touchdown Zone Elevation: 89.3 ft

2.12.1 Designation: 15R2.12.2 True Bearing: 152

2.12.3 Dimensions: 10000 ft x 150 ft

2.12.4 PCN: 94 R/B/W/T

2.12.5 Coordinates: 29-59-16.1082N / 95-21-41.0384W

2.12.6 Threshold Elevation: 94.8 ft

2.12.6 Touchdown Zone Elevation: 94.8 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 08L
2.13.2 Take-off Run Available: 9000
2.13.3 Take-off Distance Available: 9000
2.13.4 Accelerate-Stop Distance Available: 9000
2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 26R

2.13.2 Take-off Run Available: 9000

2.13.3 Take-off Distance Available: 9000

2.13.4 Accelerate–Stop Distance Available: 9000

2.13.5 Landing Distance Available: 9000

2.13.1 Designation: 08R

2.13.2 Take-off Run Available: 9402

2.13.3 Take-off Distance Available: 9402

2.13.4 Accelerate–Stop Distance Available: 9402

2.13.5 Landing Distance Available: 9402

2.13.1 Designation: 26L

2.13.2 Take-off Run Available: 9402

2.13.3 Take-off Distance Available: 9402

2.13.4 Accelerate–Stop Distance Available: 9402

2.13.5 Landing Distance Available: 9402

2.13.1 Designation: 09

2.13.2 Take-off Run Available: 10000

2.13.3 Take-off Distance Available: 10000

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 27

2.13.2 Take-off Run Available: 10000

2.13.3 Take-off Distance Available: 10000

2.13.4 Accelerate–Stop Distance Available: 10000

2.13.5 Landing Distance Available: 10000

2.13.1 Designation: 33R

2.13.2 Take–off Run Available: 12001

2.13.3 Take-off Distance Available: 12001

2.13.4 Accelerate–Stop Distance Available: 12001

2.13.5 Landing Distance Available: 12001

2.13.1 Designation: 15L

2.13.2 Take-off Run Available: 120012.13.3 Take-off Distance Available: 120012.13.4 Accelerate-Stop Distance Available: 120012.13.5 Landing Distance Available: 12001

2.13.1 Designation: 33L

2.13.2 Take-off Run Available: 9999

2.13.3 Take-off Distance Available: 9999

2.13.4 Accelerate–Stop Distance Available: 9999

2.13.5 Landing Distance Available: 9999

2.13.1 Designation: 15R2.13.2 Take-off Run Available: 99992.13.3 Take-off Distance Available: 99992.13.4 Accelerate-Stop Distance Available: 9999

2.13.5 Landing Distance Available: 9999

# AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 08L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 26R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 08R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 26L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 092.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 272.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 33R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 15L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 33L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 15R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 128.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 124.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: GND METERING2.18.3 Channel: 119.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 08L/26R, 08R/26L, 09/27) 2.18.3 Channel: 118.575 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 15L/33R, 15R/33L)2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08L/26R)2.18.3 Channel: 120.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08R/26L)2.18.3 Channel: 125.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 15L/33R, 15R/33L)2.18.3 Channel: 127.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 09/27)2.18.3 Channel: 135.152.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 15L/33R, 15R/33L)

2.18.3 Channel: 288.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 08L/26R, 08R/26L, 09/27)2.18.3 Channel: 290.22.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 08L. Magnetic variation: 3E
2.19.2 ILS Identification: BZU
2.19.5 Coordinates: 30–0–21.9187N / 95–21–44.0405W
2.19.6 Site Elevation: 87.5 ft

2.19.1 ILS Type: Glide Slope for runway 08L. Magnetic variation: 3E
2.19.2 ILS Identification: BZU
2.19.5 Coordinates: 30–0–29.7528N / 95–21–18.6875W
2.19.6 Site Elevation: 86 ft

2.19.1 ILS Type: Inner Marker for runway 08L. Magnetic variation: 3E
2.19.2 ILS Identification: BZU
2.19.5 Coordinates: 30-0-25.764N / 95-21-40.8592W
2.19.6 Site Elevation: 90.8 ft

2.19.1 ILS Type: Localizer for runway 08L. Magnetic variation: 3E
2.19.2 ILS Identification: BZU
2.19.5 Coordinates: 30–0–25.8701N / 95–19–36.9727W
2.19.6 Site Elevation: 94.4 ft

2.19.1 ILS Type: DME for runway 26R. Magnetic variation: 3E
2.19.2 ILS Identification: OND
2.19.5 Coordinates: 30–0–21.9187N / 95–21–44.0405W
2.19.6 Site Elevation: 87.5 ft

2.19.1 ILS Type: Glide Slope for runway 26R. Magnetic variation: 3E
2.19.2 ILS Identification: OND
2.19.5 Coordinates: 30–0–29.8117N / 95–20–2.26W
2.19.6 Site Elevation: 89.7 ft

2.19.1 ILS Type: Inner Marker for runway 26R. Magnetic variation: 3E
2.19.2 ILS Identification: OND
2.19.5 Coordinates: 30–0–25.8755N / 95–19–40.4195W
2.19.6 Site Elevation: 94.4 ft

2.19.1 ILS Type: Localizer for runway 26R. Magnetic variation: 3E
2.19.2 ILS Identification: OND
2.19.5 Coordinates: 30–0–25.7696N / 95–21–43.9647W
2.19.6 Site Elevation: 90.8 ft

2.19.1 ILS Type: DME for runway 08R. Magnetic variation: 3E 2.19.2 ILS Identification: IAH

2.19.5 Coordinates: 29-59-38.9211N / 95-21-31.3127W 2.19.6 Site Elevation: 92.5 ft 2.19.1 ILS Type: Glide Slope for runway 08R. Magnetic variation: 3E 2.19.2 ILS Identification: IAH 2.19.5 Coordinates: 29-59-40.3184N / 95-21-6.0476W 2.19.6 Site Elevation: 88.8 ft 2.19.1 ILS Type: Localizer for runway 08R. Magnetic variation: 3E 2.19.2 ILS Identification: IAH 2.19.5 Coordinates: 29-59-36.3913N / 95-19-19.5749W 2.19.6 Site Elevation: 89.6 ft 2.19.1 ILS Type: DME for runway 26L. Magnetic variation: 3E 2.19.2 ILS Identification: JYV 2.19.5 Coordinates: 29-59-38.9211N / 95-21-31.3127W 2.19.6 Site Elevation: 92.5 ft 2.19.1 ILS Type: Glide Slope for runway 26L. Magnetic variation: 3E 2.19.2 ILS Identification: JYV 2.19.5 Coordinates: 29-59-39.5388N / 95-19-42.8056W 2.19.6 Site Elevation: 86.8 ft 2.19.1 ILS Type: Inner Marker for runway 26L. Magnetic variation: 3E 2.19.2 ILS Identification: JYV 2.19.5 Coordinates: 29-59-36.3841N / 95-19-20.5992W 2.19.6 Site Elevation: 89.2 ft 2.19.1 ILS Type: Localizer for runway 26L. Magnetic variation: 3E 2.19.2 ILS Identification: JYV 2.19.5 Coordinates: 29-59-36.2865N / 95-21-31.2791W 2.19.6 Site Elevation: 92.2 ft 2.19.1 ILS Type: DME for runway 09. Magnetic variation: 3E 2.19.2 ILS Identification: UYO 2.19.5 Coordinates: 29-58-35.3774N / 95-20-13.5882W 2.19.6 Site Elevation: 87.3 ft 2.19.1 ILS Type: Glide Slope for runway 09. Magnetic variation: 3E 2.19.2 ILS Identification: UYO 2.19.5 Coordinates: 29-58-35.3875N / 95-19-50.679W 2.19.6 Site Elevation: 85.3 ft 2.19.1 ILS Type: Localizer for runway 09. Magnetic variation: 3E 2.19.2 ILS Identification: UYO 2.19.5 Coordinates: 29-58-39.4132N / 95-17-57.578W 2.19.6 Site Elevation: 81 ft 2.19.1 ILS Type: DME for runway 27. Magnetic variation: 3E 2.19.2 ILS Identification: GHI 2.19.5 Coordinates: 29-58-35.3774N / 95-20-13.5882W

2.19.6 Site Elevation: 87.3 ft

2.19.1 ILS Type: Glide Slope for runway 27. Magnetic variation: 3E
2.19.2 ILS Identification: GHI
2.19.5 Coordinates: 29–58–35.4434N / 95–18–20.8578W
2.19.6 Site Elevation: 80 ft

2.19.1 ILS Type: Inner Marker for runway 27. Magnetic variation: 3E
2.19.2 ILS Identification: GHI
2.19.5 Coordinates: 29–58–39.4166N / 95–17–59.1664W
2.19.6 Site Elevation: 81.1 ft

2.19.1 ILS Type: Localizer for runway 27. Magnetic variation: 3E
2.19.2 ILS Identification: GHI
2.19.5 Coordinates: 29–58–39.3268N / 95–20–15.3338W
2.19.6 Site Elevation: 87.4 ft

2.19.1 ILS Type: Glide Slope for runway 33R. Magnetic variation: 3E
2.19.2 ILS Identification: CDG
2.19.5 Coordinates: 29–57–38.8144N / 95–20–33.4594W
2.19.6 Site Elevation: 80.4 ft

2.19.1 ILS Type: Localizer for runway 33R. Magnetic variation: 3E
2.19.2 ILS Identification: CDG
2.19.5 Coordinates: 29–59–31.6238N / 95–21–37.6444W
2.19.6 Site Elevation: 91.9 ft

2.19.1 ILS Type: Glide Slope for runway 15R. Magnetic variation: 3E
2.19.2 ILS Identification: LKM
2.19.5 Coordinates: 29–59–4.4118N / 95–21–39.0331W
2.19.6 Site Elevation: 89.9 ft

2.19.1 ILS Type: Localizer for runway 15R. Magnetic variation: 3E
2.19.2 ILS Identification: LKM
2.19.5 Coordinates: 29–57–39.3739N / 95–20–41.8496W
2.19.6 Site Elevation: 82.7 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 5E
2.19.2 Navigation Aid Identification: IAH
2.19.5 Coordinates: 29–57–24.9013N / 95–20–44.5885W
2.19.6 Site Elevation: 80.6 ft

#### **General Remarks:**

THE FLWG MOV AREAS ARE NOT VSB FM THE ATCT: PORTIONS OF TWYS 'WA' & 'WB' FM TWY 'WH' TO THE AER 33R; TWYS 'WA' & 'WB' FM TWY 'WD' NORTH FOR 400 FT; TWY 'WD' FM TWY 'WA' TO TWY 'NR'; TWY 'NR'; TWY 'NR'; TWY 'WL' FM RWY 15L TO TWY 'WB' & TWY 'WM'.

TXLN 'RA', 'RB', 'RC', 'R2', AND TWY 'SC' NORTH OF TWY 'SB' ARE DSGND NON–MOVEMENT AREAS OPERD BY UAL RAMP CTL.

DUAL TWY OPNS TWY NK BTN TWY NB & NORTH RAMP; WEST CNTRLN RSTRD TO ACFT MAX WING SPANS 125 FT & EAST CNTRLN MAX WING SPANS 214 FT.

NORTH RAMP TAXILANE BTN TWYS NF & NR RSTRD TO ACFT WITH WING SPAN 125 FT & BLO.

RWY STATUS LGTS ARE IN OPN.

TWY WW BTN TWY NR AND TWY WB CLSD TO ACFT WINGSPAN MORE THAN 214 FT.

APRON TERMINAL ALPHA NORTH RAMP EAST-WEST TXL CLSD TO ACFT WINGSPAN MORE THAN 118 FT.

TWY 'SF' BTN TWY 'NB' AND TXL 'RA' IS DSGND NON-MOV AREA.

9 FT AGL UNMKD SECURITY FENCE ADJ TO FBO & CORPORATE BASE OPR RAMPS AND NONMOV AREA TXLS.

TWY SF BTN RWY 09/27 UP TO AND INCLUDING THE EAST BRIDGE CLSD TO ACFT WITH WINGSPAN 215 FT & OVER.

HEL HOVER/TAXI RSTRD TO HARD SFC MOV AREAS ONLY.

APRON TERMINAL ALPHA NORTH RAMP SPOT 5 CLSD TO ACFT WINGSPAN MORE THAN 118 FT.

TWY 'NR' CLSD TO ACFT WITH WING SPANS GREATER THAN 125 FT BTN TWY 'WD' & TWY 'WB'.

TWY WC WEST OF RWY 15R/33L RSTRD TO ACFT WITH 118 FT WING SPAN AND BLW.

TWY NR BTN TWY NC AND TWY WW CLSD TO ACFT WINGSPAN MORE THAN 214 FT.

TWY NR BTN WW AND TWY WB DSGND NON-MOVEMENT AREA.

TWY NA LGT ALL BTN TWY WP AND TWY NP NOT STD

APRON TERMINAL ALPHA NORTH RAMP SPOT 6 CLSD TO ACFT WINGSPAN MORE THAN 125 FT.

PILOTS & CREWS SHOULD BE AWARE OF DEP TURNS ON CRS IN EXCESS OF 180 DEGS. PILOT READ BACK OF DRCTN OF TURN IS HIGHLY ENCOURAGED.

TWYS WA & WB MAGNETIC ANOMALIES MAY AFFECT COMPASS HDG.

RWY 15L/33R MAGNETIC ANOMALIES MAY AFFECT COMPASS HDG FOR TKOF.

GBAS APCH SVC VOL 20NM FR THR, ALL GLS APCHS.

TWY WD BTN TWY NR AND TWY WB CLSD TO ACFT WINGSPAN MORE THAN 171 FT.

NORTH RAMP NORTH & SOUTH TAXI LANES CLSD TO ACFT WITH WING SPANS GREATER THAN 125 FT.

RWY 09/27 CLSD TO ACFT WITH WINGSPAN 215 FT & ABOVE.

TWY NJ BTN TWY NB AND TERMINAL C RAMP SIMULTANEOUS ACFT OPS PROHIBITED WHEN MIDDLE TAXILANE IN USE, MIDDLE TAXILANE CLSD TO ACFT WINGSPAN MORE THAN 214FT.

DUAL TWY OPNS TWY NJ BTN TWY NB & TERMINAL C RAMP; WEST CNTRLN RSTRD TO ACFT MAX WING SPANS 118 FT & EAST CNTRLN MAX WING SPANS 118 FT.

TXLN RC CLSD TO ACFT WITH WINGSPAN GREATER THAN 135 FT.

BIRDS ON & INVOF ARPT.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

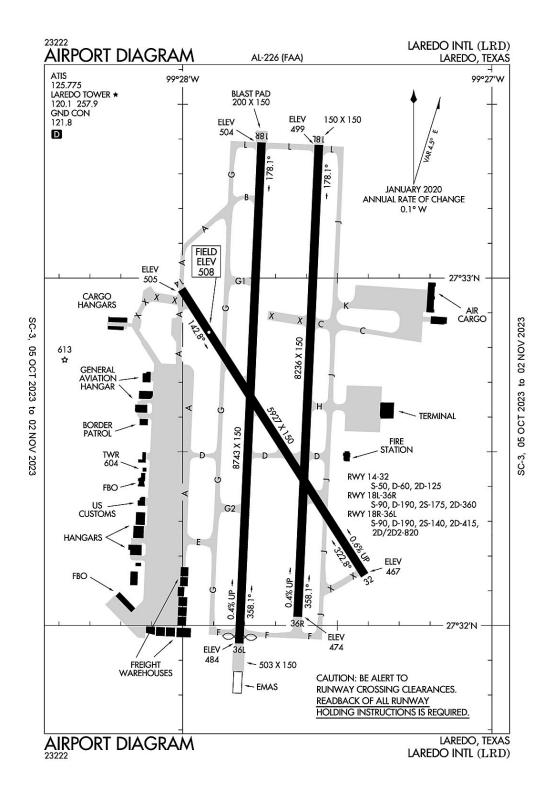
NOISE SENSITIVE AREA N, E AND W OF ARPT.

TWY WW RUN UP PAD FOR RWY 15L CLSD TO ACFT WITH WINGSPAN 135 FT & OVER.

WILDLIFE HAZ BATS INVOF IAH.

TWY NK BTN TWY NB AND TERMINAL D RAMP SIMULTANEOUS ACFT OPS PROHIBITED WHEN MIDDLE TAXILANE IN USE.

Laredo, Texas Laredo International ICAO Identifier KLRD



# Laredo, TX Laredo Intl ICAO Identifier KLRD

## AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 27–32–39.1N / 99–27–41.7W
2.2.2 From City: 3 miles NE of LAREDO, TX
2.2.3 Elevation: 508 ft
2.2.5 Magnetic Variation: 5E (2020)
2.2.6 Airport Contact: GILBERTO SANCHEZ

5210 BOB BULLOCK LOOP
LAREDO, TX 78041 (956–795–2000)

2.2.7 Traffic: IFR/VFR

# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

# **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: None

# AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 7/1/1975 2.6.2 Rescue and Firefighting Services: ARFF Index–B

# **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 32
2.12.2 True Bearing: 327
2.12.3 Dimensions: 5927 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 27–32–8.635N / 99–27–24.668W
2.12.6 Threshold Elevation: 467.4 ft
2.12.6 Touchdown Zone Elevation: 493.6 ft

2.12.1 Designation: 14
2.12.2 True Bearing: 147
2.12.3 Dimensions: 5927 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 27–32–58.0248N / 99–28–0.2242W
2.12.6 Threshold Elevation: 505.4 ft
2.12.6 Touchdown Zone Elevation: 508 ft

2.12.1 Designation: 18L

2.12.2 True Bearing: 183
2.12.3 Dimensions: 8236 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 27–33–22.9267N / 99–27–33.5988W
2.12.6 Threshold Elevation: 499.2 ft
2.12.6 Touchdown Zone Elevation: 499.2 ft

2.12.1 Designation: 36R
2.12.2 True Bearing: 3
2.12.3 Dimensions: 8236 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 27–32–1.4547N / 99–27–37.6934W
2.12.6 Threshold Elevation: 474.2 ft
2.12.6 Touchdown Zone Elevation: 486.7 ft

2.12.1 Designation: 36L
2.12.2 True Bearing: 3
2.12.3 Dimensions: 8743 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 27–31–56.8817N / 99–27–49.0449W
2.12.6 Threshold Elevation: 483.7 ft
2.12.6 Touchdown Zone Elevation: 497 ft

2.12.1 Designation: 18R
2.12.2 True Bearing: 183
2.12.3 Dimensions: 8743 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 27–33–23.3681N / 99–27–44.7128W
2.12.6 Threshold Elevation: 503.7 ft
2.12.6 Touchdown Zone Elevation: 503.7 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 32
2.13.2 Take-off Run Available: 5927
2.13.3 Take-off Distance Available: 5927
2.13.4 Accelerate-Stop Distance Available: 5927
2.13.5 Landing Distance Available: 5927

2.13.1 Designation: 14
2.13.2 Take-off Run Available: 5927
2.13.3 Take-off Distance Available: 5927
2.13.4 Accelerate-Stop Distance Available: 5927
2.13.5 Landing Distance Available: 5927

2.13.1 Designation: 18L
2.13.2 Take-off Run Available: 8236
2.13.3 Take-off Distance Available: 8236
2.13.4 Accelerate-Stop Distance Available: 8236
2.13.5 Landing Distance Available: 8236

2.13.1 Designation: 36R

2.13.2 Take-off Run Available: 8236

2.13.3 Take-off Distance Available: 8236

2.13.4 Accelerate–Stop Distance Available: 8236

2.13.5 Landing Distance Available: 8236

2.13.1 Designation: 36L

2.13.2 Take-off Run Available: 8743

2.13.3 Take-off Distance Available: 8743

2.13.4 Accelerate–Stop Distance Available: 8743

2.13.5 Landing Distance Available: 8623

2.13.1 Designation: 18R
2.13.2 Take-off Run Available: 8743
2.13.3 Take-off Distance Available: 8743
2.13.4 Accelerate-Stop Distance Available: 8743
2.13.5 Landing Distance Available: 8743

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 322.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: V4L

2.14.1 Designation: 142.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: V4L

2.14.1 Designation: 18L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 36R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 36L

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 18R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

# AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 125.7752.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 0600–2400

2.18.1 Service Designation: LCL/P2.18.3 Channel: 120.12.18.5 Hours of Operation: 0600–2400

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.92.18.5 Hours of Operation: 0600–2400

# AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 18R. Magnetic variation: 5E
2.19.2 ILS Identification: LRD
2.19.5 Coordinates: 27–31–50.8814N / 99–27–46.6673W
2.19.6 Site Elevation: 477 ft

2.19.1 ILS Type: Glide Slope for runway 18R. Magnetic variation: 5E
2.19.2 ILS Identification: LRD
2.19.5 Coordinates: 27–33–12.4993N / 99–27–40.6967W
2.19.6 Site Elevation: 497 ft

2.19.1 ILS Type: Localizer for runway 18R. Magnetic variation: 5E
2.19.2 ILS Identification: LRD
2.19.5 Coordinates: 27–31–51.7421N / 99–27–49.3028W

2.19.6 Site Elevation: 477 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 9E
2.19.2 Navigation Aid Identification: LRD
2.19.5 Coordinates: 27–28–43.4544N / 99–25–3.6441W
2.19.6 Site Elevation: 583 ft

## **General Remarks:**

RWY 14/32 RSTRD TO ACFT LESS THAN 60000 LBS DTW.

BIRDS ON AND INVOF ARPT.

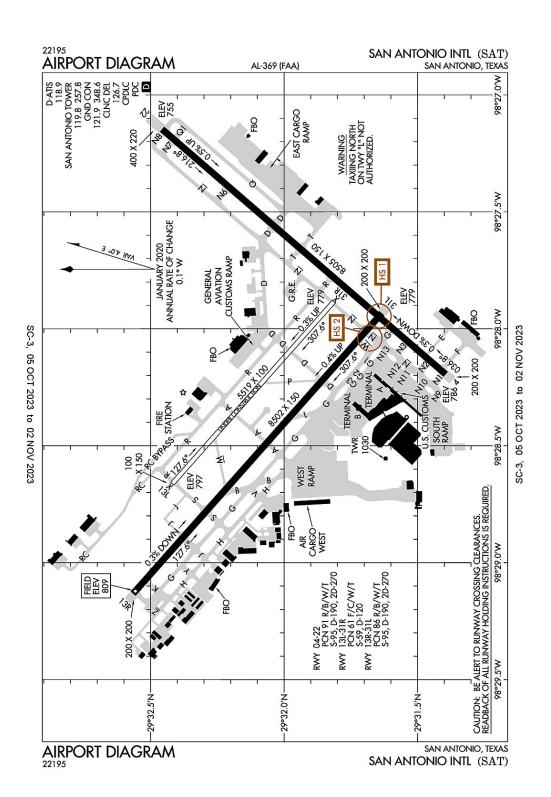
FEDERAL INSPECTION STATION FEE.

FOR CD IF UNA TO CTC ON FSS FREQ, CTC HOUSTON ARTCC AT 281–230–5622.

TWY C CLSD BTN RWY 18L/36R & RWY 18R INDEFLY.

FEDERAL INSPECTION STATION IS LCTD ON THE WEST GENERAL AVIATION/CARGO APRON.

LNDG FEE ASSESSED FOR ANY "FOR HIRE" ACFT.



# San Antonio, Texas San Antonio International ICAO Identifier KSAT

# San Antonio, TX San Antonio Intl ICAO Identifier KSAT

AD 2.2 Aerodrome geographical and administrative data 2.2.1 Reference Point: 29–32–2.25N / 98–28–8.605W 2.2.2 From City: 7 miles N of SAN ANTONIO, TX 2.2.3 Elevation: 809.1 ft 2.2.5 Magnetic Variation: 4E (2020) 2.2.6 Airport Contact: JESUS H. SAENZ, JR. 9800 AIRPORT BLVD SAN ANTONIO, TX 78216 (210–207–3444)

2.2.7 Traffic: IFR/VFR

# AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

# **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

# **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 04
2.12.2 True Bearing: 41
2.12.3 Dimensions: 8505 ft x 150 ft
2.12.4 PCN: 91 R/B/W/T
2.12.5 Coordinates: 29–31–23.6409N / 98–28–11.6562W
2.12.6 Threshold Elevation: 786 ft
2.12.6 Touchdown Zone Elevation: 786 ft

2.12.1 Designation: 22
2.12.2 True Bearing: 221
2.12.3 Dimensions: 8505 ft x 150 ft
2.12.4 PCN: 91 R/B/W/T
2.12.5 Coordinates: 29–32–27.3928N / 98–27–8.7715W
2.12.6 Threshold Elevation: 754.5 ft
2.12.6 Touchdown Zone Elevation: 770 ft

2.12.1 Designation: 31R

2.12.2 True Bearing: 312
2.12.3 Dimensions: 5519 ft x 100 ft
2.12.4 PCN: 61 F/C/W/T
2.12.5 Coordinates: 29–31–48.7812N / 98–27–53.0202W
2.12.6 Threshold Elevation: 779.2 ft
2.12.6 Touchdown Zone Elevation: 788.1 ft

2.12.1 Designation: 13L
2.12.2 True Bearing: 132
2.12.3 Dimensions: 5519 ft x 100 ft
2.12.4 PCN: 61 F/C/W/T
2.12.5 Coordinates: 29–32–25.0764N / 98–28–39.714W
2.12.6 Threshold Elevation: 797.3 ft
2.12.6 Touchdown Zone Elevation: 797.3 ft

2.12.1 Designation: 31L
2.12.2 True Bearing: 312
2.12.3 Dimensions: 8502 ft x 150 ft
2.12.4 PCN: 86 R/B/W/T
2.12.5 Coordinates: 29–31–38.0038N / 98–27–55.9932W
2.12.6 Threshold Elevation: 778.5 ft
2.12.6 Touchdown Zone Elevation: 790 ft

2.12.1 Designation: 13R
2.12.2 True Bearing: 132
2.12.3 Dimensions: 8502 ft x 150 ft
2.12.4 PCN: 86 R/B/W/T
2.12.5 Coordinates: 29–32–33.8853N / 98–29–7.9481W
2.12.6 Threshold Elevation: 809.1 ft
2.12.6 Touchdown Zone Elevation: 809.1 ft

# **AD 2.13 Declared Distances**

2.13.1 Designation: 04
2.13.2 Take-off Run Available: 8505
2.13.3 Take-off Distance Available: 8505
2.13.4 Accelerate-Stop Distance Available: 8505
2.13.5 Landing Distance Available: 8505

2.13.1 Designation: 22
2.13.2 Take-off Run Available: 8505
2.13.3 Take-off Distance Available: 8505
2.13.4 Accelerate-Stop Distance Available: 8505
2.13.5 Landing Distance Available: 8505

2.13.1 Designation: 31R
2.13.2 Take-off Run Available: 5519
2.13.3 Take-off Distance Available: 5519
2.13.4 Accelerate-Stop Distance Available: 5519
2.13.5 Landing Distance Available: 5519

2.13.1 Designation: 13L

2.13.2 Take-off Run Available: 5519

2.13.3 Take-off Distance Available: 5519

2.13.4 Accelerate–Stop Distance Available: 5519

2.13.5 Landing Distance Available: 5519

2.13.1 Designation: 31L

2.13.2 Take-off Run Available: 8502

2.13.3 Take-off Distance Available: 8502

2.13.4 Accelerate–Stop Distance Available: 8502

2.13.5 Landing Distance Available: 8502

2.13.1 Designation: 13R
2.13.2 Take-off Run Available: 8502
2.13.3 Take-off Distance Available: 8502
2.13.4 Accelerate-Stop Distance Available: 8502
2.13.5 Landing Distance Available: 8502

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 042.14.2 Approach Lighting System: MALS2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 222.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 31R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 13L2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 31L

2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 13R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ALAMO DP (RWY 04, 22, 31)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALAMO DP (RWY 13)2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALAMO DP (RWY 13)2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALAMO DP (RWY 04, 22, 31)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALISS DP (RWY 04, 22, 31)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALISS DP (RWY 13)2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: ALISS DP (RWY 13)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P2.18.3 Channel: 121.3752.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P (115–154/35–56 SAT)2.18.3 Channel: 257.6252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (141–270) 2.18.3 Channel: 118.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (360–090)2.18.3 Channel: 124.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (091–140) 2.18.3 Channel: 128.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (091–140)2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (360–090)2.18.3 Channel: 335.6252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P (141–270) 2.18.3 Channel: 353.5 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (271–359)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (271–359)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 251.1252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOWIE DP (RWY 04 LRD TRANSITION)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOWIE DP (RWY 13, 22, 31)2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOWIE DP (RWY 04 CRP TRANSITION)2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOWIE DP (RWY 04 CRP TRANSITION)2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOWIE DP (RWY 04, 13, 31)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: BOWIE DP (RWY 04 LRD TRANSITION)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRAUN STAR2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: BRAUN STAR2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 126.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CENTERPOINT STAR (RWY 13R, 22)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CENTERPOINT STAR (RWY 04, 31L)2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: CENTERPOINT STAR (RWY 04, 31L)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: CENTERPOINT STAR (RWY 13R, 22)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (141–270) 2.18.3 Channel: 118.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (360–090)2.18.3 Channel: 124.452.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (271–359)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (091–140) 2.18.3 Channel: 128.05 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (271–359)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (091–140)2.18.3 Channel: 318.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (360–090) 2.18.3 Channel: 335.625 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (141–270) 2.18.3 Channel: 353.5 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: D-ATIS2.18.3 Channel: 118.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 119.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEJON DP (RWY 04, 22, 31)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEJON DP (RWY 13)2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEJON DP (RWY 12)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEJON DP (RWY 13)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEJON DP (RWY 04, 22, 31)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEMIG STAR2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LEMIG STAR2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: MARCS STAR2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: MARCS STAR2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: MILET DP (RWY 04)2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: MILET DP (RWY 13, 22, 31)2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: MILET DP (RWY 13, 22, 31)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

2.18.1 Service Designation: MILET DP (RWY 04)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: STONEWALL STAR2.18.3 Channel: 125.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: STONEWALL STAR2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: THREE RIVERS DP (RWY 13, 22, 31)2.18.3 Channel: 125.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: THREE RIVERS DP (RWY 04)2.18.3 Channel: 127.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: THREE RIVERS DP (RWY 04)2.18.3 Channel: 269.12.18.5 Hours of Operation: 24

2.18.1 Service Designation: THREE RIVERS DP (RWY 13, 22, 31)2.18.3 Channel: 290.2252.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 04. Magnetic variation: 4E
2.19.2 ILS Identification: SAT
2.19.5 Coordinates: 29–32–32.9486N / 98–26–58.6881W
2.19.6 Site Elevation: 746.3 ft

2.19.1 ILS Type: Glide Slope for runway 04. Magnetic variation: 4E
2.19.2 ILS Identification: SAT
2.19.5 Coordinates: 29–31–30.2202N / 98–27–58.0715W
2.19.6 Site Elevation: 774.8 ft

2.19.1 ILS Type: Localizer for runway 04. Magnetic variation: 4E
2.19.2 ILS Identification: SAT
2.19.5 Coordinates: 29–32–35.0937N / 98–27–1.1714W
2.19.6 Site Elevation: 748.9 ft

2.19.1 ILS Type: DME for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: ANT
2.19.5 Coordinates: 29–31–29.0932N / 98–27–49.9584W
2.19.6 Site Elevation: 790.7 ft

2.19.1 ILS Type: Glide Slope for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: ANT
2.19.5 Coordinates: 29–32–28.9928N / 98–28–54.8202W
2.19.6 Site Elevation: 801.3 ft

2.19.1 ILS Type: Inner Marker for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: ANT
2.19.5 Coordinates: 29–32–39.0383N / 98–29–14.595W
2.19.6 Site Elevation: 807.6 ft

2.19.1 ILS Type: Localizer for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: ANT
2.19.5 Coordinates: 29–31–31.3122N / 98–27–47.3799W
2.19.6 Site Elevation: 771 ft

2.19.1 ILS Type: Outer Marker for runway 13R. Magnetic variation: 4E
2.19.2 ILS Identification: ANT
2.19.5 Coordinates: 29–36–27.2991N / 98–34–11.0119W
2.19.6 Site Elevation: 1054.4 ft

2.19.1 ILS Type: DME for runway 31L. Magnetic variation: 4E
2.19.2 ILS Identification: IZR
2.19.5 Coordinates: 29–31–29.0932N / 98–27–49.9584W
2.19.6 Site Elevation: 790.7 ft

2.19.1 ILS Type: Glide Slope for runway 31L. Magnetic variation: 4E
2.19.2 ILS Identification: IZR
2.19.5 Coordinates: 29–31–47.9039N / 98–28–1.9173W
2.19.6 Site Elevation: 777.5 ft

2.19.1 ILS Type: Localizer for runway 31L. Magnetic variation: 4E
2.19.2 ILS Identification: IZR
2.19.5 Coordinates: 29–32–43.1182N / 98–29–19.835W
2.19.6 Site Elevation: 813.4 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 8E
2.19.2 Navigation Aid Identification: SAT
2.19.5 Coordinates: 29–38–38.508N / 98–27–40.7369W
2.19.6 Site Elevation: 1158.8 ft

## General Remarks:

TWY L CLSD NORTHBOUND.

FREQUENT RUBBER ACCUMULATION NW 2500 RY 13R/31L.

GLIDER/SOARING OPNS APRXLY 17 MILES NW OF ARPT DURG VFR.

ARPT RSTD TO ACFT WITH WINGSPAN GTR THAN 171 FT, PPR WITH 24HR OPS 210–207–3433. RQRD FOR AUTH.

ALL INTL GENERAL AVIATION CLEAR U.S. CSTMS AT NORTH FIXED BASE OPERATOR RAMP EAST SIDE, CALL U.S. CSTMS 210–821–6965 UPON ARR.

TWY S BTN APCH END RWY 13L AND RWY 13R/31L CLSD TO ACFT WITH WINGSPAN MORE THAN 100 FT. TWY R BTN APCH END RWY 13L AND TWY D CLSD TO ACFT WINGSPAN MORE THAN 100 FT.

NOISE SENSITIVE AREAS EXIST ON ALL SIDES OF ARPT, AT PILOTS DISCRETION CLIMB AS QUICKLY AND QUIETLY AS SAFELY POSSIBLE ON DEPARTURE AND USE CONSIDERATION WHEN FLYING OVER POPULATED AREAS BY MINIMIZING FLT AND HIGH PWR SETTINGS. MILITARY AIRCRAFT: DEPARTING AND ARRIVING AIRCRAFT WILL USE MINIMUM POWER SETTINGS CONSISTENT WITH AIRCRAFT FLIGHT MANUALS, AFTERBURNER TAKEOFF IS PROHIBITED UNLESS REQUIRED FOR SAFETY OF FLIGHT. ENGINE–UPS ARE PERMITTED BTN 0600–2300.

ACFT TAXIING ON RY 04 NE BOUND LOOK FOR HOLD SHORT TO RY 31L.

INNER RAMP TAXILANE NORTH OF TRML A AND B IS CLSD TO ACFT WITH WINGSPAN GTR THAN 135 FT.

PPR WITH ARPT OPNS FOR ACFT POWERING BACK FM TERMINAL GATES.

GROUND RUN-UP ENCLOSURE AVBL 24 HRS.

NUMEROUS FLOCKS OF BIRDS INVOF ARPT.

FOREIGN MIL ACFT WITH WINGSPAN LESS THAN 100 FT MUST REP TO GA RAMP FED INSPECTION STATION FOR CUST PROCESSING, CTC AP MANAGEMENT AT 210–207–3433.

RY 13L/31R NOT AVBL FOR PART 121 ACR OPNS.

TERMINAL GATES A1, A2, A6, A7, A8, A15 & A17 USE ONLY WITH PPR CALL OPNS 210–207–3433.

ALL ACFT AFTER LDG ON RWY 13R/31L EXITING SOUTHWEST BOUND ON TWY DELTA TO MAKE 90 DEG TURN ON TWY GOLF TO AVOID UNUSBL SFC.

C130 AND C17 TYPE ACFT MUST PARK ON WEST RAMP TO CLR CUST.

ACFT TAXIING ON TWY N SW BOUND LOOK FOR HOLD SHORT TO RY 31R.

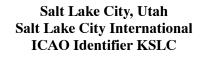
TWY Z CLSD TO ACFT WITH WINGSPAN GREATER THAN 118 FT.

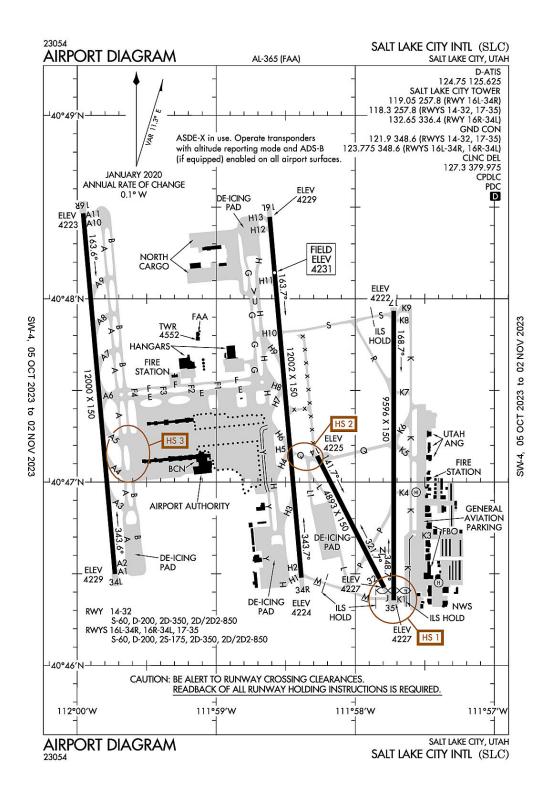
APRON EAST CARGO RAMP INT OF RWY 04/22 AND TWY DELTA ACFT ARE REQ TO APPLY THE MNM THRUST WHEN XNG THE RWY TO AVOID DMG DUE TO JET BLAST.

THE FOLLOWING TWYS ARE NOT AVBL FOR ACFT 59,000 LBS OR OVER: TWY A & TWY J NORTH OF RY 13R–31L, TWY M & TWY P, TWY H NORTHWEST OF TWY Z AND TWY E EAST OF RY 04/22.

TWYS L & B CLSD TO ACFT WITH WINGSPANS GREATER THAN 118 FT EXITING RY 31L.

ACFT AT TERMINAL A & B ADVISE GND CTL PRIOR TO PUSH.





### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 40–47–18.216N / 111–58–39.984W 2.2.2 From City: 3 miles W of SALT LAKE CITY, UT 2.2.3 Elevation: 4230.9 ft 2.2.5 Magnetic Variation: 11E (2020) 2.2.6 Airport Contact: MATTHEW BROWN P.O. BOX 145550 SALT LAKE CITY, UT 84114 (801–575–2244) 2.2.7 Traffic: IFR/VFR

### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

#### **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 14
2.12.2 True Bearing: 153
2.12.3 Dimensions: 4893 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40-47-8.5848N / 111-58-16.4661W
2.12.6 Threshold Elevation: 4224.7 ft
2.12.6 Touchdown Zone Elevation: 4224.8 ft

2.12.1 Designation: 32
2.12.2 True Bearing: 333
2.12.3 Dimensions: 4893 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40-46-25.5192N / 111-57-47.5915W
2.12.6 Threshold Elevation: 4226.8 ft
2.12.6 Touchdown Zone Elevation: 4226.8 ft

2.12.1 Designation: 34R
2.12.2 True Bearing: 355
2.12.3 Dimensions: 12002 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 40-46-28.7185N / 111-58-23.2566W
2.12.6 Threshold Elevation: 4224.3 ft
2.12.6 Touchdown Zone Elevation: 4224.7 ft

2.12.1 Designation: 16L 2.12.2 True Bearing: 175 2.12.3 Dimensions: 12002 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-48-26.8298N / 111-58-36.9557W 2.12.6 Threshold Elevation: 4229.1 ft 2.12.6 Touchdown Zone Elevation: 4230.9 ft 2.12.1 Designation: 16R 2.12.2 True Bearing: 175 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-48-28.0035N / 111-59-57.4282W 2.12.6 Threshold Elevation: 4223.4 ft 2.12.6 Touchdown Zone Elevation: 4225.8 ft 2.12.1 Designation: 34L 2.12.2 True Bearing: 355 2.12.3 Dimensions: 12000 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-46-29.9171N / 111-59-43.6913W 2.12.6 Threshold Elevation: 4228.8 ft 2.12.6 Touchdown Zone Elevation: 4228.8 ft 2.12.1 Designation: 35 2.12.2 True Bearing: 360 2.12.3 Dimensions: 9596 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-46-21.3022N / 111-57-43.4496W 2.12.6 Threshold Elevation: 4226.8 ft 2.12.6 Touchdown Zone Elevation: 4226.9 ft 2.12.1 Designation: 17 2.12.2 True Bearing: 180 2.12.3 Dimensions: 9596 ft x 150 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-47-56.1043N / 111-57-43.4552W 2.12.6 Threshold Elevation: 4221.7 ft 2.12.6 Touchdown Zone Elevation: 4222.2 ft 2.12.1 Designation: HB 2.12.2 True Bearing: 2.12.3 Dimensions: 60 ft x 60 ft 2.12.4 PCN: 2.12.5 Coordinates: 40-46-27.0827N / 111-57-24.0562W 2.12.6 Threshold Elevation: 4220.4 ft 2.12.6 Touchdown Zone Elevation: ft 2.12.1 Designation: HF

2.12.3 Dimensions: 60 ft x 60 ft 2.12.4 PCN: 2.12.5 Coordinates: -- / --2.12.6 Threshold Elevation: ft

2.12.6 Touchdown Zone Elevation: ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 14
2.13.2 Take-off Run Available: 4892
2.13.3 Take-off Distance Available: 4892
2.13.4 Accelerate-Stop Distance Available: 4892
2.13.5 Landing Distance Available: 4892

2.13.1 Designation: 32

2.13.2 Take-off Run Available: 48922.13.3 Take-off Distance Available: 48922.13.4 Accelerate-Stop Distance Available: 48922.13.5 Landing Distance Available: 4892

2.13.1 Designation: 34R
2.13.2 Take-off Run Available: 12002
2.13.3 Take-off Distance Available: 12002
2.13.4 Accelerate-Stop Distance Available: 12002
2.13.5 Landing Distance Available: 12002

2.13.1 Designation: 16L

2.13.2 Take-off Run Available: 12002

2.13.3 Take–off Distance Available: 12002

2.13.4 Accelerate–Stop Distance Available: 12002

2.13.5 Landing Distance Available: 12002

2.13.1 Designation: 16R

2.13.2 Take-off Run Available: 12000

2.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate–Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 34L

2.13.2 Take-off Run Available: 12000

2.13.3 Take-off Distance Available: 12000

2.13.4 Accelerate–Stop Distance Available: 12000

2.13.5 Landing Distance Available: 12000

2.13.1 Designation: 35

2.13.2 Take-off Run Available: 9596

2.13.3 Take-off Distance Available: 9596

2.13.4 Accelerate–Stop Distance Available: 9596

2.13.5 Landing Distance Available: 9272

2.13.1 Designation: 17

2.13.2 Take-off Run Available: 9596 2.13.3 Take-off Distance Available: 9596

- 2.13.4 Accelerate–Stop Distance Available: 9596
- 2.13.5 Landing Distance Available: 9596

2.13.1 Designation: HB

- 2.13.2 Take–off Run Available:
- 2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

2.13.1 Designation: HF

2.13.2 Take-off Run Available:

2.13.3 Take–off Distance Available:

2.13.4 Accelerate–Stop Distance Available:

2.13.5 Landing Distance Available:

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 142.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 322.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 34R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 34L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 352.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 172.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: HB2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: HF2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ANG COMD POST2.18.3 Channel: 303.152.18.5 Hours of Operation:

2.18.1 Service Designation: ANG COMD POST2.18.3 Channel: 3112.18.5 Hours of Operation:

2.18.1 Service Designation: CD PRE DEP CLNC2.18.3 Channel: 127.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD PRE TAXI CLNC2.18.3 Channel: 127.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 379.9752.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 124.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 125.6252.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P (RWY 14/32, 17/35)2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P (RWY 16L/34R, 16R/34L)

2.18.3 Channel: 123.775 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 14/32, 17/35)2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16L/34R)2.18.3 Channel: 119.052.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16R/34L)2.18.3 Channel: 132.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 14/32, 16L/34R, 17/35)2.18.3 Channel: 257.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16R/34L)2.18.3 Channel: 336.42.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 16L. Magnetic variation: 11E
2.19.2 ILS Identification: MOY
2.19.5 Coordinates: 40–46–18.724N / 111–58–18.1254W
2.19.6 Site Elevation: 4239.9 ft

2.19.1 ILS Type: Glide Slope for runway 16L. Magnetic variation: 11E
2.19.2 ILS Identification: MOY
2.19.5 Coordinates: 40–48–17.0756N / 111–58–30.6172W
2.19.6 Site Elevation: 4225 ft

2.19.1 ILS Type: Inner Marker for runway 16L. Magnetic variation: 11E
2.19.2 ILS Identification: MOY
2.19.5 Coordinates: 40–48–35.7038N / 111–58–38.0115W
2.19.6 Site Elevation: 4222.8 ft

2.19.1 ILS Type: Localizer for runway 16L. Magnetic variation: 11E
2.19.2 ILS Identification: MOY
2.19.5 Coordinates: 40–46–18.5061N / 111–58–22.0717W
2.19.6 Site Elevation: 4226.5 ft

2.19.1 ILS Type: DME for runway 34R. Magnetic variation: 11E 2.19.2 ILS Identification: SLC

2.19.5 Coordinates: 40-46-18.724N / 111-58-18.1254W 2.19.6 Site Elevation: 4239.9 ft 2.19.1 ILS Type: Glide Slope for runway 34R. Magnetic variation: 11E 2.19.2 ILS Identification: SLC 2.19.5 Coordinates: 40-46-39.3436N / 111-58-19.2908W 2.19.6 Site Elevation: 4220 ft 2.19.1 ILS Type: Inner Marker for runway 34R. Magnetic variation: 11E 2.19.2 ILS Identification: SLC 2.19.5 Coordinates: 40-46-20.3855N / 111-58-22.2947W 2.19.6 Site Elevation: 4225.1 ft 2.19.1 ILS Type: Localizer for runway 34R. Magnetic variation: 11E 2.19.2 ILS Identification: SLC 2.19.5 Coordinates: 40-48-37.6811N / 111-58-38.2145W 2.19.6 Site Elevation: 4224.5 ft 2.19.1 ILS Type: DME for runway 16R. Magnetic variation: 11E 2.19.2 ILS Identification: UAT 2.19.5 Coordinates: 40-46-19.627N / 111-59-46.3581W 2.19.6 Site Elevation: 4233.6 ft 2.19.1 ILS Type: Glide Slope for runway 16R. Magnetic variation: 11E 2.19.2 ILS Identification: UAT 2.19.5 Coordinates: 40-48-17.3028N / 112-0-1.6005W 2.19.6 Site Elevation: 4218.7 ft 2.19.1 ILS Type: Localizer for runway 16R. Magnetic variation: 11E 2.19.2 ILS Identification: UAT 2.19.5 Coordinates: 40-46-19.9476N / 111-59-42.5324W 2.19.6 Site Elevation: 4227.2 ft 2.19.1 ILS Type: DME for runway 34L. Magnetic variation: 11E 2.19.2 ILS Identification: UUH 2.19.5 Coordinates: 40-46-19.627N / 111-59-46.3581W 2.19.6 Site Elevation: 4233.6 ft 2.19.1 ILS Type: Glide Slope for runway 34L. Magnetic variation: 11E 2.19.2 ILS Identification: UUH 2.19.5 Coordinates: 40-46-39.8998N / 111-59-50.2673W 2.19.6 Site Elevation: 4222.6 ft 2.19.1 ILS Type: Localizer for runway 34L. Magnetic variation: 11E 2.19.2 ILS Identification: UUH 2.19.5 Coordinates: 40-48-37.9731N / 111-59-58.5893W 2.19.6 Site Elevation: 4220 ft 2.19.1 ILS Type: DME for runway 17. Magnetic variation: 11E 2.19.2 ILS Identification: BNT 2.19.5 Coordinates: 40-46-9.7838N / 111-57-47.5356W

2.19.6 Site Elevation: 4242.7 ft

2.19.1 ILS Type: Glide Slope for runway 17. Magnetic variation: 11E
2.19.2 ILS Identification: BNT
2.19.5 Coordinates: 40-47-45.7497N / 111-57-50.0372W
2.19.6 Site Elevation: 4216.4 ft

2.19.1 ILS Type: Localizer for runway 17. Magnetic variation: 11E
2.19.2 ILS Identification: BNT
2.19.5 Coordinates: 40–46–10.0541N / 111–57–43.4502W
2.19.6 Site Elevation: 4227.9 ft

2.19.1 ILS Type: DME for runway 35. Magnetic variation: 11E
2.19.2 ILS Identification: UTJ
2.19.5 Coordinates: 40–46–9.7838N / 111–57–47.5356W
2.19.6 Site Elevation: 4242.7 ft

2.19.1 ILS Type: Glide Slope for runway 35. Magnetic variation: 11E
2.19.2 ILS Identification: UTJ
2.19.5 Coordinates: 40-46-35.1583N / 111-57-48.6413W
2.19.6 Site Elevation: 4229.2 ft

2.19.1 ILS Type: Localizer for runway 35. Magnetic variation: 11E
2.19.2 ILS Identification: UTJ
2.19.5 Coordinates: 40–47–8.3329N / 111–57–51.5557W
2.19.6 Site Elevation: 4220.8 ft

#### General Remarks:

SEE CURRENT NOTAMS FOR DATES AND ADDITIONAL INFO.

MILITARY: ANG RAMP: NSTD PAVEMENT MARK ON RAMP.

SVFR IS NOT RCMD AT THE ARPT, IF REQD, EXPT DLAS.

TWY Y RSTD TO WINGSPANS LESS THAN 171 FT BTWN TWY H3 AND H4.

MILITARY: ANG RAMP: OPR 1430–2230Z++ MON–THU. CLSD FRI–SUN AND HOL. OFFL BUS ONLY. PPR REQ 48 HR ALL ACFT, VALID 1 HR +/– ETA. TRAN PRK/SVC EXTREMELY LTD. BASE OPS DSN 245–2274, C801–245–2274. MIL ALT HILL AFB (KHIF) 25 NM N. ALL ACFT CTC UTAH CTL (COMD POST) 20 MIN OUT WITH ETA AND REQ.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

SURFACE MOVEMENT GUIDANCE CONTROL SYSTEM & LOW VISIBILITY TAXI PROCEDURES.

HELIPADS B AND F LOCATED ON GENERAL AVIATION APRONS.

USE CAUTION FOR EXTENSIVE PARAGLIDING OPS INVOF POINT OF THE MOUNTAIN.

SEE FLIP AP/1 SUPPLEMENTARY ARPT INFO.

MILITARY: COMMUNICATIONS: ANG COMD POST - CALL UTAH CONTROL.

USE MINIMUM THRUST IN CONSTRUCTION AREAS.

CONTACT GROUND ON 123.775 BEFORE TAXIING OUT OF NORTH CARGO.

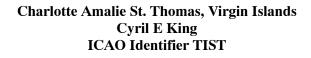
DUE TO TFC VOL, LCL DEPARTURE AND ARR OPNS ARE DISCOURAGED AND DLAS CAN BE EXPCD BTN 1500–1730Z++ AND 0130–0300Z++.

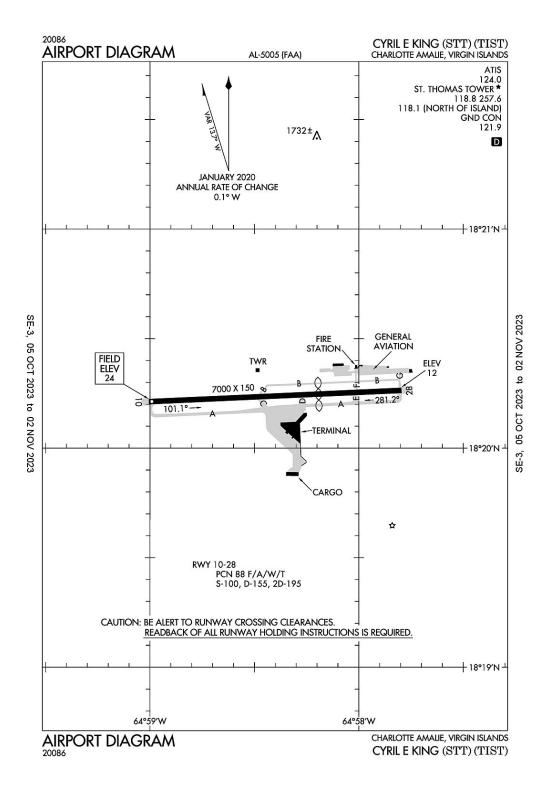
MILITARY: SVC: FUEL A++.

TWY K RSTRD TO ACFT WITH WINGSPAN LESS THAN 171 FT.

FLOCK OF BIRDS ON AND IN VICINITY OF ARPT.

MILITARY: ANG RAMP: ALL ACFT CTC UTAH CONTROL WITH LDG & DEP TIMES. COMD POST DSN: 245–2416/2417; C801–245–2416/2417. PHASE II WILDLIFE ACT DURING MIGRATION/MORNING/EVENING HRS FR OCT–APR. CTC UTAH CTL FOR CURRENT BIRD–WATCH COND.





## Charlotte Amalie, VI Cyril E King ICAO Identifier TIST

AD 2.2 Aerodrome geographical and administrative data 2.2.1 Reference Point: 18–20–14.3N / 64–58–24W 2.2.2 From City: 2 miles W of CHARLOTTE AMALIE, VI 2.2.3 Elevation: 23.6 ft 2.2.5 Magnetic Variation: 13W (2000) 2.2.6 Airport Contact: JEROME SHERIDAN CYRIL E. KING AIRPORT ST THOMAS, VI 802 ((340) 714–6667) 2.2.7 Traffic: IFR/VFR

### 2.2.7 Itallic. IFK/VFK

### AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, 0700–2300 Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MINOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

## **AD 2.12 Runway Physical Characteristics**

2.12.1 Designation: 28
2.12.2 True Bearing: 267
2.12.3 Dimensions: 7000 ft x 150 ft
2.12.4 PCN: 88 F/A/W/T
2.12.5 Coordinates: 18–20–15.8124N / 64–57–47.7382W
2.12.6 Threshold Elevation: 11.7 ft
2.12.6 Touchdown Zone Elevation: 16.5 ft

2.12.1 Designation: 10
2.12.2 True Bearing: 87
2.12.3 Dimensions: 7000 ft x 150 ft
2.12.4 PCN: 88 F/A/W/T
2.12.5 Coordinates: 18–20–12.7247N / 64–59–0.3371W
2.12.6 Threshold Elevation: 23.5 ft
2.12.6 Touchdown Zone Elevation: 23.6 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 7000
2.13.3 Take-off Distance Available: 7000
2.13.4 Accelerate-Stop Distance Available: 6170
2.13.5 Landing Distance Available: 3870

2.13.1 Designation: 102.13.2 Take-off Run Available: 70002.13.3 Take-off Distance Available: 70002.13.4 Accelerate-Stop Distance Available: 6892

2.13.5 Landing Distance Available: 6892

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 282.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System:

2.14.1 Designation: 102.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 1242.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 0700–2230, ATCT CLOSES 1 HR EARLIER DRG DALGT SAVINGS TIME.

2.18.1 Service Designation: LCL/P (NORTH OF ISLAND)2.18.3 Channel: 118.12.18.5 Hours of Operation: 0700–2230, ATCT CLOSES 1 HR EARLIER DRG DALGT SAVINGS TIME.

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.82.18.5 Hours of Operation: 0700–2230, ATCT CLOSES 1 HR EARLIER DRG DALGT SAVINGS TIME.

2.18.1 Service Designation: LCL/P2.18.3 Channel: 257.62.18.5 Hours of Operation: 0700–2230, ATCT CLOSES 1 HR EARLIER DRG DALGT SAVINGS TIME.

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: TMN
2.19.5 Coordinates: 18–20–18.78N / 64–57–39.88W
2.19.6 Site Elevation: 22.6 ft

2.19.1 ILS Type: Glide Slope for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: TMN
2.19.5 Coordinates: 18–20–10.62N / 64–58–48.29W
2.19.6 Site Elevation: 15.1 ft

2.19.1 ILS Type: Localizer for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: TMN
2.19.5 Coordinates: 18–20–16.26N / 64–57–37.22W
2.19.6 Site Elevation: 17 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 10W
2.19.2 Navigation Aid Identification: STT
2.19.5 Coordinates: 18–21–20.9431N / 65–1–28.3968W
2.19.6 Site Elevation: 679.2 ft

#### **General Remarks:**

LGTS ON HILL 4 NM SE OF ARPT MAY BE MISTAKEN FOR RY 10/28 WHEN MAKING A VISUAL APCH FROM THE SOUTH.

ACFT THAT BACK TAXI FOR DEP ON RY 28 SHALL MAKE THEIR 180 DEG TURN CCLKWS.

NOISE SENSITIVE AREA: AVOID OVERFLIGHTS OF WATER ISLAND LOCATED 2 MI SE OF ARPT.

ARFF UNAVBL 2300-0630.

RY 10 DEPS MAINTAIN RY HDG UNTIL REACHING DEP END OF RY BFR TURNING ON COURSE OR ASSIGNED HDG UNLESS OTRW AUZD BY ATCT.

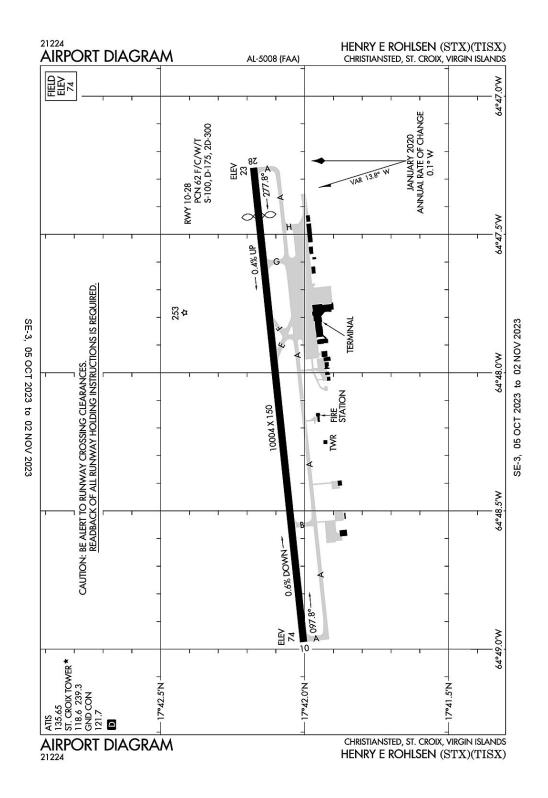
WHEN TWR CLSD CTC SAN JUAN CERAP AT 787-253-8664/8665

PILOTS CTC GND CTL PRIOR TO PUSHBACK.

PILOTS MAY ENCTR FALSE ILLUSORY INDICATIONS DURG NGT VISUAL APCHS TO RY 10 WHEN USING VISUAL CUES FOR VERTICAL GUIDANCE; RCMD USE OF THE ILS GS & FQT CROSS REF WITH THE ACFT ALTM TO MAINT THE PROPER APCH PROFILE.

OBSTRUCTION SAILBOAT MAST 100FT WEST OF APPROACH END OF RWY 10 50FT AGL

# Christiansted St. Croix Henry E Rohlsen ICAO Identifier TISX



## Christiansted, VI Henry E Rohlsen ICAO Identifier TISX

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 17–42–5.416N / 64–48–6.9945W 2.2.2 From City: 6 miles SW of CHRISTIANSTED, VI 2.2.3 Elevation: 74.1 ft 2.2.5 Magnetic Variation: 13W (2000) 2.2.6 Airport Contact: JEROME SHERIDAN P.O. BOX 1134 ST CROIX, VI 821 (340–714–6662) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule 2.3.1 All Months, All Days, 0500–2300 Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100LL,A1+2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### **AD 2.6 Rescue and Firefighting Services**

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–C

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 28 2.12.2 True Bearing: 264 2.12.3 Dimensions: 10004 ft x 150 ft 2.12.4 PCN: 62 F/C/W/T 2.12.5 Coordinates: 17–42–10.62N / 64–47–15.544W 2.12.6 Threshold Elevation: 22.5 ft 2.12.6 Touchdown Zone Elevation: 40 ft

2.12.1 Designation: 10 2.12.2 True Bearing: 84 2.12.3 Dimensions: 10004 ft x 150 ft 2.12.4 PCN: 62 F/C/W/T 2.12.5 Coordinates: 17–42–0.212N / 64–48–58.445W 2.12.6 Threshold Elevation: 73.7 ft 2.12.6 Touchdown Zone Elevation: 74.1 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 28
2.13.2 Take-off Run Available: 10004
2.13.3 Take-off Distance Available: 10004
2.13.4 Accelerate-Stop Distance Available: 10004
2.13.5 Landing Distance Available: 8998

2.13.1 Designation: 10
2.13.2 Take-off Run Available: 10004
2.13.3 Take-off Distance Available: 10004
2.13.4 Accelerate-Stop Distance Available: 9003
2.13.5 Landing Distance Available: 9003

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 282.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 102.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

## AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: ATIS2.18.3 Channel: 135.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P 2.18.3 Channel: 121.7 2.18.5 Hours of Operation: 0700–2200

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.62.18.5 Hours of Operation: 0700–2200

2.18.1 Service Designation: LCL/P 2.18.3 Channel: 239.3 2.18.5 Hours of Operation: 0700–2200

## AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: STX
2.19.5 Coordinates: 17-41-58.77N / 64-48-45.5W
2.19.6 Site Elevation: 63.5 ft

2.19.1 ILS Type: Localizer for runway 10. Magnetic variation: 13W

2.19.2 ILS Identification: STX 2.19.5 Coordinates: 17–42–11.36N / 64–47–8.28W 2.19.6 Site Elevation: 26.4 ft

2.19.1 ILS Type: Outer Marker for runway 10. Magnetic variation: 13W
2.19.2 ILS Identification: STX
2.19.5 Coordinates: 17–41–30.92N / 64–53–4.74W
2.19.6 Site Elevation: 40 ft

#### **General Remarks:**

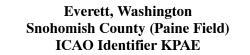
APCH TO RY 28 SMTMS OBSCD BY SMOKE FM LANDFILL LCTD E OF ARPT.

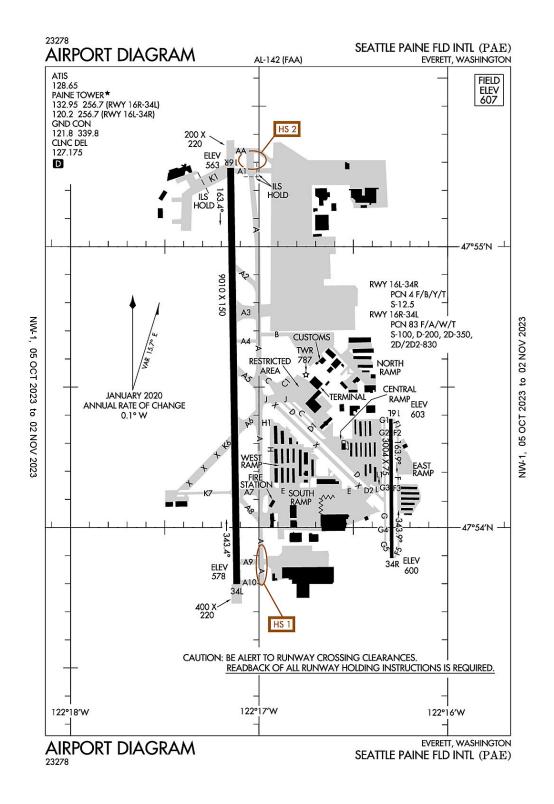
TAXI INTO POSITION AND HOLD PROCEDURES NO LONGER IN EFFECT.

BIRDS & WILDLIFE ON & INVOF ARPT.

AP SFC COND UNMON DLY 2300 – 0600 AST.

WHEN TWR CLSD CTC SAN JUAN CERAP AT 787-253-8664/8665





## Everett, WA Snohomish County (Paine Fld) ICAO Identifier KPAE

# AD 2.2 Aerodrome geographical and administrative data 2.2.1 Reference Point: 47–54–26.345N / 122–16–55.538W 2.2.2 From City: 6 miles SW of EVERETT, WA 2.2.3 Elevation: 606.9 ft 2.2.5 Magnetic Variation: 16E (2020) 2.2.6 Airport Contact: JOSHUA MARCY 3220 100TH ST SW EVERETT, WA 98204 (425–308–2347) 2.2.7 Traffic: IFR/VFR

## AD 2.3 Attendance Schedule

2.3.1 NOV-APR Months, All Days, 0700-2100 Hours

## AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: NO2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

## AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 11/1/19742.6.2 Rescue and Firefighting Services: ARFF Index–B

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 16L
2.12.2 True Bearing: 180
2.12.3 Dimensions: 3004 ft x 75 ft
2.12.4 PCN: 4 F/B/Y/T
2.12.5 Coordinates: 47–54–23.129N / 122–16–18.0936W
2.12.6 Threshold Elevation: 602.9 ft
2.12.6 Touchdown Zone Elevation: 606.9 ft

2.12.1 Designation: 34R 2.12.2 True Bearing: 360 2.12.3 Dimensions: 3004 ft x 75 ft 2.12.4 PCN: 4 F/B/Y/T 2.12.5 Coordinates: 47–53–53.4898N / 122–16–17.7647W 2.12.6 Threshold Elevation: 599.8 ft 2.12.6 Touchdown Zone Elevation: 606.9 ft

2.12.1 Designation: 16R

2.12.2 True Bearing: 179
2.12.3 Dimensions: 9010 ft x 150 ft
2.12.4 PCN: 83 F/A/W/T
2.12.5 Coordinates: 47–55–16.8088N / 122–17–9.0632W
2.12.6 Threshold Elevation: 562.7 ft
2.12.6 Touchdown Zone Elevation: 569.8 ft

2.12.1 Designation: 34L
2.12.2 True Bearing: 359
2.12.3 Dimensions: 9010 ft x 150 ft
2.12.4 PCN: 83 F/A/W/T
2.12.5 Coordinates: 47–53–47.904N / 122–17–7.0916W
2.12.6 Threshold Elevation: 577.6 ft
2.12.6 Touchdown Zone Elevation: 583.4 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 16L
2.13.2 Take-off Run Available: 3004
2.13.3 Take-off Distance Available: 3004
2.13.4 Accelerate-Stop Distance Available: 3004
2.13.5 Landing Distance Available: 3004

2.13.1 Designation: 34R

2.13.2 Take-off Run Available: 3004

2.13.3 Take-off Distance Available: 3004

2.13.4 Accelerate-Stop Distance Available: 3004

2.13.5 Landing Distance Available: 3004

2.13.1 Designation: 16R
2.13.2 Take-off Run Available: 9010
2.13.3 Take-off Distance Available: 9010
2.13.4 Accelerate-Stop Distance Available: 9010
2.13.5 Landing Distance Available: 9010

2.13.1 Designation: 34L
2.13.2 Take-off Run Available: 9010
2.13.3 Take-off Distance Available: 9010
2.13.4 Accelerate-Stop Distance Available: 9010
2.13.5 Landing Distance Available: 9010

## AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 16L

2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P2L

2.14.1 Designation: 34R2.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P2L

2.14.1 Designation: 16R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 34L2.14.2 Approach Lighting System: MALSF2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: AR OPS2.18.3 Channel: 34.12.18.5 Hours of Operation:

2.18.1 Service Designation: ATIS2.18.3 Channel: 128.652.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 127.1752.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.82.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: GND/P2.18.3 Channel: 339.82.18.5 Hours of Operation: 0700-2100

2.18.1 Service Designation: LCL/P (RWY 16L/34R)2.18.3 Channel: 120.22.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: LCL/P2.18.3 Channel: 256.72.18.5 Hours of Operation: 0700–2100

2.18.1 Service Designation: LCL/P IC (RWY 16R/34L)2.18.3 Channel: 132.952.18.5 Hours of Operation: 0700–2100

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: Glide Slope for runway 16R. Magnetic variation: 16E
2.19.2 ILS Identification: PAE
2.19.5 Coordinates: 47–55–7.3456N / 122–17–13.6246W
2.19.6 Site Elevation: 566.4 ft

2.19.1 ILS Type: Localizer for runway 16R. Magnetic variation: 16E
2.19.2 ILS Identification: PAE
2.19.5 Coordinates: 47–53–34.031N / 122–17–6.7829W
2.19.6 Site Elevation: 569.7 ft

2.19.1 Navigation Aid Type: VOR/DME. Magnetic variation: 20E
2.19.2 Navigation Aid Identification: PAE
2.19.5 Coordinates: 47–55–11.3996N / 122–16–40.0864W
2.19.6 Site Elevation: 669.2 ft

**General Remarks:** RWY 16L/34R LTD TO HEL 8000 LBS OR LESS.

AVOID INT DEPS FM RWY 16L/34R

IT IS REQ THAT PILOTS ADHERE TO THE FLW NOISE ABATEMENT PROC UNLESS OTRW INSTRD BY ATCT, ITNRNT ARR AND LOW APCH OF SML ACFT OVER 250 HORSEPOWER AUZ ON RWYS 16L AND 34R.

NOISE SENSITIVE ARPT; FOR NOISE ABATEMENT PROC & TFC PROC CALL ARPT OPS 425-388-5125.

TSNT HEL EXP LNDG/TKOF ON TWY B.

RWY 16R/34 TGL PROHIBITED MON-FRI FM 0700-0900.

ITNRNT DEP OF SML ACFT OVER 250 HORSEPOWER ON RWY 34R.

TRNG FLTS DISCOURAGED AFT 2200.

FOR NOISE ABATEMENT FROM 0500–1500Z++ IF ACFT PERFORMANCE/WIND ALLOWS, USE RY 16R FOR ARRIVALS AND RY 34L FOR DEPARTURES.

TWY C BTN TRML RAMP AND CNTRL RAMP RSTRD TO WINGSPAN OF 68 FT OR LESS. TWY D, F, G AND L RSTRD TO WINGSPAN LESS THAN 49 FT. TWY A4, A5, K7 & B RSTRD TO WINGSPAN LESS THAN 118 FT. TAXILANE H RSTRD TO WINGSPAN LESS THAN 49 FT.

LRG ACFT FLY W PAT OVR WTR; SML ACFT FLY E PAT OVR ARPT.

AVOID LOW LVL OVRFLT OF BOEING RAMP; NE CORNER OF ARPT DUE TO JET BLAST.

FLOCKS OF LRG & SML BIRDS INVOF ARPT.

BE ALERT TO CNVG TFC ON BASE TO FINAL LEGS RWY 16R/34L 2100-0700.

FOR CD WHEN ATCT IS CLSD CTC SEATTLE APCH AT 206-214-4722.

PAE HAS FAC CONSTRAINTS THAT LMT ITS ABILITY TO ACCOMMODATE DIVD FLTS AND MNTN THE ARPTS SAFE OPN DUR IREG OPS. ACFT OPR SHOULD CTCT THE ON–DUTY ARPT OPS PSNL (425–388–5125) TO COORD DIVD FLTS EXC IN THE CASE OF A DECLARED IN–FLT EMERG.

PPR RQRD FOR ACES ON BOEING RAMP. CTC BOEING FLT DISPATCH 206–544–5900 FOR APVL. PRIOR TO TAXI ONTO BOEING RAMP CTC BOEING RADIO TWR 123.475 OR CALL 425–342–5900.

TWY K1 CLSD TO ACFT UNDER 30000 LBS.

TKOF CLNC RWY 16R FULL LEN; ENT RWY VIA TWY A1 UNLESS TWY AA SPECIFIED.

USE CTN FOR 80 FT AGL LGT POLES SW EDGE OF BRAVO RAMP.

RWY 16L/34R CLSD BTN 0500-1500Z.

TWY A-2 RSTRD TO 30000 LBS.

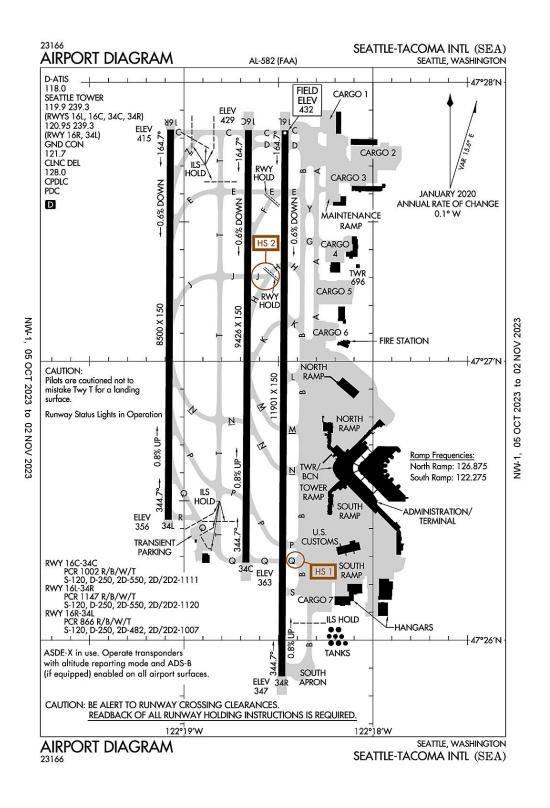
EMERG FREQ 121.5 NOT MNT AT TWR. SEATTLE APP CON-TRACON MNT 121.5 FOR EVERETT (PAE).

AREAS NOT VSB FM ATCT INCL E EDGE OF S 1200 FT OF TWY A, TAXILANE E FM SE CORNER OF W HNGRS TO TWY A, TAXILANE H FROM NW EDGE OF W HNGRS TO TAXILANE E.

TAXILANE E RSTD TO WINGSPAN LESS THAN 171 FT. ACFT WINGSPAN OF 171 FT OR GREATER ON TAXILANE E, TUG OPS ONLY. EAST 500 FT OF TAXILANE E RSTD TO WINGSPAN LESS THAN 49 FT.

AIRFIELD CONDS NOT MNTD BTN 0000-0630.

## Seattle, Washington Seattle–Tacoma International ICAO Identifier KSEA



## Seattle, WA Seattle–Tacoma Intl ICAO Identifier KSEA

### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 47–26–59.6N / 122–18–42.4W 2.2.2 From City: 10 miles S of SEATTLE, WA 2.2.3 Elevation: 432.3 ft 2.2.5 Magnetic Variation: 16E (2020) 2.2.6 Airport Contact: LANCE LYTTLE BOX 68727 SEATTLE, WA 98168 ((206) 787–5229) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

## **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: A,A12.4.5 Hangar Space:2.4.6 Repair Facilities: NONE

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/19732.6.2 Rescue and Firefighting Services: ARFF Index–E

## AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 16C
2.12.2 True Bearing: 180
2.12.3 Dimensions: 9426 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 47–27–49.7155N / 122–18–39.5415W
2.12.6 Threshold Elevation: 429.4 ft
2.12.6 Touchdown Zone Elevation: 429.5 ft

2.12.1 Designation: 34C
2.12.2 True Bearing: 0
2.12.3 Dimensions: 9426 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 47–26–16.6966N / 122–18–40.3554W
2.12.6 Threshold Elevation: 362.9 ft
2.12.6 Touchdown Zone Elevation: 387 ft

2.12.1 Designation: 16L
2.12.2 True Bearing: 180
2.12.3 Dimensions: 11901 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 47–27–49.6628N / 122–18–27.9008W
2.12.6 Threshold Elevation: 432.3 ft
2.12.6 Touchdown Zone Elevation: 432.3 ft

2.12.1 Designation: 34R
2.12.2 True Bearing: 0
2.12.3 Dimensions: 11901 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 47–25–52.2202N / 122–18–28.9377W
2.12.6 Threshold Elevation: 346.7 ft
2.12.6 Touchdown Zone Elevation: 371.5 ft

2.12.1 Designation: 16R
2.12.2 True Bearing: 180
2.12.3 Dimensions: 8500 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 47–27–49.8109N / 122–19–4.2846W
2.12.6 Threshold Elevation: 414.8 ft
2.12.6 Touchdown Zone Elevation: 414.8 ft

2.12.1 Designation: 34L
2.12.2 True Bearing: 0
2.12.3 Dimensions: 8500 ft x 150 ft
2.12.4 PCN:
2.12.5 Coordinates: 47–26–25.9217N / 122–19–5.009W
2.12.6 Threshold Elevation: 356.2 ft
2.12.6 Touchdown Zone Elevation: 379.3 ft

#### **AD 2.13 Declared Distances**

2.13.1 Designation: 16C
2.13.2 Take-off Run Available: 9426
2.13.3 Take-off Distance Available: 9426
2.13.4 Accelerate-Stop Distance Available: 9426
2.13.5 Landing Distance Available: 9426

2.13.1 Designation: 34C
2.13.2 Take-off Run Available: 9426
2.13.3 Take-off Distance Available: 9426
2.13.4 Accelerate-Stop Distance Available: 9426
2.13.5 Landing Distance Available: 9426
2.13.1 Designation: 16L

2.13.5 Landing Distance Available: 9426
2.13.1 Designation: 16L
2.13.2 Take-off Run Available: 11901
2.13.3 Take-off Distance Available: 11901
2.13.4 Accelerate-Stop Distance Available: 11901
2.13.5 Landing Distance Available: 11901

2.13.1 Designation: 34R

- 2.13.2 Take-off Run Available: 11901
- 2.13.3 Take-off Distance Available: 11901
- 2.13.4 Accelerate–Stop Distance Available: 11901 2.13.5 Landing Distance Available: 11901
- Federal Aviation Administration

2.13.1 Designation: 16R
2.13.2 Take-off Run Available: 8500
2.13.3 Take-off Distance Available: 8500
2.13.4 Accelerate-Stop Distance Available: 8500
2.13.5 Landing Distance Available: 8500

2.13.1 Designation: 34L

2.13.2 Take–off Run Available: 8500

2.13.3 Take-off Distance Available: 8500

2.13.4 Accelerate–Stop Distance Available: 8500

2.13.5 Landing Distance Available: 8500

### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 16C2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 34C2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16L2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 34R2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 16R2.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 34L2.14.2 Approach Lighting System: MALSR2.14.4 Visual Approach Slope Indicator System: P4L

### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: CD/P2.18.3 Channel: 1282.18.5 Hours of Operation: 24

2.18.1 Service Designation: D-ATIS2.18.3 Channel: 1182.18.5 Hours of Operation: 24

2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.72.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16L/34R, 16C/34C)2.18.3 Channel: 119.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16R/34L)2.18.3 Channel: 120.952.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16L/34R, 16C/34C)2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P (RWY 16R/34L)2.18.3 Channel: 239.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (SOUTH RAMP)2.18.3 Channel: 122.2752.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (GATE HOLD)2.18.3 Channel: 126.252.18.5 Hours of Operation: 24

2.18.1 Service Designation: RAMP CTL (NORTH RAMP)2.18.3 Channel: 126.8752.18.5 Hours of Operation: 24

#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 16C. Magnetic variation: 16E
2.19.2 ILS Identification: SZI
2.19.5 Coordinates: 47–26–6.28N / 122–18–39.51W
2.19.6 Site Elevation: 359 ft

2.19.1 ILS Type: Glide Slope for runway 16C. Magnetic variation: 16E
2.19.2 ILS Identification: SZI
2.19.5 Coordinates: 47–27–38.687N / 122–18–45.462W
2.19.6 Site Elevation: 417.6 ft

2.19.1 ILS Type: Localizer for runway 16C. Magnetic variation: 16E 2.19.2 ILS Identification: SZI

2.19.5 Coordinates: 47-26-6.703N / 122-18-40.4438W 2.19.6 Site Elevation: 355.7 ft 2.19.1 ILS Type: DME for runway 34C. Magnetic variation: 16E 2.19.2 ILS Identification: TUC 2.19.5 Coordinates: 47-26-6.28N / 122-18-39.51W 2.19.6 Site Elevation: 359 ft 2.19.1 ILS Type: Glide Slope for runway 34C. Magnetic variation: 16E 2.19.2 ILS Identification: TUC 2.19.5 Coordinates: 47-26-25.6028N / 122-18-46.1679W 2.19.6 Site Elevation: 366.8 ft 2.19.1 ILS Type: Localizer for runway 34C. Magnetic variation: 16E 2.19.2 ILS Identification: TUC 2.19.5 Coordinates: 47-27-54.3525N / 122-18-39.5018W 2.19.6 Site Elevation: 421.8 ft 2.19.1 ILS Type: DME for runway 16L. Magnetic variation: 16E 2.19.2 ILS Identification: SNQ 2.19.5 Coordinates: 47-26-3.5974N / 122-18-22.6779W 2.19.6 Site Elevation: 369.4 ft 2.19.1 ILS Type: Glide Slope for runway 16L. Magnetic variation: 16E 2.19.2 ILS Identification: SNQ 2.19.5 Coordinates: 47-27-38.9362N / 122-18-33.8193W 2.19.6 Site Elevation: 425.2 ft 2.19.1 ILS Type: Localizer for runway 16L. Magnetic variation: 16E 2.19.2 ILS Identification: SNQ 2.19.5 Coordinates: 47-25-42.224N / 122-18-29.0263W 2.19.6 Site Elevation: 335.5 ft 2.19.1 ILS Type: DME for runway 34R. Magnetic variation: 16E 2.19.2 ILS Identification: SEA 2.19.5 Coordinates: 47-26-3.5974N / 122-18-22.6779W 2.19.6 Site Elevation: 369.4 ft 2.19.1 ILS Type: Glide Slope for runway 34R. Magnetic variation: 16E 2.19.2 ILS Identification: SEA 2.19.5 Coordinates: 47-26-3.3996N / 122-18-23.0248W 2.19.6 Site Elevation: 355.1 ft 2.19.1 ILS Type: Localizer for runway 34R. Magnetic variation: 16E 2.19.2 ILS Identification: SEA 2.19.5 Coordinates: 47-27-54.2762N / 122-18-27.8613W 2.19.6 Site Elevation: 428.1 ft 2.19.1 ILS Type: DME for runway 16R. Magnetic variation: 16E 2.19.2 ILS Identification: CJL 2.19.5 Coordinates: 47-26-15.6195N / 122-18-59.9408W

2.19.6 Site Elevation: 344.8 ft

2.19.1 ILS Type: Glide Slope for runway 16R. Magnetic variation: 16E
2.19.2 ILS Identification: CJL
2.19.5 Coordinates: 47–27–38.4647N / 122–19–0.5973W
2.19.6 Site Elevation: 405.5 ft

2.19.1 ILS Type: Localizer for runway 16R. Magnetic variation: 16E
2.19.2 ILS Identification: CJL
2.19.5 Coordinates: 47–26–15.9249N / 122–19–5.0962W
2.19.6 Site Elevation: 343.7 ft

2.19.1 ILS Type: DME for runway 34L. Magnetic variation: 16E 2.19.2 ILS Identification: BEJ 2.19.5 Coordinates: 47–26–15.6195N / 122–18–59.9408W 2.19.6 Site Elevation: 344.8 ft

2.19.1 ILS Type: Glide Slope for runway 34L. Magnetic variation: 16E
2.19.2 ILS Identification: BEJ
2.19.5 Coordinates: 47–26–34.9351N / 122–18–59.9836W
2.19.6 Site Elevation: 358.5 ft

2.19.1 ILS Type: Localizer for runway 34L. Magnetic variation: 16E
2.19.2 ILS Identification: BEJ
2.19.5 Coordinates: 47–27–59.7764N / 122–19–4.1986W
2.19.6 Site Elevation: 409.5 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 19E
2.19.2 Navigation Aid Identification: SEA
2.19.5 Coordinates: 47–26–7.3434N / 122–18–34.618W
2.19.6 Site Elevation: 348.4 ft

#### **General Remarks:**

(E94) WSO/WSFO.

RWY 16L/34R RSTD TO ACFT WITH WINGSPAN 260 FT OR LESS.

TAXILANE W RSTD TO ACFT WITH WINGSPAN 135 FT OR LESS N OF TWY N AND 167 FT OR LESS SOUTH OF TWY N. SEATTLE RAMP TWR PRVDS ADZY CTL ONLY.

AIR CARGO 5 RAMP DUAL ENG TAX ONLY

TWYS J & H E OF TWY T RSTD TO ACFT WITH WINGSPAN 167 FT OR LESS.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

RPRT BIRD STRIKES TO 206-787-7233

TWY H E OF RWY 16L/34R RSTD TO ACFT WITH WINGSPAN 118 FT OR LESS WHEN EXITING RWY 16L/34R.

HELICOPTERS LANDING & DEPARTING AVOID OVERFLYING FUEL FARM LCTD AT THE SE CORNER OF THE ARPT.

DO NOT MISTAKE TWY T FOR LNDG SFC.

ACES TO AIR CARGO 4 PRKG AND CARGO AREAS RSTD TO ACFT WITH WINGSPAN 170 FT OR LESS.

(E110) CONTINUOUS POWER ARPT.

PPR FOR ALL GA PRKG & SVCS, CTC 206–433–5481. OP HRS 0530L – 2100L, WITH A CALL OUT AVBL UPON REQ.

TWY B SOUTH OF AIR CARGO 7 RAMP RSTD TO ACFT WITH WINGSPAN 260 FT OR LESS.

TWY FOR CORPORATE HNGR RAMP RSTD TO ACFT WITH WINGSPAN 62 FT OR LESS FOR TAXI OPS. GA CUST PKNG IS VERY LTD.

RY STATUS LGTS ARE IN OPN.

TWY A SOUTH OF TWY G RSTD TO ACFT WITH WINGSPAN 225 FT OR LESS.

100LL FUEL NOT AVBL.

TWY B S OF TWY Q RSTD TO ACFT WITH WINGSPAN 260 FT OR LESS.

BIRD FLOCKS WITHIN ARPT VCNTY – CHECK LCL ADZYS.

THE USE OF REVERSE THRUST BYD WHAT IS NEC FOR OPNL OR SAFETY RSNS IS DISCOURAGED AT ALL TIMES. NOISE ABATEMENT FLT PROCS IN EFCT BTN 2200–0600. FOR FURTHER INFO CTC SEA NOISE ABATEMENT OFC AT 206–787–5393.

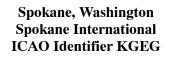
TAXILANE ON N SIDE OF N STLT RSTD TO ACFT WITH WINGSPAN 118 FT OR LESS. TRI-TAXILANES AT N STLT: CNTR (GREEN) TAXILANE RSTD TO ACFT WITH WINGSPAN 135 FT OR LESS. WHEN AN ACFT IS ON THE CNTR (GREEN) OR OTR (ORANGE/BLUE) TAXILANES, NO OTR ACFT CAN SIMUL USE THE ADJ TAXILANE(S). ORANGE & BLUE TAXILANES ARE RSTD TO ACFT WITH WINGSPAN 118 FT OR LESS. TWO ACFT CAN SIMUL USE THE OUTER TAXILANES.

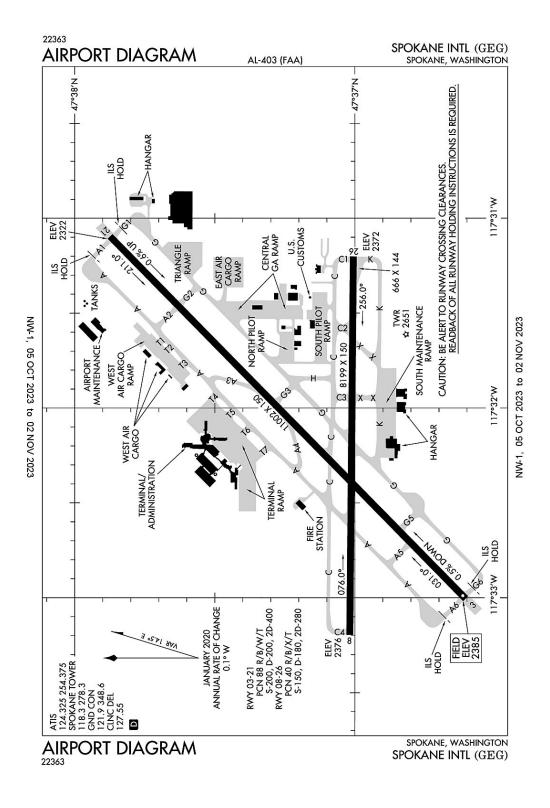
GA LANDING FEES PAYABLE BY MAJOR CREDIT CARDS ONLY.

ACFT WITH WINGSPANS OF 171 FT. OR MORE PARKED AT PAX GATES OR CARGO 7 MUST PROVIDE 30 MIN PPR PRIOR TO PUSHBACK TO SEATTLE RAMP TWR WHEN VSBY LESS THAN 2400 RVR

CONS TAXI TO TKOFS AT SEA. WHEN PRACTICAL, SAFE AND AVBL, CONS TAXI TO TKOFS ARE ENCOURAGED. CONS TAXI TO TKOFS MAY RDC ACFT NOISE WI NEARBY COMMUNITIES.

FLIGHT NOTIFICATION SERVICE (ADCUS) AVBL.





# Spokane, WA Spokane Intl ICAO Identifier KGEG

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 47–37–8.5N / 117–32–6.8W
2.2.2 From City: 5 miles SW of SPOKANE, WA
2.2.3 Elevation: 2385 ft
2.2.5 Magnetic Variation: 14E (2020)
2.2.6 Airport Contact: LAWRENCE J KRAUTER 9000 W AIRPORT DR. SPOKANE, WA 99224 ((509) 455–6418)
2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### AD 2.4 Handling Services and Facilities

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100,100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

#### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

### AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 03 2.12.2 True Bearing: 45 2.12.3 Dimensions: 11002 ft x 150 ft 2.12.4 PCN: 88 R/B/W/T 2.12.5 Coordinates: 47–36–36.2909N / 117–33–0.2876W 2.12.6 Threshold Elevation: 2385 ft 2.12.6 Touchdown Zone Elevation: 2385 ft

2.12.1 Designation: 21 2.12.2 True Bearing: 225 2.12.3 Dimensions: 11002 ft x 150 ft 2.12.4 PCN: 88 R/B/W/T 2.12.5 Coordinates: 47–37–52.3811N / 117–31–5.7573W 2.12.6 Threshold Elevation: 2322.4 ft 2.12.6 Touchdown Zone Elevation: 2346.1 ft

2.12.1 Designation: 08 2.12.2 True Bearing: 90 2.12.3 Dimensions: 8199 ft x 150 ft 2.12.4 PCN: 40 R/B/X/T 2.12.5 Coordinates: 47–37–1.0687N / 117–33–11.7639W 2.12.6 Threshold Elevation: 2376.2 ft 2.12.6 Touchdown Zone Elevation: 2376.2 ft 2.12.1 Designation: 26 2.12.2 True Bearing: 270 2.12.3 Dimensions: 8199 ft x 150 ft 2.12.4 PCN: 40 R/B/X/T 2.12.5 Coordinates: 47–37–0.3642N / 117–31–12.1045W 2.12.6 Threshold Elevation: 2371.5 ft 2.12.6 Touchdown Zone Elevation: 2371.5 ft

### **AD 2.13 Declared Distances**

2.13.1 Designation: 03
2.13.2 Take-off Run Available: 11002
2.13.3 Take-off Distance Available: 11002
2.13.4 Accelerate-Stop Distance Available: 11002
2.13.5 Landing Distance Available: 11002

2.13.1 Designation: 21

2.13.2 Take-off Run Available: 11002

2.13.3 Take-off Distance Available: 11002

2.13.4 Accelerate-Stop Distance Available: 11002

2.13.5 Landing Distance Available: 11002

2.13.1 Designation: 08

2.13.2 Take-off Run Available: 8199

2.13.3 Take-off Distance Available: 8199

2.13.4 Accelerate–Stop Distance Available: 8199

2.13.5 Landing Distance Available: 8199

2.13.1 Designation: 26

2.13.2 Take-off Run Available: 8199

2.13.3 Take-off Distance Available: 8199

2.13.4 Accelerate-Stop Distance Available: 8199

2.13.5 Landing Distance Available: 8199

#### AD 2.14 Approach and Runway Lighting

2.14.1 Designation: 032.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 212.14.2 Approach Lighting System: ALSF22.14.4 Visual Approach Slope Indicator System: P4L

2.14.1 Designation: 082.14.2 Approach Lighting System:2.14.4 Visual Approach Slope Indicator System: P4R

2.14.1 Designation: 262.14.2 Approach Lighting System:

2.14.4 Visual Approach Slope Indicator System: P4L

#### AD 2.18 Air Traffic Services Communication Facilities

2.18.1 Service Designation: APCH/P DEP/P IC (205–025) 2.18.3 Channel: 123.75 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (026–204) 2.18.3 Channel: 133.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (026–204)2.18.3 Channel: 2632.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (205–025) 2.18.3 Channel: 282.25 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/S DEP/S2.18.3 Channel: 372.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 124.3252.18.5 Hours of Operation: 24

2.18.1 Service Designation: ATIS2.18.3 Channel: 254.3752.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 127.552.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (205–025) 2.18.3 Channel: 123.75 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (026–204) 2.18.3 Channel: 133.35 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (026–204) 2.18.3 Channel: 263 2.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (205–025) 2.18.3 Channel: 282.25 2.18.5 Hours of Operation: 24 2.18.1 Service Designation: EMERG2.18.3 Channel: 121.52.18.5 Hours of Operation:

2.18.1 Service Designation: EMERG2.18.3 Channel: 2432.18.5 Hours of Operation:

2.18.1 Service Designation: GND/P2.18.3 Channel: 121.92.18.5 Hours of Operation: 24

2.18.1 Service Designation: GND/P2.18.3 Channel: 348.62.18.5 Hours of Operation: 24

2.18.1 Service Designation: HILIE STAR2.18.3 Channel: 133.352.18.5 Hours of Operation: 24

2.18.1 Service Designation: HILIE STAR2.18.3 Channel: 2632.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 118.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: LCL/P2.18.3 Channel: 278.32.18.5 Hours of Operation: 24

2.18.1 Service Designation: ZOOMR STAR2.18.3 Channel: 123.752.18.5 Hours of Operation: 24

2.18.1 Service Designation: ZOOMR STAR2.18.3 Channel: 282.252.18.5 Hours of Operation: 24

### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 03. Magnetic variation: 14E
2.19.2 ILS Identification: OLJ
2.19.5 Coordinates: 47–36–32.05N / 117–33–15.1W
2.19.6 Site Elevation: 2380.2 ft

2.19.1 ILS Type: Glide Slope for runway 03. Magnetic variation: 14E
2.19.2 ILS Identification: OLJ
2.19.5 Coordinates: 47–36–47.5569N / 117–32–51.8755W

2.19.6 Site Elevation: 2372 ft

2.19.1 ILS Type: Localizer for runway 03. Magnetic variation: 14E
2.19.2 ILS Identification: OLJ
2.19.5 Coordinates: 47–37–59.6757N / 117–30–54.7682W
2.19.6 Site Elevation: 2315.7 ft

2.19.1 ILS Type: DME for runway 21. Magnetic variation: 14E
2.19.2 ILS Identification: GEG
2.19.5 Coordinates: 47–36–32.05N / 117–33–15.1W
2.19.6 Site Elevation: 2380.2 ft

2.19.1 ILS Type: Glide Slope for runway 21. Magnetic variation: 14E
2.19.2 ILS Identification: GEG
2.19.5 Coordinates: 47–37–48.959N / 117–31–19.4519W
2.19.6 Site Elevation: 2324.3 ft

2.19.1 ILS Type: Localizer for runway 21. Magnetic variation: 14E
2.19.2 ILS Identification: GEG
2.19.5 Coordinates: 47–36–29.2008N / 117–33–10.9524W
2.19.6 Site Elevation: 2380.1 ft

2.19.1 Navigation Aid Type: VORTAC. Magnetic variation: 14E
2.19.2 Navigation Aid Identification: GEG
2.19.5 Coordinates: 47–33–53.805N / 117–37–36.789W
2.19.6 Site Elevation: 2756.3 ft

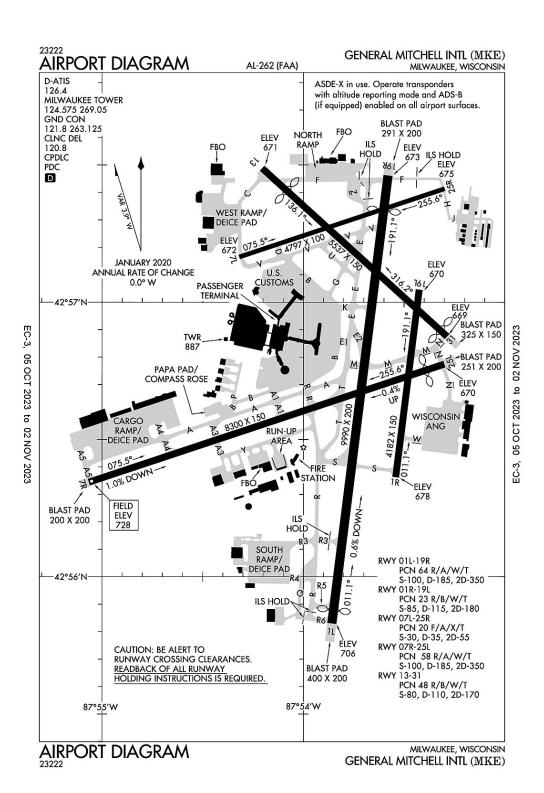
#### **General Remarks:**

PORTIONS OF TWY K NOT VISIBLE FM ATCT.

TWY K UNLGTD ON RAMP SIDE ALONG MAINTENANCE RAMP AND IS UNAVBL BELOW 1200 RVR UNLESS UNDER ESCORT BY "FOLLOW ME".

BE ALERT TO TURBULENCE OVER SMOKE STACKS 1 MILE EAST OF ARPT.

WATERFOWL & BIRDS ON & INVOF ARPT.



# Milwaukee, Wisconsin General Mitchell International ICAO Identifier KMKE

# Milwaukee, WI General Mitchell Intl ICAO Identifier KMKE

#### AD 2.2 Aerodrome geographical and administrative data

2.2.1 Reference Point: 42–56–48.955N / 87–53–49.432W 2.2.2 From City: 5 miles S of MILWAUKEE, WI 2.2.3 Elevation: 728.4 ft 2.2.5 Magnetic Variation: 4W (2020) 2.2.6 Airport Contact: BRIAN DRANZIK 5300 S HOWELL AVE MILWAUKEE, WI 53207 (414–747–5300) 2.2.7 Traffic: IFR/VFR

AD 2.3 Attendance Schedule

2.3.1 All Months, All Days, All Hours

### **AD 2.4 Handling Services and Facilities**

2.4.1 Cargo Handling Facilities: YES2.4.2 Fuel Types: 100LL,A2.4.5 Hangar Space: YES2.4.6 Repair Facilities: MAJOR

### AD 2.6 Rescue and Firefighting Services

2.6.1 Aerodrome Category: Class–I certified on 5/1/1973 2.6.2 Rescue and Firefighting Services: ARFF Index–C

### AD 2.12 Runway Physical Characteristics

2.12.1 Designation: 19R
2.12.2 True Bearing: 187
2.12.3 Dimensions: 9990 ft x 200 ft
2.12.4 PCN: 64 R/A/W/T
2.12.5 Coordinates: 42–57–27.699N / 87–53–34.7753W
2.12.6 Threshold Elevation: 672.7 ft
2.12.6 Touchdown Zone Elevation: 671.9 ft

2.12.1 Designation: 01L
2.12.2 True Bearing: 7
2.12.3 Dimensions: 9990 ft x 200 ft
2.12.4 PCN: 64 R/A/W/T
2.12.5 Coordinates: 42–55–49.7963N / 87–53–51.516W
2.12.6 Threshold Elevation: 705.8 ft
2.12.6 Touchdown Zone Elevation: 703.5 ft

2.12.1 Designation: 01R
2.12.2 True Bearing: 7
2.12.3 Dimensions: 4182 ft x 150 ft
2.12.4 PCN: 23 R/B/W/T
2.12.5 Coordinates: 42–56–21.766N / 87–53–32.5016W
2.12.6 Threshold Elevation: 677.7 ft
2.12.6 Touchdown Zone Elevation: 677.7 ft

AD 2–645 5 OCT 23

2.12.1 Designation: 19L 2.12.2 True Bearing: 187 2.12.3 Dimensions: 4182 ft x 150 ft 2.12.4 PCN: 23 R/B/W/T 2.12.5 Coordinates: 42-57-2.7448N / 87-53-25.4878W 2.12.6 Threshold Elevation: 669.6 ft 2.12.6 Touchdown Zone Elevation: 674.2 ft 2.12.1 Designation: 07L 2.12.2 True Bearing: 72 2.12.3 Dimensions: 4797 ft x 100 ft 2.12.4 PCN: 20 F/A/X/T 2.12.5 Coordinates: 42-57-9.8896N / 87-54-19.1101W 2.12.6 Threshold Elevation: 671.5 ft 2.12.6 Touchdown Zone Elevation: 672 ft 2.12.1 Designation: 25R 2.12.2 True Bearing: 252 2.12.3 Dimensions: 4797 ft x 100 ft 2.12.4 PCN: 20 F/A/X/T 2.12.5 Coordinates: 42-57-24.8031N / 87-53-17.893W 2.12.6 Threshold Elevation: 674.6 ft 2.12.6 Touchdown Zone Elevation: 674.6 ft 2.12.1 Designation: 25L 2.12.2 True Bearing: 252 2.12.3 Dimensions: 8300 ft x 150 ft 2.12.4 PCN: 58 R/A/W/T 2.12.5 Coordinates: 42-56-46.473N / 87-53-18.0003W 2.12.6 Threshold Elevation: 669.9 ft 2.12.6 Touchdown Zone Elevation: 683.1 ft 2.12.1 Designation: 07R 2.12.2 True Bearing: 72 2.12.3 Dimensions: 8300 ft x 150 ft 2.12.4 PCN: 58 R/A/W/T 2.12.5 Coordinates: 42-56-20.6652N / 87-55-3.9117W 2.12.6 Threshold Elevation: 728.4 ft 2.12.6 Touchdown Zone Elevation: 728.4 ft 2.12.1 Designation: 13 2.12.2 True Bearing: 132 2.12.3 Dimensions: 5537 ft x 150 ft 2.12.4 PCN: 48 R/B/W/T 2.12.5 Coordinates: 42-57-29.2767N / 87-54-12.2946W 2.12.6 Threshold Elevation: 671.4 ft 2.12.6 Touchdown Zone Elevation: 670.5 ft

2.12.1 Designation: 31 2.12.2 True Bearing: 312 2.12.3 Dimensions: 5537 ft x 150 ft 2.12.4 PCN: 48 R/B/W/T

2.12.5 Coordinates: 42-56-52.5074N / 87-53-17.1839W

2.12.6 Threshold Elevation: 668.6 ft

2.12.6 Touchdown Zone Elevation: 670.1 ft

## **AD 2.13 Declared Distances**

2.13.1 Designation: 19R
2.13.2 Take-off Run Available: 9990
2.13.3 Take-off Distance Available: 9990
2.13.4 Accelerate-Stop Distance Available: 9990
2.13.5 Landing Distance Available: 9205

2.13.1 Designation: 01L

2.13.2 Take-off Run Available: 9990 2.13.3 Take-off Distance Available: 9990

2.13.4 Accelerate–Stop Distance Available: 9380

2.13.5 Landing Distance Available: 9080

2.13.1 Designation: 01R
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2.13.3 Take-off Distance Available: 4182
2.13.4 Accelerate-Stop Distance Available: 4182
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2.13.1 Designation: 19L

2.13.2 Take-off Run Available: 4182

2.13.3 Take-off Distance Available: 4182

2.13.4 Accelerate–Stop Distance Available: 4182

2.13.5 Landing Distance Available: 4182

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2.13.2 Take-off Run Available: 4797

2.13.3 Take-off Distance Available: 4797

2.13.4 Accelerate–Stop Distance Available: 4797

2.13.5 Landing Distance Available: 4797

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2.13.4 Accelerate–Stop Distance Available: 8300

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2.18.1 Service Designation: APCH/P DEP/P (B SE)2.18.3 Channel: 317.7252.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P DEP/P IC (A NW)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

2.18.1 Service Designation: APCH/P IC (A NW)2.18.3 Channel: 126.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: CD/P2.18.3 Channel: 120.82.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (B SE)2.18.3 Channel: 1182.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (A NW)2.18.3 Channel: 126.52.18.5 Hours of Operation: 24

2.18.1 Service Designation: CLASS C (A NW)2.18.3 Channel: 3072.18.5 Hours of Operation: 24

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2.18.1 Service Designation: DEP/P (A NW)2.18.3 Channel: 125.352.18.5 Hours of Operation: 24

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2.18.1 Service Designation: OPS2.18.3 Channel: 139.52.18.5 Hours of Operation:

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#### AD 2.19 Radio Navigation and Landing Aids

2.19.1 ILS Type: DME for runway 01L. Magnetic variation: 4W
2.19.2 ILS Identification: MKE
2.19.5 Coordinates: 42–57–50.9407N / 87–53–27.4465W
2.19.6 Site Elevation: 725 ft

2.19.1 ILS Type: Glide Slope for runway 01L. Magnetic variation: 4W
2.19.2 ILS Identification: MKE
2.19.5 Coordinates: 42–56–4.4522N / 87–53–43.0463W
2.19.6 Site Elevation: 691.4 ft

2.19.1 ILS Type: Inner Marker for runway 01L. Magnetic variation: 4W
2.19.2 ILS Identification: MKE
2.19.5 Coordinates: 42–55–44.6539N / 87–53–52.3948W
2.19.6 Site Elevation: 706 ft

2.19.1 ILS Type: Localizer for runway 01L. Magnetic variation: 4W
2.19.2 ILS Identification: MKE
2.19.5 Coordinates: 42–57–49.9549N / 87–53–30.968W
2.19.6 Site Elevation: 713 ft

2.19.1 ILS Type: DME for runway 19R. Magnetic variation: 4W
2.19.2 ILS Identification: BLY
2.19.5 Coordinates: 42–57–50.9407N / 87–53–27.4465W
2.19.6 Site Elevation: 725 ft

2.19.1 ILS Type: Glide Slope for runway 19R. Magnetic variation: 4W
2.19.2 ILS Identification: BLY
2.19.5 Coordinates: 42–57–9.1784N / 87–53–32.5226W
2.19.6 Site Elevation: 666.4 ft

2.19.1 ILS Type: Localizer for runway 19R. Magnetic variation: 4W
2.19.2 ILS Identification: BLY
2.19.5 Coordinates: 42–55–38.3041N / 87–53–53.4819W
2.19.6 Site Elevation: 709.2 ft

2.19.1 ILS Type: DME for runway 07R. Magnetic variation: 4W
2.19.2 ILS Identification: GMF
2.19.5 Coordinates: 42–56–18.5074N / 87–55–23.6562W
2.19.6 Site Elevation: 743.1 ft

2.19.1 ILS Type: Glide Slope for runway 07R. Magnetic variation: 4W
2.19.2 ILS Identification: GMF
2.19.5 Coordinates: 42–56–20.4936N / 87–54–47.1205W
2.19.6 Site Elevation: 707.3 ft

2.19.1 ILS Type: Localizer for runway 07R. Magnetic variation: 4W
2.19.2 ILS Identification: GMF
2.19.5 Coordinates: 42–56–49.0824N / 87–53–7.2728W
2.19.6 Site Elevation: 669.1 ft

2.19.1 ILS Type: DME for runway 25L. Magnetic variation: 4W
2.19.2 ILS Identification: PXY
2.19.5 Coordinates: 42–56–18.5074N / 87–55–23.6562W
2.19.6 Site Elevation: 743.1 ft

2.19.1 ILS Type: Localizer for runway 25L. Magnetic variation: 4W
2.19.2 ILS Identification: PXY
2.19.5 Coordinates: 42–56–16.0665N / 87–55–22.7833W
2.19.6 Site Elevation: 728 ft

### General Remarks:

TWY B BTN TWY V AND TWY P CLSD TO AFCT WITH WINGSPAN GREATER THAN 170 FT.

RY 19R TODA 8,750 FT FROM INT TWY V.

RY 07L/25R NO ACFT 65,000 LBS OR GREATER ALLOWED TO TAXI BTN TWY D & RY 13/31 AND EAST OF RY 19R.

TWY A CLSD FM TWY R TO TWY E AND TWY E CLSD FM TWY T TO TWY E1 AND TWY T CLSD N OF RWY 07R/25L, AND TWY M CLSD FM TWY E TO RWY 01R/19L TO ACFT WITH TAIL HGT GTR THAN 54.5 FT DURG CAT II AND CAT III OPS.

TWY A CLSD BTN TWY A4 AND TWY A5 TO ACFT WITH WINGSPAN GREATER THAN OR EQUAL TO 214' UNLESS PERMISSION FROM ARPT MGR 414–747–5325

ALL AIRCRAFT PUSHBACKS FROM GATES C20, C21, C22, C23, D39 D41 D43, D45, D48, D51, D53, D54, D55, E65, E66, & E67 REQUIRE CLEARANCE FROM GROUND CONTROL. PUSHBACKS FROM ALL OTHER GATES ARE AT RAMP/ PILOT DISCRETION; CONTACT GROUND CONTROL WHEN READY TO TAXI.

ACFT ARE NOT PERMITTED TO MAKE LEFT TURN ONTO TWY E WHEN EXITING TWY E2.

TWY S & TWY T BTN TWY R & RY 07R/25L AND RY 07R/25L BTN RY 1R/19L & TWY R CLSD DURG CAT II & III OPNS.

HOLDING BAY AT RY 01L CLSD EXCP ACFT WITH WINGSPAN LESS THAN 118 FT.

TWY A BTN TWY R AND TWY A1 CLSD TO ACFT WINGSPAN MORE THAN 171 FT EXC PPR 414–747–5325.

TWY F (E OF RWY 19R), TWY H, TWY J, AND TWY P CLSD TO ACFT WITH WINGSPAN GTR THAN 78 FT UNLESS PMSN FM AMGR AT 414–747–5325.

PREFERRED USAGE BY ACFT BTN 2200-0600 IS TKOF RY 19R & LNDG RY 01L.

RY 07L/25R CLSD TO ALL JET ACFT.

DEICE PAD FOR RWY 07R NOT AUTH FOR THRU TAXI.

TWY C CLSD BTWN APCH END OF RWY 7L AND WEST RAMP NORTH TXL TO ACFT WITH WINGSPAN GTR THAN OR EQUAL TO 118 FT UNLESS PMSN FM ARPT MGR 414–747–5325.

TRNG FLGTS INVOLVING SUCCESSIVE USE OF ANY RY PROHIBITED 2200-0600.

ACFT WITH WINGSPAN GREATER THAN 175 FT CANNOT PASS SIMULTANEOUSLY ON TWY 'E' & TWY 'Z'.

HOLDING BAY AT RY 19R WHEN IN USE, TWY Z ADJACENT TO BAY IS LIMITED TO ACFT WITH WINGSPAN UP TO 170 FT.

RY 13/31 CLSD JET ACFT, UNLESS PMSN FROM TWR OR AMGR 414-747-5325.

RY 01R–19L AVAILABLE TO AIR CARRIERS FOR TAXI ONLY.

ANG: PPR ALL ACFT 48HR PN, CTC AFLD MGMT DSN 580–8241, C414–944–8241. AFLD MGMT HR 1200Z–2230Z++ TUE–FRI, CLSD HOL, SAT–SUN EXC UNIT TMG. MAINT OPS (MOCC) FREQ – 379.85. ANY MDS (OTHER THAN KC–135) IS LTD TO STD TRAN MARSHALLING AND PRK. NO TECH DATA AVBL FOR TRAN MAINT. FUEL AND AGE SUPPORT EQUIP AVBL FOR SELF–SVC. NO ADNL CONFIGN ITEMS SUPPORTED SUCH AS LANTIRN PODS, EDM PODS, ETC. ANG: EOR, ACFT SHELTERS/REVETMENTS, AND ALERT FAC UNAVBL. APRON HAS LTD STATIC GND POINTS AND TIE DOWN POINTS. FLEET SVC/HOT CARGO PRKG UNAVBL. CTC UPSET CTL ON 321.0 30 MIN PRIOR TO LDG AND DEP. NSTD MRK ON APRON FOR WINGTIP CLNC USED BY BASE ASGND ACFT.

TWY F (WEST OF TWY Z) CLSD TO ACFT WITH WINGSPAN GREATER THAN OR EQUAL TO 118 FT UNLESS PERMISSION FROM ARPT DIR AT 414–747–5325.

ALL APCHS ARE OVER NOISE SENSITIVE AREAS; ALL TURBOJET ACFT SHOULD REFRAIN FM CONDUCTING MULTI VFR TFC PATTERN APCHS & DEPS WO PRIOR APVL FM AMGR CALL C414–747–5325.

BIRDS ON & INVOF ARPT.

RYS 13/31 & 01R/19L & 07L/25R CLSD EXCP LGT WT SINGLE ENG ACFT 0400-1200Z DLY.

TWY V BTN TWY D AND RY 7L/25R CLSD TO ACFT WITH WINGSPAN GREATER THAN 170 FT WHEN RY 7L/25R IN USE.

ASDE-X IN USE. OPERATE TRANSPONDERS WITH ALTITUDE REPORTING MODE AND ADS-B (IF EQUIPPED) ENABLED ON ALL AIRPORT SURFACES.

TWY B BTN TWY R AND TWY A1 CLSD TO ACFT WINGSPAN MORE THAN 118 FT EXC PPR 414–747–5325.

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# Appendix 2. FAA Form 7233-4 – International Flight Plan

**a.** The FAA will accept a flight plan in international format for IFR, VFR, SFRA, and DVFR flights. File the flight plan electronically via a Flight Service Station (FSS), FAA contracted flight plan filing service, or other commercial flight plan filing service. Depending on the filing service chosen, the method of entering data may be different but the information required is generally the same.

**b.** The international flight plan format is mandatory for:

**1.** Any flight plan filed through a FSS or FAA contracted flight plan filing service; with the exception of Department of Defense flight plans and civilian stereo route flight plans, which can still be filed using the format prescribed in FAA Form 7233–1.

#### NOTE-

DOD Form DD-175 and FAA Form 7233-1 are considered to follow the same format.

**2.** Any flight that will depart U.S. domestic airspace. For DOD flight plan purposes, offshore Warning Areas may use FAA Form 7233–1 or military equivalent.

3. Any flight requesting routing that requires Performance Based Navigation.

**4.** Any flight requesting services that require filing of capabilities only supported in the international flight plan format.

### c. Flight Plan Contents

**1.** A flight plan will include information shown below:

- (a) Flight Specific Information (TBL 2–1)
- (b) Aircraft Specific Information (TBL 2–19)
- (c) Flight Routing Information (TBL 2–20)
- (d) Flight Specific Supplementary Information (Item 19)

**2.** The tables indicate where the information is located in the international flight plan format, the information required for U.S. domestic flights, and the location of equivalent information in the domestic flight plan format.

**3.** International flights, including those that temporarily leave domestic U.S. airspace and return, require all applicable information in the international flight plan. Additional information can be found in ICAO Doc. 4444 (Procedures for Air Navigation Services, Air Traffic Management), and ICAO Doc. 7030 (Regional Supplemental Procedures) as well as the Aeronautical Information Publications (AIPs), Aeronautical Information Circulars (AICs), and NOTAMs of applicable other countries.

TBL 2–1
Flight Specific Information

Item	International Flight Plan (FAA Form 7233–4)	Domestic II S Requirements Domest	
Aircraft Identification	Item 7	Required	Item 2
Flight Rules	Item 8	Required	Item 1
Type of Flight	Item 8	No need to file for domestic U.S. flight	N/A
Equipment and Capabilities	Item 10 Item 18 PBN/; NAV/; COM/; DAT/; SUR/	Required	Item 3
Date of Flight	Item 18 DOF/	Include when date of flight is not today	N/A
Reasons for Special Handling	Item 18 STS/; RMK/	Include when special category is applicable	Item 11
Remarks	Item 18 RMK/	Include when necessary	Item 11
Operator	Item 18 OPR/	No need to file for domestic U.S. flight	N/A
Flight Plan Originator	Item 18 ORGN/	No need to file for domestic U.S. flight	N/A

### d. Instructions for Flight-Specific Information Items

**1.** Aircraft Identification (Item 7) Aircraft Identification is always required. Aircraft identification must not exceed seven alphanumeric characters and be either:

(a) The ICAO designator for the aircraft operating agency, followed by the flight identification (for example, KLM511, NGA213, JTR25). When in radiotelephony the call sign to be used by the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (for example, KLM511, NIGERIA213, JESTER25);

(b) The nationality or common mark and registration of the aircraft (for example, EIAKO, 4XBCD, N2567GA), when:

(1) In radiotelephony, the call sign to be used by the aircraft will consist of this identification alone (for example, CGAJS) or preceded by the ICAO telephony designator for the aircraft operating agency (for example, BLIZZARD CGAJS); or

(2) The aircraft is not equipped with radio.

#### NOTE-

1. Standards for nationality, common and registration marks to be used are contained in Annex 7, Chapter 2.

**2.** Provisions for using radiotelephony call signs are contained in Annex 10, Volume II, Chapter 5. ICAO designators and telephony designators for aircraft operating agencies are contained in Doc 8585—Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.

#### NOTE-

Some countries' aircraft identifications begin with a number, which cannot be processed by U.S. ATC automation. The FAA will add a leading letter temporarily to gain automation acceptance for aircraft identifications that begin with a numeral. For flight–processing systems (e.g., ERAM or STARS) which will not accept a call sign that begins with a number, if the call sign is 6 characters or less, add a Q at the beginning of the call sign. If the call sign is 7 characters, delete the first character and replace it with a Q. Put the original call sign in the remarks section of the flight plan.

#### EXAMPLE-

9HRA becomes Q9HRA 5744233 becomes Q744233

### 2. Flight Rules (Item 8a)

- (a) Flight rules are always required.
- (b) Flight rules must indicate IFR (I) or VFR (V).

#### EXAMPLE-

#### DCT APN J177 LEXOR/N0467F380 J177 TAM/N0464F390 J177

#### 6. Delay En Route (Item 15, Item 18 DLE/)

(a) ICAO defines Item 18 DLE/ to provide information about a delay en route. International flights with a delay outside U.S. domestic airspace should indicate the place and duration of the delay in Item 18 DLE/. The delay is expressed by a fix identifier followed by the duration in hours (H) and minutes (M), HHMM.

#### EXAMPLE-

#### DLE/EMI0140

(b) U.S. ATC systems will accept but not process information in DLE/. Therefore, for flights in the lower 48 states, it is preferable to include the delay as part of the route (Item 15). Delay in this format is specified by an oblique stroke (/) followed by the letter D, followed by 2 digits for hours (H) of delay, followed by a plus sign (+), followed by 2 digits for minutes (M) of delay: /DHH+MM.

#### EXAMPLE-

DCT EMI/D01+40 DCT MAPEL/D00+30 V143 DELRO DCT

#### 7. Destination Airport (Item 16, Item 18 DEST/)

(a) Enter the destination airport. The airport should be identified using the four-letter location identifier from FAA Order JO 7350.9, Location Identifiers, or from ICAO Document 7910. FSS and FAA contracted flight plan filing services will allow up to 11 characters in the destination field. This will permit entry of non-ICAO identifier airports, and other fixes such as an intersection, fix/radial/distance, and latitude/longitude coordinates. Other electronic filing services may require a different format.

#### NOTE-

While user interfaces for flight plan filing are not specified, all flight plan filing services must adhere to the appropriate Interface Control Document upon transmission of the flight plan to the control facility.

(b) When the intended destination (Item 16) is outside of domestic U.S. airspace, or if using the paper version of FAA Form 7233–4, or if the chosen flight plan filing service does not allow non–ICAO airport identifiers in Item 13 or Item 16, use the following ICAO procedure. Enter four Z's (ZZZZ) in Item 13 and include the non–ICAO airport location identifier, fix, or waypoint location in Item 18 DEP/. A text description following the location identifier is permissible in Item 18 DEP/.

#### EXAMPLE-

DEST/06A MOTON FIELD DEST/4AK6 DEST/MONTK DEST /3925N07722W

#### 8. Total Estimated Elapsed Time (Item 16)

All flight plans must include the total estimated elapsed time from departure to destination in hours (H) and minutes (M), format HHMM.

#### 9. Alternate Airport (Item 16, Item 18 ALTN/)

(a) When necessary, specify an alternate airport in Item 16 using the four-letter location identifier from FAA Order 7350.9 or ICAO Document 7910. When the airport does not have a four-letter location identifier, include ZZZZ in Item 16c and file the non-standard identifier in Item 18 ALTN/.

(b) While the FAA does not require filing of alternate airports in the flight plan provided to ATC, rules for establishing alternate airports must be followed.

(c) Adding an alternate may assist during Search and Rescue by identifying additional areas to search.

(d) Although alternate airport information filed in a flight plan will be accepted by air traffic computer systems, it will not be presented to controllers. If diversion to an alternate airport becomes necessary, pilots are expected to notify ATC and request an amended clearance.

#### EXAMPLE-

ALTN/W50 2W2

## 10. Estimated Elapsed Times (EET) at boundaries or reporting points (Item 18 EET/)

EETs are required for international or oceanic flights when crossing a Flight Information Region (FIR) boundary. The EET will include the ICAO four–letter location identifier for the FIR followed by the elapsed time to the FIR boundary (e.g., KZNY0245 indicates 2 hours, 45 minutes from departure until the New York FIR boundary).

#### EXAMPLE-

EET/MMFR0011 MMTY0039 KZAB0105

## 11. Remarks (Item 18 RMK/)

Enter only those remarks pertinent to ATC or to the clarification of other flight plan information. Items of a personal nature are not accepted.

#### NOTE-

"DVRSN" should be placed in Item 11 only if the pilot/company is requesting priority handling to their original destination from ATC as a result of a diversion as defined in the Pilot/Controller Glossary.
 Do not assume that remarks will be automatically transmitted to every controller. Specific ATC or en route requests should

2. Do not assume that remarks will be automatically transmitted to every controller. Specific ATC or en route requests should be made directly to the appropriate controller.

## g. Flight Specific Supplemental Information (Item 19)

**1.** Item 19 data must be included when completing FAA Form 7233–4. This information will be retained by the facility/organization that transmits the flight plan to Air Traffic Control (ATC), for Search and Rescue purposes, but it will not be transmitted to ATC as part of the flight plan.

**2.** Do not include Supplemental Information as part of Item 18. The information in Item 19 is retained with the flight plan filing service for retrieval only if necessary.

#### NOTE-

Supplemental Information within Item 19 will be transmitted as a separate message to the destination FSS for VFR flight plans filed with a FSS or FAA contracted flight plan filing service. This will reduce the time necessary to conduct SAR actions should the flight become overdue, as this information will be readily available to the destination Flight Service Station.

**3.** Minimum required Item 19 entries for a domestic flight are Endurance, Persons on Board, Pilot Name and Contact Information, and Color of Aircraft. Additional entries may be required by foreign air traffic services, or at pilot discretion.

(a) After E/ Enter fuel endurance time in hours and minutes.

(b) After P/ Enter total number of persons on board using up to 30 alphanumeric characters. Enter TBN (to be notified) if the total number of persons is not known at the time of filing.

### EXAMPLE-

P/005 P/TBN

*P/ON FILE CAPEAIR OPERATIONS* 

(c) R/ (Radio) Cross out items not carried

- (d) S/ (Survival Equipment) Cross out items not carried.
- (e) J/ (Jackets) Cross out items not carried.
- (f) D/ (Life Raft/Dinghies) Enter number carried and total capacity. Indicate if covered and color.
- (g) A/ (Aircraft Color and Markings) Enter aircraft color(s).

### EXAMPLE-

### White Yellow Blue

**4.** N/ (Remarks. Not for ATC) select N if no remarks. Enter comments concerning survival equipment and information concerning personal GPS locating service, if utilized. Enter name and contact information for responsible party to verify VFR arrival/closure, if desired. Ensure party will be available for contact at ETA. (for example; FBO is open at ETA)

**5.** C/ (Pilot) Enter name and contact information, including telephone number, of pilot–in–command. Ensure contact information will be valid at ETA in case SAR is necessary.

#### FIG 2–1

#### FAA Form 7233-4, Pre-Flight Pilot Checklist and International Flight Plan

PRIVACY ACT STATEMENT: This statement is provided pursuant to the Privacy Act of 1974, 5 USC § 552a: The authority for collecting this information is contained in 49 U.S.C. §§ 40113, 44702, 44703, 44709, and 14 C.F.R. Part 6 - [Part 61, 63, 65, or 67. The principal purpose for which the information is intended to be used is to allow you to submit your flight plan. Submission of the data is voluntary. Failure to provide all required information may result in you not being able to submit your flight plan. The information collected on this form will be included in a Privacy Act System of Records known as DCT/RAA 847, ittled "xivation Records on Individuals" and will be subject to the routine uses published in the System of Records Notice (SORN) for DOT/FAA 847 (see www.dot.gov/privacy/privacyactnotices).

Paperwork Reduction Act Statement: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0026. Public reporting for this collection of information is estimated to be approximately 2.5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information, including suggestions for reduired to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clientance Officer, ASP-110.

Aircraft l	dentification		ight Pilot C	neenn	51			
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