

#### **UNITED STATES GOVERNMENT SPECIFICATIONS**

## FLIGHT INFORMATION PUBLICATION AIRPORT DIAGRAMS

**1AC 9 7 October 2025** 

Prepared by the Interagency Air Committee (IAC)

# UNITED STATES GOVERNMENT SPECIFICATIONS FOR THE FLIGHT INFORMATION PUBLICATION AIRPORT DIAGRAMS

#### 7 October 2025

These specifications have been developed by the Interagency Air Committee (IAC), composed of representatives of the Department of Defense and the Federal Aviation Administration, for use in the preparation of the United States Government Flight Information Publication Airport Diagrams. These specifications shall be complied with, without deviation, until such time as they are amended by formal IAC action.

Changes to these specifications will be provided when necessitated by new requirements or through development action of the IAC.

Questions of interpretation that arise in the use of these specifications shall be referred to the Chair, Interagency Air Committee.

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#### **CHANGES APPLIED TO CURRENT EDITION**

#### REQUIREMENT DOCUMENTS

- a. RD 896 Alignment of NGA Exceptions & Differences to IAC 9
- **b.** RD 897 Runway Lighting Notes on Instrument Approach Procedures and Airport Diagrams

#### **EDITORIAL CHANGES**

a. None applied this edition

#### **CHANGES APPLIED 18 SEPTEMBER 2025**

#### REQUIREMENT DOCUMENTS

**a.** None applied this edition

#### **EDITORIAL CHANGES**

- a. EC 25-05 Helipad Identification on Airport Diagrams
- **b.** EC 25-12 Part-Time Frequency Depiction in TPP

#### **CHANGES APPLIED 12 JUNE 2025**

#### REQUIREMENT DOCUMENTS

**a.** None applied this edition

#### **EDITORIAL CHANGES**

a. EC 25-04 – Removal of Control Tower Elevation

#### **CHANGES APPLIED 20 MAY 2024**

#### REQUIREMENT DOCUMENTS

a. None applied this edition

#### **EDITORIAL CHANGES**

- a. EC 24-21 Non-Air Carrier Runways Note
- **b.** EC 24-22 Self Service Fuel

#### **CHANGES APPLIED 6 MAY 2025**

#### REQUIREMENT DOCUMENTS

- **a.** RD 884 Removal of 67:1 Slope Obstacles on Instrument Approach Procedures (IAP) and Removal of the Highest Obstacles from IAPs and Airport Diagrams (AD)
- **b.** RD 889 Airport Location Identifiers on Terminal Chart Products

#### **EDITORIAL CHANGES**

a. None applied this edition

#### **CHANGES APPLIED 11 MARCH 2025**

#### REQUIREMENT DOCUMENTS

a. None applied to this edition

#### **EDITORIAL CHANGES**

a. EC 24-18 – Airport Diagram Closed Pavement Depiction

#### **CHANGES APPLIED 8 JANUARY 2025**

IAC 9 is a new specification that consolidates all information pertaining to Airport Diagrams from IAC 4. It will be the primary specification for Airport Diagrams going forward. This edition captures all signed Requirement Documents (RD) and Editorial Changes (EC) that pertain to Airport Diagrams as of 8 January 2025. For prior changes, see the list of RDs and ECs contained in IAC 4.

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#### AMENDMENT OF SPECIFICATIONS

#### 1. PROCEDURE

a. Recommendations for amendments to specifications from the Department of Defense shall be directed to:

National Geospatial-Intelligence Agency 7500 GEOINT Drive Springfield, VA 22150-7500

b. Recommendations for amendments to specifications from the Federal Aviation Administration shall be directed to:

Federal Aviation Administration /
Aeronautical Information Services
SSMC-4 Sta # 4503
1305 East-West Highway
Silver Spring, MD 20910

#### 2. AMENDMENT SYSTEM

- a. Change to the specifications will be issued at the effective date of the latest Requirement Document (RD) and / or Editorial Change (EC).
- b. The Specification will be dated, indicated along the upper margin of each page, to reflect the most current change.

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#### CHAPTER 1 GENERAL

#### 1.1 PURPOSE AND SCOPE

#### 1.1.1 General

Airport Diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations. Airport Diagrams are not intended for use in approach and landing or departure operations. The word airport as used within these specifications is synonymous with the word heliport.

#### 1.1.2 Purpose

The purpose of these specifications is to provide appropriate guidelines to ensure uniformity and standardization of content and portrayal techniques in the preparation and production of Airport Diagrams for use by both civil and military pilots.

#### 1.2 **REQUIREMENTS**

#### 1.2.1 Quality and Accuracy

The highest standards of accuracy in plotting, reproduction and currency of information shall be maintained.

Although the digital chart files are compiled in accordance with these specifications, the final product may vary slightly in appearance due to differences in printing techniques/processes and/or digital display technique.

#### **1.2.2** Color

Airport Diagrams and associated textual material shall be printed in black color. Hot Spot symbols and text will be printed in brown color.

All supplemental information, both textual and graphic, will be in solid color unless otherwise specified.

#### 1.2.3 Symbolization

Symbolization used in the preparation of Airport Diagrams shall be in accordance with the Aeronautical Information/Chart Symbols included herein and in the appendices.

The symbols contained in this manual have been developed for use in the production of U.S. Government aeronautical charts and publications.

These symbols have been developed through the United States Government Interagency Air Committee (IAC), and their supporting technical groups, for the purpose of standardization of the aeronautical symbols portrayed on charts and publications used by both military and civil aviation.

#### 1.2.4 Type Styles

The use of capital letters is intended unless otherwise specified as C/L (capital and lower case letters) or lower case.

All type unless otherwise specified shall be Futura Medium (FAA and NGA), TwCen MT (NGA), or as indicated in the various appendices.

#### 1.2.5 Department of Defense (DoD) Exceptions and Differences

The National Geospatial-Intelligence Agency (NGA), as the DoD member of the Interagency Air Committee, has authority to take exception to any specified charting requirement. A footnote may be used to identify when NGA has taken an exception to a requirement in this specification. Clarifying remarks may be added to the footnote, as applicable.

Figure 1.1 DoD Exceptions

#### 3.5.2.14 Landing Direction Indicator

Wind cone, landing tee, and/or tetrahedron shall be shown in proper location. 1

1. RD 862 - NGA will not depict Landing Direction Indicators.

Minor charting differences will be indicated in the specification text with the agency to which it applies, i.e., (FAA) or (NGA).

#### 1.3 SPECIFICATION APPENDICES

Appendices are included within these specifications for use in layout, format and content of the various Airport Diagrams. Appendices do not necessarily reflect all possible operational content.

#### CHAPTER 2 FORMAT AND LAYOUT

#### 2.1 GENERAL

The Airport Diagram, including all textual or type data, shall be aligned normally with true north at the top of the page. A predominately extensive east-west airport layout shall be depicted in a landscape format in which north shall be toward the left side of the page. In such cases, the text will be oriented consistent with the geographic depiction.

#### 2.2 SIZE AND DIMENSIONS

The trim size and dimensions of the finished charts shall be as shown in the appendices.

#### 2.2.1 Airport Diagrams

References:

**Appendix 3** - Airport Diagram Chart (TPP) – Format

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### CHAPTER 3 CONTENT

#### 3.1 GENERAL

Airport Diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations. Airport Diagrams are not intended for use in approach and landing or departure operations.

#### 3.2 LEGENDS

The legends shall define and depict all symbols used in the presentation of Airport Diagrams, and provide general information and a listing of all abbreviations.

#### 3.2.1 Airport Diagram Symbols

References:

**Appendix 1** - Legend – Airport Diagram

#### 3.2.2 Airport Diagram Lighting System Symbols

References:

**Appendix 2** - Legend – Airport Diagram Lighting Systems

#### 3.3 COMPILATION

References:

**Appendix 3** - Airport Diagram Chart (TPP) – Format **Appendix 6** - Airport Diagram

#### 3.3.1 General

Data shown must be of sufficient detail to facilitate visual orientation of aircraft while parked or taxiing.

#### 3.3.2 Color

The Airport Diagram shall be printed in black color. Screen shall be used to obtain a suitable contrast as illustrated in the appendices

All information, textual and graphic, will be solid color unless otherwise specified.

#### **3.3.3** Scale

In general, the scale selected should allow at least one whole minute of latitude and longitude within the graphic presentation. Scale will vary as necessary for the best portrayal of the airport consistent with the graphic presentation to be shown. Larger scale insets may be used to better portray congested areas.

#### 3.3.4 **Projection**

Projection shall be Lambert Conformal Conic or Polyconic, (0° - 80° N-S) and Polar Stereographic, (80° - 90° N-S). The projection graticule shall be depicted by at least 2 lines of latitude and 2 lines of longitude, annotated with numerical values.

Line Weights .005":

- 30 second ticks .10" long centered
- 6 second ticks .04"

#### 3.3.5 **Area of Coverage**

These specifications apply to all areas of the world for which Airport Diagrams are required by the U.S. Government.

#### 3.3.6 Symbolization

Symbolization used in the preparation of the Airport Diagram shall be in accordance with the Aeronautical Information/Chart Symbols herein and in the appendices.

The configuration of the symbols contained herein and within the appendices shall be adhered to. The size and line weights, specified and/or indicated therein, should also be adhered to but varied when absolutely necessary

#### 3.3.7 Type

Type used to identify taxiways and airport facilities may be reduced in size only when absolutely necessary to reduce congestion for the sake of clarity.

All textual data and numerical values within the planview shall be shown using 7 point type unless otherwise stated.

#### 3.3.8 References

Catalog of Photon type faces.

The appendices are included for use in layout format and content of Airport Diagrams. These appendices do not necessarily reflect all operational content.

#### 3.4 MARGIN INFORMATION

Type size, style, and position shall be shown in accordance with the appendix unless otherwise stated below.

References:

**Appendix 4** - Margin Data (FAA Format)

#### **3.4.1** Title

The title "AIRPORT DIAGRAM" will be positioned flush left, immediately above the top neatline and immediately below the bottom neatline.

#### 3.4.2 Julian Date

The latest revision date (Julian), which reflects a chart revision of any type, shall be shown flush left, immediately above the title in the top margin and immediately below the title in the bottom margin.

#### 3.4.3 Chart Reference Number

The chart reference number shall be preceded by the series code "AL" and dash followed by the abbreviated name of the appropriate authority for the procedure, placed inside parentheses, e.g., AL-000 (FAA). NGA Charts do not show a chart reference number, but do show the appropriate office of primary responsibility for the airfield, e.g., (USN).

The chart reference number shall be shown in the top margin only, centered, on the top neatline.

#### 3.4.4 Geographic Location Name

The geographic location name shall be the city and state name with which the airport is associated, positioned flush right, immediately above the top neatline and immediately below the bottom neatline.

(NGA) North American province/state names, in the approved abbreviated format, should be included with location names followed by country title. In other areas outside the US, country, territory, or island name shall be used in lieu of the state name.

#### 3.4.5 <u>Airport Name</u>

The airport name will be extracted verbatim from the authoritative database. The airport name will be shown flush right, immediately above the geographic location name in the top margin and immediately below the geographic location in the bottom margin.

(NGA) Airport alternate names shall be shown in 8 pt text to the right of the airport name in parenthesis, e.g., PENSACOLA NAS (FORREST SHERMAN FLD).

#### 3.4.6 Airport Location Identifier

The FAA airport location identifier shall be shown in parentheses positioned immediately following the airport name at the top and bottom of each civil and joint-use Airport Diagram. Civil and joint-use airports outside the contiguous United States will be shown with the FAA airport location identifier followed by the ICAO location indicator. Military airports that are not joint-use will be shown with only the ICAO location indicator.

To distinguish between the number zero and the letter "O", a slash shall be shown through the zero.

#### 3.5 AIRPORT DIAGRAMS

References:

**Appendix 6** - Airport Diagram

#### 3.5.1 **Graphic Information Requirements**

- Runways
- Waterways
- Helipads
- Taxiways
- Visual Screen
- Turnarounds and Run-up Areas
- Stopways, Overruns, Blast Pads
- Ramps, Parking and Alert Areas
- Non-Movement Areas
- Under-Construction Areas
- Restricted Areas
- Hangars
- Control Towers
- Airport Beacons
- Landing Direction Indicators
- Lighting
- Navigational Aids (NAVAIDs)
- Hot Spots
- Radar Reflectors
- Large Tanks
- Self-Serve Fuel
- Penalty Boxes
- Projection
- Magnetic Variation Symbology
- Other unique structures or features as identified by the requesting agency as providing a safety benefit

#### 3.5.2 Operational Data Requirements

#### 3.5.2.1 Active Runways | Waterways | Helipads

Runway Delimiting Line: .1 weight (.005"), or Dashed Delimiting Line - 1 weight (.005"), 0.1" dash, separated by a .04" space.

#### 3.5.2.1.1 Active Runway and/or Waterway Dimensions

Threshold-to-threshold including displaced thresholds.

#### 3.5.2.1.2 Runway Surface

Paved or hard surfaced runways consisting of concrete, asphalt, bitumen, or macadam shall be shown in solid color.

Metal surfaced runways shall be shown using solid color, by the cross-hatch pattern at right angles to each other and 45° to the edge of the runway, as indicated in the appendix.

Ultralight areas, ski landing areas, unpaved or runway other than hard surface, such as sod, clay, gravel, etc., shall be shown by the solid dot pattern and outlining the runway with a solid line as indicated in the appendix. "Ultralight Area" or "Ski Landing Area" text shall be placed in close proximity or leadered to those areas.

Seaplane landing or waterways shall be as indicated in the appendix. Waterways will be shown in their approximate geographic location when coordinates are not available.

Only hard surfaced overruns shall be shown, as illustrated in the appendices.

#### **3.5.2.1.3** Helipads

Helicopter lighting areas that exist in the authoritative source database with geographic coordinate data will be shown using the standard circle H symbol. The circle H symbol shall not be used for helicopter parking areas.

#### 3.5.2.1.4 Runway End or Helipad Identification

References:

**Appendix 6** - Airport Diagram

Idents shall be in agreement with the authoritative source database (e.g., 18R, H1) and labeled near the helipad symbol or with a leader line/arrow when necessary.

#### 3.5.2.1.5 Runway Heading

Accuracy of 0.1° Magnetic headings will be shown. For runways north of 67°N or south of 67°S, runway heading may be shown with grid and true headings in lieu of magnetic headings.

#### 3.5.2.1.6 Weight Bearing Capacity

Pavement Classification Numbers (PCN) and Pavement Classification Rating (PCR) designations shall be listed when published.

#### 3.5.2.1.7 Runway End Elevations

Runway end elevations shall be expressed in whole numbers.

#### 3.5.2.1.8 Stopways, Overruns, and Blast Pads<sup>1</sup>

References:

**Appendix 6** - Airport Diagram

Stopways, overruns, and blast pads will be shown using a chevron symbol and outline over taxiway surface symbology. When used, approach lighting symbols will be shifted from the runway end to the end of the chevrons.

Figure 3.1 Stopways, Overruns, and Blast Pads



<sup>1.</sup> NGA will depict stopways, overruns, and blast pads in a solid color, rgb (230,230,230), without chevrons.

#### **3.5.2.1.9 Runway Slope**

Runway slope shall be shown as a percentage value of the slope of the runway measured from each threshold (runway end) to midpoint of all runways 8,000 feet or longer, from threshold (runway end) to threshold (runway end) on all runways shorter than 8,000 feet, and portrayed when the unrounded calculated value is greater than or equal to 0.25% (expressed to the nearest 0.1%). (0.249% does not require charting, 0.250% would be charted as 0.3%)

Runway slope values shall be expressed in whole numbers and tenths; e.g., 0.6%, 1.2%, using .05 as the breaking point, e.g., 1.44% shall be shown as 1.4%, 1.45% shall be shown as 1.5%.

Runway slope value shall be positioned parallel to and in close proximity to the runway end. The slope value shall be followed by the corresponding "UP" or "DOWN" designation and supplemented with directional arrows.

#### 3.5.2.1.10 Arresting Systems

Arresting Systems shall be depicted offset from the runway end, symbolized by an open polygon and shown in their approximate position.

Identify type of arresting system (i.e., EMAS).

#### 3.5.2.1.11 Arresting Gear and Jet Barriers

Arresting Gear and Jet Barriers shall be shown in their true position, using the symbols indicated in the appendix.

Directional arrows for the arresting gear shall point with the direction of roll.

#### 3.5.2.1.12 U.S. Navy Optical Landing System Systems

U.S. Navy Optical Landing System shall be show by the symbol indicated in appendix, in its exact position alongside of the runway.

#### 3.5.2.1.13 Displaced Thresholds

#### 3.5.2.1.14 Runway Declared Distance Information

Runway declared distance information when available will be indicated by a negative type D in a box shown in the upper left/right corner immediately below the communications information.

Figure 3.2 Runway Declared Distance Information Icon

Figure 3.3 Runway Declared Distance Information Icon Example



#### 3.5.2.2 Indefinitely Closed, Under Construction or Re-Purposed Runways

References:

**Appendix 6** - Airport Diagram

Any runway that maintains a runway entry in the authoritative source database, and is identified as indefinitely closed, under construction, or re-purposed as a taxiway or apron indefinitely will be shown as depicted below.

Figure 3.4 Runway Closed Indefinitely

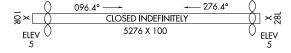
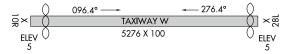


Figure 3.5 Runway Under Construction



Figure 3.6 Runway Re-Purposed as Taxiway



#### 3.5.2.3 Permanently Closed Runways

References:

**Appendix 6** - Airport Diagram

Runways that exist in the authoritative source database as permanently closed will be depicted by open runway symbol with an "X" at both ends. Runway designators, runway dimensions and other data normally associated with the active runway will not be shown.

Figure 3.7 Permanently Closed Runway



Hard surface runways that have been removed from the authoritative source database (but continue to exist as closed pavement) will be depicted in screen with X's to indicate closed pavement either along the entire extent of the pavement or as needed to define closed section(s).

Figure 3.8 Closed Pavement



#### 3.5.2.4 New Runways Under Construction

New runways under construction will be shown using a .010" dotted outline symbol.

Figure 3.9 New Runway Under Construction

#### **3.5.2.5 Taxiways**

Taxiways (hard surface or other than hard surface) will be shown using 120L/15% or rgb (230, 230, 230). Other than hard surface taxiways, when indicated by appropriate authority, shall be labeled "Soft Surface".

#### 3.5.2.5.1 Taxiway Identification

All active taxiways will be labeled with text parallel to the taxiway orientation. Taxiways with two letter/number identifiers will be labeled without spaces or dashes, e.g., A2, B1. Taxiway identification shall not be shown for under construction or closed taxiways. To eliminate confusion between Taxiway M, Taxiway N, Taxiway W, and Taxiway Z (not M1, M2, etc.) will be underlined, e.g., N, WW.

BAK-12A

BASE POPS

RAMP HANGAR

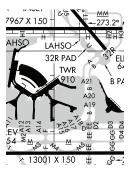
C

RAMP B

RA

Figure 3.10 Taxiway Identification - Use of M, N, W and Z

Figure 3.11 Taxiway Identification - Use of M, MM and M with a Number



#### 3.5.2.5.2 Closed Taxiways

Permanently closed taxiways will be depicted in screen with X's to indicate closed pavement either along the entire extent of the pavement or as needed to define closed section(s). Taxiway designators normally associated with an active taxiway will not be shown.

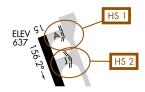
#### 3.5.2.6 Parking Areas

#### 3.5.2.7 Holding Position Markings

ILS holding position lines with "ILS HOLD" label.

Non-typical locations of runway holding position markings when requested by appropriate authority. When space permits, markings will be depicted in the same orientation as they are on the ground. Markings may be depicted in conjunction with a Hot Spot established at the same location.

Figure 3.12 Runway Holding Positing Markings



Land and Hold Short Operations (LAHSO) hold lines with "LAHSO" label.

#### 3.5.2.8 Penalty Box

#### 3.5.2.9 Airport Elevation

The highest point on an airport's usable runway surface, expressed in elevation above mean sea level, shall be shown with a .03 inch diameter dot. The airport elevation value with the text "FIELD ELEV" shall be shown within a box, in close proximity to and with a leader pointing to the dot.

If the highest point on the usable runway surface cannot be determined, the airport elevation value with the text "FIELD ELEV" shall be shown within a box, and shall be positioned in the upper left/right corner of the airport diagram opposite the communication data.

#### 3.5.2.10 Identify the following:

#### 3.5.2.10.1 Terminal/Administration Building and Base Operations

Buildings (FBO's, Hangars, Terminal, etc.) will be referred to in generic terms; no individual commercial names should appear on the government diagrams. It is permissible to differentiate building features using geographic identifiers, e.g., North FBO, East Terminal.

#### **3.5.2.10.2** Fire Station

#### **3.5.2.10.3** Control Tower ("TWR")

The control tower will be symbolized as shown in the appendices and labeled "TWR". If Control Tower and Airport Beacon are collocated see Section 3.5.2.13.

#### 3.5.2.10.4 Military/Government Hangars (numbered)

Identify the branch of services or agency to which it belongs, when other than airport operator. Acronyms and/or abbreviations may be used; i.e., ANG (Air National Guard), USCG (United States Coast Guard), FAA (Federal Aviation Administration).

#### 3.5.2.10.5 Hot cargo ramps

#### 3.5.2.10.6 Parking areas and ramps

Parking areas, ramps, and aprons will be referred to in generic terms; no commercial names shall be published. Commonly used identifiers include: North Ramp or Apron, South Ramp or Apron, Army/Air National Guard (ANG), US Navy (USN), Fire Base Apron, Flight School Apron, FBO Ramp, GA Transient Ramp, GA Tenant Ramp, Terminal Apron, GA Transient Parking, GA Tenant Parking.

- 3.5.2.10.7 Flight Service Station (FSS), National Weather Service (NWS)
- 3.5.2.10.8 U.S. Customs
- 3.5.2.10.9 Flight Standards District Office (FSDO)
- 3.5.2.10.10 Hot Spots

Hot Spot symbols and text will be printed in brown color. Hot Spots will be labeled with "HS1", "HS2", etc. as indicated in the Hot Spot tabulation.

#### 3.5.2.10.10.1 Hot Spots

Hot Spots will be indicated with a circle or ellipse symbol.

Figure 3.13 Hot Spots





#### 3.5.2.10.11 Run-up Areas

Run-up areas will be identified when requested by the appropriate authority as providing a safety benefit.

#### **3.5.2.10.12 Arm/Dearm Areas**

Arm/Dearm Areas will be identified when specifically requested by airport authority.

#### **3.5.2.10.13** Compass Rose

Compass rose will be identified when specifically requested by airport authority.

#### 3.5.2.11 Radar Reflectors

Show radar reflectors in proper location; if the exact position is unknown add a note, e.g., NOTE: RADAR REFLECTORS ON RWY 18-36.

#### 3.5.2.12 Airport Surface Surveillance System

When ASDE-X, ASSC, or SAID is published at a given airport in the authoritative source database, the information shall be depicted on the airport diagram as an operational note.

#### 3.5.2.13 Airport Beacon and Airport Beacon Collocated with Control Tower

The Airport Beacon (rotating light) shall be symbolized by the five-pointed star with an open center, as shown in **Appendix 2** - Legend – Airport Diagram Lighting Systems, (if beacon is pilot controlled, the negative symbol will be used) positioned as near the proper location as possible.

If control tower and airport beacon are collocated, the beacon symbol will be used and identified "TWR".

When control tower or airport beacon is located on a charted building, its position will be indicated with an arrow and labeled appropriately, i.e., "TWR" or "TWR/BCN". When airport beacon is pilot controlled, the text will be appended with the negative L symbol, see **Appendix 6** - Airport Diagram.

#### 3.5.2.14 Landing Direction Indicator<sup>2</sup>

Wind cone, landing tee, and/or tetrahedron shall be shown in proper location.

#### 3.5.2.15 Self-Service Fuel

Self-service fuel facilities not collocated with an FBO will be depicted by a fuel pump symbol. When the self-serve fuel facilities are located at a building or hangar, the fuel pump symbol shall be leadered to where the building or hangar is located.

Figure 3.14 Self Service Fuel

#### 3.5.2.16 Visual Screen

Show visual screen in proper location.

Figure 3.15 Visual Screen



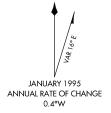
#### 3.5.2.17 Runway Status Lights in Operation

If Runway Status Lights are operational and are published in an airport remark for a given airport, the note "Runway Status Lights in operation." should be depicted on the diagram.

#### 3.5.2.18 Magnetic Variation

Magnetic variation shall be provided as follows:

Figure 3.16 Magnetic Variation



In addition, true/magnetic variation arrows will be shown using a .01" line weight. True/magnetic variation value shall be shown in 5 pt type.

#### 3.5.2.18.1 Grid Coverage Angle

For airfields north of 67°N or south of 67°S, grid convergence angle may be shown in lieu of magnetic variation.

Figure 3.17 Convergence Angle



#### 3.5.2.19 Operational Notes

Operational notes on Airport Diagrams are to be held to an absolute minimum and may only be shown when requested by appropriate authority and deemed necessary to safe movement in the airport environment.

#### 3.5.2.19.1 Non-Air Carrier Runway Note

When Air Carrier Use is published at a given airport in the authoritative source database, the information shall be depicted on the airport diagram with the following standardized note identifying the non-air carrier runways.

Figure 3.18 Non-Air Carrier Runway Note

Not for Part 121/Part 380 Air Carrier Use or Foreign Air Carrier Equivalent: RWYS 06-24, 17-35.

#### 3.5.2.20 Communications Information

Communications information when available, shall be shown in the upper left/right corner as indicated in the appendices, in such a manner so as not to interfere with significant items of the Airport Diagram. Only the primary VHF and UHF frequencies shall be shown.

#### 3.5.2.20.1 Terminal Communication Information

Terminal communication information, when available in the authoritative source database, shall be shown in the sequence listed below. The communications facility (e.g., Ground Control) shall be abbreviated. Part-time operations will be annotated with a star after the communication title. Hours of Operation shall not be shown.

#### 3.5.2.20.1.1 Automatic Terminal Information Service (ATIS)

Automatic Terminal Information Services (ATIS) shall be shown by the letters "ATIS" followed by the specific frequency/s. If the service is digital and listed as D-ATIS in the authoritative source database, "D-ATIS" shall be shown followed by the specific frequency/s.

When the service is provided on one frequency for both arrival and departure information, it shall be shown.

#### Table 3.1 ATIS - One Frequency for Arrival and Departure

ATIS 111.8

When the service is provided on more than one frequency for both arrival and departure information, both (or all) frequencies shall be shown.

#### Table 3.2 ATIS - Multiple Frequencies for Arrival and Departure

ATIS 113.9 124.1

When the service provided is either arrival and/or departure on different frequencies, both frequencies shall be shown.

#### Table 3.3 ATIS - Separate Frequencies for Arrival and Departure

ATIS ARR 112.7 DEP 121.85

#### 3.5.2.20.1.2 Automatic Flight Information Service (AFIS)(AK Only)

Automatic Flight Information Service (AFIS) shall be shown by the letters "AFIS" followed by the specific frequency/s.

- 3.5.2.20.1.3 Tower (TOWER)
- **3.5.2.20.1.4 Ground Control (GND CON)**
- 3.5.2.20.1.5 Clearance Delivery (CLNC DEL)

#### 3.5.2.20.1.6 Controller Pilot Data Link Communications (CPDLC)

When CPDLC service is provided, "CPDLC" shall be shown.

#### 3.5.2.20.1.7 Pre-Departure Clearance (PDC)

When PDC service is provided, "PDC" will be shown.

#### **3.5.2.20.1.8** Ground Metering (GND METERING)

Metering frequencies shall be shown on airport diagrams when maintained in the authoritative source database.

#### 3.5.2.20.1.9 Ramp Control Frequencies

Ramp control frequencies shall be shown on airport diagrams when requested by appropriate authority and shall be positioned adjacent to or in the vicinity (when possible) of the ramps to which they apply.

#### 3.5.2.20.1.10 Pilot Activated Airport Lighting

Pilot capability to activate airport lighting systems shall be shown using negative symbols following the applicable frequency, e.g., 122.70.

Hours of operation shall not be shown.

#### 3.5.2.20.2 Airports with a Control Tower

For airports with a Control Tower, the following note shall be shown, lower left corner preferred (Civil Only):

**CAUTION:** BE ALERT TO RUNWAY CROSSING CLEARANCES. READ BACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

#### 3.5.2.20.3 Airports without a Control Tower

Additional communications information, when available, will be depicted at non-towered airports in the following sequence:

ASOS/AWOS, CTAF/UNICOM/AUNICOM2, CLNC DEL (to include contact facility), CP-DLC, GCO.

#### 3.5.2.21 NAVAIDs

All NAVAIDs within the geographic parameters of the airport diagram, with the exception of LOC, LOC/DME, Offset Localizer and components of the ILS, shall be shown.

When more than one NAVAID of the same type is shown, the identifiers shall be shown.

#### **3.5.2.22** Lighting

#### 3.5.2.22.1 Approach Lighting Systems

Various approach lighting systems shall be shown symbolized in miniature. The circled letters associated with and identifying the various systems shall also be shown.

The approach lighting system symbols and associated letter designation shall be positioned as illustrated in the appendices.

Threshold lights shall be indicated only when an integral part of the approach lighting symbol. They shall not be shown separately.

#### References:

```
Appendix 2 - Legend – Airport Diagram Lighting Systems
Appendix 6 - Airport Diagram
```

#### 3.5.2.22.2 Visual Glide Slope Indicator (VGSI) Lighting Systems

The VGSI lighting symbols referenced in the Appendix shall be charted on the side of the runway where they are actually located. In cases where the VGSI system lights are located on both sides of the runway (such as V12 and V16 systems), a single symbol shall be placed on the left side of the runway.

#### References:

```
Appendix 2 - Legend – Airport Diagram Lighting Systems Appendix 6 - Airport Diagram
```

#### 3.5.2.22.3 Runway End Identifier Lights (REIL)

Runway End Identifier Lights (REIL) shall be indicated by a boxed note, e.g., REIL Rwy 11R. When more than one runway end is involved, reference to all pertinent runway ends shall be included in a common note, e.g., REIL Rwys 4 and 22. At larger airports, when all runway ends are involved and the available diagram area prevents the listing of all runway ends, "all rwys" may be used, e.g., REIL all rwys. When the lighting feature is used at all but one or two runway ends, "all rwys except" may be used with the excepted runway ends, e.g., REIL all rwys except 4 and 22.

#### 3.5.2.22.4 Runway Lead-in Light Systems (RLLS)

Runway Lead-in Light Systems (RLLS) shall be indicated by a boxed note, e.g., RLLS Rwy 13L. When more than one runway end is involved, reference to all pertinent runway ends shall be included in a common note, e.g., RLLS Rwys 13C, 31C, 4R and 22L. At larger airports, when all runway ends are involved and the available diagram area prevents the listing of all runway ends, "all rwys" may be used, e.g., RLLS all rwys. When the lighting feature is used at all but one or two runway ends, "all rwys except" may be used with the excepted runway ends, e.g., RLLS all rwys except 13C and 31C.

#### **3.5.2.22.5** Runway Lights

Runway Lights (HIRL) (MIRL) (LIRL) (TDZL) (TDZL/RCLS) shall be indicated by a boxed note, e.g., HIRL Rwy 9-27. When more than one runway is involved (or runway end, in the case of TDZL), all pertinent runways shall be included in a common note, e.g., HIRL Rwys 7L-25R and 7R-25L, TDZL Rwys 8 and 26. Runway Centerline Lighting Systems (RCLS) will be indicated by a note only when paired with TDZL, e.g., TDZL/RCLS Rwys 6 and 24. At larger airports, when all runways or runway ends are involved and the available diagram area prevents the listing of all runways or runway ends, "all rwys" may be used, e.g., HIRL all rwys. When the lighting feature is used at all but one or two runways or runway ends, "all rwys except" may be used with the excepted runway or runway ends, e.g., HIRL all rwys except 3-21, TDZL all rwys except 21.

Runways with RCLS will show a negative dot pattern through the middle of the solid runway as illustrated in the Legend.

#### 3.5.2.22.6 Notes on Lighting

Boxed notes on lighting shown within the airport diagram shall generally be positioned together in an open area of the diagram. Pilot capability to activate airport lighting systems shall be shown using negative symbols or type, as shown in the appendix. Pilot capability to activate airport lighting by nonstandard methods shall be indicated by a star symbol following the applicable note, as shown in the appendix.

#### APPENDIX 1 LEGEND – AIRPORT DIAGRAM

LEGEND

#### INSTRUMENT APPROACH PROCEDURES (CHARTS)

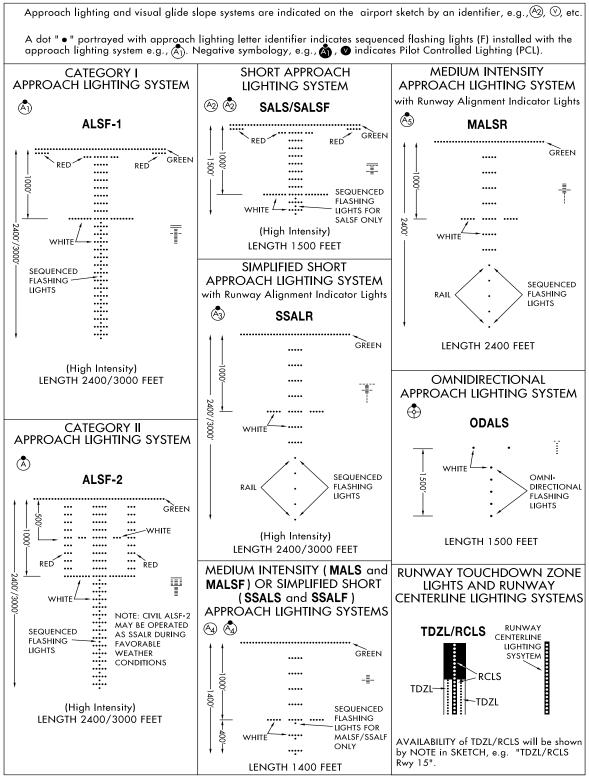
AIRPORT DIAGRAM/AIRPORT SKETCH					
Runways	,				
Hard Other Than Stopways, Taxiways, Metal Surface Hard Surface Parking Areas Surface	Helicopter Alighting Areas (+) (+) (+) (+) (+)  Negative Symbols used to identify Copter Procedures				
Closed Closed Non- Under Water Runway Surface Movement Construction Runway	NOTE:  Landmark features depicted on Copter Approach insets				
,	and sketches are provided for visual reference only.  Runway TDZ elevationTDZE 123				
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 Slope → 0.3% Down0.8% UP → (shown when rounded runway slope is ≥ 0.3%)				
Tuni-directional bi-directional Jet Barrier  ARRESTING SYSTEM (EMAS)	NOTE: Runway Slope measured to midpoint on runways 8000 feet or longer.				
REFERENCE FEATURES  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.				
Buildings	Approach light symbols are shown in the Flight Information Handbook.				
Tanks	Airport diagram scales are variable.				
Obstructions         Λ           Airport Beacon #         ★           Runway Radar Reflectors         ▼	True/magnetic North orientation may vary from diagram to diagram				
Bridges	Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.				
Wind Cone       → → → → → → → → → → → → → → → → → → →	Positional accuracy within $\pm$ 600 feet unless otherwise noted on the chart.				
# When Control Tower and Rotating Beacon are	Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.				
co-located, Beacon symbol will be used and further identified as TWR.  ## See appropriate Chart Supplement for	A <b>D</b> symbol is shown to indicate runway declared distance information available, see appropriate Chart Supplement for distance information.				
information.	• •				
Runway Weight Bearing Capacity or Pavement Classification Number (PCN)/Pavement Classification Rating (PCR) is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 PCR 560 R/B/W/T; S-75, D-185, 2D-325, 2D/2D2-1120	NOTE: All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in DoD FLIP. (Foreign Only)				
FIELD	The airport sketch box includes the final approach course or final approach course extended.				
Runway Slope ELEV 174	Displaced Threshold Runway Visual Screen				
Runway End ELEV 9000 X 200 Elevation 164 Runway Dimensions (in feet)	023.2° () 1000 X 200 EMAS  Runway Heading (Magnetic)				
SCC	Movement Area Dimensions (in feet)				
Airport diagrams are specifically designed to assist in the i	movement of ground traffic at locations with complex intended to be used for approach and landing or departure				

#### LEGEND

#### APPENDIX 2 LEGEND – AIRPORT DIAGRAM LIGHTING SYSTEMS

LEGEND 22195

INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES



LEGEND 22195

#### APPENDIX 2 LEGEND – AIRPORT DIAGRAM LIGHTING SYSTEMS (CONTINUED)

LEGEND 00000

INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES

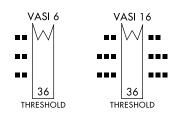
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, 🙉 , 🤍 etc. A dot " • " portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., (\$\hat{A}\_1\$). Negative symbology, e.g., \$\hat{\text{\delta}}\$ , ● indicates Pilot Controlled Lighting (PCL). PRECISION APPROACH PULSATING VISUAL APPROACH  $(V_2)$ **PATH INDICATOR** SLOPE INDICATOR PAPI **PVASI** Pulsating White Too low Slightly low Steady White or Alternating Red/White On correct On Glide Path Slightly Below Glide Path Steady Red approach path 0 Pulsating Red Below Glide Path Too high Slightly high Threshold Legend: □ White ■ Red CAUTION: When viewing the pulsating visual approach slope indicators VISUAL APPROACH in the pulsating white or pulsating red sectors, it is possible to mistake this lighting aid for another aircraft or a ground vehicle. Pilots should  $\bigcirc$ SLOPE INDICATOR exercise caution when using this type of system. VASI VISUAL APPROACH SLOPE INDICATOR TRI-COLOR VISUAL APPROACH  $(V_4)$ WITH STANDARD THRESHOLD CLEARANCE SLOPE INDICATOR **PROVIDED** ALL LIGHTS WHITE --- TOO HIGH **TRCV** FAR LIGHTS RED - ON GLIDE SLOPE NEAR LIGHTS WHITE -- - TOO LOW VASI 2 VASI 4 On Glide Path 36 36 CAUTION: When the aircraft descends from green to red, the pilot may **THRESHOLD** THRESHOLD see a dark amber color during the transition from green to red. VASI 12  $(V_5)$ ALIGNMENT OF ELEMENTS SYSTEMS 36

#### VISUAL APPROACH SLOPE INDICATOR

#### VASI

THRESHOLD

3-BAR, 6 OR 16 BOX, VISUAL APPROACH SLOPE INDICATOR THAT PROVIDES 2 GLIDE ANGLES AND 2 THRESHOLD CROSSING HEIGHTS.



# ALIGNMENT OF ELEMENTS SYSTEMS APAP

Above glide path

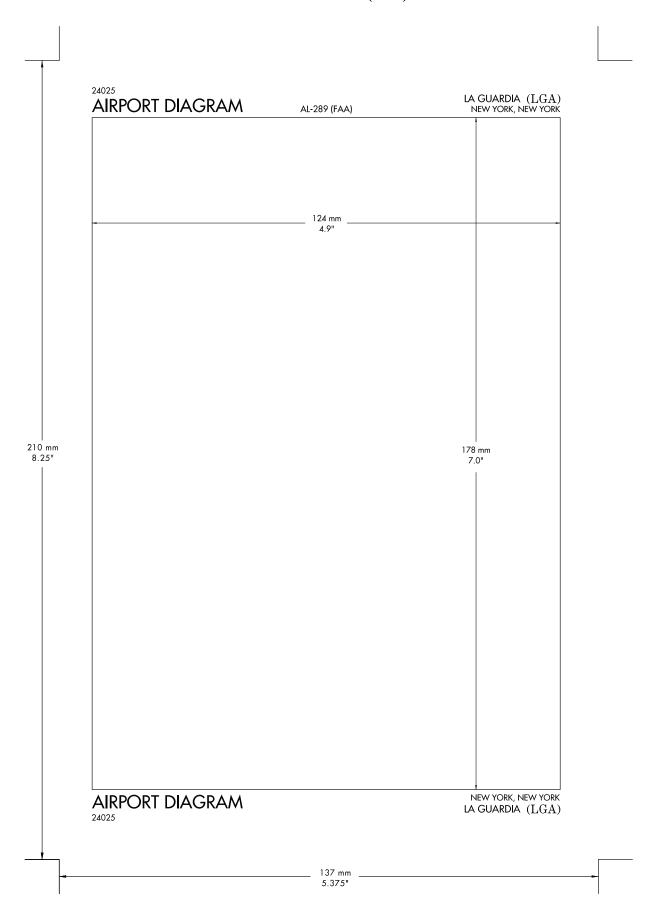
Painted panels which may be lighted at night. To use the system the pilot positions the aircraft so the elements are in alignment.

On Glide Path

Below Glide Path

LEGEND 00000

#### APPENDIX 3 AIRPORT DIAGRAM CHART (TPP) – FORMAT



#### **APPENDIX 4 MARGIN DATA (FAA FORMAT)**

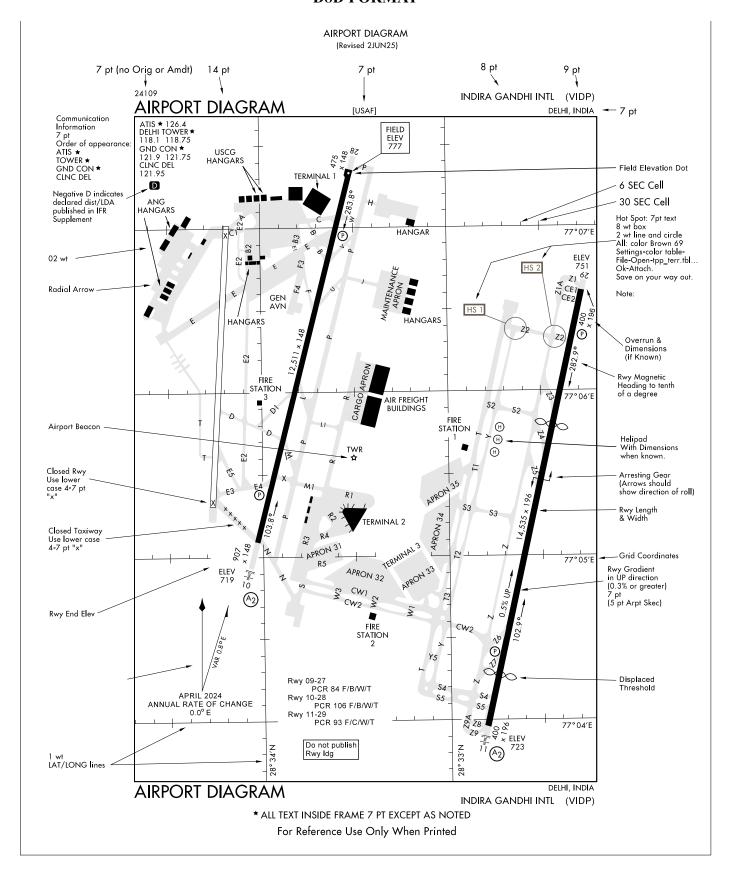
ΓΕ (7 Pt)		Al	IRPORT NAME (9 Pt)	AIRPORT LOCATIO IDENTIFIER (9 OR 8 CENTURY EXPAND
24025 AIRPORT DIAG	GRAM	AL-289 (FAA)		LA GUARDIA (LGA) NEW YORK, NEW YORK
		1		/
CHART TITLE (14 Pt)			GEOGRAPHIC LOCA	ATION NAME (8 Pt)
	CHART REFER	ENCÉ NUMBER (7 Pt)		
	ALL TYPE IS F	UTURA MEDIUM EXC	EPT AS NOTED.	

LA GUARDIA (LGA)

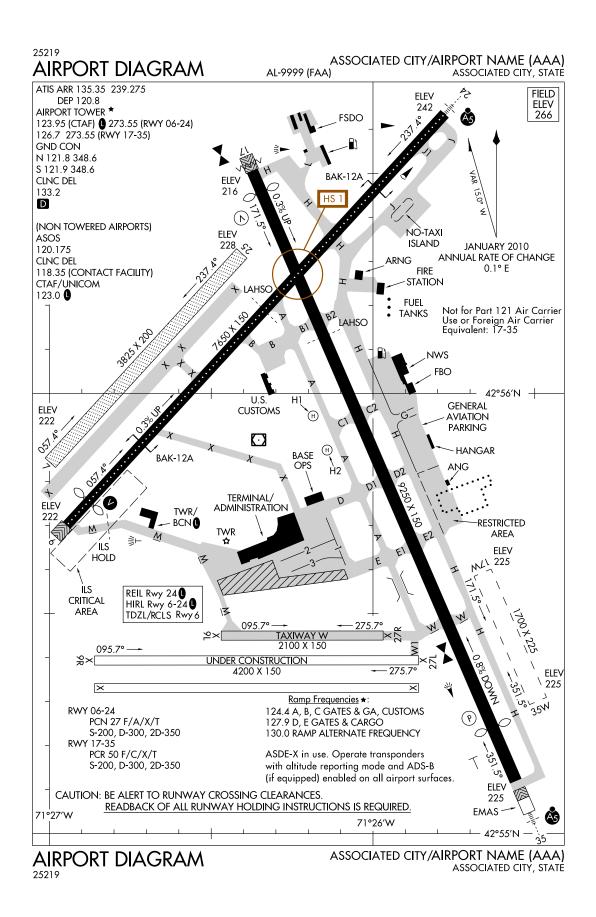
A-5

24025

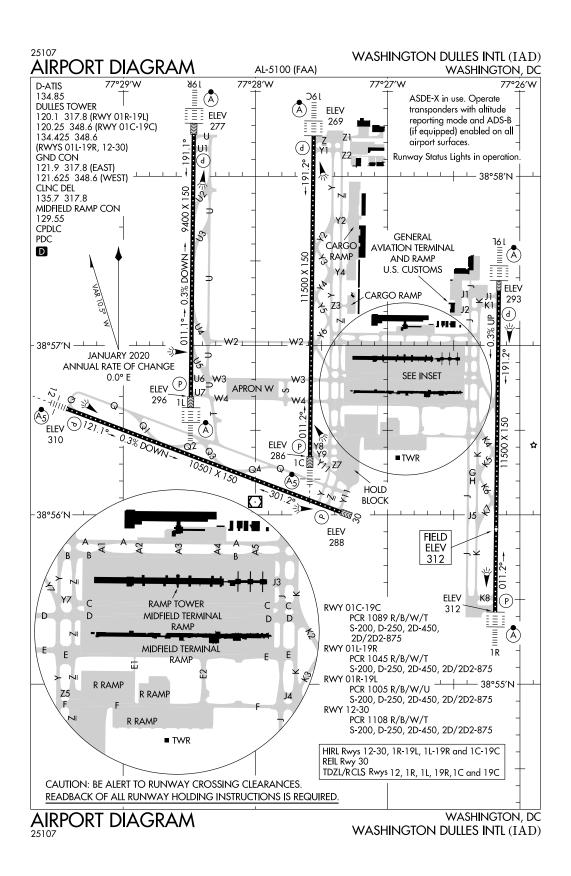
## APPENDIX 5 DoD FORMAT



#### APPENDIX 6 AIRPORT DIAGRAM



#### APPENDIX 7 AIRPORT DIAGRAM WITH INSET



#### APPENDIX 8 AIRPORT DIAGRAM – CONGESTED/ROTATED

