

CHANGE

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**JO 7110.10X
CHG 2**

Air Traffic Organization Policy

Effective Date:
January 8, 2015

SUBJ: Flight Services

- 1. Purpose of This Change.** This change transmits revised pages to Federal Aviation Administration Order JO 7110.10X, Flight Services, and the Briefing Guide.
- 2. Audience.** This change applies to select offices in Washington headquarters, service area offices, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, and to all air traffic field facilities, international aviation field offices, and the interested aviation public.
- 3. Where Can I Find This Change?** This change is available on the FAA Web site at http://faa.gov/air_traffic/publications and http://employees.faa.gov/tools_resources/orders_notices/.
- 4. Explanation of Policy Change.** See the Explanation of Changes attachment which has editorial corrections and changes submitted through normal procedures. The Briefing Guide lists only new or modified material, along with background.
- 5. Distribution.** This change is distributed to select offices in Washington headquarters, service area offices, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, and to all air traffic field facilities, international aviation field offices, and the interested aviation public.
- 6. Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.
- 7. Page Control Chart.** See the page control chart attachment.



Elizabeth L. Ray
Vice President, Mission Support Services
Air Traffic Organization

Date: 11/12/14

**Flight Services
Explanation of Changes
Change 2**

**Direct questions through appropriate facility/service center office staff
to the Office of Primary Interest (OPI)**

a. Appendix A. ICAO FLIGHT PLANS

Typographical error correction.

b. Entire Publication

Additional editorial/format changes were made where necessary. Revision bars were not used because of the insignificant nature of these changes.

PAGE CONTROL CHART

REMOVE PAGES	DATED	INSERT PAGES	DATED
6-3-1	4/3/14	6-3-1	1/8/15
6-3-2	4/3/14	6-3-2	4/3/14
9-5-1	4/3/14	9-5-1	1/8/15
9-5-2	4/3/14	9-5-2	4/3/14
9-8-1	8/22/13	9-8-1	4/3/14
Appendix A-11	4/3/14	Appendix A-11	1/8/15
Appendix A-12	4/3/14	Appendix A-12	4/3/14
PCG-1	7/24/14	PCG-1	1/8/15
PCG A-11 through PCG A-16	7/24/14	PCG A-11 through PCG A-16	1/8/15
PCG C-3	7/24/14	PCG C-3	7/24/14
PCG C-4 through PCG C-9	7/24/14	PCG C-4 through PCG C-9	1/8/15
PCG D-1	7/24/14	PCG D-1	7/24/14
PCG D-2 through PCG D-4	7/24/14	PCG D-2 through PCG D-4	1/8/15

Section 3. IFR Flight Plan Handling

6-3-1. IFR FLIGHT PLANS

IFR flight plans should consist of items 1 through 17 of FAA Form 7233-1 or electronic equivalent. Items 1 through 11 must be transmitted to the ARTCC as part of the IFR flight plan proposal. Items 12 through 17 must be retained by the FSS or in the operational system and be available upon request.

NOTE-

1. *Part-time FSSs must forward items 1 through 17 in accordance with para 6-1-7, Part-time FSS Closure Action.*

2. *Procedures for automatic assignment of RNAV routes are contained in para 6-2-3, Flight Plans with Area Navigation (RNAV) Routes in Domestic U.S. Airspace.*

6-3-2. NOTIFYING ARTCC

Transmit flight plans and flight plan amendments to the ARTCC for the departure point. Facilities should use FAA Order JO 7350.9, Location Identifiers, or the appropriate aeronautical charts to determine the ARTCC to which each transmission must be made. Transmit flight plans (if necessary) and flight plan amendments via interphone to the flight data position (error referral position) or departure sector when the aircraft's proposed departure time is less than 30 minutes from transmittal time. Advise the ARTCC's departure sector or flight data position (error referral position), via interphone, when a message is received indicating ineligibility or a response is not received via data terminal within 10 minutes. Transmit flight plans as follows:

a. When multiple (two or more) flight plans are received from the same aircraft, or for flight plans which propose alternating VFR and IFR, stopover, or terminal area delay, the station receiving the flight plans transmits separate flight plans to the appropriate ARTCCs for each IFR portion or segment.

b. Transmit flight plans specifying special use airspace delays (MOAs, warning areas, restricted areas, ATCAA) as in subpara 6-3-2 a except when letters of agreement specify otherwise.

c. Aerial refueling delays, or any other en route delays not covered in subparas. 6-3-2 a or b and not involving a change of altitude stratum, do not require

separate messages. Delay information must be filed within the route of flight. If a change of altitude stratum is indicated, transmit separate messages as in subparas 6-3-2 a or b.

d. When a composite, stopover, or terminal area delay flight plan is revised:

1. Before departure, transmit the information to the original addressees plus any new addressees.

2. After departure, transmit the information to all new addresses that are affected by the change.

e. When a flight is to depart after 0500 hours local time on the day following the filing of the flight plan, do not transmit the flight plan to the ARTCC until after 0000 hours local time.

NOTE-

In the event of a time zone difference between the station and the associated ARTCC, use the ARTCC's local time in determining transmission time.

f. Address all IFR flight plan messages to the ARTCC serving the point of departure and all concerned oceanic and non-conterminous air traffic service (ATS) units, except FAA ATCTs.

NOTE-

The ARTCC within whose control area IFR flight is proposed to begin will forward the proposed tower en route flight plan data to the appropriate departure terminal facility.

g. For flights inbound to the conterminous U.S. from Alaska or Hawaii, address only the first conterminous U.S. ARTCC; for example, for a proposed flight from Sitka to Houston, address PAZAZQZX, CZVRZQZX, and KZSEZQZX.

REFERENCE-

FAAO JO 7110.65, Para 2-2-2, Forwarding Information.

6-3-3. IFR FLIGHT PLAN CONTROL MESSAGES

Transmit all proposed IFR flight plan messages to the ARTCC within whose control area IFR flight is proposed to begin.

a. Communications Functions. Flight plan data messages must be addressed to the computer only. All other types of messages for ARTCC attention must be addressed to the Flight Data position only. Acknowledgements for all numbered messages will

be received from the computer or the Flight Data position indicating receipt by the ARTCC, but not necessarily computer acceptance. (See TBL 6-3-1.)

**TBL 6-3-1
ARTCC ID & Computer Flight Data**

ARTCC	ID	Computer	Flight Data
Albuquerque	ZAB	KZABZQZX	KZABZRZX
Atlanta	ZTL	KZTLZQZX	KZTLZRZX
Anchorage	ZAN	PAZAZQZX	PAZAZRZX
Boston	ZBW	KZBWZQZX	KZBWZRZX
Chicago	ZAU	KZAUZQZX	KZAUZRZX
Cleveland	ZOB	KZOBZQZX	KZOBZRZX
Denver	ZDV	KZDVZQZX	KZDVZRZX
Fort Worth	ZFW	KZFWZQZX	KZFWZRZX
Honolulu	ZHN	PHZHZQZX	PHZHZRZX
Houston	ZHU	KZHUZQZX	KZHUZRZX
Indianapolis	ZID	KZIDZQZX	KZIDZRZX
Jacksonville	ZJX	KZJXZQZX	KZJXRZX
Kansas City	ZKC	KZKCZQZX	KZKCZRZX
Los Angeles	ZLA	KZLAZQZX	KZLAZRZX
Memphis	ZME	KZMEZQZX	KZMEZRZX
Miami	ZMA	KZMAZQZX	KZMAZRZX
Minneapolis	ZMP	KZMPZQZX	KZMPZRZX
New York	ZNY	KZNYZQZX	KZNYZRZX
Oakland	ZOA	KZ0AZQZX	KZ0AZRZX
Salt Lake	ZLC	KZLCZQZX	KZLCZRZX
San Juan	ZLU	TJZSZQZX	TJZSZRZX
Seattle	ZSE	KZSEZQZX	KZSEZRZX
Washington	ZDC	KZDCZQZX	KZDCZRZX

b. Adhere to a fixed order of data. Do not exceed the stated maximum number of characters or elements allowed for each field in messages addressed to an ARTCC computer. Flight plans filed containing more than the stated character maximums should be sent using the ARTCC flight data address.

c. For manual entry into Service B, one space character must be entered at the end of each data field. The first data field of a message need not be preceded by a space. The last data field of a message need not be followed by a space.

d. Each field of data is composed of one or more elements. Discrete elements of information within a field are separated by delimiters, generally slashes (/) or periods (ABC..DEF).

e. Messages addressed using a ARTCC flight data address (see TBL 6-3-1) are not processed by the ARTCC computer. Response and/or interpretation of these messages are dependent on flight data personnel action. The prime consideration of these

types of messages must be the readability of the transmitted data.

f. All domestic flight data processing computers have the capability to return acknowledgments to the source and, depending on local adaption, return error messages and accept amendments. Notify the appropriate ARTCC Data Systems Specialist or Primary A position when it is suspected that a flight plan has been erroneously rejected by the computer.

g. IFR flight plans specifying stopovers or terminal area delays require separate messages be sent to the appropriate ARTCCs for each segment. Unless otherwise covered by a letter of agreement, treat flight plans proposing SUA delays in the same manner. Separate messages are also required for any other en route delays if a change of altitude stratum is proposed at the delay point. See subparagraph 6-3-4n8(b)(2) for delays not involving a change of altitude stratum.

h. Some fields contain the necessary functions to operate the computer data terminal adapters and are designated by alpha characters (HIO..RAW-ER.V23.EUG/D0+30..16S). Do not separate these fields with spaces.

6-3-4. IFR FLIGHT PLAN CONTROL MESSAGE FORMAT

For En Route Automation System Flight Data Processing (EAS FDP) acceptance, the complete message contents, the order of data, the number of characters allowed within any data field or element, and any associated operational procedures or restrictions are as follows (as used here, “field” refers to EAS FDP field):

NOTE-
Detailed operating instructions for processing IFR Flight Plans are contained in the operational system instructions.

a. Start of Message Code (Field A). (New Line Key)

b. Preamble Line (Field B). Consists of originator, priority, and addressee(s).

c. Originator Line (Field C). Consists of a six-digit date-time group and the eight-character originator identifier.

d. End of Line Function (Field E). Same as subpara 6-3-4a.

Section 5. Area Forecast (FA)

9-5-1. GENERAL

a. Area forecasts (FA) are available through the WMSCR and provide an overview of weather conditions which could impact aviation operations. FAs are issued by the Aviation Weather Center (AWC) in Kansas City, Missouri, the Alaska Aviation Weather Unit (AAWU) in Anchorage, Alaska, and

the Weather Forecast Office (WFO) in Honolulu, Hawaii. The delineation of the areas is specified in the National Weather Service Instruction 10-811. Canadian and Mexican FAs are also available through WMSCR.

b. FAs consist of the following elements according to each geographical location in TBL 9-5-1.

TBL 9-5-1

	Boston and Miami	Chicago and Fort Worth	San Francisco and Salt Lake City	Gulf of Mexico	Caribbean	Hawaii	Alaska
Synopsis	X	X	X	X	X	X	X
VFR Clouds and Weather	X	X	X				
Clouds and Weather				X	X	X	X (Includes AIRMETS)
Icing and Freezing Level				X	X		X
Turbulence				X	X		X
VFR Clouds and Weather includes clouds with bases higher than or equal to 1,000 feet							

9-5-2. AREA FORECAST (FA) SCHEDULE

FAs are issued three times a day in the contiguous U.S., Alaska, and the Gulf of Mexico; and four times

a day in Hawaii and the Caribbean. The issuance times are in TBL 9-5-2.

TBL 9-5-2

	Boston and Miami (UTC)	Chicago and Fort Worth (UTC)	San Francisco and Salt Lake City (UTC)	Gulf of Mexico (UTC)	Caribbean (UTC)	Hawaii (UTC)	Alaska (UTC)
1 st Issuance	0845 DT 0945 ST	0945 DT 1045 ST	1045 DT 1145 ST	0130	0330	0340	0415 DT 0515 ST
2 nd Issuance	1745 DT 1845 ST	1845 DT 1945 ST	1945 DT 2045 ST	1030	0930	0940	1215 DT 1315 ST
3 rd Issuance	0045 DT 0145 ST	0145 DT 0245 ST	0245 DT 0345 DT	1830	1530	1540	2015 DT 2115 ST
4 th Issuance					2130	2140	
Note: DT – Daylight Time, ST – Standard Time, UTC – Coordinated Universal Time							

9-5-3. DISTRIBUTION

Distribution of FAs is made by WMSCR in accordance with a predetermined list for each circuit based upon intra-circuit coordinated requirements.

Section 8. Center Weather Advisory (CWA)

9-8-1. GENERAL

A Center Weather Advisory (CWA) is an unscheduled weather advisory for conditions meeting or approaching national in-flight advisory (WA, WS, or WST) criteria. It is primarily used by aircrews to anticipate and avoid adverse weather conditions in the en route and terminal environments.

9-8-2. CRITERIA

a. CWAs are valid for up to 2 hours and may include forecasts of conditions expected to begin within 2 hours of issuance. If conditions are expected to persist after the advisory's valid period, a statement to that effect is included in the last line of the text. Additional CWAs will subsequently be issued as appropriate. The CWSU will issue a CWA:

1. When necessary to supplement an existing WS, WST, or WA for the purpose of refining or updating the location, movement, extent, or intensity of the weather event relevant to the ARTCC's area of responsibility.

2. When an inflight advisory has not yet been issued, but the observed or expected weather conditions meet WS, WST or WA criteria based on current pilot reports and reinforced by other sources of information concerning existing meteorological conditions.

3. When observed, or developing weather conditions do not meet WS, WST or WA criteria but current pilot reports or other weather information sources indicate that an existing, or anticipated, meteorological phenomena will adversely affect the

safe flow of air traffic within the ARTCC's area of responsibility.

b. The CWA will describe the location of the phenomenon using ARTCC relevant points of reference, such as VORs, and will include the height, extent, intensity, and movement of the phenomenon. Each CWA will have a phenomenon number.

c. The format of the CWA communications header is: (ARTCC designator)(phenomenon number) CWA (date/time issued in UTC)/(ARTCC designator) CWA (issuance number) VALID UNTIL (date/time in UTC)/(FROM) (affected area)/(text).

EXAMPLE-

ZOB1 CWA 032141

ZOB CWA 101 VALID UNTIL 032300

*FROM 10S DET TO 40N DJB TO 40E SBN TO 80SE MKG
LN SEV TSTMS WITH EXTRM PCPN MOVG FROM
2525 3/4 INCH HAIL RPRTD LAST 5 MINS 20 SW YIP.
TSTMS WITH HVY TO EXTRM PCPN CONTG DTW
AREA BYD 2300*

ZKC1 CWA 121528

ZKC CWA 102 VALID UNTIL 121728

*STL DIAM 30 NM. NMRS RPTS OF MOD TO SEV ICG
080/090.. LGT OR NEG ICG RPTD 040/120 RMNDR OF
ZKC AREA AND NE OF AREA.*

9-8-3. DISTRIBUTION

The CWA will be distributed to ARTCC area supervisors and traffic management coordinators and will be entered through FAA AISR and other communications media to make it available for dissemination to other FAA and NWS facilities.

RNAV SPECIFICATIONS

A1	RNAV 10 (RNP 10)
B1	RNAV 5 all permitted sensors
B2	RNAV 5 GNSS
B3	RNAV 5 DME/DME
C4	RNAV 2 DME/DME/IRU
D1	RNAV 1 all permitted sensors
D2	RNAV 1 GNSS
D3	RNAV 1 DME/DME
D4	RNAV 1 DME/DME/IRU

B4	RNAV 5 VOR/DME
B5	RNAV 5 INS or IRS
B6	RNAV 5 LORAN C
C1	RNAV 2 all permitted sensors
C2	RNAV 2 GNSS
C3	RNAV 2 DME/DME

RNP SPECIFICATIONS

L1	RNP 4
O1	Basic RNP 1 all permitted sensors
O2	Basic RNP 1 GNSS
O3	Basic RNP 1 DME/DME
O4	Basic RNP 1 DME/DME/IRU
S1	RNP APCH
S2	RNP APCH with BARO-VNAV
T1	RNP AR APCH with RF (special authorization required)
T2	RNP AR APCH without RF (special authorization required)

Combinations of alphanumeric characters not indicated above are reserved.

NAV/ Significant data related to navigation equipment, other than specified in PBN/, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, for example, NAV/GBAS SBAS.

NOTE-

See paragraph 6-2-3 to file NAV/ for flight with Area Navigation (RNAV) Routes in Domestic U.S. airspace.

COM/ Indicate communications applications or capabilities not specified in Item 10(a).

DAT/ Indicate data applications or capabilities not specified in 10(a).

SUR/ Include surveillance applications or capabilities not specified in Item 10(b). If ADS-B capability filed in Item 10 is compliant with RTCA DO-260B, include the item "260B" in SUR/. If ADS-B capability filed in Item 10 is compliant with RTCA DO-282B, include the item "282B" in SUR/.

EXAMPLE -

1. SUR/260B
2. SUR/260B 282B

DEP/ Insert the non-ICAO identifier of departure aerodrome, if ZZZZ is inserted in Item 13, or the ATS unit from which supplementary flight plan data can be obtained, if AFIL is inserted in Item 13. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location as follows:

With 4 figures describing latitude in degrees and tens and units of minutes followed by "N" (North) or "S" (South), followed by 5 figures describing longitude in degrees and tens and units of minutes, followed by "E" (East) or "W" (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. 4620N07805W (11 characters).

OR Bearing and distance from the nearest significant point, as follows:

The identification of the significant point followed by the bearing from the point in the form of 3 figures giving degrees magnetic, followed by the distance from the point in the form of 3 figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical,

degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros, e.g., a point of 180° magnetic at a distance of 40 nautical miles from VOR “DUB” should be expressed as DUB180040.

OR The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

DEST/ Insert the non-ICAO identifier of destination aerodrome, if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under DEP/ above.

DOF/ The date of flight departure in a six figure format (YYMMDD, where YY equals the year, MM equals the month and DD equals the day). The FAA will not accept flight plans filed with Date of Flight resulting in more than 24 hours in advance.

REG/ The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in Item 7.

EET/ Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority.

EXAMPLES-

EET/CAP0745 XYZ0830

EET/EINN0204

SEL/ SELCAL Code, for aircraft so equipped.

TYP/ Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if ZZZZ is inserted in Item 9.

EXAMPLE-

TYP/2F15 5F5 3B2

CODE/ Aircraft address (expressed in the form of an alphanumeric code of six hexadecimal characters) when required by the appropriate ATS authority. Example: “F00001” is the lowest aircraft address contained in the specific block administered by ICAO.

DLE/ En route delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four figure time in hours and minutes (hhmm).

EXAMPLE-

DLE/MDG0030

OPR/ ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.

ORGN/ The originator—s 8 letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.

NOTE-

In some areas, flight plan reception centers may insert the ORGN/ identifier and originator’s AFTN address automatically.

PER/ Aircraft performance data, indicated by a single letter as specified in the Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume I — Flight Procedures, if so prescribed by the appropriate ATS authority.

ALTN/ Name of destination alternate aerodrome(s), if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

RALT/ ICAO four letter indicator(s) for en-route alternate(s), as specified in Doc 7910, Location Indicators, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

TALT/ ICAO four letter indicator(s) for take-off alternate, as specified in Doc 7910, Location Indicators, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical

PILOT/CONTROLLER GLOSSARY

PURPOSE

a. This Glossary was compiled to promote a common understanding of the terms used in the Air Traffic Control system. It includes those terms which are intended for pilot/controller communications. Those terms most frequently used in pilot/controller communications are printed in *bold italics*. The definitions are primarily defined in an operational sense applicable to both users and operators of the National Airspace System. Use of the Glossary will preclude any misunderstandings concerning the system's design, function, and purpose.

b. Because of the international nature of flying, terms used in the Lexicon, published by the International Civil Aviation Organization (ICAO), are included when they differ from FAA definitions. These terms are followed by "[ICAO]." For the reader's convenience, there are also cross references to related terms in other parts of the Glossary and to other documents, such as the Code of Federal Regulations (CFR) and the Aeronautical Information Manual (AIM).

c. This Glossary will be revised, as necessary, to maintain a common understanding of the system.

EXPLANATION OF CHANGES

d. Terms Added:

APPROACH WITH VERTICAL GUIDANCE

DESIGNATED COMMON TRAFFIC ADVISORY FREQUENCY (CTAF) AREA

e. Terms Modified:

COMMON TRAFFIC ADVISORY FREQUENCY (CTAF)

f. Editorial/format changes were made where necessary. Revision bars were not used due to the insignificant nature of the changes.

APD–

(See AUTOMATED PROBLEM DETECTION.)

APDIA–

(See AUTOMATED PROBLEM DETECTION INHIBITED AREA.)

APPROACH CLEARANCE– Authorization by ATC for a pilot to conduct an instrument approach. The type of instrument approach for which a clearance and other pertinent information is provided in the approach clearance when required.

(See CLEARED APPROACH.)

(See INSTRUMENT APPROACH PROCEDURE.)

(Refer to AIM.)

(Refer to 14 CFR Part 91.)

APPROACH CONTROL FACILITY– A terminal ATC facility that provides approach control service in a terminal area.

(See APPROACH CONTROL SERVICE.)

(See RADAR APPROACH CONTROL FACILITY.)

APPROACH CONTROL SERVICE– Air traffic control service provided by an approach control facility for arriving and departing VFR/IFR aircraft and, on occasion, en route aircraft. At some airports not served by an approach control facility, the ARTCC provides limited approach control service.

(See ICAO term APPROACH CONTROL SERVICE.)

(Refer to AIM.)

APPROACH CONTROL SERVICE [ICAO]– Air traffic control service for arriving or departing controlled flights.

APPROACH GATE– An imaginary point used within ATC as a basis for vectoring aircraft to the final approach course. The gate will be established along the final approach course 1 mile from the final approach fix on the side away from the airport and will be no closer than 5 miles from the landing threshold.

APPROACH HOLD AREA– The locations on taxiways in the approach or departure areas of a runway designated to protect landing or departing aircraft. These locations are identified by signs and markings.

APPROACH LIGHT SYSTEM–

(See AIRPORT LIGHTING.)

APPROACH SEQUENCE– The order in which aircraft are positioned while on approach or awaiting approach clearance.

(See LANDING SEQUENCE.)

(See ICAO term APPROACH SEQUENCE.)

APPROACH SEQUENCE [ICAO]– The order in which two or more aircraft are cleared to approach to land at the aerodrome.

APPROACH SPEED– The recommended speed contained in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration.

APPROACH WITH VERTICAL GUIDANCE (APV)– A term used to describe RNAV approach procedures that provide lateral and vertical guidance but do not meet the requirements to be considered a precision approach.

APPROPRIATE ATS AUTHORITY [ICAO]– The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned. In the United States, the “appropriate ATS authority” is the Program Director for Air Traffic Planning and Procedures, ATP-1.

APPROPRIATE AUTHORITY–

a. Regarding flight over the high seas: the relevant authority is the State of Registry.

b. Regarding flight over other than the high seas: the relevant authority is the State having sovereignty over the territory being overflown.

APPROPRIATE OBSTACLE CLEARANCE MINIMUM ALTITUDE– Any of the following:

(See MINIMUM EN ROUTE IFR ALTITUDE.)

(See MINIMUM IFR ALTITUDE.)

(See MINIMUM OBSTRUCTION CLEARANCE ALTITUDE.)

(See MINIMUM VECTORING ALTITUDE.)

APPROPRIATE TERRAIN CLEARANCE MINIMUM ALTITUDE– Any of the following:

(See MINIMUM EN ROUTE IFR ALTITUDE.)

(See MINIMUM IFR ALTITUDE.)

(See MINIMUM OBSTRUCTION CLEARANCE ALTITUDE.)

(See MINIMUM VECTORING ALTITUDE.)

APRON– A defined area on an airport or heliport intended to accommodate aircraft for purposes of loading or unloading passengers or cargo, refueling,

parking, or maintenance. With regard to seaplanes, a ramp is used for access to the apron from the water.

(See ICAO term APRON.)

APRON [ICAO]– A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, refueling, parking or maintenance.

ARC– The track over the ground of an aircraft flying at a constant distance from a navigational aid by reference to distance measuring equipment (DME).

AREA CONTROL CENTER [ICAO]– An air traffic control facility primarily responsible for ATC services being provided IFR aircraft during the en route phase of flight. The U.S. equivalent facility is an air route traffic control center (ARTCC).

AREA NAVIGATION (RNAV)– A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Note: Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.

AREA NAVIGATION (RNAV) APPROACH CONFIGURATION:

a. STANDARD T– An RNAV approach whose design allows direct flight to any one of three initial approach fixes (IAF) and eliminates the need for procedure turns. The standard design is to align the procedure on the extended centerline with the missed approach point (MAP) at the runway threshold, the final approach fix (FAF), and the initial approach/intermediate fix (IAF/IF). The other two IAFs will be established perpendicular to the IF.

b. MODIFIED T– An RNAV approach design for single or multiple runways where terrain or operational constraints do not allow for the standard T. The “T” may be modified by increasing or decreasing the angle from the corner IAF(s) to the IF or by eliminating one or both corner IAFs.

c. STANDARD I– An RNAV approach design for a single runway with both corner IAFs eliminated. Course reversal or radar vectoring may be required at busy terminals with multiple runways.

d. TERMINAL ARRIVAL AREA (TAA)– The TAA is controlled airspace established in conjunction with the Standard or Modified T and I RNAV approach configurations. In the standard TAA, there are three areas: straight-in, left base, and right base. The arc boundaries of the three areas of the TAA are published portions of the approach and allow aircraft to transition from the en route structure direct to the nearest IAF. TAAs will also eliminate or reduce feeder routes, departure extensions, and procedure turns or course reversal.

1. STRAIGHT-IN AREA– A 30NM arc centered on the IF bounded by a straight line extending through the IF perpendicular to the intermediate course.

2. LEFT BASE AREA– A 30NM arc centered on the right corner IAF. The area shares a boundary with the straight-in area except that it extends out for 30NM from the IAF and is bounded on the other side by a line extending from the IF through the FAF to the arc.

3. RIGHT BASE AREA– A 30NM arc centered on the left corner IAF. The area shares a boundary with the straight-in area except that it extends out for 30NM from the IAF and is bounded on the other side by a line extending from the IF through the FAF to the arc.

AREA NAVIGATION (RNAV) GLOBAL POSITIONING SYSTEM (GPS) PRECISION RUNWAY MONITORING (PRM) APPROACH – A GPS approach, which requires vertical guidance, used in lieu of an ILS PRM approach to conduct approaches to parallel runways whose extended centerlines are separated by less than 4,300 feet and at least 3,000 feet, where simultaneous close parallel approaches are permitted. Also used in lieu of an ILS PRM and/or LDA PRM approach to conduct Simultaneous Offset Instrument Approach (SOIA) operations.

ARINC– An acronym for Aeronautical Radio, Inc., a corporation largely owned by a group of airlines. ARINC is licensed by the FCC as an aeronautical station and contracted by the FAA to provide communications support for air traffic control and meteorological services in portions of international airspace.

ARMY AVIATION FLIGHT INFORMATION BULLETIN– A bulletin that provides air operation

data covering Army, National Guard, and Army Reserve aviation activities.

ARO-

(See AIRPORT RESERVATION OFFICE.)

ARRESTING SYSTEM- A safety device consisting of two major components, namely, engaging or catching devices and energy absorption devices for the purpose of arresting both tailhook and/or nontailhook-equipped aircraft. It is used to prevent aircraft from overrunning runways when the aircraft cannot be stopped after landing or during aborted takeoff. Arresting systems have various names; e.g., arresting gear, hook device, wire barrier cable.

(See ABORT.)

(Refer to AIM.)

ARRIVAL AIRCRAFT INTERVAL- An internally generated program in hundredths of minutes based upon the AAR. AAI is the desired optimum interval between successive arrival aircraft over the vertex.

ARRIVAL CENTER- The ARTCC having jurisdiction for the impacted airport.

ARRIVAL DELAY- A parameter which specifies a period of time in which no aircraft will be metered for arrival at the specified airport.

ARRIVAL SECTOR- An operational control sector containing one or more meter fixes.

ARRIVAL SECTOR ADVISORY LIST- An ordered list of data on arrivals displayed at the PVD/MDM of the sector which controls the meter fix.

ARRIVAL SEQUENCING PROGRAM- The automated program designed to assist in sequencing aircraft destined for the same airport.

ARRIVAL TIME- The time an aircraft touches down on arrival.

ARSR-

(See AIR ROUTE SURVEILLANCE RADAR.)

ARTCC-

(See AIR ROUTE TRAFFIC CONTROL CENTER.)

ARTS-

(See AUTOMATED RADAR TERMINAL SYSTEMS.)

ASDA-

(See ACCELERATE-STOP DISTANCE AVAILABLE.)

ASDA [ICAO]-

(See ICAO Term ACCELERATE-STOP DISTANCE AVAILABLE.)

ASDE-

(See AIRPORT SURFACE DETECTION EQUIPMENT.)

ASF-

(See AIRPORT STREAM FILTER.)

ASLAR-

(See AIRCRAFT SURGE LAUNCH AND RECOVERY.)

ASP-

(See ARRIVAL SEQUENCING PROGRAM.)

ASR-

(See AIRPORT SURVEILLANCE RADAR.)

ASR APPROACH-

(See SURVEILLANCE APPROACH.)

ASSOCIATED- A radar target displaying a data block with flight identification and altitude information.

(See UNASSOCIATED.)

ATC-

(See AIR TRAFFIC CONTROL.)

ATC ADVISES- Used to prefix a message of noncontrol information when it is relayed to an aircraft by other than an air traffic controller.

(See ADVISORY.)

ATC ASSIGNED AIRSPACE- Airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.

(See SPECIAL USE AIRSPACE.)

ATC CLEARANCE-

(See AIR TRAFFIC CLEARANCE.)

ATC CLEARS- Used to prefix an ATC clearance when it is relayed to an aircraft by other than an air traffic controller.

ATC INSTRUCTIONS- Directives issued by air traffic control for the purpose of requiring a pilot to take specific actions; e.g., "Turn left heading two five zero," "Go around," "Clear the runway."

(Refer to 14 CFR Part 91.)

ATC PREFERRED ROUTE NOTIFICATION– URET notification to the appropriate controller of the need to determine if an ATC preferred route needs to be applied, based on destination airport.

(See ROUTE ACTION NOTIFICATION.)

(See USER REQUEST EVALUATION TOOL.)

ATC PREFERRED ROUTES– Preferred routes that are not automatically applied by Host.

ATC REQUESTS– Used to prefix an ATC request when it is relayed to an aircraft by other than an air traffic controller.

ATC SECURITY SERVICES – Communications and security tracking provided by an ATC facility in support of the DHS, the DOD, or other Federal security elements in the interest of national security. Such security services are only applicable within designated areas. ATC security services do not include ATC basic radar services or flight following.

ATC SECURITY SERVICES POSITION – The position responsible for providing ATC security services as defined. This position does not provide ATC, IFR separation, or VFR flight following services, but is responsible for providing security services in an area comprising airspace assigned to one or more ATC operating sectors. This position may be combined with control positions.

ATC SECURITY TRACKING – The continuous tracking of aircraft movement by an ATC facility in support of the DHS, the DOD, or other security elements for national security using radar (i.e., radar tracking) or other means (e.g., manual tracking) without providing basic radar services (including traffic advisories) or other ATC services not defined in this section.

ATCAA–

(See ATC ASSIGNED AIRSPACE.)

ATCRBS–

(See RADAR.)

ATCSCC–

(See AIR TRAFFIC CONTROL SYSTEM COMMAND CENTER.)

ATCT–

(See TOWER.)

ATD–

(See ALONG–TRACK DISTANCE.)

ATIS–

(See AUTOMATIC TERMINAL INFORMATION SERVICE.)

ATIS [ICAO]–

(See ICAO Term AUTOMATIC TERMINAL INFORMATION SERVICE.)

ATS ROUTE [ICAO]– A specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services.

Note: The term “ATS Route” is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure, etc.

ATTENTION ALL USERS PAGE (AAUP)– The AAUP provides the pilot with additional information relative to conducting a specific operation, for example, PRM approaches and RNAV departures.

AUTOLAND APPROACH–An autoland system aids by providing control of aircraft systems during a precision instrument approach to at least decision altitude and possibly all the way to touchdown, as well as in some cases, through the landing rollout. The autoland system is a sub-system of the autopilot system from which control surface management occurs. The aircraft autopilot sends instructions to the autoland system and monitors the autoland system performance and integrity during its execution.

AUTOMATED INFORMATION TRANSFER– A precoordinated process, specifically defined in facility directives, during which a transfer of altitude control and/or radar identification is accomplished without verbal coordination between controllers using information communicated in a full data block.

AUTOMATED MUTUAL-ASSISTANCE VESSEL RESCUE SYSTEM– A facility which can deliver, in a matter of minutes, a surface picture (SURPIC) of vessels in the area of a potential or actual search and rescue incident, including their predicted positions and their characteristics.

(See FAAO JO 7110.65, Para 10–6–4, INFLIGHT CONTINGENCIES.)

AUTOMATED PROBLEM DETECTION (APD)– An Automation Processing capability that compares trajectories in order to predict conflicts.

AUTOMATED PROBLEM DETECTION BOUNDARY (APB)– The adapted distance beyond a facilities boundary defining the airspace within which URET performs conflict detection.

(See USER REQUEST EVALUATION TOOL.)

AUTOMATED PROBLEM DETECTION INHIBITED AREA (APDIA)– Airspace surrounding a terminal area within which APD is inhibited for all flights within that airspace.

AUTOMATED RADAR TERMINAL SYSTEMS (ARTS)– A generic term for several tracking systems included in the Terminal Automation Systems (TAS). ARTS plus a suffix roman numeral denotes a major modification to that system.

a. ARTS IIIA. The Radar Tracking and Beacon Tracking Level (RT&BTL) of the modular, programmable automated radar terminal system. ARTS IIIA detects, tracks, and predicts primary as well as secondary radar-derived aircraft targets. This more sophisticated computer-driven system upgrades the existing ARTS III system by providing improved tracking, continuous data recording, and fail-soft capabilities.

b. Common ARTS. Includes ARTS IIE, ARTS IIIE; and ARTS IIIE with ACD (see DTAS) which combines functionalities of the previous ARTS systems.

c. Programmable Indicator Data Processor (PIDP). The PIDP is a modification to the AN/TPX-42 interrogator system currently installed in fixed RAPCONS. The PIDP detects, tracks, and predicts secondary radar aircraft targets. These are displayed by means of computer-generated symbols and alphanumeric characters depicting flight identification, aircraft altitude, ground speed, and flight plan data. Although primary radar targets are not tracked, they are displayed coincident with the secondary radar targets as well as with the other symbols and alphanumerics. The system has the capability of interfacing with ARTCCs.

AUTOMATED WEATHER SYSTEM– Any of the automated weather sensor platforms that collect weather data at airports and disseminate the weather information via radio and/or landline. The systems currently consist of the Automated Surface Observing System (ASOS), Automated Weather Sensor System (AWSS) and Automated Weather Observation System (AWOS).

AUTOMATED UNICOM– Provides completely automated weather, radio check capability and airport advisory information on an Automated UNICOM system. These systems offer a variety of features, typically selectable by microphone clicks, on the

UNICOM frequency. Availability will be published in the Airport/Facility Directory and approach charts.

AUTOMATIC ALTITUDE REPORT–
(See ALTITUDE READOUT.)

AUTOMATIC ALTITUDE REPORTING– That function of a transponder which responds to Mode C interrogations by transmitting the aircraft's altitude in 100-foot increments.

AUTOMATIC CARRIER LANDING SYSTEM– U.S. Navy final approach equipment consisting of precision tracking radar coupled to a computer data link to provide continuous information to the aircraft, monitoring capability to the pilot, and a backup approach system.

AUTOMATIC DEPENDENT SURVEILLANCE (ADS) [ICAO]– A surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position fixing systems, including aircraft identification, four dimensional position and additional data as appropriate.

AUTOMATIC DEPENDENT SURVEILLANCE–BROADCAST (ADS-B)– A surveillance system in which an aircraft or vehicle to be detected is fitted with cooperative equipment in the form of a data link transmitter. The aircraft or vehicle periodically broadcasts its GPS-derived position and other information such as velocity over the data link, which is received by a ground-based transmitter/receiver (transceiver) for processing and display at an air traffic control facility.

(See GLOBAL POSITIONING SYSTEM.)

(See GROUND-BASED TRANSCEIVER.)

AUTOMATIC DEPENDENT SURVEILLANCE–CONTRACT (ADS-C)– A data link position reporting system, controlled by a ground station, that establishes contracts with an aircraft's avionics that occur automatically whenever specific events occur, or specific time intervals are reached.

AUTOMATIC DIRECTION FINDER– An aircraft radio navigation system which senses and indicates the direction to a L/MF nondirectional radio beacon (NDB) ground transmitter. Direction is indicated to the pilot as a magnetic bearing or as a relative bearing to the longitudinal axis of the aircraft depending on the type of indicator installed in the aircraft. In certain applications, such as military, ADF operations may

be based on airborne and ground transmitters in the VHF/UHF frequency spectrum.

(See BEARING.)

(See NONDIRECTIONAL BEACON.)

AUTOMATIC FLIGHT INFORMATION SERVICE (AFIS) – ALASKA FSSs ONLY– The continuous broadcast of recorded non-control information at airports in Alaska where a FSS provides local airport advisory service. The AFIS broadcast automates the repetitive transmission of essential but routine information such as weather, wind, altimeter, favored runway, breaking action, airport NOTAMS, and other applicable information. The information is continuously broadcast over a discrete VHF radio frequency (usually the ASOS/AWSS/AWOS frequency.)

AUTOMATIC TERMINAL INFORMATION SERVICE– The continuous broadcast of recorded noncontrol information in selected terminal areas. Its purpose is to improve controller effectiveness and to relieve frequency congestion by automating the repetitive transmission of essential but routine information; e.g., “Los Angeles information Alfa. One three zero zero Coordinated Universal Time. Weather, measured ceiling two thousand overcast, visibility three, haze, smoke, temperature seven one, dew point five seven, wind two five zero at five, altimeter two niner niner six. I-L-S Runway Two Five Left approach in use, Runway Two Five Right closed, advise you have Alfa.”

(See ICAO term AUTOMATIC TERMINAL INFORMATION SERVICE.)

(Refer to AIM.)

AUTOMATIC TERMINAL INFORMATION SERVICE [ICAO]– The provision of current, routine information to arriving and departing aircraft by

means of continuous and repetitive broadcasts throughout the day or a specified portion of the day.

AUTOROTATION– A rotorcraft flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft is in motion.

a. Autorotative Landing/Touchdown Autorotation. Used by a pilot to indicate that the landing will be made without applying power to the rotor.

b. Low Level Autorotation. Commences at an altitude well below the traffic pattern, usually below 100 feet AGL and is used primarily for tactical military training.

c. 180 degrees Autorotation. Initiated from a downwind heading and is commenced well inside the normal traffic pattern. “Go around” may not be possible during the latter part of this maneuver.

AVAILABLE LANDING DISTANCE (ALD)– The portion of a runway available for landing and roll-out for aircraft cleared for LAHSO. This distance is measured from the landing threshold to the hold-short point.

AVIATION WEATHER SERVICE– A service provided by the National Weather Service (NWS) and FAA which collects and disseminates pertinent weather information for pilots, aircraft operators, and ATC. Available aviation weather reports and forecasts are displayed at each NWS office and FAA FSS.

(See EN ROUTE FLIGHT ADVISORY SERVICE.)

(See TRANSCRIBED WEATHER BROADCAST.)

(See WEATHER ADVISORY.)

(Refer to AIM.)

AWW–

(See SEVERE WEATHER FORECAST ALERTS.)

aircraft are held short of the applicable runway holding position marking.

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.

c. Pilots and controllers shall exercise good judgement to ensure that adequate separation exists between all aircraft on runways and taxiways at airports with inadequate runway edge lines or holding position markings.

CLEARANCE-

(See AIR TRAFFIC CLEARANCE.)

CLEARANCE LIMIT- The fix, point, or location to which an aircraft is cleared when issued an air traffic clearance.

(See ICAO term CLEARANCE LIMIT.)

CLEARANCE LIMIT [ICAO]- The point to which an aircraft is granted an air traffic control clearance.

CLEARANCE VOID IF NOT OFF BY (TIME)-

Used by ATC to advise an aircraft that the departure clearance is automatically canceled if takeoff is not made prior to a specified time. The pilot must obtain a new clearance or cancel his/her IFR flight plan if not off by the specified time.

(See ICAO term CLEARANCE VOID TIME.)

CLEARANCE VOID TIME [ICAO]- A time specified by an air traffic control unit at which a clearance ceases to be valid unless the aircraft concerned has already taken action to comply therewith.

CLEARED APPROACH- ATC authorization for an aircraft to execute any standard or special instrument approach procedure for that airport. Normally, an aircraft will be cleared for a specific instrument approach procedure.

(See CLEARED (Type of) APPROACH.)

(See INSTRUMENT APPROACH PROCEDURE.)

(Refer to 14 CFR Part 91.)

(Refer to AIM.)

CLEARED (Type of) APPROACH- ATC authorization for an aircraft to execute a specific instrument

approach procedure to an airport; e.g., "Cleared ILS Runway Three Six Approach."

(See APPROACH CLEARANCE.)

(See INSTRUMENT APPROACH PROCEDURE.)

(Refer to 14 CFR Part 91.)

(Refer to AIM.)

CLEARED AS FILED- Means the aircraft is cleared to proceed in accordance with the route of flight filed in the flight plan. This clearance does not include the altitude, DP, or DP Transition.

(See REQUEST FULL ROUTE CLEARANCE.)

(Refer to AIM.)

CLEARED FOR TAKEOFF- ATC authorization for an aircraft to depart. It is predicated on known traffic and known physical airport conditions.

CLEARED FOR THE OPTION- ATC authorization for an aircraft to make a touch-and-go, low approach, missed approach, stop and go, or full stop landing at the discretion of the pilot. It is normally used in training so that an instructor can evaluate a student's performance under changing situations.

(See OPTION APPROACH.)

(Refer to AIM.)

CLEARED THROUGH- ATC authorization for an aircraft to make intermediate stops at specified airports without refiling a flight plan while en route to the clearance limit.

CLEARED TO LAND- ATC authorization for an aircraft to land. It is predicated on known traffic and known physical airport conditions.

CLEARWAY- An area beyond the takeoff runway under the control of airport authorities within which terrain or fixed obstacles may not extend above specified limits. These areas may be required for certain turbine-powered operations and the size and upward slope of the clearway will differ depending on when the aircraft was certificated.

(Refer to 14 CFR Part 1.)

CLIMB TO VFR- ATC authorization for an aircraft to climb to VFR conditions within Class B, C, D, and E surface areas when the only weather limitation is restricted visibility. The aircraft must remain clear of clouds while climbing to VFR.

(See SPECIAL VFR CONDITIONS.)

(Refer to AIM.)

CLIMBOUT- That portion of flight operation between takeoff and the initial cruising altitude.

CLIMB VIA– An abbreviated ATC clearance that requires compliance with the procedure lateral path, associated speed restrictions, and altitude restrictions along the cleared route or procedure.

CLOSE PARALLEL RUNWAYS– Two parallel runways whose extended centerlines are separated by less than 4,300 feet and at least 3000 feet (750 feet for SOIA operations) that are authorized to conduct simultaneous independent approach operations. PRM and simultaneous close parallel appear in approach title. Dual communications, special pilot training, an Attention All Users Page (AAUP), NTZ monitoring by displays that have aural and visual alerting algorithms are required. A high update rate surveillance sensor is required for certain runway or approach course spacing.

CLOSED RUNWAY– A runway that is unusable for aircraft operations. Only the airport management/military operations office can close a runway.

CLOSED TRAFFIC– Successive operations involving takeoffs and landings or low approaches where the aircraft does not exit the traffic pattern.

CLOUD– A cloud is a visible accumulation of minute water droplets and/or ice particles in the atmosphere above the Earth's surface. Cloud differs from ground fog, fog, or ice fog only in that the latter are, by definition, in contact with the Earth's surface.

CLT–

(See **CALCULATED LANDING TIME**.)

CLUTTER– In radar operations, clutter refers to the reception and visual display of radar returns caused by precipitation, chaff, terrain, numerous aircraft targets, or other phenomena. Such returns may limit or preclude ATC from providing services based on radar.

(See **CHAFF**.)

(See **GROUND CLUTTER**.)

(See **PRECIPITATION**.)

(See **TARGET**.)

(See ICAO term **RADAR CLUTTER**.)

CMNPS–

(See **CANADIAN MINIMUM NAVIGATION PERFORMANCE SPECIFICATION AIRSPACE**.)

COASTAL FIX– A navigation aid or intersection where an aircraft transitions between the domestic route structure and the oceanic route structure.

CODES– The number assigned to a particular multiple pulse reply signal transmitted by a transponder.

(See **DISCRETE CODE**.)

COMBINED CENTER-RAPCON– An air traffic facility which combines the functions of an ARTCC and a radar approach control facility.

(See **AIR ROUTE TRAFFIC CONTROL CENTER**.)

(See **RADAR APPROACH CONTROL FACILITY**.)

COMMON POINT– A significant point over which two or more aircraft will report passing or have reported passing before proceeding on the same or diverging tracks. To establish/maintain longitudinal separation, a controller may determine a common point not originally in the aircraft's flight plan and then clear the aircraft to fly over the point.

(See **SIGNIFICANT POINT**.)

COMMON PORTION–

(See **COMMON ROUTE**.)

COMMON ROUTE– That segment of a North American Route between the inland navigation facility and the coastal fix.

OR

COMMON ROUTE– Typically the portion of a RNAV STAR between the en route transition end point and the runway transition start point; however, the common route may only consist of a single point that joins the en route and runway transitions.

COMMON TRAFFIC ADVISORY FREQUENCY (CTAF)– A frequency designed for the purpose of carrying out airport advisory practices while operating to or from an airport without an operating control tower. The CTAF may be a UNICOM, Multicom, FSS, or tower frequency and is identified in appropriate aeronautical publications.

(See **DESIGNATED COMMON TRAFFIC ADVISORY FREQUENCY (CTAF) AREA**.)

(Refer to AC 90-42, Traffic Advisory Practices at Airports Without Operating Control Towers.)

COMPASS LOCATOR– A low power, low or medium frequency (L/MF) radio beacon installed at the site of the outer or middle marker of an instrument landing system (ILS). It can be used for navigation at distances of approximately 15 miles or as authorized in the approach procedure.

a. Outer Compass Locator (LOM)– A compass locator installed at the site of the outer marker of an instrument landing system.

(See OUTER MARKER.)

b. Middle Compass Locator (LMM)– A compass locator installed at the site of the middle marker of an instrument landing system.

(See MIDDLE MARKER.)

(See ICAO term LOCATOR.)

COMPASS ROSE– A circle, graduated in degrees, printed on some charts or marked on the ground at an airport. It is used as a reference to either true or magnetic direction.

COMPLY WITH RESTRICTIONS– An ATC instruction that requires an aircraft being vectored back onto an arrival or departure procedure to comply with all altitude and/or speed restrictions depicted on the procedure. This term may be used in lieu of repeating each remaining restriction that appears on the procedure.

COMPOSITE FLIGHT PLAN– A flight plan which specifies VFR operation for one portion of flight and IFR for another portion. It is used primarily in military operations.

(Refer to AIM.)

COMPOSITE ROUTE SYSTEM– An organized oceanic route structure, incorporating reduced lateral spacing between routes, in which composite separation is authorized.

COMPOSITE SEPARATION– A method of separating aircraft in a composite route system where, by management of route and altitude assignments, a combination of half the lateral minimum specified for the area concerned and half the vertical minimum is applied.

COMPULSORY REPORTING POINTS– Reporting points which must be reported to ATC. They are designated on aeronautical charts by solid triangles or filed in a flight plan as fixes selected to define direct routes. These points are geographical locations which are defined by navigation aids/fixes. Pilots should discontinue position reporting over compulsory reporting points when informed by ATC that their aircraft is in “radar contact.”

CONFIDENCE MANEUVER– A confidence maneuver consists of one or more turns, a climb or descent, or other maneuver to determine if the pilot

in command (PIC) is able to receive and comply with ATC instructions.

CONFLICT ALERT– A function of certain air traffic control automated systems designed to alert radar controllers to existing or pending situations between tracked targets (known IFR or VFR aircraft) that require his/her immediate attention/action.

(See MODE C INTRUDER ALERT.)

CONFLICT RESOLUTION– The resolution of potential conflicts between aircraft that are radar identified and in communication with ATC by ensuring that radar targets do not touch. Pertinent traffic advisories shall be issued when this procedure is applied.

Note: This procedure shall not be provided utilizing mosaic radar systems.

CONFORMANCE– The condition established when an aircraft’s actual position is within the conformance region constructed around that aircraft at its position, according to the trajectory associated with the aircraft’s Current Plan.

CONFORMANCE REGION– A volume, bounded laterally, vertically, and longitudinally, within which an aircraft must be at a given time in order to be in conformance with the Current Plan Trajectory for that aircraft. At a given time, the conformance region is determined by the simultaneous application of the lateral, vertical, and longitudinal conformance bounds for the aircraft at the position defined by time and aircraft’s trajectory.

CONSOLAN– A low frequency, long-distance NAVAID used principally for transoceanic navigations.

CONTACT–

a. Establish communication with (followed by the name of the facility and, if appropriate, the frequency to be used).

b. A flight condition wherein the pilot ascertains the attitude of his/her aircraft and navigates by visual reference to the surface.

(See CONTACT APPROACH.)

(See RADAR CONTACT.)

CONTACT APPROACH– An approach wherein an aircraft 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 in those conditions, may deviate from the instrument

approach procedure 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.

(Refer to AIM.)

CONTAMINATED RUNWAY– A runway is considered contaminated whenever standing water, ice, snow, slush, frost in any form, heavy rubber, or other substances are present. A runway is contaminated with respect to rubber deposits or other friction-degrading substances when the average friction value for any 500-foot segment of the runway within the ALD fails below the recommended minimum friction level and the average friction value in the adjacent 500-foot segments falls below the maintenance planning friction level.

CONTERMINOUS U.S.– The 48 adjoining States and the District of Columbia.

CONTINENTAL UNITED STATES– The 49 States located on the continent of North America and the District of Columbia.

CONTINUE– When used as a control instruction should be followed by another word or words clarifying what is expected of the pilot. Example: “continue taxi,” “continue descent,” “continue inbound,” etc.

CONTROL AREA [ICAO]– A controlled airspace extending upwards from a specified limit above the earth.

CONTROL SECTOR– An airspace area of defined horizontal and vertical dimensions for which a controller or group of controllers has air traffic control responsibility, normally within an air route traffic control center or an approach control facility. Sectors are established based on predominant traffic flows, altitude strata, and controller workload. Pilot-communications during operations within a sector are normally maintained on discrete frequencies assigned to the sector.

(See DISCRETE FREQUENCY.)

CONTROL SLASH– A radar beacon slash representing the actual position of the associated aircraft. Normally, the control slash is the one closest to the interrogating radar beacon site. When ARTCC radar is operating in narrowband (digitized) mode, the control slash is converted to a target symbol.

CONTROLLED AIRSPACE– 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.

a. Controlled airspace is a generic term that covers Class A, Class B, Class C, Class D, and Class E airspace.

b. Controlled airspace is also that airspace within which all aircraft operators are subject to certain pilot qualifications, operating rules, and equipment requirements in 14 CFR Part 91 (for specific operating requirements, please refer to 14 CFR Part 91). For IFR operations in any class of controlled airspace, a pilot must file an IFR flight plan and receive an appropriate ATC clearance. Each Class B, Class C, and Class D airspace area designated for an airport contains at least one primary airport around which the airspace is designated (for specific designations and descriptions of the airspace classes, please refer to 14 CFR Part 71).

c. Controlled airspace in the United States is designated as follows:

1. CLASS A– Generally, that airspace from 18,000 feet MSL up to and including FL 600, including the airspace overlying the waters within 12 nautical miles of the coast of the 48 contiguous States and Alaska. Unless otherwise authorized, all persons must operate their aircraft under IFR.

2. CLASS B– Generally, that airspace from the surface to 10,000 feet MSL surrounding the nation’s busiest airports in terms of airport operations or passenger enplanements. The configuration of each Class B airspace area is individually tailored and consists of a surface area and two or more layers (some Class B airspaces areas resemble upside-down wedding cakes), and is designed to contain all published instrument procedures once an aircraft enters the airspace. An ATC clearance is required for all aircraft to operate in the area, and all aircraft that are so cleared receive separation services within the airspace. The cloud clearance requirement for VFR operations is “clear of clouds.”

3. CLASS C– Generally, that airspace from the surface to 4,000 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower, are serviced by a radar approach control, and that have a certain number of IFR operations or passenger enplanements. Although the configuration of each Class C area is individually tailored, the airspace usually

consists of a surface area with a 5 nautical mile (NM) radius, a circle with a 10NM radius that extends no lower than 1,200 feet up to 4,000 feet above the airport elevation and an outer area that is not charted. Each person must establish two-way radio communications with the ATC facility providing air traffic services prior to entering the airspace and thereafter maintain those communications while within the airspace. VFR aircraft are only separated from IFR aircraft within the airspace.

(See OUTER AREA.)

4. CLASS D– Generally, that airspace from the surface to 2,500 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower. The configuration of each Class D airspace area is individually tailored and when instrument procedures are published, the airspace will normally be designed to contain the procedures. Arrival extensions for instrument approach procedures may be Class D or Class E airspace. Unless otherwise authorized, each person must establish two-way radio communications with the ATC facility providing air traffic services prior to entering the airspace and thereafter maintain those communications while in the airspace. No separation services are provided to VFR aircraft.

5. CLASS E– Generally, if the airspace is not Class A, Class B, Class C, or Class D, and it is controlled airspace, it is Class E airspace. Class E airspace extends upward from either the surface or a designated altitude to the overlying or adjacent controlled airspace. When designated as a surface area, the airspace will be configured to contain all instrument procedures. Also in this class are Federal airways, airspace beginning at either 700 or 1,200 feet AGL used to transition to/from the terminal or en route environment, en route domestic, and offshore airspace areas designated below 18,000 feet MSL. Unless designated at a lower altitude, Class E airspace begins at 14,500 MSL over the United States, including that airspace overlying the waters within 12 nautical miles of the coast of the 48 contiguous States and Alaska, up to, but not including 18,000 feet MSL, and the airspace above FL 600.

CONTROLLED AIRSPACE [ICAO]– 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.

Note: Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D, and E.

CONTROLLED TIME OF ARRIVAL– Arrival time assigned during a Traffic Management Program. This time may be modified due to adjustments or user options.

CONTROLLER–

(See AIR TRAFFIC CONTROL SPECIALIST.)

CONTROLLER [ICAO]– A person authorized to provide air traffic control services.

CONTROLLER PILOT DATA LINK COMMUNICATIONS (CPDLC)– A two-way digital communications system that conveys textual air traffic control messages between controllers and pilots using ground or satellite-based radio relay stations.

CONVECTIVE SIGMET– A weather advisory concerning convective weather significant to the safety of all aircraft. Convective SIGMETs are issued for tornadoes, lines of thunderstorms, embedded thunderstorms of any intensity level, areas of thunderstorms greater than or equal to VIP level 4 with an area coverage of $\frac{4}{10}$ (40%) or more, and hail $\frac{3}{4}$ inch or greater.

(See AIRMET.)

(See AWW.)

(See CWA.)

(See SIGMET.)

(Refer to AIM.)

CONVECTIVE SIGNIFICANT METEOROLOGICAL INFORMATION–

(See CONVECTIVE SIGMET.)

COORDINATES– The intersection of lines of reference, usually expressed in degrees/minutes/seconds of latitude and longitude, used to determine position or location.

COORDINATION FIX– The fix in relation to which facilities will handoff, transfer control of an aircraft, or coordinate flight progress data. For terminal facilities, it may also serve as a clearance for arriving aircraft.

COPTER–

(See HELICOPTER.)

CORRECTION– An error has been made in the transmission and the correct version follows.

COUPLED APPROACH– An instrument approach performed by the aircraft autopilot, and/or visually depicted on the flight director, which is receiving position information and/or steering commands from onboard navigational equipment. In general, coupled non-precision approaches must be flown manually (autopilot disengaged) at altitudes lower than 50 feet AGL below the minimum descent altitude, and coupled precision approaches must be flown manually (autopilot disengaged) below 50 feet AGL unless authorized to conduct autoland operations. Coupled instrument approaches are commonly flown to the allowable IFR weather minima established by the operator or PIC, or flown VFR for training and safety.

COURSE–

- a. The intended direction of flight in the horizontal plane measured in degrees from north.
- b. The ILS localizer signal pattern usually specified as the front course or the back course.
- c. The intended track along a straight, curved, or segmented MLS path.
(See BEARING.)
(See INSTRUMENT LANDING SYSTEM.)
(See MICROWAVE LANDING SYSTEM.)
(See RADIAL.)

CPDLC–

(See CONTROLLER PILOT DATA LINK COMMUNICATIONS.)

CPL [ICAO]–

(See ICAO term CURRENT FLIGHT PLAN.)

CRITICAL ENGINE– The engine which, upon failure, would most adversely affect the performance or handling qualities of an aircraft.

CROSS (FIX) AT (ALTITUDE)– Used by ATC when a specific altitude restriction at a specified fix is required.

CROSS (FIX) AT OR ABOVE (ALTITUDE)– Used by ATC when an altitude restriction at a specified fix is required. It does not prohibit the aircraft from crossing the fix at a higher altitude than specified; however, the higher altitude may not be one that will violate a succeeding altitude restriction or altitude assignment.

(See ALTITUDE RESTRICTION.)
(Refer to AIM.)

CROSS (FIX) AT OR BELOW (ALTITUDE)– Used by ATC when a maximum crossing altitude at a specific fix is required. It does not prohibit the aircraft from crossing the fix at a lower altitude; however, it must be at or above the minimum IFR altitude.

(See ALTITUDE RESTRICTION.)
(See MINIMUM IFR ALTITUDES.)
(Refer to 14 CFR Part 91.)

CROSSWIND–

- a. When used concerning the traffic pattern, the word means “crosswind leg.”
(See TRAFFIC PATTERN.)
- b. When used concerning wind conditions, the word means a wind not parallel to the runway or the path of an aircraft.
(See CROSSWIND COMPONENT.)

CROSSWIND COMPONENT– The wind component measured in knots at 90 degrees to the longitudinal axis of the runway.

CRUISE– Used in an ATC clearance to authorize a pilot to conduct flight at any altitude from the minimum IFR altitude up to and including the altitude specified in the clearance. The pilot may level off at any intermediate altitude within this block of airspace. Climb/descent within the block is to be made at the discretion of the pilot. However, once the pilot starts descent and verbally reports leaving an altitude in the block, he/she may not return to that altitude without additional ATC clearance. Further, it is approval for the pilot to proceed to and make an approach at destination airport and can be used in conjunction with:

- a. An airport clearance limit at locations with a standard/special instrument approach procedure. The CFRs require that if an instrument letdown to an airport is necessary, the pilot shall make the letdown in accordance with a standard/special instrument approach procedure for that airport, or
- b. An airport clearance limit at locations that are within/below/outside controlled airspace and without a standard/special instrument approach procedure. Such a clearance is NOT AUTHORIZATION for the pilot to descend under IFR conditions below the applicable minimum IFR altitude nor does it imply that ATC is exercising control over aircraft in Class G airspace; however, it provides a means for the aircraft to proceed to destination airport, descend, and land in accordance with applicable CFRs

governing VFR flight operations. Also, this provides search and rescue protection until such time as the IFR flight plan is closed.

(See INSTRUMENT APPROACH PROCEDURE.)

CRUISE CLIMB– A climb technique employed by aircraft, usually at a constant power setting, resulting in an increase of altitude as the aircraft weight decreases.

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.

(See ALTITUDE.)

(See ICAO term CRUISING LEVEL.)

CRUISING LEVEL–

(See CRUISING ALTITUDE.)

CRUISING LEVEL [ICAO]– A level maintained during a significant portion of a flight.

CT MESSAGE– An EDCT time generated by the ATCSCC to regulate traffic at arrival airports. Normally, a CT message is automatically transferred from the traffic management system computer to the NAS en route computer and appears as an EDCT. In the event of a communication failure between the traffic management system computer and the NAS,

the CT message can be manually entered by the TMC at the en route facility.

CTA–

(See CONTROLLED TIME OF ARRIVAL.)

(See ICAO term CONTROL AREA.)

CTAF–

(See COMMON TRAFFIC ADVISORY FREQUENCY.)

CTAS–

(See CENTER TRACON AUTOMATION SYSTEM.)

CTRD–

(See CERTIFIED TOWER RADAR DISPLAY.)

CURRENT FLIGHT PLAN [ICAO]– The flight plan, including changes, if any, brought about by subsequent clearances.

CURRENT PLAN– The ATC clearance the aircraft has received and is expected to fly.

CVFP APPROACH–

(See CHARTED VISUAL FLIGHT PROCEDURE APPROACH.)

CWA–

(See CENTER WEATHER ADVISORY and WEATHER ADVISORY.)

D

D-ATIS–

(See DIGITAL-AUTOMATIC TERMINAL INFORMATION SERVICE.)

DA [ICAO]–

(See ICAO Term DECISION ALTITUDE/DECISION HEIGHT.)

DAIR–

(See DIRECT ALTITUDE AND IDENTITY READOUT.)

DANGER AREA [ICAO]– An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

Note: The term “Danger Area” is not used in reference to areas within the United States or any of its possessions or territories.

DAS–

(See DELAY ASSIGNMENT.)

DATA BLOCK–

(See ALPHANUMERIC DISPLAY.)

DEAD RECKONING– Dead reckoning, as applied to flying, is the navigation of an airplane solely by means of computations based on airspeed, course, heading, wind direction, and speed, groundspeed, and elapsed time.

DECISION ALTITUDE/DECISION HEIGHT [ICAO Annex 6]– A specified altitude or height (A/H) in the precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

1. Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.

2. Category II and III minima are expressed as a DH and not a DA. Minima is assessed by reference to a radio altimeter and not a barometric altimeter, which makes the minima a DH.

3. The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path.

Decision altitude (DA) - A specified altitude (mean

sea level (MSL)) on an instrument approach procedure (ILS, GLS, vertically guided RNAV) at which the pilot must decide whether to continue the approach or initiate an immediate missed approach if the pilot does not see the required visual references.

DECISION HEIGHT– With respect to the operation of aircraft, means the height at which a decision must be made during an ILS, MLS, or PAR instrument approach to either continue the approach or to execute a missed approach.

(See ICAO term DECISION ALTITUDE/DECISION HEIGHT.)

DECODER– The device used to decipher signals received from ATCRBS transponders to effect their display as select codes.

(See CODES.)

(See RADAR.)

DEFENSE AREA– Any airspace of the contiguous United States that is not an ADIZ in which the control of aircraft is required for reasons of national security.

DEFENSE VISUAL FLIGHT RULES– Rules applicable to flights within an ADIZ conducted under the visual flight rules in 14 CFR Part 91.

(See AIR DEFENSE IDENTIFICATION ZONE.)

(Refer to 14 CFR Part 91.)

(Refer to 14 CFR Part 99.)

DELAY ASSIGNMENT (DAS)– Delays are distributed to aircraft based on the traffic management program parameters. The delay assignment is calculated in 15–minute increments and appears as a table in Traffic Flow Management System (TFMS).

DELAY INDEFINITE (REASON IF KNOWN) EXPECT FURTHER CLEARANCE (TIME)– Used by ATC to inform a pilot when an accurate estimate of the delay time and the reason for the delay cannot immediately be determined; e.g., a disabled aircraft on the runway, terminal or center area saturation, weather below landing minimums, etc.

(See EXPECT FURTHER CLEARANCE (TIME).)

DELAY TIME– The amount of time that the arrival must lose to cross the meter fix at the assigned meter fix time. This is the difference between ACLT and VTA.

DEPARTURE CENTER– The ARTCC having jurisdiction for the airspace that generates a flight to the impacted airport.

DEPARTURE CONTROL– A function of an approach control facility providing air traffic control service for departing IFR and, under certain conditions, VFR aircraft.

(See APPROACH CONTROL FACILITY.)

(Refer to AIM.)

DEPARTURE SEQUENCING PROGRAM– A program designed to assist in achieving a specified interval over a common point for departures.

DEPARTURE TIME– The time an aircraft becomes airborne.

DESCEND VIA– An abbreviated ATC clearance that requires compliance with a published procedure lateral path and associated speed restrictions and provides a pilot-discretion descent to comply with published altitude restrictions.

DESCENT SPEED ADJUSTMENTS– Speed deceleration calculations made to determine an accurate VTA. These calculations start at the transition point and use arrival speed segments to the vertex.

DESIGNATED COMMON TRAFFIC ADVISORY FREQUENCY (CTAF) AREA- In Alaska, in addition to being designated for the purpose of carrying out airport advisory practices while operating to or from an airport without an operating airport traffic control tower, a CTAF may also be designated for the purpose of carrying out advisory practices for operations in and through areas with a high volume of VFR traffic.

DESIRED COURSE–

a. True– A predetermined desired course direction to be followed (measured in degrees from true north).

b. Magnetic– A predetermined desired course direction to be followed (measured in degrees from local magnetic north).

DESIRED TRACK– The planned or intended track between two waypoints. It is measured in degrees from either magnetic or true north. The instantaneous angle may change from point to point along the great circle track between waypoints.

DETRESFA (DISTRESS PHASE) [ICAO]– The code word used to designate an emergency phase wherein there is reasonable certainty that an aircraft

and its occupants are threatened by grave and imminent danger or require immediate assistance.

DEVIATIONS–

a. A departure from a current clearance, such as an off course maneuver to avoid weather or turbulence.

b. Where specifically authorized in the CFRs and requested by the pilot, ATC may permit pilots to deviate from certain regulations.

DH–

(See DECISION HEIGHT.)

DH [ICAO]–

(See ICAO Term DECISION ALTITUDE/ DECISION HEIGHT.)

DIGITAL-AUTOMATIC TERMINAL INFORMATION SERVICE (D-ATIS)– The service provides text messages to aircraft, airlines, and other users outside the standard reception range of conventional ATIS via landline and data link communications to the cockpit. Also, the service provides a computer-synthesized voice message that can be transmitted to all aircraft within range of existing transmitters. The Terminal Data Link System (TDLS) D-ATIS application uses weather inputs from local automated weather sources or manually entered meteorological data together with preprogrammed menus to provide standard information to users. Airports with D-ATIS capability are listed in the Airport/Facility Directory.

DIGITAL TARGET– A computer-generated symbol representing an aircraft's position, based on a primary return or radar beacon reply, shown on a digital display.

DIGITAL TERMINAL AUTOMATION SYSTEM (DTAS)– A system where digital radar and beacon data is presented on digital displays and the operational program monitors the system performance on a real-time basis.

DIGITIZED TARGET– A computer-generated indication shown on an analog radar display resulting from a primary radar return or a radar beacon reply.

DIRECT– Straight line flight between two navigational aids, fixes, points, or any combination thereof. When used by pilots in describing off-airway routes, points defining direct route segments become compulsory reporting points unless the aircraft is under radar contact.

DIRECT ALTITUDE AND IDENTITY READ-OUT– The DAIR System is a modification to the

AN/TPX-42 Interrogator System. The Navy has two adaptations of the DAIR System-Carrier Air Traffic Control Direct Altitude and Identification Readout System for Aircraft Carriers and Radar Air Traffic Control Facility Direct Altitude and Identity Readout System for land-based terminal operations. The DAIR detects, tracks, and predicts secondary radar aircraft targets. Targets are displayed by means of computer-generated symbols and alphanumeric characters depicting flight identification, altitude, ground speed, and flight plan data. The DAIR System is capable of interfacing with ARTCCs.

DIRECTLY BEHIND– An aircraft is considered to be operating directly behind when it is following the actual flight path of the lead aircraft over the surface of the earth except when applying wake turbulence separation criteria.

DISCRETE BEACON CODE–
(See **DISCRETE CODE**.)

DISCRETE CODE– As used in the Air Traffic Control Radar Beacon System (ATCRBS), any one of the 4096 selectable Mode 3/A aircraft transponder codes except those ending in zero zero; e.g., discrete codes: 0010, 1201, 2317, 7777; nondiscrete codes: 0100, 1200, 7700. Nondiscrete codes are normally reserved for radar facilities that are not equipped with discrete decoding capability and for other purposes such as emergencies (7700), VFR aircraft (1200), etc.
(See **RADAR**.)
(Refer to AIM.)

DISCRETE FREQUENCY– A separate radio frequency for use in direct pilot-controller communications in air traffic control which reduces frequency congestion by controlling the number of aircraft operating on a particular frequency at one time. Discrete frequencies are normally designated for each control sector in en route/terminal ATC facilities. Discrete frequencies are listed in the Airport/Facility Directory and the DOD FLIP IFR En Route Supplement.

(See **CONTROL SECTOR**.)

DISPLACED THRESHOLD– A threshold that is located at a point on the runway other than the designated beginning of the runway.

(See **THRESHOLD**.)
(Refer to AIM.)

DISTANCE MEASURING EQUIPMENT– Equipment (airborne and ground) used to measure, in

nautical miles, the slant range distance of an aircraft from the DME navigational aid.

(See **MICROWAVE LANDING SYSTEM**.)

(See **TACAN**.)

(See **VORTAC**.)

DISTRESS– A condition of being threatened by serious and/or imminent danger and of requiring immediate assistance.

DIVE BRAKES–
(See **SPEED BRAKES**.)

DIVERSE VECTOR AREA– In a radar environment, that area in which a prescribed departure route is not required as the only suitable route to avoid obstacles. The area in which random radar vectors below the MVA/MIA, established in accordance with the TERPS criteria for diverse departures, obstacles and terrain avoidance, may be issued to departing aircraft.

DIVERSION (DVRSN)– Flights that are required to land at other than their original destination for reasons beyond the control of the pilot/company, e.g. periods of significant weather.

DME–
(See **DISTANCE MEASURING EQUIPMENT**.)

DME FIX– A geographical position determined by reference to a navigational aid which provides distance and azimuth information. It is defined by a specific distance in nautical miles and a radial, azimuth, or course (i.e., localizer) in degrees magnetic from that aid.

(See **DISTANCE MEASURING EQUIPMENT**.)

(See **FIX**.)

(See **MICROWAVE LANDING SYSTEM**.)

DME SEPARATION– Spacing of aircraft in terms of distances (nautical miles) determined by reference to distance measuring equipment (DME).

(See **DISTANCE MEASURING EQUIPMENT**.)

DOD FLIP– Department of Defense Flight Information Publications used for flight planning, en route, and terminal operations. FLIP is produced by the National Geospatial-Intelligence Agency (NGA) for world-wide use. United States Government Flight Information Publications (en route charts and instrument approach procedure charts) are incorporated in DOD FLIP for use in the National Airspace System (NAS).

DOMESTIC AIRSPACE– Airspace which overlies the continental land mass of the United States plus

Hawaii and U.S. possessions. Domestic airspace extends to 12 miles offshore.

DOWNBURST– A strong downdraft which induces an outburst of damaging winds on or near the ground. Damaging winds, either straight or curved, are highly divergent. The sizes of downbursts vary from 1/2 mile or less to more than 10 miles. An intense downburst often causes widespread damage. Damaging winds, lasting 5 to 30 minutes, could reach speeds as high as 120 knots.

DOWNWIND LEG–

(See **TRAFFIC PATTERN**.)

DP–

(See **INSTRUMENT DEPARTURE PROCEDURE**.)

DRAG CHUTE– A parachute device installed on certain aircraft which is deployed on landing roll to assist in deceleration of the aircraft.

DSP–

(See **DEPARTURE SEQUENCING PROGRAM**.)

DT–

(See **DELAY TIME**.)

DTAS–

(See **DIGITAL TERMINAL AUTOMATION SYSTEM**.)

DUE REGARD– A phase of flight wherein an aircraft commander of a State-operated aircraft assumes responsibility to separate his/her aircraft from all other aircraft.

(See also **FAAO JO 7110.65, Para 1–2–1, WORD MEANINGS**.)

DUTY RUNWAY–

(See **RUNWAY IN USE/ACTIVE RUNWAY/DUTY RUNWAY**.)

DVA–

(See **DIVERSE VECTOR AREA**.)

DVFR–

(See **DEFENSE VISUAL FLIGHT RULES**.)

DVFR FLIGHT PLAN– A flight plan filed for a VFR aircraft which intends to operate in airspace within which the ready identification, location, and control of aircraft are required in the interest of national security.

DVRSN–

(See **DIVERSION**.)

DYNAMIC– Continuous review, evaluation, and change to meet demands.

DYNAMIC RESTRICTIONS– Those restrictions imposed by the local facility on an “as needed” basis to manage unpredictable fluctuations in traffic demands.