IFR AERONAUTICAL CHART SYMBOLS

IFR Enroute Low/High Altitude (U.S. & Alaska Charts)
AIRPORTS 41
RADIO AIDS TO NAVIGATION 42
AIRSPACE INFORMATION 43
NAVIGATIONAL AND PROCEDURAL INFORMATION
CULTURE
HYDROGRAPHY
TOPOGRAPHY
Oceanic Route Charts
North Atlantic and North Pacific Route Charts
AIRPORTS 48
RADIO AIDS TO NAVIGATION 48
AIRSPACE INFORMATION
NAVIGATIONAL AND PROCEDURAL INFORMATION 49
CULTURAL BOUNDARIES
HYDROGRAPHY 49

GENERAL INFORMATION

Symbols shown are for the Instrument Flight Rules (IFR) Enroute Low and High Altitude Charts.

IFR ENROUTE LOW/HIGH ALTITUDE U.S. & ALASKA CHARTS

	AIRPORTS	AIRPORTS		
AIRPORT DATA	LOW/HIGH ALTITUDE Airports/Seaplane bases shown in BLUE and GREEN have an approved Instrument Approach	CIVIL	LOW/ HIGH ALTITUDE	
	Procedure published. Those in BLUE have an approved DOD Instrument Approach Procedure and/or DOD RADAR MINIMA published in DOD FLIPS or Alaska Terminal. Airports/Seaplane bases shown in BROWN do not have a published Instrument Approach Procedure.	CIVIL AND MILITARY	LOW/ HIGH ALTITUDE	
	All IAP Airports are shown on the Low Altituide Charts. Non-IAP Airports shown on the U.S. Low Altitude Charts have a minimum hard surface runway of 3000'. Non-IAP Airports shown on the Alaska Low Altitude Charts have a minimum hard or soft surface runway of 3000'.	MILITARY	LOW/ HIGH ALTITUDE	
	surface runway of 3000'. Airports shown on the U.S. High Altitude Charts have a minimum hard surface runway of 5000'. Airports shown on the Alaska High Altitude Charts have a minimum hard or soft surface runway of 4000'.	SEAPLANE - CIVIL	LOW ALTITUDE	
	Associated city names for public airports are shown above or preceding the airport name. If airport name and city name are the same, only the airport name is shown. City names for military and private airports are not shown. The airport identifier in parentheses follows	HELIPORT	LOW ALTITUDE	
	the airport name or Pvt." Airport symbol may be offset for enroute navigational aids. Pvt - Private Use			
AIRPORT DATA DEPICTION	Associated City Name Airport Identifier and Identif			
	Associated City Name SIOUX CITY Airport Joe Foss Fld (FSD)			
	HIGH ALTITUDE - ALASKA Airport			

RADIO AIDS TO NAVIGATION VHF LOW/ HIGH ALTITUDE **OMNIDIRECTIONAL** VHF / UHF Data is depicted in Black LF / MF Data is depicted in Brown **RADIO RANGE** (VOR) **DISTANCE MEASURING EQUIPMENT (DME)** TACTICAL COMPASS ROSES are oriented to Magnetic North of the NAVAID which may not be adjusted to the charted isogonic values. **AIR NAVIGATION** (TACAN) VORTAC VOR VOR / DME TACAN "L" and "T" Category Radio Aids located off Jet Routes are depicted in screen black. **NON-DIRECTIONAL** LOW/ HIGH ALTITUDE RADIO BEACON (NDB) **MARINE** NDB or RBN with RADIO BEACON Magnetic North Indicator (RBN) UHF NDB NDB with DME **COMPASS LOW ALTITUDE LOCATOR BEACON** ILS LOCALIZER LOW ALTITUDE ILS Localizer Course with additional navigation function. **WAYPOINT DATA** HIGH ALTITUDE - ALASKA NAME N00°00.00′ W00°00.00′ 000.0 NME 000.0°-00.0 Coordinates Radial/Distance (Facility to Waypoint) Frequency Reference Facility Elevation WAYPOINT LOW/ HIGH ALTITUDE ◆ NAMEE

RADIO AIDS TO NAVIGATION

NAVIGATION and COMMUNICATION **BOXES**

LOW/ HIGH ALTITUDE

CHECK NOTAMS PINE BLUFF (T) 116.0 PBF 107(Y) # 134°14.81′ W91°55.57′

VOR with TACAN compatible DME

Underline indicates No Voice Transmitted on this frequency

TACAN channels are without voice but not underlined

Overprint of affected data indicates Abnormal Status, i.e. CHECK NOTAMS/ DIRECTORY

Frequency Protection - usable range 25 NM at 12000' AGL (T)

TACAN must be placed in "Y" mode to receive distance information (Y)

Frequency Protection - usable range 40 NM at 18000' AGL (L)

ASOS/AWOS - Automated Surface Observing Station/Automated Weather Observing Station 0

HIWAS - Hazardous Inflight Weather Advisory Service 0

O TWEB - Transcribed Weather

Automated weather, when available, is broadcast on the associated NAVAID frequency.

For terminal weather frequency see A / G Voice Communication Tab under associated airport. (U.S. Low only)

MALVERN *215 MVQ 86 113.9 ==-_

Part-time or On-Request

NDB with DME

DME channel and paired VHF frequency are shown

122.65 WICHITA 113.8 ICT 85 ≡---

FSS associated with a NAVAID

123.6 122.65 (EL DORADO ELD)

Name and identifier of FSS not associated with NAVAID

Shadow NAVAID Boxes indicate Flight Service Station (FSS) locations. Frequencies 122.2, 255.4 and emergency 121.5 and 243.0 are normally available at all FSSs and are not shown. All other frequencies are shown above the box.

Certain FSSs provide Local Airport Advisory (LAA) on 123.6.

Frequencies transmit and receive except those followed by R or T: R - Receive only $\,$ T - Transmit only

In Canada, shadow boxes indicate FSSs with standard group frequencies of 121.5, 126.7 and 243.0.

JONESBORO 122.55)

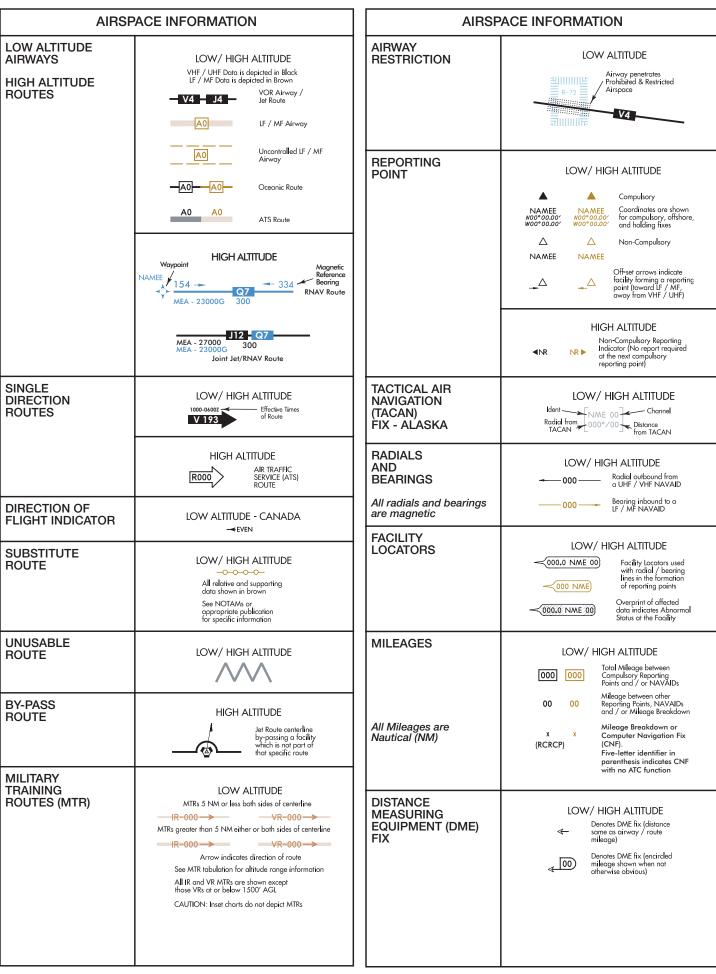
Remote Communications Outlet (RCO)
FSS name and remoted frequency are shown

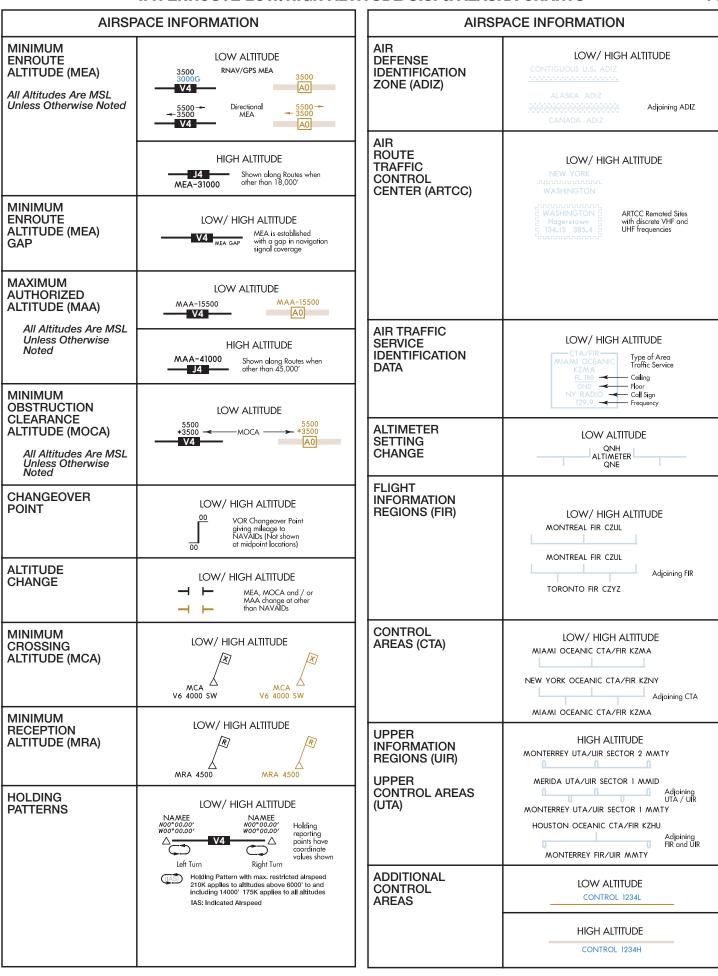
122.6 PINE BLUFF 116.0 PBF 107 HIE:
N34°14.81′ W91°55.57′ Controlling FSS Name JONESBORO

Thin Line NAVAID Boxes without frequencies and controlling FSS name indicate no FSS frequencies available. Frequencies positioned above thin line boxes are remoted to the NAVAID sites. Other frequencies at the controlling FSS named are available, however, altitude and terrain may determine their reception.

Morse Code is not shown in NAVAID boxes on High Altitude Charts.

Location symbol for an FSS or RCO when not located at a facility or an airport.





AIRSPACE INFORMATION **OFF ROUTE** OBSTRUCTION IOW AITITUDE **CLEARANCE ALTITUDE** (OROCA) Example: 12,500 feet OROCA is computed similarly to the Maximun Elevation Figure (MEF) found on Visual charts except that it provides an additional vertical buffer of 1,000 feet in designated non-mountainous areas and a 2,000 foot vertical buffer in designated mountainous areas within the United States. SPECIAL USE LOW/ HIGH ALTITUDE **AIRSPACE** P - Prohibited Area R - Restricted Area W - Warning Area Low Only A - Alert Area Canada Only CYR - Restricted Area CYA - Advisory Area Caribbean Only D - Danger Area In the Caribbean, the first 2 letters represent the country code, i.e. MY: Bahamas, MU: Cuba EXCLUSION AREA AND NOTE Internal lines delimit separation of the same Special Use Area or Exclusion Areas SEE AIRSPACE TABULATION ON EACH CHART FOR COMPLETE INFORMATION ON: AREA IDENTIFICATION EFFECTIVE ALTITUDE OPERATING TIME CONTROLLING AGENCY VOICE CALL SPECIAL USE LOW ALTITUDE **AIRSPACE** MOA - Military Operations Area Continued EXCLUSION AREA AND NOTE Internal lines delimit separation of the same Special Use Area or Exclusion Areas SEE AIRSPACE TABULATION ON EACH CHART FOR COMPLETE INFORMATION ON: AREA IDENTIFICATION AREA IDENTIFICATION EFFECTIVE ALTITUDE OPERATING TIME CONTROLLING AGENCY VOICE CALL

AIRSPACE INFORMATION

CONTROLLED AIRSPACE

HIGH ALTITUDE

CLASS A AIRSPACE

Open Area (White)

That airspace from 18,000′ MSL to and including FL 600, including the airspace overlying the waters within 12 NM of the coast of the contiguous United States and Alaska and designated offshore areas, excluding Santa Barbara Island, Farallon Island, the airspace south of latitude 25 04′00″N, the Alaska peninsula west of longitude 160 00′00″W, and the airspace less than 1,500′ AGL.

That airspace from 18,000′ MSL to and including FL 450, including Santa Barbara Island, Farallon Island, the Alaska peninsula west of longitude 160 00′00″W, and designated offshore areas.

LOW ALTITUDE

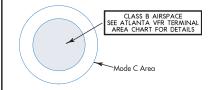
CLASS B AIRSPACE

Screened Blue with a Solid Blue Outline

That airspace from the surface to 10,000' MSL (unless otherwise designated) surrounding the nation's busiest airports. Each Class B airspace area is individually tailored and consists of a surface area and two or more layers.

MODE C AREA A Solid Blue Outline

That airspace within 30 NM of the primary airports of Class B airspace and within 10 NM of designated airports. Mode-C transponder equipment is required. (see FAR 91.215)



LOW ALTITUDE

CLASS C AIRSPACE

Screened Blue with a Solid Blue Dashed Outline

That airspace from the surface to 4,000' (unless otherwise designated) above the elevation of selected airports (charted in MSI). The normal radius of the outer limits of Class C airspace is 10 NM. Class C airspace is of so indicated by the letter C in a box following the airport name.



LOW ALTITUDE

CLASS D AIRSPACE

Open Area (White)

That airspace, from the surface to 2,500' (unless otherwise designated) above the airport elevation (charted in MSL), surrounding those airports that have an operational control tower. Class D airspace is indicated by the letter D in a box following the airport name.

LOW/ HIGH ALTITUDE
Isogonic lines and values shall be based on the five year epoch.
LOW/ HIGH ALTITUDE Central Std Eastern Std +5-UTC During periods of Daylight Saving Time (DT), effective hours will be one hour earlier than shown. All states observe DT except Arizona and that portion of Indiana in the Eastern Time Zone. ALL TIME IS COORDINATED UNIVERSAL TIME (UTC)
LOW/ HIGH ALTITUDE JACKSONVILLE AREA CHART A-1
LOW ALTITUDE - ALASKA HIGH ALTITUDE - U.S.
5/1

NAVIGATIONAL AND PROCEDURAL INFORMATION NAVIGATIONAL AND PROCEDURAL INFORMATION MORSE CODE **CRUISING** LOW/ HIGH ALTITUDE LOW ALTITUDE **ALTITUDES** U.S. only A --N --IFR EVEN в ----0 ---2 -----IFR Thousands c ----P ----ODD 3 -----D ---Q ----4 -----VFR or ON TOP EVEN Thousands Plus 500' VFR or ON TOP ODD Thousands Plus 500' E -R ---5 ----s ---F ----6 -----G ---T -7 ----н ----U ---1 -v ----0 ---w ---VFR above 3000' AGL unless otherwise authorized by ATC x ----K ---1 ----Υ ----IFR outside controlled airspace M --Z ----IFR within controlled airspace as assigned by ATC **CULTURE** All courses are magnetic **BOUNDARIES** HIGH ALTITUDE LOW/ HIGH ALTITUDE 18,000' MSL to Flight Level 290 Omitted when coincident with ARTCC or FIR International IFR ODD 2000' Intervals Begin at FL 190 EVEN 2000' Intervals Begin at 18,000' MSL VFR or VFR ON TOP EVEN 2000' LOW/ HIGH ALTITUDE U.S. /Russia Maritime Line VFR or VFR ON TOP ODD 2000' Intervals Begin at FL 195 RUSSIA Intervals Begin at FL 185 UNITED STATES LOW/ HIGH ALTITUDE Date Line Flight Level 290 and Above INTERNATIONAL DATE LINE MONDAY SUNDAY 4000 IFR 4000' Intervals Begin at FL 290 Intervals **HYDROGRAPHY** Begin at FL 310 VFR or VFR ON TOP 4000' Intervals Begin at FL 320 SHORELINE VFR or VFR ON TOP 4000' Intervals Begin at FL 300 NO VFR FLIGHTS WITHIN CLASS A AIRSPACE VFR above 3000' AGL unless otherwise authorized by ATC IFR outside controlled airspace IFR within controlled airspace as assigned by ATC All courses are magnetic **NOTES** LOW/ HIGH ALTITUDE FAA AIR TRAFFIC SERVICE OUTSIDE U.S. AIRSPACE IS PROVIDED IN ACCORDANCE WITH ARTICLE 12 AND ANNEX 11 OF ICAO CONVENTION. ICAO CONVENTION NOT APPLICABLE TO STATE AIRCRAFT BUT COMPLIANCE **TOPOGRAPHY** WITH ICAO STANDARDS AND PRACTICES IS ENCOURAGED. CAUTION: POSSIBLE DAMAGE AND/OR INTERFERENCE TO AIRBORNE RADIO DUE TO HIGH LEVEL RADIO ENERGY IN THE **TERRAIN** VICINITY OF R-2206 Area Charts CAUTION: ACCURACY OF AIR TRAFFIC SERVICES RELATIVE TO HAVANA FIR CANNOT BE CONFIRMED. CONSULT NOTAMS. North American Datum of 1983 (NAD 83), for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

	OCEANIC ROUTE CHAR	113			
	AIRPORTS				
AIRPORT DATA	Airport of Entry (AOE) are shown with four letter ICAO Identifier				
LANDPLANE-CIVIL Refueling and repair facilities for normal traffic.	+ HONOLULU INTL (PHNL)				
LANDPLANE-CIVIL AND MILITARY Refueling and repair facilities for normal traffic.	Ф HILO INTL (PHTO)				
LANDPLANE- MILITARY Refueling and repair facilities for normal traffic.	⊚ KALAELOA (PHJR)				
RADIO	AIDS TO NAVIGATION				
VHF OMNIDIRECTIONAL RADIO RANGE (VOR)	VOR ⊕ ☐				
DISTANCE MEASURING EQUIPMENT (DME)	VORTAC TACAN TO TO TACAN				
TACTICAL AIR NAVIGATION (TACAN)	narc nprc				
NON-DIRECTIONAL RADIO BEACON (NDB)	NDB				
DISTANCE MEASURING EQUIPMENT (DME)	NDB / DME ⊕ ① NARC NPRC				
IDENTIFICATION BOX	,				
	Identification — MDY 400 VHF Frequency N28°12.2′ Latitude & Longitude				
	Identification NQM 347 LF / MF Frequency CHAN 93 TACAN Channel N28*12.2' W177*22.8' Latitude & Longitude				
AIRSPACE INFORMATION					
AIR TRAFFIC SER- VICE (ATS) OCEANIC ROUTES	A450 Identification 283 Mileage				
Note: Mileages are Nautical (NM)	UBB91 UHF Caribbean Identification 114 Mileage				
ATS SINGLE DIRECTION ROUTE	<u>—————————————————————————————————————</u>				
AERIAL REFUELING TRACKS	AR-900 E One Way FL 180/270				
	AR-903 E,W Two Way FL 180/270				

AIRSPACE INFORMATION				
AIR DEFENSE IDENTIFICATION ZONE (ADIZ)	HAWAIIAN ADIZ TAWAN ADIZ JAPAN ADIZ			
AIR ROUTE TRAFFIC CONTROL CENTER (ARTCC)	SEATTLE (ZSE) 			
FLIGHT INFORMATION REGIONS (FIR) and/or (CTA)	HONOLULU FIR PHZH HONIARA FIR ANAU HONOLULU FIR PHZH			
UPPER INFORMATION REGIONS (UIR)	JAKARTA UIR WIIZ MERIDA UTA / UIR MMID			
UPPER CONTROL AREAS (UTA)	MAZATIAN UTA / UIR MMZT MAZATIAN UTA / UIR MMZT MEXICO FIR / UIR MMFR L			
OCEANIC CONTROL AREAS (OCA) and /or (CTA /FIR)	OAKLAND OCEANIC CTA / FIR KZAK L TOKYO FIR / OCA RUTG NAHA FIR / OCA RORG			
ADDITIONAL OCEANIC CONTROL AREAS Note: Limits not shown when coincident with Warning	CONTROL 1485			
BUFFER ZONE	Teeth point to area			
NON-FREE FLYING ZONE	Teeth point to area			
NORTH ATLANTIC / MINIMUM NAVIGATION PERFORMANCE SPECIFICATIONS (NAT/MNPS)	**************************************			
REPORTING POINTS	Name — ARTOP Latitude & N20°52.7' Longitude			
SPECIAL USE AIRSPACE	W-470 W517			
Warning Area	NARC NPRC			
Special Use	ATLANTIC FLEET WEAPONS RANGE			
12 Mile Limit				
UNCONTROLLED AIRSPACE				

49	OCEANIC ROUTE CHARTS	Acronaduoarimo	· · · · · · · · · · · · · · · · · · ·	
NAVIGATIONAL AND PROCEDURAL INFORMATION		CULTURAL BOUNDARIES		
MILEAGE CIRCLES		INTERNATIONAL		
Note: Mileages are Nautical (NM)	100 NM	MARITIME	RUSSIA UNITED STATES	
Time Zone Note: All time is Coordinated Uni- versal (Standard) Time (UTC)	+3=UTC +2 = UTC	DATE LINE	MONDAY SUNDAY	
Overlap Marks				
NPRC Only	SW			
COMPASS ROSE Note: Compass Roses oriented to Magnetic North	MN			
	330	HYDROGRAPHY		
	8 111111	SHORELINES		
NOTES WARNING	AIRCRAFT INFRINGING UPON NON FREE FLYING TERRITORY MAY BE FIRED UPON WITHOUT WARNING			