UNITED STATES GOVERNMENT
FLIGHT INFORMATION PUBLICATION

IFR ENROUTE HIGH ALTITUDE - U.S.

For use and above 18,000' MSL
HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983

L E G E N D

AIRCRAFT

Airports shown have a minimum of 8000' hard surfaced runway. Facilities in BLUE or GREEN have an approved instrument approach procedure. Facilities in BLUE have a control tower. Facilities in GREEN do not have a control tower. Facilities in BROWN have an Instrument Approach Procedure and an IFR ENROUTE SERVICE but are not in the High Altitude Dot Pitch. Facilities in BROWN do not have an Instrument Approach Procedure or IFR ENROUTE SERVICE but are in the High Altitude Dot Pitch. Facilities in BROWN do not have an Instrument Approach Procedure or IFR ENROUTE SERVICE but are in the High Altitude Dot Pitch.

- Civil
- Civil-Military
- Military

Associated city name for public airports.
Associated city name for military airports.
Airport name for airports with no associated city name.
Airports and private airports with an Instrument Approach Procedure or IFR ENROUTE SERVICE will be shown in capitals. The airport name is shown. The airport name is shown in capitals. The airport name is shown in capitals. The airport name is shown in capitals.

NAVAIDS AND COMMUNICATION BOXES

NAVAIDS

VHF/UHF Data is depicted in BLACK
ILS/MLS Data is depicted in BROWN

- (Omnidirectional) VOR, VOR/DME, VORTAC, TACAN, VOR/TAC
- (Omnidirectional) VOR or TACAN with Associated Collocated Nondirectional Radio Beacon
- (Omnidirectional) VOR or TACAN with Associated Collocated Nondirectional Radio Beacon
- Flight Service Station (FSS), Remote Communications Outlet (RCO), Automated Weather Observation System (AWOS/ASOS) not associated with VOR or TACAN/VOR/VORTAC or airport

COMMUNICATION BOXES

- VHF/UHF 000.0 to 999.9
- VOR with TACAN compatible DME
- Underline indicates Voice transmitted on this frequency. VOR/DME Channels are without voice but not underlined.
- Crosshatch indicates Limited Hours
- TACAN must be placed in "Y" mode to receive DME interrogations
- Automated Weather Broadcast Systems
- ASOS/AWOS - Automated Surface Observing System/Automated Weather Observing System
- HIWAS - Hazardous Inflight Weather Advisory Service
- TWEB - Transcribed Weather Broadcast
- Identifier and/or name of navaid. Navaid is at the associated VORTAC, Navaid is at the associated VORTAC, Navaid is at the associated VORTAC, Navaid is at the associated VORTAC.
- Frequency/channel shown. Any navaid box is necessary to the navaid.
- FSS (Flight, 122.2, 123.6, and emergency 121.5 and 243.0 MHz) name and/or name of station. All high altitude sectors have FSS name shown above the box.
- Radius NAVAID box indicates NAVAID and Flight Service Station (FSS) have collocated.
- FSS Name and Identifier not associated with NAVAID
- Outside CONUS (Alaska, Hawaii, Puerto Rico, and U.S. Virgin Islands) FSS name and phone
- FSS (Flight, 122.2, 123.6, and emergency 121.5 and 243.0 MHz) name and/or name of station. All high altitude sectors have FSS name shown above the box.
- Frequency in Protection outside ranges at 18,000 ft. MSL and above. Use lowest published altitude for intended route of flight (12,000' AGL - 17,999').
- Emergency Use Only. Frequency tuned off all high altitude sectors. Use only for emergency without clearance use "Hi"

AIR TRAFFIC SERVICES AND AIRSPACE INFORMATION

ROUTE DATA

VHF/UHF Data is depicted in BLACK
ILS/MLS Data is depicted in BROWN
Short Data is depicted in BLUE

- Jet Route
- ATS Route
- Oceanic Route
- Atlantic Route
- Bahama Route
- Substitute Route

Substitute routes are established for military operations. Normally, they are not to be flown by civil aircraft. Pilots may file substitute routes when they are necessary to avoid areas of severe weather.

- Unusable Route Segment
- World Grid

Flying along a route, the next fix/navaid ahead is the fix/navaid toward which you are flying. Behind or abeam the fix/navaid is the one you have just passed. Only the fix/navaid ahead has the name associated with it. Fix/navaid behind or abeam do not.

- Preferred Direction of Flight for Routes
- Preferred Direction of Flight for Routes
- 000.0 - 999.9 Facility Location and Frequency
- Radial Outbound Course in 000 Unit of NAVAID
- Bearing Inbound to 000 Unit of NAVAID
- Total Mileage between Fixes, Navaids, Airports, and/or NAVAIDS
- Mileage between other Fixes/Navaids and Mileage breakdown
- Mileage Breakdown or Computer Navigational Fix (CNF)

BOUNDARIES

- Air Traffic Control Assigned Airspace (ATCAA)
- Call Sector Identification
- Adjoining ADIZ
- Flight Information Region (FIR)
- Adjoining FIR
- Control Area (CTA)
- Combined FIR and UIR
- Control Area (CTA) or Upper Control Area (UTA)
- International Boundary (Not to be confused with ARTCC's)

MISCELLANEOUS

2000 Aeronautical Chart Update Manual (ACUM)
ALL TIMES IN THIS PUBLICATION ARE UNIVERSAL COORDINATED
ALL BEARINGS AND WORDING ARE MAGNETIC UNLESS OTHERWISE STATED
ALL TRUE IS DESIGNATED (EXAMPLE: TRUE EAST). DAYS ARE LOCAL
ALL TIME IS COORDINATED UNIVERSAL TIME (UTC) UNLESS OTHERWISE STATED
Daylight Saving Time (DST) effective hours will be one hour earlier than shown. All times in UTC unless otherwise stated.

AIRSPACE INFORMATION

Open area (white) indicates Class A airspace from 18,000' MSL up to and including FL600 including the portion which extends from 60 NM

Tint airspace of the United States from the surface to and including FL600 including the portion which extends from 60 NM

REPORTING REQUIREMENTS

- ATC Compulsory and Noncompulsory Position Report
- Pilot's Discretion Position Report
- Non-Compulsory Position Report

SPECIAL USE AIRSPACE

- Prohibited Area
- Restricted Area
- Warning Area
- Alert Area
- Military Operations Area (MOA)
- Controlled Firing Area (CFA)
- Additional Control Area Unit

Complete information is tabulated on front panel

EXAMPLE OF GROUPING

Airports are grouped by proximity to a facility which is not part of that specific facility.

MEA 17000 — 040 — 15000 — 040 — 12000

Effective Times of Single Direction Routes

Navigation Reference Bearings will not be shown on Joint Use/RVSM routes

MEA is established with a gap in navigation signal coverage.

Holding Pattern in navigation signal coverage.

MORSE CODE

A	· —	H	· · · ·	O	— — —	V	· · · —
B	— · · ·	I	· ·	P	· — — ·	W	· — —
C	— · — ·	J	· — — —	Q	— — · —	X	— · · —
D	— · ·	K	— · —	R	· — ·	Y	— · — —
E	·	L	· — · ·	S	· · ·	Z	— — · ·
F	· · — ·	M	— —	T	—		
G	— — ·	N	— ·	U	· · —		

MINIMUM EN ROUTE ALTITUDES

18,000' MSL to FL600

Wind Direction	Wind Velocity
90°	25
180°	50
270°	75
360°	100

VFR or VFR On Top valid 500'

No VFR or VFR On Top authorized above FL285 in RVSM airspace

CRUISING ALTITUDES - U.S.
(In cells unshaded airways as assigned by ATC)

FL290 to FL410

Wind Direction	Wind Velocity
90°	25
180°	50
270°	75
360°	100

FL430 and Above

Wind Direction	Wind Velocity
90°	25
180°	50
270°	75
360°	100

FOR ADDITIONAL PANEL INFORMATION REFER TO THE CHART USER'S GUIDE