

UNITED STATES GOVERNMENT
FLIGHT INFORMATION PUBLICATION
IFR ENROUTE LOW ALTITUDE - U.S.

For use up to but not including 18,000' MSL
HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983

L E G E N D

AIRPORTS

Facilities in BLUE or GREEN have an approved Instrument Approach Procedure and/or RADAR MINIMA published in either the FAA Terminal Procedures Publications or the DoD FLTPs. Those in BLUE have an Instrument Approach Procedure and/or RADAR MINIMA published at least in the High Altitude DoD FLTPs. Facilities in BROWN do not have a published Instrument Approach Procedure or RADAR MINIMA.

LAND

- Civil
- Civil - Military
- Military
- Heliport
- SEA
- Civil

1. A solid line box enclosing the airport name indicates FAR 93 Special Requirements-see Directory/Supplement
2. "NO SVFR" above the airport name indicates FAR 91 fixed-wing special VFR flight is prohibited
3. [C] or [D] following the airport name indicates Class C or Class D Airspace
4. Pvt - Private use
5. 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 the airport name.

Part-time or established by NOTAM. See Airport/Facility Directory for times of operation. In Alaska see Supplement Alaska

Longest runway length to nearest 100 feet with 70 feet on the dividing point (add 00) s indicates soft surface

Lighting Capability:
 (L) Lighting available
 (P) Pilot Controlled Lighting
 (R) Part-time or on request
 (N) No lighting available
 (A) At private facilities - indicates no lighting information is available.

NAVAIDS

VHF/UHF Data is depicted in BLACK
LF/MF Data is depicted in BROWN

COMPASS ROSE and/or NORTH ARROW Oriented to Magnetic North of NAVAID which may not be adjusted to the charted isogonic values.
Smaller sizes are used in congested areas.

Compass Locator Beacon

VOR VOR/DME TACAN VORTAC LF/MF Non-directional Radiobeacon or Marine Radiobeacon LF/MF Non-directional Radiobeacon /DME

Non Compulsory Reporting or Off Airway
Compulsory Reporting

Flight Service Station (FSS), Remote Communications Outlet (RCO) or Automated Weather Observing Station (ASOS/AWOS) not associated with a charted NAVAID or airport

ILS Localizer Course with additional navigation function

COMMUNICATION BOXES

NAME (T)
000.0 IDT 000(Y) ±··

VOR with TACAN compatible DME
Underline indicates No Voice transmitted on this frequency. TACAN Channels are without voice but not underlined.

Crosshatch indicates Shutdown status

(T) Frequency protection usable range at 12,000' AGL - 25NM

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

NAME
000 IDT ±·· (000.0)
N00°00.00' W000°00.00'

TACAN Channel paired with VHF Frequency in parenthesis.

Automated Weather Broadcast Systems:
 (A) ASOS/AWOS (H) HIWAS
 Automated weather, when available, is broadcast on the associated NAVAID frequency.
 (NAME ASOS 000.0) Stand Alone ASOS/AWOS

000.0 NAME
000.0 IDT 000 ±··
N00°00.00' W000°00.00'

Freq(s) positioned above thin line NAVAID box is remote to the NAVAID site. Other freq(s) at the named FSS radio are available, however, altitude and terrain may determine their reception.

Thin line NAVAID boxes without freq(s) and FSS radio name indicates no freq(s) available.

000.0 000.0
NAME
000.0 IDT 000 ±··
N00°00.00' W000°00.00'

Shadow NAVAID box indicates NAVAID and Flight Service Station (FSS) have same name

000.0 000.0
NAME IDT
Remote Communications Outlet (RCO). FSS radio name and remote freq(s) are shown.

Part-Time or On-Request
NAME
*000 IDT 00(000.0) ±··

LF/MF Non-directional Radiobeacon/DME VHF Freq paired with TACAN Channel

SHADOW BOXES indicate Flight Service Stations (FSS). Frequencies 122.2, 255.4 and emergency 121.5 and 243.0 (Canada: 121.5, 126.7 and 243.0) are available at many FSSs and are not shown. All other frequencies are shown. Certain FSSs provide Airport Advisory Service, see A/FD. Frequencies transmit and receive except those followed by R or T:
 R - Receive only
 T - Transmit only

In Canada, a "D" after the frequency indicates a Dial-up Remote Communications Outlet.

AIR TRAFFIC SERVICES AND AIRSPACE INFORMATION

ROUTE DATA

VHF/UHF Data is depicted in BLACK
LF/MF Data is depicted in BROWN
RNAV Data is depicted in BLUE

VO VOR Airway
AO LF/MF Airway
Uncontrolled LF/MF Airway
AO AO Oceanic Route
T000 RNAV Route GNSSE required
TK000 RNAV Helicopter Route GNSSE required

Substitute Route Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.

Unusable Route Segment
VO Preferred Single Direction Route
EVEN Direction of Flight Indicator (Canada only)

000.0 IDT 000 Facility Locators used in formation of Reporting Points
000 ID Radial outbound from a VHF/UHF NAVAID
000 Bearing inbound to an LF/MF NAVAID
000 Magnetic Reference Bearing, outbound from a NAVAID or Fix
000 000 Total Mileage between Compulsory Fixes and/or NAVAIDS

Mileage between other Fixes, NAVAIDS and/or Mileage Breakdown
Changeover Point giving mileage to NAVAIDS (Not shown at midpoint locations)
*0000 *0000 Minimum Obstruction Clearance Altitude (MOCA)
0000000000 Minimum Enroute Altitude (MEA)
000000 GNSS RNAV MEA
MAA-00000 Maximum Authorized Altitude (MAA)
MEA, MOCA and/or MAA Change at other than NAVAIDS
Minimum Reception Altitude (MRA)
Minimum Crossing Altitude (MCA) or Minimum Turning Altitude (MTA)
Holding Pattern with max restricted airspace 210K applies to altitudes above 6000' and including 14000' 175K applies to all altitudes

BOUNDARIES

Air Route Traffic Control Center (ARTCC)
ARTCC Remoted Sites with discrete VHF and UHF frequencies
Flight Information Region (FIR)
Type of Area Traffic Service
CTA/FIR OAKLAND OCEANIC
KZAK
UNITED FL 55
ACC Ceiling Floor
Air Defense Identification Zone (ADIZ)
Off Route Obstruction Clearance Altitudes (OROCA)
Example: 12,500 feet
International Boundary (Not shown when coincident with ARTCC or FIR)
US/Russia Maritime Boundary
Area of Enlargement (contains only data for through flights)
See Area Charts for complete data
Official Time Zone
International Date Line

REPORTING REQUIREMENTS

Fix Compulsory and Non-Compulsory Position Report
RNAV Waypoint Compulsory and Non-Compulsory Position Report
Denotes DME Fix (Distance same as route mileage)
Denotes DME Fix and Mileage
Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)
Mileage Breakdown or Computer Navigational Fix (CNF) (no ATC functions)

AIRSPACE INFORMATION

Open area (white) indicates controlled airspace (Class E) unless otherwise indicated
All airspace 14,500' and above is controlled (Class E)
Shaded area (brown) indicates uncontrolled airspace below 14,500' (Class G)
In Canada - Indicates Class B Airspace above 12,500'
Oceanic Control Area (CTA)
Additional Control Area limit
Class B Airspace
Class C Airspace
Made C Area See FAR 91.215

SPECIAL USE AIRSPACE

P - Prohibited Area
R - Restricted Area
W - Warning Area
A - Alert Area
MOA - Military Operations Area
In Canada:
CYA - Advisory Area
CYD - Danger Area
CYR - Restricted Area
Line delimits internal separation of some Special Use Area
See Airspace Tabulation for complete information

EXAMPLE OF GROUPING

Magnetic Reference Bearings will not be shown on joint Victor/RNAV routes.

Reporting Points (coordinates are shown for offshore and holding fixes)

MEAs established with a gap in navigation signal coverage

Water Vignette

MILITARY TRAINING ROUTES (MTRs)

MTRs 5 NM or less both sides of centerline
IR-000
VR-000
MTRs greater than 5 NM either or both sides of centerline
IR-000
VR-000
Arrow indicates direction of route

See MTR tabs for altitude range information
All IR and VR MTRs are shown except those VRs at or below 1500' AGL
CAUTION: Inset charts do not depict MTRs

CRUISING ALTITUDES - U.S.

IFR within controlled airspace as assigned by ATC

IFR EVEN Thousands
IFR ODD Thousands
VFR or ON TOP EVEN Thousands Plus 500'
VFR or ON TOP ODD Thousands Plus 500'

VFR above 3000' AGL unless otherwise authorized by ATC
IFR outside controlled airspace
All courses are magnetic

MISCELLANEOUS

ALTIMETER Altimeter setting change -4°C = 2010 Isogonic Line and Value
All Mileages are Nautical except as noted.
All Radials and Bearings are magnetic except as noted.
All Altitudes are MSL except as noted.
All Time is Coordinated Universal Time (UTC). Days are local.
‡ During periods of Daylight Saving Time (DT), effective hours will be one hour earlier than shown. All states observe DT except Arizona and Hawaii.
North American Datum of 1983 (NAD 83), for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

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