

## Reading Aeronautical Charts

To zoom in on charts,

- 1) go to <https://skyvector.com/>.
- 2) Locate the Washington DC area
- 3) Click on the “Washington” sectional (button on top)
- 4) Drag map or zoom in/out
- 5) Note: The legend is on the left hand-side of the chart on Skyvector



# WASHINGTON LEGEND



Airports having Control Towers are shown in Blue, all others in Magenta. Consult Chart Supplement for details involving airport lighting, navigation aids, and services. All times are local. For additional symbol information refer to the Chart User's Guide.

## AIRPORTS

- Other than hard-surfaced runways
- Seaplane Base
- Hard-surfaced runways 1500 ft. to 8069 ft. in length
- Hard-surfaced runways greater than 8069 ft. or some multiple runways less than 8069 ft.
- Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, or VORTAC location.

All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.

## ADDITIONAL AIRPORT INFORMATION

- Private "Pvt" - Non-public use having emergency or landmark value
- Military - Other than hard-surfaced; all military airports are identified by abbreviations AFB, NAS, AAF, etc.
- Helipad Selected
- Unverified
- Abandoned - paved having landmark value, 3000 ft. or greater
- Ultralight Flight Park Selected

Fuel - available Mon thru Fri 10:00 A.M. to 4:00 P.M. depicted by use of ticks around basic airport symbol. Consult Supplement for details and for availability at airports with hard-surfaced runways greater than 8069 ft.

★ Rotating airport beacon in operation Sunset to Sunrise  
OBJECTIONABLE - Airport may adversely affect airspace use.

## AIRPORT DATA

Box indicates FAR 93 Special Air Traffic Rules & Airport Traffic Patterns.  
Runways with Right Traffic Patterns (public use) RP \* Special conditions exist - see Supplement.  
FSS - Flight Service Station  
NO SVFR - Fixed-wing special VFR flight is prohibited.  
CT - 118.3 - Control Tower (CT) - primary frequency  
★ - Star indicates operation part-time. See tower frequencies tabulation for hours of operation.  
Ⓢ - Follows the Common Traffic Advisory Frequency (CTAF)  
ATIS 123.8 - Automatic Terminal Information Service  
ASOS/AWOS 135.42 - Automated Surface Weather Observing Systems (shown where full-time ATIS not available). Some ASOS/AWOS facilities may not be located at airports.  
UNICOM - Aeronautical advisory station  
VFR Advsy - VFR Advisory Service shown where full-time ATIS not available and frequency is other than primary CT frequency.  
285 - Elevation in feet  
L - Lighting in operation Sunset to Sunrise  
\*L - Lighting limitations exist; refer to Supplement.  
72 - Length of longest runway in hundreds of feet; usable length may be less.

When information is lacking, the respective character is replaced by a dash. Lighting codes refer to runway edge lights and may not represent the longest runway or full length lighting.

## AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

Only the controlled and reserved airspace effective below 18,000 ft. MSL are shown.

- Class B Airspace
- Class C Airspace (Mode C - see FAR 91.215(AIM))
- Class D Airspace
- Class E (ste) Airspace
- Class E Airspace with floor 700 ft. above surface that laterally abuts Class G Airspace.
- Class E Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E Airspace.
- Class E Airspace with floor 1200 ft. or greater above surface that laterally abuts Class G Airspace.

2400 MSL Differentiates floors of Class E Airspace greater than 700 ft. above surface.

4500 MSL Class E Airspace exists at 1200' AGL unless otherwise designated as shown above.

Class E Airspace low altitude Federal Airways are indicated by center line.

Intersection - Arrows are directed towards facilities which establish intersection.

132° V 69

109

Total mileage between NAVAIDs on direct Airways.

Class E Airspace low altitude RNAV 2 Routes are indicated by center line.

T 319 TK 313 RNAV Waypoint

(Helicopter Only)

Prohibited, Restricted, and Warning Areas

Canadian Advisory, Danger, and Restricted Areas

Alert Area and MOA - Military Operations Area

Special Airport Traffic Area (See FAR 93 for details.)

ADIZ - Air Defense Identification Zone

MODE C (See FAR 91.215(AIM))

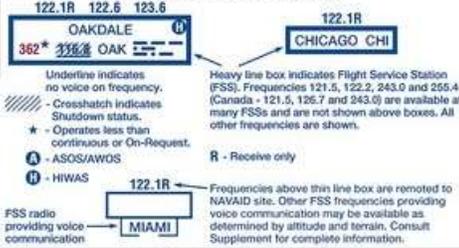
National Security Area

Terminal Radar Service Area (TRSA)

MTR - Military Training Route

IR211

## COMMUNICATION BOXES



## RADIO AIDS TO NAVIGATION

- VHF OMNI RANGE (VOR)
- VOR-DME
- DME
- VORTAC
- Other facilities, i.e., FSS Outlet, RCO, etc.
- Non-Directional Radio Beacon (NDB)
- NDB - DME

## OBSTRUCTIONS



## MISCELLANEOUS

- STADIUM
- Intermittent TFR site (within 3 NM, up & incl 3000' AGL)
- Space Launch Activity Area (See Supplement.)
- A - Aerobatic Practice Area (See Supplement.)
- G - Glider Operations
- H - Hang Glider Activity
- U - Ultralight Activity
- UA - Unmanned Aircraft Activity
- Parachute Jumping Area (See Supplement.)
- VPXYZ
- VFR Waypoints (See chart tabulation for latitude/longitude.)
- Isogonic Line (2015 VALUE)
- NAME (VPXYZ)

## TOPOGRAPHIC INFORMATION

- Power Transmission Line
  - Aerial Cable
  - Lookout Tower
  - 618 (Elevation Base of Tower)
  - Mountain Pass
  - 11823 (Elevation of Pass)
- Pass symbol does not indicate a recommended route or direction of flight and pass elevation does not indicate a recommended clearance altitude. Hazardous flight conditions may exist within and near mountain passes.



Frederick Airport



- 1) How many runways are there at the airport \_\_\_\_\_
- 2) Is there a VOR or VORTAC at the airport \_\_\_\_Y / N
- 3) What is the 3 letter ICAO code for Frederick Airport \_\_\_\_\_
- 4) What is the Control Tower Frequency \_\_\_\_\_
- 5) Is the airport open full time or only part time \_\_\_\_\_
- 6) Does the Airport have a Common Traffic Advisory Frequency \_\_Y / N\_\_\_\_\_
- 7) What is the purpose of a CTAF? \_\_\_\_\_
- 8) What is the Frequency for the Automatic Terminal Information Service (ATIS)  
\_\_\_\_\_
- 9) What information is provided by the ATIS? Give an example. \_\_\_\_\_  
\_\_\_\_\_
- 10) What is the field elevation at the airport \_\_\_\_\_

11) Are there lighting limitations at the airport Y / N

12) What is an example of a lighting limitation \_\_\_\_\_

13) What is the length of the longest runway in (note: 100's of feet) \_\_\_\_\_ ft

14) What is the UNICOM frequency \_\_\_\_\_

15) What is a UNICOM frequency used for \_\_\_\_\_

Note: In U.S many non-towered airports use the same frequency for both Unicom and CTAF purposes.

Navigating to the Airport

1) List 4 landmarks that could be used to locate and/or navigate to the airport:

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2) What type of Radio Navigation Aid is at the airport \_\_\_\_\_



3) What is the name of this Radio Navigation Aid \_\_\_\_\_

4) What is the 3 letter ICAO code for the Radio Navigation Aid \_\_\_\_\_

5) What Frequency is set to tune the Radio Navigation Aide \_\_\_\_\_

6) What Frequency is used to contact the Flight Service Station (FSS) below 5000 ft in the vicinity of this Radio navigation Aid \_\_\_\_\_

7) What would a pilot communicate to the FSS. Give an example. \_\_\_\_\_



5) What is the outbound radial from GRV used to fly this airway \_\_\_\_\_

6) List the Nav aids and their Outbound radials that define the TOMAC intersection on this airway

a. HGR \_\_\_\_\_ 274 \_\_\_\_\_

b. \_\_\_\_\_ \_\_\_\_\_

c. \_\_\_\_\_ \_\_\_\_\_

7) What is the distance between KSL and MRB on the V-166 airway \_\_\_\_\_

8) What is the name of the intersection on the V-166 airway and the V 92 airway \_\_\_\_\_