

# Aeronautical Charts

Vineet Awasthy- June 2026

# Latitude and Longitude

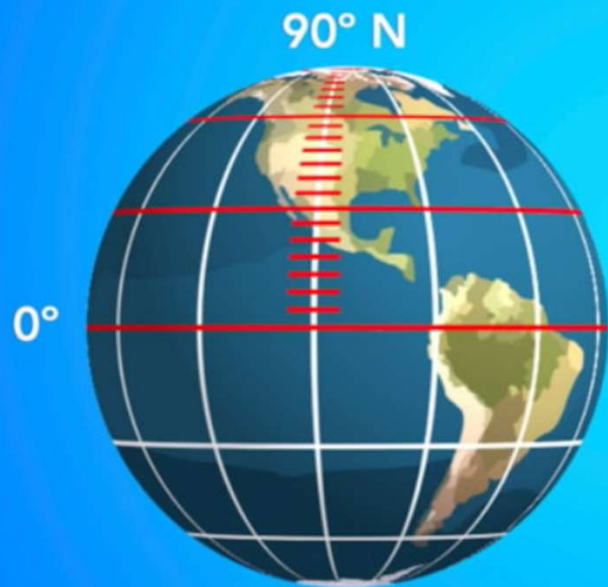
**Latitude:**  
Parallel to  
the Equator



**Longitude:**  
Connect the Poles



In between the equator and the north pole we have lines of latitude numbers between zero and 90. This tells us where the lines exist along the earth's north and south axis. As the equator is the line of origin for the lateral axis dividing the northern and southern poles, the Prime Meridian, or a line that runs straight through Greenwich, London is where we get our line of origin dividing the Western hemisphere and the eastern hemisphere for our longitudinal axis



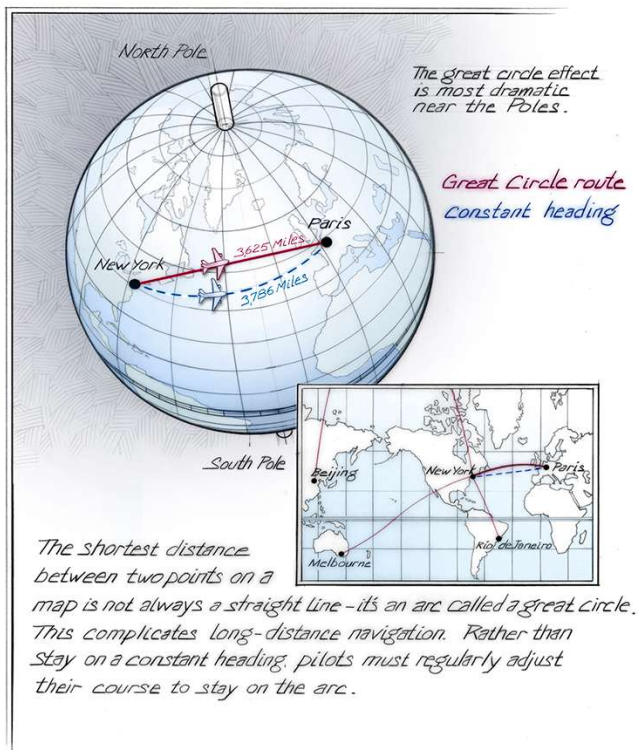
Western  
Hemisphere



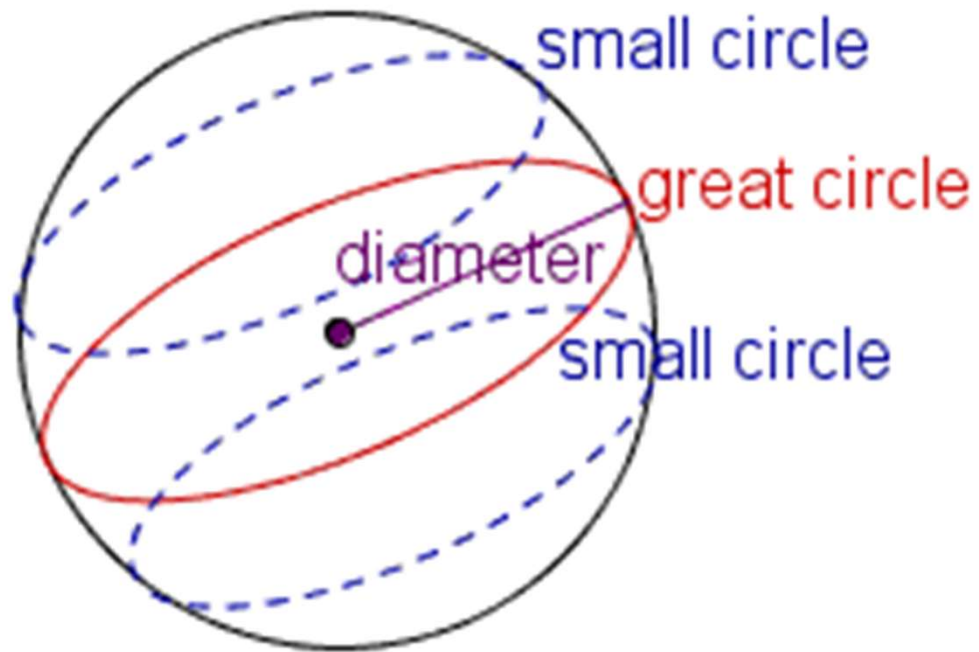
Eastern  
Hemisphere

# Great circle

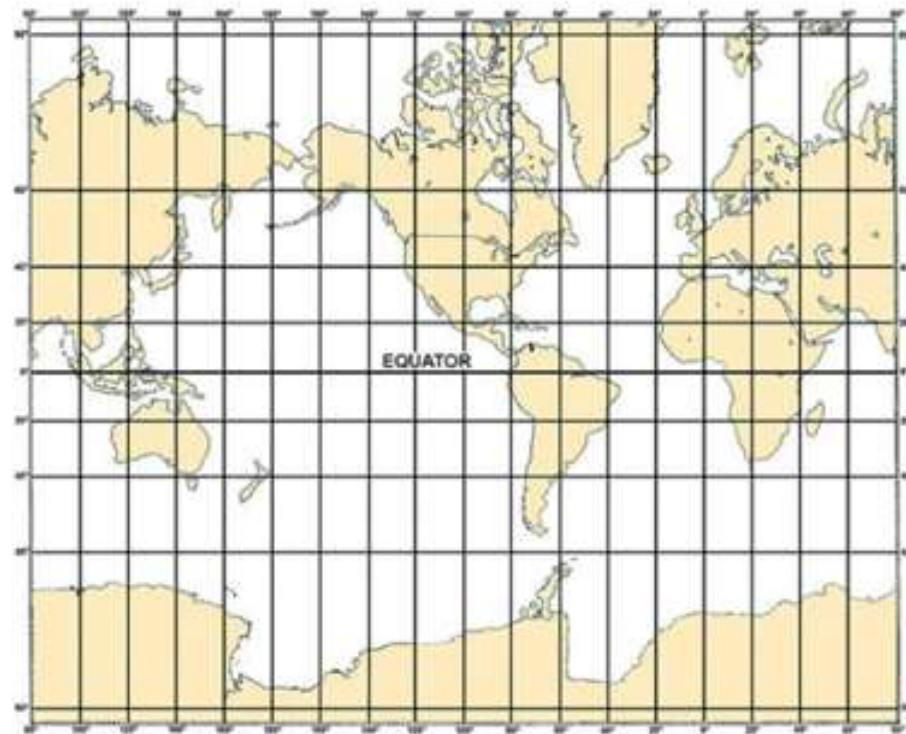
## GREAT CIRCLE



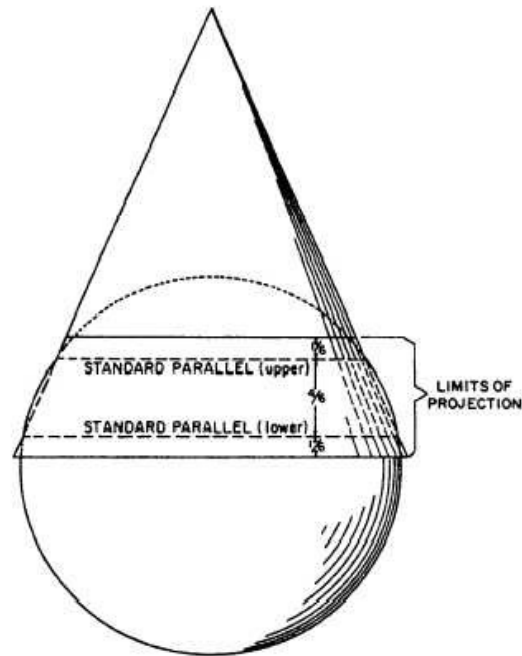
# Small circle



# Mercator projection

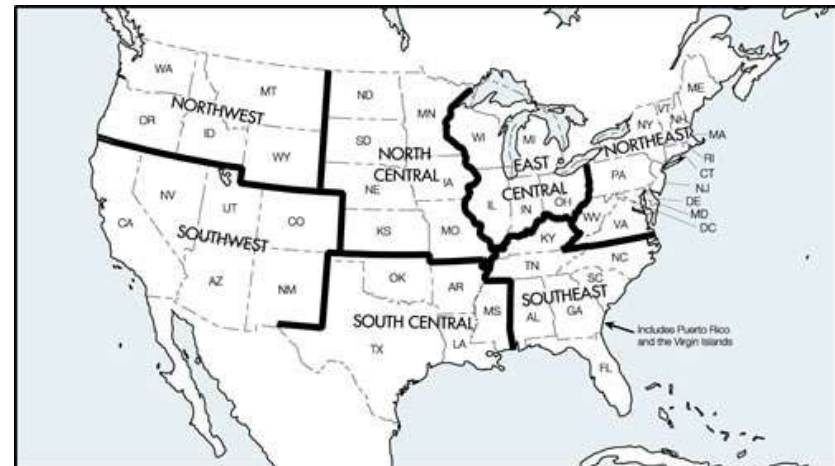
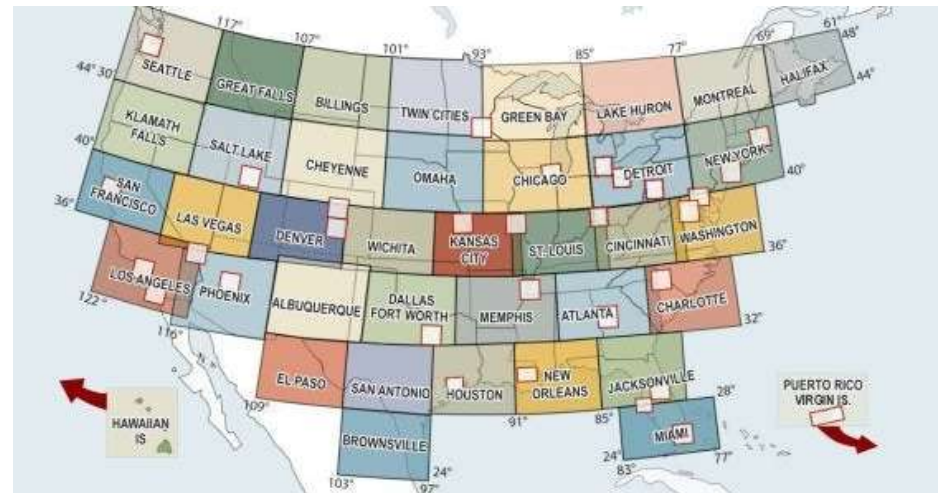


# Lambert conformal conic projection

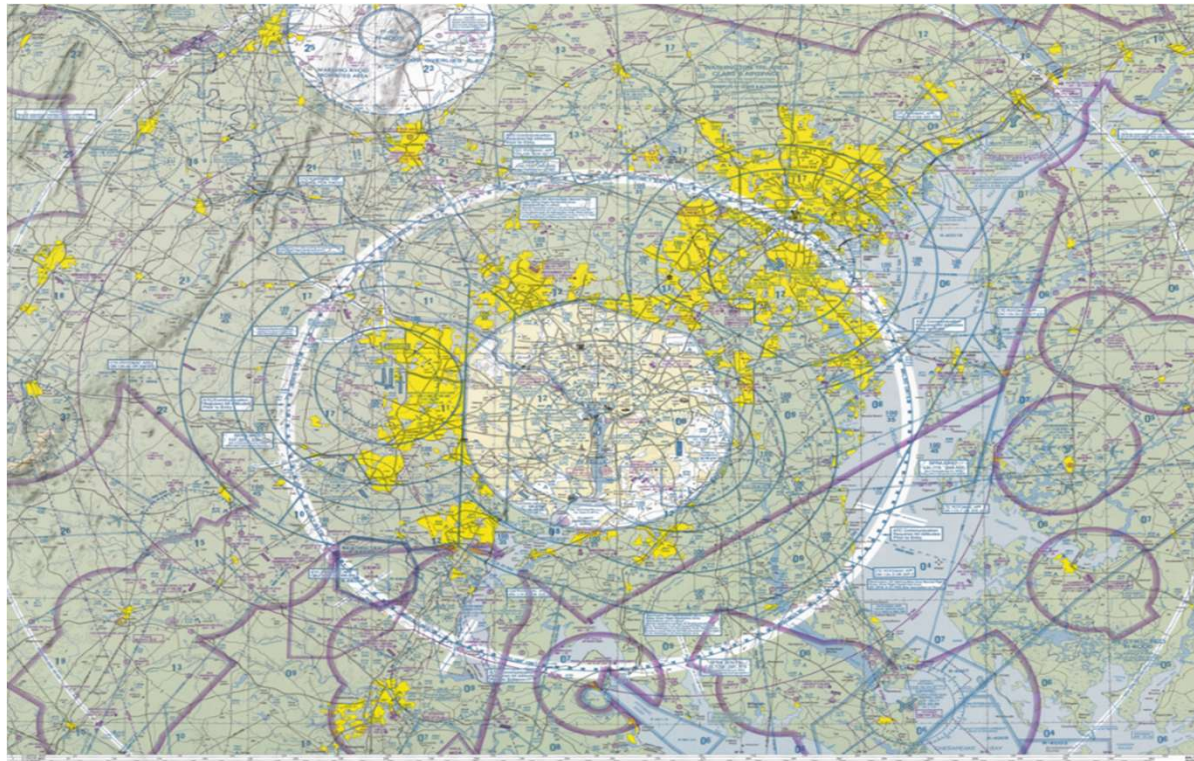


# Aviation VFR charts

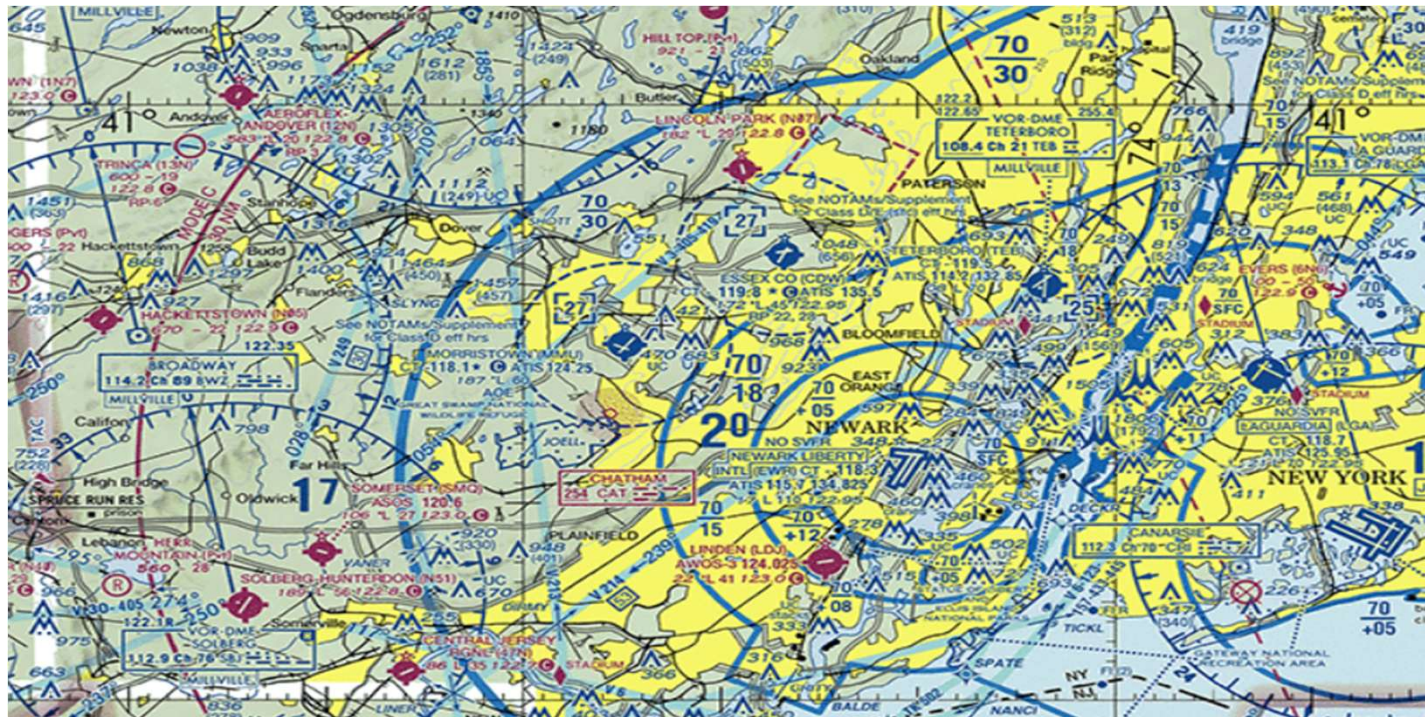
- Sectional Charts (1:500,000)
- Terminal Area Charts (1:250,000)
- Valid for eight weeks (56 days)
- Additional information in Chart Supplement



# Terminal Area Chart



# Sectional Charts



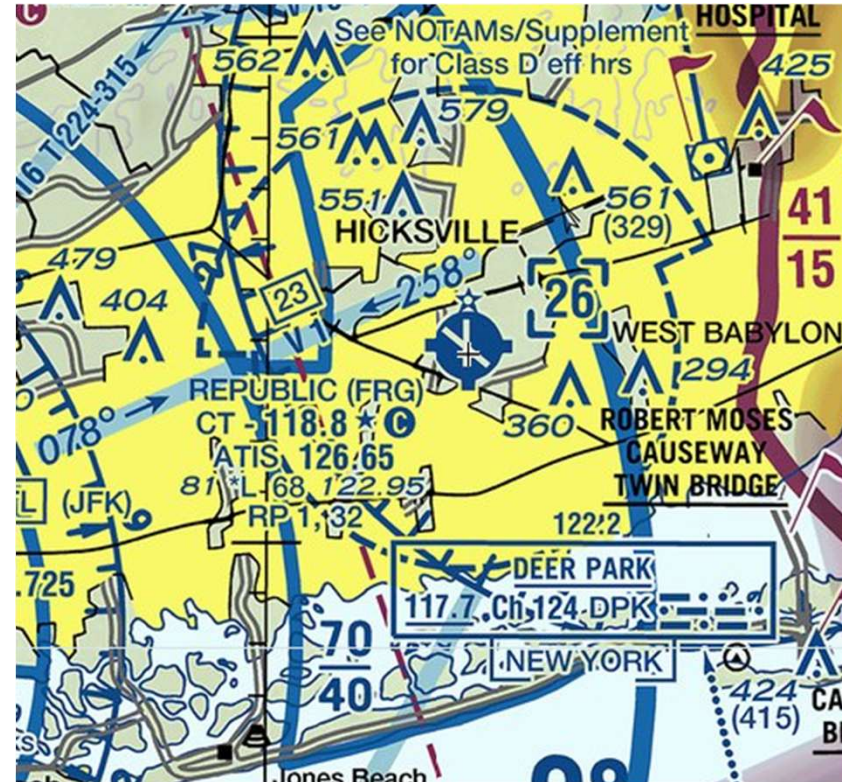
# Latitude and Longitude

- Degrees and Minutes



# Airports

- Towered airport
- 2 Runways
- Frequencies
  - Control tower 118.8, part time
  - C = CTAF
  - ATIS 126.65
  - UNICOM 122.95
- Additional information
  - 81' MSL
  - Longest runway 6,800'
  - RP rwys 1,32= non-standard pattern
  - \*L Lighting limitations



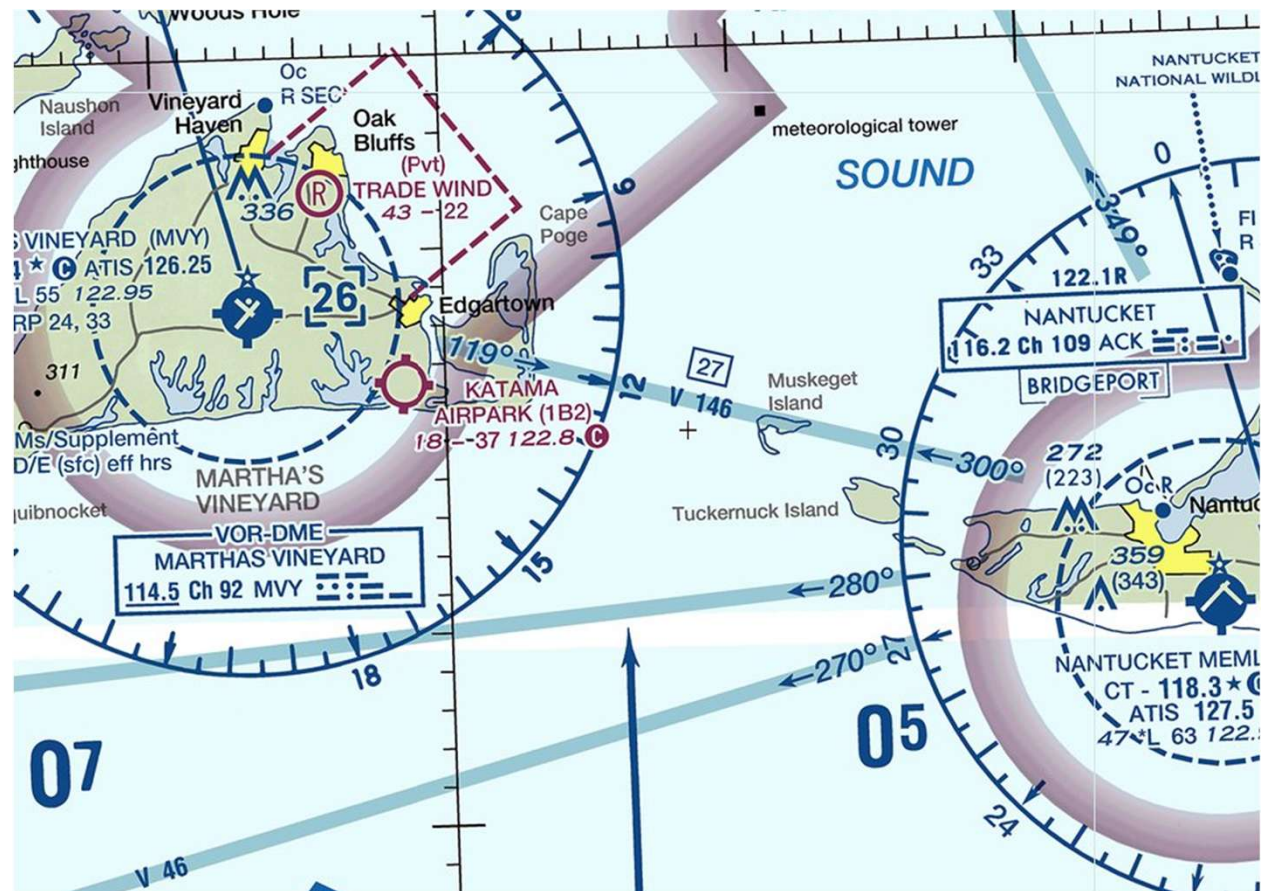
# Airports

- Non-towered airport
- 1 runway
- Frequencies
  - CTAF 122.7
  - ASOS 135.175
- Additional information
  - 345' MSL
  - Longest runway 5,000'
  - \*L Lighting limitations
  - Fuel available



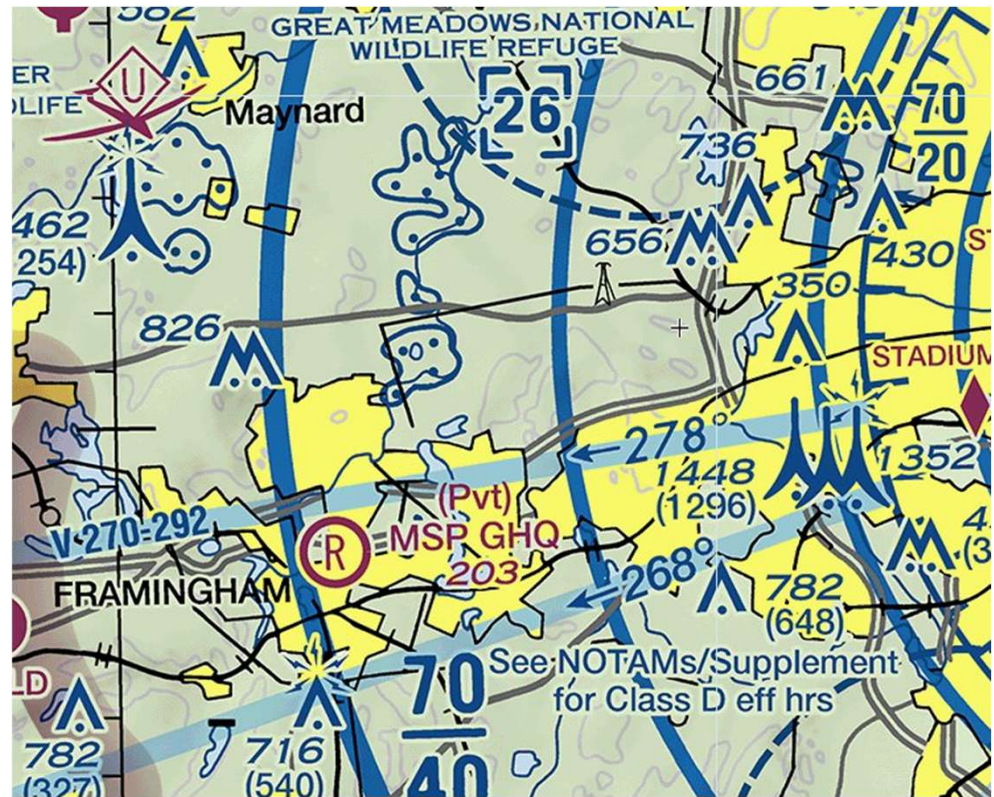
# Nav aids

- VOR
- TACAN
- DME
- NDB



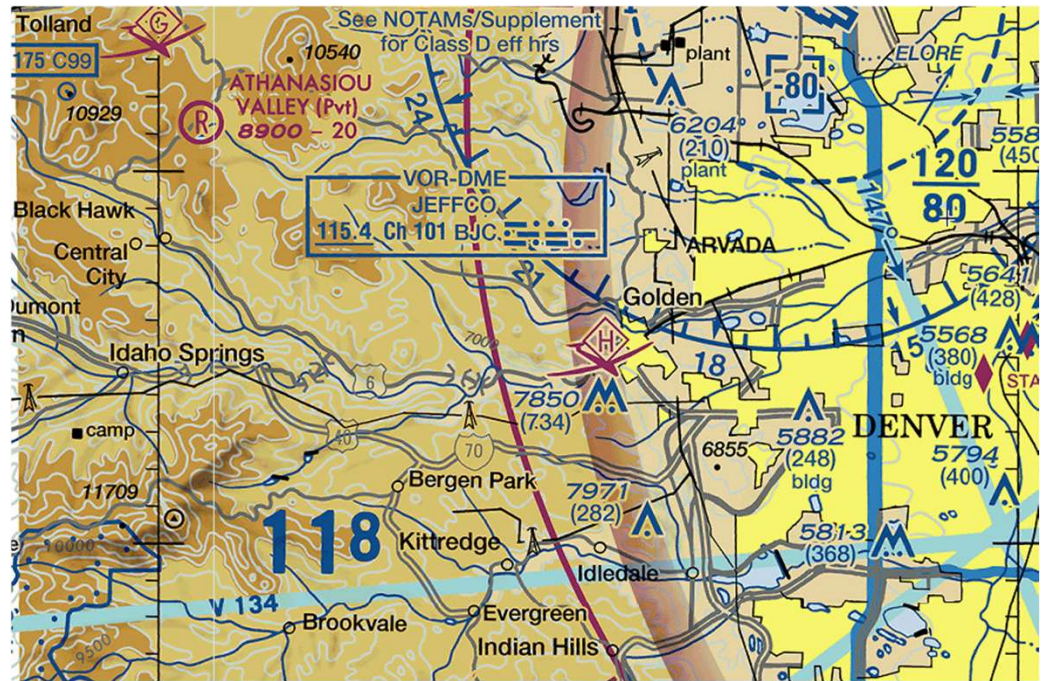
# Obstruction

- Nature
- Elevation (MSL+AGL)
- Lit/unlit



Topographic map of the Presidential Range area in New Hampshire. Key features include:

- Mountains:** MT WASHINGTON (3671, 3583, 2500), Twin Mountain (3671), Fabyan (3671), Lafayette (4902), Bartlett (4720).
- Wilderness Areas:** PEMIGEWASSET WILDERNESS AREA, PRESIDENTIAL RANGE DRY RIVER WILDERNESS AREA.
- Settlements:** Twin Mountain, Fabyan, Lafayette, Bartlett.
- Infrastructure:** Roads (e.g., 6288, 66, 6), towers, bldg, sawmill, ski area.
- Geographic Features:** Contour lines (e.g., 1500, 2000, 3000, 4000), rivers, and a red line with cross-ticks indicating a boundary or trail.



# Other elements

- Water
- Land
- Towns/cities
- Roads
- Power lines
- Railroads
- Magnetic variation
- VFR reporting points
- Other fixes

