

Position Fixing and Flightplanning Exercise

Go to Enroute H-12 Aeronautic Chart on skyvector.com

Charts, Enroute-High, Diagonal chart on east coast.

Reading Enroute Aero Charts

Locate BALTIMORE VORTAC

- 1.) What is three letter callsign _____ [BAL]
- 2.) What is the frequency to tune BALTIMORE _____ [115.1]
- 3.) What is the Lat/Lon for BALTIMORE _____ [N39.10.26, W76.39.68]
- 4.) What Jetroute in on the 303 degree outbound radial from BALTIMORE _____ [J518]
- 5.) What is the next VOR on the Jetroute on the 303 degree outbound radial from BALTIMORE _____ [INDIAN HEAD]
- 6.) What is the inbound radial to the next VOR on the Jetroute on the 303 degree outbound radial from BALTIMORE VORTAC _____ [116]
- 7.) How many miles between the BALTIMORE and the next VOR on the Jetroute on the 303 degree outbound radial from BALTIMORE _____ [32+ 15+13+74]
- 8.) Name 2 Intersections on this Jetroute _____ [MCRAY] and _____ [BUFFR]
- 9.) What distance is the change over point from BALTIMORE to the next VOR _____ [114, 20]
- 10.) What is the Maximum Authorized Altitude (MAA) _____ [35000]
- 11.) Why would there be an MAA on this jet route _____ [airspace above reserved for crossing traffic]

Position Fixing:

Locate WESTMINSTER VORTAC, BALTIMORE VORTAC, and ARMEL VORTAC

- 1.) What is three letter callsign for WESTMINSTER VORTAC _____ [EMI]
- 2.) What is the frequency to tune WESTMINSTER _____ [117.9]
- 3.) What is the Lat/Lon for WESTMINSTER _____ [N39 29 70, W76 58 72]
- 4.) You have tuned the WESTMINSTER VORTAC and your radios indicate that you are located on the 356 degree radial outbound at approx 28 miles from the VORTAC. What is the closest intersection or landmark _____ [KIPPI]
- 5.) You have tuned the WESTMINSTER VORTAC and your radios indicate that you are located on the 300 degree radial outbound at approx 56 nm from the VORTAC. What is the closest intersection or landmark _____ [BUSTR]
- 6.) You have tuned the WESTMINSTER VORTAC and the ARMEL VORTAC, your radios indicate that you are located on the 300 degree radial outbound at approx 66 nm from the WESTMINSTER

VORTAC, and on the 357 degree radial at 44nm from the ARMEL VORTAC What is the closest landmark _____ [Hagerstown Airport, HGR]

Flightplanning:

Locate COLUMBIA AIRPORT (CUB) (approx 33°56'20"N 81°6'58"W)

Locate DULLES INTERNATIONAL AIRPORT (IAD) approx 38°56'57"N 77°27'51"W

Develop a flightplan for the following route from IAD to CUB

Direct to: IAD - CASANOVA VORTAC – J48 – J42 – J75 - CUB

Assume no wind.

Waypoints (e.g. VOR, intersection, etc)	Bearing (from previous waypoint to waypoint on this line)	Distance (from previous waypoint to waypoint on this line)	Airspeed (from previous waypoint to waypoint on this line)	Estimated Time Between Waypoints
IAD				
CSN	236 degrees	26 nm	250 knots	6.24
MOL	239 degrees	73.6 nm	250 knots	17.664
GVE	86 degrees	45.8 nm	250 knots	10.992
DRAK	223 degrees	66 nm	250 knots	15.84
GSO	223 degrees	81 nm	250 knots	19.44
GLOVR	205 degrees	35 nm	250 knots	8.4
CUB	205 degrees	106 nm	250 knots	25.44

Total Distance _____ 433.4 nm _____

Total Time _____ 104 mins (1.73 hours) _____

Assume fuel burn rate 5 gallons/hour, gallons fuel required _____ 8.668 gallons _____