

Cortland County – Chase Field, N03 to V423 Outbound from Ithaca VOR

This flight originates at Cortland County – Chase Field, New York, N03. The flight plan requires intercepting the V423 airway outbound from the Ithaca VOR, ITH, and then continue en route for ten minutes.

V423 is an FAA-designated airway. The "V" preceding the airway number signifies that it is a VOR airway connecting two or more Omni stations. Examine the chart and note that V423 is 026° outbound from the Ithaca VOR. If you had the actual N.Y. Sectional chart you would note that this segment of V423 runs 41 nm from the Ithaca VOR Northeast to the Syracuse VOR.

The procedure to intercept an *outbound* radial is:

1. Before takeoff, set the Nav receiver to the appropriate VOR frequency.
2. Similarly while still on the ground, set the OBS to the radial intended to intercept.
3. On takeoff, turn to the heading set into the VOR. Since we are intercepting an outbound radial, the heading and the OBS setting should match.
4. The TO-FROM indicator should settle on FROM. If it doesn't then continue on the OBS heading until the FROM flag appears. Be aware that the TO-FROM flags won't appear until reaching the minimum reception altitude.
5. Where are you in relation to the desired intercept radial? The CDI, left-right needle, will tell you. If the needle is centered, with a FROM flag, you are already dead-center on course. Rather unlikely, though.
6. If the needle is to the left, turn left to intercept the radial. The amount of turn depends on how much needle deflection is showing. A large needle deflection warrants a large intercept angle, perhaps 30°. A small needle deflection requires a more modest interception angle.
7. A needle deflection to the right requires right turns to intercept.
8. Once intercepting the radial, return to the OBS heading and check for any wind correction needed to properly track the radial outbound.

This flight departs from Cortland County Chase Field, N03, Runway 24. Before departure set the Nav receiver to the Ithaca VOR, 111.80 MHz., and the OBS to 026°.

Your cruise altitude will be 5500 ft. Takeoff and maintain runway heading until 2000 ft. Then turn right to 340°. This will give you a 45° intercept angle with V423. It will take seven or eight minutes before you note movement of the VOR needle with a 90 kt climb. As the needle nears the center of the gauge, turn right to 026° for the intercept. Correct your course as necessary to center the VOR needle and to keep it centered.

After intercepting V423 continue your climb to 5500 ft and fly en route for at least ten minutes confident that you are properly maintaining track. Repeat this outbound intercept flight two more times. Then fly the route another two times after setting in an 18 kt. wind from 090°.