

Directions: Follow the directions very carefully as this will be vital to complete this lab.

PreLab Questions:

1. What does VOR stand for?
2. What is a "Bearing" where you are located?
3. What is a "Heading" where you are located?
4. What Does CDI stand for?
5. Can the Bearing and Heading be the same? _____
 - a. If Yes, explain below

 - b. If No, explain below.

Lab Procedure:

Equipment needed:

- Laminated New York Sectional map
- Dry Erase marker
- Plotter
- Simulator with a co-pilot

Lab Purpose: To navigate from one airport to another via VOR navigation, not GPS.

1. Obtain the laminated New York Sectional map we have been using. Identify Danbury airport and the closest VOR to Danbury Airport – CARMEL.
2. Line up on the Oxford airport runway 36 or 18 and dial in the radio frequency for CARMEL into NAV 1 on the instrument panel. See if you can hear the Morse Code Identifier.
3. This is now something you should have done prior to getting into your airplane as part of a preflight planning session. Locate the TO and FROM Radial at CARMEL that would take you directly to Danbury airport. Write this down below.

CARMEL VOR _____ Hz Radial Bearing TO _____ Radial Bearing FROM _____

4. Go to the website: <https://canvaslib.erau.edu/coa-flight/trainingaids/navigation/vor.html> and practice this procedure on your Chromebooks prior to making this flight. Set up the airplane and VOR in a similar manner as you see on the Sectional and with your mouse, move the airplane as if it were taking off from Oxford and turn it towards the Bearing Radial you want to intercept.
5. Follow normal take off procedures and after reaching an MSL of 1200 feet begin to turn from the runway heading towards Danbury and intercept your bearing. Climb to 2500 feet MSL and continue to head towards Danbury Airport.
6. Fly this bearing on a TO indication, the Bearing Radial and Heading should be the same when there is no wind.
7. When you see the airport begin landing procedures and safely land to a full stop.

Post Lab Questions:

1. Name the Airspace you flew through from Oxford (OXC) to Danbury (DXR).
2. Name three land marks you crossed as you were flying to help identify where you are located. Pilots who do not use any instruments to fly use these landmarks to guide themselves cross country. This is known as Dead Reckoning Flying.
3. What are the ceiling heights of the airspace around DXR and OXR respectively?