

Tim's Air Navigation Simulator

NDB EXERCISE

This assignment requires the use of "Tim's Air Navigation Simulator," which can be found online at www.visi.com/~mim/nav or by typing the name into a search engine.

1. Change the RED navaid to an NDB.
2. Position the airplane north of the RED NDB and notice the position of the needle on the NDB display. Repeat with the following positions:
 - Northeast
 - East
 - Southeast
 - South
 - Southwest
 - West
 - Northwest
3. Reposition the airplane west of the NDB. Set the turn rate to 3 degrees/second (0kts airspeed.) Notice how the needle moves and points to the station as the airplane turns.
4. Change the airplane's heading to 090 and set the turn rate to 0 degrees/second. Repeat number 2 above. Regardless of position or heading, the needle always points to the station.
5. Change the RED NDB into a DG.
6. Change the BLUE navaid to an NDB and place it in the center of the map.
7. Place the airplane in the southwest corner of the map.
 - Press the "T" key for tracing.
 - Intercept the 030 bearing to the station using an intercept angle of 45 degrees. (If you are stuck, think 030+45 for your heading.)
 - Set airspeed to 120 knots.
 - Don't forget to lead the turn.
 - Watch what happens when the airplane crosses the station.
8. **Now comes the hard part. Print a copy of the screen shot showing how well you intercepted and tracked the course.** You can try using the "Print Screen" key on the keyboard and pasting it into MS Word.
9. Fly the same course but set the wind to 300 at 25 knots. Print a copy of the screen shot showing how well you intercepted and tracked the course.