

## **Gardner, Massachusetts to Keene, N.H.**

The flight begins at Gardner Municipal airport, Gardner, Mass. with Keene, N.H. the destination. The flight-information package is gdm-een.zip.

The zip-file includes the IFR chart, the approach plate for VOR Rwy 2 at Dillant-Hopkins airport in Keene, and this text description of the flight.

This flight is unusual in that a procedure turn is not required for our route of flight. We proceed from the GDM VOR to EEN VOR and straight in to Runway 2 at Dillant-Hopkins.

As usual, do nothing until you have gone through the step-by-step details of the flight with this text and your charts. Only by doing this will you both understand the purpose of each step, but you will visualize them in your mind, a very important part of instrument flight.

- Set the flight simulator weather conditions to 1700 ft overcast, cloud tops at 10,000 ft., and one and one-half mile visibility. The wind is calm.
- Move the aircraft to Gardner's Runway 36, and retract the flaps to 0°.
- Tune the Nav. receiver to the Gardner VOR, 110.6 MHZ., ident GDM.
- Set the OBS to 323°. Reset the timer to zero.
- Takeoff from Runway 36 with a climbing right turn to 280°. ATC has cleared you to 4000 ft. (The Right Turn provides an easier intercept of the 323° radial from Gardner VOR.)
- Intercept Gardner's 323° radial north-bound, indicated by the VOR needle centering. Cruise at 120 kts.
- Track outbound from the GDM VOR. Your heading will be 323° with no wind.
- Activate the HDG control of the Autopilot to maintain the 323° outbound track from GDM.
- Retune the VOR to 109.4 MHZ., Keene VOR, ident EEN.
- Set the OBS to 024°, the inbound track to Keene VOR and Dillant-Hopkins' Runway 2.
- Intercept the 024° radial with a right turn and descend to 2600 ft.
- Slow to 80 kts and drop one notch of flaps. Track inbound to the VOR.

At this point your approach should be stabilized.

- On station passage, when the FROM flag appears, start the timer, and descend to 1600 ft.
- Don't chase the needle on station passage. Maintain your heading and don't worry if the needle slides off the side of the gauge. If you're tracking well it will return to center shortly after station passage.
- Runway 2 is 5.7 nm from the FAF, EEN VOR. Elapsed time to cover that distance at 80 kts will be 4 min., 17 secs.
- With one and one-half mile visibility, the runway threshold or approach lights should become visible 1 min., 08 secs. before arrival at 80 kts, or 3 min., 09 secs. after station passage.
- On sighting the runway, configure the aircraft for landing and make a normal landing. Field elevation is 488 feet so slightly more than 1100 ft must be lost for touchdown from the MDA.
- Runway 2's heading is 019° so a 5° turn to the left to it will be necessary after sighting it.