

Chester, Connecticut to Hartford, Connecticut

This flight culminates with an LDA approach. Think of it as one more way to keep final approaches from becoming too boring. It's very short and begins at the Chester, Connecticut, airport, 3B9, where you earlier began a flight leading to a VOR approach. We're heading in a different direction this time, to the Hartford-Brainard airport, KHFD, in Hartford, Connecticut.

The LDA approach at Brainard is to Runway 2. The flight-information package is in chstr-hfd.zip. The zip-file includes the IFR chart, the approach plate for LDA Rwy 2 at Hartford-Brainard, and this text description of the flight.

The flight could hardly be simpler. We proceed northwest, make an easy intercept of the Runway 2 localizer into Brainard. After the FAF we cannot descend below the MDA until passing the Danns intersection, even if the field is in sight. Assume that this flight is under radar control, allowing the direct route to an intercept of the localizer.

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 critical part of instrument flight.

Remember, this is an LDA approach, Localizer-type Directional Aid, and the approach path is *not* lined up with the runway. A right turn is necessary upon reaching the runway to land. Going straight, without the turn, will bring you down onto the taxiway and into the control tower, a rather unsatisfactory ending to a good IFR approach.

NOTE: Fly the Instrument Approach portion with your Nav-2 Receiver for better needle visibility.

- Set the flight simulator weather conditions to 900 ft overcast, cloud tops at 10,000 ft., and two miles visibility. The wind is calm.
- Move the aircraft to Chester's Runway 35, airport 3B9, and retract the flaps to 0°.
- Tune the Nav-1 receiver to the Hartford VOR, 114.9 MHz., ident HFD.
- Set the VOR-1 OBS to 278°.
- Tune the Nav-2 receiver to Brainard's Runway 2 Localizer, 109.7 MHz., ident I-HFD.
- Set the VOR-2 OBS to 002°. The Runway 2 heading is 23°, so anticipate a 21° right turn on arrival.
- Reset the timer to zero.
- **Fly Nav-2.** Takeoff from Runway 35, climbing out with a modest 10° left turn to a 345°

heading to insure intercepting the localizer at a comfortable distance from the FAF.

- ATC has cleared you to 3000 ft. Climb at 90 kts., then cruise at 110 kts. after reaching your assigned altitude.
- Ident both the localizer, I-HFD, and the VOR, HFD. A FROM flag should be showing on the HFD VOR.
- On intercept of the localizer, turn right to 002° to track it inbound.
- Descend to 2200 ft.
- Slow to 75 kts. and drop one notch of flaps.

It's vital to stabilize the approach well before beginning your descent to the MDA.

- Watch the progress of the VOR-1 needle. When it centers you will be at the FAF.
- Reset the VOR-2 OBS to 023° the runway heading. Maintain 2200 ft. until the FAF.
- When the Outer Marker sounds, and the Blue marker light appears, with the VOR-1 needle centered from the HFD VOR, start your timer and start your descent to the 640 ft. MDA.
- Hold your rate of descent between 500 fpm and 700 fpm.
- Reset the VOR-1 OBS to 323°, the Danks Intersection.
- Don't chase the needle; it will be very sensitive as you near the runway. Just try to keep it from moving.
- Include VOR-1 in your instrument scan; you cannot descend below the MDA until passing Danks Intersection, when that needle centers.
- At 75 kts., 4 min., 43 secs. will elapse to fly the 5.9 nm. to the MAP or Runway 2 threshold.
- With two-miles visibility, Runway 2's threshold or approach lights should become visible in 3 min., 07 secs.
- One more time, this is an LDA approach. Anticipate a 21° right turn to land after sighting the runway.
- Brainard's field elevation is 19 ft., so you will have one and a half minutes to descend 621 ft. for touchdown.
- Slow the aircraft for a normal landing by reducing power and further lowering the flaps.

- The Runway 2 landing threshold is displaced 410 ft. Don't touchdown early.
- Pray that, before your next arrival here, a bulldozer removes what ever terrain features prevented this from being a standard localizer approach.
- Flight time: About 15 minutes.