

## **Plymouth, Massachusetts to Provincetown, Massachusetts, KPYM to KPVC**

It's a brief flight from Plymouth Municipal Airport to Provincetown: 13 to 15 minutes to the PVC beacon, the IAF. Smart to fly ... an hour and a half or so to drive out around the hooked arm of Cape Cod.

Despite Mr. Counter's plea not to depart early, we're ready to go at 8:00 a.m. Provincetown has some low-lying fog and clouds with calm winds. Set your Flight Simulator weather at two miles visibility and a ceiling of 800 ft.

Begin, as usual, by completing the approach worksheet.

We'll take-off from Plymouth's runway 6 and have been approved for an NDB approach to Provincetown's runway 25. For this very short flight we've been assigned to 3000 ft. cruise altitude. Tune your ADF to PVC NDB, 389. On takeoff fly direct to PVC NDB.

Descend to 1500 ft. approaching the PVC beacon. Cross the beacon, start the panel timer and intercept the  $067^\circ$  outbound bearing ... ADF needle will point to  $247^\circ$ . Maintain this track for two minutes, adjusting the heading as necessary for any wind. At the two-minute point, make the  $45^\circ$  left procedure turn, to a heading of  $022^\circ$ .

It's your choice whether to reset the timer or not at this time. Continue on the procedure-turn heading for one to two minutes, then reverse back to  $202^\circ$  with a right turn. The aircraft should be in the landing configuration at this point. Slow to 75 kts., and drop one notch of flaps.

Intercept the inbound bearing of  $247^\circ$ , reset the panel timer, and immediately descend to the MDA of 520 ft. Although there is no FAF to MAP time, the timer will generally keep you apprised of your distance from the airport. You flew outbound for two minutes plus made a procedure turn away from the airport, so inbound time will be on the order of two and a half minutes.

At this point you have only three tasks: fly the aircraft at the MDA, sight the runway, and land. Don't clutter your mind with other things.

With no FAF to fly from, your only option is to forge ahead until the runway is sighted or until the ADF needle indicates station passage. This is not all bad because you are flying inbound to the beacon, to an increasingly accurate signal. Mind your heading and don't chase the needle.

The MAP is unmistakably clear: station passage.

Without a clear timing fix inbound, the non-FAF procedure has a built-in trap in that the outbound leg (on the way to the procedure turn) usually starts over the airport, not over a beacon a mile or three from the runway. Pilots who fly a normal two-minute outbound

leg may wind up still letting down to MDA when they roar across the airport or else descending at a very rapid, unsafe rate when the problem is recognized.

The solution is simple: extend your outbound leg to three minutes so you'll have room to descend on the way back to the airport. As soon as it's legal, i.e., on course, inbound, head for the MDA; don't hesitate. Grinding along at MDA for an extra half-minute or so is not sinful; besides it gives you better odds on breaking out of the clouds and more time in level flight to look for the airport and make a rational decision about when to start down for the landing.

One final matter. On a non-FAF approach, the runway heading will never coincide with your inbound heading. Since the beacon is located on the field, it must be located to the side of a runway, not right in front of it where it would be a hazard. So there will be some last-minute jockeying in position to properly align the aircraft with the runway heading.