

Stage 2, Phase 3: GPS, NDB, and VOR Navigation

SCENARIO 1: GPS for IFR Use and ADF/NDB Navigation (If Installed)

ATD MAY BE USED

Note: Although an ATD may be used for this scenario, the maximum time that may be credited is 10 hours (BATD) or 20 hours (AATD) instrument time for a Part 61 course [61.65(i)] or 25% (BATD) or 40% (AATD) of the total instrument training requirement (35 hours) for a Part 141 course [141 Appendix C, 4.(b)(3)].

Objective:

Familiarize yourself with the GPS and its use for IFR navigation. If your airplane has a functioning ADF, you will navigate using a non-directional beacon (NDB).

Purpose/pressures (real or simulated):

You are flying with two friends to a ski destination and back.

Where to go:

A nearby airport

How to get there:

IFR flight plan using GPS waypoints, and NDB bearings if an ADF is installed and an NDB is available

Planned deviations:

To a suitable airport to deal with en route icing

Planned malfunctions:

RAIM unavailable

NDB loss of signal

Risks (real or simulated):

Navigation errors due to unreliable signals

Each of you is carrying ski boots and extra clothes

Runway has light snow on it

AIRMET Zulu and Sierra are valid for the route of flight (possibility of encountering structural icing and IMC or mountain obscurations)

Destination airport is 6,388 feet MSL

New this scenario:

Aeronautical decision making

Determining suitability of GPS for IFR flight

Familiarity with avionics

Navigation system orientation (GPS and/or NDB)

Navigation system course intercepting and tracking (GPS and/or NDB)

Navigating to a waypoint or an off-airway fix at a safe altitude

Improving your skills:

Risk management

Checklist usage