

## **TRAINING G1000 C182T PILOTS**

Although the G1000 offers much more than this, I focus on the following items I consider to be most important.

### **On The PFD:**

- Inset map setup – with terrain always on, wind arrow in use
- Wind Vectors choice
- Nearest airports and how Direct Enter works for what's shown
- Transponder setup and use
- 121.5 Frequency shift button
- Manual VOR/ILS frequency selection/ radial/course selection
- Audio Panel operation/volume/squelch
- Basic Autopilot operation, climb, descend, turn, navigate, reset, and knowing what it's doing, what it is armed to do, and where it is going
- Cross Checking **outside** every time we look down
- Cockpit Lighting

### **On the MFD:**

- MAP page 1 and 4 for Terrain, Nexrad, Winds Aloft, Cloud Tops, traffic, use range cursor to find altitude of GPS overlay under you (poor man's radio altimeter), also names of lake/rivers/Interstate highways
- WPT page 1 for specific airport info, frequencies, wx and forecasts, autoloading frequencies
- WPT page 5 to press softkey 'new' to mark a find and make a waypoint of it, and make waypoints for the four corners of a grid (S394NW – Salt Lake sectional, grid 394, NW corner, adding Lat and Long)
- Using Direct Enter Enter to go to any waypoint
- NRST to find best FSS or Center Frequencies –autoload it, nearest VOR to autoload frequency
- Set up a flight plan, note location of SAR program
- Divert to another airport
- Reset fuel used/loaded, use lean assist:

### **For Instrument Pilots, Add:**

- setting minimums and timers on the PFD
- setting up a flight plan with DP, airways and STARS
- changing, loading, and activating approaches
- autopilot proficiency for all types of approaches including VNAV
- monitoring FLT PLAN page to see 'how goes it'
- Use direct button to go to a waypoint and hold in a certain direction, or go to NRST intersections, go direct and hold there in a certain direction

**Training should include a thorough review of the Emergency Checklists, often well served setting in the hangar with ground power attached. Weight and Balance should also be reviewed as the G1000 aircraft are heavier than Legacy aircraft.**

## **G1000 FORM 5 CHECKRIDE C182T**

This typical profile tries to touch on most all of the items thought important from the previous list using logical sequence in a minimal time period. I have the pilot plan a short field takeoff with a 50' obstacle, then follow a given VOR radial a certain distance before flying the flight plan (GPS direct between two airports with high terrain between). As they are doing the walk around, I scramble frequencies and set the transponder to 3001. I hope the pilot will do the following before even moving:

- do a normal checklist and engine start
- set up a GPS flight plan between two airports
- set up the initial VOR frequency and radial
- autoload necessary frequencies with volume and squelch adjustments
- reset transponder and use TERRAIN on MAP page 1
- Do the Taxi Checklist (as much as possible)

Then,

- let them taxi out, short field takeoff, follow the VOR radial and transition to the GPS flight plan, climb to altitude and lean out the engine, while cross checking outside.
- here we can do the slow flight to do clearing turns, then the stall series, and 720s
- then, autopilot ON to follow course and hold altitude
- next divert to the nearest airport after checking its' weather
- please find me the NRST FSS and Center frequency
- Autopilot off and engine out practice
- Return to base for 3 landings; no flap 80 knots on final, soft field (snow) 70 knots, and a short field landing, 65 knots, to a full stop. Demonstrate a stabilized approach on final during the last 200-300 feet.
- Proper use of all checklists

### **For Night Ops, Add;**

- TERRAIN always on the MAP MFD
- Flashlight handy
- IFR routes/altitudes ONLY
- cockpit lighting, switch locations, strobe light/landing light ground etiquette
- Pulse light vs landing light during the landing flare

### **For Instrument Check, Add after the Engine Out Practice;**

- Partial panel Unusual Attitude recovery –( I black out the PFD)
- go direct to nearby waypoint or intersection and enter hold
- 1 local approach using correct setup selection, minimums set, good briefing, and FLT PLN page open for how goes it, all to a normal no flap landing at minimums

### **For Cadet Orientation or AFROTC check add;**

- during the stall series, have the pilot talk you through them as if you were a cadet
- during the pre-flight, have the pilot demonstrate workable knowledge of 52-7