

Cindtronix Aviation

G1000 Transition Training RENTER'S TRAINING AND TRANSITION SYLLABUS



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Notes to the Transitioning Pilot

Ground Training consists of a combination of the *Getting Ready to Fly the Garmin G1000* as well one-on-one instruction on specific topics. The transitioning pilot is expected to have completed the *Getting Ready to Fly the Garmin G1000* Ground Training modules as a home study course.

Briefing and Debriefing are included in the total amount of time necessary to complete the flight portion of the training. Actual flight time can be expected to

range depending on the pilot certificate (VFR only vs. IFR) and level of proficiency.

G1000 C172SP Checkout

* The VFR Checkout is anticipated to be 1.5 to 2.0 hours. IFR checkout is anticipated to be 4.0 hours.

VFR Transition Training Scenario

Lesson Objective:

During this lesson the transitioning pilot will learn to accomplish tasks required for VFR flight using the Garmin G1000. Specifically the transitioning pilot will learn to

- Become familiar and comfortable with the G1000 presentation of the flight instruments
- Tune communication and navigation frequencies
- Set transponder codes
- Use the GPS to enter a flight plan
- Use the MFD and / or standby instruments in the event of a PFD or ADC/AHRS failure

Upon completion of this lesson the transitioning pilot will have completed the requirements for a Biennial Flight Review.

GROUND TRAINING MODULE

The transitioning pilot shall have completed the following home-study Labs from the *Getting Ready to Fly the Garmin G1000* prior to commencing the flight scenarios.

Getting Ready to Fly the Garmin G1000

1. Lab 1 . What the G1000 Does for You
 - a. A Quick Tour of the G1000
 - b. Airplane Control . All on One Screen
 - c. Using the Audio Panel and Radios
2. Lab 2 . Navigation Made Easy
 - b. Direct To: Just Get Me There
 - f. Finding the Airports and Facilities Nearest to You
3. Lab 3 . Managing G1000 Systems
 - a. System Startup . From Preflight to Takeoff in the G1000
 - b. G1000 Alerts
 - c. Using the G1000 Engine Indications
4. Lab 4 . Coping When Things Go Wrong
 - a. Dealing with Malfunctions
 - b. What to Do With an Ailing G1000
5. Lab 5 . Putting It All Together in the Air
 - a. Managing Risks While Flying With a Glass Cockpit

FLIGHT TRAINING SCENARIO

Leg 1:

The flight plan for Leg 1 will be from the *ALN* to *TAZ*. The transitioning pilot will enter the flight plan using the Flight Plan function on the G1000. Enroute to *TAZ* the transitioning pilot will become familiar with the G1000 PFD presentation. The transitioning pilot will tune the radios and transponder. The transitioning pilot will perform normal and/or crosswind takeoffs and landings at the destination airport.

Instructor notes: While enroute have the student perform constant airspeed climbs and descents, turns to headings, and climbing and descending turns to develop an understanding of the flight instruments. Perform some of the maneuvers under the hood. Also have the student get flight following and demonstrate the use of the transponder.

Leg 2:

The flight plan for Leg 2 will be from *TAZ* to *VLA* (*this will allow for an area that permits air work, such as stalls and slow flight*). The transitioning pilot will enter the flight plan using the Direct To function on the PFD. Enroute the transition pilot will perform slow flight, steep turns, stalls and unusual attitude recovery. Once re-established on course, the transitioning pilot will lean the engine using the G1000 lean assist function. **Prior to reaching the destination a diversion will be required to an alternate airport (to 3LF).** The transitioning pilot will use the Nearest function to locate an alternate airport. While flying to the alternate airport, the transitioning pilot will experience a PFD failure and will be required to navigate and land while in reversionary mode. The transitioning pilot will perform short and soft field takeoffs and landings as well as landings using not flaps.

Leg 3:

The flight plan for Leg 3 will be from *3LF* back to *ALN*. The transitioning pilot will enter the flight plan using any method they prefer (Direct-To, Flight Plan or Nearest). While flying to the alternate airport, the transitioning pilot will experience an ADC/AHRS failure and will be required to navigate and land using the standby instruments. A non-instrument rated pilot may be introduced to the use of an autopilot and ATC assisted letdown through a cloud layer to VMC conditions.

EVALUATION RECORD – VFR TRANSITION TRAINING

| Scenario Activities | | | | | |
|---|---------------------------------|--|--|--|--|
| <ul style="list-style-type: none"> • Flight Planning <ul style="list-style-type: none"> ○ Weight & Balance ○ Aircraft Performance ○ Aircraft Speeds ○ Configuration ○ Conduct Flight ○ SRM Briefing | | | | | |
| <ul style="list-style-type: none"> • Normal Preflight & Cockpit Procedures <ul style="list-style-type: none"> ○ Normal Pre-Takeoff Checklist ○ G1000 Setup | | | | | |
| <ul style="list-style-type: none"> • Engine Start & Taxi Procedures <ul style="list-style-type: none"> ○ Engine Start ○ G1000 Setup ○ Taxi | | | | | |
| <ul style="list-style-type: none"> • Before Takeoff Checklist <ul style="list-style-type: none"> ○ Normal & Abnormal Indications ○ G1000 Setup | | | | | |
| <ul style="list-style-type: none"> • Takeoff <ul style="list-style-type: none"> ○ Normal / Crosswind ○ Short field / Soft field ○ No Flap | | | | | |
| <ul style="list-style-type: none"> • Climb Procedures <ul style="list-style-type: none"> ○ Manual Climb ○ Autopilot Climb ○ Power Management ○ Use of G1000 | e a t u r e s | | | | |
| <ul style="list-style-type: none"> • Cruise Procedures <ul style="list-style-type: none"> ○ Lean Assist ○ Manual Cruise ○ Autopilot Cruise | | | | | |
| <ul style="list-style-type: none"> • PFD / <i>Visual</i> Crosscheck | | | | | |

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|--|----------------------------|--|--|--|--|
| <ul style="list-style-type: none"> ○ Straight & Level Flight ○ Normal Turns ○ Climbs & Descents | | | | | |
| <ul style="list-style-type: none"> ● Slow Flight, Stalls, Steep Turns ○ Configuration | h a n g e s | | | | |
| <ul style="list-style-type: none"> ○ Slow Flight Recovery ○ Power-off Stall Recognition ○ Stall Prevention ○ Steep Turns | | | | | |
| <ul style="list-style-type: none"> ● G1000 Programming ○ General Programming ○ Communications ○ Ground Based Navigation | | | | | |
| <ul style="list-style-type: none"> ● Autopilot Operation ○ Navigation Modes ○ PFD Interface | | | | | |
| <ul style="list-style-type: none"> ● Emergency Escape Procedures ○ Recovery from Unusual Attitudes ○ Weather Deviations | | | | | |
| <ul style="list-style-type: none"> ● PFD / Standby Instruments / <i>Visual, Instrument</i> Crosscheck ○ Straight & Level Flight ○ Normal Turns ○ Climbs & Descents | | | | | |
| <ul style="list-style-type: none"> ● Emergency Escape Procedures ○ Autopilot Only Flight ○ PFD / AHRS / ADC Failure ○ Alternator Failure ○ Pilot Decision Making | | | | | |
| <ul style="list-style-type: none"> ● Landing ○ Before Landing | | | | | |

