

ILLINOIS AVIATION ACADEMY, INC.

G1000 Check out VFR/IFR

1. Define the following navigation terms:

TRK

DTK

VNAV

CTS

2. Explain the use of and limitations of a TSO-C129a GPA during instrument approaches per the AIM.
3. When filling a flight plan, what suffix is used when you have a current GPS data base?"
4. When can GPS be used in lieu of DME and ADF?
5. Describe the differences between a fly-by and a fly-over GPS waypoint and draw their respective symbols.
6. What does RAIM stand for? Describe its purpose.
7. You are on the RNAV(GPS)17 into KIXD (New Century Air center, Olathe, KS) and the system displays the RAIM UNAVAIL alert inside the Final Approach FIX. The weather is reported as 500 feet overcast with 2 statute miles of visibility. What action do you take and why
8. On the back of this page sketch the primary 6 instruments as displayed on the PFD.

9. Assume that your aircraft is flying with the following indications, fill in the appropriate fields on your sketch with this data.

airspeed 120
True airspeed 135
Altitude 9,000
Vertical Speed 0
Heading 095
Barometer 29.82

10. Which transponder mode of operation does the G1000 system default to when it is first powered up if it is equipped with the Garmin mode S transponder (GTX33)

11. Describe the process for entering a newly assigned transponder code.

12. Which key should be used on the audio panel (GMA 1347) to monitor a COM radio frequency without using it to transmit on?

13. Describe how the split COM feature works and provide a sample scenario of its use.

14. Describe the function of the digital clearance recorder

15. What purpose does the red button located at the bottom of the audio panel (GMA1347) serve?

16. When the PLOT ICS key is pressed, can the other passengers in the aircraft communicate with each other via the intercom?

17. Does the COM MIC key selection have any impact on the display of the COM frequencies on the PFD or MFD? Explain?
18. You are flying a long cross-country flight and encounter bad weather. Another pilot is sitting in the right seat. You want to get a weather update, but you are struggling to get on frequency and be heard because the ARTCC frequency is very busy handling multiple reroutes. What tools are available to you to get the necessary weather information to continue the flight?
19. Can you create a direct to navigation/flight plan using the GPS on both the PFD and the MFD or must you use one or the other – and if so, which one?
20. Describe the process for canceling a direct to GPS navigation.
21. Describe the process for entering a flight Plan.
22. When using the Flight Plan function, does the unit auto-sequence the waypoints and does the autopilot continuously fly the programmed route?
23. Describe some of the advantages to using the Flight plan function as opposed to continuous direct to navigation.