SUSAN PARSON

Checklist

Can I (Legally) Use My iPad?

Since acquiring my Apple iPad® last summer and stocking it with an ever-evolving suite of aviation apps, this amazing and, yes, magical device has become my favorite tool for 21st century flight planning, flight management, and flight monitoring. Every pilot who sees its capabilities seems to want one, but the first question I usually get — even before the obligatory exchange of best app tips — concerns the legalities of using iPad during flight.

Straight from the Source

For those operating under Title 14 Code of Federal Regulations (14 CFR) part 91, the single best source of information about the FAA's view of iPad use is Advisory Circular 91-78, *Use of Class 1 or Class 2 Electronic Flight Bag (EFB)*. AC 91-78 is applicable to instrument flight rules (IFR) or visual flight rules (VFR), preflight, flight, and postflight operations conducted under part 91 unless such use is prohibited by a specific section of 14 CFR chapter I. AC 91-78 provides "information for removal of paper aeronautical charts and other documentation from the cockpit through the use of either portable or installed cockpit displays (electronic flight bags)." Though its July 2007 publication date obviously preceded the iPad's introduction in 2010, the guidance still applies.

If you aren't certain about the definition of EFB, AC 91-78 can help. In brief, it defines an EFB as an electronic system that can display a range of aviation data (e.g., checklists, navigation charts, pilot's operating handbook (POH)) or perform basic calculations (e.g., performance data, fuel calculations). Physical EFBs may be portable (Class 1), attached to a mounting device (Class 2), or built into the aircraft (Class 3).

As far as the FAA is concerned, "The in-flight use of an EFB in lieu of paper reference material is the decision of the aircraft operator and the pilot in command" for part 91. This guidance applies as long as the interactive or precomposed information used for navigation or performance planning is valid, up-to-date, and functionally equivalent to the paper reference material it replaces.

Do I Need Paper Back-ups?

The FAA does not *require* you to carry paper, but AC 91-78 suggests that pilots consider a secondary source of aeronautical information. The secondary source could be a separate electronic display.

A related point is AC 91-78's recommendation for implementing an EFB. The idea is to practice with the iPad or other EFB before you leave your paper products at home. Items to evaluate include: workload management during various phases of flight, integration of the EFB into the cockpit, display and lighting, and system failures. You also need a solid grasp of the aeronautical information apps you are using. You don't want to be fumbling for the right data at a critical phase of flight.

Other considerations include power supply and signal strength. Though the iPad's battery life is excellent, intensive use over a long flight can drain the battery faster than you might expect — especially if you start with less than 100 percent. Several after-market devices are available to boost and stabilize the GPS signal reception to your iPad.

Note: Operators of large and turbine-powered multiengine and fractional ownership aircraft operating under part 91F and part 91K should reference AC 120-76, Guidelines for the Certification, Airworthiness, and Operational Use of Electronic Flight Bags (EFB) *(currently under revision), for specific functionality and/or equipage guidelines.*

Susan Parson is a Special Assistant in the FAA's Flight Standards Service and editor of FAA Safety Briefing. She is an active general aviation pilot and flight instructor.

Learn More

AC 91-78 Use of Class 1 or Class 2 Electronic Flight Bag (EFB) – July 2007
http://rgl.faa.gov/REGULATORY_AND_GUIDANCE_LIBRARY/RGADVISORYCIRCULAR.NSF/0/eb15b0c685650a04862573 21006b3b8c/$FILE/AC%2091_78.pdf

InFO 11011 – May 13, 2011 - The Apple iPad and Other Suitable Tablet Computing Devices as Electronic Flight Bags (EFB)
http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info/all_infos/media/2011/InFO11011.pdf

"Flying Paperless Airplanes" – FAA Safety Briefing – May June 2010