# Pilots embrace aviation apps

by Matt Thurber

For this year's **AIN** Special Report on Aviation Apps, we conducted a survey of **AIN** readers who are pilots, to learn what apps they use regularly while flying. The survey was open from Dec. 26, 2017, through Jan. 8, 2018, and generated 589 responses.

The following three questions aren't shown in the charts in this article:

- What is your primary type of flying?
- What accessories do you regularly use with your mobile device while flying?
- Which mobile device operating system do you use regularly for aviation apps?

The majority of respondents, 69 percent, fly in Part 91 (non-commercial) operations, while 15 percent fly under Part 135 (charter), and 11 percent Part 121 (airline). About 5 percent of respondents selected the "other" category, and these responses included a variety of operational types such as fractional, flight training, flight test, public use, and others.

In the question about accessories, almost 58 percent of respondents said they fly with

a GPS receiver, which drives the own-ship position display on moving maps. Many fewer, just 22.5 percent fly with a combined ADS-B In receiver with AHRS sensors, which allows display of synthetic vision and attitude information. Nineteen percent fly with ADS-B In alone.

Although the subscription to Sirius XM WX isn't free, as is ADS-B In weather and traffic information, and the Sirius receivers are a fairly recent addition to the aviation mobile device ecosystem, this tallied 17 percent of responses to this question. (ADS-B In and Sirius XM work primarily in the U.S.) Just over 5 percent said they fly with an action camera.

There are three primary operating systems in use on mobile devices: Apple's iOS, Google's Android, and Microsoft's Windows 10. As expected, most pilots are flying with iOS-powered devices such as Apple iPads, with 94 percent responding thusly. Android users accounted for nearly 11 percent of the responses, while Windows garnered nearly 5 percent.

The majority of aviation apps are available for iOS, with many also available on Android. The Windows platform has a lot of catching up to do in the aviation world, although it is supported by a major developer, Jeppesen, as well as FltPlan Go.

## REGULAR USE

While ForeFlight has made huge gains in the professional pilot ranks, the majority of respondents indicate that they are flying with Jeppesen's Mobile FliteDeck or FliteDeck Pro, followed by ForeFlight. However, it may be likely that many pilots are flying with both apps, using ForeFlight for preflight planning and moving-map display and Jeppesen's apps to display charts.

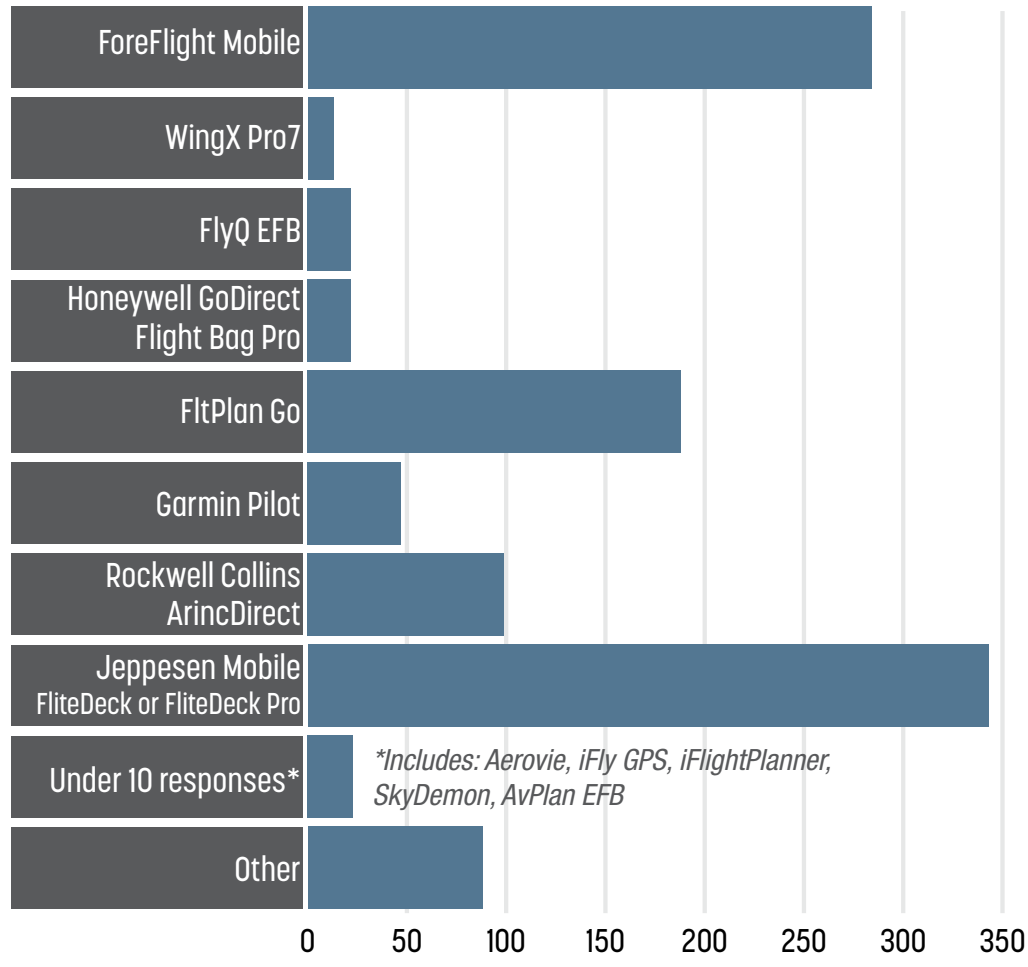
Jeppesen came later to the game with own-ship position display (geo-referencing) on maps and approach charts. Now, the company not only offers that feature but also the unique ability of geo-referencing on SID and STAR charts.

Another factor here is that Jeppesen and ForeFlight are working together on new products. The first fruit of this partnership is the ability of ForeFlight buyers to download Jeppesen charts (with a subscription to Jeppesen) in ForeFlight, so it isn't necessary to use a separate app to display Jepp charts. Jeppesen also supplies navigational, terrain, and obstacle data to ForeFlight. The two companies are working jointly on a new app that is targeting the professional pilot market, and it will be interesting to see how this turns out, especially given ForeFlight's purchase of flight planning software developer AviationCloud in 2015.

FltPlan Go received the third-highest number of responses to this question, and clearly pilots are using this free app, which is tightly tied to FltPlan's online flight planning service.

Respondents indicated that they are also using apps such as Honeywell's GoDirect Flight Bag Pro and Rockwell Collins's ArincDirect, although the number of respondents on these apps was much

**Which EFB apps do you regularly use while flying?**




lower than hugely popular ForeFlight and Jeppesen apps. Among professional pilots, ForeFlight clearly has outpaced its rivals, which include Hilton Software's WingX Pro7, FlyQ EFB from Seattle Avionics, Garmin Pilot, and those that garnered fewer than 10 responses each: Aerovie, IFlyGPS, iFlightPlanner, SkyDemon, and AvPlan EFB.

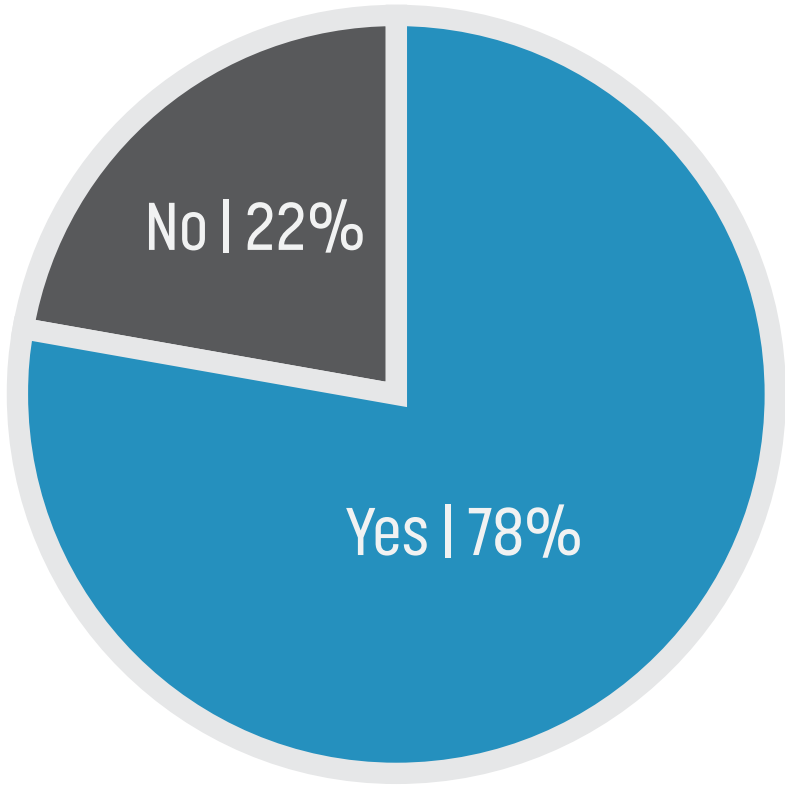
In the "Other" category, some of the apps that were mentioned include WSI Pilotbrief, AeroWeather Pro, Lido/RouteManual, Droid EFB, Air Navigation Pro, RocketRoute, Avare, and more.

## OWN-SHIP DISPLAY

Clearly, pilots are using geo-referencing (aka own-ship display) to show their aircraft's location on moving maps, with 78 percent of respondents indicating they use that feature.

Until recently, the FAA frowned on such behavior, except for airport ground operations, and even instructed commercial operators to turn off own-ship display on their mobile device apps when in the air. However, late last year, the FAA issued an updated advisory circular (AC120-76D) that now supports own-ship display in all phases of flight. The AC applies to Part 91, 91K, 121, 125, and 135 operators, but only 91K through 135 operators are required to seek FAA approval of their EFB programs. Part 91 operators can use EFBs as they wish, without formal approval. Although that has always been the case, the FAA's new attitude seems to encourage the use of this vital safety benefit for all pilots.

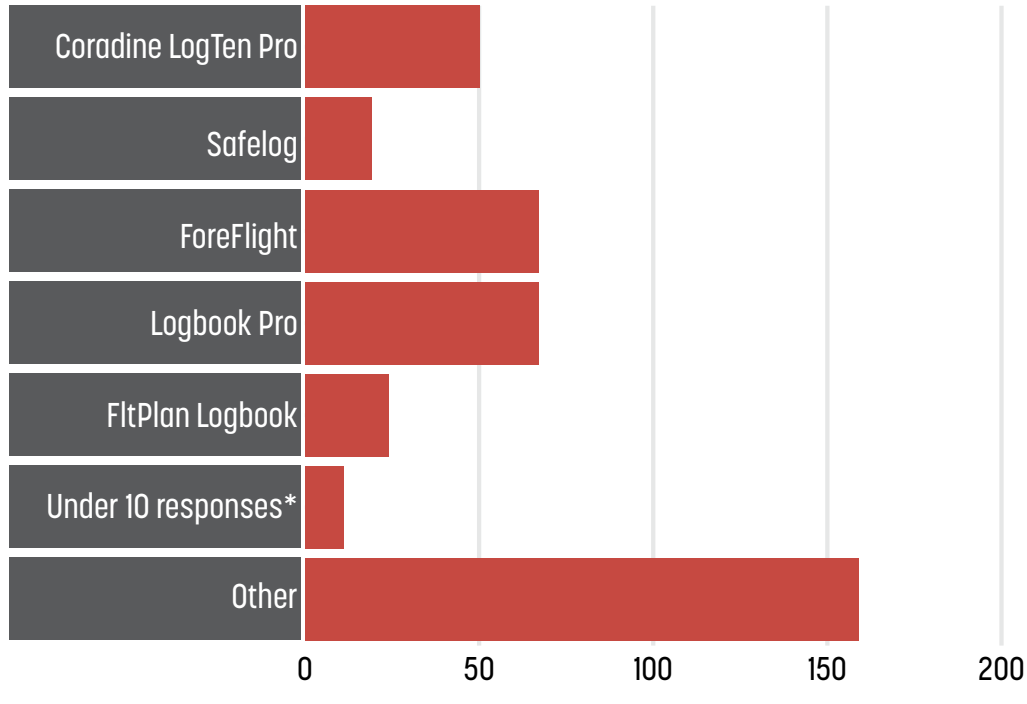
Do you use own-ship display on EFB apps with moving-map displays?




## LOGBOOK APPS

There are a huge number of pilot logbook apps available, but we tried to narrow the question to the most popular apps. Logbook Pro and ForeFlight topped the respondents' choices, followed by Coradine's LogTen Pro. Safelog and FltPlan also saw significant responses. Those that received fewer than 10 responses include ZuluLog and mccPilotLog. The "Other" category generated a number of responses, indicating the following as some of the options in the logbook arena: MyFlightbook, Pilot Pro, and plain old spreadsheets. Many respondents indicated that they still use paper logbooks.

If you use a logbook app, which one do you prefer?

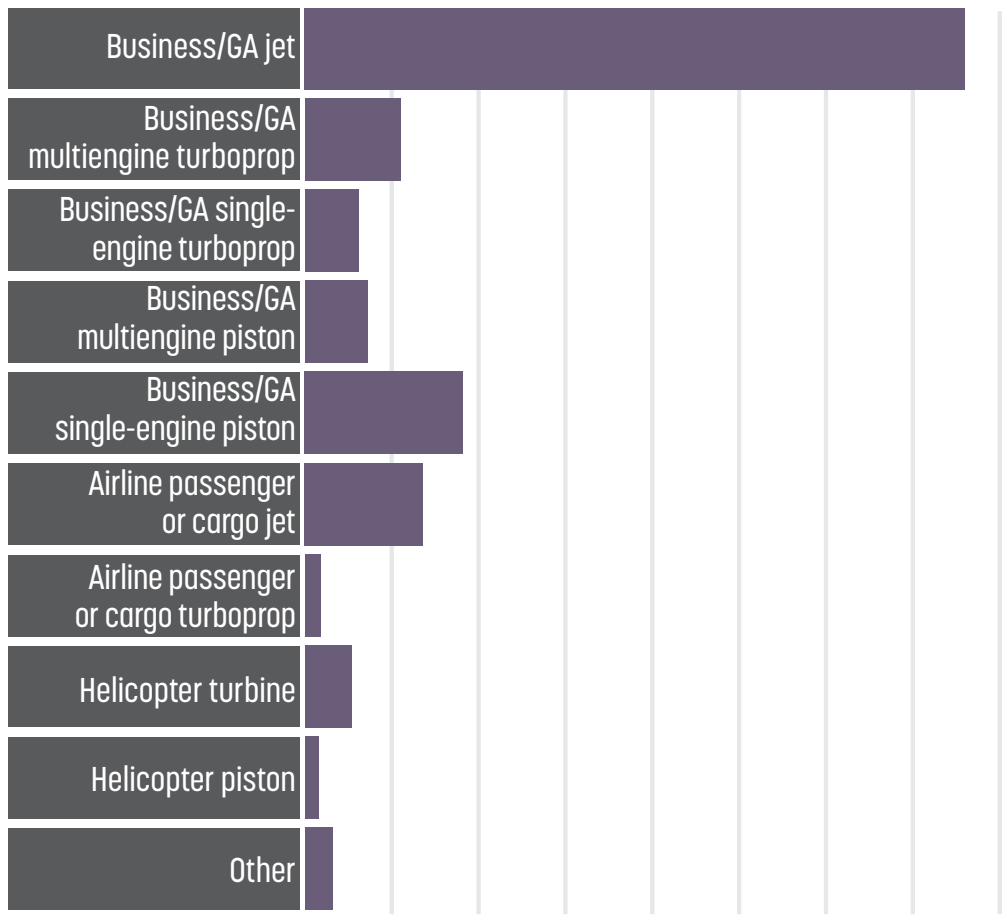


## AIRCRAFT TYPES AND REGIONS

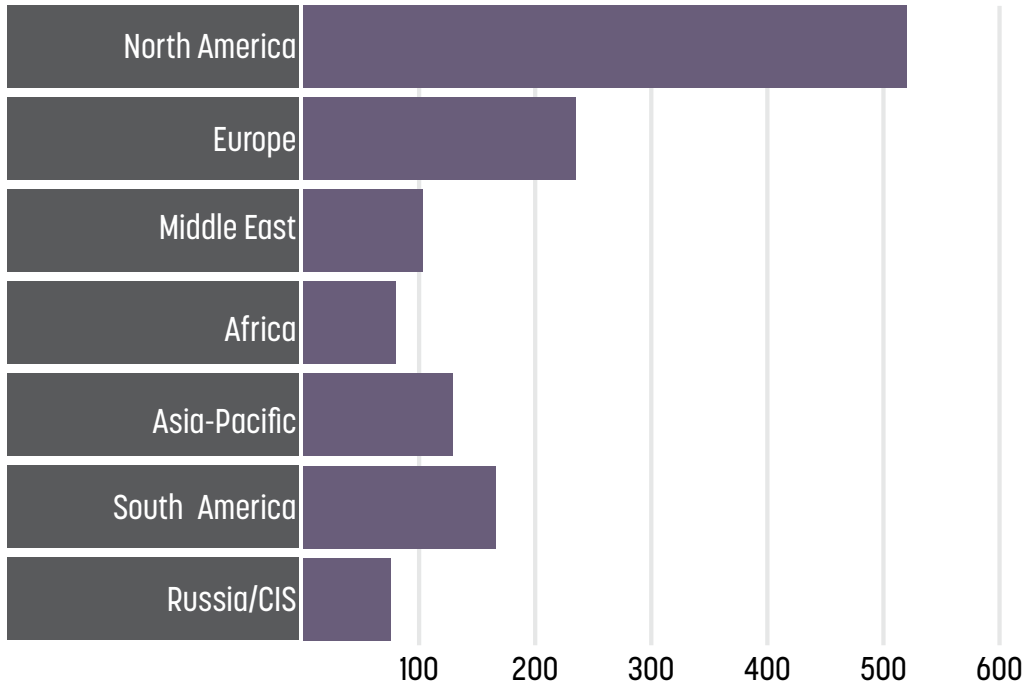
The majority of survey takers fly business jets, with 380 respondents in that category. The next-highest levels of respondents indicate that they fly Part 91 multiengine turboprops, single-engine pistons and turboprops, and airline or cargo jets. Turbine helicopter pilots outnumbered piston helicopter pilots.

Most of the respondents fly in North America, followed by Europe, and the remainder were spread among all the other regions of the world. This seems to indicate that the use of mobile device apps has gained ground worldwide and isn't just a phenomenon associated with parts of the world where business aviation is strongest and most well-served.

**What type aircraft do you fly regularly?**




**Where do you fly?**



## WEIGHT-AND-BALANCE, PERFORMANCE

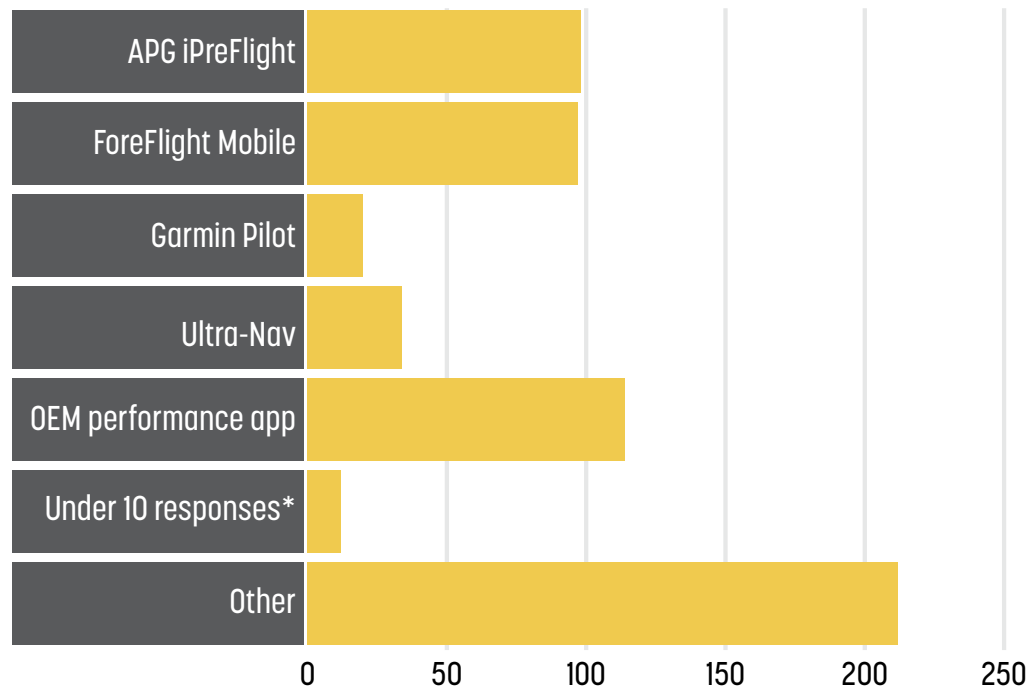
We asked pilots which apps they are using for preflight planning (weight-and-balance and performance calculations), and this question received the most answers in the "Other" category.

Aircraft manufacturers' own apps received the next-most responses, not surprising in that most business aircraft OEMs publish apps that incorporate the latest flight manual performance data.

Aviation Performance Group's iPreFlight ranked high among respondents, just slightly ahead of ForeFlight, which has recently made performance calculations a big part of its menu. The iPreFlight app is a key part of APG's runway analysis service, which many airlines and business jet operations use to calculate optimum flight profiles in case of engine failure. ForeFlight's performance planning features came into play after it bought AviationCloud and started adding type-specific aircraft into its database. Ultra-nav and Garmin Pilot are also highly ranked.

In the "Under 10" category, developers include: CAVU EFB-Pro and Gyronimo. Companies mentioned in the "Other" category, which generated a large number of responses, include Rockwell Collins ArincDirect (which can be bundled with APG's iPreFlight runway analysis), FltPlan Go, NavBlue, iFlyGPS, SkyDemon, iFlightPlanner, RocketRoute, and others.

**Which app do you use for weight-and balance and preformance planing?**



## FLIGHTPLANNING AND FILING

FltPlan Go is the clear favorite for flight planning and filing, likely having to do with the app's integration with FltPlan's free web-based services. But FltPlan Go has another advantage: its ability to run on a variety of mobile devices, including those running operating systems such as iOS, Android, and even Windows 10. The key advantage here is tight integration with performance profiles for the aircraft flown by the user. FltPlan has been focused on this integration for a while, and ForeFlight, which came in second in this question, has made it a priority and is continually adding more aircraft to its database.

Garmin Pilot, Rockwell Collins ArincDirect, and Honeywell GoDirect Flight Bag Pro were also well represented.

The app developers with fewer than 10 responses were FlyQ EFB, WingX Pro7, Aerovie, AvPlan EFB, iFlyGPS, iFlightPlanner, and SkyDemon. Some mentions in the "Other" category include Universal Weather UVGo, FlightStar, SkyVector, RocketRoute, Air Navigation Pro, EuroFPL, and more. ■

**Which app do you use regularly for flight planing and filing?**