



There's A Pilot App For That...

Enhancing the Flying Profession.
by Ken Elliott

A viation-related phone and tablet applications are proliferating into all sectors of our industry - with a significant growth in those used by pilots being the focus of this review.

It would take a complete manual with regular updates to provide a fair summary and assessment of applications available for pilots. Some Apps are available without being tied to a specific aircraft model or equipment type. Others are locked-in, meaning the application supplements - or is tied to - a certain aircraft model or equipage.

A locked-in example would be Bombardier's Flight Deck that offers pilots paperless documentation storing and access to serial number-specific Bombardier aircraft data. An unlocked example would be AirNav FBO covering the United States and Territories FBO locations with pertinent details and fuel costs.

Apps mostly come from three primary operating sources: Apple iTunes - IOS; Google Play - Android; and Microsoft Store - Microsoft. Not all Apps are for both tablets and phones, and there may be different versions for each. Apps come either free or at a small charge, however free Apps often include in-App purchases that include Pro versions. Free Apps as locked-in, often involve fees related to the specific aircraft or equipment service that may already be a

subscription an operator has. Pilot-related Apps may be categorized into groups depicted in **Diagram 1** (below), and covered in the following pages.

BREAKING OUT THE VARIOUS GROUPS

1. AIRCRAFT

The Aircraft group for business jets includes specific locked-in applications that are released by the various aircraft OEMs and

DIAGRAM 1: APP CATEGORIES

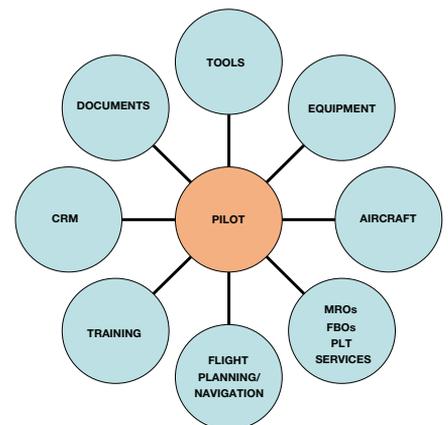


TABLE 1: GULFSTREAM-SPECIFIC APPS

Gulfstream	Description
PlaneBook	User-name/Password-protected, Paperless Cockpit solution of pilot manuals
G650 G550 G450 G280 G150	Product information, image gallery, range maps and product support, all in individual applications for each Gulfstream aircraft model
Cabin Control	Passenger cabin remote control for Gulfstream Cabin Management System
Nonstop (News)	Publication for aircraft owners with focus on Gulfstream products
24-Hour Support	Support connection for operators worldwide
FlightJournal	Uploads flight logs to Gulfstream's CMP.net
My Gulfstream	Customer portal for remote access to important Gulfstream documents
PlaneBalance	Interactive weight and balance

TABLE 2: OTHER OEM APPS

Bombardier	Dassault	Embraer	Textron
Flight Deck	Falcon 7X HD	eTechPubs	Citation Jets
Aircraft Training Info Pack	Falcon 2000S HD	Customer Support & Service Executive Jets	CLCalc (CESNAV) Told Perf (Performance)
Proximity	Falcon 2000LXS HD	Embraer CTS (wCAE)	CLCalc (CESNAV) WT & Bal (Loading)
SmartPubs	Falcon 900LX HD	ePerf	EOM Enroute
SmartFix Plus	Falconer (magazine)		CLCalc (CESNAV) Cesview
Aircraft Training eLearning	P1 Falcon Flight Test		CLCalc (CESNAV) Service
	iPilot DA2000 Study G.		Attache (magazine)

TABLE 3: EQUIPMENT OEM APPS

Rockwell Collins	Honeywell	Garmin	Universal Avionics
Ascend Flight Manager	Direct Access	Pilot (DCI)	UniNet Mobile
HGS Flight	MyGDC	GTN Trainer	CDU Emulator
Service First	Aerospace Business Aviation	G1000 Checkout	
	MyFlightPath	G1000 Mobile Training (Garmin & Jeppesen)	
	MyCMC	WAAS Approaches	
	MyJetex		

pertain to distinct aircraft models, even in some cases by aircraft serial number. There are also a few unlocked applications that generally promote OEM aircraft models available 'For Sale' (locked-in applications being for actual operators and unlocked for potential buyers).

Within the Aircraft group would also be those unlocked applications that various bro-

kers provide for their own inventory of new and aftermarket business jets. **Table 1** (as an example) maps out Gulfstream OEM business jet Apps useful to pilots. Throughout, some Apps listed are not strictly pilot Apps, but all involve aircraft operations. **Table 2**, meanwhile, lists some of the other applications available from major business jet OEMs.

JetBook, meanwhile, is a detailed aircraft

guide not outlined in the tables, and covering all models as an alternative to the paper aircraft comparison guidebook. An excellent aircraft trading company application is offered by Jetcraft Corporation and includes a wide selection of new-to-market business jets, worldwide contact information for its regional offices, link to website, avionics, news and events. The phone and tablet versions are well adapted to user needs and include a very useful range map tool.

2. EQUIPMENT

Equipment Applications for pilots tend to refer to system operating guides or user manuals provided by the various major board equipment manufacturers. Some are locked-in and others unlocked for general use.

Taking the major equipment OEMs and focusing on cockpit as opposed to cabin, **Table 3** outlines several application examples and is by no means the full menu available. One cautionary note is that some of the major equipment OEMs have their system guides embedded in aircraft OEM guidance material.

Not to be missed (but not depicted in the table) is the Satcom Direct suite of applications, many of which are for passengers in business jets. However Satcom's Yonder, Flight Tracker, Flight Deck 360 and SDR are all relevant for cockpits.

3. TOOLS

This category comprises what typically are generic applications used as aids for pilots with a goal of reducing or streamlining workload. One could conceivably argue that applications on tablets used in cockpits are all tools, given that tablets and EFBs in general are extremely useful tools for pilots. However more specifically flight calculator applications - and there are a number - would be a true example of pilot tools. Apart from flight planning, there are range maps, weight and balance, and aircraft performance calculation applications that are widely available.

AOPA has a high quality EFB App – FlyQ EFB free within App purchases, while EFB – Charts and Weather for Aviation is a subscription-based App. The popular Flying with ForeFlight, meanwhile, has a separate 70-minute Sporty Pilot Shop familiarization video, and EFB Pro is an aircraft performance application for the EFB.

Finally, three stellar applications for tablets are ARINC Direct, Universal Weather, and Accu-Kwik, all of which are multipurpose tablet applications that are very useful to pilots. Flight List Plus, meanwhile, is a Google Play checklist application worthy of note.

4. TRAINING

Apart from the many ‘learning to fly’ training applications there are some very useful advanced and recurrent training applications, both locked-in and unlocked. One main player providing flight training Apps is FlightSafety (in addition to CAE, Kings, Rod Machado and others). Training applications also come as part of aircraft and equipment OEM Apps designed for individual models of aircraft and their systems.

Business Jet Upset Training by Aviation Performance Solutions is an invaluable application for safety conscious pilots, and Rockwell Collins has a very nice HGS Head-Up display application that is a good intro to those complex devices.

5. FLIGHT PLANNING AND NAVIGATION

Jeppesen is a master in the area of Flight Planning and Navigation with several high-end Apps for business jet users. A comparison of different popular Flight Navigation Apps are depicted in **Table 4**, indicating the various features available for each.

6. DOCUMENTS

Among the Applications that are more centered on flight planning are aviation document Apps that focus on the ability to access, review and utilize cockpit documents. These often may be accessed in flight, usually via a dedicated Cloud site, and can be updated and re-sent for a number of different purposes.

The App produced by On Board Data Systems is a good example of a document-only application that is designed for aviation use.

7. CRM (COCKPIT RESOURCE MANAGEMENT)

The ‘Cockpit Resource Management’ category spans a large area of guidance applications for pilots that are helpful to an overall efficient area of operations and crew management. For example, the 360 Aviation Flight Risk Assessment app reviews complying with IS-BAO as an SMS tool. Premier Jets, Corporate Eagle, NEXTGEN Systems and others also have a flight risk assessment tool (FRATs), while Pilot Workshops has a pilot proficiency application that covers 20 areas of flight proficiency for the busy pilot.

8. FBOs, MROs & PILOT SERVICES

More and more aircraft support facilities are providing useful applications offering excellent support services to pilots. A stand-out for MRO applications is Duncan Aviation’s three customer Apps plus newsletter: *Debrief* and *AOG Service* is from iTunes and *myDuncan* plus *Aircraft Parts* are Google Play applications.

DIAGRAM 2: TYPICAL TABLET EFB APP GROUPS

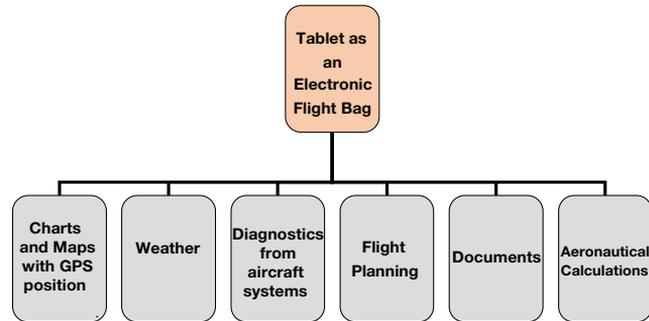


TABLE 4: FLIGHT PLANNING & NAVIGATION APPS COMPARISON

	ForeFlight Mobile	Garmin Pilot	Hilton WingX Pro	AOPA FlyQ	AirNavigation Pro	Fitplan.com Go	Jeppesen Mobile FD
VFR Sectionals	*	*	*	*	*	*	
IFR En Route Charts	*	*	*	*		*	*
Instrument Approach Charts	*	*	*	*	*	*	*
Geo-Ref Instrument Approach Charts	*	*	*	*	*	*	*
FAA A/FD		*	*			*	
FBO Directory	*	*	*	*		*	
Canadian Charts	*				limited	*	*
Mexico Charts	*				limited	*	*
Caribbean Charts	*				limited	*	*
Flight Plan Filing	*	*	*	*		*	
NWS WX Imagery	*	*	*	*			*
QJCP Weather Approved	*					*	*
Fuel Prices	*	*	*	*		*	
Terrain/Obstacle Alerts	*	*	*	*	*		
Synthetic Vision		*	*	*	*		
Split Screen Chart Option		*	*	*			
Track Up Option	*	*	*	*	*	*	*
Backup Flight Instruments	*	*	*	*	*		
ADS-B Receiver Support	Stratus	Garmin GDL39	Dual XGPS170, Sagatech Clarity, SkyRadar, iLevel SW/AW, NavWorx 600-B	Dual XGPS170, Sagatech Clarity, iLevel SW/AW	No	Sagatech Clarity	No
ADS-B Traffic	*	*	*	*			
ADS-B Weather	*	*	*	*		*	
Document Viewer	*		*		*	*	*
Scratchpad	*	*	*	*	*	*	
Compatibility	iPhone/iPad	iPhone/iPad/Android	iPhone/iPad	iPad	iPhone/iPad/Android	iPhone/iPad/Android	iPad

Source: iPadpilotnews.com

The Orville to your Wilbur



Further proving that partnerships improve aviation.



The **FlyQ EFB™** is for pilots who want to be in the know during every step of the flight process. From planning, to filing to executing, our advanced iPad app works with our entire suite of flight intelligence products through CloudSync, keeping you constantly up to date on routes, conditions and geography. It's pretty smart actually, and we're pretty excited about it.

Go to AOPA.org/FLYQEFB for your **FREE 30-Day Trial**.

Powered by **Seattle Avionics Inc.**

Other excellent MRO-related Apps are found with GE Beacon, which focuses on its core business and your aircraft by serial number and West Star Aviation, which provides a potpourri of services as part of its one-stop-shop MRO capability. With its 'experience on call', all the sales and service contacts are available at the pilot's fingertips. Standard Aero, meanwhile, has an MRO application that focuses on its AOG and Complete Care services.

Another very interesting maintenance-related App for pilots - and worth a special mention here - is iCamp, part of a suite of offerings from CAMP Systems Int'l. The application includes airworthiness docs, RAMP check view, squawks on the fly and Work Cards and fleet view.

On the FBO side of things, AirNav FBO shares information on a number of FBOs, airports and fuel prices, while Signature's worldwide iFBO App is a very nice application with detailed FBO information and a price calculator. Other great FBO Apps include those from Jet Aviation, Million Air, Landmark and Paragon.

SUMMARY

There are many useful pilot Apps that cannot be covered in the limited scope of this article, and there are a few that may fall outside of the groups categorized here. Airport Info, is one such useful pilot application providing useful airport information at over 4,250 airports.

Selecting applications is not easy as in some cases there are almost too many choices available. Finding the one you want can be extremely difficult! The more professional Apps tend to look professional, have all the bells and whistles, and are intuitive to use.

Application ratings are usually found on the application review itself, but for many of the more 'exotic' aviation applications many will not have been rated previously. If the name behind the application is well known in the Business Aviation community, then it is likely to be trustworthy and without bugs.

Surprisingly, some major aviation companies either do not yet offer Apps or only a couple, while others have a full set representative of their product lines.

A final thought is to research the App

before you buy; make sure the App is available for the device you need it on - that the App software is compatible with your device; and that the application delivers all of the features you need.

➤ Ken Elliott is an avionics veteran of 40 years and more recently focused on NextGen. His work within the NextGen Advisory Council sub-committee brings him close to current and intended development effort.



Equally, his specialization in low-vision operations provides a deeper insight into one of the pillars of NextGen. Ken has served the aviation industry on three continents from light GA to large corporate aircraft. His current employer, Jetcraft, is a leading aircraft brokerage company with worldwide presence.

➤ More from www.jetcraft.com, email: kenelliott@jetcraft.com ■