

AOPA

Cockpit Weather General Aviation Perspective

Rune Duke

**Director, Airspace & Air Traffic Services
Aircraft Owners & Pilots Association**

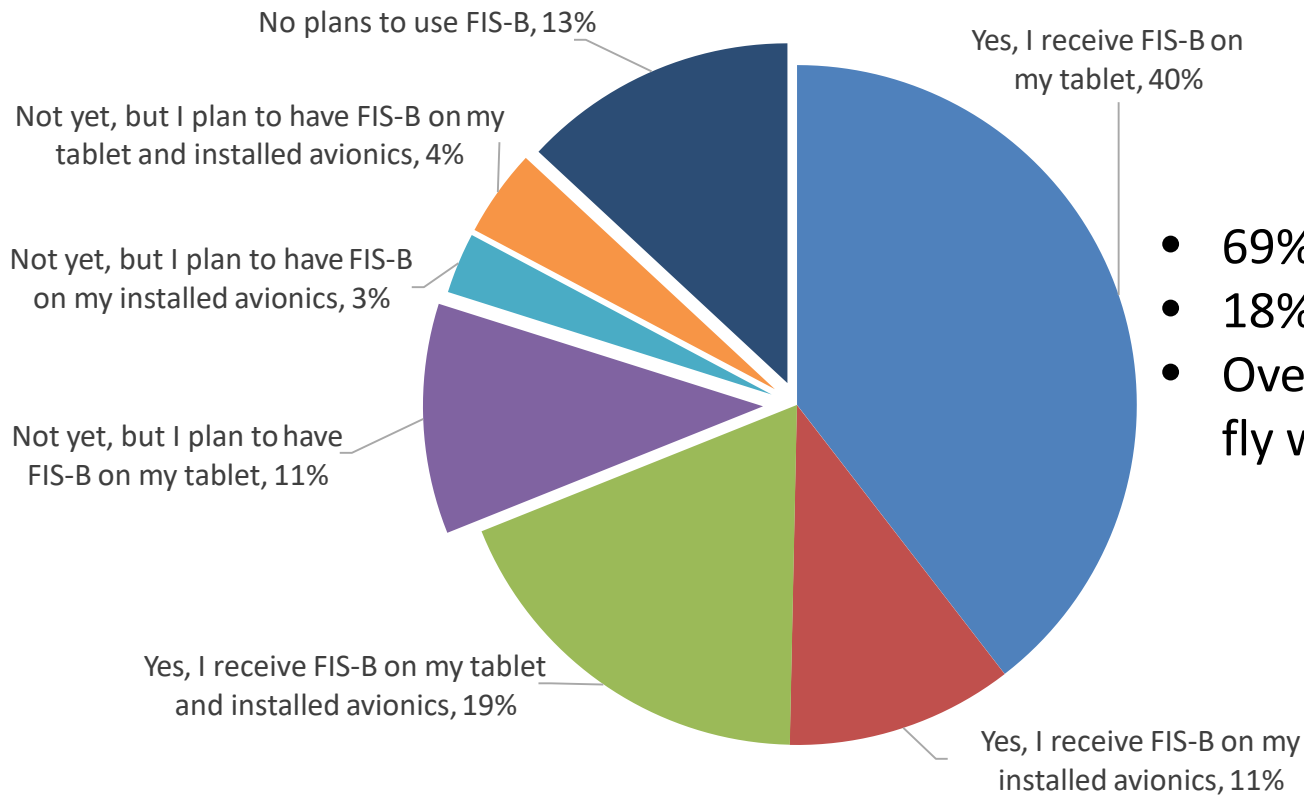
WTIC Capabilities for General Aviation



- Flight Information Service-Broadcast (FIS-B) is one of the key GA elements of ADS-B
- For aircraft that are ADS-B In equipped, FIS-B delivers NEXRAD radar images, PIREP, METAR, TAF and winds aloft weather reports directly to an EFB or cockpit multifunction display
- Other solutions are available like XM WX Satellite Weather



FIS-B Utilization



- 69% of respondents use FIS-B
- 18% plan to use FIS-B
- Over 80% of pilots routinely fly with an EFB

Must Have: Integrate with Flight Service



- Pilots increasingly use an app to preflight brief
 - 95% of weather briefings are not conducted over the phone
 - Pilots can supplement their call with graphics emailed to them
- Future Flight Service Program must meet pilot needs
 - Ensure information is available via technology
 - Leverage the alert functions to tell pilots of changes preflight and inflight
 - Two-way communication/dialogue via system
- Weather products/websites should be mobile-friendly
 - Maximize the advantages of graphical interface
 - Consolidate weather resources (FAA has websites, so does AWC)

Must Have: PIREP Submission Integration



- AOPA conducted PIREP survey in 2016 in support of NTSB's PIREP Special Investigation Report
- Better automation/technology would improve submittal rate
 - Integrate into apps/avionics
 - Include GPS provided position
- Simplify process/form for inflight transactions

PIREP Entry Form		SURVEY	INFO
This is an updated PIREP Entry page. Please refer to the Info page for more information.			
Items 1 through 5 are mandatory for all PIREPs			
1.	<input checked="" type="radio"/> UA (Routine Report) <input type="radio"/> UUA (Urgent Report)		
2. /OV	<div>Enter Lat/Lon - OR - Enter NAVAID</div> <div>Location: <input type="text"/></div> <div>Weather reporting station: <input type="text"/></div>		
3. /TM	<div>Time:</div> <div><input type="text"/> Local (optional)</div> <div><input type="text"/> UTC (required) 4 digits UTC e.g. 0915, 2330</div> <div>Current UTC Time <input type="text"/></div>		
4. /FL	<div>Altitude/Flight Level:</div> <div><input type="text"/> <input checked="" type="radio"/> climb 3 digits in hundreds of feet MSL. e.g. 095 = 9500 ft MSL; 210 = FL210 or 21,000 ft MSL</div> <div><input type="radio"/> level</div> <div><input type="radio"/> descent</div> <div>Unknown Select climb, level or descent if applicable.</div>		
5. /TP	<div>Aircraft Type:</div> <div><input type="text"/></div> <div>4 characters max. If unknown, use UNKN (e.g. C210, P3, UNKN)</div>		

AWC PIREP submission form

Must Have: Fill in the blank space

- Insufficient number of surface observations leaves gaps for situational awareness when flight planning
 - Offer tools to allow a pilot to build a picture
 - GFA and HEMS tool
- Must do more on unintentional VFR flight into IMC
 - Make more WX observations available for no-go decisions
 - [August 2017 joint letter](#) from industry on AWOS/MAWS
- Weather websites focused on aviation should have an aeronautical design
 - Offer aeronautical chart layers – Improve user friendliness
 - Include human factors in design



Pilot Education



- Informed consumers – Aware of best practices
- Training requirements – Consider knowledge exam changes
- Utilizing technology to make smart decisions
- Know before you go mentality is important- becoming competent and confident prior to flying with advanced equipment
- Understanding limitations, lag time, and constraints of your specific equipment and plan accordingly
- Never become distracted by technology – Flying always comes first



AOPA

Air Traffic Services
202-509-9515

Rune.duke@aopa.org

Thank you!