

AOPA

PIREP Enhancement and Process Improvement Efforts

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Aircraft Owners & Pilots Association**

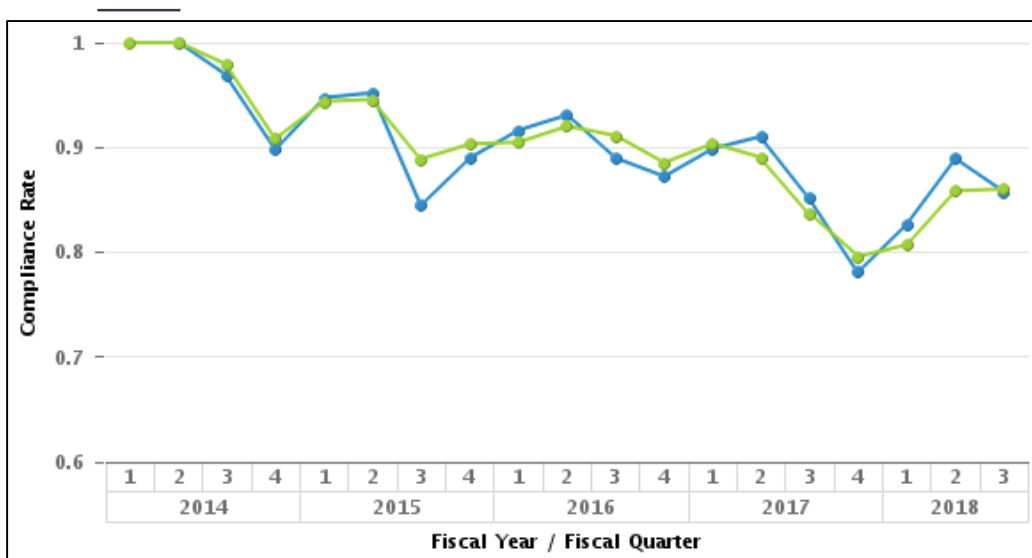
Efforts to Increase PIREP Submission



- Alaska PIREP Working Group of FAA and industry formed following 2015 Valdez, AK, fly-in and STOL competition
- NTSB PIREP Forum in 2016
- NTSB PIREP recommendations in 2017
- FAA adds PIREPs as an ATO Top 5 issue in 2017

- Recognition of systemic issues
 - Pilot, ATC, FSS culture
 - Submission automation
 - Reporting format
 - Lack of tracking and quality assurance

ATO Top 5 PIREP Effort



- Issuance of observed/reported weather areas
- PIREP solicitation and dissemination

NEI	Exemplary	Met Requirements	Needs Improvement	FY18 Q2 Compliance Rate	Two-Year Compliance Rate
Issuance of observed/reported weather areas	107	1,763	223	86%	85.3%
PIREP solicitation and dissemination	171	3,690	636	84%	85.2%

ATO Top 5 Corrective Action Plan



Strategies

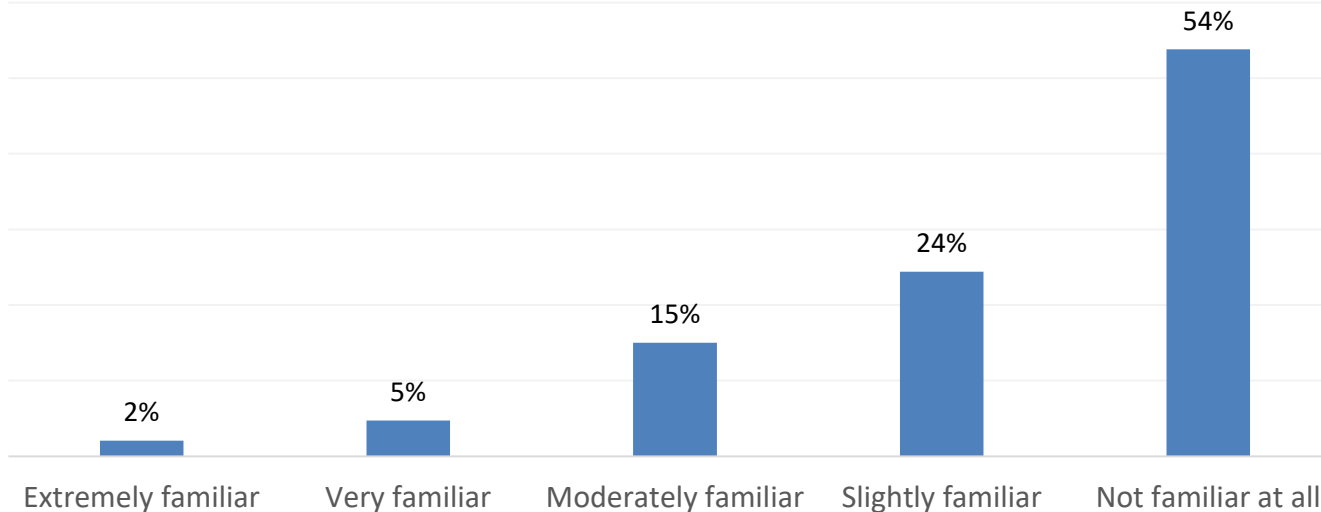
1. Encourage pilots to file more PIREPs
2. Improve automation capabilities with regard to PIREP solicitation, entry, and dissemination
3. Improve knowledge of PIREP processes, tools, and system impacts through training and education
4. Align policy and procedures to provide consistent and sufficient guidance on PIREP solicitation and dissemination

Issue Identified	Strategy	Mitigation	Fiscal Year Targets	Responsible Organization	Completion Date
First class and revenue pilot weather reports (PIREP)	1. Encourage pilots to file more PIREPs	a. Review the process by which federal and contract Flight Services specialists receive verbal pilot weather reports and then verbally procedures to reduce the amount of time the operations take to obtain the necessary information from pilots (NTSB Recommendation A-17-216)	1. Verify changes to Flight Service PIREP receipt process are having intended effect. - Follow up with GA community - Provide GC notices on removal of unnecessary overhead requirement - Provide trend data for PIREPs issued to determine if they are increasing 2. Provide memo to AVE recommending that they communicate changes to pilot community	AJR-8	December 31, 2018
	2. Improve automation capabilities with regard to PIREP solicitation, entry, and dissemination	a. Per NTSB Recommendation A-17-21, provide air traffic controllers with automated pilot weather report data collection tools that incorporate design elements to prevent input errors, increase quantity, and improve the timeliness of PIREPs disseminated to the NAS. Consider: • NTSB Recommendation A-17-22 • NTSB Recommendation A-17-26 • Incorporation of industry technology such as EFB, TAPI, and ACARS • Data link communications capabilities • Inclusion of inputter information for Quality Management	1. Present recommendation from Assess phase of the CVM process to the Directors Forum to facilitate determination on whether to proceed to Concept Development for Terminal and En Route environments 2. As applicable, provide status update on Concept Development or schedule for not continuing work	AJV-72 AJV-73	December 31, 2018 October 31, 2019 June 30, 2019
	3. Improve knowledge of PIREP processes, tools, and system impacts through training and education	b. Improve FLM and controller awareness concerning real-time changes to PIREP solicitation requirements in the En Route environment by expanding and improving the PIREP's solicitation page (e.g. ZTL & ZNE)	1. Obtain source information on area boundaries for 2D ARTCCs across the NAS 2. Code each area to display pertinent PIREP solicitation status	AJR-151, AJT-2 AJR-151, AJT-2	January 31, 2019 September 30, 2019
		c. Improve FLM and controller awareness concerning real-time changes to PIREP solicitation requirements by implementing the PIREP's solicitation page (similar to ZTL & ZNE)	1. Meet with NWS to determine feasibility and appropriate next steps	AJR-151, AJT-2, AJR-B11	December 31, 2018
4. Align policy and procedures to provide consistent and sufficient guidance on PIREP solicitation and dissemination	4. Align policy and procedures to provide consistent and sufficient guidance on PIREP solicitation and dissemination	a. Educate PIREP users on the benefits of a PIREP common misconception, and tools that are already available for entry/dissemination	1. Ensure at least a 93 percent NAS-wide completion rate for Recurrent Training on PIREP solicitation/dissemination	AJR-2, AJT-2	July 31, 2019
		b. Update Refresher Training requirements in FAA Order JO 7102.4, Chapter 4, Paragraph 5b, to include PIREP solicitation/dissemination with simulation requirements	1. If applicable, publish final T224 document, requiring PIREPs in annual Refresher Training, which include PIREP solicitation/dissemination	AJR-2	August 31, 2019
		a. Review orders 7110.65, 7110.10, and 7203.2 to ensure that the chapters addressing Pilot PIREPs include consistent guidance about PIREP coding, solicitation, and dissemination, as well as chap and subchapter	1. Publish final DCP to FAA Order JO 7110.65, 7110.10, and 7203.2	AJV-6	March 31, 2019

AWC PIREP Submission Website



How familiar are you with the Aviation Weather Center's web-based PIREP submission portal for pilots?

A screenshot of the AWC PIREP submission form. The form is titled "PIREP Entry Form" and includes a "SURVEY" button and an "INFO" link. It contains instructions for pilots to enter their PIREP information, including location, time, altitude, and aircraft type. The form is divided into sections for "Items 1 through 5 are mandatory for all PIREPs" and "Items 6 through 10 are optional for all PIREPs".

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. ☒ UA (Routine Report) ☐ UUA (Urgent Report)

Enter Lat/Lon Enter NAVAID

2. /OV Location:

Weather reporting station:

3. /TM Time: Local (optional) UTC (required) 4 digits UTC e.g. 0915, 2330

Current UTC Time

4. /FL Altitude/Flight Level: climb level descent 3 digits in hundreds of feet MSL. e.g. 095 = 9500 ft MSL; 210 = FL210 or 21,000 ft MSL. Select climb, level or descent if applicable.

5. /TP Aircraft Type: 4 characters max. If unknown, use UNKN (e.g. C210, P3, UNKN)

AWC PIREP submission form

IAD UUA /OV KIAD/TM 1238/FL040/TP CRJ2/TB MOD-SEV/RM VERY BUMPY ON DESCENT. PRETTY MUCH EVERY ONE ON THE PLANE THREW UP. PILOTS WERE ON THE VERGE OF THROWING UP. AWC-WEB

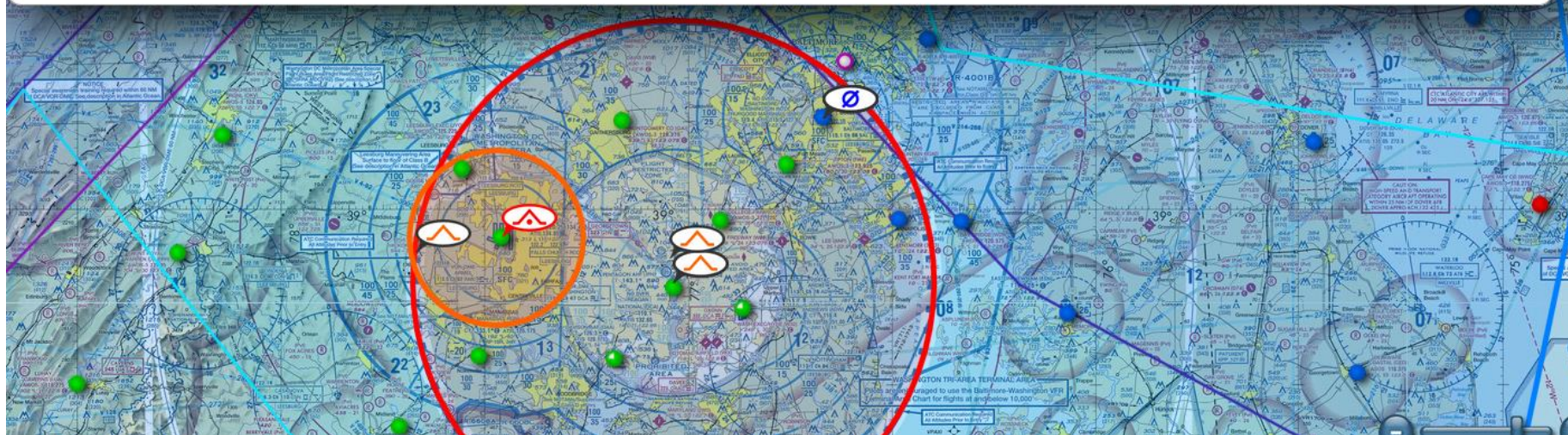
Report Age 1h 8m

Aircraft CRJ2 at 4000ft

Observation Moderate to Severe Turbulence at 4000

Remark VERY BUMPY ON DESCENT. PRETTY MUCH EVERY ONE ON THE PLANE THREW UP. PILOTS WERE ON THE VERGE OF THROWI

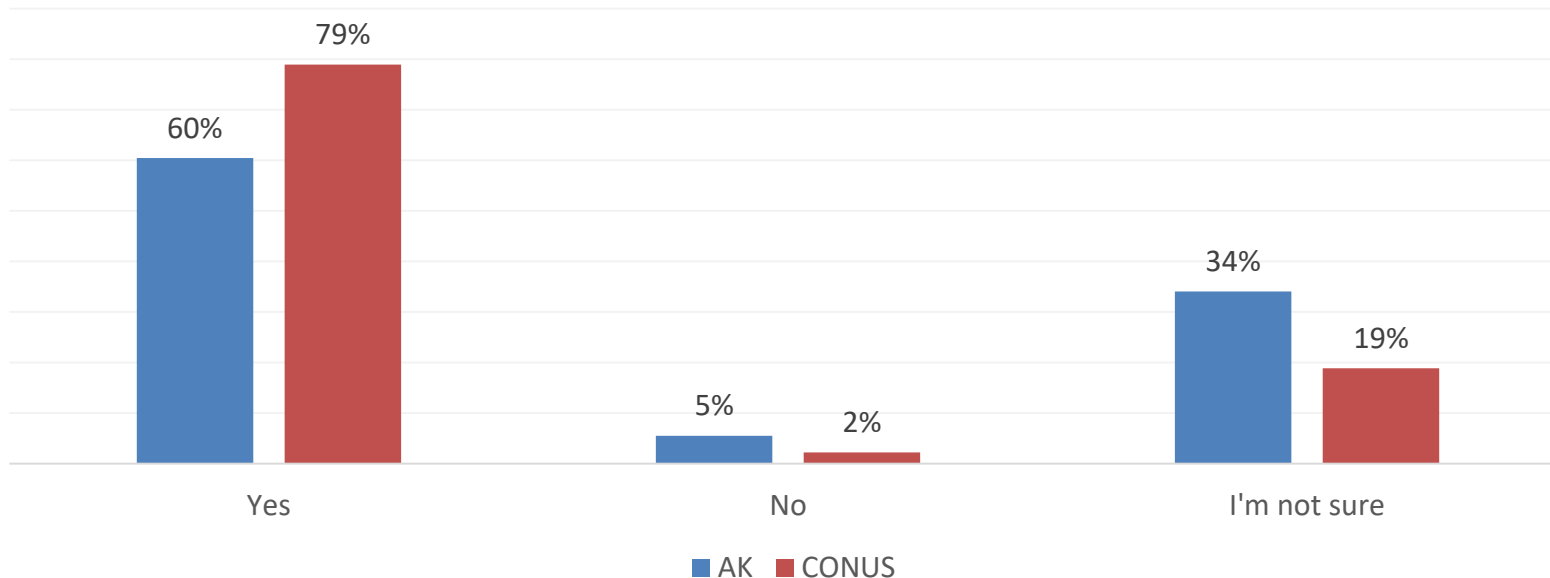
Close



PIREP Submission via Application



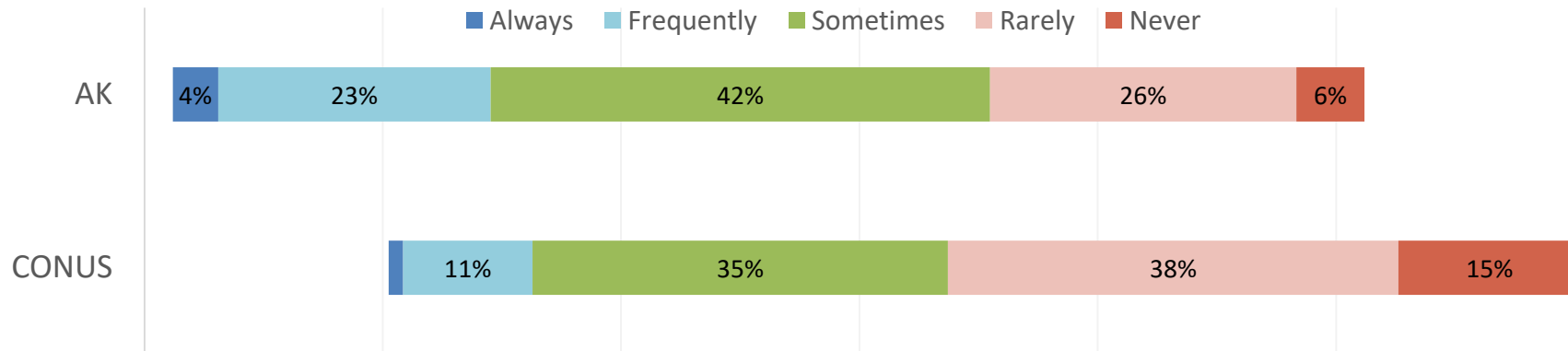
Would you use a PIREP Submission tool if it was integrated with your primary inflight application?



Providing a PIREP



How often do you usually provide an unsolicited PIREP? By location



PIREP Fields are Important



- PIREP provided at FAI04545 but recorded as over FAI
- Entering PIREP information in wrong field impacts automation and plain language interpretation – Reduces utility of PIREP

A screenshot of the FAA Aviation Weather Cameras website. The interface includes a top navigation bar with links like "Weather Alerts", "Weather Cameras", "Observations", "Forecasts", "Tools", "Map Data", "Glossary", "Site search", and "My". A search bar on the left allows users to "Search airport or city". The main map area shows a satellite view of a mountainous region. A PIREP report is displayed as a pop-up window over the map. The report details are as follows:

Raw Text
FAI UA /OV FAI /TM 2305 /FL055 /TP C185 /TB LGT /RM SCT VRB BKN 060

Plain Text (Beta)

Location:	FAI
Report Type:	PIREP
Observation Time:	2017-04-30 23:05z
Aircraft Reference:	C185
Altitude/Flight Level:	5500 FT MSL
Sky Cover:	missing
Flight Visibility & Weather:	missing
Temperature:	missing
Winds:	missing
Turbulence:	Type: missing Intensity: Light Frequency: missing

A screenshot of the FAA Aviation Weather Cameras website, showing a different view of the same mountainous region. A PIREP report is displayed as a pop-up window. The report details are as follows:

PIREP within the past 3 hours

Report Type:	PIREP
Receipt Time:	2017-04-30T23:24:34Z
Observation Time:	2017-04-30T23:05:00Z
Aircraft Reference:	C185
Latitude:	64.8001°
Longitude:	-148.012°
Altitude:	5500 FT MSL
Turbulence Conditions:	Turbulence Intensity: LGT
Raw Text:	FAI UA /OV FAI /TM 2305 /FL055 /TP C185 /TB LGT /RM SCT VRB BKN 060

ATC PIREP Entry Automation Improvements



Aeronautical Information System Replacement (AISR) enhancements implemented in 2017

- Improve consistent entry of PIREPs
- UTC date/time: The date will be auto-populated
- Limit or validate that the user entered four digits for the time
- Wind: Automatically add "KT" to the user entry
- Visibility: Automatically add "SM" to the user entry

Enterprise Information Display System (E-IDS) enhancements on schedule for 2022 deployment

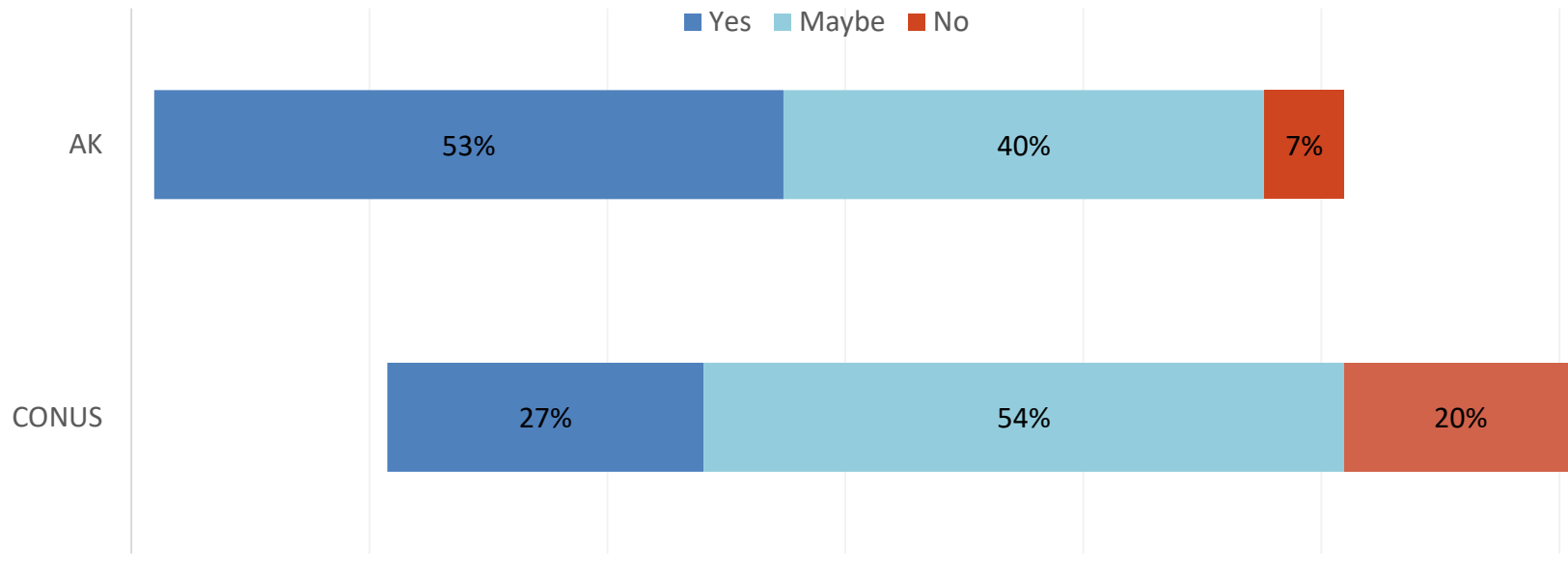
Flight Plan		Messages		Collective		NOTAM		Weather		Admin.		Library	
Location Weather		PIREP		METAR		WMSCR Report		WMSCR WMO					
WMO Header Information													
TT*		AA*		II*		CCCC*							
UA		US		10		KAIS							
Pilot Weather Report													
METAR (SA Identifier)*													
1. Message Type*		<input checked="" type="radio"/> UA <input type="radio"/> UUA											
2. /OV* (Location)													
3. /TM* (Time: HHMM)													
4. /FL* (Altitude/Flight Level)													
5. /TP* (Aircraft Type)													
6. /SK (Sky Cover)													
7. /WX (Visibility and Weather)													
8. /TA (Temperature: Celsius)													
9. /VV (Wind)													
10. /TB (Turbulence)													
11. /IC (Icing)													
12. /RM (Remarks)													
<div>Send Reset</div>													

Value of PIREPs Older than 1 Hour



Do you think there is value in seeing PIREPs that are more than one hour old?
By location

■ Yes ■ Maybe ■ No



Further Effort Needed on PIREPs

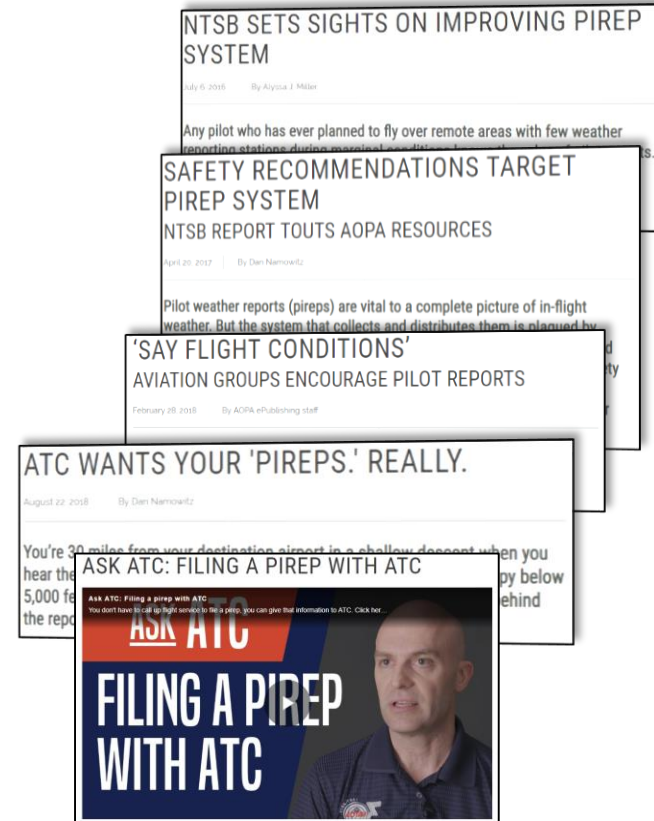


Controllers and Flight Service

- Emphasis on null reports
- Best practices for solicitation
- Confirmation PIREP is accepted into the system
 - Benefits forecasters, pilots not on frequency
- Efficiency of transaction

Pilots

- Emphasis on null reports, counter PIREP myths
- Integration of PIREP submission with EFB
- Training on PIREP format
- FIRCs, BFR's, safety seminars, other outreach



Pilot/Controller Communication Improvements



- “Chop” is considered a type of turbulence
- Inconsistency in pilot/controller guidance
- Not all moderate chop being submitted as PIREP
- Pilot/Controller Glossary updated to harmonize terminology – and expectations – between pilots and ATC
- Mountain wave also defined
- PIREP quick reference guide added to all Chart Supplements

The image displays two AOPA documents. The top document is the 'CISP SAFE Discussion Sheet' dated June 2018, titled 'Safety Awareness for Excellence'. It includes an illustration of an aircraft and discusses pilot reports of turbulence versus chop. The bottom document is the 'PIREP FORM' (Pilot Report Form), which includes a table for reporting various types of turbulence and chop, and a section for reporting mountain waves. The table lists categories like 'Light Chop', 'Moderate Chop', 'Severe Chop', 'Light Turbulence', 'Moderate Turbulence', 'Severe Turbulence', and 'Mountain Wave', with corresponding descriptions and reporting instructions. The PIREP FORM also includes a section for reporting 'Other Turbulence' and a section for reporting 'Other Weather'.

AOPA

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[AOPA 2016 Pilot Report Survey](#)

[AOPA 2017 Weather Survey](#)

[AOPA 2018 Weather Survey](#)

Thank you!