

Federal Aviation Administration

## FY23 FAASI Report



February 29, 2024

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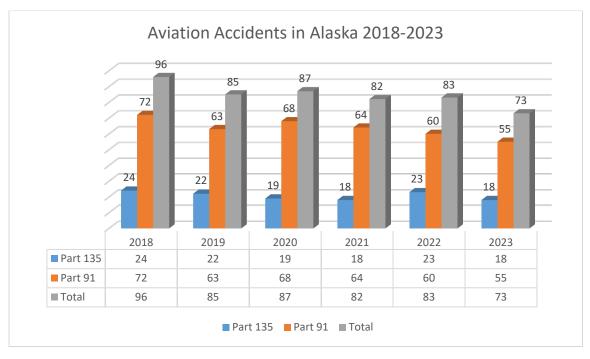
#### **Executive Summary**

The Federal Aviation Administration (FAA) Alaska Aviation Safety Initiative (FAASI) was initially launched in response to the NTSB Safety Report, *Revise Processes to implement safety enhancements for Alaska aviation operations*. Their report issued recommendation A-20-11:

# Work with stakeholders that service the Alaska aviation industry to implement a safety-focused working group to review, prioritize, and integrate Alaska's aviation safety needs into the FAA's safety enhancement process.

The recommendation was intended to address the elevated rate of accidents in Alaska, particularly by Part 135 operators. While Part 121 accidents are not addressed within FAASI, they are significant and are addressed by FAA in other forums. Information on those efforts and occurrences is readily available from FAA and NTSB.

The NTSB convened their Anchorage panel in 2018 with concerns about the rate of aviation accidents in Alaska. Since then, we have seen a downward trend in the number of aviation accidents in the state, which correlates with the initiation and continuation of FAASI. The accident statistics are evidenced by the data from 2018-2023.



#### **Executive Summary**

The FAASI Tiger Team showed significant progress on the FAASI recommendations in fiscal year 2023. Three of the 11 original recommendations are completed and will be moved to an appendix. FAASI recommendations may become part of FAA normal business practices, and any significant changes will be updated in subsequent FAASI reports. For FY23, the three completed recommendations are:

- 2.4: T-Route Development
- 3.1: Mountain Pass Workgroup
- 3.2: Aeronautical Charting Meetings

Of the eight remaining recommendations, six saw significant progress toward completion. These recommendations are:

- 1.1: Automated Weather Observing System (AWOS)
- 1.2: Visual Weather Observation System (VWOS)
- 2.1: Evaluate operator authorization requirements
- 2.2: Establish and chart communications gaps on published routes
- 2.3: GPS resiliency
- 4.2: ADS-B Services

FAASI is an ongoing process and considering the FAA's vision to reach the next level of safety and efficiency and to demonstrate global leadership in how we safely integrate new users and technologies into our aviation system, the FAASI team will be adding 2 recommendations to the FY24 roadmap:

- 6.1: Air Traffic Controller staffing and optimization
- 6.2: Modernize Flight Service

While stakeholder engagement and public outreach remain a cornerstone of FAASI, both will continue within FAASI and beyond. The FAASI team will continue with an annual progress report, annual roadmap, and annual FAASI-specific stakeholder feedback sessions.

#### **1.0 Introduction**

The Federal Aviation Administration Alaska Aviation Safety Initiative (FAASI) Tiger Team continued to address aviation safety issues within the Alaskan Region in FY23. In this third yearend report on FAASI progress, they accomplished significant positive action toward completing many of the 11 original recommendations. The FAASI FY24 Roadmap will document plans for work toward completion of those recommendations, along with the addition of two recommendations. The FAASI Tiger Team continued to engage with stakeholders through targeted feedback sessions and multiple other stakeholder outreach opportunities. The FAASI Tiger Team also continued to collaborate across multiple lines of business to carry out the FAASI mission. The FY23 FAASI Roadmap provided an outline for how the FAA would continue to address the 11 FAASI recommendations through FY23.

Through the continued leadership of the Alaskan Regional Administrator (RA), work with the FAASI Tiger Team continued to change and optimize collaborative work throughout the region. This report provides the status of the 11 recommendations at the end of FY23. All previous documents can be found on the FAASI webpage. (https://www.faa.gov/alaska).

The 11 original FAASI recommendations can also be found in Appendix A.

## 2.0 FY23 Report on FAASI Recommendations

## **Recommendation 1.1: Automated Weather Observing System (AWOS)**

**<u>Recommendation</u>**: Enhance weather reporting capability utilizing the Automated Weather Observing System (AWOS) including:

- 1. Continue installation and transfer of Airport Improvement Program (AIP) funded AWOS.
- 2. Examine the root cause of "Service A" outages, associated impacts, and identify mitigations.
- 3. Consider necessary changes to FAA Joint Order 7900.5 Surface Weather Observing and FAA Order 7930.2 Notices to Air Missions (NOTAM).

#### FY23 Closeout:

- 1. Seven of the eight AWOS units within FAASI were completed and transferred to FAA. Installation of the unit at Crooked Creek was delayed due to area flooding. It was severely damaged by spring flooding and the State of Alaska is working to restore the facility. FAA takeover was completed for the Tok, Coldfoot, Perryville, Akiachak, Tununak, Kotlik, and Nulato units. Tok, Coldfoot, and Perryville are fully commissioned and operational. FAA TechOps personnel are working to convert the remaining four sites to AWOS-C before they can finalize commissioning. All conversions to AWOS-C are anticipated in spring 2024 with commissioning shortly thereafter.
- 2. Site specific AWOS data is provided 3 ways: Service A data via internet, recorded audio data via dial up, and recorded audio data transmitted via VHF. Full AWOS outages are rare, meaning that site specific data is almost always available via at least one of the three services.

FAA acknowledges that Service A (weather data transmitted via the internet) is the preferred method for users to access AWOS data. Service A is contracted to telecommunications (telco) providers who are responsible for the service. The FAA has participated in several joint site visits along with telco company personnel to address and improve reliability of services.

3. <u>Review of FAA Order 7930.2 NOTAM:</u> FAA NOTAM Governance met with subject matter experts (SMEs) on February 22, 2023. Their final determination showed that the update to order 7930.2S, *Notice to Air Missions* in January of 2019 addressed the identified issue from the FAASI report. During the meeting they identified incorrect use

of NOTAM format for the Service A outage being used. Tech Ops, National Weather Service (NWS) technical Subject Matter Expert (SME), and ATO SysOPS Flight Service Directorate NOTAM personnel were presented with the correct NOTAM format to identify Service A outage events. The FAA NOTAM Governance work group recommended the FAASI team coordinate for proactive stakeholder outreach to ensure a clear understanding on applicability of and reporting of weather long-line outages. They also recommended mandatory briefing updates to address ATC and Flight Service facilities as well as FAA Tech Ops and NWS Operations centers.

These recommended actions will be addressed in the FAASI FY24 roadmap.

## **Recommendation 1.2: Visual Weather Observation System (VWOS)**

**<u>Recommendation</u>**: Enhance weather reporting capability utilizing the Visual Weather Observation System (VWOS) including:

- 1. Test and evaluate VWOS capabilities at four Alaskan airports and document the findings in a final report.
- 2. Develop standards for non-sensor visual-based weather information.
- 3. Upon successful completion of the evaluation, seek funding for VWOS unit acquisition and installation at airports where AWOS or ASOS units do not exist.
- 4. Modify FAA-issued Operations Specifications to allow for use of VWOS as requested by aircraft operators.

#### FY23 Closeout:

- 1. <u>Test and Evaluate VWOS</u>: The VWOS test and evaluation period began in May 2021 and ended in June 2022. The four test sites continued to operate through FY23. After this successful testing of the VWOS, the FAA is continuing to pursue acquisition for VWOS use in the NAS.
- <u>Develop Standards for Analyzed Weather Information</u>: The American Society for Testing and Materials (ASTM) approved the adoption of Performance Based Weather Standards regarding analyzed weather information. FAA Flight Standards (AFS) has scheduled a Safety Risk Management Panel (SRMP) February 6-8, 2024, for use of Analyzed Weather information for Part 121 and Part 135 operations. At this time the VWOS is not certified, and use of VWOS data must meet the requirements for Analyzed Weather in order to be employed in the NAS.
- Seek funding for additional VWOS: VWOS has received funding in FY25 and FY26 to conduct an investment analysis seeking authorization and funding to implement additional VWOS systems. Funding for future VWOS deployment is dependent on the approval of the investment analysis.
- 4. <u>Modify Operations Specifications</u>: FAA Flight Standards (AFS) has drafted initial Operations Specification language. Authorization framework will continue to be formalized for the use of VWOS as an Analyzed Weather source for aircraft operators in accordance with mitigations identified by the safety risk management process.

#### **Recommendation 2.1: Evaluate Operator Authorization Requirements**

**<u>Recommendation</u>**: Evaluate and clarify aircraft operator authorization and eligibility requirements for commercial aircraft operations under instrument flight rules (IFR). Update the policy and guidance related to equipment requirements for commercial operators when using Global Positioning System (GPS) for navigation.

#### FY23 Closeout:

The Alaska GPS Navigation Policy Group completed its examination of how GPS-only navigation systems are treated with respect to regulatory requirements for independent navigation systems. The group drafted clarifications on navigation policy with respect to operational and equipage requirements.

The Group submitted document change proposals on GPS-only navigation, which are on track for publishing in the March 21, 2024, editions of the Aeronautical Information Manual (AIM) and the Aeronautical Information Publication (AIP).

Additional revisions to guidance documents affecting Remote Continental (RemCon) authorizations are progressing: Advisory Circular 91-70D *Oceanic and Remote Continental Airspace Operations* is expected to be posted for public comment by March 30, 2024, and associated authorization templates and inspector guidance are expected to be published by September 30, 2024.

#### **Recommendation 2.2: Establish and Chart Communications Gaps on Published Routes**

**<u>Recommendation</u>**: Evaluate potential policy change permitting communication gaps on routes where communication capability is the determining factor for the minimum enroute altitude.

#### FY23 Closeout:

Subject Matter Experts (SMEs) from AFS and ATO met to determine the viability and usability of five potential route segments where a lowered Minimum En-Route Altitude (MEA) may be possible and advantageous to operators. Icing and/or oxygen requirements were priority factors for selecting these routes. Additionally, FAA continued internal discussions to assess and confirm regulatory requirements of Part 91, 121 and 135 pertaining to IFR ATC communication requirements along published routes.

The five segments were shared with industry stakeholders in September of 2023 to receive feedback. Continued discussions with ATO are being conducted to confirm regulatory compliance requirements for IFR communication along routes.

#### **Recommendation 2.3: GPS Resiliency**

Recommendation: Develop strategies to address GPS backup resiliency in Alaska.

#### FY23 Closeout:

The GPS resiliency team conducted multiple stakeholder outreach engagements in FY23, and full development of the GPS backup resiliency plan will require more stakeholder engagements in FY24 to ensure the needs of Alaskan Region aviators are met.

Reliable coverage charts for VORs and NDBs throughout the region have been developed. Airports that will allow recovery of aircraft using only VOR, ILS, or NDB (i.e., no requirement for GPS) for instrument approach procedures have been identified. Multiple external stakeholders, including Department of Defense (DoD), provided input. The final plan will likely include retention and/or long-term support for some Alaska conventional navigation aids, including the 24 NDBs noted in recommendation 2.4 (T-Route Development) which has been closed. The Alaskan Region GPS Resiliency plan will likely be substantially different than the current plan in CONUS.

#### **Recommendation 4.1: Education and Outreach of ADS-B Out Equipage**

**<u>Recommendation</u>**: Continue education and outreach related to the benefits of ADS-B Out equipage within certain airspace in Alaska. Outreach will focus on the safety enhancing benefits of aircraft position notification and display for users within all airspace.

#### FY23 Closeout:

The FAA continued and expanded several safety programs to maximize stakeholder outreach. FAA Aviation Safety (AVS) held discussions with stakeholders during numerous events regarding multiple safety efforts and enhancements including the benefits of ADS-B Out equipage. Those events included:

- **Part 135 Air Tour Operators Meetings:** Arranged and presented at the pre and post season meetings in Talkeetna. Discussed Military operations, CFIT avoidance, Accident data, ADS-B and seaplane training. At least one Part-135 operator added ADS-B as a result.
- **141/61 Flight Training:** Met with part 141 and part 61 flight training organizations to discuss midair, Near Midair Collision (NMAC), CFIT, and ADS-B with most of the flight training occurring in the Palmer Airport area.
- **Public Safety Briefs/Safety Standdown:** FAA Safety Team (FAAST) met with the Alaska State Troopers (AST) aviation division. The meeting focused on CFIT training, ADS-B and preflight after maintenance. AST fleet is 50% equipped with ADS-B in and out, with plans to add more.
- Individual meetings with Part 135 Operators: Attended recurrent training for the pilot and maintenance groups regarding CFIT Avoidance, Near Midair and Midair events. Discussed ADS-B and shared the Ketchikan Midair Collision as well as 2 recent NMACs.
- Alaska Professional Guide Meeting: Discussed changes with the Aircraft Registry to shorten times to receive new/updated registrations, Rule Making, CFIT and ADS-B equipage.
- Runway Safety (RSAT Meetings and Bethel Stakeholder's Group): Shared AVS outreach focus items: CFIT avoidance, ADS-B, and NMAC avoidance.

#### **Recommendation 4.2: ADS-B Services**

**<u>Recommendation</u>**: Continue to deploy ADS-B services for non-implemented service volumes in a manner that will provide coverage along major air routes in Alaska.

#### FY23 Closeout:

The FAA Joint Resources Council (JRC) final approval of the Alaska ADS-B Service Expansion Project, including the larger ADS-B Enhancements Package, provides funding for the ADS-B Service Expansion Project and enables completion of all service expansion and site coverage assessments for each of the five service volumes receiving ADS-B services with this expansion.

Site surveys for nine Ground-Based Transmitters (GBTs) deployment locations were completed in FY23. All necessary equipment for GBT deployments was ordered and received. As of 30 September 2023, design reviews were presented and approved for three of the five Service Volumes (SV) to be provisioned by the expansion, with the remaining two SV design reviews scheduled for the beginning of FY24.

Construction of the GBT installations will continue in FY24. The first milestone is the completion of GBT construction in SV 325 (2 sites), followed closely by completion of SV 326 (2 sites) in the May timeframe. Implementation Service Acceptance Testing (ISAT) for these two SVs will occur immediately afterward in FY24, while construction continues simultaneously at the remaining 5 sites. Total construction for all sites is planned to be complete in FY24; however, the final ISAT for the northern SVs will occur in FY25.

#### **Recommendation 5.1: Safety Outreach Collaboration**

**<u>Recommendation</u>**: Continue safety programs already underway and seek to maximize opportunities for program integration.

- Expanded Participation in Existing Programs: The office of the Alaskan Regional Administrator attended the Alaskan Region Runway Safety Action Team (RSAT) meetings at Anchorage, Lake Hood, Fairbanks, Kenai, Kodiak, King Salmon, Merrill Field, Juneau, and Bethel. They conducted six co-sponsored FAA Alaska Industry Council meetings with external stakeholders. FAASI progress was added to these meetings. The Alaskan Region aviation events list will be posted monthly to the FAASI website. The RA also ensured that information regarding the transport of hazardous materials throughout Alaska was available to the public linked to the FAASI webpage. The Alaska Dangerous Goods Resources & Links page was created to be a continually growing and improving safety communication resource. The ASH hazardous materials outreach website is linked to the <u>FAASI website</u> and can also be found at the <u>ASH</u> <u>website</u>.
- 2. <u>Increase External Stakeholder Collaboration</u>: The office of the Alaskan Regional Administrator attended and encouraged stakeholder participation in multiple existing FAA safety programs, including the Bethel Stakeholders Group, the FAA Alaska Industry Council, and the Soldotna Area Common Traffic Advisory Frequency (CTAF) workgroup. The latter of which showed significant success this year.

The RA's team collaborated with local stakeholders to change the CTAFs for 25 airports in the Soldotna/Kenai area in response to NTSB recommendations A-22-4 and A-22-5. Those changes will be effective December 28, 2023. They also established a mechanism for doing the same throughout the region, as recommended by NTSB.

The RA also identified opportunities to combine existing safety efforts to make them more efficient and meaningful for stakeholders. For example, the RA's collaboration with ASH supported the creation of an aggregate website to promote safety and bring value to aviation safety stakeholders. Together, the RA and ASH are working to bring regulations, best practices, news, updates, insights, tips, guides, and articles into this one location, which were previously found in multiple locations around the internet.

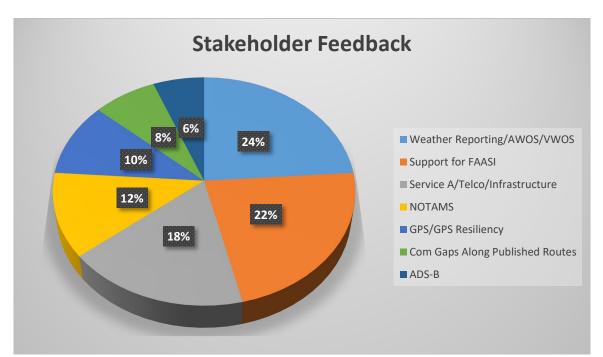
#### 3.0 Stakeholder Comments

The FAASI Tiger Team held six feedback sessions with stakeholders during April and May 2023. Stakeholder attendees included industry and organizational leaders from all regions of Alaska. There were representatives from operators of all levels of commercial and general aviation within the region. Below is a summary of those sessions. A comprehensive and unabridged list of comments received is contained in Appendix D. Attendance at the listening sessions totaled 12 stakeholder participants.

There was a total of 86 comments submitted during the listening sessions. 68 of these account for 7 primary categories. There were also 18 miscellaneous and uncategorized comments which were situational or stakeholder specific and were either directly addressed in this report or did not tie to FAASI and were discussed at the time of the session.

Among the 68 categorized comments, 64% fell into 3 categories: Weather Reporting, Support for FAASI, and Service A/Telco/Infrastructure.

In summary, the stakeholders' priority remains to be the need for accurate and reliable weather reporting, to which Service A/Telco/Infrastructure is directly connected. There is a notable level of feedback regarding NOTAMs and the NOTAM system. Of the 86 total comments received during six sessions, there was no stakeholder unsupportive of FAASI or the FAASI processes. Every stakeholder expressed support for the FAASI process, regardless of their other commentary.



## 4.0 FY23 FAASI Stakeholder Communication

The FAASI projects and work will continue both within and outside of the FAASI process. In FY24 and subsequent years, the FAASI Tiger Team will continue to host stakeholder feedback sessions early in the calendar year.

The FAASI team will continue to consider feedback received at these sessions to prioritize recommendations and work. Consistent and reliable weather reporting continues to be the top priority for stakeholders throughout the region, followed closely by Telco and infrastructure.

The FAASI Tiger team will continue to inform stakeholders of the progress of FAASI through an annual report released in the second quarter of the fiscal year. The FAASI tiger team will also publish a roadmap for the ensuing fiscal year to document actions and priorities in the second quarter of the fiscal year.

• The FY24 FAASI roadmap will focus specifically on completing ongoing recommendations, and for the first time in the FAASI process, there will be two new recommendations added to FAASI for FY24.

#### **Appendix A: 2021 FAASI Recommendations**

#### **Recommendation 1: Weather Reporting Enhancements (AWOS/VWOS)**

One of the primary focal points of FAASI is the requirement for additional and enhanced weather reporting capability via ground-based systems such as AWOS and VWOS.

#### **Recommendation 1.1: Automated Weather Observing System (AWOS)**

Continue FAA focus on new-installation AWOS units at airports for which the airport sponsor requests unit acquisition, installation, and FAA certification with funding under the Airport Improvement Program. Consistent with Section 147 of the FAA Reauthorization Act of 2018, complete each of the initial eight AWOS unit transfers at Alaskan airports (Kotlik, Tok Junction, Coldfoot, Nulato, Perryville, Crooked Creek, Tununak, and Akiachak) to the FAA by October 2022. Optimize the process to transfer AWOS units from airport sponsor ownership to the FAA, enabling seamless completion of the same in a more timely manner.

Stakeholder feedback also expressed concern about the FAA's timely acknowledgment and repair of existing FAA-owned AWOS/ASOS units which experience frequent service outages, including associated surface communication outages. FAA should conduct a study to examine the root cause of "Service A" outages and associated impacts and identify alternative mitigations which could include infrastructure improvement recommendations, alternate notification procedures, and/or the issuance of NOTAMs advising of outages. FAA should consider any necessary changes to FAA Joint Order 7900.5 <u>Surface Weather Observing</u> and FAA Order 7930.2 <u>Notices to Air Missions (NOTAM)</u>.

#### **Recommendation 1.2: Visual Weather Observation System (VWOS)**

Continue testing and evaluating VWOS systems at four Alaskan airports (Palmer, Healy River, Tatitlek, and Eek) with the goal of completion by August 2022. FAA has developed standards for air carrier use during testing and validation of the VWOS units and will develop standards for non-sensor visual-based weather information to support gridded weather analysis information currently available from the National Weather Service.

Upon successful completion of the evaluation, the FAA seek funding for VWOS unit acquisition and installation at airports throughout the state of Alaska where AWOS and/or ASOS units do not exist. Aircraft operators intending to utilize VWOS technology to support IFR operations are required to submit a program for acceptance to their FAA Principal Operations Inspector to grant modification of FAA-issued Operations Specifications.

#### **Recommendation 2: Navigation Strategy Development**

Collaboration with Stakeholders prompted a significant amount of discussion related to development of an Alaska airspace navigation strategy, associated policy for lower-altitude operations, and plans for GPS resiliency. Specific points of reference centered on equipment requirements when using GPS for navigation and optimizing/enabling lower-altitude direct flight paths.

#### **Recommendation 2.1: Evaluate Operator Authorization Requirements**

The FAA evaluate and clarify aircraft operator authorization and eligibility requirements for commercial aircraft operations under Instrument Flight Rules. Specifically, FAA should update the policy and guidance related to equipment requirements for commercial operators when using GPS for navigation.

#### **Recommendation 2.2: Establish and Chart Communications Gaps on Published Routes**

The FAA evaluate a potential policy change permitting communication gaps on routes where communication capability is the determining factor for the minimum enroute altitude. This would allow flexibility for aircraft operators with performance limitations or icing concerns while still maintaining acceptable terrain and obstacle clearance.

#### **Recommendation 2.3: GPS Backup Resiliency**

The FAA develop strategies to address GPS backup resiliency in Alaska. These strategies may include plans for retention and long-term support for conventional navigation aids.

#### **Recommendation 2.4: T-Route Development**

The FAA continue the development of T-routes as a replacement for Low Frequency/Medium Frequency (LF/MF) and other conventional airways by 2025.

#### **Recommendation 3: Aeronautical Charting**

The importance of accurate and relevant aeronautical charting, given the extent of topographical and geographical challenges in Alaska, was discussed intently during the FAASI process.

#### **Recommendation 3.1: Mountain Pass Working Group Initiative**

The FAA continue the Mountain Pass Working Group initiative and partnership with the Aircraft Owners and Pilots Association aimed at verifying existing mountain pass information and adding additional mountain passes to the Alaska VFR sectional charts as coordinated through the Service Center and as information becomes available.

#### **Recommendation 3.2: Aeronautical Charting Meetings**

Aeronautical Charting Meetings (ACM) are held bi-annually to identify issues concerning safety and usefulness of aeronautical charts and flight information products/services. To ensure adequate focus is placed on this initiative, FAA should ensure time is reserved at every future meeting to specifically address Alaska-specific charting needs that may be different than the continental United States.

#### **Recommendation 4: Surveillance**

Stakeholder discussions and FAASI internal conversations often revolved around the need for additional air traffic surveillance capability, particularly given the number of recent aircraft incidents, accidents, and near mid-air collisions in Alaska. ADS-B equipage and coverage was a frequent topic.

#### **Recommendation 4.1: Education and Outreach of ADS-B Out Equipage**

The FAA should continue with education and outreach with Stakeholders related to the requirement for equipage of ADS-B Out within specific airspace in Alaska, with focusing on the safety-enhancing benefits of aircraft position notification/display for users within all airspace. Indeed, a large number of Alaska operators have independently equipped with ADS-B Out and In or were participants in the FAA Capstone upgrade program which replaced first-generation equipment on approximately 400 aircraft with rule-compliant equipment. The extensive usage of it demonstrates the positive safety impact not only in airspace for which ADS-B is required, but also where the system is not required.

#### **Recommendation 4.2: ADS-B Services**

The FAA continue its efforts to deploy ADS-B services for the five non-implemented service volumes in a manner that will provide coverage along major air routes in Alaska.

#### **Recommendation 5: Safety Outreach**

The FAASI team and Stakeholders both repeatedly recognized the value of safety programs and, importantly, the opportunity to conduct them jointly while realizing the resultant synergistic value.

#### **Recommendation 5.1: Safety Outreach Collaboration**

The FAA should continue with the various safety programs already underway and seek to maximize adjacent opportunities for program integration. For example, FAA sponsors and/or participates in numerous programs such as Runway Safety Action Team meetings, the Aviation Safety Action Program, and Alaska-specific working groups including the Bethel Work Group and the AOPA-sponsored Mountain Pass Working Group. There are opportunities for FAA LOBs to conduct safety outreach efforts jointly among each other and via these program initiatives to address an entire realm of operational and environmental safety requirements and best practices. One such opportunity may exist at the Bethel Airport (BET). The FAA should explore combining efforts between AVS, ATO, and ARP utilizing the BET as a pilot program that addresses runway safety, local air traffic and traffic pattern safety, Class D airspace requirements, and accident/incident analysis and discussion utilizing a shared set of safety data. FAA-derived data and subject matter expert presentation material would become even more meaningful and would be more apt to be cohesively delivered in prospective multi-meeting settings.

## Appendix B: FY23 Roadmap

#### 1.1: Automated Weather Observing System (AWOS)

**<u>Recommendation</u>**: Enhance weather reporting capability utilizing the Automated Weather Observing System (AWOS) including:

**Who:** A collaboration between the Airports Division (ARP) and (ATO).

- 1. <u>Installation of AWOS</u>: ARP and ATO Operations Support are the co-leads for this portion. ARP will lead the process with respect to funding and identification of AIP eligible locations. ATO Operations Support will lead and complete the review of the request, siting, security, inspection, and acceptance.
- 2. <u>Service A Outages</u>: ATO Technical Operations and Mission Support Services will lead this portion with support from the ATO Program Management Organization.
- 3. <u>Review of FAA Order 7930.2 NOTAM</u>: ATO Mission Support Services Aeronautical Information Services will lead this portion with support from ATO Operations Support.

What: ARP and ATO will implement three changes to enhance weather reporting capability.

- 1. <u>Installation of AWOS</u>: ARP will collaborate with Alaska Department of Transportation & Public Facilities (ADOT&PF) to finalize the installation of the eight AIP-funded AWOS systems at airports. ARP will continue their collaboration with ATO to facilitate the transfer process from airport sponsor ownership to the FAA. The FAA will utilize FAA Directive Advisory Circular 170-9A: *Criteria for Assumption of Ownership of Non-Federal Systems* and other guidance as appropriate to complete the installation and transfer.
- 2. <u>Service A Outages</u>: Air Traffic Organization (ATO) Technical Operations, Anchorage District (Tech Ops) will continue to monitor the status of all Automated Surface Observing System (ASOS) and AWOS Service A capabilities in Alaska. Tech Ops is working directly with the management entities of the telecommunication provider companies to assure their understanding of the impacts and the priority needed for restoration activities.
- 3. <u>Review of FAA Order 7930.2 NOTAM</u>: The ATO US NOTAM Governance Team will meet with subject matter experts (SMEs) to determine a final action plan. Any changes will be incorporated to Order 7930.2 with change 3, scheduled for April of 2023.

How: ARP and ATO will use a variety of options to implement these changes, including:

1. <u>Installation of AWOS</u>: The FAA and ADOT&PF will continue to collaborate on the installation and FAA takeover of the AIP-funded AWOS locations at Kotlik, Tok Junction, Coldfoot, Nulato, Perryville, Crooked Creek, Tununak, and Akiachak.

- Service A Outages: Tech Ops has prioritized AWOS and ASOS telecommunications for conversion to the FAA Telecommunications Infrastructure (FTI). The FTI conversion will modernize some aspects of the circuits and adds real-time monitoring at the circuit level for these sites, which should translate into improved Service A performance.
- 3. <u>Review of FAA Order 7930.2 NOTAM</u>: The ATO US NOTAM Governance Team will meet with subject matter experts (SMEs) to determine a final action plan.

<u>When</u>: The changes will be implemented starting in calendar year 2022 with specific milestones listed below.

- 1. <u>Installation of AWOS</u>: The eight AWOS installations and transfer of ownership to FAA will be complete by September 30, 2023.
- 2. <u>Service A Outages</u>: Conversion of AWOS and ASOS telecommunications to the FAA Telecommunications Infrastructure (FTI) will be a multi-year endeavor and will extend beyond FY23.
- <u>Review of FAA Order 7930.2 NOTAM</u>: The follow-up meeting with SMEs is planned for February 2023. The workgroup will determine the final action plan by February 28, 2023. Any changes will be incorporated to Order 7930.2 with change 3, scheduled for April of 2023.

#### **1.2: Visual Weather Observation System (VWOS)**

**<u>Recommendation</u>**: Enhance weather reporting capability utilizing the Visual Weather Observation System (VWOS) including:

- 1. <u>Develop Standards for Analyzed Weather Information</u>: Standards for operator use will be developed following current research that is being performed.
- 2. <u>Seek Funding for Additional VWOS</u>: The FAA will use its acquisition management system processes to conduct an investment analysis to determine whether a business case exists for the FAA to deploy VWOS. Funding for VWOS is dependent on the approval of the business case.
- 3. <u>Modify Operations Specifications</u>: AFS will work with aircraft operators to update their authorizations as appropriate. Performance Based Weather Standards (PBWS) are being worked with industry and the ASTM F-38 working group.

Who: Flight Standards (AFS) and the Air Traffic Organization (ATO)

<u>What</u>: Flight Standards (AFS) and the Air Traffic Organization (ATO) will collaborate both internally and externally to pursue deployment of VWOS. This will include the ASTM F-38 working group and the FAA AMS process.

**How:** The FAA will use its acquisition management system processes to conduct an investment analysis. The investment analysis will determine whether a business case exists for the FAA to deploy VWOS. Funding for VWOS is dependent on the approval of the business case.

**When:** AFS will work with the ASTM F-38 working group through FY23. The FAA AMS process is multi-year in nature and will likely continue through FY25. Operations specification standards will continue being developed following current research that is being performed. Estimate to finalize these standards is early 2023.

## **2.1: Evaluate Operator Authorization Requirements**

**<u>Recommendation</u>**: Evaluate and clarify aircraft operator authorization and eligibility requirements for commercial aircraft operations under IFR. Update the policy and guidance related to equipment requirements for commercial operators when using GPS for navigation.

<u>Who</u>: Flight Technologies and Procedures Division, the Air Carrier Division (AFS), and FAA legal counsel (AGC) will collaborate to evaluate operator authorization requirements.

**What:** AFS will continue its review and evaluation of current GPS navigation policy to include regulatory requirements, equipment requirements, guidance, and the associated authorization framework. Based on the review and evaluation, AFS will consider potential for new and amended policy which would clarify and align operational and equipment requirements for commercial operators using GPS for navigation.

**How:** AFS will continue its work, focusing on inconsistencies, areas requiring clarification, and opportunities for improving navigation policy and the associated authorization framework.

Proposed updates identified by the FAA review team will be coordinated across LOBs to provide additional clarity and transparency. Identified updates will be published in applicable FAA documents.

<u>When</u>: AFS will continue its review of the navigation policy and associated requirements and plan revisions to policy documents by September 30, 2023. Members of the Flight Standards Leadership Team will provide routine updates to the FAASI team.

## 2.2: Establish and Chart Communications Gaps on Published Routes

**<u>Recommendation</u>**: Evaluate potential policy change permitting communication gaps on routes where communication capability is the determining factor for the minimum enroute altitude.

<u>Who</u>: AFS (Flight Technologies and Procedures Division) and ATO (Western Flight Procedures Team and Anchorage En Route Center (ZAN) Airspace and Procedures Office).

<u>What</u>: The FAA will collaborate with internal and external stakeholders to determine the viability and usability of potential route segments that were identified.

Additionally, FAA will continue internal discussions to assess and confirm regulatory requirements of Part 91, 121 and 135 pertaining to IFR ATC communication requirements along routes.

**How:** FAA will consider mitigations that could be implemented to ensure an equivalent level of safety for flight in areas where acceptable ATC communications gaps are proposed.

AFS and ATO personnel have identified potential route segments for consideration. The Flight Procedures Team has conducted a feasibility study of the route segments to verify potential candidates for lower altitudes. The AFS and ATO team will collaborate with internal and external stakeholders on the identified potential route segments and proposed altitudes for each segment.

<u>When</u>: The AFS and ATO team will begin collaboration with internal and external stakeholders by September 30, 2023 on potential route segments.

#### **2.3: GPS Backup Resiliency**

**Recommendation:** Develop strategies to address GPS backup resiliency in Alaska.

<u>Who</u>: ATO Program Management Organization, Enterprise Services, and Navigation Programs with input from AVS.

<u>What</u>: Finalize a GPS resiliency plan for Alaska navigation accounting for potential loss or interference of GPS or WAAS signals.

**How:** Finalize strategies for mitigating the loss of integrity of GPS navigation across the various geographic areas of Alaska. Factors that will be considered in the strategies include:

- Plans for retention and long-term support for conventional navigation aids (NAVAIDs)
- Threat to GPS signal
- Availability of safe landing sites
- Use of various ground-based NAVAIDs
- Assess accident locations and causes related to navigation
- Current and planned ground-based and satellite-based NAVAIDs and infrastructure.

The GPS resiliency concept will be coordinated with military and civil users and revised as appropriate. Alaska-located conventional NAVAIDs will be included in the appropriate navigation programs for funding, implementation, and long-term support.

When: The final plan will be submitted by September 30, 2023.

## **2.4: T-Route Development**

**<u>Recommendation</u>**: Continue the development of T-routes as a replacement for Low Frequency/Medium Frequency (LF/MF) and other conventional airways.

All planned T-Route replacement airways have completed the design, environmental and development phases. In FY22, 13 T-Routes were published, with the remaining 41 T-Routes scheduled for publication in FY23.

Moving forward through FY23, The T-Routes working group has accomplished their work for Alaska and will be publishing those new routes utilizing the established agency charting cycles. There is no FAASI plan in FY23 to design or develop more T-Routes in Alaska than have already been done. The FAA will continue to evaluate the demand for and benefits of T-Routes in Alaska and will collaborate with the FAA Alaskan Region and the FAASI team regarding any future development of additional T-Routes.

This fulfills the intent of this recommendation and recommendation 2.4 will be closed in FAASI.

#### 3.1: Mountain Pass Working Group Initiative

**Recommendation:** Continue the Mountain Pass Working Group initiative and partnership with the Aircraft Owners and Pilots Association (AOPA) aimed at verifying existing mountain pass information and adding additional mountain passes to the Alaska Visual Flight Rules (VFR) sectional charts.

The Alaskan Mountain Pass Working Group has accomplished their work for Alaska and their efforts have been published. There is no plan in FY23 to address specific mountain passes. The FAA will continue to evaluate the needs of stakeholders in the Alaskan region regarding mountain pass flying and will collaborate with the FAA Alaskan Region and the FAASI team regarding any future plans to address those needs.

This fulfills the intent of this recommendation and recommendation 3.1 will be closed in FAASI.

## **3.2: Aeronautical Charting Meetings**

**<u>Recommendation</u>**: Aeronautical Charting Meetings (ACM) will ensure adequate focus is placed on Alaska specific charting needs that may be different than the contiguous United States.

Goals for aeronautical charting within FAASI have been accomplished and the results have been published. The agenda for the aeronautical charting meetings (ACM) has been permanently modified to be conducive for consistent participation by Alaskan participants. The next scheduled ACM is April 24 – 27, 2023 and they will continue outside of FAASI. Meeting minutes for all ACMs are posted on the ACM website: Aeronautical Charting Meeting – (Charting Group) (faa.gov)

This fulfills the intent of this recommendation and recommendation 3.2 will be closed in FAASI.

## 4.1: Education and Outreach of ADS-B Out Equipage

**<u>Recommendation</u>**: Continue education and outreach related to the benefits of ADS-B Out equipage within certain airspace in Alaska. Outreach will focus on the safety enhancing benefits of aircraft position notification and display for users within all airspace.

<u>Who</u>: Flight Standards will lead the efforts with an emphasis on utilizing the FAA Safety Team (FAASTeam) in Alaska.

<u>What</u>: Outreach will consist of a multifaceted information campaign utilizing posters, presentations, brochures, e-mails, and accident case studies that promote and educate operators on the use and benefits of ADS-B.

**How:** Flight Standards will maintain an outreach plan, in harmony with the FAASTeam National Performance Plan, which identifies opportunities for the FAA to collaborate with the stakeholders on ADS-B Out equipage. The FAASTeam in Alaska will partner with stakeholders to conduct the outreach meetings. Flight Standards will review the outreach plan and add new events as identified. The outreach plan includes the following events:

- Spring Air Safety Meeting
- Great Alaskan Aviation Gathering
- Quarterly Safety Meetings
- Individual outreach with the public, including complaint investigation
- Runway Safety Action Team (RSAT) meetings
- Bethel Stakeholders Group meetings
- Pre- and Post-season Air Tour meetings
- Air Carrier briefings as requested

**When:** Flight Standards will meet quarterly to review and update the outreach plan. The FAASTeam will attend meetings and conduct outreach on ADS-B equipage as meetings occur.

## 4.2: ADS-B Services

**<u>Recommendation</u>**: Continue to deploy ADS-B services for non-implemented service volumes in a manner that will provide coverage along major air routes in Alaska.

Who: ATO Program Management Organization and Surveillance Services

<u>What</u>: The ADS-B Service Expansion Project will increase the number of Service Volumes (SVs) in Alaska from nine to fourteen.

**How:** Initial FAA Joint Resources Council (JRC) approval of the Alaska ADS-B Service Expansion Project was obtained in September 2021. Final approval of the Alaska ADS-B Service Expansion Project, including the larger ADS-B Enhancements Package was received in summer 2022. This approval provides incremental funding for the ADS-B Service Expansion Project and enables a preliminary service expansion and site coverage assessment. After completion of the preliminary service expansion and site coverage assessment, five additional ADS-B ground-based transceivers (GBT) will be installed.

<u>When</u>: Construction of the GBT installations will begin in FY23 along with delivering the first completed service volume.

#### **5.1: Safety Outreach Collaboration**

**<u>Recommendation</u>**: Continue safety programs already underway and seek to maximize opportunities for program integration.

<u>Who</u>: The Alaskan Regional Administrator (RA) will lead the process to increase safety collaboration across FAA LOBs in the Alaskan region.

<u>What</u>: The RA will implement two changes within the Alaskan Region to further increase safety outreach collaboration.

1. Expanded Participation in Existing Programs: The RA will continue to encourage expanded FAA participation in Alaska focused safety programs. The FAA currently sponsors or participates in numerous programs such as RSAT meetings, the Aviation Safety Action Program (ASAP), the Bethel Stakeholders Group, Aeronautical Charting Meetings (ACM), Mountain Pass Working Group, FAA Alaska Industry Council, and Alaska Aviation Safety Foundation Seminars. The RA will work with the RMT to ensure these existing programs are supported. In FY23 the RA will be adding collaboration with Security and Hazardous Materials (ASH) regarding the requirements for the safe transport of hazardous materials throughout Alaska. These collaborations will include education and outreach efforts to both operators and the flying public.

2. <u>Increase External Stakeholder Collaboration</u>: The RA will evaluate the opportunity to increase safety outreach collaboration by combining existing safety efforts currently in place by AVS, ATO, and ARP to make the programs more efficient and meaningful for stakeholders.

How: The RA will use a variety of options to implement these changes, including:

- 3. <u>Expanded Participation in Existing Programs</u>: The RA will advocate for increased LOB participation in all FAA safety meetings. The RA will attend RSATs, air tour operator safety meetings, and other meetings as appropriate. RMT members will communicate upcoming events at the regularly scheduled RMT meetings and will include the events on the Alaskan Region aviation events list. The RA will ensure that information regarding the transport of hazardous materials throughout Alaska will be available to the public on the FAASI webpage. The ASH hazardous materials outreach website can be found at this address: <u>ASH website</u>
- 4. <u>Increase External Stakeholder Collaboration:</u> The RA will encourage stakeholder participation in existing FAA safety programs by increasing communication of upcoming events at the FAA Alaska Industry Council and Alaska Aviation Coordination Council meetings. The Alaskan Region aviation event list is a publicly available document and is updated monthly on the FAASI website at this address: <u>FAASI website</u>

The RA will use the Alaskan Region aviation event list to identify opportunities to combine existing safety efforts to make them more efficient and meaningful for stakeholders.

The Soldotna CTAF Working Group is an example of expanded stakeholder outreach developed under FAASI. It is focused on addressing complicated and confusing CTAF boundaries in the Kenai and Soldotna area, which contributed to at least one fatal midair collision. This working group will likely propose updating CTAF boundaries and likely conclude their work in 2024.

<u>When</u>: The RA will continue to implement the two changes starting in calendar year 2023. The changes will continue beyond 2023.

- 1. <u>Expanded Participation in Existing Programs:</u> The RA will address the RMT on a monthly basis to identify upcoming events and encourage wider participation across the LOBs. The RA will ensure that information regarding the transport of hazardous materials in Alaska is linked to the FAASI website in January 2023.
- 2. <u>Increase External Stakeholder Collaboration</u>: The RA will use the bimonthly FAA Alaska Industry Council meetings hosted by the FAA and the bimonthly Alaska Aviation Coordination Council meetings hosted by the stakeholders as an opportunity to communicate upcoming events. The RA will continue to post the Alaskan Region aviation event list to the FAASI website and will update the list on a monthly basis.

The RA will continually consider opportunities to combine safety efforts for efficiency and to make them more meaningful. An update on the opportunities identified in FY23 will be included in the year end FY23 FAASI Report.

#### **Appendix C: List of Acronyms**

ACM – Aeronautical Charting Meetings ADS-B - Automated Dependent Surveillance-Broadcast AIP – Airport Improvement Program AIM – Aeronautical Information Manual AFS – Flight Standards AJR - System Operations AOPA - Aircraft Owners and Pilots Association ARP – FAA Alaskan Region Airports Division ASH - FAA Office of Hazardous Materials Safety ASOS – Automated Surface Observing System ATO – Air Traffic Organization AVS – Aviation Safety AWOS - Automated Weather Observing System CFI – Certified Flight Instructor CFIT - Controlled Flight Into Terrain **DPE** - Designated Pilot Examiner FAA – Federal Aviation Administration FAASI – FAA Alaska Aviation Safety Initiative FTI – FAA Telecommunications Infrastructure GBT - Ground-based transceivers GPS - Global Positioning System IFR – Instrument Flight Rules ISAT - Implementation Service Acceptance Testing LOB – Line of Business NDB – Non-Directional Beacon NOTAM – Notice to Air Missions NTSB - National Transportation Safety Board **OPSPECS** – Operational Specifications PIREP - Pilot Report RA – Regional Administrator RMT – Regional Management Team RSAT – Runway Safety Action Team Tech Ops – ATO Technical Operations Telco - Telecommunications VFR – Visual Flight Rules VWOS - Visual Weather Observation System WAAS – Wide Area Augmentation System

## Appendix D: Stakeholder Feedback

Stakeholder Comments	
Weather Reporting /AWOS / VWOS	
-AWOS –It's been 5 years since reauthorization and it is still not reporting, in 2017 we had a fatal accident, CFIT, in Alaska Range going to Perryville, IAP in place but no AWOS. We're still waiting for authorization for IFR authorization without AWOS.	
– AWOS and weather outages impact indigenous communities, service is declining not improving.	
– Please modify VWOS Ops Specs, can we work with operators to use VWOS, AMS process is so long and budgeting that the benefits are significantly delayed and is this timeline even realistic?	
-The VWOS and weather cameras are exceptional programs.	
-We're very interested in the VWOS status, especially operator standards.	
-Can you put a timeline on when the standards for operator use of VWOS will be completed?	
<ul> <li>Regarding VWOS, NWS looking for a denser sensor array.</li> </ul>	
<ul> <li>– FAA is responsible for aviation weather not forecasting requirements.</li> </ul>	
-For AWOS, we saw a 40% increase in AWOS availability – great work by FAA Tech Ops.	
– Can we get monthly AWOS status from Tech Ops?	
-We're getting feedback from organization members on frustrations on unavailability of AWOS/ASOS.	
-Could we have a status meeting this April, and April of 2024, where the FAA meets with Alaska DOT&PF to review the availability of AWOS/ASOS services to the aviation population? We would like to review any obstacles and have a team-sport approach to considering if there any resources that could be brought to the solution set if extended service gaps existed. The overall goal would be transparencyAWOS/VWOS need to focus on operator needs using COTS systems	
–I know some important recommendations will take longer, i.e. AWOS/VWOS	
-From the State Aviation Board, the high priority is the availability of AWOS/ASOS	
–Why does it take so long to get AWOS back after typhoon Merbok? In the lower-48 it would not take so long.	
– AWOS/ASOS loss of availability resulting in lower cargo delivered this year compared to last.	

#### Service A / Telco / Infrastructure

- We need the weather information; at ENN there was a failed transformer; stakeholders have no access to why the equipment it out and they call their pilot organization instead of FAA.

– Most pilots use 3<sup>rd</sup> party apps and don't call Flight Service.

– FAA is setting up pilots to fail by not providing required data.

- FAA should consider alternatives for accessing the Internet at remote locations.

-For Service A outages, the language to monitor is not moving the service forward. We are forced to use Chevak AWOS to access Hooper Bay, HPB is still out due to Typhoon Merbok.

-If something is not available to a pilot due to a telco issue, that is not as prominent for the FAA as if a piece of FAA hardware was broken.

– We would like FAA to expand communications gaps from T-routes to all communication gaps, RCO system is failing, like AWOS, MYU and Tooksok Bay have no communications. A single failure in western Alaska leaves a huge hole in communications and can last a long time.

–FAA is missing the mark on AWOS/VWOS, it's more than just a Service A problem, FAA should try new carriers (Iridium or Starlink).

- We're concerned that too many VORs are OTS to make them reliable for GPS resiliency.

- Can we meet annually in April to discuss AWOS/Service A with stakeholders?

-As a front-line operator with our community, our company takes the heat. If it's unsafe to fly, it doesn't make a difference to villager who has medical needs. The service is getting worse, not better.

–Without AWOS/Service A, we must file IFR to an alternate airport and hope to get the weather from the air.

#### NOTAMs

– NOTAMs are difficult to manage – specifically, ASOS is not working at Nenana and the NOTAM wasn't clear.

-It can be difficult for pilots and dispatchers to determine what is working and what is not due to the way NOTAMs describe components of the system.

-FAA typically tracks reliability and availability with a focus on their own components, and not on the end-result to the flying public.

– FAA needs to change the metric on AWOS NOTAMs, we need the data delivered to users and we need a pathway for real-time updates.

-There was no NOTAM regarding loss of LPV during recent magnetic storms, FAA/NWS should add magnetic storm forecasts to dispatch process.

-The NOTAM system is a huge challenge for operators, it's a ridiculous system.

-There needs to be a new NOTAM for GPS interference, more accuracy please.

-The NOTAM system is unrealistic and needs to be changed.

**GPS / GPS Resiliency** 

-In reference to the GPS resiliency plan; will AK participate?

-Good that we are getting new GPS sites; the industry thinks we may need more GBTs.

-As for GPS resiliency, radar doesn't work in SEAK, we need access to IAP.

-GPS back up is a good effort

-We appreciate the progress to date on GPS resiliency, we need GPS resiliency plan specifically for Alaska.

-We have entire generation of pilots who have only flown using GPS, don't know how to use VOR

-For the GPS Resiliency Plan, this item says the "final plan" will be submitted by September 30. Is there input from the state of Alaska on this one? Who is working on it?

#### ADS-B

-The FAA Program Management Office is giving us regular updates for the ADS-B roll out.

-The news about 9 new ADS-B sites over the next two years is excellent. Personally, I think there will still be a need for 2 or 3 more based on gaps. However, that really isn't a pertinent question until we all see how the new 9 sites perform. Ideally, I would like to suggest a forum after the 9 sites are installed. Where we could get the stakeholder organizations and the state of Alaska to discuss whether important gaps still exist after the 9 are installed.

-We would like to partner with FAA for ADS-B at Alpine and Willow.

-ADS-B is crucial to safety, especially on the north slope considering all the small aircraft operators at low altitudes.

#### **Communication Gaps Along Published Routes**

-Keep working on the communication gaps issue

-FAA needs to add communication facilities so communication gaps along routes are not a problem.

-The MEA from OTZ-BRW is 12K rather than 4K because of communications requirements

–What is the timeline for publishing communication gaps along published routes? Will we have an opportunity for industry input?

-Communication Gaps on published routes describes a potential policy change that would permit communication gaps on routes where voice communications capability is the determining factor for MEA. The conclusion is that there will be coordination by September 30, 2023. The concern is that at the deadline, the answer might be "no". Would it be possible to make this a more results-positive commitment like "standards for this item will be developed by September 30"? That may already be the intent, but the words are a little soft

## Support for FAASI and the FAASI process

-FAASI is like the RTCA report from 2017 – why do these good ideas get stopped? They should be funded to continue.

-We're (stakeholders and FAA) all working as a team with direct focus on Alaska aviation safety.

-FAASI needs to be funded.

-For the executive summary, you've done a good job with roadmap to accomplish 2.2, 2.3, 2.4

-With recommendation 5.1, FAA Alaska is hitting it out of the park, POIs are getting out in the bush and going above and beyond. HQ could learn from AAL/FAASI.

-Thank you for the FAASI reports, they help ADOT&PF align with FAA.

-We see FAASI as a problem statement and we want to partner with you.

-We're working to fit in and provide solutions.

-We're very happy with the process, FAA should use it as basis for our NextGen efforts.

–We want to discuss how our organizations can support FAASI and ASH efforts. Our members don't often think about hazardous materials issues.

-We appreciate FAASI.

-We appreciate update and are interested in providing input on future drafts.

-We like getting regular updates.

-Safety in aviation is paramount, and FAASI reinforces that.

-The FAASI team has saved lives.

#### **General Comments**

-The FAASI roadmap is missing causal factors that are resulting in SEAK (Southeast Alaska) accidents.

-Capstone was left to die, use R-routes as criteria for all Part 135 routes -

-For accidents in SEAK, there is no mention of causal factors; it's a marine environment.

-Pilot training is way out of date

-It would help if we could use the IFR system available in the aircraft. We have technically advanced aircraft.

- Maybe FAA could order and warehouse parts in advance of winter for aging systems? This is similar to aging aircraft problems.

-As for Evaluate operator authorizations, I don't think operators should be putting in systems that are the responsibility of the government

-Communication with frequency congestion on CTAF causes confusion at nearby villages

-ADOT&PH is connecting airport locations with operators' ability to access sites using GIS and Starlink and getting good coverage we are having outages of 5 minutes or less. Solution: test Starlink at FAA locations for last mile communications

– ACUASI is testing environments at Nenana with radar, and ADS-B. We're also working with NASA Langley for real time availability.

-Charting UAS operation areas was removed from Supplement; ACUASI is starting to operate in northern Alaska. The Charting Group needs to work on a policy.

-FAA should use Alaska Industry council for regular updates.

-Regarding the Mountain Pass Working Group, AOPA is not lead and other industry groups should be included. Please update the language. The policy group is disbanded, although there remains significant work to do.

-FAA used to have an external phone directory. When you restructure it's very difficult to contact the correct line of business.

-Under recommendation 5.1, The Soldotna CTAF needs to expand to incorporate CTAFs in other parts of Alaska; we need a structure for other areas, and how to assemble an appropriate team.

-Fire TFRs may block VFR routes and we are willing to work with those pilots; FAA needs to show VFR routes

-I flew T-route from ENN to TKA at MEA in VFR conditions and like it and think it will be useful this summer during fire season

-It seems forecasters in Alaska perceive some gaps in weather data that hinder optimal forecast development. Could we identify those gaps in sensors, and authorize forecasters to use "advisory" weather reporting equipment (if necessary), so that advisory systems such as VWOS or others could be used to augment weather information in Alaska?

## **Appendix E: Completed FAASI Recommendations**

#### **FAASI Recommendations Completed in previous years**

## **Recommendation 2.4: T-Route Development**

**Recommendation**: Continue the development of T-routes as a replacement for Low Frequency/Medium Frequency (LF/MF) and other conventional airways.

The development of T-routes as a replacement for Low Frequency/Medium Frequency (LF/MF) and other conventional airways as recommended is complete. The planned removals of airways and decommissioning of NDBs associated with this recommendation will continue as a normal business function within FAA, and will be associated with recommendation 2.3 GPS resiliency.

- All T-routes to support the new RNAV route structure have been completed and published.
- 29 out of 48 Low Frequency and Medium Frequency (LF/MF) planned removals are complete. Nine removals are planned for FY 2024. Ten removals are planned for FY 2025.
- 10 out of 62 Non-Directional Beacon (NDBs) decommissioning's are complete. Nine are expected to be removed in FY 2024, Five are expected to be removed in FY 2025. Eight will be indefinitely retained at the request of the DoD. The remaining 24 NDBs are TBD and will either be removed FY26 and beyond, or retained in support of FAASI recommendation 2.3, GPS Resiliency.

## **Recommendation 3.1: Mountain Pass Working Group Initiative**

**Recommendation:** Continue the Mountain Pass Working Group initiative and partnership with the Aircraft Owners and Pilots Association (AOPA) aimed at verifying existing mountain pass information and adding additional mountain passes to the Alaska Visual Flight Rules (VFR) sectional charts.

As reported in FY22, this recommendation is considered complete within FAASI and now continues as amended within normal FAA business. Moving forward, it will be outside of the FAASI process and will continue as an industry-led effort to consider adding features in additional Alaska passes as needed. Some of the specific pending topics include Lake Clark, Merrill, Rainey/Houston, Windy, Isabell, Mentasta, Tahneta, Portage, Thompson, White, and Chilkoot Passes.

## **Recommendation 3.2: Aeronautical Charting Meetings**

**Recommendation:** Aeronautical Charting Meetings (ACM) will ensure adequate focus is placed on Alaska specific charting needs that may be different than the contiguous United States.

As reported in FY22, this recommendation is considered complete within FAASI and now continues as amended within normal FAA business.

The ACM continued in FY23. The most recent ACM was held October 24-26, 2023. Meeting minutes and updates for the ACM can be found at this address: <u>Aeronautical Charting Meeting</u>

Aeronautic Information Services (AJV) will continue to hold biannual ACM and address Alaska charting issues. The meeting times are adjusted to better match west coast and Alaskan time zones. The next ACM will be held April 22-25, 2024.