

FAA Weather Community of Interest (COI)

Presented to: Spring 2021 FPAW Meeting

By: Bill Bauman

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**Federal Aviation
Administration**



What's the challenge?

Silos of Excellence



FAA Organizations that Research, Produce, and/or Consume Weather Information



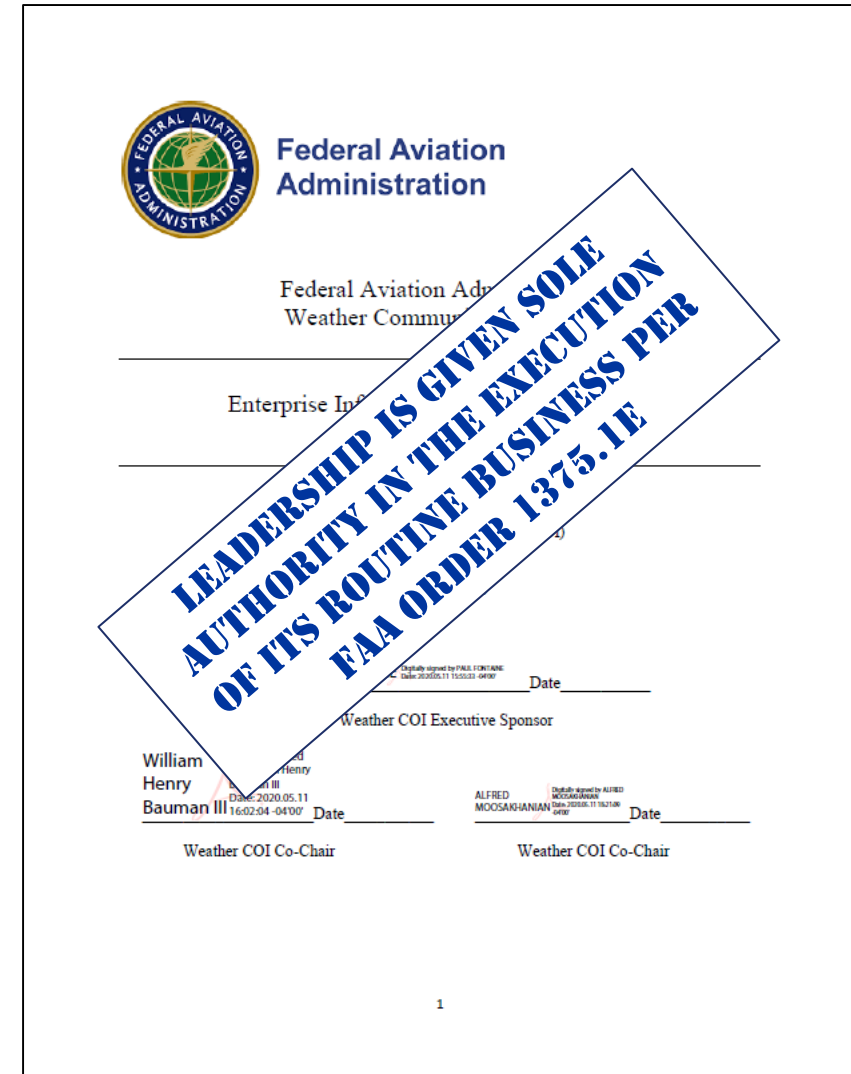
Purpose and Scope

- Promote collaboration, communication, and sharing of weather information among FAA organizations, other Federal agencies, industry, and international partners
- Resolve and/or mitigate mission-specific, information-sharing challenges across the weather enterprise
- Ensure appropriate access to, and availability & consistency of weather information
- Identify and assimilate operational and business needs for weather information in the NAS



Governance and Organization

- Chartered under Enterprise Architecture Board & Enterprise Information Management Steering Committee (EIMSC)
- Executive Sponsor
 - Paul Fontaine, NextGen, Portfolio Management & Technology Development Office
- Co-chairs
 - Bill Bauman, NextGen, Aviation Weather Division
 - Alfred Moosakhanian, Program Management Organization
- Secretariat/Contract Support
 - David Strand, MITRE Corp
 - Matt Fronzak, MITRE Corp



Activities recap up to Fall 2020 FPAW

- Mar 2020
 - Began weekly core team meetings, drafted charter & talked to other COIs
- Apr 2020
 - Charter signed and continued weekly core team meetings
- May/June 2020
 - Established membership and planned first meeting
- Jul 2020
 - First full meeting - explained COI role & laid-out plans for future meetings
- Aug 2020
 - Solicited problem statements from members
- Sep 2020
 - Adjudicated problem statements (37) and set Special Weather Action Teams (SWATs) goals
- Oct 2020
 - Formed five SWATs, discussed SWAT logistics, four problem statement submitted, briefed EIMSC
 - UAS, PIREPS, Wind Forecasts, Operations in Winter Weather, and Volcanic Ash



Weather Community of Interest Problem Statement Form

Email this form to: dstrand@mitre.org

A problem statement is a **concise** description of an issue to be addressed or a condition to be improved upon. It identifies the **gap** between the current (problem) state and desired (goal) state of a process or product. The problem statement **does not** define the solution or methods of reaching the solution.

A problem statement should be concise and include the following when possible:

- A **brief** description of the problem and the metric used to describe the problem
- Where the problem is occurring by process name and location
- The time frame over which the problem has been occurring
- The size or magnitude of the problem

Poor Problem Statement: *Human resources is taking too long to fill personnel requests.*

Better Problem Statement: *Recruiting time for software engineers for the flight systems design department in San Jose is missing the goal of 70 days 91 percent of the time. The average time to fill a request is 155 days in the human resources employee recruitment process over the past 15 months. This delay is adding costs of \$145,000 per month in overtime, contractor labor, and rework costs*

← So what?

← Ah, now we understand

*Name:

*Email:

*Organization:

*In a **few** sentences, describe the problem you are trying to solve:

Issue + Impact

(Optional)
Existing operational gaps:

(Optional)
List proposed solution(s):

(Optional)
Other background information:



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What's the role of the SWAT?

- Categorize problem statements → become SWATs
- SWATs have no defined timeline
- FAA volunteer leads each SWAT
- Lead solicits volunteers from organizations
 - Define roles and responsibilities, structure the team
 - Define goals and objectives, sets timelines
 - Delegate tasks
 - Schedule regular meetings
 - Report out at each COI meeting
 - Make a commitment to see the task through

1. Alaska Infrastructure
2. Ops in Winter
Weather
3. PIREPS
4. Standards & Policy
5. Systems: Data Flow &
Communications
6. UAS
7. Volcanic Ash
8. Wind Forecasts
9. SFO MSFS



SWAT Quad Chart for activities updates

<p>Problem Statement:</p> <p>Status:</p>	<p>Accomplishments :</p>
<p>Upcoming activities:</p>	<p>Issues:</p>



Activities since Fall 2020 FPAW

- Nov 2020
 - Formed three SWATs, briefing on NAS Weather Infrastructure Roadmap
 - Alaska Infrastructure, Standards & Policy, and Systems
- Dec 2020
 - Formed final SWAT, discussed Federal Aviation Weather Roles & Responsibilities
 - SFO Marine Stratus Forecast System (MSFS)
 - Three SWATs reported on activities
- Jan 2021
 - Discussed FAA Vision and FAA Weather Vision for next 5-, 10-, 15-years of weather in the NAS
 - Five SWATs reported on activities
- Feb 2021
 - EIMSC approved employees from other Federal organizations and FFRDCs join SWATs as SMEs
 - Seven SWATs reported on activities
- Mar 2021
 - FAA's Chief Scientific and Technical Advisor for Architecture and NextGen Air Transportation System Development briefed on Charting Aviation's Future – Operations in an Info-Centric NAS



Conclusions

- FAA has multiple organizations that interact with weather in some way
- FAA programs are successful → need to leverage information across orgs
 - Increase information-sharing and best practices across FAA programs and organizations
 - Leverage weather knowledge through forums to benefit stakeholders
 - Foster collaboration within and across weather information users
 - Identify and help resolve enterprise weather information issues
- Have held nine successful meetings
 - Adjudicated problem statements
 - Stood-up SWATs
 - SWATs reporting on activities → propose solutions
- EIMSC approved SWAT SMEs from outside FAA
- Continue to solicit new problem statements and form SWATs
- Consider 5-, 10-, 15-year problem statements to support info-centric vision

