

Draft Agenda for the Fall 2023 FPAW Meeting



Dates: 14-16 November 2023
Location: The MITRE Corporation
 Room 1N100 unless otherwise listed
 7515 Colshire Drive
 McLean, VA 22102

Registration: Required via [FPAW website](#)

	Day 1	Day 2	Day 3	
Time (EST)	Tuesday, 11-14-23	Wednesday, 11-15-23	Thursday, 11-16-23	
8:30 AM to 8:45 AM				
8:45 AM to 9:00 AM				
9:00 AM to 9:15 AM				
9:15 AM to 9:30 AM				
9:30 AM to 9:45 AM	Session 1a <i>Climate Change and Aviation</i> 9:30 AM - 11:30 AM	Session 3a <i>A Day in the Life of an Input to the ANG-C6 Portal</i> 9:30 AM - 11:30 AM	Session 5a <i>Testbed Activities – End User Engagement in the R2O Process Part Deux</i> 9:30 AM – 11:30 AM	
9:45 AM to 10:00 AM				
10:00 AM to 10:15 AM				
10:15 AM to 10:30 AM				
10:30 AM to 10:45 AM				
10:45 AM to 11:00 AM				
11:00 AM to 11:15 AM				
11:15 AM to 11:30 AM				
11:30 AM to 11:45 AM	Lunch 11:30 AM - 12:30 PM	Lunch 11:30 AM - 12:30 PM	Lunch 11:30 AM - 12:30 PM	
11:45 AM to 12:00 PM				
12:00 PM to 12:15 PM				
12:15 PM to 12:30 PM	Session 1b <i>Climate Change and Aviation</i> 12:30 PM - 2:30 PM	Session 3b <i>A Day in the Life of an Input to the ANG-C6 Portal</i> 12:30 PM - 2:00 PM	Session 5b <i>Testbed Activities – End User Engagement in the R2O Process Part Deux</i> 12:30 PM - 2:30 PM	
12:30 PM to 12:45 PM				
12:45 PM to 1:00 PM				
1:00 PM to 1:15 PM				
1:15 PM to 1:30 PM				
1:30 PM to 1:45 PM				
1:45 PM to 2:00 PM				
2:00 PM to 2:15 PM		Break		
2:15 PM to 2:30 PM		FPAW Planning Meeting 2:15 PM – 4:00 PM	Break	
2:30 PM to 2:45 PM	Break		Break	
2:45 PM to 3:00 PM	Session 2 <i>TCF Verification</i> 2:45 PM - 3:45 PM		Session 6 <i>Review of Prior FPAW Topics</i> 2:45 PM - 3:45 PM	
3:00 PM to 3:15 PM				
3:15 PM to 3:30 PM				
3:30 PM to 3:45 PM				
3:45 PM to 4:00 PM	Break			
4:00 PM to 4:15 PM	FPAW Steering Committee Meeting (Closed Session) Location TBD 4:00 PM - 5:30 PM	Break	<p>Notes:</p> <ul style="list-style-type: none"> Exact session days and start/stop times are subject to change Gray blocks indicate hybrid meeting (both in- 	
4:15 PM to 4:30 PM				
4:30 PM to 4:45 PM				
4:45 PM to 5:00 PM				
5:00 PM to 5:15 PM				
5:15 PM to 5:30 PM				
5:15 PM to 5:30 PM				

After 5:30 PM	FPAW Steering Committee Dinner 6:30 PM - ?? Location TBD	FPAW Dinner? 6:30 PM - ?? Location TBD
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person and remote participation)
(r) = remote participant

Day 1 – Tuesday, November 14, 2023

Sessions 1a and 1b: Climate Change and Aviation (9:30 AM – 11:30 AM EST and 12:30 PM – 2:30 PM EST, hybrid, MITRE Room 1N100, Session Leads: Tammy Flowe/FAA (r) and Tim Rahmes/Boeing)

FPAW will be holding its first-ever main session to address aviation’s impact on climate as well as the impact on aviation operations due to climate change. Our industry is actively engaged in research and prototyping efforts to mitigate the impact of aviation on climate. Conversely, there are many possible impacts of a changing climate on commercial aviation, such as more frequent days of high surface temperatures, colder temperatures during cruise in the stratosphere, increased probability of moderate-or-greater-turbulence, increased dust and smoke from forest fires, changes in icing probabilities, increased convective activity (lightning, hail), and changes in migratory bird patterns, to name a few. While this interchange between aviation and the climate is quite extensive, we’re planning to prioritize the following speakers and topics:

- **Tammy Flowe/FAA (r) and Tim Rahmes/Boeing:** Background & Motivations
- **Dr. Paul Williams/University of Reading (r):** Increased Turbulence Probability
- **Nicole Didyk-Wells/FAA:** Use of Sustainable Aviation Fuel (SAF), Contrail Modeling, Measurements, and Mitigation
- **Ted Thrasher/MITRE:** Contrail mitigation decisions
- **Dr. James Done/NCAR (r):** Climate projections and high impact weather

This will **NOT** be a death by PowerPoint session. There will be plenty of time built into the schedule for audience interaction and at least one panel discussion.

Session 2: TCF Verification (2:45 PM – 3:45 PM EST, hybrid, MITRE Room 1N100, Session Leads: Jason Baker/FAA and TBD)

The TFM Convective Forecast (TCF), the successor to the Collaborative Convective Forecast Product (CCFP), has been objectively verified from Day 1. Those verification statistics tell a very interesting story and raise some fundamental questions about the state of the science and the most effective path forward for convective forecasts used operationally in the NAS. The presentations will tee up what promises to be a lively conversation!

- **Jason Baker/FAA:** Background and Motivation
- **Kevin Stone/NWS and Matt Wandishin/NOAA ESRL:** TCF Statistics

FPAW Steering Committee Meeting (4:00 PM – 5:30 PM CDT, hybrid, meeting location TBD)

Steering Committee members will meet to discuss matters of its organization, mission, and best ways to impactfully guide the FPAW movement going forward. It will be a closed session for FPAW Steering Committee members only.

FPAW Steering Committee Dinner (6:30 PM CDT - ??, in-person only, location TBD)

Day 2 – Wednesday, November 15, 2023

Tour of the MITRE IDEA Lab (8:30 AM – 9:30 AM EST, in-person only, POC ??)

The first one-hour tour of the MITRE IDEA Lab will take place on Wednesday morning, November 15, 2023, starting at 8:30 AM. Sign up will be required for the tours, as there will be a maximum of 30 people each day. Sign-up sheets will be in the main meeting location, Room 1N100.

Sessions 3a and 3b: A Day in the Life of an Input to the ANG-C6 Weather Needs Portal (9:30 AM – 11:30 AM EST and 12:30 PM – 2:00 PM EST, hybrid, MITRE Room 1N100, Session Leads: Matt Eckstein/Delta Air Lines and Becky Kotten/FAA)

With apologies to The Beatles, this session, which came out of a very interesting conversation that took place at the FPAW Planning Meeting in Kansas City last May, will show what happens when someone submits a suggestion to the FAA ANG-C6 (Aviation Weather Division) Weather Needs Portal.

The Office of NextGen, Aviation Weather Division, Policy and Requirements Services Branch (ANG-C64) oversees input and processing of inputs to the Weather Needs Portal. The intent of the portal is to be a clearinghouse for aviation stakeholders to submit and track weather-related needs. Needs are reviewed, prioritized, and validated by ANG-C64 based on several factors including complexity, funding and resource availability, and impacts to the NAS. This session will provide an overview of the Needs Portal, the processes used to review and validate each need, and the various partner LOB and Agency procedures for prioritizing and developing requirements.

At the conclusion of this session, attendees will have a much better appreciation of the challenges associated with quickly and successfully turning a good aviation weather idea into reality. But, fear not, that's where FPAW may be able to play a key part!

FPAW Planning Meeting (2:15 PM – 4:00 PM EST, hybrid, MITRE Room 1N100)

The location, dates, and target session topics for the Spring 2024 FPAW Meeting will be discussed and decided upon. Potential locations, dates, and session topics will be similarly reviewed and catalogued for the Fall 2024 FPAW Meeting. Proposed topics that are submitted to <https://fpaw.aero/form/submit-a-topic> will be included in these discussions.

Session 4: FPAW Organizational Update (4:15 PM – 5:00 PM EST, hybrid, MITRE Room 1N100, Session Leads Matt Fronzak, MITRE, and Matthias Steiner, NCAR)

We will provide pertinent updates from the FPAW Steering Committee and its activities, to include the introduction of the 2023-2024 FPAW Steering Committee.

FPAW Dinner (6:30 PM CDT - ??, in-person only, location TBD)

Our first FPAW dinner went so well this past spring that we're going to try it again. Details will be provided as soon as they are able; sign-up will be required.

Day 3 – Thursday, November 16, 2023

Tour of the MITRE IDEA Lab (8:30 AM – 9:30 AM EST, in-person only, POC ??)

The second one-hour tour of the MITRE IDEA Lab will take place on Thursday morning, November 16, 2023, starting at 8:30 AM. Sign up will be required for the tours, as there will be a maximum of 30 people each day. Sign-up sheets will be in the main meeting location, Room 1N100.

Sessions 3a and 3b: Testbed Activities – End User Engagement in the R2O Process Part Deux (9:30 AM – 11:30 AM EST and 12:30 PM – 2:30 PM EST, hybrid, MITRE Room 1N100 and others, Session Leads: Sonia Alvidrez/FAA, Dr. Ian Johnson/FAA, and Vic Passetti/FAA)

FPAW attendees will learn about and provide input to three separate research areas being explored by the FAA:

- LAMP Flight Category Onset/Cessation Forecasts
- Automated Precipitation Type and Intensity Changes
- Utility of a Cockpit Cognitive Assistant (Digital Copilot)

This session will begin with all participants together in MITRE Room 1N100. They will be presented with an overview of the planned session activities. When that is complete, the in-person and remote participants will be divided up into smaller groups and head to separate real and virtual locations.

The small groups will then be exposed to each of three research areas, and be provided an opportunity to help steer the direction that these research areas will take, through both interactive surveys (Pro Tip – keep your smart phone handy) and direct conversations.

After all the groups have been engaged in each of the three research areas, in-person and remote meeting attendees will reconvene in MITRE Room 1N100 and online, for what is sure to be a fascinating and lively post-user-engagement discussion.

Session 6: Review of Prior FPAW Topics (2:45 PM – 3:45 PM EST, hybrid, MITRE Room 1N100, Session Lead: Steve Darr, Dynamic Aerospace)

This session will feature TBD updates.