Agenda for the Fall 2022 FPAW Meeting

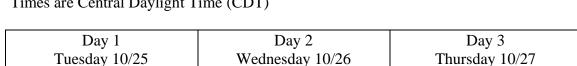
Dates: 25 – 27 October 2022

Location: Atrium of the National Weather Center (NWC)

120 David L Boren Blvd, Norman, OK 73072

Registration: Required via <u>FPAW Fall Meeting website</u>

Schedule: Times are Central Daylight Time (CDT)



8 – 9 am		Tour #1 of NWC	
9 – 10 am		Tour #2 of NWC	
10 am – noon	Session #1a	Session #2a	Session #3 Topics Update
(15 min break)	Winter Weather	Probabilistic Guidance	and FPAW Org Update
Lunch break			
1-3 pm	Session #1b	Session #2b	Seminar and
(15 min break)	Winter Weather	Probabilistic Guidance	Networking with Students
,	Winter Weather FPAW Steering Committee		Networking with Students
(15 min break) 3 – 5 pm		Probabilistic Guidance Planning Meeting	Networking with Students
,	FPAW Steering Committee		Networking with Students

Note: Gray blocks above indicate hybrid meeting (both in-person and remote participation)

Day 1 – Tuesday, October 25, 2022

<u>Sessions 1a and 1b</u> – Winter Weather (10:00 AM – 12:00 PM CDT and 1:00 PM – 3:00 PM CDT, hybrid, NWC Atrium, Session Leads Stephanie DiVito/FAA and Andrew Rosenow/University of Oklahoma)

The Winter Weather Session will address topics related to icing, snow, and mixed precipitation, as well as their impacts on all aviation operations. There will be two sessions, each focused on a main topic area.

The morning session will explore the impact of winter weather on ground operations, focusing on an airport perspective. Specific topics include surface weather observations at the airport, ground de-icing operations, and runway friction. We will hear from Victor Passetti (FAA), Scott Landolt (NCAR), Gordy Rother (FAA), and Joe Vickers (AST). After the break, a panel consisting of operator, airport, national airspace management, and weather representatives will discuss current best practices for safe operations and identifies potential areas of collaboration and improvement. We will hear from Nathan Polderman (United Airlines), Dave Cunningham (DEN Airport), Eric Avila (NATCA), Steve Green (Flight Operations Research), and Mark Ratzer (NWS).

The afternoon session will focus on winter weather guidance for flight operations, spanning the spectrum from crewed to uncrewed operations. Brief overviews of current and future meteorological winter

guidance tools will be followed by a discussion of the utility and sufficiency of winter guidance. We will hear from Austin Cross (NWS), Danny Sims (FAA), Stephanie DiVito (FAA), and Andrew Rosenow (University of Oklahoma). The final portion of the session will be focused on low-altitude flight and winter operations. A panel consisting of representatives for helicopters, uncrewed aircraft systems, and government aviation safety will discuss the specific needs and challenges of the low-altitude community. We will hear from Eric Brown (FAA), Matt Johnson (Metro Aviation Inc.), Henry Cathey (New Mexico State University), John Steventon (FAA), and Marilyn Pearson (CAE). The goal is to explore winter weather tools in the context of an expanding concept of low-altitude operations.

<u>Inaugural FPAW Steering Committee Meeting</u> (3:00 PM – 5:00 PM CDT, hybrid, Dean's Conference Room, NWC)

This will be the first meeting of the Steering Committee members to discuss 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 (6:00 PM CDT, in-person only, Interurban Restaurant, 1150 Ed Noble Pkwy, Norman, OK 73072)

Day 2 – Wednesday, October 26, 2022

<u>Tours of the NWC</u> (8:00 AM – 10:00 AM CDT, in-person only, Tour Leader Pat Hyland/ University of Oklahoma)

There will be two one-hour tours of the National Weather Center, the first starting at 8:00 AM CDT and the other at 9:00 AM CDT. Sign up is required for the tours, as there will be a maximum of 30 people per tour. Sign-up sheets will be located at the registration desk located just inside the NWC.

<u>Sessions 2a and 2b</u> – <u>Probabilistic Guidance for Decision Making</u> (10:00 AM – 12:00 PM CDT and 1:00 PM – 3:00 PM CDT, hybrid, NWC Atrium, Session Leads Brian Pettegrew/MITRE and Jennifer Stroozas/NWS)

The Probabilistic Guidance for Decision Making Session will lean into the broader spectrum of forecasts of aviation hazards in probabilistic space. We will discuss the end-to-end spectrum of probabilistic forecasting from initial development through the dissemination of information to operators and translators, who are tasked with interpretation of probabilistic aviation weather hazard information into actionable impact-based decisions.

The morning session will focus on the science and communication of probabilistic forecasting, with presentations and conversations revolving around how probabilities may be determined, the vast array of uncertainties underlying each method, and how scientists and model developers can most effectively communicate this information to decision makers. We will hear from Judy Ghirardelli (NOAA), Frank Brody (UCAR), John Williams (IBM), and Steve Weygandt (NOAA). We will also hear from Kodi Berry (NOAA), David Hogg (NOAA), Sonia Alvidrez (FAA), Jason Godwin (NWS), and Stephanie Klipfel (Delta Air Lines) about the role of social science in the development and effective communication of probabilistic weather information.

The afternoon portion will focus on a variety of users, how they receive probabilistic information, and how they turn it into actionable decisions. The overarching goal of this session is to demonstrate the

various uncertainties and communication techniques being practiced, as well as to understand how they are being received and used, and gain insight into the intent of actionable future translation research as it continues to evolve. The afternoon session plans to make use of in-person and virtual breakout groups to explore the underlying themes.

FPAW Planning Meeting (3:00 PM – 5:00 PM CDT, hybrid, NWC Atrium)

The location, dates, and target session topics for the Spring 2023 FPAW Meeting will be discussed and decided upon. Potential locations, dates, and session topics will be similarly reviewed and catalogued for the Fall 2023 FPAW Meeting. Proposed topics that are submitted to https://fpaw.aero/form/submit-a-topic will be included in these discussions.

Day 3 – Thursday, October 27, 2022

<u>Session 3</u> – **Review of Prior FPAW Topics** (10:00 AM – 11:00 AM CDT, hybrid, NWC Atrium, Session Lead Steve Darr/Dynamic Aerospace)

This session will feature three updates. The first, delivered by Session Lead Steve Darr, will summarize the status and next steps associated with the implementation of ADS-B Wx. The second will focus on the activities of the FAA Weather Community of Interest (Wx COI) and will be delivered by one of the Wx COI Co-Leads, Alfred Moosakhanian (FAA). The final update, from Bob Avjian (MITRE), will provide the latest information on PIREP modernization.

<u>FPAW Organizational Update</u> (11:00 AM – 12:00 PM CDT, hybrid, NWC Atrium, Session Leads Matt Fronzak/MITRE and Matthias Steiner/NCAR)

We will introduce the members of the newly formed FPAW Steering Committee and discuss how this group will help shepherd FPAW efforts going forward.

Seminar/Tech Talk (1:00 PM – 2:00 PM CDT, hybrid, NWC Atrium, Speaker Matthias Steiner/NCAR)

This session is intended to be FPAW's way of saying "thank you" to the National Weather Center and the National Severe Storms Laboratory (NSSL) for hosting our meeting, and a way for FPAW to engage with and give back to the local student and academic communities.

Matthias Steiner (NCAR) will share his thoughts on how the aviation/aerospace industry is evolving and the opportunities for the aviation weather research community to engage and create actionable guidance to the emerging flight operations under a changing climate system. His seminar is titled "Back to the Future – Aviation Weather Opportunities for the Research Community."

Networking with Students (2:00 PM – 3:00 PM CDT, in-person, NWC Atrium, all)

This event is intended to allow the local student community to engage in-person with the aviation weather professionals attending the FPAW meeting.