

## Detailed Agenda for the Fall 2024 FPAW Meeting



**Dates:** October 29-31, 2024  
**Location:** FAA William J. Hughes Technical Center (WJHTC) for Advanced Aerospace, Building 300, Auditorium  
 Atlantic City Int'l Airport, NJ 08405  
**Registration:** Required via [FPAW website](#)

Time (EDT)	Day 1	Day 2	Day 3		
	Tuesday, 10-29-24	Wednesday, 10-30-24	Thursday, 10-31-24		
7:30 AM					
8:00 AM	<b>Arrive WJHTC Gate 18</b> Van/Bus Transport to Building 300, Auditorium 7:50 AM - 9:30 AM	<b>Arrive WJHTC Gate 18</b> Van/Bus Transport to Building 300, Auditorium 7:50 AM - 9:30 AM	<b>Arrive WJHTC Gate 18</b> Van/Bus Transport to Building 300, Auditorium 8:00 AM - 9:45 AM		
8:30 AM				Walk to Weather Labs	Transport to NAPT/ARFF
9:00 AM				<b>Pre-Meeting WJHTC Tours/Demos*</b> ERAM Lab, STARS Lab, Traffic Production Center (TPC) 8:30 AM - 9:30 AM	<b>Pre-Meeting WJHTC Tours/Demos*</b> Nat'l Airport Pavement Test Facility (NAPT), ARFF Facility 8:30 AM - 9:30 AM
9:30 AM	<b>Welcome and Logistics</b> 9:30 AM - 10:00 AM (Auditorium)	Walk to Auditorium	Transport to Auditorium		
		Transport to Hangar 9:50 AM - 10:00 AM			
10:00 AM	<b>Session 1a</b> <b>CSS-Wx and NWP: Overview and Data Access</b> 10:00 AM - 12:00 PM (Auditorium)	<b>Session 3a</b> <b>The Art of the Possible: Weather Resiliency from the Aviation Side</b> (VFAST Lab) 10:00 AM - 10:35 AM			
10:30 AM		Transport to Building 300 10:35 AM - 10:45 AM			
11:00 AM		<b>Session 3a Group A</b> Innovate 28 LAX Demo (NIEC Lab)	<b>Group B Break</b> 10:45 AM - 11:05 AM		
11:30 AM		<b>Group A Break</b> 11:05 AM - 11:25 AM	<b>Session 3a Group B</b> Innovate 28 LAX Demo (NIEC Lab)		
		Walk to Auditorium			
		<b>Session 5a</b> <b>Artificial Intelligence and Aviation Weather Forecasting</b> 9:55 AM - 12:05 PM (Auditorium)			
12:00 PM	<b>Lunch</b> 12:00 PM - 12:55 PM (WJHTC Cafeteria)		<b>Lunch</b> 12:05 PM - 1:00 PM (WJHTC Cafeteria)		
12:30 PM	<b>Lunch</b> 12:00 PM - 1:00 PM (WJHTC Cafeteria)		<b>Lunch</b> 12:05 PM - 1:00 PM (WJHTC Cafeteria)		
1:00 PM	Walk to Weather Labs	<b>Session 3b</b> <b>The Art of the Possible: Moving Further Outside the Box for Weather Resiliency and Optimization</b> 1:00 PM - 2:30 PM (Auditorium)			
	<b>Session 1b: AWD Demonstrations</b> 1:05 PM - 1:20 PM (Weather Labs)				
	Walk to Auditorium				
1:30 PM	<b>Session 1b</b> <b>CSS-Wx and NWP: Practical Applications for FAA Weather Information</b> 1:30 PM - 3:00 PM (Auditorium)	<b>Session 5b</b> <b>Artificial Intelligence and Decision Support</b> 1:00 PM - 3:15 PM (Auditorium)			
2:00 PM		<b>Session 5b</b> <b>Artificial Intelligence and Decision Support</b> 1:00 PM - 3:15 PM (Auditorium)			

Time (EDT)	Day 1	Day 2	Day 3
	Tuesday, 10-29-24	Wednesday, 10-30-24	Thursday, 10-31-24
2:30 PM	<b>Session 1b</b> CSS-Wx and NWP: Practical Applications for FAA Weather Information 1:30 PM - 3:00 PM (Auditorium)	Break	<b>Session 5b</b> Artificial Intelligence and Decision Support 1:00 PM - 3:15 PM (Auditorium)
3:00 PM	Break	<b>Session 4</b> FPAW Organizational Update and Mini Planning Meeting 3:00 PM - 4:00 PM (Auditorium)	<b>Depart WJHTC</b> Van/Bus Transportation from Building 300, Main Entrance to Gate 18 3:15 PM - 3:45 PM
3:30 PM	<b>Session 2</b> FAA Weather Community of Interest (Wx COI) Update 3:15 PM - 4:15 PM (Auditorium)		<b>Depart WJHTC</b> Van/Bus Transportation from Building 300, Main Entrance to Gate 18 4:00 PM - 4:30 PM
4:00 PM	<b>Depart WJHTC</b> Van/Bus Transportation from Building 300, Main Entrance to Gate 18 4:15 PM - 5:00 PM	<b>FPAW Steering Committee Meeting</b> 4:30 PM - 5:30 PM (Space X Conference Room)	
4:30 PM			
5:00 PM			
5:30 PM			
6:30 PM	<b>FPAW Steering Committee Dinner</b> 6:30 PM - ?? Angelo's Fairmount Tavern, 2300 Fairmount Ave. Atlantic City, NJ, (609) 344-2439		

Key:

Motor vehicle transportation
Walking transportation
Hybrid (In-person and virtual)
In-person only
Lunch / Break
FPAW Steering Committee only

## Day 1 – Tuesday, October 29, 2024

### Welcome and Logistics

9:30 AM – 10:00 AM (Hybrid), Building 300 Auditorium

**Michael Paglione** (FAA) and **Starr McGettigan** (FAA)

Michael Paglione, Manager, Laboratory Services Division and WJHTC Senior Management Team Member, will welcome FPAW to the William J. Hughes Technical Center (WJHTC) for Advanced Aerospace and open the meeting with a keynote address. Our FAA host, Starr McGettigan, Manager of the Aviation Weather Division Weather Engineering and Evaluation Branch (ANG-C63), will go over WJHTC logistics. In-person participants who do not have a suitable federal ID (i.e., PIV Card) will want to pay particular attention to Starr’s guidance.

### Sessions 1a and 1b: CSS-Wx and NWP Comprehensive Review/Update

**10:00 AM – 12:00 PM** Building 300 Auditorium (Hybrid)

**12:55 PM – 1:30 PM** Building 300 Weather Labs (In-Person Only)

**1:30 PM – 3:00 PM** Building 300 Auditorium (Hybrid)

**Session Leads: Doug Murphy** (FAA) and **Jeff Sarver** (UPS)

It has been several years since FPAW last received a comprehensive briefing from the FAA on their future, soon to be present, flagship aviation weather systems, Common Support Services-Weather (CSS-Wx) and NextGen Weather Processor (NWP). Given that the meeting is being held at the facility in which pre-implementation testing of both systems was conducted, and that the future is now (the FAA Program Management Office (PMO) successfully completed the initial rollout of both systems on September 12, 2024), the FPAW Steering Committee (FPAW SC) felt that a detailed, hands-on update for these two new systems was both desirable and appropriate.

The morning portion, **Session 1a**, titled “Data Access and Overview,” will focus on the new systems. Session Co-Lead **Doug Murphy (FAA)** will introduce the FPAW audience to CSS-Wx and NWP. **Tim Bonin (MIT LL)** will go over some of the key improvements that are part of the new systems. **Wil Brown (FAA)** will explain how the transition from current products and capabilities to those provided by CSS-Wx and NWP will be accomplished. After a short break, two important topics to external (non-FAA) users will be briefed. **Sonoka Ho (Tech Trend – FAA Contract Support)** will share information on how web access to NWP products will be made available, **Brian Kratky (Noblis)** will provide key information on how those products can be accessed via the FAA System Wide Information Management (SWIM) system and then **Doug Lotter (UAL / ADF) (remote)** will review how aircraft dispatchers use weather information from the FAA as they conduct shared operational control of flights with the pilots-in-command. A thirty-minute Q&A panel will end Session 1a.

Following lunch, **Session 1b**, “AWD Demo and Practical Applications for FAA Weather Information,” will kick off with an **in-person only** NWP Aviation Weather Display (AWD) demonstration led by **Ryan Low** and **Joe Markiewicz (FAA)** in the WJHTC Weather Labs. After returning to the Auditorium, the remainder of Session 1b will demonstrate the importance of FAA weather information to external users. **Chris Boner (Metron)** will show how Metron’s AirCue system leverages FAA weather information to inform its trajectory predictions. **Jim Olivo (BCI)** will brief FPAW on how his organization uses government-furnished weather information. Following a break, **Mitch Scott (NBAA) (remote)** will share information on how personnel working the NBAA desk at the FAA ATCSCC rely on FAA weather information to brief their customers. Session Co-Lead **Jeff Sarver (UPS)** will put an exclamation point on the topic when he goes over a day in the life of an airline meteorologist. Session 1b will then conclude with a 20-minute Q&A panel with all the presenters, so have your questions ready to go!

Time	Activity/Topic: Presenter
<b>9:30 AM – 10:00 AM</b>	<b>Welcome and Logistics</b>
9:30 AM – 9:45 AM	<b>Keynote Address:</b> Michael Paglione (FAA)
9:45 AM – 10:00 AM	<b>Meeting Logistics:</b> Starr McGettigan (FAA)
<b>10:00 AM – 11:45 AM</b>	<b>Session 1a – CSS-WX and NWP Comprehensive Review/Update</b>
10:00 AM – 10:15 AM	<b>Introduction to the FAA’s CSS-Wx and NWP Systems:</b> Doug Murphy (FAA)
10:15 AM – 10:30 AM	<b>NWP Products – Key Improvements:</b> Tim Bonin (MIT LL)
10:30 AM – 10:40 AM	<b>Transition of Existing Access:</b> Wil Brown (FAA)
10:40 AM – 10:50 AM	<b>BREAK</b>
10:50 AM – 11:00 AM	<b>External Web Access:</b> Sonoka Ho (FAA)
11:00 AM – 11:15 AM	<b>SWIM Access to FAA Data:</b> Brian Kratky (Noblis)
11:15 AM – 11:30 AM	<b>Weather Information Use by Aircraft Dispatchers:</b> Doug Lotter (UAL / ADF) (r)
11:30 AM – 12:00 PM	<b>Q&amp;A Panel Session:</b> All Session 1a Presenters
12:00 PM – 12:55 PM	<b>LUNCH</b>
<b>12:55 PM – 3:00 PM</b>	<b>Session 1b – AWD Demo and Practical Applications for FAA Weather Information</b>
12:55 PM – 1:05 PM	<b>Walk from Auditorium to Weather Labs</b>
1:05 PM – 1:20 PM	<b>Aviation Weather Display (AWD) Demonstration:</b> Ryan Low, Joe Markiewicz (FAA)
1:20 PM – 1:30 PM	<b>Walk from Weather Labs to Auditorium</b>
1:30 PM – 1:45 PM	<b>AirCue’s Use of Weather Data for Trajectory Prediction:</b> Chris Boner (Metron)
1:45 PM – 2:00 PM	<b>Use of Government-Furnished Weather Data:</b> Jim Olivo (BCI)
2:00 PM – 2:10 PM	<b>BREAK</b>
2:10 PM – 2:25 PM	<b>FAA Weather Information and the ATCSCC NBAA Desk:</b> Mitch Scott (NBAA) (r)
2:25 PM – 2:40 PM	<b>A Day in the Life of an Airline Meteorologist:</b> Jeff Sarver (UPS)
2:40 PM – 3:00 PM	<b>Q&amp;A Panel Session:</b> All Session 1b Presenters

**Session 2: FAA Weather Community of Interest (Wx COI) Update**

**3:15 PM – 4:15 PM** Building 300 Auditorium (Hybrid)

Session Leads: **Randy Bass** (FAA) (r) and **Alfred Moosakhanian** (FAA)

The FAA Weather Community of Interest (Wx COI) is a cross-agency aviation weather body. Although it is an internal FAA group, it is directed to appropriately engage with relevant external organizations. FPAW is considered one of those organizations.

**Randy Bass (FAA)** (remote) and **Alfred Moosakhanian (FAA)** will update the FPAW community on the proceedings of the FAA Wx COI over the last six months. They will share the list of Problem Statements (PS), both open and closed (resolved) with FPAW. They will provide a progress report on an effort to develop an FAA weather strategy, including the role of the Wx COI Strategic Planning Team (SPT) in that effort. Finally, they will review the work that has taken place in support of setting up a formal relationship between FAA Wx COI and FPAW, one intended to establish routine, effective two-way communications between the two groups.

Time	Activity/Topic: Presenter
3:00 PM – 3:15 PM	<b>BREAK</b>
<b>3:15 PM – 4:15 PM</b>	<b>Session 2 – FAA Wx COI Update</b>
3:15 PM – 4:00 PM	<b>FAA Wx COI Update:</b> Randy Bass (FAA) (r) and Alfred Moosakhanian (FAA)
4:00 PM – 4:15 PM	<b>Q&amp;A:</b> All

This will conclude the first day of the Fall 2023 FPAW Meeting for all but the FPAW Steering Committee members.

**FPAW Steering Committee Meeting**

4:30 PM – 5:30 PM Space X Conference Room, 2<sup>nd</sup> floor, Building B300 (Hybrid)

Members of the FPAW 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** (In-Person only, no virtual food)

Where: Villa Rifici, 308 W Absecon Blvd, Absecon, NJ 08201

When: 6:30 PM - ??

**Day 2 – Wednesday, October 30, 2024**

**Pre-Meeting Tour #1: TPC, ERAM and STARS Labs**

**8:30 AM – 9:30 AM** Building 300 Automation Labs (In-Person Only), POC **Starr McGettigan** (FAA)

The first pre-meeting tour of the world-class facilities at the WJHTC will take place on Wednesday morning. In-person participants will visit three locations: the Traffic Production Center (TPC), the En Route Automation Modernization (ERAM) lab and the Standard Terminal Automation Replacement System (STARS) lab. All three are within walking distance of the primary meeting location in the Building 300 Auditorium. Tour sign-up sheets will be on a table in the Auditorium. Tour sizes are limited, so do not delay getting signed up.

### **Sessions 3a and 3b: The Art of the Possible**

**09:50 AM – 10:45 AM** Hangar Vertical Flight Aviation Simulation Technologies (VFAST) Lab (Hybrid)

**10:45 AM – 11:30 AM** Building 300 NextGen Integration and Evaluation Capability (NIEC) Lab  
(In-Person Only)

**11:30 AM – 2:30 PM** Building 300 Auditorium (Hybrid)

**Session Leads: Starr McGettigan (FAA) and Mike Robinson (MITRE)**

Aviation weather forecasts continue to get better and better, delivering incrementally improved predictions of impactful meteorological parameters farther into the future with each passing year. But are there other ways of looking at the aviation weather problem/solution space that can also deliver benefits to NAS operations alongside the forecast improvements? This session is focused on challenging established, legacy paradigms and priorities, and turning that problem/solution space on its head, to see if alternative innovations, outcomes, and benefits may be achieved from deliberate, divergent thinking. It seeks to identify R&D and innovations that may be leveraged to spur alternative paradigms to aviation “weather proofing.”

The morning portion, **Session 3a**, titled “New View of ATM-Weather Integration (AWI): Weather Resiliency from the Aviation Side,” seeks to view AWI from the non-weather perspective. Once again, we will take advantage of our WJHTC location and start off with an in-person field trip from Building 300 to the VFAST Lab. After an introduction from Session Co-Lead **Starr McGettigan (FAA)**, **Cliff Johnson (FAA)** will showcase three vision systems across three simulators to discuss mitigation strategies through technology.

Remote participants – don’t step away! Join us for the vision systems demos via the following Zoom link:

FAA ZoomGov Meeting

Click to Join:

<https://faavideo.zoomgov.com/j/16070624238?omn=1616111314>

Passcode: 279344

If prompted, accept the Zoom application as instructed.

Mobile Device:

Download the ‘Zoom Cloud Meetings’ App.

Select ‘Join a Meeting’ and enter Meeting ID: 160 7062 4238 • Passcode: 279344

Phone Audio Only:

Call 1-888-924-3239 or 1-571-302-4908; enter Meeting ID: 160 7062 4238 • Passcode: 279344 •

Unmute or mute yourself by pressing \*6

In-person participants will then bus back to Building 300 and head to the NIEC Lab, where **John Bradley (FAA)** will lead a demonstration of the Innovate 28 LAX Mixed Usage capabilities. Remote participants will have an extended break until 11:30 AM. At that time, the morning portion of the session will conclude in the Auditorium, where the session leads, presenters and panelists will conduct a Q&A Panel with all participants.

Following lunch, **Session 3b**, titled “Moving Further Outside the Box for Weather Resiliency and Optimization,” will look at new, unusual ideas that might be used to further weather-proof NAS operations. Session Co-Lead **Mike Robinson (MITRE)** will set the stage for the afternoon presentations, which will start when **Victor Passetti** and **Steve Maciejewski (FAA)** explore approaches to modernizing weather observation information from systems that are in sustainment. Next, **Jon Schleifer (FAA)** will review smart

airport concepts and issues that were identified through the FAA Grand Challenge. **TJ Rancour (Ambient Network)** will discuss the incentivization of decentralized data access via blockchain technology concepts. Session 3b will end with a Q&A Panel featuring the session leads, presenters and panelists who, along with the audience, will explore the idea of leveraging successful non-aviation concepts to improve NAS performance in the face of impactful, uncertain weather.

Time	Activity/Topic: Presenter	
<b>8:20 AM – 9:40 AM</b>	<b>Pre-Meeting FAATC Tour #1</b>	
8:20 AM – 8:30 AM	<b>Walk from Auditorium to Automation Labs</b>	
8:30 AM – 9:30 AM	<b>Demonstrations – Traffic Production Center (TPC), Enroute Automation Modernization (ERAM) Lab and Standard Terminal Automation Replacement System (STARS) Lab: Starr McGettigan (FAA)</b>	
9:30 AM – 9:40 AM	<b>Walk from Automation Labs to Auditorium</b>	
9:50 AM – 10:00 AM	<b>Transport from Building 300 Main Entrance to Hangar</b>	
<b>10:00 AM – 12:00 PM</b>	<b>Session 3a – The Art of the Possible: Weather Resiliency from the Aviation Side</b>	
10:00 AM – 10:05 AM	<b>Introduction: Starr McGettigan (FAA)</b>	
10:05 AM – 10:35 AM	<b>Weather Mitigation through Technology: Vision Systems for Low Visibility Conditions: Cliff Johnson (FAA)</b>	
10:35 AM – 10:45 AM	<b>Transport from Hangar to Building 300 Main Entrance to 2nd Floor Elevator D Doors</b>	
10:45 AM – 11:05 AM	<b>Group A – Innovate 28 LAX Mixed Usage</b>	<b>Group B – Break</b>
10:45 AM – 11:05 AM	<b>Demo: John Bradley (FAA)</b>	
11:05 AM – 11:25 AM	<b>Group A – Break</b>	<b>Group B – Innovate 28 LAX Mixed Usage</b>
11:05 AM – 11:25 AM		<b>Demo: John Bradley (FAA)</b>
11:25 AM – 11:30 AM	<b>Walk from NIEC Lab to Auditorium</b>	
11:30 AM – 12:00 PM	<b>Q&amp;A Panel Session: All Session 3a Presenters</b>	
12:00 PM – 1:00 PM	<b>LUNCH</b>	
<b>1:00 PM – 3:00 PM</b>	<b>Session 3b – The Art of the Possible: Moving Further Outside the Box</b>	
1:00 PM – 1:05 PM	<b>Introduction: Mike Robinson (MITRE)</b>	
1:05 PM – 1:30 PM	<b>Approaches to Modernizing Weather Observation Data Access through Sustainment Technology (with Demo): Victor Passeti (FAA) and Steve Maciejewski (FAA)</b>	
1:30 PM – 1:45 PM	<b>Smart Airport Concepts and Issues Identified through FAA Grand Challenge efforts: Jon Schleifer (FAA)</b>	
1:45 PM – 2:00 PM	<b>Blockchain Technology Concept Lessons for Incentivizing Decentralized Data Access: TJ Rancour (Ambient Network)</b>	
2:00 PM – 2:30 PM	<b>Panel Discussion – Leveraging Successful Non-Aviation Concepts to Improve System Resiliency and Optimization: All Session 3b Presenters</b>	
2:30 PM – 3:00 PM	<b>BREAK and / or Wx Obs Research (WOR) Lab Visit</b>	

#### **Session 4: FPAW Organizational Updates and Mini Planning Meeting**

**3:00 PM – 4:00 PM** Building 300 Auditorium (Hybrid)

**Session Leads: Matt Fronzak (MITRE) and Matthias Steiner (NCAR)**

FPAW Co-Chairs **Matt Fronzak (MITRE)** and **Matthias Steiner (NCAR)** will provide FPAW organizational updates, starting with announcing the results of the recent FPAW Steering Committee election. The new and returning FPAW SC members in attendance will have an opportunity to introduce themselves to the audience. They will also update the group on the status of the FPAW ADS-B Wx position paper. Next, the location, dates, and target session topics for the Spring 2025 FPAW Meeting will be discussed and decided upon in this shortened FPAW Planning Meeting. Potential locations, dates, and session topics will

be similarly reviewed and catalogued for the Fall 2025 FPAW Meeting. Proposed topics that are submitted to <https://fpaw.aero/form/submit-a-topic> will be included in these discussions.

Time	Activity/Topic: Presenter
<b>3:00 PM – 4:00 PM</b>	<b>Session 4 – FPAW Organizational Updates and Mini Planning Meeting</b>
3:00 PM – 3:30 PM	<b>FPAW Organizational Updates:</b> Matt Fronzak (MITRE) and Matthias Steiner (NCAR)
3:30 PM – 4:00 PM	<b>FPAW Mini Planning Meeting:</b> Matt Fronzak (MITRE) and Matthias Steiner (NCAR)

This will conclude the second day of the Fall 2024 FPAW Meeting, but, depending on individual dinner plans, it will not necessarily be the last we see of one another this day ☺.

### **Day 3 – Thursday, October 31, 2024**

#### **Pre-Meeting Tour #2: NAPT and ARFF Facilities**

**8:20 AM – 9:50 AM** NAPT and ARFF Tours (In-Person Only), POC **Starr McGettigan** (FAA)

The second pre-meeting tour of the world-class facilities at the WJHTC will take place on Thursday morning. In-person participants will visit the National Airport Pavement Test Facility and the Aircraft Rescue and Fire Fighting (ARFF) Research Facility. Both sites are a good distance from the meeting location and will require transportation from and to Building B. Tour sign-up sheets will be on a table in the Auditorium. Tour sizes are limited, so do not delay getting signed up.

**Pro tip #1:** You won't want to miss this tour!

#### **Sessions 5a and 5b: Artificial Intelligence (AI) and Aviation Weather**

**9:55 AM – 3:00 PM** Building 300 Auditorium (Hybrid)

**Session Leads: Matt Wandishin (NOAA GSL) and John Williams (The Weather Company)**

While artificial intelligence (AI) techniques have been used in aviation weather since at least the 1980s, recent advances in AI methodologies and computing power signal a sea change in their performance and applicability that will have dramatic ramifications in our field for years to come.

AI is also being used to relate forecasts to weather impacts on aviation, providing actionable information that can be used to streamline and optimize operations. Generative AI is showing promise as a flexible avenue for providing bespoke guidance and recommendations to support decision making to a wide variety of users. Methods for designing and evaluating AI methods to ensure that they are trustworthy will also be presented.

Session 5a will be kicked off by an introduction from co-leads **Matt Wandishin (NOAA GSL)** and **John Williams (The Weather Company)**. Next, **Randy Chase (CIRA/CSU)** (remote) will present a primer on AI methods and describe their evolution and past applications in aviation weather. **Jaideep Pathak (NVIDIA)** will explain how AI is beginning to surpass traditional physics-based numerical weather prediction in accuracy and discuss how the incredible computational efficiency of AI-NWP will improve uncertainty quantification essential for optimizing decisions. Environmental Science applications of AI will be reviewed by **Phillipe Tissot (Texas A&M University – Corpus Christi and AI2ES)** (remote). Next, **Guy Zunder (Skypath)** (remote) will brief the group on how rapid machine learning (ML) iterations and data validations are leading to a new era in turbulence prediction. The morning session will conclude with a

presentation from **Somil Shah (FAA)** on the use of ML to predict aircraft braking performance in inclement weather conditions.

Following lunch, **Mark Veillette (MIT LL)** (remote) will kick off Session 5b with a talk on AI-Enabled Aviation Weather Decision Support Systems. Next, **John Celenza (Zipline)** (remote), who briefed FPAW last spring on some of Zipline’s work in the AI arena, will once again be with us, this time to talk about establishing, growing the use of, trusting and increasing value from AI/ML-based weather DSTs. **Samer Tirhi (Port of Seattle)** (remote) will discuss how AI is being introduced at the SEATAC (KSEA) airport in both customer service and operations spaces. Following that, **Patty McDermott (MITRE)** and **Christine Taylor (MITRE)** (remote) will brief the group on an AI-Enabled TFM DST prototype that they have been working on.

**Pro Tip #2** – the AI-Enabled TFM DST project is fascinating work! Matt Fronzak has been a SME guinea pig in their work and has been amazed with the results.

The session will conclude with a panel discussion and Q&A, with the panel being comprised of the session co-leads, the afternoon presenters, and as many of the morning presenters as we can convince to hang around and rejoin us!

Time	Activity/Topic: Presenter
<b>8:20 AM – 9:50 AM</b>	<b>Pre-Meeting FAATC Tour #2</b>
8:20 AM – 8:30 AM	<b>Transport from Building 300 Main Entrance to NAPT and ARFF Facilities</b>
8:30 AM – 9:30 AM	<b>Demonstrations – National Airport Pavement Test (NAPT) and Aircraft Rescue and Fire Fighting (ARFF) Facilities:</b> Starr McGettigan (FAA)
9:30 AM – 9:50 AM	<b>Transport from NAPT and ARFF Facilities to Building 300 Main Entrance</b>
<b>9:55 AM – 12:05 PM</b>	<b>Session 5a – AI and Aviation Weather Predictions</b>
9:55 AM – 10:00 AM	<b>Introduction:</b> Matt Wandishin (NOAA GSL) and John Williams (The Weather Company)
10:00 AM – 10:25 AM	<b>A Primer on AI Weather Models:</b> Randy Chase (CIRA/CSU) (r)
10:25 AM – 10:50 AM	<b>Kilometer-Scale Convection Allowing Model Emulation using Generative Diffusion Modeling:</b> Jaideep Pathak (NVIDIA)
10:50 AM – 11:15 AM	<b>Environmental Science Applications of AI -</b> Philippe Tissot (Texas A&M University - Corpus Christi and AI2ES) (r)
11:15 AM – 11:40 AM	<b>A New Era in Turbulence Prediction – Rapid Machine Learning Iterations and Data Validations:</b> Guy Zunder (Skypath) (r)
11:40 AM – 12:05 PM	<b>Using Machine Learning to Predict Aircraft Braking Performance in Inclement Weather:</b> Somil Shah (FAA)
12:05 PM – 1:00 PM	<b>LUNCH</b>
<b>1:00 PM – 3:15 PM</b>	<b>Session 5b – AI and Decision Support</b>
1:00 PM – 1:25 PM	<b>AI-Enabled Aviation Weather Decision Support Systems:</b> Mark Veillette (MIT LL) (r)
1:25 PM – 1:50 PM	<b>Establishing, Growing Use of, Trusting, and Increasing Value from AI/ML-based Weather Decision Support Services and Solutions:</b> John Celenza (Zipline) (r)
1:50 PM – 2:15 PM	<b>Integrating AI into Airport Services and Operations Spaces:</b> Samer Tirhi (Port of Seattle) (r)
2:15 PM – 2:40 PM	<b>An AI-Enabled TFM Prototype:</b> Patty McDermott (MITRE) and Christine Taylor (MITRE) (r)
2:40 PM – 3:15 PM	<b>Panel Discussion:</b> All Session 5 Presenters

This will bring the Fall 2024 FPAW Meeting to a close.

We hope you will join us in six(ish) months for the Spring 2025 FPAW Meeting!