Agenda for the Spring 2024 FPAW Meeting

April 30, May 1-2, 2024 Dates: Location: Southwest Airlines, Wings Building Wings 1 Conference Room 2195 Research Row Dallas, TX 75235



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

	Day 1	Day 2	Day 3
Time (CDT)	Tuesday, 4-30-24	Wednesday, 5-1-24	Thursday, 5-2-24
8:30 AM to 8:45 AM			
8:45 AM to 9:00 AM	Welcome 8:45 AM - 9:00 AM	SWA NOC Tour 1	SWA NOC Tour 2
9:00 AM to 9:15 AM	-	8:40 AM – 9:25 AM	8:40 AM – 9:25 AM
9:15 AM to 9:30 AM			
9:30 AM to 9:45 AM			
9:45 AM to 10:00 AM	Session 1a	Vertical Flight and Low Altitude	Session 5a
10:00 AM to 10:15 AM	Legacy Operator Perspectives		
10:15 AM to 10:30 AM	on Gaps in Aviation Weather		Brainstorming Session:
10:30 AM to 10:45 AM	Information and Education 9:00 AM – 11:30 AM	Operator Perspectives	Synthesizing and Synchronizing
10:45 AM to 11:00 AM	9.00 AM - 11.30 AM	on Gaps in Aviation Weather	What We Heard 9:30 AM – 11:30 PM
11:00 AM to 11:15 AM	1	Information and Education 9:30 AM - 12:00 PM	
11:15 AM to 11:30 AM			
11:30 AM to 11:45 AM			
11:45 AM to 12:00 PM	Lunch		Lunch
12:00 PM to 12:15 PM	11:30 AM - 12:30 PM		11:30 AM - 12:30 PM
12:15 PM to 12:30 PM		Lunch	
12:30 PM to 12:45 PM	O i	12:00 PM - 1:00 PM	
12:45 PM to 1:00 PM	Session 1b		Occurring Th
1:00 PM to 1:15 PM	Legacy Operator Perspectives	Session 3b	Session 5b
1:15 PM to 1:30 PM	on Gaps in Aviation Weather	Vertical Flight and Low Altitude	Brainstorming Session: Synthesizing and Synchronizing What We Heard 12:30 PM - 2:30 PM
1:30 PM to 1:45 PM	Information and Education 12:30 PM - 2:00 PM	Operator Perspectives	
1:45 PM to 2:00 PM	12.30111-2.00111	on Gaps in Aviation Weather	
2:00 PM to 2:15 PM	Break	Information and Education	12.301 11 - 2.301 11
2:15 PM to 2:30 PM	Session 2	1:00 PM - 2:30 PM	
2:30 PM to 2:45 PM	FAA Weather Community of	Break	Break
2:45 PM to 3:00 PM	Interest Update	Session 4	Session 6
3:00 PM to 3:15 PM	2:15 PM - 3:15 PM	NOAA Radar Next Briefing	Review of a Prior FPAW Topic
3:15 PM to 3:30 PM	Break	and Conversation	<u>and</u> an FPAW Org Update
3:30 PM to 3:45 PM	EDAM/Stooring Committee	2:45 PM – 4:00 PM	2:45 PM - 3:45 PM
3:45 PM to 4:00 PM	FPAW Steering Committee Meeting		
4:00 PM to 4:15 PM	(Closed Session)	Break	
4:15 PM to 4:30 PM	Wings 1 Conference Room 3:30 PM - 5:00 PM	FPAW Mini-Planning Meeting	Notes:
4:30 PM to 4:45 PM		4:15 PM – 5:00 PM	 Exact session start/stop
4:45 PM to 5:00 PM		4.15 FM - 5.00 FM	 times are subject to change Gray blocks indicate hybrid meeting (both in-person and remote participation) (r) = remote participant
After 5:00 PM	FPAW Steering Committee Dinner 6:30 PM - ?? Heim BBQ 3130 West Mockingbird Ln. Dallas, TX 75235 469-397-4346	FPAW Night at the Ballpark 5:00 PM - ?? Location: Globe Life Field, Arlington, TX	

<u>Sessions 1a and 1b</u>: Legacy Operator Perspectives on Gaps in Aviation Weather Information and Education

9:00 AM – 11:30 AM and 12:30 PM – 2:00 PM, hybrid, Wings 1 Conference Room Session Leads: **Don Eick** (NTSB) and **Nathan Polderman** (United Airlines)

Tony Jannus piloted the first commercial flight in the U.S., a 23-minute trip between Tampa and St. Petersburg, FL on January 1, 1914. This journey took several hours by steamboat, up to five hours by train, or many hours by horse and buggy over primitive, unpaved roads. This means it's been 110 years since legacy aviation in the U.S. took flight, and we daresay weather has impacted it **every single step of the way.**

In this session, we will hear from front-line legacy aviation operators about the gaps in aviation weather information and education, those that keep them up at night. Don Eick will start us off with a sobering review of recent weather-related incidents and accidents. Next, we'll hear from Barbara Becker and Darin Tietjen, a Meteorologist and ATC Coordinator respectively, both from host Southwest Airlines. Following them, Doug Lotter, from the Airline Dispatchers Federation, and Craig Boxrucker, from ALPA, will take on the topic from the perspectives of the Aircraft Dispatcher and Pilot. The ATC side of the coin will be represented by Tom Amis, Bryan Beck, and James Ott of Turbulent Aerospace.

After lunch, we'll hear from Matt Johnson of Metro Aviation, who will focus on Part 91/135 weather education issues, and Sarah Staudt (r), who will present the AOPA views on the topic. Finally, the session will close with an open Q&A panel discussion, where we hope to identify common themes, challenges, and opportunities, and maybe even a new position for FPAW to promote.

Time	Topic / Presenter	
9:00 AM – 9:10 AM	Opening Remarks: Nathan Polderman, Don Eick	
9:10 AM – 9:40 AM	Survey of Weather-Related Accidents & Incidents: Don Eick	
9:40 AM – 10:00 AM	Airline Meteorology perspective: Barbara Becker (Southwest Airlines)	
10:00 AM – 10:20 AM	Airline-ATC Traffic Management perspective: Darin Tietjan (Southwest Airlines)	
10:20 AM – 10:30 AM	BREAK	
10:30 AM – 10:50 AM	Airline Dispatcher perspective: Doug Lotter (ADF)	
10:50 AM – 11:10 AM	Airline Pilot perspective: Craig Boxrucker (ALPA)	
11:10 AM – 11:30 AM	FAA ATC and Center Weather Service Unit perspective: Tom Amis, Bryan Beck, James	
	Ott (Turbulent Aerospace)	
11:30 AM – 12:30 PM	LUNCH	
12:30 AM – 1:00 PM	Part 91/135 Weather Education perspectives: Matt Johnson (Metro Aviation)	
1:00 PM – 1:30 PM	GA Pilot perspective: Sarah Staudt (r) (AOPA)	
1:30 PM – 2:00 PM	Open Discussion / Q&A: Common themes, challenges and opportunities	
2:00 PM - 2:15 PM	BREAK	

<u>Session 2</u>: FAA Weather Community of Interest (Wx COI) Update 2:15 PM – 3:15 PM, hybrid, Wings 1 Conference Room Session Leads: Randy Bass (FAA) 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 does have a mandate to appropriately engage with relevant external organizations. FPAW is considered one of those organizations.

Randy Bass and Alfred Moosakhanian will update the FPAW community on the proceedings of the FAA Wx COI over the last six months, including the formation of a Strategic Planning Team and its role in producing an FAA Weather Strategy. In addition, they will discuss considerations related to setting up a formal relationship between FAA Wx COI and FPAW, one intended to establish routine, effective two-way communications between the two groups.

2:15 PM – 3:00 PM	FAA Wx COI Update: Randy Bass (FAA) and Alfred Moosakhanian (FAA)	
3:00 PM – 3:15 PM	Q&A: 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

3:30 PM – 5:00 PM, hybrid, Wings 1 Conference Room

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

6:30 PM - ??, in-person only, Heim BBQ, 3130 West Mockingbird Ln., Dallas, TX 75235 469-397-4346

Day 2 – Wednesday, May 1, 2024

Tour of the Southwest Airlines Network Operations Center (NOC)

8:40 AM – 9:25 AM, in-person only, POC David Dillahunt (Southwest)

The first tour of the Southwest Airlines NOC will take place on Wednesday morning, May 1, 2024. The tour will meet up in the lobby of the Wings building at 8:40 AM sharp. Sign up will be required for the tours, as there will be a maximum of 25 people each day. Sign up sheets will be in the main meeting location, the Wings 1 Conference Room.

<u>Sessions 3a and 3b</u>: Vertical Flight and Low Altitude Operator Perspectives on Aviation Weather Information and Education Gaps

9:30 AM – 12:00 PM and 1:00 PM – 2:30 PM, hybrid, Wings 1 Conference Room Session Leads: **Rex Alexander** (Vertical Flight Society) and **Bryan Beck** (Turbulent Aerospace) One wonders what Tony Jannus would have thought about today's burgeoning UAS / AAM operations, the majority of which take place in the most under-sampled, under-forecast portion of the atmosphere, the planetary boundary layer (PBL).

Session 3 of the Spring 2024 FPAW Meeting will reveal the things that keep vertical flight and low altitude operators up at night. It will open with a panel discussion featuring Chris Zarzar (r) from TruWeather, Chris Johnson from Archer Aviation, John Celenza (r) from Zipline and possibly others from the low altitude operator community. Next, the current and future states of weather observations and forecasts in the PBL will be explored by Tom Amis and James Ott (Turbulent Aerospace), Heather Reeves (National Severe Storms Laboratory), Brenda Phillips (r) (UMass Amherst and CASA), Eric Adams (AAMTEX and CASA) and potentially other relevant experts.

After lunch, James Pinto (NCAR) (r) and Jamey Jacob (Oklahoma State U. and NASA WINDMAP) will relate how properly equipped UAS/AAM aircraft could improve weather observations and forecasting. To conclude the session, Nancy Mendonca (r) (NASA) and Randy Bass will brief the group on ongoing and new federal research and process development centered on low altitude weather requirements.

9:30 AM – 9:40 AM	Opening Remarks: Rex Alexander, Bryan Beck	
9:40 AM – 10:45 AM	UAS/AAM Industry Challenges with Current Aviation Weather for Low Altitude	
	Operators: TBD representatives from TruWeather, Joby, Zipline and Wing	
10:45 AM – 10:55 AM	Break	
10:55 AM – 12:00 PM	Current and Future States of Low Altitude Aviation Weather Observation and	
	Forecast Products: Tom Amis and James Ott (retired NWS CWSU, now Turbulent	
	Aerospace), Heather Reeves (NSSL), Brenda Phillips (UMass Amherst)	
12:00 PM – 1:00 PM	Lunch	
1:00 PM – 1:40 PM	UAS/AAM Self Help – How They Could Improve Weather Observations and	
	Forecasting: James Pinto (NCAR), Jamey Jacob (OSU and NASA WINDMAP)	
1:40 PM – 1:50 PM	Break	
1:50 PM – 2:30 PM	UAS/AAM Ongoing Federal Research and New Low-Altitude Weather Requirement	
	Process Development: Nancy Mendonca (NASA) and Randy Bass (FAA)	
2:30 PM - 2:45 PM	Break	

Session 4: NOAA Radar Next Briefing and Conversation

2:45 PM – 4:00 PM, hybrid, Wings 1 Conference Room Session Co-Leads **Jessica Schultz (**NOAA) and **Matt Fronzak** (MITRE)

NEXRAD (WSR-88D) weather radars, the key component of the U.S. severe weather observation network, are in the final portion of their service life, having been in place for over 30 years. NOAA has begun to explore their replacement via an effort called Radar Next.

Jessica Schultz, Deputy Director – Radar Operations Center (ROC) in Norman, OK, will deliver a briefing on Radar Next. This briefing will provide highlights of this nascent program and seek input from the aviation weather user community on the needed characteristics and capabilities of the NEXRAD replacement.

2:45 PM – 4:00 PM	NOAA Radar Next Briefing and Conversation	
4:00 PM – 4:15 PM	Break	

FPAW Planning Mini-Meeting

4:15 PM – 5:00 PM, hybrid, Wings 1 Conference Room Session Leads **Matt Fronzak (**MITRE) and **Matthias Steiner** (NCAR)

The location, dates, and target session topics for the Fall 2024 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 Spring 2025 FPAW Meeting. Proposed topics that are submitted to https://fpaw.aero/form/submit-a-topic will be included in these discussions.

FPAW Night at the Ballpark

5:00 PM - ??, in-person only, Globe Life Field, Arlington, TX

We held our first excellent FPAW dinner at the Granite City Brewery in Kansas City, MO as part of the Spring 2023 FPAW Meeting and followed it up with an outstanding FPAW dinner at The Italian Kitchen in McLean, VA during the Fall 2023 FPAW Meeting. What, you might ask, could top them?

How about an FPAW Night at the Ballpark? We hope you've signed up and have a ticket for the May 1st Texas Rangers-Washington Nationals game, because that's where this meeting's FPAW Dinner is going to take place.

By the way – did we mention that there may be 3-4 tickets still available for this event?

Oh, and, by the way again - did we mention that it's \$1.00 hotdog night at Globe Life Field?

Stay tuned for more information about how to score one of those extra tickets, possibly even at a steep discount!

Day 3 – Thursday, May 2, 2024

Tour of the Southwest Airlines Network Operations Center (NOC)

8:40 AM – 9:25 AM, in-person only, POC David Dillahunt (Southwest)

The second tour of the Southwest Airlines NOC will take place on Thursday morning, May 2, 2024, starting at 8:40 AM. The tour will meet up in the lobby of the Wings building. Sign up will be required for the tours, as there will be a maximum of 20 people each day. Sign-up sheets will be in the main meeting location, the Wings 1 Conference Room.

<u>Sessions 5a and 5b:</u> Brainstorming Session: Synthesizing and Synchronizing What We Heard 9:30 AM – 11:30 AM and 12:30 PM – 2:30 PM, hybrid, Wings 1 Conference Room Session Lead: Joel Siegel (FAA), with assists from Session 1 Co-Leads Don Eick (NTSB) and Nathan Polderman (United Airlines), and Session 3 Co-Leads Rex Alexander (Vertical Flight Society) and Bryan Beck (Turbulent Aerospace)

By this time, we will have had two full sessions exploring the gaps in aviation weather information and education from the perspectives of legacy and vertical flight/AAM/UAS operators. It is almost certain that

the conversations will have been stimulating and the ideas expressed worth pursuing. So, how do we pursue them?

FPAW Steering Committee member Joel Siegel, our Session 5 Lead, with help from the four co-leads from Sessions 1 and 3, leveraging the capabilities of the MS Teams Whiteboard app, will facilitate a conversation aimed at distilling what we heard on Days 1 and 2 into a prioritized list of actionable, executable positions, hopefully several of which FPAW can champion. You won't want to miss this amazing, interactive, audience-dependent session!

9:30 AM – 9:40 AM	Welcome and Introductions: Joel Siegel, Don Eick, Nathan Polderman, Rex Alexander,
	Bryan Beck
9:40 AM – 9:50 AM	Brief Recap of Sessions 1 and 3: Joel Siegel
9:50 AM – 10:00 AM	Overview of Session 5 Objectives: Joel Siegel
10:00 AM – 10:30 AM	Establishing Common Ground: All
10:30 AM – 10:45 AM	Break
10:45 AM – 11:15 AM	Analyzing Divergences and Unique Challenges: All
11:15 AM – 11:45 AM	Guided Brainstorming Part 1: All
11:45 AM – 12:45 PM	Lunch
12:45 PM – 1:30 PM	Guided Brainstorming Part 2: All
1:30 PM – 2:00 PM	Prioritizing and Assigning Action Items: All
2:00 PM - 2:30 PM	Closing Remarks: Joel Siegel
2:30 PM - 2:45 PM	Break

<u>Session 6</u>: A Combo Deal – Review of a Prior FPAW Topic (ADS-B Weather) <u>and</u> An FPAW Organizational Update (Position Papers)

2:45 PM – 3:45 PM, hybrid, Wings 1 Conference Room

Session Co-Leads: Steve Darr (r) (Dynamic Aerospace), Matt Fronzak (MITRE)

We've had to pivot from our intended Space Weather topic due to speaker illness. Fortunately for us, session co-leads Steve Darr (r) and Matt Fronzak are well-versed and intimately familiar with the topic at hand. And who doesn't like a combo deal!

Steve will open with a short update on ADS-B Wx. Next, Matt will describe the process used to develop, revise, and approve FPAW's first position paper, which is now available for viewing on the FPAW web site here. Elizabeth Wilson (r) (Synoptic Data) will join us and, along with Steve and Matt, outline the next steps that the FPAW SC talked about and approved earlier this week. Finally, as part of those next steps, we'll be reaching out to audience members in the meeting to identify contacts at organizations willing to join FPAW in supporting this important position.

2:45 PM – 2:50 PM	Opening Remarks: Steve Darr (r) and Matt Fronzak	
2:50 PM – 3:05 PM	An ADS-B Wx Update: Steve Darr (r)	
3:05 PM – 3:20 PM	The FPAW Position Paper Process: Matt Fronzak	
3:20 PM – 3:40 PM	FPAW ADS-B Wx Position Paper - Next Steps: Steve Darr (r), Elizabeth Wilson (r)	
3:40 PM – 3:45 PM	Closing Remarks: Matt Fronzak, Matthias Steiner	

This will bring the Fall 2023 FPAW Meeting to a close.