

Spring 2021 FPAW Planning Meeting Recap

(Virtual, Wednesday, May 12, 2021, 11:00 AM – 3:00 PM EDT)

Note #1: This summary of the Spring 2021 FPAW Planning Meeting, and all available meeting presentations, recordings and material, can be found on the [FPAW 2021 Spring Planning Meeting](#) page on the FPAW website.



Note #2: This recap was finished and published after decision-making concerning the Fall 2021 FPAW Meeting took place. **Consequently, the open questions about the format and content of the Fall 2021 FPAW Meeting contained in it have been answered. The Fall 2021 FPAW Meeting will be held virtually from October 4-7, 2021 and will consist of a Federal Aviation Weather Review / TEM.** See the FPAW website for additional details.

FPAW Co-Chair Matt Fronzak opened the meeting promptly at 11:00 AM EDT.

Matt reviewed the uncertainty associated with the Fall 2021 FPAW Meeting, primarily in terms of meeting format (In-Person or Virtual) and content (Federal Aviation Weather Review / TEM or TBD). He reminded the attendees that FPAW planned on conducting a Federal Aviation Weather Review / Technical Exchange Meeting (TEM) at the Spring 2020 FPAW Meeting, but that COVID-19 scuttled that idea, as it also did for the next two FPAW meetings. Matt also mentioned that, given that this meeting will have been pushed off 18 months, FPAW leadership desires to hold the Federal Aviation Weather Review / TEM at the Fall 2021 FPAW Meeting, and in-person, if possible. With that as a backdrop, he defined the following goals for this planning meeting:

1. Come up with a complete list of topics for a Fall 2021 FPAW Meeting
2. Attempt to ensure that these topics could be moved to the Spring 2022 FPAW Meeting, depending on how circumstances unfolded.

The group then was briefed on and discussed the following newly submitted topics:

1. Low Altitude Weather (Claudia McKnight/MITRE and Marilyn Pearson/CAE via two separate submissions)
2. Spectrum Interference (Tom Fahy)
3. Benefits of Aircraft Based Observations (Bryce Ford)
4. Weather Concerns for Space Launch and Recovery/Landing (Matthias Steiner)
5. Mixed-Phase Precipitation (Matthias Steiner)
6. NextGen Weather / ATM-Weather Integration Status Update (Le Jiang)

Finally, the group reviewed the existing list of general FPAW topics, displayed in Figure 1.

List of General Topics	
Emerging modes of transportation <ul style="list-style-type: none"> Unmanned aerial systems, urban air mobility Supersonic flight, commercial space launch (space weather) 	Weather in cockpit <ul style="list-style-type: none"> CDM in cockpit Bring in pilots to solicit their concerns and what they would benefit from
Weather forecasts <ul style="list-style-type: none"> Trajectory-based operation, flight planning, optimization, etc. Uncertainty characterization of weather, traffic, etc. 	Climate change impacts on infrastructure <ul style="list-style-type: none"> Increased temperatures, sea level rise, etc. Changing storms, more turbulence, lightning, etc.
Weather information integration <ul style="list-style-type: none"> Decision-making under uncertainty Weather, human factors, automation Data standardization (see notes) 	General updates <ul style="list-style-type: none"> Research & development from labs, industry, etc. Policy, procedures, Weather Community of Interest/Practice, gathering of requirements Funding challenges
Weather observations <ul style="list-style-type: none"> PIREPs, ADS-B, webcam (VWOS) Augmentation of surface observations Mandate to equip aircraft & share weather observations Visualization, and the use of data and information 	

Figure 1 - List of General FPAW Topics

At the conclusion of the discussion, the **tentative** agenda shown in Figure 2 was constructed. The thinking at that time was that this agenda would either be used for the Fall 2021 FPAW Meeting, **assuming that** the Federal Aviation Weather Review / TEM was once again pushed off into the future, or for the Spring 2022 FPAW Meeting, **if** the Federal Aviation Weather Review /TEM takes place in the Fall of 2021.

2022 FPAW Spring Meeting (In-Person + Virtual) OR 2021 FPAW Fall Meeting (Virtual-only)	
Topic #1 <ul style="list-style-type: none"> Primary: Low Altitude Weather (Including ABO Wx Benefits?) <ul style="list-style-type: none"> Ralph Stoffler, Don Berchoff, Bryce Ford, Janet Ford/Jim Hasemann, Marilyn Pearson Secondary: Ongoing FPAW Topics Review <ul style="list-style-type: none"> Tom Ryan (AvMet Applications) Topics TBD 	<ul style="list-style-type: none"> Low-altitude weather [submitted by Marilyn Pearson & Claudia McKnight] Spectrum interference concerns and mitigation strategy [submitted by Tom Fahy] ABO weather benefits [submitted by Bryce Ford] Weather concerns for space launch and landing [submitted by Matthias Steiner] Mixed-phase precipitation [submitted by Matthias Steiner] NextGen Status Update [submitted by Le Jiang] Enhancing Aviation Efficiency to reduce Carbon Emissions [verbal Gary Pokodner] (anti DBPP session) Space Weather Needs [verbal Ralph Stoffler, Justin Hilliard]
Topic #2 <ul style="list-style-type: none"> Primary: NextGen Weather Status Update <ul style="list-style-type: none"> Le Jiang, Bill Bauman, Don Berchoff Secondary: The Role of Weather in Enhancing Aviation Efficiency and Reducing Carbon Emissions <ul style="list-style-type: none"> Gary Pokodner, Daniel Fuka, Nancy Mendonca 	
Topic #3 <ul style="list-style-type: none"> Primary (Spring 2022 Only): Weather Concerns for Space Launch and Landing <ul style="list-style-type: none"> New Mexico RV Man, Ralph Stoffler Primary (Fall 2021 Only): Spectrum Interference and Mitigation <ul style="list-style-type: none"> TBD Secondary: FPAW Organizational Updates <ul style="list-style-type: none"> Matthias Steiner (NCAR) and Matt Fronzak (MITRE) 	

Figure 2 - Proposed Fall 2021 or Spring 2022 FPAW Agenda