



Friends and Partners in Aviation Weather

Draft Agenda for the Spring 2021 FPAW Meeting

Plenary Meeting on 27-29 April 2021

Planning Meeting on 12 May 2021

Location: Virtual Meeting (call information forthcoming)

Times: East coast time

Note: Session topics, content and times are not anticipated to change materially between now and the actual meeting. However, the exact dates that individual sessions will take place may evolve prior to the actual meetings, and these will be reflected in updates to the draft agenda.

Tuesday, 27 April 2021

11:00 – 11:10 Welcome

Matt Fronzak (MITRE) and Matthias Steiner (NCAR)

11:10 – 14:30 Digital Transformation of Flight Service: Human Assisted Briefing to Pilot Self-Briefings

Leads and Presenters: Janet Ford and Jim Hasemann (Capital Group) and others

This session will provide an overview of the FAA's digital transformation of pilot self-service for preflight planning. The session will illustrate how the FAA is working to safely move pilots toward self-service and transform the preflight self-briefing process to a two-way consultative approach that integrates smart technology that is aware of when the pilot was briefed, how the briefing was obtained, and the information provided.

The presentations will:

- 1) Highlight the comprehensive strategy the FAA undertook in 2018 to work with industry stakeholders to address the risks, obstacles, and misconceptions regarding self-briefing
- 2) Discuss the conception and development of new FAA products for pilots designed to address risks, confusion, and gaps
- 3) Illustrate the research that is driving both current and future strategy and direction
- 4) Discuss new Flight Service technology, features and service delivery models.

The session will conclude with a look forward to the changing landscape and facilitate an interactive dialogue.

15-minute breaks included

14:30 – 15:30 Spectrum Interference and Weather Observations

Leads and Presenters: Tom Fahy (Capitol Meteorologics) and others

This session will focus on existing and future issues associated with weather observations and RF spectrum interference

Wednesday, 28 April 2021

11:00 – 11:10 Welcome

Matt Fronzak (MITRE) and Matthias Steiner (NCAR)

11:10 – 14:30 Emerging Standards and Certification Challenges for Novel Weather Observations

Leads and Presenters: Stephen Darr (Dynamic Aerospace) and others

Ubiquitous sensing, data processing, computing, and communications technologies are converging to provide novel methods and sources of automated weather observation to the aviation weather community. As new data become available, the aviation weather community needs to consider the provenance and potential of these data and provide guidance on their production and limitations. This session will explore the state-of-the-art and -practice associated with a number of nascent aviation weather sources and provide an opportunity for the FPAW community to discuss their potential and their potential pitfalls.

15-minute breaks included

14:30 – 15:30 Updates from Ongoing Topics

Leads and Presenters: Tom Ryan (AvMet Applications)

This session will focus on as many as three short updates of the following topics that were covered in recent FPAW meetings:

- FAA Weather Community of Interest (Wx COI) (Bill Bauman, FAA)
- TBD (TBD)
- TBD (TBD)

Thursday, 29 April 2021

11:00 – 11:10 Welcome

Matt Fronzak (MITRE) and Matthias Steiner (NCAR)

11:10 – 14:30 Operational Airspace Capacity Estimation/Prediction under Convective Weather Impact

Leads and Presenters: Le Jiang (IMSG), Ernie Stellings (NBAA) and others

This session will focus on the reduction of air traffic throughput rates under convective weather impacts. Studies found that air traffic managers with different experience levels vary significantly in their estimates of the level of throughput reduction. This session discusses the challenge faced in ATFM operations and the opportunity to

improve the utilization of available airspace under convective weather impact. Potential integration of capacity estimation algorithms into a decision support tool (DST) would be valuable in terms of providing objective and consistent guidance to issuing of an airspace flow program (AFP) in ATFM operations, but there are additional complexities in multiple aspects. Towards this end, methodologies of airspace capacity estimation will be reviewed and discussed for their maturity and usability (constrained by the accuracy of the underlying convective weather forecast), along with human factors in the collaborative decision making (CDM) from perspectives of ATM, airlines, and other stakeholders.

15-minute breaks included

14:30 – 15:30 FPAW Updates

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

The FPAW Co-Chairs will provide an update on the status of FPAW communications and discuss other organizational and administrative matters.

Wednesday, 12 May 2021

11:00 – 15:00 Planning of Upcoming FPAW Meetings

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

We will identify the location, topics and session leads for the Fall 2021 FPAW Meeting. We will also begin to look at potential location and topics for the Spring 2022 FPAW Meeting.

Please don't forget to submit your topics of interest on the FPAW website (<https://fpaw.aero/form/submit-a-topic>).

15-minute breaks included