FPAW

Friends and Partners in Aviation Weather

Plenary Meeting Dates: 13-15 October 2020

Planning Meeting Date: 28 October 2020

Times: 1100-1500 East coast time each day

Location: Virtual Meeting (video conferencing information for each day listed below)

Registration: Please register on FPAW website for Fall Meeting

Agendas

Tuesday, 13 October 2020

Join Microsoft Teams Meeting
+1 540-492-5664 United States, Roanoke (Toll)
Conference ID: 655 695 747#
Local numbers | Reset PIN | Learn more about Teams | Meeting options

11:00 – 11:10 Welcome

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

11:10 – 14:30 Winter Weather

Leads: Joshua Paurus (MSP Airport), Gordy Rother and John Steventon (FAA), Matt Tucker (AvMet Applications)

This session will focus on winter weather impacts on the National Airspace and how different stakeholders (airlines, airports, air traffic control) prepare for and manage operations during winter weather impacts. The discussion will include updates on regulations and procedures (e.g., TALPA, NOTAM).

Josh Paurus (MSP Airport) and Seth Linden (NCAR) will give an overview and discuss the basic components of the Runway Friction and Closure Prediction System (RFCPS) developed by NCAR for the MSP airport. It will cover all the major components of the system and how they fit together to produce a friction forecast and runway closure guidance. Items that will be covered include the backend weather and road/tarmac forecast engine, the different machine-learning models developed to predict runway friction, applying the friction models in real-time and the web-display tool that shows the final output products created for MSP.

Matt Tucker (AvMet) will talk about where TALPA/RCAM has been and is today with the FAA's NOTAM Manager system. There are issues that seem to be more prevalent at small airports regarding the accuracy and timeliness of dissemination of information.

Matt will also discuss differences in the use of TALPA/RCAM information in the winter vs. the rest of the year.

Finally, the session will include a briefing by the FAA on planned changes to Pilot Report (PIREP) remarks that will enable standardized formatting of Braking Action PIREPs, and a status update from the NWS Aviation Weather Center on related progress.

15-minute breaks included

14:30 – 15:00 Industry Weather Prize

Leads: Tim Miner (& others)

Join us in congratulating the recipient of the 2020 Weather Prize.

Wednesday, 14 October 2020

Join Microsoft Teams Meeting

+1 540-492-5664 United States, Roanoke (Toll)
Conference ID: 655 695 747#
Local numbers | Reset PIN | Learn more about Teams | Meeting options

11:00 – 11:10 Welcome

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

11:10 – 14:30 Emerging Weather Tools in Cockpit

Leads: Rocky Stone (United Airlines), Matt Tucker (AvMet Applications), Mark Phaneuf (ALPA), John Kosak (NBAA) and TBD (FAA ATCSCC)

This session will focus on new weather-related capabilities in the cockpit and associated opportunities for collaborative decision making. The discussion may include evolving needs for weather in the cockpit and predictability of weather, and other related topics:

- New broadband connectivity enables delivery of updated graphical weather and traffic flow management products to the cockpit.
    - Not every cockpit has connectivity, and even those that do may have unreliable connections (~75% availability).
- Collaborative Decision Making (CDM) historically has been a process involving ground-based participants, ARTCC Traffic Management Units (TMUs), ATCSCC and airline ATC desks.
    - Do newly available graphical tools in cockpit provide the opportunity to improve individual flight efficiencies without harm to National Airspace System (NAS) flow efficiencies?
- Cockpit involvement, along with Airline Operations Center (AOC) collaboration, may help enable more nimble entry and exit strategies from Traffic Management Initiatives (TMIs), improving systemic efficiency.

- Requirements for weather and traffic flow management products to assist in cockpit involvement in CDM do not exist.
    - Short term convective weather forecasts are available, but no requirements exist on what the appropriate products are and how they can be effectively used.
    - Traffic flow management products that enable efficiencies while protecting ATC controller workload around dynamic convective events do not exist.
- How can probabilistic forecasts be used in the cockpit?
- What benefits can be offered to those who properly equip and train to participate in cockpit involvement in CDM?

15-minute breaks included

14:30 – 15:30 Updates from Ongoing Topics

Leads: Tom Ryan (AvMet Applications)

This session will focus on brief updates of the following topics

- FAA Weather Community of Interest (COI) – Bill Bauman (FAA)
- Automatic Dependent Surveillance-Broadcast (ADS-B) – Steve Darr (Dynamic Aerospace)
- Visual Weather Observation System (VWOS) – Walter Combs (FAA)

Thursday, 15 October 2020

Join Microsoft Teams Meeting
+1 540-492-5664 United States, Roanoke (Toll)
Conference ID: 655 695 747#
Local numbers | Reset PIN | Learn more about Teams | Meeting options

11:00 – 11:10 Welcome

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

11:10 – 14:30 COVID-19 Pandemic: Aviation Weather Implications and Opportunities

Leads: Mike Robinson and Matt Fronzak (MITRE), and Matthias Steiner (NCAR)

The coronavirus pandemic has significantly impacted most sectors in our society. This includes the aviation sector, where domestic and international air traffic all but ground to a halt during March and April. Demand has been slowly rebounding. Given both the ongoing coronavirus concerns and risks and significant economic losses already incurred, however, the aviation recovery is expected to be slow, uneven, and uncertain. Concerns over public health and economic impacts remain in the forefront.

The impacts and ramifications of the U.S. and global aviation operations during a serious pandemic are diverse and multi-faceted. In many ways, the pandemic and its recovery

in the air traffic sector have implications and opportunities for aviation weather interests. This session will serve as a 'table-setter' for the overall COVID-19 impact on aviation, where several outcomes and implications of the pandemic relative to aviation and environmental / atmospheric guidance and strategy will be summarized and discussed. Focus areas will include:

- Review of COVID-19 pandemic effects and impacts on the aviation ecosystem
- COVID-19 impact on weather forecasts critical to aviation
- Pandemic as propellant for 'climate-forward' aviation operation initiatives
- Flight operator / industry perspective on aviation-weather evolution due to COVID
- Advancing weather prediction during times of a pandemic
- Accelerating UAS (and its weather support) as a priority in a post-COVID world
- Impact on aviation weather research community and its interests

This session will strive to be an interactive and inclusive discussion, anchored by motivating information. Not all of the above topics may be covered, but the session will be prepared to explore each.

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, 28 October 2020

Join Microsoft Teams Meeting

+1 540-492-5664 United States, Roanoke (Toll)
Conference ID: 551 258 351#
Local numbers | Reset PIN | Learn more about Teams | Meeting options

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

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

We will identify topics and session leads for the Spring 2021 FPAW Meeting. We will also look at potential topics for the Fall 2021 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