

Fall 2021 FPAW / Aviation Weather TEM Chat Log

Day 4

[10/7 11:41 AM] gordon brooks (Guest)
Let's Go Mets, Kevin and Don...

[10/7 11:41 AM] Matt Fronzak
<https://app.mural.co/t/mitresandbox0478/m/mitresandbox0478/1633608795431/79720ef795306b116783654d1f4bac8009a1fe99?sender=u11e11e2a5a03834da7ba8376>
Federal Aviation Weather TEM Mural – GAPS

[10/7 11:45 AM] Dr. Brian Pettegrew
For those that want to perhaps be anonymous, you can text me at 781-460-7948

[10/7 11:50 AM] Flowe, Tammy (FAA) (Guest)
How do we encourage private entities to share safety related data?

[10/7 11:50 AM] Steve Darr (Guest)
I can provide some background related to ADS-B Wx development and coordination on data

[10/7 11:51 AM] Flowe, Tammy (FAA) (Guest)
LOL! I would say mandating.

[10/7 11:52 AM] McClure, Andrew (FAA) (Guest)
I second Tammy's question! "Proprietary" PIREPs should be illegal.

[10/7 11:53 AM] McClure, Andrew (FAA) (Guest)
...they are, at the very least, unethical.

[10/7 11:54 AM] Flowe, Tammy (FAA) (Guest)
But what about data other than ADS-B?

[10/7 11:56 AM] Eckstein, Matthew D (Guest)
Agreed Bill. Limited value of comingled/shared data when the reports aren't harmonized

[10/7 11:58 AM] Rother, Gordon (FAA) (Guest)
who in the FAA is part of Cobs

[10/7 11:59 AM] Flowe, Tammy (FAA) (Guest)
Gordy...I'm on the Cobs

[10/7 12:00 PM] Bass, Randy (FAA) (Guest)
I'm on the Cobs as well

[10/7 12:02 PM] Marilyn Pearson (Guest)
Kevin and everyone, the pilot community isn't training adequately in PIREPS, from the basic Pvt Pilot on to ATPs...education and testing of pilots in this area is needed

[10/7 12:04 PM] Rother, Gordon (FAA) (Guest)

Marilyn agreed change the system and retrain the pilots and airmen

[10/7 12:07 PM] Steve Darr (Guest)

George, Tom Walter Combs and I have touched on incorporating an ADS-B receiver in the VWOS suite so that ADS-B Wx can be received in remote areas. We need to have a follow-up conversation. Let me know if you're interested.

[10/7 12:08 PM] George, Tom

You bet. Would be happy to discuss.

[10/7 12:09 PM] Steve Darr (Guest)

George, Tom You can reach me at sdarr@dynamic aerospace.com or (339) 364-0955

[10/7 12:09 PM] gordon brooks (Guest)

We always tried to stress to pilots how important their manual PIREPs were for our icing and turbulence algorithm research...which would ultimately benefit them... NULL reports too...

[10/7 12:10 PM] gordon brooks (Guest)

Yes -- a whole lot of begging...

[10/7 12:11 PM] Bass, Randy (FAA) (Guest)

And remember, the last thing a pilot needs to be doing while in hazardous weather is submitting a PIREP. They should be flying the airplane. An automated PIREP would help alleviate that issue

[10/7 12:11 PM] McClure, Andrew (FAA) (Guest)

Sorry, Bill... One more PIREP comment: during my time as a mission debriefer on a carrier, we met with every crew after every flight and asked for specific feedback regarding their brief, operational AND weather.

[10/7 12:12 PM] George, Tom

Agree we need to define a new term for in situ observations. PIREPs are a subset of that, vs more automated data from aircraft so both can proceed without colliding with each other.

[10/7 12:14 PM] Matthias Steiner (Guest)

You may not need ultra-fine resolution everywhere. Maybe limited-domain nests in critical locations would suffice.

[10/7 12:15 PM] gordon brooks (Guest)

Every once in a while we again learn of potential automated data was and is still falling on the floor it seems. Work needs to be done for dissemination strategies.

[10/7 12:15 PM] Dr. Brian Pettegrew

I was just going to state that is a gap....data dissemination

[10/7 12:17 PM] Marilyn Pearson (Guest)

I think any training and education helps...now we actually pay attention to UAS, just a few years behind the need

[10/7 12:18 PM] Steve Darr (Guest)

NOAA designated AWC as lead entity in ConOps development for ADS-B Wx data ground data distribution. We're just getting started and are working jointly with FAA (NextGen Wx). We'll be looking to coordinate the ConOps with other users in the future

[10/7 12:18 PM] gordon brooks (Guest)

Randy, absolutely the automated aspect of PIREP/in-situ observations helps you with obtaining explicit NULL reports, generally speaking.

[10/7 12:19 PM] Steve Darr (Guest)

ASTERIX Maintenance Group is also beginning data distribution standard for ADS-B Wx data internationally over surveillance data interchange networks

[10/7 12:20 PM] Lt Col Williams (AF/A3W) (Guest)

I'll troubleshoot

[10/7 12:25 PM] gordon brooks (Guest)

Regarding knowing end user needs (I see it on a pink stickie note) Another of my 3 concurrent meetings (for one particular 1/2 hour) yesterday was the NWA-AMS RON. There was a lot of talk about this including a new tool to help with this - BVOT...which is being worked on and used/tested at some NWSFOs.

[10/7 12:27 PM] Lt Col Williams (AF/A3W) (Guest)

Dave, a concern we have as well as we look to return to major combat ops (as opposed to the last 20+ years of conflict). 2 tracks.... 1. train our Airmen to relearn how to forecast up to 72 hours out with old data (not updated) due to jumping bases and not having comms and 2) using big data/AI/etc where we have the capability to help us

[10/7 12:33 PM] Mike Robinson

Ensemble forecasts - as individual forecast trajectories - are a critical need for uncertainty-managed strategic planning of airspace system constraints. Enough ensembles, and timely updates (e.g., hourly, not every 6 hours)

[10/7 12:34 PM] gordon brooks (Guest)

The topic of probabilistic forecast data was also big at the RON. I learned of and have to research more about an experiment in probability communication at (I'm pretty sure) NWSFO Sioux Falls, SD.

[10/7 12:35 PM] Dr. Brian Pettegrew

Curtis Alexander (Guest), one of the limitations we ran into, was that all users have different thresholds/criteria for risk, making dissemination of probabilities difficult

[10/7 12:36 PM] Bass, Randy (FAA) (Guest)

To build upon Brian's comment, the probability of something like turbulence or tornadoes is different than the probability of convection, as they are on different scales

[10/7 12:38 PM] Matthew Wandishin (Guest)

Brian, I think the key is providing a means for the users to take their criteria to the data (where there is flexibility) rather than pushing the data to the users.

[10/7 12:41 PM] McClure, Andrew (FAA) (Guest)

Doesn't "flight into known icing" make a no-go decision in some cases?

[10/7 12:42 PM] Matthias Steiner (Guest)

Thinking of automation and ultimately autonomy, weather plays into that; for example, can algorithms understand sensor readings when weather starts affecting sensors (e.g., icing on pitot tubes).

[10/7 12:42 PM] Frank Brody (Guest)

Dr. Brian Pettegrew Agree on user differences, and in fact users within the same group - e.g., ATCSCC and ARTCC traffic managers - have widely differing thresholds between individuals.

[10/7 12:53 PM] Matthias Steiner (Guest)

Is duplication bad or potentially beneficial?

[10/7 12:57 PM] Matthew Wandishin (Guest)

From a verification standpoint, the duplication of real time radar mosaics makes things tricky. For example, as an NWS product, the HRRR tunes/validates against MRMS--which has different characteristics than CIWS. As a result, verification of HRRR against CIWS yields a consistent bias, mostly due to the duplicate mosaics.

[10/7 12:57 PM] Colavito, Jenny (FAA) (Guest)

I thought the overlap was the radar mosaic. I thought CoSPA created its own mosaic, which was where you get a discrepancy with MRMS

[10/7 12:59 PM] Rother, Gordon (FAA) (Guest)

I thought WIMAT was Weather Integration Modernization and Transition.

[10/7 1:01 PM] Johnston, Kevin L (FAA) (Guest)

Weather Information (not integration)

[10/7 1:02 PM] gordon brooks (Guest)

Finally found my notes: FYI, BVOT = Brief Vulnerability Overview Tool... to create historical awareness for institutional memory (e.g. a local NWSFO, etc).

[10/7 1:07 PM] gordon brooks (Guest)

Kim Calden Woodrow (MIT LL) (Guest) I'm sorry I missed the area for these forecast under-performance...

[10/7 1:08 PM] Curtis Alexander (Guest)

Kim Calden Woodrow (MIT LL) (Guest) Thanks for highlighting this work on CoSPA/HRRR performance this summer and NOAA/GSL (myself and my team) would certainly be interested in seeing the results of your study.

[10/7 1:09 PM] Dr. Brian Pettegrew

If you missed the link for contributing to the brainstorm on DUPLICATION OF EFFORTS:

<https://app.mural.co/t/mitresandbox0478/m/mitresandbox0478/1633613002557/d5a82eae9234bec7239e6fc1eb721d680762b4bc?sender=u11e11e2a5a03834da7ba8376>

[10/7 1:11 PM] Reeves, Heather D. (Guest)

Isn't it true that DoD models also include some classified data assimilated that may make sharing across the federal enterprise problematic?

[10/7 1:11 PM] Kim Calden Woodrow (MIT LL) (Guest)

Curtis Alexander (Guest), We will definitely be reaching out to you and perhaps set up a meeting to walk through a case study or two with you. I didn't want to exploit the issue at this meeting, but also didn't want to seem like it came out of the woodwork in the next few weeks. We are still gathering some case study information. I will be in touch. Thank you! Perhaps we can get together with Ken Stone's group at NCAR as well.

[10/7 1:12 PM] dave mccarren Navy N2N6E (Guest)

Hand not up

[10/7 1:14 PM] gordon brooks (Guest)

I've wondered about duplication of effort for years too Bill

[10/7 1:14 PM] dave mccarren Navy N2N6E (Guest)

To Matthius' point the Global ensemble is very good and typically skillful to days 12-14 -

[10/7 1:14 PM] Bass, Randy (FAA) (Guest)

Duplication bad; competition good

[10/7 1:14 PM] gordon brooks (Guest)

I think we hide behind our alleged different purposes

[10/7 1:15 PM] gordon brooks (Guest)

(to some degree)

[10/7 1:44 PM] Matt Fronzak

<https://app.mural.co/t/mitresandbox0478/m/mitresandbox0478/1633613110791/0beeb6681e41add18178f885b23a71ca801b64a6?sender=u11e11e2a5a03834da7ba8376>

[10/7 1:44 PM] Matt Fronzak

Please use the above link to access the Collaboration Opportunities Mural Brainstorm board.

[10/7 1:47 PM] Dr. Brian Pettegrew

As a reminder, for those that want to perhaps be anonymous, you may text me at 781-460-7948

[10/7 1:47 PM] Ian Johnson (FAA) (Guest)

Do you think that going forward that we should include more users (i.e., pilots, ATC, FSS etc.,) of aviation weather in our meetings? This would allow us to gain an understanding of their needs and also capture gaps that exist in the various weather products.

[10/7 1:49 PM] Joe Bracken

and perhaps a series of individual sessions that allows the user groups (dispatch, ATC, pilots, meteorologists/forecasters) to discuss the wx info they have available to them, shortfalls with that info, and other wants/needs?

[10/7 1:49 PM] Flowe, Tammy (FAA) (Guest)

Ian - there have been pilots from the airlines and ATC reps on the calls the last few days. Maybe not as many as we'd like.

[10/7 1:50 PM] Ian Johnson (FAA) (Guest)

I agree Joe!

[10/7 1:51 PM] Ian Johnson (FAA) (Guest)

Thanks Tammy!

[10/7 1:53 PM] Paurus, Joshua

Not many airports participate in FPAW, but we use wx products as well.

[10/7 1:54 PM] Ian Johnson (FAA) (Guest)

Good point Joshua!

[10/7 1:55 PM] Matthias Steiner (Guest)

To what extent can people listen or participate in aviation stakeholder forums?

[10/7 1:55 PM] Scott (Guest)

Are ideas submitted by private company to the Aviation Weather Request Form publicly viewable? Or can ideas and topics remain proprietary?

[10/7 1:58 PM] Bass, Randy (FAA) (Guest)

I'd like to see more members of AOPA, ALPA, A4A, NATCA and AAAE (American Association of Airport Executives) attend FPAW, but they need to know about it first

[10/7 1:58 PM] Eric Avila (Guest)

I'm here for NATCA Randy

[10/7 1:59 PM] Bass, Randy (FAA) (Guest)

Yes Eric but no reason other controllers can't attend, if they have time.

[10/7 1:59 PM] Bass, Randy (FAA) (Guest)

and permission of course

[10/7 2:01 PM] Rother, Gordon (FAA) (Guest)

FPAW should have a presentation at the spring FAA InfoShare meeting educating the members and requesting they attend the FPAW sharing meeting

[10/7 2:02 PM] gordon brooks (Guest)

Dave Kochevar (NWS) (Guest) Dave, do you work at NWSFO or FAA or ?? I'm curious what mesoscale models you use (and maybe even prefer) up there (Anchorage? Fairbanks? other? I was up there for fire weather years back. Currently DOD civilian with 16th weather squadron... we have 20km/4km/ and testing 1km ensemble suites over S AK.

[10/7 2:03 PM] Pokodner, Gary (FAA) (Guest)

To enhance collaboration, everyone should follow PMI guidance and when forming a program identify all stakeholders but sending notice to COI (or equivalent) to solicit stakeholders and determine the type of stakeholder (active participant, observer, partly interested, etc.). If each agency hosts a body that includes reps from each Wx related organization, they can flow the stakeholder solicitations to the proper groups and then people.

[10/7 2:03 PM] Michael McPartland (Guest)

To date, it has been problematic for the FAA to share AirObs with NOAA. Randy??

[10/7 2:03 PM] Bass, Randy (FAA) (Guest)

Gordy, we've been invited to present at the InfoShare meeting next month. If the request is granted and we can get through the travel request approval process, it's certainly something we can mention during our presentations.

[10/7 2:04 PM] gordon brooks (Guest)

Curtis Alexander (Guest) what is status of TAMDAR generally speaking? Is it alive and well? Has it morphed into a new acronym/program? Thanks!

[10/7 2:04 PM] Rother, Gordon (FAA) (Guest)

Randy is that during the plenary session? The Dispatchers have a breakout session too. I can get you on that agenda if we are not full.

[10/7 2:05 PM] Pokodner, Gary (FAA) (Guest)

I submitted a request to do a 15-minute presentation for Dispatch. Not sure if it was accepted, but I submitted it.

[10/7 2:06 PM] Pokodner, Gary (FAA) (Guest)

If accepted, I wanted to talk to you to help pick the topics since last time I presented it went over much better than expected and a lot of topics came up that I could address.

[10/7 2:08 PM] gordon brooks (Guest)

FPAW certainly seems *super* for helping to get the brains thinking and some balls rolling!

[10/7 2:10 PM] Dr. Brian Pettegrew

One of the biggest challenges I've observed for multi-agency/center/lab collaborations is understanding each groups strengths/weaknesses and knowing roles and responsibilities in the collaborative project

[10/7 2:15 PM] Steve Darr (Guest)

Matt Fronzak Would a specific effort, such as ConOps development for ADS-B Wx ground data distribution be appropriate for this mural?

[10/7 2:15 PM] Curtis Alexander (Guest)

gordon brooks (Guest) The TAMDAR (and AMDAR) program continues and we actively assimilate those observations in our operational models. There does seem to be periodic rumblings of discontinuing the data sharing agreement with NOAA but I'm not aware of change in status at the moment.

[10/7 2:15 PM] gordon brooks (Guest)

Bauman, William (FAA) Bill, at the very least, my understanding is that the AF and Navy are collaborating in the realm of providing ensemble members to each other. I'm not well versed in those data aspects but I have a degree of certainty to say that much...!

[10/7 2:17 PM] Joe Bracken

there was a comment made on day 3 from Matthias about collaboration with the wind energy providers about cloud cover and wind forecasting capabilities

[10/7 2:18 PM] gordon brooks (Guest)
Curtis Alexander (Guest)Excellent to hear, Thank you.

[10/7 2:18 PM] Dr. Brian Pettegrew
Thanks Joe Bracken....I added that to the mural wall

[10/7 2:19 PM] David Chorney (Guest)
david.chorney@noaa.gov

[10/7 2:20 PM] Rother, Gordon (FAA) (Guest)
Gary P: I got you 30 minutes on the Dispatch agenda I know you wanted 15 but maybe you can flush out a process to coordinate and reinforce Airlines to attend and feed FPAW

[10/7 2:23 PM] Pokodner, Gary (FAA) (Guest)
Great. We can definitely do 30 minutes. If we are approved to travel, I'll call you to discuss topics. I have a variety of ideas, but really want some input from you.

[10/7 2:24 PM] Pokodner, Gary (FAA) (Guest)
I can definitely talk up FPAW in the presentation, and provide good examples of why they should attend.

[10/7 2:28 PM] Flowe, Tammy (FAA) (Guest)
Good points Bill. We want to provide data, not products.

[10/7 2:28 PM] Matt Fronzak
Steve Darr (Guest) - Yes!

[10/7 2:29 PM] Joe Bracken
Melissa Wagner, on day 2, spoke to coordination and collaboration with Emergency Managers to share information / data

[10/7 2:31 PM] Steve Darr (Guest)
Dr. Brian Pettegrew Would a specific effort, such as ConOps development for ADS-B Wx ground data distribution be appropriate for this mural?

[10/7 2:32 PM] Dr. Brian Pettegrew
Steve Darr (Guest), I will add it in

[10/7 2:33 PM] Steve Darr (Guest)
Dr. Brian Pettegrew Thanks

[10/7 2:33 PM] Steve Darr (Guest)
Matt Fronzak Thanks. I sent it to Brian

[10/7 2:34 PM] Matthias Steiner (Guest)
Challenges of funding truly interdisciplinary research . . .

[10/7 2:36 PM] gordon brooks (Guest)
I have to run to my next meeting (offsite), thank you Matt, Matthias, Bill, everyone for putting together such a great 4 days of stimulating learning and conversation. Look forward to posted material. THANK YOU.

[10/7 3:00 PM] Bauman, William (FAA) (Guest)

Reference Scott's question on requests submitted via our FAA portal, we can't guarantee that the information submitted remains private or proprietary since it can be subject to FOIA and could be disclosed or released to the public

[10/7 3:04 PM] Matt Fronzak

<https://app.mural.co/t/mitresandbox0478/m/mitresandbox0478/1633613110791/0beeb6681e41add18178f885b23a71ca801b64a6?sender=u11e11e2a5a03834da7ba8376>

[10/7 3:13 PM] Scott (Guest)

Thanks for the info Bill and for following up in detail.

[10/7 3:16 PM] Joe Bracken

Did we identify any outstanding Action Items during the discussions? Do we need to generate an Action Item list now?

[10/7 3:16 PM] Matthias Steiner (Guest)

To Matt & Bill: Are there key pockets of aviation weather-related activities in government that we missed during this TEM?

[10/7 3:17 PM] Lt Col Williams (AF/A3W) (Guest)

I need to head out a bit early today, thanks all!

[10/7 3:25 PM] Steventon, John (FAA) (Guest)

Other Transnational Agreements (OTA's) may be a way of an agreement where funding can be allowed

[10/7 3:26 PM] Scott (Guest)

FAA doesn't seem to do a lot with SBIR compared with other government branches. SBIR seems relatively easy to contract and engage with small business and to get shortcoming within NAS out to companies that could help develop solutions.

[10/7 3:28 PM] Mark Klopfenstein

The SBIR program also has phase II and CCRPP opportunities that allow for multi-agency funding of a given small business.

[10/7 3:29 PM] Scott (Guest)

There is SBIR within DOT. Just very few topics/year

[10/7 3:29 PM] Scott (Guest)

Has FAA topics 1-6 per year.

[10/7 3:31 PM] Joe Bracken

it's in the notes Bill

[10/7 3:34 PM] George, Tom

Yes, there needs to be a competition for low cost ceiling and visibility!

[10/7 3:35 PM] Bass, Randy (FAA) (Guest)

Yeah, the portal!

[10/7 3:37 PM] Suffern Paul (Guest)

what if C/V ended up being as easy as the mPing setup (i'd put one in my backyard (smile)).... or temperature sensors on every "new" car/vehicle out there on the market.... that went into cloud/database for all use

[10/7 3:41 PM] Bauman, William (FAA) (Guest)

My home weather station has a component that shows estimated Cu cloud base

[10/7 3:42 PM] Bauman, William (FAA) (Guest)

But Dulles is showing 3300 ft right now and I'm only 5 miles from the IAD ASOS!

[10/7 3:42 PM] Scott (Guest)

Would be good to have future meetings virtual also, so those unable to attend in person can still attend. i.e. this Teams has been great.

[10/7 3:43 PM] George, Tom

How about a PIREP, from an "aircraft on the ground"?

[10/7 3:44 PM] George, Tom

Great meeting. Thanks!

[10/7 3:44 PM] Apoorva Bajaj (Guest)

Very informational meeting, thank you!