

00:00:00.000 --> 00:00:05.900

Matt Fronzak

Good morning, folks a job rack and can you see my slide and can you hear me?

00:00:07.450 --> 00:00:10.580

Joe Bracken

I can see your slide happens is Joe morning.

00:00:10.930 --> 00:00:12.620

Matt Fronzak

Good morning, thank you.

00:08:56.730 --> 00:09:02.330

Matt Fronzak

Radio check radio check for Joe Bracken test, 1234 radio check.

00:09:03.770 --> 00:09:05.090

Joe Bracken

Loud and clear thanks Sir.

00:09:07.170 --> 00:09:08.220

Matt Fronzak

You're more than welcome.

00:09:09.150 --> 00:09:12.220

Matt Fronzak

Feel like one of the sound guys at the at a music festival.

00:09:13.940 --> 00:09:15.290

Joe Bracken

I promise not to sing.

00:09:17.490 --> 00:09:18.180

Matt Fronzak

Me too.

00:09:40.460 --> 00:09:43.670

David Chorney (Guest)

I think this really points to where we failed.

00:14:58.520 --> 00:15:00.260

Matt Fronzak

Good morning, Rhonda your mikes hot.

00:15:10.190 --> 00:15:11.460

rhonda (Guest)

Yep can you hear me now?

00:15:15.410 --> 00:15:16.270

Matt Fronzak

Yes, we hear you.

00:15:18.080 --> 00:15:18.890

rhonda (Guest)

Good morning.

00:15:24.860 --> 00:15:26.800

Matt Fronzak

Yeah, yeah, dude.

00:15:25.410 --> 00:15:25.670

McClure, Andrew (FAA)

Yeah.

00:15:31.110 --> 00:15:33.060

McClure, Andrew (FAA)

Looks like a good crowd showing up.

00:15:35.860 --> 00:15:36.890

Matt Fronzak

Uh.

00:15:37.180 --> 00:15:45.670

Matt Fronzak

So I guess it depends on what you mean by good do you mean the numbers or the OR the actual participants so you know I? I I could go either way?

00:15:50.330 --> 00:15:53.570

McClure, Andrew (FAA)

Well, yeah, we, we could talk about that for a while.

00:15:54.950 --> 00:15:55.880

Matt Fronzak

Yes, we can.

00:15:59.610 --> 00:16:00.460

Matt Fronzak

How are you Andy?

00:16:01.580 --> 00:16:06.230

McClure, Andrew (FAA)

Well doing OK, it's a little cool here this morning and still dark but.

00:16:07.110 --> 00:16:10.370

McClure, Andrew (FAA)

Other than that life is good man, how about you.

00:16:11.330 --> 00:16:17.520

Matt Fronzak

Ah well it's it's no longer dark and not nearly as cool, but I'm I'm right with you on the latter part.

00:16:18.130 --> 00:16:18.700

McClure, Andrew (FAA)

Good.

00:16:20.260 --> 00:16:23.530

David A Strand

I saw they got a little snow up in Fairbanks couple of days ago.

00:16:24.850 --> 00:16:35.260

McClure, Andrew (FAA)

Yeah, UM one of my coworkers who lives in Eagle River just outside Anchorage got 10 inches about a week or 10 days ago.

00:16:35.850 --> 00:16:40.480

David A Strand

What how much what's his elevation about I guess he's a liar?

00:16:41.080 --> 00:16:42.930

McClure, Andrew (FAA)

Couple of 100 feet Max.

00:16:43.640 --> 00:16:44.490

David A Strand

No cool.

00:16:44.990 --> 00:16:45.580

McClure, Andrew (FAA)

Yeah.

00:16:46.410 --> 00:16:47.550

David A Strand

So we're close.

00:16:48.670 --> 00:16:54.730

McClure, Andrew (FAA)

It was a really just a a very localized event.

00:16:55.610 --> 00:17:00.630

McClure, Andrew (FAA)

Uh areas around there, only got like an inch or so and we only saw.

00:17:01.350 --> 00:17:02.070

McClure, Andrew (FAA)

I don't know.

00:17:02.790 --> 00:17:06.890

McClure, Andrew (FAA)

Flakes coming down mixed with rain but uh.

00:17:08.240 --> 00:17:11.240

McClure, Andrew (FAA)

I guess things worked out just perfectly for them.

00:17:15.520 --> 00:17:19.690

McClure, Andrew (FAA)

Currently it was really, really heavy wet stuff and.

00:17:20.340 --> 00:17:24.940

McClure, Andrew (FAA)

They were getting power outages right and left for about 2 or 3 days there.

00:17:27.420 --> 00:17:28.970

David A Strand

That's problem with that wet stuff.

00:17:29.510 --> 00:17:30.050

McClure, Andrew (FAA)

Yep.

00:17:31.760 --> 00:17:36.420

McClure, Andrew (FAA)

Yeah, the trees weren't even all bear by the time it's happened so.

00:17:37.410 --> 00:17:39.470

McClure, Andrew (FAA)

That's a That's a bad thing.

00:17:53.030 --> 00:18:01.060

Matt Fronzak

Uh so Matthias I'm I'm inclined to say. Let's go. However, we're missing. A at least one very key person I think.

00:18:05.330 --> 00:18:09.660

Matthias Steiner (Guest)

Well can, we ping that person to make sure they are there.

00:18:11.810 --> 00:18:14.200

Matt Fronzak

Is is Randy bass on the line?

00:18:15.480 --> 00:18:17.250

Matthias Steiner (Guest)

I think I saw him.

00:18:21.600 --> 00:18:22.330

Matthias Steiner (Guest)

No.

00:18:24.900 --> 00:18:25.880

Matt Fronzak

Help Derek comes.

00:18:27.330 --> 00:18:27.900

Matthias Steiner (Guest)

Yep.

00:18:32.460 --> 00:18:39.250

Matt Fronzak

Randy you're making me nervous man. I thought I was going to have to do pretend I was you and and do stuff and that would have been a disaster.

00:18:39.880 --> 00:18:44.700

Bass, Randy (FAA)

Now, sorry about that I was trying to get me a soft drink before I.

00:18:46.930 --> 00:18:50.850

Bass, Randy (FAA)

Started here, plus I was finishing up another meeting, but I'm here now.

00:18:53.750 --> 00:19:08.080

Matt Fronzak

Alright, well, I'm I'm showing uh 1131 and a half so close enough to 1130. I guess to to to get started.

Matias So what do you think Randy?

00:19:09.350 --> 00:19:10.050

Bass, Randy (FAA)

Let's go.

00:19:11.090 --> 00:19:11.580

Matt Fronzak

Alright.

00:19:12.650 --> 00:19:21.680

Matt Fronzak

So I'm I'm just gonna I. I'm just gonna make a couple of very brief comments and then hand it over to Matthias for for the the true wisdom.

00:19:22.470 --> 00:19:27.140

Matt Fronzak

We've been we've been trying to have this session.

00:19:27.880 --> 00:19:33.570

Matt Fronzak

For a long time and and I I see Bruce Carmichael 's name on the list. Good morning, Bruce.

00:19:34.180 --> 00:19:45.350

Matt Fronzak

Uh literally when when Bruce was still running F paw and you know the the rest of us were were you know attending and and helping out.

00:19:45.890 --> 00:19:57.570

Matt Fronzak

Uh you know this came up in in his tenure and that was several years ago. Now that that this first came up and and we attempted to to make it happen and.

00:19:58.870 --> 00:20:16.730

Matt Fronzak

You know a a series of events that that we had little or no control over took place and and the the kind of dilemma. That Matthias and Randy and and and and the other organizers and I found ourselves in is.

00:20:17.270 --> 00:20:31.270

Matt Fronzak

Uh was that that although it seemed at 1:00 point in time, like it was a fairly sure bet that we'd be able to meet in person this fall as events have unfolded that became very questionable.

00:20:31.810 --> 00:20:58.290

Matt Fronzak

Uhm uhm strategy and so literally at at for what US was the the last minute. Or maybe even arguably past the last minute. We decided to go all virtual so, so this meeting is about 3 years in the making it's supposed to have been in person. But it's unfortunately going to be virtual so we're going to do the best that we can to to to make that happen in a meaningful way.

00:21:00.150 --> 00:21:02.850

Matt Fronzak

In in order to to attempt to do so.

00:21:02.900 --> 00:21:23.820

Matt Fronzak

So and if you are are so inclined I would encourage people when you are speaking up to turn on your camera so that people can see you and attach a face to a name if they don't already know you and and you know, we'll make this as in person issue as we possibly can.

00:21:23.870 --> 00:21:31.200

Matt Fronzak

Yeah, and so I I'll I'll stop babbling there and hand it over to Matthias for all the the really good stuff.

00:21:33.680 --> 00:21:37.900

Matthias Steiner (Guest)

I don't know what you're talking about because the Randy will talk about the good stuff.

00:21:34.130 --> 00:21:34.350

Matt Fronzak

I.

00:21:38.310 --> 00:21:42.300

Matt Fronzak

Oh, oh, OK well how about the administrative stuff.

00:21:42.450 --> 00:21:50.850

Matthias Steiner (Guest)

Yeah, so again from my side also welcome to the fall 21 F paw meeting.

00:21:50.910 --> 00:21:55.770

Matthias Steiner (Guest)

Uh uh as Matt said This has been a.

00:21:56.510 --> 00:22:26.280

Matthias Steiner (Guest)

In preparation for quite awhile and we are happy that it actually is happening now and the people, you see listed there on this slide Randy Bass, Nancy Mendonca Lieutenant Colonel Robert Branham Jeffrey Weinrich, Matt and I were sort of the the heavy lifter in orchestrating the next 4 days. What you will see and mapped it if you go to the next slide.

00:22:27.410 --> 00:22:28.330

Matthias Steiner (Guest)

That will be great.

00:22:28.380 --> 00:22:33.640

Matthias Steiner (Guest)

It uh it will be 4 days Monday through Thursday.

00:22:33.690 --> 00:22:46.040

Matthias Steiner (Guest)

Maybe it will be the same time frame from 11:30 AM till about 4:00 PM eastern end. The meeting will be recorded click one more time Matt please.

00:22:47.550 --> 00:23:21.540

Matthias Steiner (Guest)

This is a very high level at Chinda, which you have seen based on the email distribution or if you visited the F power website. It gives you just an idea of what we will be touching base in the next 4 Day 4 days. Today is kind of reviewing the traditional evaluation whether space? What's going on in the different parts of the federal agencies then tomorrow, we will delve into aviation weather for advanced air mobility operations.

00:23:22.420 --> 00:23:52.570

Matthias Steiner (Guest)

There's a lot of buzz that you hear around and read about from the evaluation industry news outlets about drone operations. Urban Air mobility, etc. And we will really delve into that tomorrow and then

on Wednesday, October 6th will be a little bit of mixture of different things that are other aspects that may be relevant in happening out there.

00:23:52.630 --> 00:24:23.940

Matthias Steiner (Guest)

Multi use whether that could be brought to bear on the evaluation or deviation industry could benefit from those kinds of things commercial space. We talk a little bit about and looking into the future how the weather for aviation will look like in the future and then the 4th. They will particularly be a recap rethinking of what we have heard in these first 3 days and look for synergies opportunities to collaborate.

00:24:02.320 --> 00:24:02.870

Bauman, William (FAA)

No.

00:24:24.120 --> 00:24:26.250

Matthias Steiner (Guest)

And take it to the next level.

00:24:27.480 --> 00:24:44.870

Matthias Steiner (Guest)

And if that's not good enough then you have an opportunity on October 20th to get engaged in the planning meeting where we look at the spring meeting, what we will talk about then and an early look at fall meeting a year from now.

00:24:45.760 --> 00:24:47.570

Matthias Steiner (Guest)

If you click one more time Matt.

00:24:49.020 --> 00:25:18.990

Matthias Steiner (Guest)

Just a little bit of bookkeeping, please, mute your microphone 's. If you don't speak that really helps with minimizing background noise and help us focus on hearing the the speakers and what they have to say if you want to contribute something whether it's a comment or a question. Please use the chat room and type, it in there and we have people monitoring the chat room. I think it's David Strand.

00:25:19.040 --> 00:25:47.630

Matthias Steiner (Guest)

Today, if that's correct, yeah, I see Matt is is nodding so we have someone David monitoring the chat room and at the appropriate times. He will stop us and say wait a minute. We have some important questions or comments here and if needed, for clarification. We can always have the person who submitted the comment or question elaborate more by voice directly and so.

00:25:48.490 --> 00:26:07.850

Matthias Steiner (Guest)

This is the way we have been doing it in the past and it really worked well. The the chat room has taken on its own life. People have been you know, exchanging thoughts and comments there and so I think this will work again very well for the next 4 days.

00:26:08.500 --> 00:26:17.750

Matthias Steiner (Guest)

And with that I really want to hand it over to Randy Bass, who orchestrated the first day so Randy please take it from here, thank you.

00:26:21.040 --> 00:26:24.870

Bass, Randy (FAA)

Alright. Thank you Matthias and thank you. Matt and to the other.

00:26:24.930 --> 00:26:25.340

Bass, Randy (FAA)

Uh-huh.

00:26:27.030 --> 00:26:29.340

Bass, Randy (FAA)

Folks, who put this together.

00:26:29.570 --> 00:26:31.100

Bass, Randy (FAA)

Uh it's a

00:26:32.260 --> 00:26:38.250

Bass, Randy (FAA)

like Matt said it's been it's been planned for about 3 years and then last about it.

00:26:39.530 --> 00:26:42.730

Bass, Randy (FAA)

I'm not quite a year ago when we really started the.

00:26:42.780 --> 00:26:46.240

Bass, Randy (FAA)

Uh uh planning trying to put this together and.

00:26:47.510 --> 00:26:55.680

Bass, Randy (FAA)

As he said, we've we've had a lot of bumps and and restarts along the way and finally. We just decided, you know what? Let's go ahead and and do it now.

00:26:55.730 --> 00:27:06.830

Bass, Randy (FAA)

Well, uh. I want to thank all the participants who've joined us today. Both within the federal government and outside of it, I think what you'll.

00:27:07.420 --> 00:27:15.640

Bass, Randy (FAA)

Uh hopefully you'll get a lot out of this and and learn a lot of things and and I know I've learned alot just collecting all the information from folks so.

00:27:16.510 --> 00:27:18.310

Bass, Randy (FAA)

Well, the first thing we want to do is.

00:27:18.370 --> 00:27:19.410

Bass, Randy (FAA)

Uh hum.

00:27:21.100 --> 00:27:24.080

Bass, Randy (FAA)

Actually, first thing I'm going to do is put up the.

00:27:25.180 --> 00:27:26.480

Bass, Randy (FAA)

Agenda for today.

00:27:28.420 --> 00:27:28.950

Bass, Randy (FAA)

And.

00:27:38.450 --> 00:27:40.350

Bass, Randy (FAA)

Hopefully everybody can see that.

00:27:41.720 --> 00:27:42.480

Bass, Randy (FAA)

The uh.

00:27:43.980 --> 00:27:56.930

Bass, Randy (FAA)

So what we have planned for today. Uh kind of as a kickoff Dave Charney is going to provide an overview of the new Internet Interagency Council on the advancement of mineralogical services called I cams.

00:27:57.580 --> 00:28:00.700

Bass, Randy (FAA)

Uh some of you are probably familiar with.

00:28:01.730 --> 00:28:06.170

Bass, Randy (FAA)

The older osm the office of federal coordinator for meteorology.

00:28:06.950 --> 00:28:15.620

Bass, Randy (FAA)

Uh I cams is going to be doing a lot of that plus more so Dave will give us an overview on that.

00:28:16.150 --> 00:28:46.240

Bass, Randy (FAA)

And then we are going to start with the first of 3 panel sessions. Today, you'll notice that we're really trying to stay away from death by PowerPoint so we don't want to just go and give you a one after

another of of you know presentations by folks on what they do or what they want to do or things like that. So we're going to try to make this a lot more interactive so we're going to this first panel.

00:28:46.520 --> 00:28:49.720

Bass, Randy (FAA)

Is on the operations and they and what we do today?

00:28:49.770 --> 00:29:16.420

Bass, Randy (FAA)

Like so it's kind of the current weather support d'aviation operations. You see the panelists there and I'll introduce each of them as we get to that will take about a 30 minute break afterwards. So the folks on the East Coast can take a late lunch break central and mountain time can have a kind of an early lunch or right on time lunch and the folks in the West coast and Alaska.

00:29:16.480 --> 00:29:20.030

Bass, Randy (FAA)

Uh so you can have breakfast I guess in that time.

00:29:20.640 --> 00:29:43.790

Bass, Randy (FAA)

Uh afterwards going to come back and we're going to do. The research and the research development and transition to operations that that's going on now and then finally after another quick break. We're going to talk about governance and the the guidelines and policies that that drive today's weather support.

00:29:44.630 --> 00:29:54.260

Bass, Randy (FAA)

Uh that will pretty much wrap up Day One and and uh. We'll do quick quick highlight and and maybe preview preview tomorrow's agenda so.

00:29:54.310 --> 00:30:00.180

Bass, Randy (FAA)

Wow, uh with that, we'll go ahead and get started and let me.

00:30:03.120 --> 00:30:04.490

Bass, Randy (FAA)

Bring up Dave 's.

00:30:05.940 --> 00:30:07.140

Bass, Randy (FAA)

Presentation here.

00:30:24.060 --> 00:30:25.430

Bass, Randy (FAA)

And I promise I do have it.

00:30:28.230 --> 00:30:37.040

David Chorney (Guest)

Just as the history for everybody. They let you know whole rainy and I are. We we were in the Air Force together and I was working under him in 1997.

00:30:38.030 --> 00:30:39.610

David Chorney (Guest)

Watching Ellsworth Air Force Base.

00:30:41.270 --> 00:30:43.560

Bass, Randy (FAA)

That's true, it has been quite awhile so.

00:30:43.620 --> 00:30:43.950

Bass, Randy (FAA)

Ah.

00:30:46.700 --> 00:30:47.380

David Chorney (Guest)

Alright.

00:30:48.300 --> 00:30:50.810

Bass, Randy (FAA)

Hold on just one second.

00:30:51.000 --> 00:30:53.940

Bass, Randy (FAA)

Uh so yeah, let me let me introduce Dave.

00:30:54.000 --> 00:31:14.220

Bass, Randy (FAA)

Come again we've we've we've known each other for a long time. Dave 's a 28 year retired Lieutenant Colonel from the Air Force reserves and it combat wetter weather veteran. He's worked with the National Weather Service for almost 20 years and as a tropical expert who worked at the National Hurricane Center.

00:31:14.830 --> 00:31:19.160

Bass, Randy (FAA)

He's currently the senior meteorologists on staff at the FCM.

00:31:19.750 --> 00:31:45.180

Bass, Randy (FAA)

Uh, which is becoming the interagency meteorological coordination office under the new items and most people don't know. And in fact, I didn't know this even though I've known him for a long time. He's also a pilot so that hopefully makes him a better aviation meteorologist and if nothing else. He probably pays more attention to the weather than most other pilots do when he's a hopefully when he's a flight planning so.

00:31:45.230 --> 00:31:45.570

Bass, Randy (FAA)

Wow.

00:31:46.360 --> 00:31:51.710

Bass, Randy (FAA)

Uhm Dave go ahead and let me put this in presentation mode.

00:31:52.070 --> 00:31:58.060

David Chorney (Guest)

Alright well, thanks for thanks for that introduction so OK? Why don't we go to the next slide here?

00:31:52.990 --> 00:31:53.840

Bass, Randy (FAA)

Right there, you go.

00:32:03.710 --> 00:32:05.780

David Chorney (Guest)

Alright So what is I cams?

00:32:06.600 --> 00:32:07.630

David Chorney (Guest)

Uhm well.

00:32:08.430 --> 00:32:10.320

David Chorney (Guest)

It kinda gotta go back so.

00:32:12.790 --> 00:32:16.940

David Chorney (Guest)

Back a couple years ago, I think it's 2017 that do the weather act came out.

00:32:17.670 --> 00:32:26.980

David Chorney (Guest)

And Congress said we need to look at how we do things. Now, all of CM. We've been around for over 50 years and.

00:32:27.710 --> 00:32:45.740

David Chorney (Guest)

So due to that we did a pretty good job. But obviously with every organization you can always reevaluate and see what you could do better and the big thing with icams what it's trying to do is get senior leaders from agencies involved.

00:32:46.700 --> 00:32:58.040

David Chorney (Guest)

In decision making so that weather isn't just a conversation way down at this low level that we can actually have senior leaders and organizations agencies involved so.

00:32:59.500 --> 00:33:01.270

David Chorney (Guest)

Next slide will go to like slide here.

00:33:08.840 --> 00:33:10.490

David Chorney (Guest)

Can you get the next slide Randy?

00:33:14.700 --> 00:33:15.530

Bass, Randy (FAA)

Trying to

00:33:18.070 --> 00:33:18.660

Bass, Randy (FAA)

there, we go.

00:33:18.160 --> 00:33:42.310

David Chorney (Guest)

Page number there, we go so like I said the 2017 weather research and forecasts Innovation Act, came out by Congress and they they were looking for a better way for and there's 15 government agencies out there that actually have weather, which is pretty surprising probably I would say most of you probably didn't even know that.

00:33:42.730 --> 00:33:54.960

David Chorney (Guest)

We all know you know, FAA we all know Air Force and Navy. We know the Weather Service. But even places like the State Department you know have whether people so.

00:33:55.940 --> 00:34:00.860

David Chorney (Guest)

I I can just tell you when I worked I used to work when I worked at norad Northcom doing Homeland defense.

00:34:01.490 --> 00:34:10.150

David Chorney (Guest)

Uhm when Hurricane was sitting Cabo San Lucas. The State Department was involved with evaluating you a citizen so they had to have whether people.

00:34:10.930 --> 00:34:16.070

David Chorney (Guest)

No what was gonna happen. So how weak and Ovacue 8 people so.

00:34:17.190 --> 00:34:17.870

David Chorney (Guest)

Next slide.

00:34:28.680 --> 00:34:29.400

David Chorney (Guest)

There we go.

00:34:30.140 --> 00:34:31.520

David Chorney (Guest)

So how does it function?

00:34:32.710 --> 00:34:41.670

David Chorney (Guest)

So the way it is set up I cams. It falls under the office of Science and technology which is at the White House.

00:34:42.480 --> 00:34:49.090

David Chorney (Guest)

And the principles represent all icams agencies and departments like I said there's like 15 of them.

00:34:50.030 --> 00:34:50.830

David Chorney (Guest)

Uhm.

00:34:51.900 --> 00:35:12.320

David Chorney (Guest)

We were called oh FCM well, we still are technically. We're in that transition. Congress has approved it but it has not become official through Noah channels app. There's all kinds of paperwork. But we will become the interagency meteorological coordination office. Imco so that should happen here, probably in the next month or 2.

00:35:14.700 --> 00:35:18.670

David Chorney (Guest)

The interim Co is going to have an executive director.

00:35:19.560 --> 00:35:23.760

David Chorney (Guest)

And that person is going to be detailed to oh STP at the White House.

00:35:24.820 --> 00:35:30.640

David Chorney (Guest)

And then the Imco Deputy Director and staff will be in Silver Spring, it building 2.

00:35:31.400 --> 00:35:50.010

David Chorney (Guest)

And the deputy director currently is filled by Martine Yep or as a interim volunteer for the year and I believe he's gonna be ending his position in December or January and they're going to be bidding out that job as a ZA 5 ZP 5 brother.

00:35:50.780 --> 00:36:01.370

David Chorney (Guest)

Come and become the permanent position so that person is gonna kind of run emco and the as the administrative person, but will be involved with I cams as well.

00:36:02.490 --> 00:36:03.320

David Chorney (Guest)

So next slide.

00:36:05.280 --> 00:36:15.740

David Chorney (Guest)

So here's kind of the structure as you can see the eye cams at the top and as you go down and to the right. We have the Imco, which is where I'll be working.

00:36:16.760 --> 00:36:20.010

David Chorney (Guest)

And then under that we have 4 working committees.

00:36:20.640 --> 00:36:25.150

David Chorney (Guest)

And it was bantered back and forth when I came started how many she would have.

00:36:25.820 --> 00:36:32.680

David Chorney (Guest)

You know they wanted 6 at first, but we came up with for commitments and those committees are observations.

00:36:33.800 --> 00:36:38.990

David Chorney (Guest)

And then cyber facilities and in structure that's really just comes.

00:36:40.830 --> 00:36:48.310

David Chorney (Guest)

Uh Committee on services which is uh probably the biggest one as you'll see. And then Committee on research and innovation.

00:36:48.850 --> 00:37:10.240

David Chorney (Guest)

Uh, which is kind of been around the SPC. It's been around for a long time doing the research so the whole thing with Icams. We wanna have researched operations but also operations to research with back and forth coordination and that's why you see the blue arrows going back and forth between those 4 committees because there's going to be a lot of overlay.

00:37:10.890 --> 00:37:13.710

David Chorney (Guest)

Between some of these they'll have common ground.

00:37:14.880 --> 00:37:17.750

David Chorney (Guest)

So it it's not gonna be a stovepipe.

00:37:18.020 --> 00:37:23.150

David Chorney (Guest)

Uh if it falls on the robs they don't talk to anybody else. It's that's not the way this is supposed to be.

00:37:24.120 --> 00:37:24.920

David Chorney (Guest)

So next slide.

00:37:27.450 --> 00:37:30.000

David Chorney (Guest)

So under these committees.

00:37:30.730 --> 00:38:00.230

David Chorney (Guest)

So under Cobbs observations is called Cobb CEO BS that's deeper acronym for it. We have space face observations and then we are going to have 2 other groups. One is going to be surface and subsurface, which is any platform that's on the ground on the water or below the ground or below the water and then air which is anything from an inch above the surface to the outer atmosphere and that obviously space bases.

00:38:00.900 --> 00:38:01.700

David Chorney (Guest)

Out in space.

00:38:02.750 --> 00:38:15.860

David Chorney (Guest)

And then under sci-fi is which is the coms. One there's the cloud computing or offer systems. The ESD the earth system data and operational processing center.

00:38:16.800 --> 00:38:18.450

David Chorney (Guest)

So they do all the.com stuff.

00:38:19.080 --> 00:38:30.380

David Chorney (Guest)

Committee on services this is a big group that has all your Weather Service is your climate high hydro atmosphere fire aviation.

00:38:31.020 --> 00:38:40.660

David Chorney (Guest)

Marine all this stuff is gonna fall under this committee, so it's a it. I think they have 18 working groups under this committee.

00:38:41.880 --> 00:38:59.210

David Chorney (Guest)

And then Committee on research and innovations so like I had said before the earth system modeling and prediction. That'll simulation weather and climate prediction in their systems, so that's your research that's the other part next slide.

00:39:07.040 --> 00:39:09.850

David Chorney (Guest)

And this is going a little more detail so under those.

00:39:10.560 --> 00:39:14.910

David Chorney (Guest)

Uh like and and the cobs we have the space space sobs.

00:39:15.550 --> 00:39:37.490

David Chorney (Guest)

Air and ground, which is going to become just air and in situ, which will be surface and sub servers were transitioning. Those 2 subcommittees this week or next week, so that's why this slide. I left it as it is, but you can see, there's different. Working groups that are gonna fall under each one of these so everything in blue are working groups.

00:39:38.300 --> 00:39:45.600

David Chorney (Guest)

That are going to be falling under these committees, so I'm not going to read. All these 'cause. We got limited time today, but I believe these slides will be shared so.

00:39:46.390 --> 00:39:47.040

David Chorney (Guest)

Next slide.

00:39:50.680 --> 00:40:14.110

David Chorney (Guest)

This is just kind of showing you the leadership. So they're trying to be very diversified and every which way you can think of the word diversification. We want representatives. Some everything we don't once one agency. I mean, we all know. Noah Weather Service is the powerhouse when it comes to weather pretty much has the most people in the government doing that kind of work.

00:40:15.540 --> 00:40:25.370

David Chorney (Guest)

But as you can see looking at these agencies. We've got all the different agencies. You know NASA. USGS Noah NIST DoD Department of Agriculture.

00:40:26.220 --> 00:40:38.350

David Chorney (Guest)

DoD DoD so lots of different agencies are sharing or Co. Chairing these 4 committees and these are all volunteers. These are not paid.

00:40:39.420 --> 00:40:56.850

David Chorney (Guest)

Positions they're paid, but there are people that work for other these agencies and they volunteered their times to be Co chairs. So it's double duty and all of us. Working Tim to have a lot of things get done after 5:00 o'clock because they have regular jobs as well.

00:40:57.960 --> 00:40:58.590

David Chorney (Guest)

Next slide.

00:41:03.390 --> 00:41:04.620

David Chorney (Guest)

Let's see.

00:41:06.930 --> 00:41:10.160

David Chorney (Guest)

I'm gonna skip this cycle, the next slide. There's nothing that much up here.

00:41:12.250 --> 00:41:41.720

David Chorney (Guest)

So, like I was saying earlier there's 15 agencies out there and I'm not gonna read all these but there might be a few on here like I said that might be surprising that actually have weather on there. Just like Nuclear Regulatory Commission. These are not typical government agencies. You hear about when you think about weather. So we're trying really hard to get all these agencies in there and look for any where there's interagency cooperation needed.

00:41:42.310 --> 00:41:43.450

David Chorney (Guest)

And dumb.

00:41:44.640 --> 00:41:51.270

David Chorney (Guest)

Expand their horizons beyond just the DoD D OT and and Noah Weather Service.

00:41:52.480 --> 00:41:53.130

David Chorney (Guest)

Next slide.

00:41:57.710 --> 00:42:02.820

David Chorney (Guest)

So we didn't we have some milestones and I'll just briefly go over these I'm not going to read all these slides.

00:42:03.890 --> 00:42:11.900

David Chorney (Guest)

But you can see this form milestones. I'll read that part and then we'll go on milestone one was transitioned the federal.

00:42:13.760 --> 00:42:17.160

David Chorney (Guest)

Coordinating structure into Icms, which we've done.

00:42:18.490 --> 00:42:33.450

David Chorney (Guest)

Uh we establish a interagency emco office and executive leadership or probably 90% done there. Imco is established and the executive director is been selected but not announced yet.

00:42:34.470 --> 00:42:57.090

David Chorney (Guest)

So the executive director also is I'm not say it's a political position, it but it is a person that's supposed to be SCS could be a 15 will come from another agency work for a year at the White House and then after a

year will go back to their position. In another person will take their place? Unlike the deputy director, which will be a permanent position.

00:42:57.980 --> 00:43:06.340

David Chorney (Guest)

Milestone 3 communicate Icms goals and 4 engaged with the community and career scientists to inform our long term plan.

00:43:07.920 --> 00:43:22.450

David Chorney (Guest)

So right now, we also have the Icam 's transition team, which we have one or 2 people in there. Right now and they're kind of working is the leadership and they have been until the executive director is announced.

00:43:25.060 --> 00:43:26.530

David Chorney (Guest)

So let's go to the next slide.

00:43:29.390 --> 00:43:45.960

David Chorney (Guest)

So here's just kind of amok and read. All this again. This is the Icams Milestone, one and you can see on here? What we've done like I said, I came 's was started. We've set up committees. We set up rosters working groups so all the rosters are set.

00:43:46.780 --> 00:44:10.820

David Chorney (Guest)

And but they are you know it's not nothing set in stone, it can be changed. But all the members and Co chairs of all the working groups subcommittees committees is diversified between all those 15 government agencies were trying to like you said really get a true interagency coordination going on with every agency represented represented represented.

00:44:11.950 --> 00:44:12.770

David Chorney (Guest)

So next slide.

00:44:17.140 --> 00:44:33.790

David Chorney (Guest)

Like I said it was approved by Congress in September for emco. Hopefully will be the officially be dropping oh FCM and becoming emco Here probably within a month or so it's just a paperwork at this point.

00:44:34.470 --> 00:44:35.100

David Chorney (Guest)

Uhm.

00:44:36.340 --> 00:44:57.830

David Chorney (Guest)

And I've told you this so Mike Bonadonna. The current director of oh FCM. He will actually be moving on

and he there. He's moving over to Desdas as they replace the director job with the deputy director and executive director of Imco.

00:44:59.490 --> 00:45:00.640

David Chorney (Guest)

So next slide.

00:45:05.040 --> 00:45:18.410

David Chorney (Guest)

So communicate Icms goals and structures, UM that's on its way you can see, there's the portal. Icms portal so if you have more questions. After this, There's there's a question. I think there's a FAQ page on there.

00:45:20.200 --> 00:45:21.710

David Chorney (Guest)

So we'll go to the next page.

00:45:26.090 --> 00:45:35.710

David Chorney (Guest)

Uh milestone form and you engage the community with the early career scientists. That's the other thing we're trying to get more youngsters out there.

00:45:36.120 --> 00:45:41.040

David Chorney (Guest)

Uhm I kind of mentioned earlier me and Randy have known each other for almost 30 years.

00:45:41.570 --> 00:45:53.220

David Chorney (Guest)

Uh we need more young youngblood out there and it's important to have us old guys. But we need. The youngsters in there as well, and that's one of the issues we?

00:45:54.330 --> 00:46:03.840

David Chorney (Guest)

Would government hires taking 6 to 9 months. You know kid graduates. They don't want to wait 6 to 9 months to work, where they can get a job in the private sector as most of you know.

00:46:04.450 --> 00:46:09.430

David Chorney (Guest)

Uh maybe next month, so that's that's a government problem that they're looking at.

00:46:10.810 --> 00:46:11.400

David Chorney (Guest)

Next slide.

00:46:14.260 --> 00:46:15.240

David Chorney (Guest)

So the way forward.

00:46:15.850 --> 00:46:16.650

David Chorney (Guest)

Uhm.

00:46:17.230 --> 00:46:29.880

David Chorney (Guest)

Like I said, we started I cans. It's a work in progress. We're doing work plans right now and we're just trying to figure out what's the the long term goal for I cams and.

00:46:30.820 --> 00:46:32.100

David Chorney (Guest)

Not only have

00:46:32.910 --> 00:46:36.590

David Chorney (Guest)

we used to have it off statement was mostly bottom up.

00:46:37.510 --> 00:46:47.170

David Chorney (Guest)

But we also want to have top down from the administration which as many of you probably already know under dividing terrorists is fire weather.

00:46:47.780 --> 00:46:55.620

David Chorney (Guest)

Climate change and then since it kind of came up with the flooding in Tennessee that killed all those people, you know.

00:46:56.390 --> 00:47:08.240

David Chorney (Guest)

Doing a better job of communicating whether to those poor areas that maybe don't have the communication tools that are a more established community would have.

00:47:09.370 --> 00:47:09.970

David Chorney (Guest)

Next slide.

00:47:13.770 --> 00:47:15.100

David Chorney (Guest)

The next steps.

00:47:16.290 --> 00:47:19.100

David Chorney (Guest)

ICarly much talked about all this already next slide.

00:47:24.030 --> 00:47:25.420

David Chorney (Guest)

So here's some links.

00:47:27.060 --> 00:47:30.290

David Chorney (Guest)

I and and email addresses for icams contact.

00:47:31.210 --> 00:47:35.600

David Chorney (Guest)

Like I said, these slides, I think we shared so you can get all that next slide.

00:47:37.610 --> 00:47:43.180

David Chorney (Guest)

And that is, it I think I did pretty good right at high noon, so we have 10 minutes for questions.

00:47:46.030 --> 00:47:47.520

David Chorney (Guest)

And I'll do my best.

00:47:56.100 --> 00:47:58.120

David Chorney (Guest)

Are you seeing any questions there and the?

00:47:59.110 --> 00:48:00.250

David Chorney (Guest)

Chat Bots Roll.

00:47:59.350 --> 00:47:59.840

David A Strand

Any.

00:48:01.180 --> 00:48:05.060

David A Strand

It is how much influence this is from Matthias.

00:48:05.570 --> 00:48:06.400

David A Strand

Uhm.

00:48:07.270 --> 00:48:10.780

David A Strand

How much influence will I came to having the decision and policymaking?

00:48:11.980 --> 00:48:14.690

David Chorney (Guest)

Well, that's what it's supposed to be so.

00:48:15.720 --> 00:48:25.400

David Chorney (Guest)

And that's what we're working on so that's coming down. You know that's where OFCM maybe had lacked compared to Icms in theory.

00:48:26.080 --> 00:48:29.070

David Chorney (Guest)

I came just supposed to have those senior leaders.

00:48:29.830 --> 00:48:35.820

David Chorney (Guest)

I'm not that are non whether people that actually have an effect on budgets and decisions for their agencies.

00:48:36.670 --> 00:48:43.240

David Chorney (Guest)

Uh so I came just supposed to try to get those people involved and have communication where.

00:48:44.270 --> 00:48:56.250

David Chorney (Guest)

When we have a weather issue that needs funding or it's gonna affect policy for the government. Those senior leaders are involved, so that that's one strength that I came just supposed to.

00:48:56.970 --> 00:48:58.340

David Chorney (Guest)

Established so.

00:48:59.140 --> 00:49:03.880

David Chorney (Guest)

Since we're new we haven't actually done it yet, so but in theory, it should be a good thing.

00:49:04.980 --> 00:49:05.790

David Chorney (Guest)

Does that make sense?

00:49:12.810 --> 00:49:14.180

David A Strand

That answer your question with yes.

00:49:16.240 --> 00:49:18.410

Matthias Steiner (Guest)

It does it was sort of a?

00:49:19.210 --> 00:49:25.490

Matthias Steiner (Guest)

I look in a sense how much has changed reality. We just changed the name but it's the same.

00:49:26.180 --> 00:49:48.930

Matthias Steiner (Guest)

Influence or lack there off on what's happening in in a policy and decision. Making arena or has something changed that will really lift this to to a different level and it may also depend on the administration as to how much influence or how much of an open ear. There is to to influence what's happening so yeah, thank you.

00:49:49.480 --> 00:49:50.120

David Chorney (Guest)

OK, good.

00:49:50.730 --> 00:49:53.900

David Chorney (Guest)

Yeah, it should it should be we'll have much more.

00:49:55.060 --> 00:49:59.090

David Chorney (Guest)

We have many more agencies involved directly now.

00:49:59.820 --> 00:50:14.930

David Chorney (Guest)

And we have many so in those direct and and supposed to have many more. Senior leaders involved as well so that are non whether people and like I said that have and charge it at budgets and policy making so that's that's what this was all about.

00:50:16.550 --> 00:50:17.970

David Chorney (Guest)

So, in theory, it should work.

00:50:22.720 --> 00:50:23.810

David Chorney (Guest)

Any other questions.

00:50:25.810 --> 00:50:27.180

David A Strand

Hey Matt,

00:50:28.330 --> 00:50:48.310

David A Strand

has one that says whether it's from the bottom up or the top down. It seems at the OCFOFCM&I cams are really about cross coordinates which is the end of the day takes people are there enough people to get the job done, especially recognizing this is my comment that it is voluntary so.

00:50:49.870 --> 00:50:58.330

David Chorney (Guest)

Well, it's supposed to and everybody that volunteers understands the commitment that's so anybody who's on a member or chair.

00:50:59.000 --> 00:51:02.380

David Chorney (Guest)

Had to be approved by a senior level person.

00:51:03.320 --> 00:51:07.770

David Chorney (Guest)

Uh and SES person at those 15 government agencies.

00:51:08.430 --> 00:51:19.260

David Chorney (Guest)

So it has the cooperation of all the senior leaders. Non weather, senior leaders that had to approve everybody and there's hundreds and hundreds. We have on our rosters.

00:51:19.960 --> 00:51:26.720

David Chorney (Guest)

I think over 500 that are different people on these remember that are members of these committees working groups subcommittees.

00:51:28.890 --> 00:51:29.680

David Chorney (Guest)

So.

00:51:31.100 --> 00:51:31.930

David Chorney (Guest)

I think so.

00:51:37.940 --> 00:51:39.160

David Chorney (Guest)

Any other questions.

00:51:40.750 --> 00:51:43.390

David Chorney (Guest)

Still got 5 minutes or we can be ahead of schedule.

00:51:44.630 --> 00:51:47.770

David A Strand

And we've got a couple that have come in here.

00:51:48.890 --> 00:51:53.730

David A Strand

From Joshua Malloy Icam should consider reaching out to Noah.

00:51:54.860 --> 00:52:14.630

David A Strand

Uh Holling Holling Scholarship program to raise awareness of I cams and their desire to recruit involve the next generation of scientists so more of a comment Steve Dar does have a question? How do I Cam Committees monitor developments outside of the government?

00:52:16.830 --> 00:52:18.420

David Chorney (Guest)

Well, hopefully if

00:52:19.450 --> 00:52:25.100

David Chorney (Guest)

and this is in theory. This is how the theory of it's all supposed to work having 15 government agencies.

00:52:25.900 --> 00:52:43.330

David Chorney (Guest)

So a lot of these agencies to do work with outside non. We have a group called non government data like in the OP cops observations, so they're supposed to be reaching out to some of these outside sources of the see what they're doing as well.

00:52:44.740 --> 00:52:51.440

David Chorney (Guest)

But that's TBD we'll see how that works, but there is a process for it, so hopefully.

00:52:52.030 --> 00:52:55.080

David Chorney (Guest)

There will be outreach to these private sector as well.

00:52:59.220 --> 00:53:02.440

David A Strand

OK and Uh Joshua did add additional.

00:53:02.970 --> 00:53:14.340

David A Strand

Uh tack onto his comment earlier also there's a National Weather Service Newair course that that could be reached out to Steve did that satisfy your question there.

00:53:21.570 --> 00:53:22.070

David A Strand

Yes.

00:53:23.050 --> 00:53:23.830

David A Strand

Yes, thanks.

00:53:25.120 --> 00:53:34.310

David A Strand

And I'm not sure if they think that it did or was that uh thanks. But anyway, no it's uh that looks like that took care of that, so any others for Dave here.

00:53:36.620 --> 00:53:38.750

Matt Fronzak

Uh and and oh sorry.

00:53:40.110 --> 00:53:47.400

David A Strand

Yeah, Matias as such, I mean, is there a process on how to suggest topics to Icams That should get looked at.

00:53:49.100 --> 00:53:51.840

David Chorney (Guest)

Well, you can always send the email to any of us at Demco.

00:53:52.610 --> 00:53:53.710

David Chorney (Guest)
Former osm.

00:53:54.540 --> 00:54:12.660

David Chorney (Guest)
And then we can pass it on to those committees and say, Hey, you know, we have especially the research. I'm not. I'm part of the cobs committee, some very smart on that. I was in the service is one before the research one. SIM James has been is is our representative.

00:54:13.230 --> 00:54:17.000

David Chorney (Guest)
And so if you have something that's a research topic or something.

00:54:18.060 --> 00:54:28.930

David Chorney (Guest)
You know you can always reach out to him or me and I can forward to them and see what they want to do with it, you know that's something that's important obviously.

00:54:31.830 --> 00:54:33.170

David Chorney (Guest)
But that's an excellent question.

00:54:39.240 --> 00:54:42.810

David A Strand
That's why Matthias is the Co chair, he's asked excellent questions.

00:54:44.980 --> 00:54:48.160

David Chorney (Guest)
So I see here? How can early career scientists get involved?

00:54:48.690 --> 00:54:49.420

David Chorney (Guest)
Uhm.

00:54:50.690 --> 00:55:00.430

David Chorney (Guest)
Usually if they know about icams they can talk to their supervisor and say, Hey, you know how do I get involved in? How do I become a member of one of these working groups or such?

00:55:01.020 --> 00:55:02.300

David Chorney (Guest)
And because

00:55:03.200 --> 00:55:10.740

David Chorney (Guest)
there's probably somebody already there, but trust me. Most of those positions and members in that are only going to do it for a year or 2 'cause it is a volunteer.

00:55:11.340 --> 00:55:12.040

David Chorney (Guest)

So.

00:55:13.050 --> 00:55:15.110

David Chorney (Guest)

Uh we, we would love to have new people.

00:55:15.840 --> 00:55:24.070

David Chorney (Guest)

Uhm volunteer 'cause you know when something 's first starts up there's always kind of volunteers that as things progress over years sometimes.

00:55:26.110 --> 00:55:27.850

David Chorney (Guest)

It's harder to get those volunteers.

00:55:30.590 --> 00:55:36.590

David A Strand

And there's 2 other questions on the second one first and just kind of Tide to what we're just talking about Matt.

00:55:37.220 --> 00:55:40.050

David A Strand

Uh asked if should I cams I'm imco.

00:55:40.700 --> 00:55:45.830

David A Strand

Have a presence at the AMS annual meeting this January to attract young scientists.

00:55:46.380 --> 00:55:48.260

David Chorney (Guest)

Awesome question yes, they already are.

00:55:49.430 --> 00:55:50.240

David A Strand

There you go.

00:55:49.850 --> 00:55:53.360

David Chorney (Guest)

Yeah, we are, we are presenting it in January.

00:55:50.910 --> 00:55:51.520

David A Strand

Uh.

00:55:55.190 --> 00:56:01.350

David A Strand

And Randy Basque asked if someone just learning about items and really wants to be on one of the committees.

00:56:02.030 --> 00:56:07.100

David A Strand

Is it too late uh if not? How do they go about requesting to be on a committee?

00:56:08.080 --> 00:56:13.090

David Chorney (Guest)

Well, first of all I would if someone in your agency so FA in Randy 's case.

00:56:16.140 --> 00:56:26.710

David Chorney (Guest)

You tell me what you'd like to do, I can always reach out and and see if they're looking for new members still or find out who's the like. FAA Rep on.

00:56:27.850 --> 00:56:33.610

David Chorney (Guest)

Whatever committee there is right now and when that when they leave, you could take their place?

00:56:34.740 --> 00:56:48.880

David Chorney (Guest)

And they're very limited, they're they're trying to keep these members and committees. The lists are very tight very controlled every position has to be approved by a senior SES and those agencies.

00:56:49.390 --> 00:56:55.820

David Chorney (Guest)

Uh so like Grady, can't just say. Hey, I wanna be on such and such committee and Dave Charney, goes and puts him on the roster.

00:56:56.730 --> 00:57:10.340

David Chorney (Guest)

We can't we're not allowed to do that. They're they're trying to keep these groups small tight and one representative from each agency and the reason they do. That is say if you had a group that had 20 people and 5 of them were from FAA.

00:57:11.440 --> 00:57:19.680

David Chorney (Guest)

Well, you know how that committee is going to slant then right. It's Gonna Slam. Tord CFA so they're trying to just have one Rep from each each agency.

00:57:20.920 --> 00:57:23.160

David Chorney (Guest)

So if you have something you're interested in.

00:57:23.830 --> 00:57:28.370

David Chorney (Guest)

Well, the best thing is, and I see here Bill Bolman says I'm the FA Rep so.

00:57:29.040 --> 00:57:43.570

David Chorney (Guest)

I know Bill and Randy know each other so they can talk but but that's how it was should work. Find out for your senior leader boss and your agency who's part of Idcams and say, Hey next time you're looking for volunteers. I want to do that.

00:57:40.380 --> 00:57:40.620

Wang, Frank (Volpe)

Wow.

00:57:46.180 --> 00:57:52.780

Bass, Randy (FAA)

Alright, well, thanks Dave where where we've reached the the time limit. I appreciate the.

00:57:52.170 --> 00:57:52.550

David Chorney (Guest)

No.

00:57:53.510 --> 00:58:06.630

Bass, Randy (FAA)

The information on the answering the questions and and in our end as far as my question is actually more for some of the smaller agencies that are you know more non weather related than than the others.

00:58:04.970 --> 00:58:05.250

David Chorney (Guest)

There.

00:58:07.550 --> 00:58:08.460

David Chorney (Guest)

I figured so.

00:58:07.570 --> 00:58:11.880

Bass, Randy (FAA)

'cause Yeah, I I know who my rap is since he's my boss.

00:58:10.200 --> 00:58:11.730

David Chorney (Guest)

Yeah, I kinda figured you did, but

00:58:13.320 --> 00:58:27.140

Bass, Randy (FAA)

But yeah, thank thank you for that and if anybody else, has any questions. You know feel free to ask them in the chat and we can provide them to to Dave and he can get back to you probably on a on a one on one basis.

00:58:28.370 --> 00:58:31.260

Bass, Randy (FAA)

But again thank you very much.

00:58:32.070 --> 00:58:35.000

David Chorney (Guest)

and I gave you my email so if someone wants to email me that's fine.

00:58:35.620 --> 00:58:35.970

Bass, Randy (FAA)

Right.

00:58:37.030 --> 00:58:44.320

Bass, Randy (FAA)

OK let's uh let's move on and we're going to start our first session of the day and.

00:58:46.050 --> 00:58:47.080

Bass, Randy (FAA)

I think what I'll do.

00:58:53.030 --> 00:58:53.370

Bass, Randy (FAA)

Let me know.

00:58:56.760 --> 00:58:58.480

Bass, Randy (FAA)

What I will start with is the?

00:58:58.530 --> 00:58:58.980

Bass, Randy (FAA)

Yeah.

00:59:02.690 --> 00:59:10.880

Bass, Randy (FAA)

I will introduce the first presenter and have them talk and then we'll go through and and basically the plan is each.

00:59:11.130 --> 00:59:24.250

Bass, Randy (FAA)

Uh panelists will get about 5 to 7 minutes or so to to talk about their organization or themselves or what they do, and and as far as a supporting the OR supporting aviation weather.

00:59:24.880 --> 00:59:33.330

Bass, Randy (FAA)

Uh some of them have slides and I'll bring those up as they do. Others don't. But I'll start with a quick bio on each person.

00:59:33.990 --> 00:59:36.990

Bass, Randy (FAA)

Uh so I think what I'll do is.

00:59:38.590 --> 00:59:40.150

Bass, Randy (FAA)

I will start out with.

00:59:44.150 --> 00:59:47.580

Bass, Randy (FAA)

Let's start with Joshua Mobile Joshua Malloy.

00:59:48.690 --> 00:59:53.070

Bass, Randy (FAA)

From Aviation, the Alaska aviation weather unit.

00:59:53.930 --> 00:59:54.720

Bass, Randy (FAA)

And.

00:59:56.230 --> 00:59:56.700

Bass, Randy (FAA)

Uh.

00:59:57.450 --> 01:00:25.790

Bass, Randy (FAA)

Joshua is the warning coordination meteorology meteorologist of the dual office is actually the Alaska aviation weather unit and the Alaska at the Anchorage Volcanic Advisory Center in that role. He serves as a liaison between the office and interested parties of Aviation Meteorology for their area of responsibility, which is pretty huge. Now he's working there since 2014 and has been part of the Weather Service since 2008.

01:00:26.440 --> 01:00:26.960

Bass, Randy (FAA)

Uhm.

01:00:27.550 --> 01:00:50.710

Bass, Randy (FAA)

He did have several years stent in the private sector meteorologists. Meteorology formally at WSI and 4 years of active duty. Air Force service serving in Air Mobility Command. So, just a minute. Josh and let me. Bring up your your slides and then we'll go ahead and get started.

01:00:52.590 --> 01:00:53.340

Joshua Maloy (NWS-AAWU) (Guest)

Alright sounds good.

01:01:18.530 --> 01:01:20.030

Bass, Randy (FAA)

I promise I do have him here.

01:01:28.540 --> 01:01:29.220

Bass, Randy (FAA)

That's it.

01:01:48.780 --> 01:01:50.490

Bass, Randy (FAA)

Hold on I know good and well I have it up.

01:01:51.520 --> 01:01:52.280

Bass, Randy (FAA)

I have seen it.

01:01:59.140 --> 01:01:59.570

Bass, Randy (FAA)

Ah.

01:02:02.400 --> 01:02:03.460

Bass, Randy (FAA)

Alright Here we go.

01:02:10.000 --> 01:02:10.760

Bass, Randy (FAA)

Hi do you see it?

01:02:11.710 --> 01:02:13.840

Joshua Maloy (NWS-AAWU) (Guest)

I do, I do thank you Randy?

01:02:12.910 --> 01:02:13.230

Bass, Randy (FAA)

Right.

01:02:14.910 --> 01:02:45.000

Joshua Maloy (NWS-AAWU) (Guest)

And a good day to everybody who's out there on the call as mentioned Josh Malloy here representing the last region of the National Weather Service. The last Gation weather unit also known as the awoo and the Anchorage volcanic ash advisory center also known as the Anchorage back one coordination meteorologist at the office as mentioned basically a liaison in interface between my office and interested parties of Aviation Meteorology, reaching out and engaging with users and customers of our products.

01:02:45.210 --> 01:03:16.170

Joshua Maloy (NWS-AAWU) (Guest)

Trying to ascertain whether or not what we're providing is actually useful what's not so useful if it is useful? How it's actually being leveraged in decision making for operations? How are those customer operations evolving and making sure that we're staying abreast of that in our office and keeping our operations fresh and relevant as well as mentioned, we're a dual office. So the staff were engaged in Meteorological Watch office responsibilities are also monitoring the volcanoes.

01:03:16.230 --> 01:03:31.860

Joshua Maloy (NWS-AAWU) (Guest)

So 2 very important services are being provided by our office and just a tad bit. We're also Co located

with a few other Weather Service entities. We're all in the same complex pretty close to the Ted Stevens International Airport next slide, please.

01:03:38.050 --> 01:04:06.500

Joshua Maloy (NWS-AAWU) (Guest)

So for the overview of services area of responsibility. Basically, the area that you see on the map there. That's bounded by the yellow lines. That's essentially the the Anchorage flight information region or or furs. It's about 2.4, 1,000,000 square miles of airspace. So our staff are providing sigmets and Airmets area forecasts and an array of Aviation Graphics, the traditional hazards.

01:04:06.620 --> 01:04:09.120

Joshua Maloy (NWS-AAWU) (Guest)

Listed there the icing the turbulence thunderstorms.

01:04:09.420 --> 01:04:33.240

Joshua Maloy (NWS-AAWU) (Guest)

Uh outlook charts surface Maps, etc, providing phone briefings to the general aviation community. I think we have a very good rapport with the with the Bush pilot community up here pre pandemic. It would not be unusual for some of them to actually stop by the office engage with us. Ask us questions directly about you know, maybe flights that they had planned in the in the near future.

01:04:34.690 --> 01:04:47.620

Joshua Maloy (NWS-AAWU) (Guest)

We also provide briefings for government agencies for exercises specific exercises in missions in more recent years. There's more been more of a focus upon the high Arctic on the in the Arctic Ocean.

01:04:48.130 --> 01:05:01.880

Joshua Maloy (NWS-AAWU) (Guest)

Uh we have entities that are out there that are assessing the ice pack checking out on wildlife doing wildlife. Surveys things of that nature. So we do provide some support, also for those types of endeavors next slide, please.

01:05:09.030 --> 01:05:38.660

Joshua Maloy (NWS-AAWU) (Guest)

Continuing on for the uh volcanic ash operation piece on the map there at least the the one on the top of what you see, there basically is the the northern rim of the Pacific Ocean 's Ring of Fire so those orange slash red triangles that you see, those are the volcanoes. There are over 50 active volcanoes in the Alaska region. But we're also mindful of volcanoes over the Kamchatka Peninsula and the Coral Highlands area prevailing winds.

01:05:38.960 --> 01:05:51.980

Joshua Maloy (NWS-AAWU) (Guest)

Generally, out of the West, a subset of those volcanic ash eruptions provided there's enough volcanic ash will move you know eastward right into our area for responsibility and you can see that the jet routes pretty much go right through that area.

01:05:52.650 --> 01:05:56.640

Joshua Maloy (NWS-AAWU) (Guest)

And obviously there's gonna be domestic and international coordination.

01:05:58.320 --> 01:06:10.900

Joshua Maloy (NWS-AAWU) (Guest)

The map below you'll see that is actually a map of the area of responsibility for the 9 volcanic ash advisory centers across the world. There's 9 of them 2 of them fall under the auspices of Nola, Washington DC vac.

01:06:12.080 --> 01:06:41.960

Joshua Maloy (NWS-AAWU) (Guest)

Which actually falls under nez dis is one of them and they then the other ones up here in Anchorage? Our area of responsibility is actually that bolded area on the map in the top left hand. Part of that map so we share a an international border with Tokyo vac to the West. We share a border along the eastern portion of rar with the Canadians at Montreal. Vac would be the other international one that we coordinate with and and then to our South.

01:06:42.100 --> 01:06:56.230

Joshua Maloy (NWS-AAWU) (Guest)

We share a border with with Washington. Vax so all the coordination efforts handovers of responsibility. The graphics the advisories that we put out that all kind of fills the international Airways Volcano Watch Charter next slide, please.

01:07:02.610 --> 01:07:30.390

Joshua Maloy (NWS-AAWU) (Guest)

Forecast challenges in Alaska if I had to just put one on you guys. It's observation sparseness sparseness with regards to meet our sparseness with regards to bloom, sounding raop sites sparseness with regards to radars highlighted there that little image on the bottom left kind of shows the radar network of the Lower 48. I have Alaska kind of superimposed on there, so those blue circles. Those are the radars that they're Privy to in the Lower 48.

01:07:30.940 --> 01:08:01.770

Joshua Maloy (NWS-AAWU) (Guest)

The open red circles you see that's what we're that's what we have available in Alaska, 7 radars for the entire state. So obviously large subsections of the state and at the adjacent Marina errors are not sampled by radar and other observation networks, another challenge. We have is the pilot report density. This is pretty much come to the forefront. When we issue sigmets or airmets or just in general. We are or highlighting area that we believe will be impactful for aviation meteorology well, we know that a subset.

01:08:01.900 --> 01:08:26.680

Joshua Maloy (NWS-AAWU) (Guest)

Maybe a small portion of the customers will see that information and decide not to fly that day and then the rest will say well. We're going to fly, but we're just not necessarily going to fly through that area. Maybe just above it below it or around it and as such. We don't necessarily get the verification to kind of

corroborate whether or not those significant conditions actually occur. So it's a little bit of a catch 22 and certainly a challenge that we run into up here in Alaska next slide, please.

01:08:30.890 --> 01:08:59.580

Joshua Maloy (NWS-AAWU) (Guest)

As far as areas of research need. I know there's gonna be more discussion about this later don't necessarily have to cover all these I would say there's probably 2 on there. They're probably more unique to Alaska, the first. The 3rd and the 5th bullets up there. It's so better guidance to kind of project. Volcanic ash density and its eventual dispersion. You see the little image on the bottom that was a major eruption at readout volcano and that was a higher visibility. High impact event because it's a Cook Inlet volcano. We actually had some trace ashfall.

01:09:00.280 --> 01:09:30.190

Joshua Maloy (NWS-AAWU) (Guest)

In the city of Anchorage with that particular event, but not all events are you know necessarily that impactful that large obviously with time with the passage of time and distance from the volcano. Typically, the ash is going to start to dissipate but that threshold of where it is still a an aviation hazard, posing a true hazard to to aviation operations. And when does it become more of a nuisance. You know S oh 2 cloud steam and smoke. I think we need more research on that. We certainly would benefit from better guidance on.

01:09:30.490 --> 01:09:38.520

Joshua Maloy (NWS-AAWU) (Guest)

Of dispersion of a volcanic ash same thing, though, that last bullet there about the probabilities of blowing dust and Resuspended volcanic ash relic ash.

01:09:38.890 --> 01:10:09.940

Joshua Maloy (NWS-AAWU) (Guest)

Uh they bloat that blows around gets picked up transported by strong winds and then blowing dust. You know how how low will that visibility get, how broad a scope will that blowing dust be? How high will that blown the top of that blowing dust layer between again. We could use better guidance for that stuff, and then the 1:00 in the middle. There about the cold air aloft and you know consistently the FAA. Let's our local CWS you know, and also us in the Eva when The CW is not in the shop that they want to know where those temperatures -65 degrees Celsius or colder are.

01:10:11.030 --> 01:10:25.750

Joshua Maloy (NWS-AAWU) (Guest)

Yeah, you know it. It's possible some of those aircrafts that are going through those extreme temperatures. At least for an appreciable period of time may suffer some you know performance problems. So they want to know where those areas are and again. We don't really have really good guidance for that next slide, please.

01:10:29.100 --> 01:10:35.710

Joshua Maloy (NWS-AAWU) (Guest)

That pretty much concludes all I have, I have some contact information below look forward to the discussion and thank you for your time? Thank you.

01:10:43.970 --> 01:10:46.330

Bass, Randy (FAA)

Alright thank you Josh and uh.

01:10:48.980 --> 01:10:56.900

Bass, Randy (FAA)

Now we're going to move to another. Josh we're going to go to Joshua shake from aviation weather center.

01:11:03.690 --> 01:11:04.980

Bass, Randy (FAA)

And Josh I.

01:11:09.700 --> 01:11:13.310

Bass, Randy (FAA)

I know you don't have any slides so I'll let you go ahead and get started.

01:11:14.360 --> 01:11:26.540

Joshua Scheck (Guest)

Alright thanks a lot Randy Yeah, sorry folks you get the Joshua Tag team from nose. National Weather Service. Today I'm I'm I'm Joshua Schachter, the.

01:11:26.990 --> 01:11:36.360

Joshua Scheck (Guest)

Uh the aviation support branch chief at the aviation weather center in Kansas City and in Warrenton.

01:11:38.650 --> 01:11:40.730

Joshua Scheck (Guest)

So we have a?

01:11:40.790 --> 01:11:49.770

Joshua Scheck (Guest)

Uh uh a very similar mission to the awoo the Alaska aviation weather unit that you just heard about.

01:11:50.270 --> 01:11:50.780

Joshua Scheck (Guest)

Uhm.

01:11:51.850 --> 01:11:55.190

Joshua Scheck (Guest)

With a a few key differences.

01:11:55.750 --> 01:12:15.760

Joshua Scheck (Guest)

Uh so just overall, aviation weather center very similar products we issue segments. We issued Air G. Airmets still have a uh some some area forecast text products mixed in we also do a lot more convective.

01:12:15.960 --> 01:12:45.500

Joshua Scheck (Guest)

Uh work whereas we do less with the volcanic ash. We do, we issue products we monitor and and deal with those issues, but but we have a separate portion of volcanic ash advisories. A group that's contained within asdas, which is another line office within Nova, who issues those for for the area of responsibility closer to Konus.

01:12:46.080 --> 01:12:46.710

Joshua Scheck (Guest)

Uhm.

01:12:48.200 --> 01:13:00.930

Joshua Scheck (Guest)

We have a a few branches so well, we'll start with the operational tip of the Spear. Our national aviation meteorologists that are embedded within the FAA command center.

01:13:01.690 --> 01:13:08.310

Joshua Scheck (Guest)

Uh their their main focus is is traffic flow planning and advising.

01:13:08.360 --> 01:13:14.390

Joshua Scheck (Guest)

Uhm of weather conditions to the FAA that they ATC SCC.

01:13:15.750 --> 01:13:20.460

Joshua Scheck (Guest)

The FAA command center traffic flow planners and.

01:13:23.630 --> 01:13:28.250

Joshua Scheck (Guest)

Folks, who are focused on the efficiency of flight in the national airspace system.

01:13:28.790 --> 01:13:43.900

Joshua Scheck (Guest)

Uh we have a uh a domestic operations branch, which consists of a number of deaths that focus on on graphical airmets and sigmets issuance as well as.

01:13:46.360 --> 01:13:52.650

Joshua Scheck (Guest)

The the aforementioned convective the traffic flow management convective forecast or TCF.

01:13:53.320 --> 01:14:17.270

Joshua Scheck (Guest)

And and then we have an international Operations Branch, which is is highly focused on on world area forecast center duties as well as some tropical duties found offshore down in Gulf of Mexico, Caribbean and and across parts of of.

01:14:19.140 --> 01:14:21.680

Joshua Scheck (Guest)
Of the the Eastern Pacific.

01:14:21.880 --> 01:14:30.870

Joshua Scheck (Guest)
Uh so we are one of 3, met Lauches. They awoo handles Alaska and the Honolulu forecast office handles.

01:14:30.930 --> 01:14:34.050

Joshua Scheck (Guest)
Uh Oceanic out in that direction.

01:14:34.700 --> 01:15:04.720

Joshua Scheck (Guest)
And and their area the the 4th branch is the aviation support branch. So I'm I'm the chief of that branch and what a lot of folks. I think forget when we talk operations in the National Weather Service that that has lots of implications. We typically think of the the human over the loop forecaster or warning operator who is producing the products that then get decent disseminated.

01:15:04.780 --> 01:15:08.200

Joshua Scheck (Guest)
We also have a number of of automated products.

01:15:08.960 --> 01:15:19.780

Joshua Scheck (Guest)
Uh within aviation support branch. We support all aspects of that all the data flow. All of the the dissemination processes. We we look at.

01:15:20.930 --> 01:15:28.260

Joshua Scheck (Guest)
At ways to pick up efficiencies within the Noah IT infrastructure. We have 3 main groups.

01:15:29.800 --> 01:15:55.150

Joshua Scheck (Guest)
The The The Web team and I'll I'll plug Austin Cross is going to speak tomorrow and present the future vision for for really modernizing our web services, but aviationweather.gov is hosted out of out of our branch or at least the design and and the code and and support using Noah infrastructure.

01:15:57.360 --> 01:16:15.410

Joshua Scheck (Guest)
And that website receives up to 80,000,000 hits a day so it's it's about as busy as4.com or time.com or newyorktimes.com. So it's not a small site and I'm I'm sure, all of you folks are familiar with that, if not aviationweather.gov.

01:16:15.480 --> 01:16:15.970

Joshua Scheck (Guest)
Uhm.

01:16:17.090 --> 01:16:27.900

Joshua Scheck (Guest)

And it's a great time to start looking at it because it it is about to evolve considerably to a much more mobile friendly interface and then.

01:16:28.020 --> 01:16:35.860

Joshua Scheck (Guest)

Uh another team is the IT infrastructure that supports all of the operations so all of the virtual machine.

01:16:36.460 --> 01:16:46.890

Joshua Scheck (Guest)

Infrastructure all the networking that connects forecasters today to that that channels piresps that that gets the the products disseminated.

01:16:47.500 --> 01:16:55.240

Joshua Scheck (Guest)

And then finally we have a uh a science group. Uh science team within the aviation support branch in that group.

01:16:55.860 --> 01:16:56.480

Joshua Scheck (Guest)

Uhm.

01:16:57.340 --> 01:17:10.220

Joshua Scheck (Guest)

All of the all 3 of those groups are made up of both feds and Syrah associates. That's Colorado State University Institute for research in the atmosphere, it's a partnership.

01:17:10.750 --> 01:17:12.230

Joshua Scheck (Guest)

Uh cooperative.

01:17:13.450 --> 01:17:24.610

Joshua Scheck (Guest)

That group on the science side is is where the Magic happens in terms of research to operations that's where the aviation weather testbed.

01:17:27.400 --> 01:17:37.120

Joshua Scheck (Guest)

Finds it it's it's used as we as we look to evolve operations and move things forward so some things that are working well.

01:17:37.160 --> 01:17:37.770

Joshua Scheck (Guest)

Uhm.

01:17:38.860 --> 01:17:43.110

Joshua Scheck (Guest)

We we have a uh a pretty good.

01:17:45.420 --> 01:18:16.100

Joshua Scheck (Guest)

A pretty good idea of mutually beneficial ways to evolve our our services between the FAA and and and the aviation weather center and and and pretty good partnership with with NTSB I. I think those partnerships are strong course. We all have our our disagreements. But I think when you lay the Venn diagram out there's a lot of overlap between all 3 agencies and I think.

01:18:16.260 --> 01:18:20.070

Joshua Scheck (Guest)

That's allowing us to move our our operations forward.

01:18:20.410 --> 01:18:50.150

Joshua Scheck (Guest)

Uhm I think some things that that needs some improvement. There are so many entities within FAA and and the sheer size of FAA compared to NTSB and and Noah or the National Weather Service. I think I think I'm not sure that we, we have a a bit of an inequity between number of people that need to be in. In the loop and and collaborated with and I I'm not sure that that.

01:18:50.210 --> 01:19:11.900

Joshua Scheck (Guest)

Balance is helping us so I I feel like there are so many people that have to be involved on the FAA side compared to the much smaller group on the no side, so that's a personal opinion and and just an area where where we, we really are are doing our best to focus and and try to close those gaps.

01:19:13.360 --> 01:19:43.110

Joshua Scheck (Guest)

And and then Secondly, I I think the the data flow back and forth between FAA and Noah what while we've had some tremendous successes and I. I'm I think there's cause for for great hope I'm seeing very inspirational conversations between FAA and Noah on on the observation network and the acquisition of YDR and and the increasing pireps.

01:19:43.330 --> 01:20:04.380

Joshua Scheck (Guest)

Emphasis and I also think that you know, we've had some struggles moving data from NOAA into CSS weather as it it. It gets stood up and we we also have some struggles going backwards from FAA back to nola and and those have operational impacts that I I think are worth noting.

01:20:05.370 --> 01:20:09.580

Joshua Scheck (Guest)

With that I I think I checked my time Randy and I I'm OK but.

01:20:10.630 --> 01:20:12.740

Joshua Scheck (Guest)

Uh I think I can hand it back over to you.

01:20:18.790 --> 01:20:22.820

Bass, Randy (FAA)

OK, thank you Josh next we're going to uh.

01:20:23.050 --> 01:20:29.000

Bass, Randy (FAA)

Uh hear from Kurt Squires at the New York CWSU.

01:20:29.720 --> 01:20:30.350

Bass, Randy (FAA)

Uhm.

01:20:31.130 --> 01:20:37.160

Bass, Randy (FAA)

Correct actually back home, he was born on Long Island in Mastic Mastic, New York.

01:20:39.550 --> 01:21:02.630

Bass, Randy (FAA)

Then decided that he liked island so he went to the University of Hawaii at Manoa. I got both his bachelors and Masters degree. From there and then went back to to Long Island and has been at the CWS you since then, so Kurt. I know you're busy with the weather going on there, so I'll go ahead and hand it over to you and I will.

01:21:03.260 --> 01:21:05.350

Bass, Randy (FAA)

Ask get your slides here.

01:21:07.100 --> 01:21:07.700

Bass, Randy (FAA)

Set up.

01:21:13.640 --> 01:21:14.550

Bass, Randy (FAA)

All right over to you.

01:21:26.370 --> 01:21:27.750

Bass, Randy (FAA)

Right Kurt are you still there.

01:21:28.140 --> 01:21:30.710

David A Strand

He says he's having trouble getting us Mike Unmute.

01:21:32.270 --> 01:21:41.620

David A Strand

In Randy while I got you I assumed that you'd like the whole questions. Let me grouping together until after all, the panelists have had their intro.

01:21:42.490 --> 01:21:43.580

David A Strand

Speaking is that correct.

01:21:43.320 --> 01:21:45.350

Bass, Randy (FAA)

Yeah, yeah, let's yeah, let's do that.

01:21:44.820 --> 01:21:50.340

David A Strand

OK, Alright. Let me see if I can uh Kurt you still.

01:21:51.380 --> 01:21:52.520

David A Strand

Trying to speak there.

01:21:54.810 --> 01:21:56.360

David A Strand

Let me see.

01:21:57.660 --> 01:21:59.120

David A Strand

If I can unmute him.

01:22:01.820 --> 01:22:03.350

David A Strand

The mysteries of teams.

01:22:06.600 --> 01:22:10.760

Matt Fronzak

Dave I looked it's a It's grayed out right now, so.

01:22:12.800 --> 01:22:13.630

Matt Fronzak

Uhm.

01:22:13.090 --> 01:22:13.440

David A Strand

Yeah.

01:22:13.490 --> 01:22:13.900

David A Strand

Yeah.

01:22:14.090 --> 01:22:14.490

Bass, Randy (FAA)

New York.

01:22:15.320 --> 01:22:31.320

Bass, Randy (FAA)

Do you want? Why don't see if uh Q? Maybe he can log out and log back in and in the meantime, we'll go ahead and we'll go to Corey Gempler in the meantime, and let let Corey go ahead and talk so.

01:22:32.130 --> 01:22:38.570

Matt Fronzak

Yeah, and and Kurt just leave the meeting and come on back in sometimes that seems to cure whatever ails the audio.

01:22:32.240 --> 01:22:32.710

Bass, Randy (FAA)

Uhm.

01:22:40.780 --> 01:22:44.710

Bass, Randy (FAA)

So so in the meantime, we like I said, We'll go ahead to.

01:22:44.760 --> 01:23:04.970

Bass, Randy (FAA)

Like uh corn gambler, he's the manager of the weather services for a federal express. And, yes, he's not in the federal government. But I thought it would be good to have a a kind of that end of the Spear, who's receiving the information from the from the government to to talk about it, so uh Cory Go ahead.

01:23:07.770 --> 01:23:08.840

Kory Gempler

Thanks Randy and

01:23:09.820 --> 01:23:13.260

Kory Gempler

thanks for everyone for organizing this Matias and.

01:23:14.570 --> 01:23:23.740

Kory Gempler

And Mister Franzak through glad to be here today, so we're going to talk about. I don't have any slides. We're gonna talk about the 848 today?

01:23:24.460 --> 01:23:29.580

Kory Gempler

And from an airline perspective industry perspective just some background on the A 4 A.

01:23:30.280 --> 01:23:33.300

Kory Gempler

Oh, it's a basically a A work group.

01:23:34.930 --> 01:23:46.900

Kory Gempler

That I'll just read it here. It's a work group that advocates on behalf of its members to shape global policies and measures that promote safety, security and healthy US airline industry so.

01:23:47.590 --> 01:23:58.890

Kory Gempler

The airlines for America works with the labor issues. Congress and other administrative industries agencies to to get the the best out of the?

01:23:59.940 --> 01:24:07.670

Kory Gempler

The Mass and what's good for the airline so I am this year as chairman of the a 4 a meteorology committee.

01:24:08.290 --> 01:24:26.340

Kory Gempler

So the Meteorology Committee there are certain committees and the 84 A and they always report up to the operations council which again is involved with talking to agencies like the FAA the NTSB National Weather Service.

01:24:26.400 --> 01:24:57.590

Kory Gempler

Uh ATC side of things and our managing director is bill. McDonald, who act ironically used to be chief pilot here at FedEx. So he is helped us tremendously, the a 4 a meteorology group. Sometimes it's called the Met Working Group as well. So the MWG but we have a 10 members in the A 4 A and one associate member, which is Air Canada. So those those members for the on the A 4 A or Alaska.

01:24:57.640 --> 01:25:04.010

Kory Gempler

American Atlas Delta FedEx, Hawaiian JetBlue, Southwest United and UPS and then.

01:25:04.760 --> 01:25:34.660

Kory Gempler

As I mentioned the Associate Number Air Canada. So we as a group gets together and we we talk about issues internally and then we also collaborate and it briefings from mostly the the FAA and the National Weather Service. Obviously, they impact is the most the The Committee Chairman Rolls over every year to the vice chairman. So this is actually my second go around as the chairman I did it about.

01:25:34.780 --> 01:25:43.940

Kory Gempler

But I think 6 years ago, Randy Baker from UPS is the vice chair right now, so he will roll up to the chairman of the group.

01:25:45.070 --> 01:25:46.270

Kory Gempler

2022.

01:25:46.860 --> 01:25:48.680

Kory Gempler

And we will come.

01:25:49.580 --> 01:25:52.530

Kory Gempler

Elect or appoint a vice chair at that time.

01:25:53.060 --> 01:25:57.850

Kory Gempler

Uh to serve under rainy that will take over as the chairman and 23.

01:25:58.770 --> 01:26:05.910

Kory Gempler

So that's a little bit about our group. Some of the hot topics that we work on obviously there's been a lot of talk about.

01:26:06.970 --> 01:26:22.760

Kory Gempler

With the FAA about mixed phase precipitation and implementing freezing fog into deicing procedures. That's been the hot topic this summer, so we have a pretty good relationship with the FA Chuck Enders.

01:26:22.820 --> 01:26:30.720

Kory Gempler

Uh so your author or roll through coming on and talking to us about these issues. We also do.

01:26:31.530 --> 01:26:37.930

Kory Gempler

Of meat twice a year face to face and now we've had to do that virtually for the last 1218 months.

01:26:38.610 --> 01:26:59.600

Kory Gempler

And we usually meet in the spring in the fall or late spring early winter. We met in June. Virtually we had a very good meeting and all day meeting with guest speakers from the FAA and National Weather Service and so our next. One is coming up here at the end of November, will will genar twice a year face to face meeting virtually.

01:27:00.300 --> 01:27:05.700

Kory Gempler

With guest speakers one of the hot topics that come up.

01:27:06.530 --> 01:27:10.700

Kory Gempler

Is the outage is for the Weather Service so we had Michelle minelli?

01:27:11.810 --> 01:27:38.990

Kory Gempler

Who's the director of the office of dissemination at the Weather Service talked to us last June about the issues that they're having just to get some clarity on the struggles and the challenges that they're up against and she outlined you know the legacy systems and the server issues that they were dealing with, and how they were going to address them so that was very informative. Obviously Randy you've been on their part saved it as part of a WRP.

01:27:39.040 --> 01:27:53.220

Kory Gempler

He you know surface weather Steve Kim Kevin Johnston. We we know most of these names. Bill bombings group. Obviously Bruce Entwistle from the Weather Service and NOAA is on so.

01:27:54.310 --> 01:28:02.460

Kory Gempler

I think we're doing pretty good is about you know what we're doing well. I think we're communicating better. I think these face to face meetings with the airlines.

01:28:03.220 --> 01:28:10.100

Kory Gempler

Uh with the agencies is is bringing out a lot more content and information and information sharing.

01:28:11.580 --> 01:28:19.720

Kory Gempler

So I think that's good. We've also been involved with Bill Murtagh program coordinator at space weather prediction Center on.

01:28:20.330 --> 01:28:26.810

Kory Gempler

I'm doing some table tops and kind of space weather 101 for the airline and specially the dispatchers.

01:28:27.540 --> 01:28:42.110

Kory Gempler

Of airlines to get on and listen to them and because space weather even though it has whether in the name isn't really weather and even a lot of meteorologists are still trying to wrap their head around space weather and.

01:28:42.810 --> 01:28:55.590

Kory Gempler

As we come out of this Psunspot Lowell. This minimum as we ramp up the next 5 years. Obviously space weather is going to be an issue and I can obviously throw a wrench into airline operations so.

01:28:56.230 --> 01:28:57.680

Kory Gempler

I think we're doing pretty good with that.

01:28:57.730 --> 01:28:59.660

Kory Gempler

Uhm I guess.

01:29:00.700 --> 01:29:08.940

Kory Gempler

Maybe one thing, maybe we're not doing so well and I but, I think it's part of the covert thing is everything is kind of siloed right now and we're maybe.

01:29:09.570 --> 01:29:13.700

Kory Gempler

Just kind of coming out a kind of one of our covid caves.

01:29:14.340 --> 01:29:26.320

Kory Gempler

And that's what this group is so good to to tune into one. Find out what the latest is going on. But I think we'll get there as we kind of reconnect come less siloed.

01:29:27.040 --> 01:29:39.080

Kory Gempler

And I appreciate everything you do your group does so, so that's a little bit about the A 4 A and what we're doing, and some things were doing well and some things we could do better but.

01:29:39.730 --> 01:29:42.250

Kory Gempler

Like I said a lot of that I think is tide to come.

01:29:43.110 --> 01:29:45.200

Kory Gempler

What we've done in the last 18 months?

01:29:53.190 --> 01:29:54.290

Kory Gempler

Pass it back to you Randy.

01:29:58.630 --> 01:29:59.660

Bass, Randy (FAA)

OK, thank you Corey.

01:30:00.510 --> 01:30:01.100

Bass, Randy (FAA)

Uhm.

01:30:02.810 --> 01:30:05.360

Bass, Randy (FAA)

In did did Kurt make it back on.

01:30:10.250 --> 01:30:17.460

Matt Fronzak

Really, I just scrolled through the attendee list. And unless Curtis on as a phone number only the answer is no.

01:30:18.670 --> 01:30:19.240

Bass, Randy (FAA)

OK.

01:30:19.640 --> 01:30:28.250

David A Strand

I just see something in the chat where it says he has temporarily joined so I think he may have just while you were talking there.

01:30:19.900 --> 01:30:20.370

Bass, Randy (FAA)

Ah.

01:30:29.280 --> 01:30:30.540

David A Strand

Maybe rejoined

01:30:31.810 --> 01:30:33.010

David A Strand

can we hear you Kurt.

01:30:35.900 --> 01:30:37.330

David A Strand

I'm on via phone.

01:30:38.560 --> 01:30:39.240

David A Strand

He says.

01:30:38.700 --> 01:30:39.270

Bass, Randy (FAA)

OK.

01:30:41.210 --> 01:30:41.730

Bass, Randy (FAA)

Uhm.

01:30:45.870 --> 01:30:49.430

Bass, Randy (FAA)

Which one which one is he and so we can maybe unmute him?

01:30:54.680 --> 01:31:01.410

Matt Fronzak

So there's one phone that it's currently unmuted with the area, 618 area code if that's you could give us a sound check.

01:31:10.240 --> 01:31:11.330

Bass, Randy (FAA)

All right near the

01:31:11.450 --> 01:31:13.110

David A Strand

He says the 618.

01:31:13.510 --> 01:31:18.310

Bass, Randy (FAA)

ah 618 is Shane Cox, who is our next speaker tries.

01:31:14.340 --> 01:31:16.650

David A Strand
Is captain Cox?

01:31:24.730 --> 01:31:31.680

Bass, Randy (FAA)
OK, well, we'll try we'll try again to get him corrected Shane can you?

01:31:33.400 --> 01:31:34.980

Bass, Randy (FAA)
Can you talk and can we hear you?

01:31:37.250 --> 01:31:39.060

+16*****21
Yes, this is Shane you got me.

01:31:39.380 --> 01:31:47.400

Bass, Randy (FAA)
Yes, alright, great will will go to Shane next then and and I come back to a Curt hopefully at the end so.

01:31:48.130 --> 01:32:00.260

Bass, Randy (FAA)
And now we're going to get the kind of the DoD perspective. On on current operations. So kept to Shane Cox is the flight commander the 15th operational weather squadron at Scott Air Force Base, Illinois.

01:32:01.020 --> 01:32:05.810

Bass, Randy (FAA)
Uh he leaves about 35 personnel providing.

01:32:06.920 --> 01:32:18.570

Bass, Randy (FAA)
Environmental intelligence for the Air Force, the army. The Guard and the reserve forces operating at 153 different installations across the 25 state region.

01:32:19.510 --> 01:32:20.240

Bass, Randy (FAA)
Uhm.

01:32:21.240 --> 01:32:35.060

Bass, Randy (FAA)
He's a 2013 graduate of the Air Force Academy and has a Bachelor Science degree in Meteorology and he's even deployed a couple of times to overseas.

01:32:35.780 --> 01:32:43.960

Bass, Randy (FAA)
Uh and including going over to Korea, so let me get your slides up here and we'll go ahead and get started.

01:32:48.300 --> 01:32:57.910

+16*****21

Awesome I appreciate the intro, and good afternoon. Good morning, and good evening, ladies and gentlemen, it's definitely a pleasure to be on board this morning, so thank you for hosting me.

01:32:58.950 --> 01:33:28.880

+16*****21

Uh I do have some slides all kind of run through her briefly on or starting to run short on time. So hopefully get through this quickly. But try and give you the DoD 's perspective on where we stand as far as our mission here at the 15th operational weather squadron, so starting there, you see the task.org chart and there's a few other folks who have or prior Air Force weather and so I wanted to show this just to kind of describe that we're no longer organized under Air Force weather agency, we now are aligned under 16th Air Force.

01:33:28.960 --> 01:33:29.780

+16*****21

Which is under?

01:33:30.310 --> 01:34:00.720

+16*****21

Uh ACC Air Combat Command and we also have the 557th weather wings. So we're trying to be more aligned with the rest of the Air Force in terms of falling under a wing so with that comes you know if there's any sort of request for weather support that needs to go through the institutional process rather than just saying Hey Air Force weather agency can you pick up my support we can't just say yes to everything needs to be vetted and approved so you see the 15th operational weather squadron, there under Scott at Scott Air Force Base.

01:34:00.880 --> 01:34:04.040

+16*****21

Uh noise and we're under the first weather groups and so our training command falls.

01:34:04.620 --> 01:34:06.800

+16*****21

Uh like that, so next slide, please.

01:34:12.010 --> 01:34:42.500

+16*****21

This is our command philosophy, the bottom line here is we're trying to empower our airmen to know that we have you know not only is the weather forecast important? But how can we tie that to operations is that going to allow an aircraft to land or drop a certain munition on a target so not just becoming proficient at the job itself, but also knowing how that ties back into operations. And so by knowing that our airmen now have the capability to provide decision space to our commanders.

01:34:42.660 --> 01:34:45.030

+16*****21

Have to plan and execute missions accordingly.

01:34:45.880 --> 01:34:46.420

+16*****21

Why please?

01:34:49.600 --> 01:35:19.850

+16*****21

But kind of give you an overview kind of alluded to this earlier, but this is our area of responsibility. So it encompasses the northeastern portions of the konus which has about 25 states also includes eastern Canada and also the Arctic. So basically anything North of 60 degrees North latitude in that is 153 sites that we support and approximately 320 joint in total force units. That includes Army Air Force guard and reserve in total that encompass is about 11,000,000 square miles and.

01:35:20.150 --> 01:35:28.670

+16*****21

And all we do support around 490,000 personnel and assets and equipment valued at 2:00, 126 billion dollars so I please.

01:35:31.360 --> 01:36:01.190

+16*****21

Well, how we're organized on the actual operations floor. We do have 151 authorized manpower. Billets you can kind of see the breakdown there. So pretty heavy on the enlisted structure. We do execute 24, 7 operations and how we approach that is what we call teebo threat based operations. So basically that means you know if a certain area is getting hit with severe thunderstorms or tornadoes or what have you. We tried to do allocate personnel to interrogate that threat and get everyone notified who needs to be as far as.

01:36:01.250 --> 01:36:04.320

+16*****21

You know insights affected or operations impacted.

01:36:04.990 --> 01:36:32.100

+16*****21

Uh as far as the breakdown on the operations 4. We do have 12 personnel on the floor at any given time. So you can call it a night or afternoon. And there will always be 12 personnel on the floor. One of those is the senior duty officer, which I'm actually working today. So I don't have the video capability. Unfortunately, we do have shift supervisors as well. So they help manage and supervise the actual forecasters who put out the airfield fork at the tasks, which is a terminal aerodrome forecast and then.

01:36:32.150 --> 01:36:49.660

+16*****21

Uh we, we do have a civilian Overwatch manager who helps produce what we call the threat tracker, which is the 24 to 96 hour outlook across our area of responsibility that looks at anything like heavy rain such as 2 inches in 12 hours severe thunderstorms, etc slide, please.

01:36:54.200 --> 01:36:59.340

+16*****21

This is the missing execution function slide. This is basically talks to some of the higher level.

01:36:59.430 --> 01:37:09.950

+16*****21

Uh missions that we do support so Operation Noble Eagle, which is the eastern area. Defence sector that is our number one priority and at any point we could receive a call too.

01:37:10.000 --> 01:37:35.990

+16*****21

To support that mission, and so a pilot will never be put on hold. He will he or she will always have that? Was support 24 7? Were also the back up to the 25th operational weather. Squadron headquartered out of Davis Monthan Air Force Base for the western area. Defence sector that is their primary mission as far as our aviation weather support. We do have just over 1400 flight where the briefings per month and kind of see the breakdown there, but basically split between Air Force and Army aviation.

01:37:36.740 --> 01:37:54.750

+16*****21

And then another notes Uh specific to our unit here at Scott. We do produce the global aviation hazard charts, so this includes things like upper level and low level icing and turbulence and then also thunderstorms. You kind of see, there in that bottom right hand picture that is a picture of an upper level turbulence that we produce 24, 7.

01:37:55.530 --> 01:37:56.060

+16*****21

Why please?

01:37:58.790 --> 01:38:02.280

+16*****21

So I guess the meat potatoes of the brief here this is the inner HD backup.

01:38:03.100 --> 01:38:33.570

+16*****21

So we are partnered with the Storm Prediction Center in aviation weather center. We do have approximately 25 to 30 airmen on a backup team, so just in case SPC rate. A WC goes down or there's a planned outage. We do support them doing 2 to 3 backup tests per year ever since. We started this support in May of 2009. We've produced approximately 10,000 outlooks and this has been ongoing even despite the COVID-19 crisis sets as still continuing through this day.

01:38:34.130 --> 01:38:34.620

+16*****21

By please.

01:38:37.320 --> 01:39:07.010

+16*****21

I just want to show the quick overview of what our systems flight does so these are the cats that do all the work behind the scenes. We have 3 civilians and 3 active duty airmen who ensure that our entire operation runs without any seems so I do want to highlight their about middle of the slide. We are the number one bandwidth user here on, Scott, which is kind of crazy considering we have a defense

information systems agency building here headquartered at Scott and so you would think that that mission would require.

01:39:07.370 --> 01:39:26.080

+16*****21

Or bandwidth considering they have a global mission but turns out our unit of approximately 150 personnel produce or the number one is bandwidth user on Scott and so we also have the production system for advanced weather interactive processing system to a web switches tide back into the SPCA WC mission.

01:39:26.900 --> 01:39:27.440

+16*****21

Slide please.

01:39:31.190 --> 01:39:34.260

+16*****21

And then this is one of the last slides here we are also.

01:39:35.460 --> 01:40:05.680

+16*****21

Not only are we accomplishing the home station mission here, but we are also tasked to provide base operations support teams, which is a boss team and each boss team has approximately 3 airmen that we send downrange either to the Central Command. AOR places like Iraq, Afghanistan. Kuwait, etc. So there's this constant rotation of personnel. As far as getting their training up-to-date getting familiarized with the theater that they will be supporting and of course, with any mission down.

01:40:05.730 --> 01:40:29.760

+16*****21

In that the Middle East, part of the world. There's limited data not as many observations and therefore the model data that we do have out there is, is the kind of lacking so we do have to rely on current observations and a satellite to help us forecast, but All in all that ties back into the mission execution forecast and it's basically a continuous thing. So we're always constantly sending people out the door.

01:40:30.680 --> 01:40:32.030

+16*****21

So a flight please.

01:40:38.360 --> 01:40:50.850

+16*****21

So that is all I have hopefully those uh quick down and dirty. I'll be here. If you have any questions and I definitely appreciate you having me so I will pass it over to Randy thank you.

01:40:54.880 --> 01:41:00.950

Bass, Randy (FAA)

Alright, Shane. Thank you very much and uh we'll try one last time with Kurt or you.

01:41:02.610 --> 01:41:07.990

Bass, Randy (FAA)

Back on I know he he emailed me, saying he was trying another method, so let's see if that works.

01:41:27.320 --> 01:41:44.730

Bass, Randy (FAA)

Already tell you what, UM will continue to try to get a Curt on here for the next couple of minutes. And if you yeah, if he has just speaks up or or if we see that he's on will try again. Otherwise, David. Why don't you go ahead and start going through some of the questions that have come in?

01:41:45.260 --> 01:41:54.410

David A Strand

Alright, well, they kick it off, we do have 2 questions both for Josh Malloy and.

01:41:55.610 --> 01:41:59.740

David A Strand

Kind of as I would expect from the audience here.

01:41:59.990 --> 01:42:08.650

David A Strand

So anyway floors got a question about in light of the sparse meet our radars and forecast verification.

01:42:10.200 --> 01:42:18.200

David A Strand

Where in Alaska or in the North Pacific? Which would you like to see an increase in infrastructure and what kind of tools would be needed?

01:42:19.920 --> 01:42:23.710

Joshua Maloy (NWS-AAWU) (Guest)

That's a good question, and I you know, maybe in my presentation. I was a little too.

01:42:25.060 --> 01:42:54.210

Joshua Maloy (NWS-AAWU) (Guest)

I mean, I'm not sure what the word is put a you know, we do have a car soundings that can kind of help supplement our raod network. You know, some of the aircraft. They're coming into some of our terminals. We can kind of leverage. Some of that information with regards to the temperature and the relative humidity and Whatnot and then we are heavy users of the FAA webcam network, and there have been more and more that have been put online in the last several years, so those types of investments I think.

01:42:54.260 --> 01:43:24.910

Joshua Maloy (NWS-AAWU) (Guest)

We are are paying immediate dividends in terms of real infrastructure. I don't think from my perspective meet Josh Malloy talking here just a commensurate level of a network that they're Privy to in the Lower 48 just starting to fill in the gaps. Maybe put a few more radars. If you're asking me where to put a put a couple more off to the West and Southwest of Fairbanks put a couple in the over the southwestern mainland near McGrath put a couple more up on let's put some on the Arctic coast. We know that the that the Arctic is getting uh.

01:43:25.160 --> 01:43:56.490

Joshua Maloy (NWS-AAWU) (Guest)

Uh more airplay these days because of its importance in deal with climate change and what not let let's get a couple up there. Let's improve our bui network. I I know you know that's more of a marine operate application. But at least we can see the wind. We can see what the pressure is doing. We can kind of use. Even Buoy data in in conjunction with say some of the scatterometer satellite passes to kind of you know, maybe get a better feel for whether something is actually initializing there that we're seeing and maybe some of the higher resolution models.

01:43:56.830 --> 01:44:25.150

Joshua Maloy (NWS-AAWU) (Guest)

Uh so yeah, some some basic infrastructure investments certainly continue to push out more webcams through some of the the more remote parts of the state. I think that would go a long way for for helping us here in Alaska region and I believe that would actually be downstream support also because you know the models get initialized up here in Alaska. You know all those systems are moving South East towards the Lower 48 that could possibly have good application for them as well.

01:44:29.760 --> 01:44:31.270

David A Strand

Alright and dumb.

01:44:32.460 --> 01:44:36.180

David A Strand

We do have one other question for each Josh from.

01:44:36.990 --> 01:44:39.580

David A Strand

Karen Shelton burn the?

01:44:40.600 --> 01:44:44.750

David A Strand

How much concern and issue is suspended ash?

01:44:45.400 --> 01:44:57.570

David A Strand

Uh referring to volcanic ash and is there some way to determine concentration of the resuspended ash and what is the disruption airspace as a result of resuspended ash?

01:44:58.380 --> 01:45:27.770

Joshua Maloy (NWS-AAWU) (Guest)

OK, yeah, so, so resuspended ash for the most part we only deal with that with one volcano in particular. Now there there is a caveat. To that and I'll get to it, but for the most part, the one that gives us the most problem is the cat mine, over up to volcanic complex. There was a huge a Mega Volcanic eruption back in 1912 over the Valley of the 10,000 smokes and there is ash all over the place and it's relic ash from that particular option over 100 years ago.

01:45:28.250 --> 01:45:58.520

Joshua Maloy (NWS-AAWU) (Guest)

And so in strong northwesterly flow situations that volcanic ash will get picked up and transported well downstream in some cases, you know over a couple 100 miles to the southeast of the volcano complex in terms of the height of that ash in a general sense. Our rule of thumb is usually between 4 and 6000 feet. We have seen occurrences. Some anomalous occurrences up to about 11,000 feet and and typically it is relatively narrow and it kind of pivots.

01:45:58.680 --> 01:46:04.810

Joshua Maloy (NWS-AAWU) (Guest)

You know from a generally from the northwest to southeast trajectory. Sometimes, it pivots a little bit more to the East.

01:46:05.870 --> 01:46:36.070

Joshua Maloy (NWS-AAWU) (Guest)

In terms of how does it actually impact the you know the the disruption of the airspace so there's a couple of things even though it's not they're very high in the in the atmosphere. It is getting pretty close. In some of the cases. We actually do see some of that ash move over Kodiak City, which is a major city if you will over Alaska. It's a It's a hub for some of the smaller airlines to get folks to and from the island. 'cause a lot of Alaska is off of the road system so there are cases or there are sometimes when that.

01:46:36.120 --> 01:46:40.720

Joshua Maloy (NWS-AAWU) (Guest)

Ask can kind of move over Kodiak City and that can potentially shut down the airport.

01:46:41.250 --> 01:47:11.080

Joshua Maloy (NWS-AAWU) (Guest)

And we also know at least you know from some conversations. I don't know if there's anybody from the US Coast Guard on the call, but I know I have failed. At some calls and some of the staffers have fielded some calls from from the Coast Guard wanting to know whether or not, that ash is going to get close to Kodiak City or where where else around Kodiak Island can it be expected. You know, unfortunately year after year, there's a lot of uh search and rescue missions that have to occur out there over the Northwest Pacific and you know the Coast Guard has been deployed out there and so you know it.

01:47:11.130 --> 01:47:14.810

Joshua Maloy (NWS-AAWU) (Guest)

It can potentially impact those operations to come.

01:47:15.820 --> 01:47:46.570

Joshua Maloy (NWS-AAWU) (Guest)

In terms of other volcanic ash resuspension events and and I know there wasn't there was a question there about or there was a follow up to that end result question about concentrations of the ash quite frankly. I don't think there's really any real way for us to determine hey. This is a A Class A event or a Class B event. I mean, the what we do is we collaborate with the Alaska volcano observatories, which is part of the USGS Geological Survey. They have some local modeling that they do out there based off of the strength of the winds.

01:47:47.470 --> 01:48:14.690

Joshua Maloy (NWS-AAWU) (Guest)

But in terms of you know how thick that concentration is we just tend to assume that it is very disruptive and it could potentially pose a you know a significant hazard to any aircraft that are you know, kind of going through that particular area so right now as I understand there's no real way to kind of distinguish. We just kind of have a blanket garden variety assumption that it is pretty disruptive in pretty significant to operations to peel back off to other.

01:48:15.130 --> 01:48:46.660

Joshua Maloy (NWS-AAWU) (Guest)

Uh events up just this year for the first time that I've been Alaska reason I've been up here in Alaska since 2008. We actually had a resuspended ash event from Eniac check, which is on the the Alaska Peninsula, the southwestern port portion of Bristol Bay kind of between King salmon and Cold Bay and we had some strong winds from the southeast, not anything more than typical garden variety. You know 30 knots or so out of the southeast and we actually had resuspend attach that was going into the Bering Sea.

01:48:47.020 --> 01:49:12.470

Joshua Maloy (NWS-AAWU) (Guest)

And you know it's even speaking with some of the people who've been here 2025 years. They could not recall a time when there was actually resuspended ash confirmed resuspended ash by the by the Pirates and also by Aveo of ash moving northwest opposed to southeast and from a different volcano. So I think there's still a lot, that we don't know and it's possible there could be occurring at at other locations. But these are just the ones that you know that we know about right now.

01:49:17.050 --> 01:49:17.310

Bass, Randy (FAA)

Right.

01:49:18.000 --> 01:49:24.800

Bass, Randy (FAA)

Hey David Kelly Yeah. Can we try. Kurt one more time. I see that he's on and see if his uh his Mike is working now.

01:49:28.230 --> 01:49:29.450

David A Strand

I mean here you Kurt.

01:49:45.870 --> 01:49:48.500

Bass, Randy (FAA)

Doesn't that sound like we can get him so?

01:49:49.390 --> 01:49:49.770

Bass, Randy (FAA)

Uhm.

01:49:50.950 --> 01:49:57.920

Bass, Randy (FAA)

Maybe maybe maybe we can try again. Maybe Thursday morning. If we can't get things working 'cause. We've only got about 8 more minutes or so.

01:49:58.600 --> 01:50:03.120

Bass, Randy (FAA)

Come in and he did send it to me, it's a It's a very good overview. But.

01:50:03.210 --> 01:50:06.580

Bass, Randy (FAA)

Uh uhm let's go back to any questions.

01:50:09.540 --> 01:50:17.450

David A Strand

OK, yes, and to everyone. Yeah, we know that my Mike has a lot of static or trying to hang onto the break before I drop off here.

01:50:18.060 --> 01:50:19.720

David A Strand

Uh for the UM.

01:50:20.620 --> 01:50:29.470

David A Strand

Here in our Karen did they respond back as she appreciated all those good comments. Josh uh that's the only ones that we had in the chat.

01:50:30.600 --> 01:50:41.010

David A Strand

Randy so are there any others or did the ending of floor? Did you want to respond to Josh 's explanation to your question anyway.

01:50:42.520 --> 01:50:44.270

McClure, Andrew (FAA)

No thanks David UM.

01:50:45.430 --> 01:50:49.500

McClure, Andrew (FAA)

What Josh said matches up pretty well with what I've been thinking?

01:50:49.800 --> 01:50:58.300

McClure, Andrew (FAA)

Uh just for your knowledge Josh I I work for Alaska flight service so we've been.

01:50:59.060 --> 01:51:00.240

McClure, Andrew (FAA)

Uh working.

01:51:00.960 --> 01:51:07.380

McClure, Andrew (FAA)

Under the direction of the FAA administrator to come up with the FAA safety initiative.

01:51:08.120 --> 01:51:15.790

McClure, Andrew (FAA)

Uh, which covers basically anything that's going to improve aviation safety up here in Alaska and.

01:51:16.920 --> 01:51:17.900

McClure, Andrew (FAA)

I hope that.

01:51:18.590 --> 01:51:24.290

McClure, Andrew (FAA)

Uh there are people listening who will pay attention to the needs of Alaska.

01:51:25.330 --> 01:51:26.950

McClure, Andrew (FAA)

But uh thanks for your answer?

01:51:30.540 --> 01:51:32.870

David A Strand

Thanks Andy and 4.

01:51:34.040 --> 01:51:39.330

David A Strand

Uh for Shane we have a question from Josh.

01:51:39.380 --> 01:51:39.680

David A Strand

Check.

01:51:40.150 --> 01:51:41.180

David A Strand

Early WC.

01:51:42.360 --> 01:51:46.690

David A Strand

Concerning your global graphics products are you able to use any of the a WC.

01:51:47.230 --> 01:51:53.310

David A Strand

Uh world area forecast system global hazard Maps to help your teams efficiency.

01:51:55.210 --> 01:52:25.290

+16*****21

I assert copy all and I'm not tracking that we're able to ingest anything from a WC so right now. We're using the the gallon, which is the actor is going to escape me, but the global air land and execution model something to that effect, but it's got a pretty decent resolution overall and we use a software called visual whether to output and create all of our our hazard charts for you know across the globe. So I'd have to ask the question as far as any ingesting anything from.

01:52:25.340 --> 01:52:31.880

+16*****21

A WC that might have some implications as far as what we can accept on the the DoD I you know network.

01:52:32.380 --> 01:52:42.540

+16*****21

Uh so I'd have to see if that's a possibility with Firewalls and and things of that nature, but that's definitely something that could help us out, so I'd have to get back with you on that over.

01:52:45.450 --> 01:52:56.570

Joshua Scheck (Guest)

Yeah, thanks for that Shane I. I think that might be one. Even just small area where maybe we help each other a little bit. I I know that the systems.

01:52:57.020 --> 01:53:02.580

Joshua Scheck (Guest)

Uh do 'cause issues when we when we coordinate with the with the Air Force.

01:53:02.640 --> 01:53:13.940

Joshua Scheck (Guest)

So, but but we've also found ways around that so even just as a as a reference point for your your folks might be able to help each other out.

01:53:19.700 --> 01:53:23.330

+16*****21

Awesome. Thank you, Sir I'll take a look at that and get back with you. Appreciate it.

01:53:25.800 --> 01:53:29.490

David A Strand

Hey Randy I know we're down to 5 minutes. Matt did have one.

01:53:30.040 --> 01:53:38.870

David A Strand

A question for all of the panelists for all of them are there any common gap areas that you each share?

01:53:40.760 --> 01:53:43.160

David A Strand

And Matt if you need to elaborate on that as right ahead.

01:53:47.710 --> 01:54:17.070

Matt Fronzak

No, I think it it was a it was a fairly straight for I hope fairly straightforward question and it's it's motivated in part by the fact that on Thursday. You know, we're going to be talking about gap areas and I was. I was kind of hoping that you know in the brief. Here's who we are, and what we do presentations. You know, maybe there would be a theme is something that that you know that more than one of the presenters talked to.

01:54:18.040 --> 01:54:30.460

Matt Fronzak

If there was, I missed it, and so I thought I'd give an opportunity for the the panelists to maybe you know think about what each one is said, and what they said, and you know, see if there's something that that jumps out to them.

01:54:46.930 --> 01:54:47.400

Joshua Maloy (NWS-AAWU) (Guest)

Italy.

01:54:48.820 --> 01:54:54.400

Joshua Maloy (NWS-AAWU) (Guest)

Hey Josh Malloy here, yeah, I mean, I again. I can't really speak for the for the other entities there.

01:54:54.450 --> 01:54:54.880

Joshua Maloy (NWS-AAWU) (Guest)

Uhm.

01:54:55.510 --> 01:55:25.040

Joshua Maloy (NWS-AAWU) (Guest)

I I think up in Alaska because we do have some some unique challenges here. I'm I'm not sure if they're all really applicable to to the Lower 48 and I know I I did touch on that cold air aloft a concern that our local FAA has up here and and the the little bit of anecdotal conversations. We've had from from folks from the Lower 40. It just doesn't seem like it's as well, or even the Canadians. It just doesn't seem like for example, cold air aloft areas of cold air aloft at the flight levels that the.

01:55:25.500 --> 01:55:56.400

Joshua Maloy (NWS-AAWU) (Guest)

That The Jets are flying at it doesn't seem to have as much of a sensitivity in those other areas and or maybe it does it but maybe it's just not being presented that way. But I I know from our perspective we have very limited guidance when it comes to being able to actually identify and project that I mean in in a general sense. You know, we can. Bring up some some guidance as mentioned, we have some wraps up here that where we can. At least initialize? What temperatures are say at 30,000 feet between 30 and 40,000 feet. You know the height of the tropopause.

01:55:56.450 --> 01:56:01.140

Joshua Maloy (NWS-AAWU) (Guest)

Maybe as a very loose guide, but yeah, I mean, something like that.

01:56:01.760 --> 01:56:12.990

Joshua Maloy (NWS-AAWU) (Guest)

Uh I I tend to think that there is definitely a gap in there and being able to kind of project that out in time. So I'm from from Alaska 's perspective, I mean that's one that kind of jumps out for me.

01:56:27.290 --> 01:56:30.240

Bass, Randy (FAA)

Alright we have about 2 minutes, so I would.

01:56:32.390 --> 01:56:41.870

Bass, Randy (FAA)

I think the only I think the biggest gap. I saw and and I'm not even sure it's really a gap. But you know just the coordination among among those groups.

01:56:43.770 --> 01:56:56.630

Bass, Randy (FAA)

You know there may not be any overlap in coverage except for maybe the the the Air Force but but certainly you know the you know the awoo is in needing to talk to a WC about those common interests and.

01:56:58.490 --> 01:57:03.900

Bass, Randy (FAA)

You know 848 flies everywhere so there. There is a common interest there and and you know.

01:57:04.570 --> 01:57:11.940

Bass, Randy (FAA)

Is is there community is the communication between all those entities as good as it can be in and?

01:57:13.090 --> 01:57:18.730

Bass, Randy (FAA)

It obviously because Josh was just talking to Shane about that that potential.

01:57:20.140 --> 01:57:30.590

Bass, Randy (FAA)

Yeah, collaboration among some of their products so, so that's where I see see it and uh Brian Pettigrew has one last question, and then we'll come to Corey.

01:57:31.270 --> 01:57:37.490

Bass, Randy (FAA)

And then we'll take a break here as far as the public partner.

01:57:37.540 --> 01:57:43.750

Bass, Randy (FAA)

A public, private partnerships have long been discussed. How do you see the future of this from a a 4 A side?

01:57:47.960 --> 01:57:50.490

Kory Gempler

Well, I think there already is a lot of.

01:57:51.170 --> 01:57:52.950

Kory Gempler

A public private.

01:57:53.530 --> 01:57:57.860

Kory Gempler

We yeah interaction. You know a lot of the airlines have their own private.

01:57:59.220 --> 01:57:59.870

Kory Gempler
Weather.

01:58:00.750 --> 01:58:03.250

Kory Gempler
Entities within their operations centers.

01:58:04.350 --> 01:58:06.630

Kory Gempler
So you know it depends on.

01:58:07.240 --> 01:58:22.240

Kory Gempler
In the future, I think of the Weather Service and and you know under the Trump administration. Obviously, there's a lot of talk about privatization of the Weather Service and I'm now. I'm sure that's hopefully off the off the table, but you know, I think.

01:58:22.910 --> 01:58:52.230

Kory Gempler
There's a role there for the private sector and I don't. I don't see it. Changing too much. Maybe a gradual increase as as they may be can you know, sometimes their technologies might be a little bit faster than the Weather Service just implementing those and giving them out to 2 others, but you know, we, we have a some relationship with the private sector or some companies. But you know, I think from at least a FedEx standpoint, we prefer the Weather Service to be the leader.

01:58:53.070 --> 01:58:56.170

Kory Gempler
The primary source of of of meta data.

01:58:56.220 --> 01:58:58.810

Kory Gempler
Uh you know taps and meters.

01:58:59.630 --> 01:59:06.050

Kory Gempler
But you know, there's there's probably a role there for the private private sector and and it's probably continue to grow but probably slowly.

01:59:08.210 --> 01:59:09.510

Kory Gempler
Hopefully, that answers your question.

01:59:17.690 --> 01:59:23.810

Bass, Randy (FAA)
OK, well first of all thanks for all the thanks to all the panelists for the.

01:59:25.440 --> 01:59:45.750

Bass, Randy (FAA)

Their participation and the information they provided there is one more question. I'll go ahead and say, Let's go ahead and break and come back at 1:40 PM. Eastern Time, and you can do. The math for everybody is not on Eastern Time, so if you want to grab some lunch.

01:59:45.900 --> 02:00:08.790

Bass, Randy (FAA)

And for those who want to stay on for just a couple more minutes or not another minute or so Shane Cox did have a question for Josh Malloy says we're providing forecasts for various locations across the Arctic and have been conducting some model verification to see how good various models perform is there a go to that you and your team utilized in terms of overall performance.

02:00:11.330 --> 02:00:12.070

Joshua Maloy (NWS-AAWU) (Guest)

Awesome.

02:00:12.930 --> 02:00:25.880

Joshua Maloy (NWS-AAWU) (Guest)

I don't know if you know it's one of those deals, where I mean, I think there's been more of a focus now on to more like ensemble. The usage of ensemble modeling more than the individual models themselves the individual members.

02:00:26.510 --> 02:00:56.920

Joshua Maloy (NWS-AAWU) (Guest)

And I do know you know for the most part when we're conducting our forecasts. You know for the most part. It's in that you know like the area forecast for example, it's over the next 12 hours. We do have some outlook charts that we produce that go out to 60 hours and because of internal limitations about how much stuff we can actually ingest into our workstations, oftentimes were leading more on the GFS than some of the other models per say in terms of where particular features maybe.

02:00:57.230 --> 02:01:06.780

Joshua Maloy (NWS-AAWU) (Guest)

Especially the surface of features certainly cold bias from the Nam Model time and time again specially during these transitions seasons.

02:01:07.100 --> 02:01:31.710

Joshua Maloy (NWS-AAWU) (Guest)

Uh I think in terms of you know when we have some of these systems that are kind of recurring up. You know extra tropical systems. I think maybe we put a little bit more stock onto the EC model. But you know up over the high Arctic. You know, we, we try to leverage some of the The Young ***** guidance that it that is Privy to us for for our particular purposes. We do, make use of the her model in some of the more shorter term.

02:01:33.280 --> 02:01:42.260

Joshua Maloy (NWS-AAWU) (Guest)

Areas for potential for low fog and Stratus both along the Arctic coast and and off short as we try to support some of those missions.

02:01:42.840 --> 02:01:53.640

Joshua Maloy (NWS-AAWU) (Guest)

And sometimes a little bit too much of a of a false alarm rate went with that. But we try to leverage it where we can so I hopefully that gives you at least a little bit of insight from our perspective in Alaska.

02:02:00.770 --> 02:02:09.320

Bass, Randy (FAA)

Alright, well. Thank you very much and uh unless Matt Fronzak has anything I say we go ahead and break for.

02:02:10.160 --> 02:02:11.320

Bass, Randy (FAA)

26 minutes or so.

02:02:12.550 --> 02:02:13.480

Matt Fronzak

Sounds good to me.

02:02:14.650 --> 02:02:15.090

Bass, Randy (FAA)

Alright.

02:02:14.660 --> 02:02:20.370

Matt Fronzak

Sounds good to me, Randy and I I need to practice what I preach him so people can see my ugly face too.

02:02:26.260 --> 02:02:31.470

Bass, Randy (FAA)

Alright, well, thanks everybody and we'll we'll see you in about 25 minutes now.

02:02:33.480 --> 02:02:34.980

Joshua Scheck (Guest)

Thanks Randy thanks everyone.

02:12:06.360 --> 02:12:07.670

Matt Fronzak

Go ahead, Dave Give me a try.

02:12:11.310 --> 02:12:13.210

David A Strand

And they will oh is that any better.

02:12:13.590 --> 02:12:15.120

Matt Fronzak

Tons tons better.

02:12:15.450 --> 02:12:21.560

David A Strand

OK, all I did was log off log back on, but I hated to do that when I was in the middle of.

02:12:24.050 --> 02:12:24.600

David A Strand

Chatting.

02:12:25.210 --> 02:12:34.210

Matt Fronzak

Yep, Yep no, I I know where you were it was, it was actually getting worse as time went on, so, so people more people were responding.

02:12:25.740 --> 02:12:26.080

David A Strand

Sure.

02:12:31.020 --> 02:12:31.650

David A Strand

Yep.

02:12:34.800 --> 02:12:37.570

David A Strand

I didn't change networks or anything, so OK very good.

02:12:38.090 --> 02:12:38.820

Matt Fronzak

Alright cool.

02:12:38.280 --> 02:12:38.930

David A Strand

Ah.

02:12:40.100 --> 02:12:42.590

David A Strand

OK, I saw that Brian was on food so that's good.

02:12:44.230 --> 02:12:44.580

Matt Fronzak

Yep.

02:12:45.500 --> 02:12:49.650

McClure, Andrew (FAA)

Sounded like you were on the HF from a long, long way away.

02:12:49.700 --> 02:12:49.880

McClure, Andrew (FAA)

Right.

02:12:50.320 --> 02:12:57.190

Bauman, William (FAA)

Horrible horrible horrible Dave for a pilot to communicate.

02:12:50.690 --> 02:12:51.760

David A Strand

Yeah, yeah, I was.

02:12:53.880 --> 02:12:54.540

David A Strand

You have a

02:12:55.890 --> 02:12:57.020

David A Strand

it, it it.

02:12:56.910 --> 02:12:58.000

McClure, Andrew (FAA)

Welcome back.

02:12:58.380 --> 02:13:00.830

David A Strand

It was like well, what do I do now?

02:13:01.330 --> 02:13:11.500

Matt Fronzak

For for several of us who have spent time in the in the cockpit of Trans Oceanic aircraft. It was a it was deja vu all over again, you talking on HF.

02:13:01.720 --> 02:13:02.110

David A Strand

Yeah.

02:13:12.990 --> 02:13:14.050

Matt Fronzak

Agenda or anything.

02:13:13.410 --> 02:13:18.520

David A Strand

You know they're just seemed to be on teams more than some of the other platforms more.

02:13:19.360 --> 02:13:20.210

David A Strand

Uhm.

02:13:20.960 --> 02:13:33.620

David A Strand

Things like that, you know that we just all of a sudden, it's kind of like what Kurt was trying to get on

board. There you know, and for some reason we could never hear audio and I don't know if it has anything that we need to.

02:13:30.650 --> 02:13:31.040

Matt Fronzak

Yep.

02:13:30.810 --> 02:13:31.180

McClure, Andrew (FAA)

Yep.

02:13:34.520 --> 02:13:35.290

David A Strand

Uhm.

02:13:36.310 --> 02:13:39.330

David A Strand

I saw somebody show up at the end as an unknown.

02:13:40.790 --> 02:13:45.990

David A Strand

User participants with an unknown email and everything and actually put something in the chat.

02:13:46.670 --> 02:13:59.870

David A Strand

And I was wondering if that was him, maybe trying to get off, but is there anything set up in this map the way. Billy was set up with them. If somebody was not quote registered this, they were not able to come.

02:14:01.110 --> 02:14:01.450

Matt Fronzak

No.

02:14:01.270 --> 02:14:05.370

David A Strand

You know, yeah, I mean, there was nothing magical this is just the normal teams.

02:14:06.020 --> 02:14:36.930

Matt Fronzak

Yep, yeah, all that all that registration. The only function or purpose. It served as a gate for the the dial in information and even even that as we have found out during the meeting. There was something goofy with with that, too. I know on on our side. Neither Mike Robinson nor Bob Abdon, both of whom you know signed up for the meeting got the notices and I. I believe they signed up in time to I should qualify that.

02:14:06.560 --> 02:14:07.050

David A Strand

Meeting.

02:14:37.780 --> 02:14:57.250

Matt Fronzak

Uh because there was a cut off day in time. But in any that I I think there's something for instance, about the way that our email server is set up where when it sees an email coming from a website, which is what it what happens in this case it. It tends to to block some of those, and I think it did in this case.

02:14:58.470 --> 02:15:03.430

David A Strand

Well, it's been seen before and you know the interesting thing is here.

02:15:04.160 --> 02:15:07.200

David A Strand

It archives of course, everybody 's.

02:15:07.980 --> 02:15:08.540

David A Strand

Chat.

02:15:09.700 --> 02:15:13.360

David A Strand

And whoever it was they put in that unknown.

02:15:13.990 --> 02:15:16.440

David A Strand

Chat from unknown email.

02:15:17.400 --> 02:15:21.480

David A Strand

When I logged off like back on that one is no longer in my chat now.

02:15:23.050 --> 02:15:25.540

David A Strand

And it was something to do about.

02:15:26.530 --> 02:15:37.690

David A Strand

No no no what was it something to do about the discussion on the Colbert. Oh no that was Brandon I don't know what it was about. I don't remember now that was minutes ago I forgot already.

02:15:38.370 --> 02:15:39.010

David A Strand

Uhm.

02:15:40.750 --> 02:15:42.960

David A Strand

So OK well enough, we're set.

02:15:43.640 --> 02:15:44.110

Matt Fronzak

Yep.

02:15:45.110 --> 02:15:45.510

Matt Fronzak

Cool.

02:15:54.670 --> 02:15:58.080

Steve Weygandt (Guest)

Hey Kyle can you hear me this is Steve I just wanted to do a voice check?

02:15:59.560 --> 02:16:00.980

Matt Fronzak

No, we can't hear you Steve.

02:16:01.090 --> 02:16:09.440

Steve Weygandt (Guest)

I'm glad to hear that you can't hear me. That's good by the way David. Where's your picture that cloud over that rock that's really impressive? Where is that?

02:16:10.600 --> 02:16:12.040

David A Strand

Ah that is Gibraltar.

02:16:13.090 --> 02:16:13.960

Steve Weygandt (Guest)

Oh, OK.

02:16:14.260 --> 02:16:17.210

David A Strand

I I was standing in a parking lot there.

02:16:18.120 --> 02:16:28.000

David A Strand

And I was like wow. This is a cool example. In early was like it's just the cloud. You know switch off so no it was.

02:16:27.120 --> 02:16:28.910

Steve Weygandt (Guest)

It's pretty or weather geek right.

02:16:29.090 --> 02:16:46.830

David A Strand

Oh yeah, I mean, it was, it was pretty impressive and so I I was like I was shooting pictures off at the trying to get the right angle and no come on hurry. We need to get on the bus to go around to the other side and blah blah blah. But this thing came out the best so yeah, that was your fault are about.

02:16:47.500 --> 02:16:51.740

David A Strand

3 years ago we were on a cruise and we were there for one day. Unfortunately, the meeting, we were there.

02:16:52.380 --> 02:16:56.940

David A Strand

They had just the right temperature Dew Point.

02:16:57.690 --> 02:17:02.470

David A Strand

Spread and when was coming from chest the right direction there itself?

02:17:02.980 --> 02:17:04.310

Steve Weygandt (Guest)

What's very cool picture?

02:17:04.720 --> 02:17:20.320

David A Strand

Yeah, and by the time I in fact, the only thing that is the negative is I wanted to go up to the top and revolver and of course, the cable car with in the cloud and it did not scatter out until probably about 30 minutes before we were going to get back on the boat so.

02:17:21.650 --> 02:17:29.160

David A Strand

I didn't get to go to the park. But I I'm glad I got this instead of going up there. I think this is actually from the airport.

02:17:29.870 --> 02:17:35.790

David A Strand

Uh maybe you know the airports interesting and it's got a road main road that goes out to the rock.

02:17:36.480 --> 02:17:38.190

David A Strand

Uh and the town and everything.

02:17:38.850 --> 02:17:39.610

David A Strand

Goes right.

02:17:40.370 --> 02:17:42.310

David A Strand

Touch right across the middle of the runway.

02:17:44.040 --> 02:17:47.350

David A Strand

And then there Degarde, so at each side of the runway.

02:17:48.020 --> 02:17:49.220

David A Strand

That that has a

02:17:50.510 --> 02:18:20.740

David A Strand

you know like gate, there and and they are in contact with the power and then there's an airplane that is like 3 or 4 minutes out on final. They put the gates down and the roads closed and and it is the road. It's the only way to get out to the town at the golf events, so again. We're in a tour bus and we're going across the runway and I'm sitting there, snapping pictures left and right and everybody thought I was unmute it 'cause I was just I thought that was the greatest thing they said. Well, I thought you were whether it be again, I said, well well pilot too.

02:18:20.790 --> 02:18:21.890

David A Strand

You know so.

02:18:21.950 --> 02:18:22.240

David A Strand

What?

02:18:22.370 --> 02:18:22.690

Matt Fronzak

Yeah.

02:18:23.590 --> 02:18:29.980

David A Strand

That was that was fascinating to I knew it was coming. I I made sure took the bus trip. This quarter after one week.

02:24:34.120 --> 02:24:36.980

Matt Fronzak

Joe Bracken Soundcheck Part 2 test 12.

02:24:52.170 --> 02:24:53.630

Matt Fronzak

Every now and then I pay attention.

02:24:56.840 --> 02:25:00.420

Bieger, David CTR (FAA)

And some of the other folks in the audience can hear you as well so that sounds good. On this end.

02:25:03.790 --> 02:25:04.690

Matt Fronzak

Thank you disco.

02:28:02.340 --> 02:28:07.150

Bass, Randy (FAA)

Alright, according to my Clock on the on the laptop which.

02:28:08.040 --> 02:28:13.200

Bass, Randy (FAA)

Sometimes is wrong, it does appear to be 140 so we'll go ahead and get started.

02:28:15.020 --> 02:28:16.170

Bass, Randy (FAA)

So this uh.

02:28:16.920 --> 02:28:23.310

Bass, Randy (FAA)

Uh first session of the of the afternoon or I guess the middle session of the of the.

02:28:24.000 --> 02:28:30.250

Bass, Randy (FAA)

The day is on research and operate research and development and transition.

02:28:30.930 --> 02:28:33.700

Bass, Randy (FAA)

And so we've got a a good lineup.

02:28:33.760 --> 02:28:34.160

Bass, Randy (FAA)

Uh.

02:28:35.700 --> 02:28:37.220

Bass, Randy (FAA)

Set up a

02:28:38.030 --> 02:28:38.830

Bass, Randy (FAA)

got it.

02:28:39.920 --> 02:28:46.920

Bass, Randy (FAA)

Uh Bill Bowman from the FAA on our research Doug Murphy from the FAA to talk about.

02:28:46.970 --> 02:28:49.870

Bass, Randy (FAA)

The CSS weather and.

02:28:49.920 --> 02:28:53.310

Bass, Randy (FAA)

Uh next Gen whether processor.

02:28:54.370 --> 02:28:58.280

Bass, Randy (FAA)

Uh from the global systems lab, we have Steve Weigand.

02:28:59.030 --> 02:29:01.580

Bass, Randy (FAA)

Uh from NASA Langley Bill Smith.

02:29:02.220 --> 02:29:05.140

Bass, Randy (FAA)

And Jason Levitt from the uh.

02:29:05.570 --> 02:29:05.990

Bass, Randy (FAA)

Hi.

02:29:06.950 --> 02:29:20.440

Bass, Randy (FAA)

And SAP and hopefully Josh Kosuth, but I uh. Hopefully we'll we'll see him as well. So let's go ahead and get started and and uh I haven't.

02:29:21.670 --> 02:29:34.480

Bass, Randy (FAA)

I've got a particular lineup setup, but let's go ahead and uh. I'm gonna I'm gonna put my boss on the spot first and and have him talk so I'll turn it over to Bill Bowman.

02:29:37.870 --> 02:29:39.380

Bauman, William (FAA)

Thanks Randy appreciate it.

02:29:40.110 --> 02:29:43.820

Bauman, William (FAA)

Angry afternoon, everybody, I just want to tell you a little bit about.

02:29:45.120 --> 02:30:14.520

Bauman, William (FAA)

Where we are within the FAA aviation weather division? What our role is and how we interact with other folks in the federal government. So first of all the division is within the office of next Gen, which is a research organization, so that's our primary role and were part of the portfolio management and Technology Development Office. But if a whether it's threaded out threaded throughout the FAA 's mission when you come right down to it, so even though we are the aviation weather division.

02:30:15.100 --> 02:30:43.430

Bauman, William (FAA)

There are multiple FA lines of business that touch weather in some way, shape or form, which is one reason within the last year, we establish the FAA 's weather community of interest, which I'm sure we'll talk about a bit more. During this session, but basically the community of interest or any community of interest within the FAA is to share communication across those lines of business basically breakdown. The silos, which we've all heard of especially in larger organizations.

02:30:44.470 --> 02:31:15.260

Bauman, William (FAA)

But the aviation weather division in particular, has 4 branches within it. So I mentioned we do conduct research because we're part of next gem. But we do more than that, so I'll describe each branch just briefly here. The weather research branch, which is headed by and none other than Randy Bass, who just introduce me and his major programs are the aviation weather research program and its main goal really is to deliver capabilities to the National Weather Service mostly to aviation weather center and the environmental modeling center.

02:31:15.560 --> 02:31:34.230

Bauman, William (FAA)

Of our work focuses around those weather phenomena that would affect aviation turbulence icing ceiling visibility convection and Whatnot and again those capabilities are delivered through transition to a WC into EMC. He also has the weather technology cockpit in the program.

02:31:35.300 --> 02:32:03.410

Bauman, William (FAA)

Come the winter program as the acronym says is really to focus on general aviation for the most part and instead of delivering a capability to the National Weather Service to the other government entities. It's the private industry and we do a lot of support with the GA community through outreach and through our research, to deliver those capabilities over to private industry, then to integrate back into the cockpit for the Aviators.

02:32:04.320 --> 02:32:16.710

Bauman, William (FAA)

Our next branches, the new weather concept development branch and effort, which fueled is the manager there and unlike what Randy 's branch does to deliver capabilities to the National Weather Service specifically.

02:32:17.460 --> 02:32:38.510

Bauman, William (FAA)

The goal of our new weather concept development branch is really to deliver to the FAA to deliver to our air traffic controllers to provide a capability. That's more of a decision support tool instead of delivering a meteorological project because you're delivering a capability to non meteorologist you want to deliver some sort of tool or capability that they can use.

02:32:39.490 --> 02:33:00.200

Bauman, William (FAA)

Also within the branch is our weather forecast improvement program and they also lead our safety risk management, which is critical when we're deploying different technologies will have a safety risk management panel could be a one to 3 day meeting where we look at all the risks and gets subject matter experts together and then hopefully approved that new technology to go into an operation.

02:33:01.780 --> 02:33:23.610

Bauman, William (FAA)

Our 3rd branches weather engineering and evaluation branch and they're not in DC like the other 4 branches with headquarters. They're located at Atlantic City at our technical center and store, mcgettigan is our branch manager there. One of their major programs that aviation weather demonstration and evaluation or audio program.

02:33:24.340 --> 02:33:41.500

Bauman, William (FAA)

Dumb as it says they do a lot of demonstrations in evaluation. They do surveys. They work very closely with aviation weather center during their summer and winter experiments to test out new FAA technologies with the aviation weather center and with National Weather Service forecasters.

02:33:42.630 --> 02:33:58.420

Bauman, William (FAA)

They also managed to weather observation improvements program. They have locations at the Atlantic City airport with sensors that they do testing on and one of the main programs are working on right now under WOI is a new president weather sensor for a sauce.

02:33:59.550 --> 02:34:28.080

Bauman, William (FAA)

They also support next Gen process whether processor the other NWP not numerical weather prediction and common support services. Whether CSS weather and the last branch will talk about is our policy and requirements, branch that's headed by Pat Murphy in their lives are international program where we deliver capability and support. The International Civil Aviation organization or a KMR space weather program working closely with the National Weather Service space weather prediction center.

02:34:28.490 --> 02:34:35.350

Bauman, William (FAA)

And Office of Science and technology policy space weather operations and research mitigation team otherwise known as swarm.

02:34:36.030 --> 02:34:59.880

Bauman, William (FAA)

The interesting thing about this branch is that it's our requirements branch so requirements coming into the division and going out of the division or run through the policy and requirements, branch our requirements from the FAA come from agv organization or mission support and we also levy requests onto the National Weather Service to try and support those requirements, we have.

02:35:00.870 --> 02:35:30.040

Bauman, William (FAA)

And the other major program is the new ATM weather transition program and policy and requirements branch. So who do we work with internally within the FAA as I mentioned especially through our weather CLI. But even before we had that community of interest. We work with flight standards. Aviation safety program management organization. Air traffic services system operations mission support commercial space basically any organization within the FAA.

02:35:30.490 --> 02:36:01.800

Bauman, William (FAA)

That produces whether consumes whether or researchers whether we work with internally how about externally. We work closely with no National Weather Service as I already mentioned at headquarters. That's the aviation and space where their services branch, which is in Silver Spring and then aviation weather center. Of course in Kansas City. We also work with no global systems lab cell in Boulder, with

the aviation weather research program so they do a lot of the modeling work for us that we deliver to the aviation weather center.

02:36:02.100 --> 02:36:03.460

Bauman, William (FAA)

AMC is I mentioned earlier.

02:36:04.480 --> 02:36:34.950

Bauman, William (FAA)

Or other main research partners are FFRDC partners are federally funded Research Development Corporation. Like end car MIT. Lincoln lab and mitre, most of the research conducted under the aviation weather research program is done by those 3 organizations and then we work with other federal agencies. DoD specifically Air Force weather. A lot of collaboration and also NASA quite a bit lately on uas work. I think I'll leave it, there and turn it back over to Randy.

02:36:38.480 --> 02:36:52.240

Bass, Randy (FAA)

Alright Thanks Bill next we'll move on to Doug Murphy from the FAA program management office on kind of what they do, and and the research they're conducting so.

02:36:53.680 --> 02:36:54.490

Bass, Randy (FAA)

Doug you on.

02:37:00.390 --> 02:37:02.430

Murphy, Doug CTR (FAA)

I I'm here sorry I didn't find my mute.

02:37:03.230 --> 02:37:04.180

Bass, Randy (FAA)

Hi go ahead.

02:37:05.090 --> 02:37:19.810

Murphy, Doug CTR (FAA)

Uh so gathering good morning. Everybody like Randy said. I actually support program management office and action weather programs. Common support services weather and next Gen whether processor as bill mentioned a minute ago.

02:37:20.760 --> 02:37:30.550

Murphy, Doug CTR (FAA)

I I dare say, I might be the only meteorologist in the program management organization, but I've been around for 10 years on the in the group supporting warp and then the next Gen.

02:37:31.470 --> 02:37:38.470

Murphy, Doug CTR (FAA)

I'm gonna start out with a little bit of program background for anybody that might be new to have power or or us.

02:37:39.420 --> 02:37:46.120

Murphy, Doug CTR (FAA)

Come and support services weather is are RFA. Zander is is going to be RFA 's enterprise level.

02:37:47.100 --> 02:38:10.820

Murphy, Doug CTR (FAA)

System responsible for acquiring and disseminating weather information from the Weather Service as well as the next reads Canadian radars. Other sources and then providing those same data and and additional products that are our programs create out to our consumers inside the FAA primarily as well as outside our nest stakeholders.

02:38:12.140 --> 02:38:32.410

Murphy, Doug CTR (FAA)

Uhm and for the for the NWP so the next in weather processor is responsible for generating value added. Aviation weather products from those Weather Service products that we acquire and and and other sources and and providing those 2 are aviation stakeholders as well.

02:38:33.240 --> 02:38:41.980

Murphy, Doug CTR (FAA)

Uh because that's a quick high level background on the 2 programs for veterans who've been on FL and followed us for quite a few years.

02:38:43.170 --> 02:39:02.580

Murphy, Doug CTR (FAA)

Thank you for your patience while we continue to work to getting this operational. I know we've hit some turbulence in the last 12 to 18 months on the programs. However, we recently went through a baseline change approval and we are full steam ahead again working towards.

02:39:03.270 --> 02:39:06.020

Murphy, Doug CTR (FAA)

Uh I deployment here in about 2 years.

02:39:06.540 --> 02:39:08.750

Murphy, Doug CTR (FAA)

Uh in 2023.

02:39:08.800 --> 02:39:14.780

Murphy, Doug CTR (FAA)

Make a small change to our baseline, which will reduce our footprint in our terminal environment.

02:39:16.040 --> 02:39:21.370

Murphy, Doug CTR (FAA)

We had planned to replace the IT with systems that are out there and then ask those will remain in place.

02:39:22.030 --> 02:39:31.850

Murphy, Doug CTR (FAA)

Uh for the foreseeable future. That's the primary change in our baseline other than that. Everything else is pretty much the same SCSS weather will still continue to provide.

02:39:32.490 --> 02:39:33.120

Murphy, Doug CTR (FAA)

Uhm.

02:39:34.150 --> 02:39:38.920

Murphy, Doug CTR (FAA)

All our data via swim to our consumers, both inside and outside.

02:39:39.730 --> 02:39:47.410

Murphy, Doug CTR (FAA)

In both the Iraq some and as well as the US Ricks formats and net CDF formats as well.

02:39:48.430 --> 02:39:53.880

Murphy, Doug CTR (FAA)

Uh quickly on timeline, we are looking at our key site in summer of 2023 now.

02:39:53.930 --> 02:40:05.860

Murphy, Doug CTR (FAA)

Now followed by about 12 to 18 months of testing there at the key sites before we are officially declared operational towards in mid to late 2024 calendar year.

02:40:06.840 --> 02:40:17.820

Murphy, Doug CTR (FAA)

Uhm during that keysight time you will start seeing data available on swim out of CSS weather. While we're testing the official operational data is in 24.

02:40:20.020 --> 02:40:26.230

Murphy, Doug CTR (FAA)

Uh and kind of keying on on the research topic, which were supposed to be more focused on here in this hour.

02:40:26.800 --> 02:40:44.250

Murphy, Doug CTR (FAA)

Uh this initial release of the 2 programs. You'll see a few items that have transitioned out of research that we're planning on implementing things such as convective weather of waiting 's model, which estimates probability that pilots will change routes.

02:40:45.120 --> 02:41:16.270

Murphy, Doug CTR (FAA)

Due to convection and that will be implemented in our initial deployment. Another area you all might be familiar with is our seawise and Cospa R zero to 2 hour precip forecast as well as the 2 to 8 hour precip forecast that goes pop provides those will be incorporated into the NWP system along with model. I'm sorry algorithm improvements to those forecast relative to the CS and Co Spa.

02:41:16.700 --> 02:41:32.820

Murphy, Doug CTR (FAA)

Implementation now which is actually still considered a prototype even though it's been out there for a number of years and and folks use. It will be operationalizing. Those officially as part of our implementation and then Lastly. Another example is the traffic flow impact.

02:41:33.360 --> 02:41:43.990

Murphy, Doug CTR (FAA)

A decision support tool, which underwent quite a bit of research. It'll be implemented as a forecast confidence product coming out of NWP as well.

02:41:45.020 --> 02:42:14.330

Murphy, Doug CTR (FAA)

I'm kind of looking forward beyond our initial deployment are planning for our first enhancement is going to start ramping up here in the next year. One key item that we are already have on our plates that were planning on implementing is the offshore precip capability, which is out there. It's been tested out in Houston Centers, Miami Center, New York center as well. San Juan and it's gotten very positive feedback what that does is that it.

02:42:14.390 --> 02:42:17.780

Murphy, Doug CTR (FAA)

Extends the reach of the next rad into the Gulf of Mexico.

02:42:18.600 --> 02:42:48.340

Murphy, Doug CTR (FAA)

Uh and the Atlantic providing extended precept mosaics that incorporate satellite based in lightning based returns reflectivity returns so that's one item. We know is going to be enhancement. One obviously there's a number of research projects within Angie. There are rapidly maturing and getting close to being fully ready to transition and we will definitely consider.

02:42:49.450 --> 02:43:07.440

Murphy, Doug CTR (FAA)

Anything and everything that we need, and we'll probably have to prioritize in that first enhancement. But just know that there's a lot of work in that area and a lot of coordination that we're doing with Angie and we do also follow a WC as well, and in the Weather Service in in their research as well so.

02:43:07.990 --> 02:43:15.440

Murphy, Doug CTR (FAA)

A lot of exciting plans. Finally, I think we're on the right track and we're just a couple couple years away from finally becoming operational.

02:43:16.110 --> 02:43:17.380

Murphy, Doug CTR (FAA)

And I think I'll leave it at that.

02:43:20.590 --> 02:43:21.640

Bass, Randy (FAA)

Alright, thank you Doug.

02:43:22.240 --> 02:43:27.670

Bass, Randy (FAA)

Uh next we'll move on to a bill Smith from NASA Langley.

02:43:31.040 --> 02:43:33.550

Bass, Randy (FAA)

And Bill is the uh.

02:43:34.160 --> 02:43:44.600

Bass, Randy (FAA)

Now works in the climate science branch, there and the is the cloud. Working group lead and give me just a second and I will load up your presentation bill.

02:43:45.050 --> 02:43:45.940

Smith, William L. (LARC-E302)

Thank you Randy.

02:43:49.550 --> 02:43:50.380

Smith, William L. (LARC-E302)

Yeah, so.

02:43:51.610 --> 02:43:59.080

Smith, William L. (LARC-E302)

Appreciate the opportunity Randy and I I did not survey. You know all of the aviation weather related research that's being done.

02:43:59.880 --> 02:44:10.830

Smith, William L. (LARC-E302)

Uh within NASA so undoubtedly there's some activity at some of the other centers. You know, particularly a NASA Marshall where they have the sport program.

02:44:11.500 --> 02:44:12.220

Smith, William L. (LARC-E302)

Uhm.

02:44:12.890 --> 02:44:15.780

Smith, William L. (LARC-E302)

And probably some of the other senators. I'm just going to focus on.

02:44:16.510 --> 02:44:21.610

Smith, William L. (LARC-E302)

Uh research is being done in the science Directorate here at Langley.

02:44:22.620 --> 02:44:23.870

Smith, William L. (LARC-E302)

Which is where I work?

02:44:24.840 --> 02:44:27.300

Smith, William L. (LARC-E302)

And a lot of our activities are really.

02:44:28.160 --> 02:44:29.810

Smith, William L. (LARC-E302)

Uhm driven by.

02:44:29.860 --> 02:44:44.330

Smith, William L. (LARC-E302)

Hey Uh, NASA 's climate program so most of our work supports climate research. But over the years and and I guess mainly this started through NASA is Applied Sciences program about 15 years ago.

02:44:44.940 --> 02:44:52.130

Smith, William L. (LARC-E302)

Uh we, we've been motivated to try and transition. Some of these cloud data products in particular to.

02:44:52.760 --> 02:45:02.710

Smith, William L. (LARC-E302)

Uh operational users and so that's why I'm going to talk about today and the system that we developed over the last 20 years or so is called this the SAT core.

02:45:03.460 --> 02:45:11.370

Smith, William L. (LARC-E302)

And UM it's it's a real time system that we operate that ingests satellite imagery data.

02:45:12.110 --> 02:45:19.360

Smith, William L. (LARC-E302)

Uh from various weather satellites and we run retrieval algorithms on that to quantify.

02:45:20.200 --> 02:45:49.670

Smith, William L. (LARC-E302)

Uh atmosphere and surface conditions with again a focus on clouds and this is using measurements that are taken from satellite in the visible near infrared and infrared so we do this globally now and actually analyze the the entire constellation of geostationary operational satellites. Not all satellites. But these 5. Here are the primary ones that we analyzed that they give us the global coverage from Geo you can see the which satellites those are there.

02:45:50.370 --> 02:45:55.080

Smith, William L. (LARC-E302)

Come and uh we're actually expanding our system now.

02:45:56.780 --> 02:46:22.510

Smith, William L. (LARC-E302)

To try and stitch these data together with the polar orbiting satellite data 'cause. We also derive cloud properties from these satellites. That's those are mainly for our science around climate programs. So Modis and veers data from the polar orbiters, and Devi HR. But the goal here is to stitch. All this

together into a global gridded composite. It's going to be at 3:00 kilometer resolution and at 30 or 60 minute resolution.

02:46:23.150 --> 02:46:23.820

Smith, William L. (LARC-E302)

Uhm.

02:46:24.450 --> 02:46:26.800

Smith, William L. (LARC-E302)

And I think he's going to be a really nice product for.

02:46:27.820 --> 02:46:34.590

Smith, William L. (LARC-E302)

Uh you know the science community, particularly model modelers. They're looking for a global datasets to evaluate models and.

02:46:35.310 --> 02:46:41.780

Smith, William L. (LARC-E302)

Uhm develop machine learning capabilities for various things so on the lower left here, you can see some of the.

02:46:41.830 --> 02:46:48.900

Smith, William L. (LARC-E302)

Uh cloud parameters that we derive you know first we, we run a fairly complex cloud mask.

02:46:49.640 --> 02:47:08.590

Smith, William L. (LARC-E302)

Uh to identify which clouds or which pixels are clear and cloudy and then we derive the cloud. Optical thickness and effective radius using theoretically based methods and these provide important information on the density and size distribution of cloud water and ice.

02:47:09.180 --> 02:47:15.630

Smith, William L. (LARC-E302)

Up in the atmosphere and the optical depth, that we derived during the daytime.

02:47:16.280 --> 02:47:31.050

Smith, William L. (LARC-E302)

Is also an important parameter 'cause? It gives us some information on the geometric cloud thickness? So it kind of gives us a vertical dimension to the retrievals that we derive and we can use that to estimate cloud ceilings when subtracted from the derived cloud top Heights.

02:47:32.510 --> 02:48:02.500

Smith, William L. (LARC-E302)

So we've developed algorithms over the years that that utilize these information to to try and diagnose various aviation weather hazards and we make these data available for anyone to use and and these are shown in red here, so cloud ceilings airframe. Icing also like the high I swapped icing and we've got some convection products as well, and of course, we really value our collaborations.

02:48:02.550 --> 02:48:06.720

Smith, William L. (LARC-E302)

With the FAA and the National Weather Service in aviation weather center.

02:48:07.360 --> 02:48:24.990

Smith, William L. (LARC-E302)

Uh to work collectively to evaluate and improve these data and trying to advance them into aviation weather tools, so that's ongoing work that we're currently involved with and that aspect trying to get these data into you know operational systems. It's not that easy to do.

02:48:25.040 --> 02:48:42.770

Smith, William L. (LARC-E302)

You come and so while you know, we want to exploit the satellite observation advantages as much as we can which is really the the spatial and temporal resolution geographic coverage that we get from satellites. There are a lot of you know outstanding issues with satellite retrievals.

02:48:43.450 --> 02:48:51.220

Smith, William L. (LARC-E302)

Come under some conditions that have high uncertainties and and these can certainly complicate or even prevent their use.

02:48:51.880 --> 02:49:00.510

Smith, William L. (LARC-E302)

Uhm they're confident use in operations. So we spend a considerable amount of our time our research time validating our data products with.

02:49:01.130 --> 02:49:04.210

Smith, William L. (LARC-E302)

You know field campaign data aircraft measurements.

02:49:04.270 --> 02:49:04.770

Smith, William L. (LARC-E302)

Uh.

02:49:04.850 --> 02:49:16.660

Smith, William L. (LARC-E302)

Uhm pilot reports are an important data set that we utilize and of course, the active sensor data or data. The lighters and radarsat surface sites and from satellites are really critical as well.

02:49:17.260 --> 02:49:18.230

Smith, William L. (LARC-E302)

And dumb.

02:49:19.390 --> 02:49:31.410

Smith, William L. (LARC-E302)

So you know our our ongoing research is very focused on continuing to try and advance. These data products by improving their accuracies and their consistency is at all times of day, so that they can be used more confidently.

02:49:31.960 --> 02:49:32.670

Smith, William L. (LARC-E302)

Uhm.

02:49:34.900 --> 02:49:59.460

Smith, William L. (LARC-E302)

We're also interested in trying to improve the utility the satellite data products for weather forecasting so most of what I've talked about so far is just diagnosing clouds and and trying to diagnose aviation weather hazards, but obviously we want to be able to forecast. These things accurately as well. So we've been collaborating for quite a long time with Steve Weygandt and his colleagues at.

02:50:00.250 --> 02:50:11.500

Smith, William L. (LARC-E302)

Uh and Noah GSD and that's actually led to some of our cloud data products being assimilated into a weather forecast models both at GSD and ends at.

02:50:12.140 --> 02:50:17.810

Smith, William L. (LARC-E302)

And then another thing that we're trying to do, we're currently implementing a new capability within the sack or?

02:50:18.620 --> 02:50:23.110

Smith, William L. (LARC-E302)

To try and take advantage of atmospheric sounding data, which is I would say.

02:50:24.200 --> 02:50:27.870

Smith, William L. (LARC-E302)

Quite underutilized in numerical weather prediction right now.

02:50:28.540 --> 02:50:33.910

Smith, William L. (LARC-E302)

And so the sounding data of course, provides profiles of atmospheric there might be an Amex.

02:50:34.580 --> 02:50:47.090

Smith, William L. (LARC-E302)

And he's data can be assimilated into weather forecast models and we're trying to advance that capability and really investigate the impacts of these data on weather forecasting so I'll come back to that in just a second real briefly.

02:50:47.750 --> 02:50:48.380

Smith, William L. (LARC-E302)

Uhm.

02:50:49.310 --> 02:50:52.280

Smith, William L. (LARC-E302)

So Randy can hit the next slide for me, please.

02:50:55.460 --> 02:51:07.890

Smith, William L. (LARC-E302)

So real briefly I've listed here. Some of the research activities that we're currently conducting really targeted towards improving satellite data products and their utility and various applications.

02:51:08.570 --> 02:51:27.580

Smith, William L. (LARC-E302)

Including a aviation weather and and so there. There's sort of 3 themes here. I mean, one is one is data Fusion. No single sensor tells us everything we need to know so we found that fusing data with other sensors can really take us to the next level from an accuracy and utility standpoint.

02:51:28.310 --> 02:51:37.720

Smith, William L. (LARC-E302)

Uh so for example, one thing that we're really missing in our sort of standard retrievals is information on cloud vertical structure and I won't go into details on that, but if we include.

02:51:38.630 --> 02:51:53.950

Smith, William L. (LARC-E302)

If we if we fuse data that garners information on cloud vertical structure like from the active sensors and microwave radiometers and even cloud models themselves. We can derive more accurate cloud properties from satellite that that are more.

02:51:54.000 --> 02:52:11.370

Smith, William L. (LARC-E302)

Uhm consistent with what we say, Get out of models and so that actually helps put the models and the satellite data sort of on the same playing field and and hopefully in the future could lead to more advanced assimilation of satellite cloud data products.

02:52:12.130 --> 02:52:12.840

Smith, William L. (LARC-E302)

Uhm.

02:52:14.630 --> 02:52:15.920

Smith, William L. (LARC-E302)

Let's see what else.

02:52:17.560 --> 02:52:32.990

Smith, William L. (LARC-E302)

Uh we're also using textual information to improve various products like the convective products overshooting tops and the technical information also helps us. You know QC. The data and and and improves the interpretation of the drive products.

02:52:33.660 --> 02:52:41.330

Smith, William L. (LARC-E302)

And then we started to throw machine learning at some of the more challenging problems and and this is we're starting to see some really nice improvements with.

02:52:42.020 --> 02:52:50.930

Smith, William L. (LARC-E302)

And so for example, addressing multi layered clouds, which we typically you know in traditional methods. We've tended to ignore.

02:52:51.560 --> 02:53:06.590

Smith, William L. (LARC-E302)

Uhm cloud detection and retrieval uncertainties over snow and ice quite difficult, but machine learning is helping us with that and then you know, we have large inconsistencies between what we can derive in the daytime and what we can derive at night when we only have infrared.

02:53:07.190 --> 02:53:15.920

Smith, William L. (LARC-E302)

A satellite imagery data and so machine learning is actually helping us to derive much more consistent and more accurate nighttime cloud properties that are.

02:53:17.000 --> 02:53:19.420

Smith, William L. (LARC-E302)

Uh quite consistent with what we get during the daytime.

02:53:20.480 --> 02:53:38.220

Smith, William L. (LARC-E302)

Uh so the example shown here is actually just our our icing product. This is a global gridded analysis that we put out and it's actually a good example of how these these various activities on the left have led to maturation over time of of of our products.

02:53:38.910 --> 02:53:42.780

Smith, William L. (LARC-E302)

Come here for icing you know from something that you know 20 years ago was.

02:53:43.480 --> 02:54:02.660

Smith, William L. (LARC-E302)

Really only useful for identifying super cold liquid water and the tops of low level clouds to now a product that provides information on the icing potential and severity under all cloud conditions and now, even more consistently at all times a day so the next slide Randy.

02:54:05.040 --> 02:54:10.130

Smith, William L. (LARC-E302)

So finally I'm just gonna jump back real quick to this kind of new area of work that we're delving into.

02:54:11.340 --> 02:54:18.770

Smith, William L. (LARC-E302)

Which is the atmospheric they're running Ericsson wins and we are in the process of implementing a satellite sounding data retrieval and simulation system within the.

02:54:19.360 --> 02:54:28.950

Smith, William L. (LARC-E302)

Set core and and one of the reasons we're doing that is the researchers that have been doing this in partnership with NASA for some a few years now.

02:54:29.520 --> 02:54:53.960

Smith, William L. (LARC-E302)

Uh we have developed a system that's really unique because it exploits. The full information content in hyperspectral radiance is we're talking about thousands of channels of information and we're getting this information right now from Chris and Yazzie, which your hyperspectral sensors on the polar orbiting satellites. But this is soon going to be available from geostationary satellites. the Chinese are actually already flying.

02:54:54.510 --> 02:55:09.340

Smith, William L. (LARC-E302)

Uh Polaroid or hyperspectral Sounders NGOs and then the Europeans will launch a sounding instrument on a Geo in. I think 2 years and the US unfortune is lagging quite a ways behind it'll probably be 2030 before we have that capability.

02:55:10.090 --> 02:55:18.830

Smith, William L. (LARC-E302)

Over the US but you know the operational centers are assimilating some of these information, but they're not fully exploiting these data.

02:55:20.100 --> 02:55:50.630

Smith, William L. (LARC-E302)

There are really only a simulating a small fraction of the information, which is really contrary to why these sounding instruments were developed and that's really leading to limited impacts of these data and numerical weather weather prediction. So what we want to do is evaluate you know through this system that we're implementing the impact of the satellite thermodynamics profile assimilation on wind analysis and forecasts and we are getting some pretty impressive results so far.

02:55:50.680 --> 02:56:01.160

Smith, William L. (LARC-E302)

But there's a plot on the right actually that shows the results of the assimilation system compared to Ray Obs. These are rooting standard differences, so the red is about a factor of 2.

02:56:01.210 --> 02:56:12.560

Smith, William L. (LARC-E302)

To a more accurate than, say the control run that doesn't assimilate the satellite data and it's quite a bit more accurate even than the atmosphere at motion tracking methods that are shown in green here.

02:56:14.150 --> 02:56:42.740

Smith, William L. (LARC-E302)

So it's a nice a nice pick up there in accuracies. Of course, there's a lot of potential here for severe weather. Forecasting we have a strong interest in understanding when we assimilate these atmospheric thermodynamic information. How do we improve cloud and icing analysis and forecast so we want to do. That kind of research to try and quantify that and then we also have a contrail research program here at Langley and one of the things we're interested in using these data force predicting.

02:56:43.560 --> 02:57:09.290

Smith, William L. (LARC-E302)

Or I should say diagnosing first of all but then through modeling predicting the conditions were contrails would form and this is to investigate the possibility of you know, providing your logical datasets for control avoidance should then you know ever be a strategy. That's adopted so that's all I have. I hope I didn't go too long. Thanks again Randy and I'll pass it back to you.

02:57:21.080 --> 02:57:27.650

Bass, Randy (FAA)

Alright, thank you very much bill our next speaker is Steven Wagon from Global Systems Lab.

02:57:28.480 --> 02:57:30.190

Bass, Randy (FAA)

And we go ahead.

02:57:29.350 --> 02:57:32.560

Steve Weygandt (Guest)

Thanks Randy I hope you can all hear me and come.

02:57:33.890 --> 02:57:35.370

Steve Weygandt (Guest)

We could queue up like.

02:57:36.650 --> 02:57:41.780

Steve Weygandt (Guest)

Maybe just a few slides it tried to not get too excessive is we like to do.

02:57:43.150 --> 02:57:44.380

Steve Weygandt (Guest)

I think most of you know.

02:57:45.530 --> 02:57:54.960

Steve Weygandt (Guest)

I'm I'm the I work at GSL. I'm the deputy division chief and avid which is the simulation verification Innovation Division.

02:57:55.590 --> 02:58:23.440

Steve Weygandt (Guest)

And we also worked very closely with another division at GSL, which is epad the environmental prediction Advancement Division. And so they kind of do the modeling and the physics and we do the data assimilation and the verification. So we're kind of Morab Centric and there's 2 pieces, really work together and and and the work. We've done with the FAA is noted by Bill earlier is under the aviation weather research program and I'm the GSL.

02:58:23.790 --> 02:58:53.400

Steve Weygandt (Guest)

Uhm focal 0.41 of the so called product development teams model development enhancement team and we've worked a lot on modeling over the years going back even to the Rock and then the rap and the her and and doing development research and development and then transition to operations for

those systems. We work very closely with the other product development teams. There's ones focused on different aviation hazards, icing, convection turbulence and is noted.

02:58:53.450 --> 02:59:23.410

Steve Weygandt (Guest)

Why those are it? How's it end car or MIT or the place. We also work very closely with then set both with EMC and EnSCO, a lot of development works shared with environmental modeling center and and pleased to see that that Jason level. We talking next and then also with the network central operations for the implementations and AMC and NCO work very closely. Together, 2 and these these big model operational implementations that are pretty big deals with a lot of testing and evaluation that goes into them.

02:59:24.350 --> 02:59:55.890

Steve Weygandt (Guest)

I mean, we've done since the first rap in 2012 and the first her in 2014. We've hit a combined wrapper implementation every 2 years and 2016, 2018 and 2020 was the latest one and I'll talk a little bit about that and we've done a lot of innovation, both in the model physics and the data assimilation and and I'll kind of highlight a few of those things. But they really work together because you need the good physics, so the model is not veering off course, so that the day is simulation can make the kind of the small adjustments.

02:59:56.150 --> 03:00:24.860

Steve Weygandt (Guest)

I'm needed in and and and so we'll talk about that. But we're also now at a big transition point is removing towards this new system. This this rapid. Refresh forecast system or RF sometimes we refer to it as the Rufus and that's going to be a major implementation and then it transitions into a more unified model and it's currently slated for late in in FY23. It's a big ambitious project with a lot of work so there's some chance that may slide to the right.

03:00:26.140 --> 03:00:30.100

Steve Weygandt (Guest)

And I'll talk a little about that as well. If you could go on to the next slide.

03:00:31.630 --> 03:00:32.500

Steve Weygandt (Guest)

Randy I'm

03:00:33.230 --> 03:01:04.610

Steve Weygandt (Guest)

and I wanna talk to you still little bit about the the the work. We've done in in the capabilities. We've brought along and again. It's really been a ongoing set of innovations. But as I said it both model physics and data simulation and that could show a lot of different examples. I showed just one example here. It's mostly a data. Assimilation, one, but there's actually a lot of model physics that go into this as well in terms of getting the boundary layer and the near surface. Temperatures right for the having the right Cape. This is a case from the Iowa Deratio back in August of 2020.

03:01:04.970 --> 03:01:35.380

Steve Weygandt (Guest)

And it shows the the then operational her V 3 and the bottom with the the the her V 4, which was in final testing before it was implemented a few months later. And while the Herbie 3, did a pretty good job of this system and these are really hard to forecast systems 'cause typically. It's a very, very capped environment just South of the storm and a lot of times the model spuriously have the convection is elevated, and so they just don't get the evolution of the systems right, but you can see the heard did a better job of capturing just the little.

03:01:35.430 --> 03:02:05.160

Steve Weygandt (Guest)

Details of of of the bow echo with the comma head up in northeastern Iowa and then that translates into improved wind forecast. This is uh run model of a sum over the whole model run through 21. Z of the of the the 10 meter when you can see this these streaks of the more intense winds in the new model so this kind of shows that the things we've done both in the data simulation in the physics to continually improve the forecast it and and that's

03:02:05.450 --> 03:02:13.230

Steve Weygandt (Guest)

been a lot of the goal of our work, but also to work with the other stakeholders. Both these product development teams, but also.

03:02:13.450 --> 03:02:29.650

Steve Weygandt (Guest)

Uh a WC in the other stakeholders to help them know how to best use the grids and facilitate the use of the model guidance, which underpins a lot of these hazard products that are produced for for aviation and.

03:02:30.540 --> 03:03:00.190

Steve Weygandt (Guest)

Again, a big part of this has been work with ensembles and that's increasing it seems like throughout a lot of my career. The the promise of ensembles and determine on uncertainty information is just been around the corner and there's been a lot of work to make that become a reality. But I think that is going to become a reality and it helps in in with some of the AI and the machine learning techniques. Sort of coming online to where there really is a lot of uncertainty information in the ensembles.

03:03:00.620 --> 03:03:31.020

Steve Weygandt (Guest)

And we can be able to harness that to to enable decision making for had specific hazards. A few of the other things that we've brought along we improved our cloud and our ceiling forecasts. A lot with her before it was under done a lot and her V 3. Sometimes I'd be a little overdone and Josh below. You know did a lot of things about Alaska that were pretty interesting. Of course, the the data sparseness is a key factor that we see in the data assimilation but in general, we, we, we think that the.

03:03:31.100 --> 03:04:00.930

Steve Weygandt (Guest)

The the ceiling visibility forecasts are improved quite a bit. We also added. The smoke field and that's

been used quite a bit across a lot of different applications and improves our visibility forecasts and this meant a lot of work on kind of coupling aerosol beta simulation and Whatnot to improve that and a lot of that is satellite based in in in bill. It was nice to see your talk about the work that you've done it at NASA and we've as you noted assimilate a lot of your cloud products.

03:04:01.230 --> 03:04:31.380

Steve Weygandt (Guest)

There's a lot of really good information in that and especially as we go to a bigger domains. I'll show you in a minute. This rapid refresh. Domain is going to be 3 kilometres over a domain. That's pretty close to as big as the rap used to be. And so there's a lot of Oceanic regions where the satellite data are really gonna figure. Even more prominently and we've also done some work looking at combining that the goes cloud top information with with the polar orbiter, which which of course, it isn't you know it isn't doesn't have the frequency that the ghost does but it it's.

03:04:31.430 --> 03:05:01.990

Steve Weygandt (Guest)

Good resolution data in the combining of them is really nice. And we appreciate the work. You've done for a lot of the things like the in situ observations. They are crafted and Whatnot. We we want to take the direct observation. But for things like radar data in the satellite data that the the products you put together with the coverage or really nice and and your your global one. I'll say something about that in a minute. It really looks like a promising thing and in terms of us moving forward and again. We've worked with the partners and will continue to do that.

03:05:02.050 --> 03:05:32.210

Steve Weygandt (Guest)

As we move into this Rufus Eric Is It's a pretty big transition. The grids are pretty big and and Josh Shrek. You made a comment. I think with you about the the data volumes and they're going to be even bigger with the Rufus and that's going to be a pretty big issue and maybe that's a good point. Thank you to go to this next slide. Randy come if we are moving to this new new unified system, the rapid. Refresh forecast system and we're working even more closely with EMC my boss, Curtis Alexander and Jacob Carly VMC are heading up this.

03:05:32.270 --> 03:06:02.240

Steve Weygandt (Guest)

Effort and it's really gonna be a transition to a big upgrade and capabilities with this Big 3 kilometer domain. That's roughly this yellow area that will encompass the area covered by the the the her Alaska and the konus her and it will give us a unified solution even out to a lot of Hawaii. So we don't have to have all these different postage size grids. We also it will have a 10 member ensemble and that will give us a really good capability to do probabilistic forecasts.

03:06:02.390 --> 03:06:13.660

Steve Weygandt (Guest)

In feed into machine learning type post processing that we think can be really helpful and and that's part of this greater coupling that we're going to have in terms of working with the other.

03:06:13.720 --> 03:06:44.060

Steve Weygandt (Guest)

Some groups and stakeholders to to to make better post process process and give the grids and along those lines that satellite data is really going to be helpful and some of the trends. That kind of dovetail off of this. I noted the bottom. We're kind of moving over to that. Second, one to hourly cycle than even looking at Global Rapid refresh models. And so that's where that product that you mentioned build will really helpful for that and and some of the the the the data simulation processes could just be better handled.

03:06:44.120 --> 03:07:14.970

Steve Weygandt (Guest)

With the a bigger grid because you can get the longest wavelengths across the grid and so we think in the next 10 years. It will be in an hourly cycle global rapid. Refresh and so we're going to want all those satellite data to really help that the other direction. We've been pushing in it's kind of the other end is it really high resolution less than one kilometre horizontal resolution and significantly enhanced vertical resolution, especially in the boundary layer and this is going to be pretty key. I think for the the uas applications. It's also good for for real localized.

03:07:15.180 --> 03:07:45.520

Steve Weygandt (Guest)

In looking at fog formation and and low cloud formation around San Francisco and and and seeing some evidence that the one kilometre grid does a better job getting the trained details and we could also picture really small scale grids of less than one kilometre around airport hubs to try and get like wind shifts. You know across the runways and that sort of thing and then as I mentioned the application of the AI best tech based techniques for enhanced ensemble post processing and then the other thing we'll see.

03:07:45.570 --> 03:08:08.240

Steve Weygandt (Guest)

Is increased working with the other centers and then we've been testing some cloud computing and and this isn't something that's going to happen right away. But just with these huge datasets in the grid volumes. We think that's a trend that will be increasing over the next few years and so lots of different areas. We appreciate the opportunity to discuss with various stakeholders are here at this meeting thank you.

03:08:12.810 --> 03:08:25.740

Bass, Randy (FAA)

Alright Thanks Steve UM next speaker. You know is all the research in the world doesn't do you any good if you can't transition it into operations? So our next speaker is Jason Levitt?

03:08:26.480 --> 03:08:33.830

Bass, Randy (FAA)

From a on Incipency and Jason if you're on I will get your slides up.

03:08:35.080 --> 03:08:35.990

Bass, Randy (FAA)

Or slide.

03:08:35.220 --> 03:08:36.940

Jason Levit (Guest)

Great thank you thanks.

03:08:38.420 --> 03:08:39.740

Jason Levit (Guest)

Yeah, I just got one slide.

03:08:54.940 --> 03:08:55.970

Bass, Randy (FAA)

Alright should be up.

03:08:58.900 --> 03:09:28.950

Jason Levit (Guest)

Alright thanks, yeah, so I just put together a few bullet points here to describe what we do. I think probably here at AMC. We don't need a whole ton of introduction, you all use our data quite extensively. But I can speak to a little bit about just what we do, and what's what's here at the branch and specifically to some of the aviation weather support that we do, and and talk a little bit about that with respect to the subject matter of the panel. So I good afternoon. Everybody my name is Jason Levitt. I'm the branch chief for the verification.

03:09:29.240 --> 03:09:50.370

Jason Levit (Guest)

Processing product generation branch here at EMC. It's one of the 3 branches at the environmental modeling center. The Model Development branch being the other one at 1:00 of the other one of the other 3 and then the engineering implementation branch of being the other. The 3 EIB so you all know pretty well. You know, we develop implement and maintain the suite of all of the.

03:09:50.430 --> 03:10:09.610

Jason Levit (Guest)

The numerical environmental model forecasts for the United States and we develop these with thousands of people across the country and internationally as well to partners like Steve Leggett, who just who just chatted about his work at GSL and along with several of you that are on the.

03:10:10.230 --> 03:10:15.920

Jason Levit (Guest)

On the on the call today, so quite a bit of work that we do of course, we currently have.

03:10:16.110 --> 03:10:30.770

Jason Levit (Guest)

Of 22 separate modeling systems and a lot of other drive product systems. From that I can remember where the exact count is of all of our separate applications. But I think a number somewhere in the 40s, so that's a lots of support and so we have a a lot of products that we support.

03:10:31.830 --> 03:11:01.210

Jason Levit (Guest)

Going all the way back at decades that are still in operations. All the way to new things that we're designing and implementing as well, too, and supportive aviation weather so specifically to this branch

here. The verification of post processing branch, so verification is what you would think it would be quality control, making sure that the the systems that are operating currently in operations and the new ones that are about to come online are evaluated well. I meant they're operating specifications for what we need them to do for predicting across.

03:11:01.390 --> 03:11:33.640

Jason Levit (Guest)

The country across the globe, and then post processing and product generation. That's all the scientific work that goes into regridding. The data that you're able to download and see 2 derived variables like Cape lifted index things like that to post another post processing to Cisco Post processing calibration to product generation, which is a little bit more of the technical end. That's making sure we've got the right. WMO headers on the data. That's in the right data format like Group 2 or net CDF and all the documentation associated with that, so it's it's a little bit of a hybrid of both of.

03:11:33.700 --> 03:11:49.070

Jason Levit (Guest)

Of Science and then computer science as well to make sure that we have all the the technical end covered so it could be transmitted out over all of our various transmission networks like the satellite broadcast network. The SPN as well as the Internet as well, too, and can be decoded properly on your end that receives it.

03:11:50.010 --> 03:11:55.740

Jason Levit (Guest)

Looks like the slide show ended Randy if we could go back to the slide.

03:11:59.040 --> 03:12:02.490

Jason Levit (Guest)

Looks like something happened here and a technical glitch.

03:12:07.040 --> 03:12:08.890

Matt Fronzak

5 TV 's abare Jason.

03:12:08.240 --> 03:12:08.710

Jason Levit (Guest)

Thanks.

03:12:11.310 --> 03:12:12.060

Jason Levit (Guest)

Say that again.

03:12:13.430 --> 03:12:15.680

Matt Fronzak

Live TV is a real beast.

03:12:15.280 --> 03:12:16.710

Jason Levit (Guest)

It is it is right.

03:12:19.750 --> 03:12:21.090

Jason Levit (Guest)

If something occurred here.

03:12:22.490 --> 03:12:26.290

Jason Levit (Guest)

So I can keep talking while Randy gets it back up. I actually have this slide up here.

03:12:27.280 --> 03:12:30.150

Jason Levit (Guest)

I'll put it over on my other screen here, so I can just talk to it so.

03:12:31.650 --> 03:13:02.680

Jason Levit (Guest)

Uh some of the other things that we do here is specifically for aviation support would be supporting the international treaty efforts that we have with the United Nations that support the I ko and the world area forecast since you know them as last products that would be the things that come out of the global forecast system. The GFS and then the rap her turbulence icing visibility. Those specialized products that are blended with the UK. Now these are really important products we know the airlines use them quite extensively.

03:13:02.730 --> 03:13:32.660

Jason Levit (Guest)

As well as other parts of industry and so we have a lot of dedicated resources to those specifically just to those products within the branch here at the MC so now we spent quite a bit of time working on the new algorithms and with our partners and putting that across the fence for research operations with each new upgrades every time we change the GFS or the wrap her to a new dynamic core or to more vertical levels. We have to re tune. Those algorithms, which takes quite a bit of work with our partners so.

03:13:33.160 --> 03:13:40.910

Jason Levit (Guest)

That's something that we're very committed to the model, sweet as like, I said it produces all the aviation specific aviation variables that you can.

03:13:45.310 --> 03:14:15.360

Jason Levit (Guest)

Cloud cover things like that besides just the icing turbulence and ceiling and visibility that that you're you're used to looking at the most so the full range of data that you need to make forecast for aviation. Steve mentioned this and a couple. Others have as well. So here at AMC one of the the biggest projects were working on with a lot of our partners is evolving. The prediction, Sweet to a smaller set of applications that 22 or so applications that we have to.

03:14:15.570 --> 03:14:26.040

Jason Levit (Guest)

Maintain and constantly update is way more than what we currently have resources for and is certainly as computers become more complicated and we're dealing with more.

03:14:26.100 --> 03:14:50.300

Jason Levit (Guest)

There are more issues associated with having to transition those to operations as those systems get older and our frozen and don't change in their science or don't change their data. Simulation, the onm tail for those products and and systems increases exponentially so we're going to be consolidating systems down. Steve mentioned one of them. The RFS that's going to take over the rap and the her and.

03:14:50.890 --> 03:15:21.010

Jason Levit (Guest)

Uh and several the other modeling systems down the road from that will be a new coupled ocean atmosphere system merging the GFS and the gaffes as well as subsuming the Nam and the Sheriff a year or year and a half after that, so these systems will be consolidating down some of the legacy frozen systems that occur and going through a major upgrade to the new dynamic court a new post processing systems and to new grids and Steve illustrated that pretty well for the RFS in his last slide so lots going on.

03:15:21.080 --> 03:15:35.210

Jason Levit (Guest)

In terms of what we're doing here at AMC with our partners. The unified forecast system, bringing those applications over over the next several years. We're going to see consolidation 's a major upgrades designs and post processing for those systems so.

03:15:35.270 --> 03:16:05.030

Jason Levit (Guest)

Uh fasten your seat belt, we're going to have a lot of changes coming and 2 great things about that is upgrading the science and the post processing so we're up to the the latest and greatest some of these frozen systems like this ref in the Nam, which had been around for a long time, but we're not changing the science will go away to upgrade the science and then at the opposite end 2. We should hopefully reduce our own M costs by getting rid of a lot of these singular systems and reducing down the footprints in terms of what we support and develop your at EMC so that.

03:16:05.450 --> 03:16:17.000

Jason Levit (Guest)

We can focus more of our efforts on the development and I'm crossing the science rather than on the large on'em costs. So I will end there and pass it back to Randy for the next person thanks everybody.

03:16:26.980 --> 03:16:28.090

Bass, Randy (FAA)

Alright uh.

03:16:28.850 --> 03:16:31.330

Bass, Randy (FAA)

Thanks Jason and sorry for the.

03:16:31.930 --> 03:16:34.380

Bass, Randy (FAA)

A technical glitch there as I.

03:16:36.080 --> 03:16:46.000

Bass, Randy (FAA)

You know if you're sharing your screen, and and full presentation mode. You can't see anything else and I was trying to bring up the teams icon and it shut down everything else so.

03:16:47.270 --> 03:16:49.400

Bass, Randy (FAA)

Uh apologize for that is uh.

03:16:48.790 --> 03:16:50.650

Jason Levit (Guest)

No worries no worries things right now.

03:16:52.050 --> 03:16:56.060

Bass, Randy (FAA)

His uh Josh Kossuth online. I don't believe he is.

03:17:00.030 --> 03:17:08.570

Bass, Randy (FAA)

Alright well, uh that that concludes the the panelists. Now let's go to the question so I'll pass it over to Dave.

03:17:10.370 --> 03:17:14.700

David A Strand

You think trendy, UM, we had several come in let me come.

03:17:15.940 --> 03:17:18.700

David A Strand

Uh take him kind of in reverse order here.

03:17:19.550 --> 03:17:20.870

David A Strand

But Doug Murphy.

03:17:21.620 --> 03:17:37.550

David A Strand

Uh and this is from Matt from your perspective do you think that the weather products needed by the FAA and operators and are produced by the FA are sufficiently different from similar products generated by the Weather Service in order to justify them.

03:17:43.550 --> 03:18:00.050

Murphy, Doug CTR (FAA)

So the answer your question mark, I think the answer is yes, I think the algorithms within the FAA that we're developing are primarily focused on translating weather data that the Weather Service and other sources produce.

03:18:00.740 --> 03:18:29.880

Murphy, Doug CTR (FAA)

Uh as otherwise probably where most air traffic controllers don't have time to interpret weather and

our algorithms that we were primarily focused within the FAA would make their life easier or more easy to interpret and more quickly interpret weather information and the format form of say like we talked about earlier convective weather avoidance based on air traffic history and and probabilities.

03:18:30.740 --> 03:18:34.990

Murphy, Doug CTR (FAA)

I think that's primarily where most of our work is focused on in the FA side.

03:18:35.740 --> 03:18:36.590

Murphy, Doug CTR (FAA)

With.

03:18:37.220 --> 03:18:42.350

Murphy, Doug CTR (FAA)

But those types of products that perform that kind of translation that connection from.

03:18:42.990 --> 03:18:49.350

Murphy, Doug CTR (FAA)

Raw weather data and having to interpret too, not too making decisions.

03:18:49.400 --> 03:18:53.790

Murphy, Doug CTR (FAA)

Uh dot tactical and strategic in traffic management.

03:19:06.030 --> 03:19:08.540

Matthias Steiner (Guest)

Dave you're muted muted.

03:19:09.530 --> 03:19:10.810

David A Strand

Alright uh.

03:19:11.710 --> 03:19:14.120

David A Strand

And met that satisfy your watching there.

03:19:16.390 --> 03:19:21.460

Matt Fronzak

Yeah, I'm just it's just teeing up a conversation and see if anybody wants to jump in.

03:19:17.560 --> 03:19:18.150

David A Strand

Uhm.

03:19:21.920 --> 03:19:25.610

David A Strand

And and I think I have one more food for Doug here it was from.

03:19:26.520 --> 03:19:38.530

David A Strand

Robert Bonham and it didn't say who it was stored, but it sounds like it would maybe you, it was uh. How do you plan on operationalizing OPC from a production perspective?

03:19:39.250 --> 03:19:43.830

David A Strand

And we are still working on that in the airports, which GSW are.

03:19:44.650 --> 03:19:46.750

David A Strand

So I think that was supposedly.

03:19:44.700 --> 03:19:46.100

Murphy, Doug CTR (FAA)

Yeah, right.

03:19:47.210 --> 03:20:00.250

Murphy, Doug CTR (FAA)

Yeah, I believe it was, it came in during my my topic. So I would be lying. If I if I said, we've figured it completely held. I think we're in the similar situation as you folks at the Air Force.

03:20:00.960 --> 03:20:09.150

Murphy, Doug CTR (FAA)

Uh so to date on our evaluations in those facilities across the Gulf of Mexico and East Coast.

03:20:10.010 --> 03:20:15.130

Murphy, Doug CTR (FAA)

We've provided them this OPC information on separate displays.

03:20:15.820 --> 03:20:27.450

Murphy, Doug CTR (FAA)

And one thing we've heard loud and clear is hey, we would like to have these integrated into our scope center, so that we can actually see it on our scope and be able to real time route.

03:20:27.720 --> 03:20:52.690

Murphy, Doug CTR (FAA)

Uh flights I think that's going to be one of the main things that we have to make sure we implement properly integrated into our automation systems and will definitely have a lot of work with the air traffic control community and that guy in in thinking how we do that. And there's other questions. We still have I think we're a long way from from fully figuring out how we implement it.

03:20:53.530 --> 03:20:55.400

Murphy, Doug CTR (FAA)

Yeah, 3 quickly Frank.

03:20:58.530 --> 03:21:26.200

Bauman, William (FAA)

And if I could expand on the earlier part Doug that you answered formats question I agree completely that the FAA is focus is to support our controllers with translated capability so that would be decision. Support tools and Whatnot as I mentioned but on the other hand, which is part of another question

about federal agencies sharing the FAA funded the her development and we did that because we were selfish and we wanted better.

03:21:26.610 --> 03:21:57.170

Bauman, William (FAA)

Uh aviation hazards to be able to be forecast, with higher resolution such as turbulence icing convection. CNVM Whatnot, but aviation certainly isn't the only group using to her. It's widely used by people for forecasting severe weather fire weather. Marine weather and Whatnot. So while the FAA certainly we're developing as Doug said. Our own capabilities to support our controllers a lot of the work that we've done for aviation has flowed out to other components outside of aviation.

03:21:57.220 --> 03:22:06.970

Bauman, William (FAA)

In other parts of the the federal government, too, so there's a pretty good, sharing there, of our capabilities. So so I hope that helps since you said. We're having an open conversation.

03:22:12.980 --> 03:22:13.610

Matt Fronzak

That was great.

03:22:15.020 --> 03:22:15.660

Matt Fronzak

And dog.

03:22:16.770 --> 03:22:17.260

Matt Fronzak

Thank you.

03:22:18.410 --> 03:22:20.160

David A Strand

Thanks Bill and and that was.

03:22:20.210 --> 03:22:24.090

David A Strand

So there there was a question to all the panel.

03:22:24.730 --> 03:22:29.010

David A Strand

Uh members about the sharing of information.

03:22:29.680 --> 03:22:46.370

David A Strand

Uh before I open it up to the other panelists on that. This is probably a simple question here and I don't want to get lost in the mix above average and had a question back to build Smith. But what would the vertical resolution of your winning product.

03:22:54.220 --> 03:22:56.570

Smith, William L. (LARC-E302)

Yeah, sorry UM.

03:22:57.310 --> 03:22:59.090

Smith, William L. (LARC-E302)

In that configuration.

03:22:59.690 --> 03:23:05.780

Smith, William L. (LARC-E302)

Uh to be honest, I don't remember I think it might have been up on the order of.

03:23:07.390 --> 03:23:09.030

Smith, William L. (LARC-E302)

25 millibars.

03:23:11.770 --> 03:23:21.500

Smith, William L. (LARC-E302)

But yeah, I I I don't. I don't really know the exact answer. It's it's it's a decent resolution. It's configurable, too, you know.

03:23:22.380 --> 03:23:25.270

Smith, William L. (LARC-E302)

Resolution you want it, it, it's a war space.

03:23:26.270 --> 03:23:27.080

Smith, William L. (LARC-E302)

Our system.

03:23:28.700 --> 03:23:29.910

Smith, William L. (LARC-E302)

I don't know if that helps.

03:23:32.840 --> 03:23:35.130

David A Strand

And and maybe Bob uh if you are.

03:23:35.820 --> 03:23:40.220

David A Strand

More discuss that additional here if you can maybe reach out directly to build.

03:23:40.930 --> 03:23:41.590

David A Strand

Uhm.

03:23:42.090 --> 03:23:43.380

Smith, William L. (LARC-E302)

Yeah, and get that information.

03:23:44.490 --> 03:24:05.470

David A Strand

Uh so, so back to the remainder of the panelists. Matthias did key above conversation here with to what extent and how are aviation weather hasn't characteristic characterization algorithm shared costs

federal agencies such as you know on their boards and I think Bill fetched on that and so I'll open it to the other panelists here to.

03:24:06.360 --> 03:24:07.100

David A Strand

Respond.

03:24:08.840 --> 03:24:39.370

Steve Weygandt (Guest)

I can add one small part of this and this is somebody. I meant to mention and didn't get in. But there's been work supported by the FAA to take some of the the the downstream algorithms. Like the the forecast icing potential phippen GTG the terminals. One and move them more into the The Model Post processor. The UPP that Jason knows well about the universal post processing system and we think that's a good thing. 'cause they use other data sources as well, but they used a lot of model.

03:24:39.420 --> 03:24:49.410

Steve Weygandt (Guest)

Output and that just kind of moves it into a more streamlined way and we also think that'll dovetail well into making use of the ensemble data as it comes out so I think that's been.

03:24:50.800 --> 03:24:52.760

Steve Weygandt (Guest)

One bit of progress in this area.

03:25:00.390 --> 03:25:01.800

David A Strand

Any other panelists.

03:25:02.840 --> 03:25:33.240

Bauman, William (FAA)

I think just expanding on that a little bit. Stevie made me remember that, not only do we share it among federal agencies but also with private industry so the GTG now cast for example, those fields are available to anybody that wants to get them from end car. Hopefully we're going to get them over to Weather Service at some point here, but right now. You can request that from end car and those fields are available for the now cast the the 15 minute update of graphical turbulence guidance so.

03:25:10.040 --> 03:25:10.350

David A Strand

So.

03:25:33.800 --> 03:25:49.980

Bauman, William (FAA)

The algorithms are being shared outside of the federal agency as well in the form of model output fields that are available to stakeholders that want to use it and I think there are about a dozen or so that subscribe to the GT GN, including the commercial airlines.

03:26:05.410 --> 03:26:35.690

Matthias Steiner (Guest)

This this materials if I may chime in a little more on elaborating why I posed this question is when I was listening to captain Shane Cox and I don't know if he's still on, he was saying that the Air Force is a backed up for deviation weather center and potentially the The Storm Prediction Center if they go down and so, if you suddenly switch products from one provider to another that uses different models.

03:26:06.680 --> 03:26:07.020

Bass, Randy (FAA)

Yep.

03:26:35.820 --> 03:26:50.810

Matthias Steiner (Guest)

Potentially different post processing procedures. I wonder how different those products are and if you have some sharing of the capabilities, then that might help bring them closer in nature.

03:27:04.710 --> 03:27:06.200

Bass, Randy (FAA)

Alright well, it's a?

03:27:07.230 --> 03:27:16.460

Bass, Randy (FAA)

Basically, 20 minutes to 3, so I want to thank all the panelists very insightful and very informative.

03:27:17.060 --> 03:27:17.660

Bass, Randy (FAA)

Uhm.

03:27:19.040 --> 03:27:23.140

Bass, Randy (FAA)

Lot of interesting questions and and that that question about you know the.

03:27:23.960 --> 03:27:28.160

Bass, Randy (FAA)

Uh you know collaboration and and making sure that they're you know.

03:27:30.080 --> 03:27:44.710

Bass, Randy (FAA)

The they worked together is is a good one and it's something that I think sometimes we struggle with some sometimes it doesn't turn out to be as big a problem as as we thought, but but especially when we start looking at.

03:27:45.390 --> 03:27:46.050

Bass, Randy (FAA)

Uhm.

03:27:47.160 --> 03:28:00.390

Bass, Randy (FAA)

You know integrating things from from NASA Langley or or you know, some of our I wouldn't say nontraditional but but the groups that we haven't worked with as much in the past like you know in car in Lincoln.

03:28:00.900 --> 03:28:06.730

Bass, Randy (FAA)

Uh that those those questions are going to become more relevant and things are going to have to take a look at so.

03:28:07.520 --> 03:28:08.210

Bass, Randy (FAA)

Uhm.

03:28:09.800 --> 03:28:17.020

Bass, Randy (FAA)

Continue ask your questions, but let's take a 10 minute break before we get started on the last session of the day.

03:28:21.400 --> 03:28:24.710

David A Strand

And and math isn't Dave can you hear me soundtrack?

03:28:25.290 --> 03:28:27.040

Matt Fronzak

Yes, 5 by 5.

03:28:27.400 --> 03:28:28.280

David A Strand

Can you hear me now?

03:28:28.820 --> 03:28:29.770

Matt Fronzak

I hear you now.

03:28:30.200 --> 03:28:33.790

David A Strand

Yeah, this is the guard this is the same kind of thing that happened to.

03:28:34.800 --> 03:28:39.120

David A Strand

Occurred earlier, apparently except I am unable to mute.

03:28:43.770 --> 03:28:46.280

Matt Fronzak

Now you're frozen in time and space.

03:37:37.480 --> 03:37:43.770

Bass, Randy (FAA)

Great welcome back everyone will go ahead and get started with our 3rd and final panel panel session of the day.

03:37:44.570 --> 03:37:57.760

Bass, Randy (FAA)

This ones on the governance, so basically the the policy and guidelines that the aviation weather research and operations communities must adhere to to and follow.

03:37:58.370 --> 03:38:00.360

Bass, Randy (FAA)

And and how those uh.

03:38:01.780 --> 03:38:05.160

Bass, Randy (FAA)

They uh policies may change in the future.

03:38:05.840 --> 03:38:06.370

Bass, Randy (FAA)

Uhm.

03:38:07.200 --> 03:38:24.450

Bass, Randy (FAA)

So I've got to yeah well. One of our panelists is not able to make it today. So we've only got 2 panelists for this one, so probably more more time for questions and answers so please get those in our first panelists of the day.

03:38:25.090 --> 03:38:28.490

Bass, Randy (FAA)

The OR the of the session is Gordie Rother.

03:38:29.100 --> 03:38:37.910

Bass, Randy (FAA)

Uh Gordy works were flight standards, the air carrier operations branch supporting aviation weather policy and procedures.

03:38:39.960 --> 03:38:51.620

Bass, Randy (FAA)

Is the flight standards aviation weather subject matter expert working with air traffic NOAA Weather Service and and others on a weather related issues.

03:38:52.230 --> 03:38:58.200

Bass, Randy (FAA)

And uh so Gordy I will go ahead and pass it over to you and give me just a minute to bring up your slides.

03:38:59.050 --> 03:39:00.350

Rother, Gordon (FAA)

Thanks Randy can hear you OK.

03:39:01.270 --> 03:39:02.220

Bass, Randy (FAA)

Yes, I can hear you.

03:39:02.360 --> 03:39:09.770

Rother, Gordon (FAA)

OK, yeah, uh I won't turn my camera on 'cause. I have a little tablet that gets all funky on me when I use a little camera on it, so.

03:39:11.110 --> 03:39:20.920

Rother, Gordon (FAA)

Had some issues with that, but uh. I appreciate that introduction and yeah. I work in Aviation Diamond Aviation safety inspector, I work in.

03:39:21.500 --> 03:39:36.470

Rother, Gordon (FAA)

Uh FS 200 or the air carrier operations branch, but I'm one of many inspectors that a deal with weather and the flight standards aside for slide their second slide, please.

03:39:38.190 --> 03:39:43.090

Rother, Gordon (FAA)

I'm going to cover their roles and responsibilities and kind of what we're what we're doing today?

03:39:43.140 --> 03:40:07.370

Rother, Gordon (FAA)

Hey uhm, basically to start off with our roles and responsibilities are cover 33 big areas that general aviation, which is our AFS 800 partners. They have the fast team that's a team that goes out and does outreach to the to the aviation community at large. A lot of good stuff comes out of the fast team. They work, a lot with the EPA and others.

03:40:08.030 --> 03:40:32.860

Rother, Gordon (FAA)

Uhm they published the preflight planning guidance so recently there was a AC updated on that Marilyn Pearson, who no longer is with the FAA but she's on here was instrumental in getting that up and running and published but that's an AFS 800 document like I said, I'm in AFS 200. There's a few of us in 200 that work on the 121 and 135.

03:40:33.510 --> 03:40:44.420

Rother, Gordon (FAA)

Which is the big air carriers and the uh on demand folks we deal with the policies regulation and interface a lot with the?

03:40:45.670 --> 03:40:48.100

Rother, Gordon (FAA)

Uh with AGC which is our legal counsel.

03:40:49.230 --> 03:41:04.220

Rother, Gordon (FAA)

Uh FS 400 as John Steventon and his group over there. They deal with a lot of guidance. A lot of the advisory circular guidance. That's out there, they put together requirements they have some.

03:41:05.220 --> 03:41:12.360

Rother, Gordon (FAA)

Uh some money that they use for weather research, so they have some weather research products that they work with the NGC 6.

03:41:13.280 --> 03:41:26.740

Rother, Gordon (FAA)

And they also deal with them, they're putting together our radiation. Whether handbooks so that's so the technical programs are run through 400, so that's that's how they handle things next slide, please.

03:41:28.210 --> 03:41:30.700

Rother, Gordon (FAA)

So it just basically in some of the regulations.

03:41:31.630 --> 03:41:47.520

Rother, Gordon (FAA)

91 just requires pilots to be familiar with weather information. There's no specific requirements under IFR that talks about having having appropriate weather reports and forecasts next slide, please.

03:41:48.630 --> 03:41:51.090

Rother, Gordon (FAA)

Under 121.

03:41:51.200 --> 03:41:51.970

Rother, Gordon (FAA)

Uhm.

03:41:53.120 --> 03:41:58.610

Rother, Gordon (FAA)

Certificate holders conducting domestic and flag they have to have your procrit weather reporting.

03:41:59.230 --> 03:42:21.900

Rother, Gordon (FAA)

Uh in the forecast necessary for the operation and specifically the sources of information within the 48 have to be a source prepared by the Weather Service or approved by the Weather Service in for operations outside the 48 is prepared by a source approved by the administrator so the FAA has some authority there.

03:42:23.660 --> 03:42:26.160

Rother, Gordon (FAA)

On the 135 side next slide, please.

03:42:28.160 --> 03:42:35.930

Rother, Gordon (FAA)

So 135 operations interesting thing about 135 is and it's somebody or probably are interested in this is a lot of the?

03:42:35.980 --> 03:42:48.660

Rother, Gordon (FAA)

Yeah, uas operators and in the future am will lot of it will fall under 135. So we're trying to figure out how this is all going to work, but for 135.

03:42:49.320 --> 03:42:55.940

Rother, Gordon (FAA)

Uh again, it's similar to 121, where that has to be a National Weather Service or source approved by the National Weather Service.

03:42:56.650 --> 03:43:19.760

Rother, Gordon (FAA)

And that's a requirement for operations under IFR for under VFR they can operate if they have missing weather reports. The pilot can make that that determination, but generally speaking, the Weather Service or a source of proof by the administrator is allowed for 135 operations next slide, please.

03:43:25.870 --> 03:43:43.490

Rother, Gordon (FAA)

So what do we do if we, we coordinate aviation weather requirements so any new requirements are worked through NGC 6. I think building user word requirement recommendations. I think is with the term he was using but.

03:43:44.410 --> 03:43:58.840

Rother, Gordon (FAA)

You know when we look when we find issues and you know, we, we make recommendations. We work it through NGC 6. We have BI weekly meetings with NGC 6 flight standards and others with in flight services.

03:43:59.480 --> 03:44:03.910

Rother, Gordon (FAA)

Uh within the FAA and we have monthly meetings with FA and the Weather Service.

03:44:04.880 --> 03:44:08.010

Rother, Gordon (FAA)

So that's a an effort to continue the coordination.

03:44:09.450 --> 03:44:10.340

Rother, Gordon (FAA)

Next slide.

03:44:13.550 --> 03:44:21.560

Rother, Gordon (FAA)

So a future guidance, so the FAA has recognized that their current certified weather systems.

03:44:22.180 --> 03:44:38.860

Rother, Gordon (FAA)

They're just too costly to obtain and maintain and there's significant gaps out there and we realize that aviation is expanding beyond airports. So how can we fill this and and what will be good enough to fill this so we're currently looking at developing?

03:44:38.910 --> 03:44:49.060

Rother, Gordon (FAA)

Uh different standards for what we call analyzed whether or it's weather information. Not not provided by any Wasser Esos or or Certified Observer.

03:44:49.770 --> 03:44:57.480

Rother, Gordon (FAA)

But the silver standard recognizes the fact that you know, there's there's certain risks that that are acceptable.

03:44:57.980 --> 03:45:04.640

Rother, Gordon (FAA)

Uh you know lower risk operations, rural remote operations. Some some could be even higher risk.

03:45:05.220 --> 03:45:35.120

Rother, Gordon (FAA)

So this the silver standard will be a what we're looking at is working in advisory circular as to how 3rd party whether vendors and and really FAA can basically quantify how good does the weather information have to be kind of fill those gaps. We're not we're not planning on lowering the bar for anything that we currently have with you know Category 12 and 3 operations. Those types of lower lower operations but.

03:45:35.490 --> 03:45:40.210

Rother, Gordon (FAA)

We certainly recognize the fact that we've got to expand our horizons here.

03:45:41.110 --> 03:45:53.020

Rother, Gordon (FAA)

So we know that there are less expensive systems and sources of information out there a lot of it is going to come from the commercial weather information providers. Many of them are on this call listening in.

03:45:53.620 --> 03:46:08.070

Rother, Gordon (FAA)

A National Weather Service has products that we currently aren't using but we are evaluating and we have a through FS 400 funding. We have a working group with the environmental modeling center looking at how good are TMA is.

03:46:08.810 --> 03:46:11.410

Rother, Gordon (FAA)

And so that that's a That's a potential.

03:46:12.810 --> 03:46:16.170

Rother, Gordon (FAA)

Analyze product that would fill some of the gaps if you will.

03:46:17.320 --> 03:46:23.940

Rother, Gordon (FAA)

A Handbook development. I kind of talked about that. They were 6 advisory circulars. It's going to be combined into a weather Handbook.

03:46:25.030 --> 03:46:41.460

Rother, Gordon (FAA)

The nice thing about this, it'll offer more timely updates, and it'll be easier access to guidance. So we're planning to make it available via the web. It'll be easier to search and things like that, and we realize that a lot of these advisory circulars are used by academia.

03:46:41.880 --> 03:46:44.250

Rother, Gordon (FAA)

Uh you know by by pilots.

03:46:44.400 --> 03:46:54.790

Rother, Gordon (FAA)

Uh you know learning and and it's quite often. We're we're behind the power curve as things event advance very quickly in the?

03:46:55.510 --> 03:47:04.370

Rother, Gordon (FAA)

In the weather reporting and forecasting world, so we've gotta we've gotta try to keep up in a Handbook will make it a lot easier for us to amend that that product.

03:47:05.160 --> 03:47:06.440

Rother, Gordon (FAA)

So uhm.

03:47:07.210 --> 03:47:20.510

Rother, Gordon (FAA)

Just basically you know flight standards were the ones that are interface directly with the pilot. Obviously we do. The certification of the airmen certification of the operators and.

03:47:21.450 --> 03:47:26.210

Rother, Gordon (FAA)

You know, we're the ones that that have to write the policy. You know for what's what's good enough so.

03:47:26.860 --> 03:47:54.530

Rother, Gordon (FAA)

Uh we kind of were a little bit of the rubber meets the road definitely a lot of the face for the for the FAA when when pilots come to the office those and so you know, we, we hope to make our policy is clear and the information easy to use so that's kind of the what what our roles are with that. I don't have anything else to talk about here, but anybody has any questions.

03:47:55.340 --> 03:47:56.940

Rother, Gordon (FAA)

Please please let me know.

03:47:57.940 --> 03:47:59.250

Rother, Gordon (FAA)

Turn it back to you Randy.

03:48:03.280 --> 03:48:03.660

Bass, Randy (FAA)

Right.

03:48:04.610 --> 03:48:05.300

Bass, Randy (FAA)

Thanks, Courtney.

03:48:07.750 --> 03:48:08.650

Bass, Randy (FAA)

Our next.

03:48:10.110 --> 03:48:14.790

Bass, Randy (FAA)

Panelist is Bruce Entwistle from Noah.

03:48:15.420 --> 03:48:28.150

Bass, Randy (FAA)

Uh Bruce is in his 4th year serving as the chief of the aviation and space weather services branch at the National Weather Service headquarters in prior to that assignment, he served 13 years at a WC.

03:48:29.190 --> 03:48:29.740

Bass, Randy (FAA)

So.

03:48:30.680 --> 03:48:33.710

Bass, Randy (FAA)

Bruce hold on just a minute and I'll get your.

03:48:35.150 --> 03:48:37.920

Bass, Randy (FAA)

Slides up here, but you can go ahead and start if you'd like.

03:48:37.340 --> 03:48:40.470

Bruce Entwistle (NWS) (Guest)

Uh you don't have any slides for me, so you don't have anything to worry about.

03:48:38.770 --> 03:48:39.880

Bass, Randy (FAA)

Oh, I don't have any slides.

03:48:40.760 --> 03:48:41.080

Bass, Randy (FAA)

Now.

03:48:44.090 --> 03:48:53.100

Bruce Entwistle (NWS) (Guest)

Yeah, and yeah, thanks for hanging in for the dry topic of requirements as it deals with operations to research.

03:48:54.080 --> 03:49:21.070

Bruce Entwistle (NWS) (Guest)

For us, I work primarily on the requirements or recommendations receipt side of the House and the governance process here if it was a creature its ears would perk up the moment it. Here's somebody saying. Hey, I've got an idea that idea can come from international through you know the international Civil Aviation organization. I know most of the aviation related Order comes through.

03:49:22.400 --> 03:49:28.090

Bruce Entwistle (NWS) (Guest)

Bill Bowman shop NGC 6 with Pat Murphy's branch, sending the recommendations over to us.

03:49:29.140 --> 03:49:32.280

Bruce Entwistle (NWS) (Guest)

Once they arrive here and usually.

03:49:33.490 --> 03:49:36.090

Bruce Entwistle (NWS) (Guest)

Those recommendations are.

03:49:36.140 --> 03:50:05.950

Bruce Entwistle (NWS) (Guest)

Or uh the Weather Service is aware of in addition to those monthly meetings that Gordy talked about earlier. There's other forums that the Weather Service participates in with the FAA and there's a lot of close collaboration that goes on between. Joshua checks support branch there at the aviation weather center and people who at the you know the weather algorithms and other ideas that come over for operationalization within Weather Service.

03:50:06.760 --> 03:50:07.160

Bruce Entwistle (NWS) (Guest)

Uh.

03:50:07.870 --> 03:50:14.300

Bruce Entwistle (NWS) (Guest)

Pages either through aviationweather.gov or for incorporation into our numerical weather prediction or weather models here.

03:50:16.530 --> 03:50:25.580

Bruce Entwistle (NWS) (Guest)

When those recommendations when we get those to coming in from a NGC 6. Those immediately go up to A.

03:50:26.690 --> 03:50:37.920

Bruce Entwistle (NWS) (Guest)

Committee here at the Weather Service and they have to take everything that comes in from the FAA. We also get recommendations from the National Transportation Safety Board that deal with aviation.

03:50:39.020 --> 03:50:44.450

Bruce Entwistle (NWS) (Guest)

And they have to figure out how to most cost effectively with the taxpayers dollars.

03:50:45.290 --> 03:50:46.740

Bruce Entwistle (NWS) (Guest)

Figure out how to implement.

03:50:48.320 --> 03:50:54.860

Bruce Entwistle (NWS) (Guest)

Various requirements from aviation and from the various other types of forecasting or their space weather in my branch for example, but.

03:50:55.450 --> 03:51:03.370

Bruce Entwistle (NWS) (Guest)

You name the type of weather forecasting weather. It's marine tropical public weather forecasting winter fire severe storms.

03:51:04.100 --> 03:51:16.400

Bruce Entwistle (NWS) (Guest)

Even climate those are all contending for a limited bucket of resources to be run operationally within the Welsh or Weather Service so that first committee gets all the recommendations and requirements and they rack and stack them.

03:51:17.570 --> 03:51:41.400

Bruce Entwistle (NWS) (Guest)

And pass them over to another committee who's working on OK? What are the solutions now since a lot of the Times working in research to operations with aviation solutions are already in progress and So what my branch tries to do as the requirements are coming in. We try to have a similar level of awareness happening on the folks that provide the solutions.

03:51:42.740 --> 03:51:47.660

Bruce Entwistle (NWS) (Guest)

And we hope that they both come up and reach these 2 committees at the same time.

03:51:48.630 --> 03:52:01.600

Bruce Entwistle (NWS) (Guest)

Uh somebody might ask well isn't there a specific line for aviation operations at the Weather Service. The answer is no our budget doesn't align that way we're actually broken up into.

03:52:02.220 --> 03:52:28.470

Bruce Entwistle (NWS) (Guest)

Different what they call portfolios and each one has a specific function so for example, you know, we've got observations. So we have a portfolio dedicated to observations, we have a portfolio dedicated to central processing. It's just where our super computers that run. The models live. We have a portfolio dedicated to dissemination. We've got to move all that data from here to there in a cost efficient and speedy manner.

03:52:29.250 --> 03:52:37.110

Bruce Entwistle (NWS) (Guest)

We also have uh my branch, which is called analyzed forecasts and support. That's where all the various products and statements and.

03:52:38.100 --> 03:52:54.290

Bruce Entwistle (NWS) (Guest)

Things that you hear about the weather. Even the terminal aerodrome forecast. The Tasks your airmets your sigmets all come from that portion of the portfolio and then there's actually a group that focuses on research to operations, which we call science and technology integration.

03:52:55.890 --> 03:53:04.160

Bruce Entwistle (NWS) (Guest)

And so working all those portfolios together within our governments determines what we can actually get to.

03:53:04.820 --> 03:53:24.550

Bruce Entwistle (NWS) (Guest)

The public or to aviators anybody whether it's somebody flying general aviation or you know you're a freight hauler or if you're into major passenger cargo OPS or even if you're into charter operations. And so all of that has to come together in order for the Weather Service to say. Hey this is what you're going to get.

03:53:25.290 --> 03:53:35.790

Bruce Entwistle (NWS) (Guest)

Now the folks at a WC have done a wonderful job of integrating a lot of the new things coming in and filtering out and phasing out some of the older products that.

03:53:36.400 --> 03:53:43.260

Bruce Entwistle (NWS) (Guest)

Really have better solutions than what have been out there in the past and so there's a lot of back and forth that goes between.

03:53:43.920 --> 03:53:57.270

Bruce Entwistle (NWS) (Guest)

Uh the operating side of the Weather Service the algorithm production side of the Weather Service and the requirement side. There, along with our partners over at the Federal Aviation Administration and to a little lesser extent with the NTSB.

03:53:58.160 --> 03:54:03.430

Bruce Entwistle (NWS) (Guest)

Yeah, any interaction with the Civil Aviation there, yeah, the International Group.

03:54:04.540 --> 03:54:20.830

Bruce Entwistle (NWS) (Guest)

You know that's through the FAA they provide the international recommendations come through the FAA and then to say it doesn't go straight from international to the US another thing that we also handle because not all things wanting to be operationalized happens to be research, you know.

03:54:21.570 --> 03:54:29.820

Bruce Entwistle (NWS) (Guest)

I'm I'm sure there's a few folks who have listened to where it's like you know, I would really like a tab for my airport and so we can help with that part too.

03:54:30.990 --> 03:54:47.800

Bruce Entwistle (NWS) (Guest)

That tends to generate some other requests. But if you those typically would start at the local forecast office. But you know a lot of times people don't know which forecasted office would actually have responsibility for a particular airport and we can help identify that and begin working to process that way.

03:54:49.540 --> 03:54:50.470

Bruce Entwistle (NWS) (Guest)

And with that.

03:54:52.010 --> 03:54:54.900

Bruce Entwistle (NWS) (Guest)

I will clam up and entertain questions.

03:55:00.510 --> 03:55:03.860

Bass, Randy (FAA)

Alright Thanks Bruce and thanks Gordy.

03:55:04.760 --> 03:55:05.530

Bass, Randy (FAA)

And.

03:55:06.620 --> 03:55:11.120

Bass, Randy (FAA)

We will now open it up to questions so I'll pass it over to Dave Strand.

03:55:13.060 --> 03:55:17.980

David A Strand

Alright and so far, we don't have any specific questions. It's been a lot of good discussion.

03:55:18.850 --> 03:55:19.960

David A Strand

Uh about

03:55:22.160 --> 03:55:26.600

David A Strand

oki love Bill Bauman had some comments and.

03:55:28.620 --> 03:55:29.980

David A Strand

Let's see.

03:55:31.270 --> 03:55:37.750

David A Strand

Yeah, he had a couple things build do you wanna expand on what you're putting in the chat there and?

03:55:38.600 --> 03:55:45.890

David A Strand

Bathke off the discussion here because otherwise there's no specific questions that come in yet.

03:55:51.420 --> 03:55:54.460

Bauman, William (FAA)

What was I putting in the chat in response to this session?

03:55:53.350 --> 03:55:53.950

David A Strand

Stocks.

03:55:54.780 --> 03:56:00.650

David A Strand

Ah well it's about promoting ogr your aviation weather request form your.

03:55:58.210 --> 03:55:59.280

Bauman, William (FAA)

Go to her OK.

03:56:00.700 --> 03:56:04.410

David A Strand

For uh sorry about this community, then finished.

03:56:05.720 --> 03:56:06.890

David A Strand

Let's see here.

03:56:08.130 --> 03:56:09.700

David A Strand

You have another one earlier.

03:56:11.430 --> 03:56:13.060

David A Strand

Sorry didn't mean to put you on the spot.

03:56:12.990 --> 03:56:13.680

Bauman, William (FAA)

Oh, that's OK.

03:56:15.840 --> 03:56:20.140

Bauman, William (FAA)

I'll just you know stop all your funding for putting me on the spot.

03:56:19.090 --> 03:56:19.400

Bass, Randy (FAA)

Yes.

03:56:22.300 --> 03:56:24.750

Bauman, William (FAA)

Just kidding of course no, I mean, the oh 2 R.

03:56:23.330 --> 03:56:25.950

Bass, Randy (FAA)

Yeah, actually actually did you did talk about?

03:56:26.010 --> 03:56:27.250

Bass, Randy (FAA)

The UM.

03:56:28.070 --> 03:56:31.950

Bass, Randy (FAA)

You know the the the difference between the terms requirements and.

03:56:32.720 --> 03:56:33.880

Bass, Randy (FAA)

Recommendations.

03:56:34.630 --> 03:56:37.450

Bass, Randy (FAA)

Which time and go to policy?

03:56:35.090 --> 03:56:37.070

Bauman, William (FAA)

Right yeah, Matt had asked that question.

03:56:35.430 --> 03:56:36.380

David A Strand

Earlier, Yeah.

03:56:37.370 --> 03:56:43.230

Bauman, William (FAA)

Uhm, which was from the previous session or or something he just wanted to discuss and that.

03:56:43.890 --> 03:56:55.170

Bauman, William (FAA)

Is kind of a a an interesting topic because a lot of folks assume that the FAA levies requirements on the National Weather Service and as I had put in the chat.

03:56:55.220 --> 03:57:02.810

Bauman, William (FAA)

Yeah, UM domestic aviation is supported by title, 49 of the US Code Section 44 something or another.

03:57:03.540 --> 03:57:07.030

Bauman, William (FAA)

And it's very specific.

03:57:07.690 --> 03:57:38.140

Bauman, William (FAA)

Verbiage that says the administrator of the FAA, which obviously the administrator doesn't do this. But through my division and through Pat Murphy's branch. We make recommendations to the secretary of Commerce? Which of course, is Bruce is branch. We don't do it to the secretary of Commerce on providing met services necessary for safe and efficient movement of aircraft in Commerce. So we're making recommendations and then to promote that safety and efficiency to the highest possible degree the secretary of Commerce.

03:57:38.190 --> 03:58:08.080

Bauman, William (FAA)

Or National Weather Service shall and there's a whole list of things that they shall do. But one of those is not necessarily fulfill that requirement the way their verbiage. Regis they'll do their best to meet those requests where those recommendations and as Bruce was saying. Aviation is not specifically budgeted within Weather Service to meet those recommendations so that gets dumped him with marine and fire weather and tropical and.

03:58:08.440 --> 03:58:39.840

Bauman, William (FAA)

Public weather and they have to fight for resources to provide that support now there's one difference. There, which is Randy 's program which is aviation weather research program. We specifically set aside. FAA funding under research and development funding to fund the transition of the AW part a WRP technologies to the National Weather Service. So we provide that funding. But for other recommendations that are not specific to that research the FA is not providing the funding.

03:58:40.280 --> 03:58:55.610

Bauman, William (FAA)

So the Weather Service is doing that and they have to fight for those those different levels of funding. So that's where that term requirements versus recommendations versus request comes in and we are not living requirements on the Weather Service their recommendations that they try to support.

03:58:50.370 --> 03:58:50.730

David A Strand

Like it's

03:58:57.060 --> 03:59:09.190

Bauman, William (FAA)

Uh proofs from your side under since Dave put me on the spot. I'll put you on the spot. Did you wanna say anything on the response to those? I know you mentioned that you know you have the governance and you have committees if there's anything to follow up on.

03:59:10.210 --> 03:59:16.210

Bruce Entwistle (NWS) (Guest)

No uh you, you send over the requirements to my branch and we collaborate.

03:59:15.100 --> 03:59:16.840

Bauman, William (FAA)

Ah, they're not requirements.

03:59:16.850 --> 03:59:18.000

Bruce Entwistle (NWS) (Guest)

Recommendations.

03:59:19.380 --> 03:59:22.340

Bruce Entwistle (NWS) (Guest)

Recommendation is that much harder word to pronounce for some reason.

03:59:21.880 --> 03:59:22.910

Bauman, William (FAA)

It is it is.

03:59:23.250 --> 03:59:37.680

Bruce Entwistle (NWS) (Guest)

So and you know, my branch speaks requirements all the times. But yes technically they are recommendations. But we engage in communications within the Weather Service and then provide feedback to Bilbao Mens group there at the aviation weather division.

03:59:38.300 --> 03:59:44.610

Bruce Entwistle (NWS) (Guest)

As to what we are capable of doing can, we do some of it all of it. None of it. What kind of timeline is involved.

03:59:45.710 --> 03:59:49.570

Bruce Entwistle (NWS) (Guest)

And then you know once there's some level of agreement in there.

03:59:50.410 --> 04:00:11.180

Bruce Entwistle (NWS) (Guest)

Then obviously dollars have to be talked about some point, either from Weather Service appropriated funds for the operations and maintenance of a feature a thing or a forecast or how do we pay for this transition from an operational or from a research system into a Weather Service operation system?

04:00:13.260 --> 04:00:43.140

Bauman, William (FAA)

And the other part of that process is we don't just throw something over to Bruce and say, Hey, here, you go. Please fulfill this we try to give a couple years notice. If we can to get into the planning cycle for funding. But we also iterate on what that recommendation is so we start off by talking to each other. We have monthly meetings will send a draft letter and say, Hey, this is what we're thinking about

recommending what do you guys think the Weather Service will hack on it and send it back and forth with us so when we send our final.

04:00:43.420 --> 04:00:56.140

Bauman, William (FAA)

Recommendation letter or letter of request to the Weather Service we've all discussed. It already to make sure that it goes into the system without coming back so there's a lot of work that goes into that that process. It's not just throwing it over the fence.

04:00:57.230 --> 04:01:08.720

Bauman, William (FAA)

And in this case you know, we've all heard of the Valley of death with research to operations. This is a Valley of death or could be for requests for operations. We we don't throw it over we iterate on it.

04:01:09.860 --> 04:01:35.420

Bruce Entwistle (NWS) (Guest)

And it's it's not a new you know it. It's a frequent occurrence to have 4 or 5 different iterations of these conversations in order to one make sure that we actually understand what's being requested a word at the FAA will mean something completely different in the Weather Service and I don't know how many ah ha. Moments we've had over the last few years, so yeah, we, we

04:01:36.090 --> 04:01:45.410

Bruce Entwistle (NWS) (Guest)

a lot of time, we spent just learning how to talk with each other. Talk to each other and you know just understand so that when we say something the same picture shows up in our head.

04:01:46.030 --> 04:01:51.500

Bruce Entwistle (NWS) (Guest)

Makes no sense for the Weather Service to implement something and had the FAA come back. It says that's not what we wanted.

04:01:54.000 --> 04:01:55.980

Bauman, William (FAA)

Yep, precisely good points.

04:01:57.160 --> 04:01:58.090

David A Strand

you know it's

04:01:57.270 --> 04:02:02.330

Bauman, William (FAA)

Dave you mentioned the oh 2 are, did you want me to speak to that or do you have something else?

04:02:01.870 --> 04:02:25.680

David A Strand

Well, you know before you leave the requirements recommendation expression Josh Malloy put him in a question with living requirements in lieu of recommendation on the Weather Service have more full in helping the Netflix or skip the need appropriations sister fill those requirement or recommendation.

04:02:05.200 --> 04:02:05.600

Bauman, William (FAA)

Sure.

04:02:27.490 --> 04:02:32.170

David A Strand

So I guess that was you know, probably at either one of y'all there or both of you.

04:02:34.030 --> 04:02:43.780

Bruce Entwistle (NWS) (Guest)

Life in a government agency is always about having to figure out how many requirements. You can fulfill with the appropriation with the money that you've got.

04:02:44.880 --> 04:02:45.830

Bruce Entwistle (NWS) (Guest)

And.

04:02:47.220 --> 04:03:07.910

Bruce Entwistle (NWS) (Guest)

You know, I mean, things that come from my Cal you know, those are requirements. I mean, they get filtered through bills shop to us, but we and we do have to rank that much higher than some of these other things that come through, but the language for people who parse words for a living AKA lawyers, UM.

04:03:08.770 --> 04:03:12.610

Bruce Entwistle (NWS) (Guest)

They pay attention to that phrase in the US code that says recommendations.

04:03:13.860 --> 04:03:16.280

Bruce Entwistle (NWS) (Guest)

And that's when.

04:03:17.570 --> 04:03:21.470

Bruce Entwistle (NWS) (Guest)

The word parsers really start getting into our air gills.

04:03:21.520 --> 04:03:22.080

Bruce Entwistle (NWS) (Guest)

Uhm.

04:03:23.570 --> 04:03:29.780

Bruce Entwistle (NWS) (Guest)

And I see you know, levying a requirement versus or recommendation really.

04:03:31.850 --> 04:03:33.390

Bruce Entwistle (NWS) (Guest)

It can help a little bit.

04:03:34.560 --> 04:03:45.330

Bruce Entwistle (NWS) (Guest)

But because you know aviation doesn't have a specific line item unless somebody wants to get rid of Aviation art. Oh, we don't want to go there. We just did 4 years of that.

04:03:47.200 --> 04:03:47.850

Bruce Entwistle (NWS) (Guest)

So.

04:03:48.840 --> 04:03:53.180

Bruce Entwistle (NWS) (Guest)

Uh maybe I'm not sure how much traction that gets by changing the word.

04:03:54.530 --> 04:04:09.810

Bauman, William (FAA)

Yeah, I agree I don't know what the word would wouldn't matter that much, and I suspect that somebody thought that through when the US code was written and they made it more. They made it a recommendation so that you're not putting somebody up against the wall who doesn't have the resources to do it.

04:04:10.420 --> 04:04:28.880

Bauman, William (FAA)

Now could that be something appropriated by Congress. I guess that would be something that could be looked into where you do have an aviation line like Bruce was saying. Then you could certainly have a requirement knowing you have funding for it, but without that specific funding that resource that has to be shared across the Weather Service, you know it really has to be a recommendation I would think.

04:04:30.000 --> 04:04:33.610

Bruce Entwistle (NWS) (Guest)

Yeah, and we do use those recommendations when we put our.

04:04:34.500 --> 04:04:46.750

Bruce Entwistle (NWS) (Guest)

Uh budget request or in the Blue Book. Is it's called on the no side that goes on before Congress and so those requests. Those requirements those timelines are all taken into consideration.

04:04:48.610 --> 04:05:04.420

Bruce Entwistle (NWS) (Guest)

But you know once they once I get that put together and it goes up through what the equivalent of our congressional affairs office. You know what happens with the sausage as it gets made at the higher levels beyond my branch is a middle pic to me right now, but

04:05:05.140 --> 04:05:07.190

Bruce Entwistle (NWS) (Guest)

yeah, it, it's helped in the past.

04:05:07.970 --> 04:05:14.370

Bruce Entwistle (NWS) (Guest)

Uh we will see if it's going to help in the future. All we can do is the best that we can there's more stuff coming down the Pike.

04:05:15.490 --> 04:05:20.210

Bruce Entwistle (NWS) (Guest)

And you know, we also have to work with in various other.

04:05:20.900 --> 04:05:25.800

Bruce Entwistle (NWS) (Guest)

Parts of the Weather Service and their cycles for implementation and adaptation.

04:05:26.780 --> 04:05:37.420

Bruce Entwistle (NWS) (Guest)

And there are some there are times when some parts of the Weather Service due to a major hardware upgrades simply can't put something new in and so we have to work with those cycles, too, and that.

04:05:38.020 --> 04:05:50.040

Bruce Entwistle (NWS) (Guest)

You know, and our our lead time for new stuff coming in can be as short as 2 years. I have seen some instances. Where can go 6 or 9 just depending on the type of requirement?

04:05:53.420 --> 04:05:56.410

David A Strand

Kind of on that same vein of requirements.

04:05:56.460 --> 04:06:18.530

David A Strand

Uh Matthias asked what extent are the various requirements coming to know of visible to the agencies submitting them and it gives warning example is the FAA aware? What surface transportation may have submitted and are there, perhaps overlapping overlapped in the interest to join forces were compensated.

04:06:22.670 --> 04:06:30.940

Bauman, William (FAA)

I think the answer is no I don't think there is any knowledge of what other agencies may be submitting to know at least not that I'm I'm aware of.

04:06:31.890 --> 04:06:33.750

Bauman, William (FAA)

Come and were pretty.

04:06:35.130 --> 04:07:05.120

Bauman, William (FAA)

I also hate to say it but we're we're in our own cone of Aviation and not looking out at what other agencies may be submitting for their support. I would hope Noah does that internally to extend as I mentioned to her was funded by FAA and there are a lot of agencies that benefit from the her. We were focused on that the aviation impact variables like a better icing forecast. But I'm sure there's been other developments in the her submitted by other lines of business within weather servers.

04:07:05.180 --> 04:07:16.400

Bauman, William (FAA)

So for those for fire weather or whatnot that were then expanded within the her so maybe indirectly Matthias. But I don't know of any direct discussion or sharing of that information.

04:07:21.430 --> 04:07:34.820

Matthias Steiner (Guest)

Thanks Bill and in some ways this could also be a discussion that may be revisited. Uh on Wednesday when we talk about other potential areas that may benefit aviation and vice versa.

04:07:35.420 --> 04:07:35.800

Bauman, William (FAA)

Great.

04:07:41.800 --> 04:07:42.510

Matthias Steiner (Guest)

I.

04:07:44.420 --> 04:07:46.180

David A Strand

Well, I think that was it on the.

04:07:47.400 --> 04:07:51.520

David A Strand

Requirements, a discussion about like there's only one there was a.

04:07:52.500 --> 04:07:53.390

David A Strand

Uhm.

04:07:54.670 --> 04:07:56.000

David A Strand

Let's see here at least.

04:07:56.070 --> 04:08:19.970

Bauman, William (FAA)

You mentioned Dave the the oh 2 R and one thing I did want to expand on on that which I didn't during the previous session. I mentioned our community of interest. And that's a a formal organization within the FAA and there's only a couple 3 of them. I think whether it's one that we started dot 18 months ago, the day before the pandemic shut us down.

04:07:58.390 --> 04:07:59.120

David A Strand

Yes.

04:08:20.300 --> 04:08:21.170

David A Strand

So.

04:08:20.690 --> 04:08:28.840

Bauman, William (FAA)

And UM we, we take problem statements from stakeholders. It's the members are FAA employees. There's about 40 of them.

04:08:50.470 --> 04:08:50.870

David A Strand

Right.

04:08:52.110 --> 04:09:23.040

Bauman, William (FAA)

Pretty much from the operators, saying we've got a problem here. How can you help so we were hearing directly from the operational community within the FAA of weather issues that they were looking to solve and that community of interest. The primary focus is really to communicate across the agency so you have your silos of excellence, where my research or might not be talking to Alfred 's operations arm and we're either duplicating effort wasting taxpayers money.

04:09:23.460 --> 04:09:37.960

Bauman, William (FAA)

We're going off in different directions, so the community of interest brings that together and then I as I said with Dave Matt Alfred myself. The core team works with those 40 employees and we meet every month and discussed our problem statements and look for solutions.

04:09:39.140 --> 04:10:08.800

Bauman, William (FAA)

We do have our weather portal as Dave had alluded to and I put the URL there in the chat where any stakeholder. That's operating in the national airspace system can submit a problem statement to us and we will consider that that goes direct to our requirements branch to Pat Murphy and his folks and will consider whether or not, that would be a valid requirement that either. We work internally at the FAA or maybe something that Weather Service could support and we go through aviation.

04:10:08.850 --> 04:10:32.220

Bauman, William (FAA)

Or the research program or or whether technology in the cockpit to provide a solution to those stakeholders and then I mentioned. We meet with a 4 A and aopa and other organizations representing the airlines and other groups to submit their requirements. So those are all the operators, sending us their their needs and their problems were things that we could potentially work on.

04:10:34.470 --> 04:10:36.070

David A Strand

You know, I have heard.

04:10:37.310 --> 04:11:06.310

David A Strand

But I was not working if you look at the comment that came in 'cause. This is clearly the case so many times. Matt and I are on the same brain wavelengths here and 'cause. I was thinking. When this discussion about the CI and then about well, more specifically about cross visibility of of whether

requirements across other agencies and if there was that visibility. I thought she we almost need like a macro COI.

04:11:06.730 --> 04:11:11.580

David A Strand

You know that that is looking across all the agencies so Matt put into the chat.

04:11:10.200 --> 04:11:11.120

Bauman, William (FAA)

Well, we have one.

04:11:11.960 --> 04:11:13.630

Bauman, William (FAA)

That's called Icam Steve.

04:11:13.590 --> 04:11:32.500

David A Strand

Well and that's and that's what Matt and I was thinking. I thought yeah. I wonder if I cams would be maybe you know that and so he says. I wonder if the question of visibility to other agencies requests of Noah is something that I Cam shows or FCM could should explicitly do and then Matias.

04:11:33.170 --> 04:11:44.850

David A Strand

Time then want to know if there was an equivalence to the FASCI and other governmental agencies that anybody was aware of so all kind of related to that.

04:11:46.210 --> 04:11:47.620

David A Strand

Uh in

04:11:48.560 --> 04:11:51.000

David A Strand

interagency or cross agency.

04:11:51.690 --> 04:11:52.160

David A Strand

Uh.

04:11:52.950 --> 04:11:53.950

David A Strand

Between agencies.

04:11:54.770 --> 04:11:55.550

David A Strand

Visibility.

04:11:57.340 --> 04:12:08.050

Bauman, William (FAA)

Yeah, I mean, I look at, I cams as sort of that macro, but they're not really operating the same way. We are where we're looking at specific problem statements. I cams is much more of A.

04:12:05.420 --> 04:12:05.640

David A Strand

Yeah.

04:12:08.710 --> 04:12:18.860

Bauman, William (FAA)

Broadview of the federal weather enterprise and how are they working together and that's one of the things I've tried to foot stop from what we've learned in our community interest.

04:12:19.490 --> 04:12:29.630

Bauman, William (FAA)

Is I'm trying to convince I? I work on the committee for services within icams is to look at problems because they're looking more at issues, which is different.

04:12:30.390 --> 04:12:36.280

Bauman, William (FAA)

And they're very broad things like we want to provide better weather information to underserved communities.

04:12:37.090 --> 04:12:55.160

Bauman, William (FAA)

Well tell me the problem and then we can maybe figure out what we're doing there, not just a broad statement like that, and some of that 's response to the weather act. There's just stuff in there that they need to respond to. But I think the larger the organization the harder. It is to get down to those details like we've been successful with Dave and Matt.

04:12:56.250 --> 04:12:57.740

Bauman, William (FAA)

In the community of interest.

04:12:58.450 --> 04:13:04.420

Bauman, William (FAA)

I don't know about other organizations in the federal government if they have that type of COI thing it was unique to me.

04:13:05.210 --> 04:13:08.740

Bauman, William (FAA)

Come in the FAA because when was first proposed to me I thought it was silly?

04:13:09.360 --> 04:13:35.910

Bauman, William (FAA)

And found out I was very wrong and it. It's very valuable to have that communication among people with like minded this one of my division colleagues. She's looking at starting a human factors community of interest and has asked me for information on how we're doing ours. So you know, I don't know in like

Weather Service could you have an aviation community of interest because you've Bruce you have 11 different mission areas?

04:13:36.660 --> 04:13:41.830

Bauman, William (FAA)

I assume they probably work together anyway, fire weather people work with fire weather people and so on, but

04:13:42.580 --> 04:13:47.490

Bauman, William (FAA)

you do they have a formal community like the FAA I? I don't know Matthias?

04:13:48.880 --> 04:13:51.940

Bruce Entwistle (NWS) (Guest)

Yeah, I don't know either I mean, we do, find.

04:13:52.740 --> 04:13:58.850

Bruce Entwistle (NWS) (Guest)

Pockets of other agencies where weather is a piece of information into the larger mission.

04:13:59.650 --> 04:14:07.020

Bruce Entwistle (NWS) (Guest)

Uh we see it in the Department of interior and with the Forest Service at the Department of Agriculture dealing with fire weather.

04:14:07.950 --> 04:14:25.340

Bruce Entwistle (NWS) (Guest)

Uh we see it when some of the state agencies with some of their hazard response missions and various environmental programs. You'll see it at the EPA. You know that's a completely different group and whether you know as just another piece of information into a much larger operation.

04:14:27.040 --> 04:14:31.740

Bruce Entwistle (NWS) (Guest)

But whether they have something exactly similar or parallel to.

04:14:32.370 --> 04:14:35.290

Bruce Entwistle (NWS) (Guest)

The FAA 's uh whether community of interest.

04:14:36.350 --> 04:14:37.010

Bruce Entwistle (NWS) (Guest)

I do not know.

04:14:40.030 --> 04:14:40.680

Steve Weygandt (Guest)

From.

04:14:40.390 --> 04:14:41.110

David A Strand

Uhm.

04:14:44.050 --> 04:14:45.870

David A Strand

One thing that well.

04:14:46.870 --> 04:14:49.940

David A Strand

I think we just kind of briefly is there any other?

04:14:51.290 --> 04:14:55.240

David A Strand

Uh we discussion on this 'cause there's a pretty good string of.

04:14:55.990 --> 04:14:58.530

David A Strand

Questions discussion on.

04:14:59.310 --> 04:15:04.700

David A Strand

On boarding topic, there and a seeds and so forth so.

04:15:05.450 --> 04:15:08.360

David A Strand

Uh maybe we can surface after this, but

04:15:06.660 --> 04:15:07.110

Steve Weygandt (Guest)

I need a

04:15:08.380 --> 04:15:38.450

Steve Weygandt (Guest)

alright it quick comment or just thinking about the discussion on the communities and you know, while with the her. There's some leveraging with severe weather. I mean, some renewable energy and whatnot that the aviation support is bill mentioned it's really been keen essential and I think about what I think one of the things you know going back even to the late like 2008 2010. Initial work on. On on the her before we had stormscafe operational modeling.

04:15:38.770 --> 04:16:08.150

Steve Weygandt (Guest)

And the support from the FAA for that and I think one of the things is it crosses a lot of different weather hazards. You know, and so it really it's it's not just a single focus. You know everything from winter weather and I sing in in into the convection. Of course, and clouds and so it is a pretty unique group in in the support provided for the her. I think has been really essential to to move it forward. And so it's been helpful just to think a little bit about that.

04:16:12.400 --> 04:16:13.570

David A Strand
next weekend.

04:16:14.750 --> 04:16:30.030

David A Strand
Brian factory did just enter comment that in his days until recently at a WC there was a beginning conversation about Prof interest between aviation fire whether it's supported but there's some some research groups so.

04:16:34.270 --> 04:16:48.530

Bruce Entwistle (NWS) (Guest)
Yeah, unfortunately, I'm not part of that conversation, but I can you know I I am aware that when multiple programs come together to support a particular recommendation or requirement?

04:16:49.220 --> 04:16:56.690

Bruce Entwistle (NWS) (Guest)
It does get a little more heft in those decision making councils. You know it's always nice to have friends in the council room.

04:16:57.310 --> 04:17:08.220

Bruce Entwistle (NWS) (Guest)
So that doesn't surprise me up. I do see a lot of parallels between aviation and fire aviation and our severe weather programs aviation and our winter weather programs.

04:17:03.220 --> 04:17:03.550

David A Strand
So.

04:17:09.230 --> 04:17:13.620

Bruce Entwistle (NWS) (Guest)
And we are at least within my organization.

04:17:14.640 --> 04:17:20.350

Bruce Entwistle (NWS) (Guest)
Uh looking at those things where I would call topics of mutual need.

04:17:21.380 --> 04:17:25.590

Bruce Entwistle (NWS) (Guest)
So that you know, we can buddy up and support each other on some of these.

04:17:26.760 --> 04:17:34.890

Bruce Entwistle (NWS) (Guest)
Uh initiatives and recommendations and requirements that come in and our governance process when stuff comes in.

04:17:35.740 --> 04:17:44.130

Bruce Entwistle (NWS) (Guest)
Say elsewhere within the Weather Service invites are other service programs to comment.

04:17:44.930 --> 04:17:47.280

Bruce Entwistle (NWS) (Guest)

On the requirement as it's being developed and vetted.

04:17:55.100 --> 04:17:58.420

Bruce Entwistle (NWS) (Guest)

They see a Joshua Shack has responded to Brian 's question.

04:18:04.050 --> 04:18:08.580

Joshua Scheck (Guest)

Yeah, Bruce Uh this is definitely your panel and and you're dead on I'm just.

04:18:09.930 --> 04:18:31.240

Joshua Scheck (Guest)

It's it, it is a conversation but it in scope. It's huge and in impurity or in concentration. It's it's very diluted so I I don't know that that we've zeroed in on anything that we can do. We just keep getting paired with fire may because everyone is worried about fire.

04:18:36.540 --> 04:18:40.020

Bruce Entwistle (NWS) (Guest)

Yeah, let's just say in the meetings here at our headquarters come.

04:18:41.620 --> 04:18:43.440

Bruce Entwistle (NWS) (Guest)

It's fire first winter second.

04:18:43.640 --> 04:18:44.960

Bruce Entwistle (NWS) (Guest)

So dumb.

04:18:45.840 --> 04:18:46.260

Bass, Randy (FAA)

Well.

04:18:45.990 --> 04:18:53.280

Bruce Entwistle (NWS) (Guest)

We'll see what happens after the first of January. When our big winter weather supporter moves onto a whiter pastures.

04:18:55.540 --> 04:19:00.380

Bass, Randy (FAA)

Hey this is Randy we actually tried to get some fire weather folks.

04:19:00.710 --> 04:19:10.120

Bass, Randy (FAA)

Uh especially for the session on Wednesday. And unfortunately because of all the fires going on. They just didn't have the bandwidth to do it.

04:19:16.810 --> 04:19:21.400

David A Strand

Or Randy with your permission looking at the comments here.

04:19:21.880 --> 04:19:29.710

David A Strand

Uh we can circle back to this, if there's more to come in. But there's been quite a few that were kind of targeted more code reporting.

04:19:30.220 --> 04:19:33.030

David A Strand

Uh that I'd like to pivot, too, so we don't.

04:19:33.660 --> 04:19:35.490

David A Strand

For change him or run out of time.

04:19:35.830 --> 04:19:39.360

David A Strand

Uh and there's really kind of 2 veins the first one was.

04:19:40.010 --> 04:19:49.350

David A Strand

Uh uh a pretty singular question from Josh Malloy to Gordy about the silver standard.

04:19:49.550 --> 04:20:06.070

David A Strand

Uh in in a certification of whether it's system, basic perhaps it may be beyond the scope of this panel discussion, but couldn't certified weather systems that are deemed to proxy to obtain or maintain be addressed through infrastructure appropriation.

04:20:06.880 --> 04:20:14.860

David A Strand

And then after that there there's some discussion about in books and a CD so or did you want to respond to Josh on that?

04:20:30.410 --> 04:20:31.510

David A Strand

It's already there.

04:20:30.450 --> 04:20:30.910

Matt Fronzak

What?

04:20:32.030 --> 04:20:33.550

Matt Fronzak

You can't understand.

04:20:32.340 --> 04:20:33.160

David A Strand

I see.

04:20:34.220 --> 04:20:34.820

David A Strand

Muted.

04:20:38.130 --> 04:20:43.720

Matt Fronzak

Then he just messaged and said that he can't unmute. We know how to fix that Gordy you leave and come back.

04:20:46.450 --> 04:20:49.720

David A Strand

And I had a similar problem where I couldn't mute UM.

04:20:51.000 --> 04:20:56.580

David A Strand

And I had to leave and come back so I they've been that's about the 4th or 5th reported that we had today.

04:20:58.660 --> 04:21:08.290

Matt Fronzak

Well, Dave This is Matt would it would it be if in fact, Gordy does bail and then come back would it would it.

04:21:07.770 --> 04:21:08.160

David A Strand

I'm

04:21:09.460 --> 04:21:13.280

David A Strand

I was glancing through these discussions about the.

04:21:14.470 --> 04:21:17.460

David A Strand

Handbooks and AC to see if there was somebody else in there.

04:21:18.200 --> 04:21:26.540

David A Strand

But quation here, there was a question about the the new weather services in new aviation weather Handbook.

04:21:27.440 --> 04:21:36.030

David A Strand

Somebody was asking about when we left gonna be out and John Steventon responded. It was currently in FA legal reviews.

04:21:36.680 --> 04:21:37.390

David A Strand

Uhm.

04:21:39.800 --> 04:21:40.630

David A Strand

And.

04:21:42.940 --> 04:21:45.370

David A Strand

I see that it's very for 40 there.

04:21:46.790 --> 04:21:49.800

Steventon, John (FAA)

Did you need me to answer anything on the Handbook there Dave?

04:21:50.450 --> 04:21:56.140

Bass, Randy (FAA)

Hey Dave, Marilyn Pearson has her hand up, she may be able to provide some answers.

04:21:56.290 --> 04:21:58.780

David A Strand

You know there's one thing about teams.

04:21:59.440 --> 04:22:18.600

David A Strand

When you see a hand up there's a little circle. It says plus 87 and it has a hand. So then you have to go searching so thanks for identifying the the handy there. Maryland good to hear from you. What would your because you had. I think you had a hand in some of this stuff and so forth as well.

04:22:19.240 --> 04:22:20.740

David A Strand

So over the American.

04:22:21.250 --> 04:22:50.040

Marilyn Pearson

Thanks David Yes, and good to see you and talk to all of you, UM, I had a hand in AC 91 dash 92. The weather one. I can't comment on John 's Handbook. He will I'm sure but there are a couple of questions about a seasoned? How do you publish them? What's the criteria there's no specific criteria for the weather AC that I had that I wrote with many of the people who were on this call.

04:22:50.670 --> 04:22:51.260

Marilyn Pearson

Uhm.

04:22:52.430 --> 04:23:23.620

Marilyn Pearson

LPA several individuals other organizations all wanted to know what's the legal impact of not having a briefing or what is a legal briefing and so after having that question enough times then the requests for?

How do you comply with 91103 the preflight requirements, especially now that the flight service phone system seems to be antiquated everyones online.

04:23:12.330 --> 04:23:12.750

David A Strand

Sure.

04:23:23.980 --> 04:23:54.190

Marilyn Pearson

It was just a need to explain what is the rule? What other requirements? How do you best go about doing it so we wrote the AC it was kind of a 2 year project from within the FAA. It goes through whatever division you're in for review and approval and then it goes to the document Control Board made up of all of the divisions. Representatives from all the divisions within the FAA it's reviewed commented on and moved on.

04:23:54.420 --> 04:24:01.810

Marilyn Pearson

Eventually goes through legal and comments from legal corrections edits whatever.

04:23:54.660 --> 04:23:55.110

David A Strand

Thanks.

04:24:02.110 --> 04:24:07.450

Marilyn Pearson

Uh and then to publication so this was probably a 2 year project start to finish.

04:24:08.220 --> 04:24:32.950

Marilyn Pearson

Uh so that's flight standards. Now I can't speak for air traffic or anyone else doing a CS but within flight standards. That's typically the process. There's a need there's a team that wants to go ahead and and start the writing of it and then it goes through a review process internally within the FAA then to legal then it does have external comments as well.

04:24:35.400 --> 04:24:42.440

David A Strand

Well, in in Maryland, not not to put you on the spot here. It's it's you're wearing a different app these days, but

04:24:43.710 --> 04:24:46.200

David A Strand

unless we've got 40 back up.

04:24:47.350 --> 04:24:49.880

David A Strand

Randy had a interesting question.

04:24:50.510 --> 04:24:52.980

David A Strand

Uh yeah that that I've.

04:24:53.830 --> 04:25:04.590

David A Strand

You know over the years advisory circulars. When I first started in aviation back shortly after Lindbergh is that it was advisory and and and they've become much more.

04:25:04.990 --> 04:25:34.940

David A Strand

Uh requirements over the years and Randy 's question was a little bit more about well about the process for getting HC published which we just went through, and the enforcement power. They can carry and he was discussing and specifically about a few years ago, they were considering at AC or similar order for procedures for closing ramps because of lightning rockets and there was a lot of concern from airline.

04:25:34.990 --> 04:25:42.660

David A Strand

Operators that have big ramps because the AC is meant they had to abide versus quote consider.

04:25:43.300 --> 04:25:47.070

David A Strand

Uh so I I guess to the enforcement.

04:25:47.740 --> 04:25:53.950

David A Strand

How are they carried considering they are advisory by name anyway?

04:25:54.200 --> 04:25:57.830

David A Strand

Uh do you want to comment on that or do you?

04:25:57.980 --> 04:26:27.520

Marilyn Pearson

Sure, I I mean, I I can comment from not from the FAA but because I was there 24 years. Until recently, so I remember some things advisory in nature, they explain regulations. But in that explanation if you are operating, contrary to what the explanation of the regulation is in fact, you're cooperating contraries or the regulation and they see doesn't have.

04:25:58.510 --> 04:25:58.880

David A Strand

Yes.

04:26:04.850 --> 04:26:05.220

David A Strand

Bye.

04:26:27.980 --> 04:26:28.830

Marilyn Pearson
For power.

04:26:29.150 --> 04:26:29.520

David A Strand
Sure.

04:26:29.430 --> 04:26:37.110

Marilyn Pearson
To require you to do anything, it's the regulation, so any compliance and enforcement would be.

04:26:37.870 --> 04:26:54.360

Marilyn Pearson
Regulatory in nature, not advisory circular in nature, they really don't confuse that because the advisory circular may have explained something that in fact, the operator in question may have done conquered.

04:26:58.710 --> 04:27:00.700

David A Strand
Randy doesn't give a little bit more.

04:26:59.070 --> 04:26:59.330

Marilyn Pearson
Right.

04:27:02.570 --> 04:27:04.830

David A Strand
Contact in the world and what you're seeing.

04:27:03.830 --> 04:27:06.720

Bass, Randy (FAA)
No yeah that yeah that definitely helps.

04:27:08.380 --> 04:27:20.300

Bass, Randy (FAA)
And I get you know like I said, we had just briefly considered it and before we even got anywhere. The couple of airline Rep, said no don't you know, don't do that because you know that forces us to do things.

04:27:20.770 --> 04:27:22.510

Bass, Randy (FAA)
Uh but the uh.

04:27:24.010 --> 04:27:25.430

Bass, Randy (FAA)
Her comment about the.

04:27:26.250 --> 04:27:43.370

Bass, Randy (FAA)

It it just you know, kind of informs or or explained the requirement and, technically, there is no requirement for ramp closures, so in that respect you know, and and AC probably wasn't appropriate in the first place, but still that's good to know and minutes.

04:27:43.430 --> 04:27:49.870

Bass, Randy (FAA)

That certainly helps to know what the you know, kind of what that process is for the development of an AC.

04:27:51.050 --> 04:28:07.190

Marilyn Pearson

And Randy might have thought about a CFO safety advisory for operations, which is kind of a notification if there's an urgent matter that you want to inform about it takes less time to publish a safe oh.

04:28:07.700 --> 04:28:08.350

Marilyn Pearson

Uhm.

04:28:09.690 --> 04:28:16.560

Marilyn Pearson

Again, those are not requirements, but they advise of pertinent information of a timely fashion.

04:28:12.030 --> 04:28:12.440

David A Strand

Sure.

04:28:18.740 --> 04:28:19.760

Bass, Randy (FAA)

OK thanks.

04:28:22.450 --> 04:28:26.260

David A Strand

And Speaking of the timeliness of HCS there was a.

04:28:27.220 --> 04:28:28.090

David A Strand

A mentor.

04:28:29.020 --> 04:28:31.170

David A Strand

On this earlier about the.

04:28:31.990 --> 04:28:36.020

David A Strand

There was going to be, I think it was maybe from Gordy discussion.

04:28:37.060 --> 04:28:41.130

David A Strand

Uh that was talking about that there was gonna be about a half a dozen.

04:28:42.060 --> 04:28:46.910

David A Strand

He sees that he's talking about we're gonna go into a Handbook because that was.

04:28:47.610 --> 04:28:50.340

David A Strand

Easier and they could they keep that up to date.

04:28:51.040 --> 04:28:54.480

David A Strand

More easily than than the AC 's.

04:28:52.850 --> 04:28:53.160

Rother, Gordon (FAA)

Yep.

04:28:55.370 --> 04:29:06.550

David A Strand

And I guess I can see that I mean, the aim is updated every 6 months and I guess I could see that knowing how long it takes it seems for a CS to get updated but.

04:28:55.660 --> 04:28:56.020

Rother, Gordon (FAA)

Yeah.

04:29:07.160 --> 04:29:07.850

David A Strand

Uhm.

04:29:08.480 --> 04:29:09.540

David A Strand

It is that

04:29:10.420 --> 04:29:16.640

David A Strand

what is it that would make a Handbook I guess administratively more easily updated than?

04:29:17.410 --> 04:29:21.100

David A Strand

Uh bases that have maybe the equivalent material in them.

04:29:21.300 --> 04:29:22.290

Rother, Gordon (FAA)

Legal review.

04:29:21.780 --> 04:29:22.160

David A Strand

Ah.

04:29:23.470 --> 04:29:34.310

David A Strand

It it's legal reviews, so legal as one, but not the other and I know John Stephenson has his hand up so it may be under John is that on the same subject here.

04:29:25.100 --> 04:29:26.190

Rother, Gordon (FAA)

That's yeah.

04:29:34.660 --> 04:29:58.400

Steventon, John (FAA)

Yes, it is the Handbook is within 400 and we have it with legal currently it's made it made it through the DCP process. So it's been reviewed and commented on and answered and now it's with AGC legal further review and comment as well. We've answered their comments and we've pushed them back to them. So we're close as soon as they get finished with that review of our responses.

04:29:58.840 --> 04:30:08.230

Steventon, John (FAA)

We should be into the next phase of publication, but I I can't speak to their timeline and I have no influence over that at all, so I can't give you an exact date. But we're hoping it's soon.

04:30:08.660 --> 04:30:19.820

Rother, Gordon (FAA)

The yeah, unfortunately everything now goes through legal you know the theory that the Handbook will be easier to update it's still a pretty good theory.

04:30:20.460 --> 04:30:22.230

Rother, Gordon (FAA)

Uh the challenges.

04:30:22.860 --> 04:30:27.150

Rother, Gordon (FAA)

Uh I mean, safos info is everything that we write.

04:30:27.670 --> 04:30:31.080

Rother, Gordon (FAA)

Uh has spent his time in legal.

04:30:31.730 --> 04:30:36.910

Rother, Gordon (FAA)

And the bigger the document the longer the longer they get to to review it so some of these.

04:30:35.510 --> 04:30:35.840

David A Strand

Cool.

04:30:37.520 --> 04:30:42.380

Rother, Gordon (FAA)

Uh some of these bases are pretty lengthy. I have 3 currently working right now.

04:30:43.090 --> 04:30:43.420

David A Strand

Yeah.

04:30:43.100 --> 04:30:50.210

Rother, Gordon (FAA)

And you know they're they're they they literally take years to get through the process so.

04:30:50.900 --> 04:31:20.950

Rother, Gordon (FAA)

It's uh it's not timely enough for us to keep up with with everything that's going on to the aviation world. So the Handbook is a better idea. If we can establish timelines like you're mentioning for the aim that that be cut off dates and and document should change proposals will be put forth and it'll be easier to manage that way. And we just have to work. That process through with legal so the big review, which is the the the initial rewrite or the initial right of that, like.

04:31:21.250 --> 04:31:33.380

Rother, Gordon (FAA)

Onset is guarding gone through we've educated adjudicated their comments and then spoken to their comments and and now they're just chewing on the last little bits of it before we can go to publishing publishing on the Handbook.

04:31:32.510 --> 04:31:32.870

Steventon, John (FAA)

Right.

04:31:33.740 --> 04:32:04.400

Steventon, John (FAA)

We had some asks that were weren't reviewed or weren't really a revised or or attitude. For decades, like the hazardous mountain winds or pilot. Windshear guide so we had a very thorough, senior mereological review from Larry Burch, over all those bases in the in the implementation into this single source document the Handbook. So this is it's as current as anything has been in a quite awhile, so that's a That's a definite benefit and we've made significant changes to it, so it's we're excited to get it out.

04:32:04.450 --> 04:32:06.820

Steventon, John (FAA)

We're hoping it's sooner than later.

04:32:10.050 --> 04:32:15.150

David A Strand

There's nothing like getting mistreated grip tape to slow down progress so sometimes so.

04:32:15.700 --> 04:32:16.380

Steventon, John (FAA)

Exactly.

04:32:15.940 --> 04:32:16.370

David A Strand

Uh.

04:32:17.100 --> 04:32:24.630

David A Strand

I I know a lot of AFS 400 back in the 90s. I was working closely with the guy that will RVSM.

04:32:25.390 --> 04:32:55.830

David A Strand

And RVSM, the guidance does need it needed to get out to manufacturers. Millions we developed the serviceable material to meet both the AI ko. Northland mandate, so because AC would take too long if they came out with an IG M dash 91. RVSM interim guidance material and it was a you know couple 100. Page document and eventually in the definitely guides. You circular, but it it's uh years beyond what we've.

04:32:56.220 --> 04:33:03.230

David A Strand

Meeting so we, we feel your pain when trying to get some of this stuff out in the final pageant.

04:33:07.840 --> 04:33:10.720

David A Strand

And and Gloria I'm glad you got your mute button is working again.

04:33:10.860 --> 04:33:15.740

David A Strand

Uh you're you're not the first to be coached up on that today.

04:33:16.260 --> 04:33:20.520

David A Strand

Uh I'm not sure if you heard Maryland discussion next. Thank you Marilyn.

04:33:16.280 --> 04:33:16.780

Rother, Gordon (FAA)

Yeah.

04:33:21.470 --> 04:33:29.620

David A Strand

Stepping in there, but if there's anything you want to add about the getting it in Spacy published in the fine line.

04:33:29.710 --> 04:33:37.960

Rother, Gordon (FAA)

Yeah, that that that like I I saw Marilyn Polson. It's 2 years for sure. Yeah, it's probably longer than that the way things are going now, but it's it is a?

04:33:38.570 --> 04:33:50.320

Rother, Gordon (FAA)

Uh you know, we, we, we have a specific format that we follow we have a long form or short form of the

AC and and it goes through our document Control Board, which is an informal coordination process of lines of business.

04:33:50.990 --> 04:33:58.820

Rother, Gordon (FAA)

And and then from there once it's once it's finalized. It goes to legal and and then and then it and then it then it goes through formal coordination.

04:33:59.430 --> 04:34:12.450

Rother, Gordon (FAA)

And through formal coordination it can be changed again, and again and again so these are the This is just the standard process for for getting things published and and they see is really no different than publishing a notice.

04:34:13.000 --> 04:34:16.590

Rother, Gordon (FAA)

Uh you know, so this is this is the world we live in.

04:34:17.270 --> 04:34:32.410

Rother, Gordon (FAA)

Uh and uh I I will say that you know, some bases have a regulatory hook up. I notice there was a comment about that whether they're required to follow the AC the way they're written generally speaking.

04:34:33.190 --> 04:34:39.240

Rother, Gordon (FAA)

Uh if they say you know, right up front. It's one way. But it's not the only way to meet the intent of the role.

04:34:39.890 --> 04:34:58.940

Rother, Gordon (FAA)

Uh take uh Etops for example, extended extended operations within twin engine aircraft or extend operations now that is. There's a regulation and and so many tops AC has specific guidance in there well when we do the review of the operators.

04:34:59.790 --> 04:35:00.280

Rother, Gordon (FAA)

You know.

04:35:00.340 --> 04:35:21.040

Rother, Gordon (FAA)

Uh uh they're they're they're they're proposals their policies and procedures. We make sure it's in compliance with the AC and and that's an effort to standardize things so one operators. You know doesn't doesn't operate differently than another. But that's one of the general reasons. We like to write, though, is is it is it provides standardization.

04:35:22.820 --> 04:35:26.380

David A Strand

So is something like uh we the safe Oh with mentioned earlier.

04:35:26.830 --> 04:35:28.520

David A Strand

It will join members seeing none.

04:35:29.210 --> 04:35:32.440

David A Strand

Uh once that is coming down the pipeline would be management, but

04:35:33.810 --> 04:35:43.550

David A Strand

it is that it, it, it sounds like it's a It's a much more easily generated disseminated thing from a timeline standpoint, but does it.

04:35:44.190 --> 04:35:48.390

David A Strand

Like the example that was usually lightning on the ramp if.

04:35:49.100 --> 04:35:51.800

David A Strand

Let's say 4 comes out how.

04:35:52.430 --> 04:35:53.370

David A Strand

Binding.

04:35:54.070 --> 04:36:01.960

David A Strand

Uh does that, like with a DD can point back to a Reg or something so would that have any less.

04:35:56.830 --> 04:35:57.450

Rother, Gordon (FAA)

Well, they're not.

04:36:03.580 --> 04:36:09.120

David A Strand

Concern about you know, tying the hands of our ramp operators for hubs.

04:36:09.470 --> 04:36:40.350

Rother, Gordon (FAA)

It it becomes a liability for them to be quite honest with you with specially with their insurance carriers. I can tell you that saffels or not are not regulatory. I I've written a number of safe was on wet and contaminated runways and we've seen operators just disregard that information and continue operations and have accidents and and so the question has come back home from the NTSB whether whether these things should be regulatory or not the challenges as you thought you'd like to fix the regulation, but that that that isn't even.

04:36:40.490 --> 04:36:52.150

Rother, Gordon (FAA)

Uh a starter in a lot of cases and and if you look at our regulations with her with regard to whether they are ancient. I mean in fact, the The Weather Bureau is still written in the in 121 regulations, I mean?

04:36:53.350 --> 04:37:00.390

Rother, Gordon (FAA)

You know, so they don't even call National Weather Service source approved by the weather Bureau, so it really it's really dated.

04:37:00.990 --> 04:37:04.660

Rother, Gordon (FAA)

Uh but it's a very big challenge to make to make a regulatory change.

04:37:06.030 --> 04:37:18.720

Rother, Gordon (FAA)

So you know that the best thing, we can do is to try to get the information out. And that is through a safe forward info. And we've written. We've written a number of infos on on whether in fact, we've got one going on right now for this, no spicy change.

04:37:19.310 --> 04:37:24.440

Rother, Gordon (FAA)

And that will be coming out here shortly so it it's a It's a notification tool.

04:37:26.790 --> 04:37:29.280

David A Strand

We're down about 10 minutes and I I did one.

04:37:30.020 --> 04:37:44.840

David A Strand

Right when you went no comma earlier. I was asking a question that the Josh Malloy had sent early on, and that was about. He said it may be beyond the scope of this discussion, but we were talking about the silver standard.

04:37:44.890 --> 04:37:48.840

David A Strand

The uh for certified weather system and if.

04:37:50.110 --> 04:38:00.950

David A Strand

If if certified ones or D 2 costly obtain or maintain could there be addressed through Infrastructure Corporation. And so I just want to at least tosses interviews for comments.

04:37:59.040 --> 04:38:03.080

Rother, Gordon (FAA)

Well, they're they're actually is they're actually is and that was.

04:38:03.140 --> 04:38:26.620

Rother, Gordon (FAA)

Uh uh it's now allowed for AIP funding to go to the procurement of of weather systems. The challenges is when you when you do that. You take away from the airport itself or the location itself. You know, whereas AIP funding would be generally you know, brick and mortars type stuff you know building runways taxiways fixing things.

04:38:27.220 --> 04:38:34.680

Rother, Gordon (FAA)

Uh you know taken a couple \$1,000,000.00 or \$1,000,000.00 whatever whatever the the dollar amount is for a weather system.

04:38:35.250 --> 04:38:49.060

Rother, Gordon (FAA)

Uhm doesn't make a lot of sense, especially in in real remote areas. So I mean, we're looking at other options. Many people here know we're looking at a low cost option utilizing the weather camera platform called the V was.

04:38:49.850 --> 04:38:57.540

Rother, Gordon (FAA)

And that is primarily because the fact of the matter is, we, we can't continue download the lines of installing awos everywhere they?

04:38:58.220 --> 04:39:00.310

Rother, Gordon (FAA)

Uh we would like something you know.

04:39:00.360 --> 04:39:18.950

Rother, Gordon (FAA)

Or as good as in a wasp, but it doesn't make sense so vast makes a lot. A lot of sense, but yeah, they're so dancer question. Yes, there is a way a way to get other funding for for these systems, but unfortunately, it robs Peter to pay Paul.

04:39:24.900 --> 04:39:26.830

David A Strand

OK, well, thanks Gordy UM.

04:39:28.760 --> 04:39:32.710

David A Strand

Any other questions or comments into the chat there.

04:39:35.560 --> 04:39:50.010

Matt Fronzak

Uh Dave This is Matt and and I don't know if Rob or or or Lieutenant Colonel Williams or still on the call or not Rob random that is, but you know this. This this afternoon conversation has become very.

04:39:50.700 --> 04:39:55.910

Matt Fronzak

Uh you know FA Weather Service see kind of centric, especially around.

04:39:56.370 --> 04:40:15.360

Matt Fronzak

Uhm requirements versus recommendations and I was curious and put a question in chat about how the DoD does that do they levy requirements on external or internal weather providers or are they recommendations also I'd be curious to hear from one of the other of them if they're still on.

04:40:20.310 --> 04:40:22.130

Branham, Robert

This is other tenant Colonel Brandon Can you hear me?

04:40:23.310 --> 04:40:23.950

Matt Fronzak

Yes, Sir.

04:40:24.020 --> 04:40:24.500

David A Strand

Yes, Sir.

04:40:24.310 --> 04:40:49.050

Branham, Robert

Oh great good afternoon, yeah that's a great question from requirements perspective we, we actually take internal requirements. Externally outside of Air Force weather largely from a data perspective through our our partnerships, I.e. through something called a cop see.

04:40:49.520 --> 04:40:52.340

Branham, Robert

Uh network from Noah.

04:40:52.890 --> 04:41:09.070

Branham, Robert

Uh as an example, you know like for a data feed or in the case of the Navy requesting you know data support from Air Force weather and then I will tell you our process.

04:41:10.400 --> 04:41:23.550

Branham, Robert

It's I don't you know it, it, it, it runs through our lead command down Air Combat Command, Donna Langley Air Force Base and it goes into the requirements process for.

04:41:25.210 --> 04:41:38.830

Branham, Robert

What's called a dot mil P FP analysis? Which is basically assessing training education operations and you know the impact of the requirement to the community and.

04:41:39.160 --> 04:42:03.820

Branham, Robert

Uh ACC you'll take that lead command and actually determine if a materialistic or non materialistic solution meets the intent of that requirement so the process can take a little bit of time. It's very

thorough, but once it gets into the requirements prioritization process, then we start working with our support program office to look at funding.

04:42:04.640 --> 04:42:07.370

Branham, Robert

Ah that's kind of how the process works.

04:42:07.980 --> 04:42:08.580

Branham, Robert

Ah.

04:42:09.810 --> 04:42:32.740

Branham, Robert

One of the things that we're looking at 2:00 right now and I know Doctor Rao. He just came in after doctor, Ferro recently. He's our new chief scientist for Air Force whether he's been involved in a number of meetings and you know, taking a look at you know how do we? How do we work with the arts? Who oh process and I think that's that's where?

04:42:33.020 --> 04:42:52.890

Branham, Robert

Uh you know, we're trying to get better at that in the Air Force. If you will from a you know working with a a FRL Air Force Research lab working with Army Research lab working with. Yeah, the other Academy. You know the science you know community to come and help us.

04:42:53.320 --> 04:42:55.210

Branham, Robert

Like do some of those things.

04:42:57.980 --> 04:43:01.870

Branham, Robert

I hope that helps helps answer a little bit about the process.

04:43:08.200 --> 04:43:09.980

David A Strand

Matt Matt is that the.

04:43:11.080 --> 04:43:11.680

David A Strand

Take care of it.

04:43:11.490 --> 04:43:25.700

Matt Fronzak

Well, well, I'm embarrassed to say. I went to mute myself after Colonel. Brandon started talking and when I hit the mute button teams folded its tent on me. So I really didn't hear much of what he had to say, but as long as the rest of y'all did that's fine.

04:43:23.400 --> 04:43:23.900

David A Strand

Yep.

04:43:26.100 --> 04:43:30.830

David A Strand

It it wasn't excellent answer that went right down the path of what you already formed.

04:43:30.960 --> 04:43:31.490

Matt Fronzak

There you go.

04:43:31.600 --> 04:43:36.110

Branham, Robert

Yeah, that's OK, it'll take me about an hour and a half to go back over here, real quick.

04:43:36.160 --> 04:43:36.920

Branham, Robert

Doctors yogurt.

04:43:38.990 --> 04:43:39.520

Branham, Robert

Ah.

04:43:39.080 --> 04:43:39.680

Matt Fronzak

I hear you.

04:43:40.230 --> 04:43:41.940

Branham, Robert

No, but I I can actually reach.

04:43:40.370 --> 04:43:41.390

Matt Fronzak

No no no no no.

04:43:41.440 --> 04:43:41.800

Matt Fronzak

I don't know.

04:43:42.560 --> 04:43:45.650

Branham, Robert

Yeah, yeah, I could actually reach make it to you pretty quickly.

04:43:45.710 --> 04:44:08.220

Branham, Robert

Uh uh just from a perspective you know, we ever requirements process yes. Uh Arlid Command, which is Air Combat Command at Langley Air Force Base manages that they work very closely with our support program office, which is up at Hanscom Air Force Base, Massachusetts.

04:44:08.660 --> 04:44:32.820

Branham, Robert

Ah and and taking a look at our portfolio of capabilities. So obviously on the aviation side. A lot of our

focus. A lot of our systems on the terrestrial side really kind of fall. You know with the weather sensors. You know of course at the airfields both deployed and in Garrison and so.

04:44:34.190 --> 04:44:35.460

Branham, Robert
From a standpoint.

04:44:36.090 --> 04:45:06.150

Branham, Robert
Uh I think it's important to note that you know once we get a requirement submitted whether it's internally or externally. Most of our external requirements are submitted to either from the Navy, or at times from Noah through interagency forum, such as cops see that's an example. That's a group that's under the new icam structure. It's a It's an older longer standing group, I mean, some of you have probably heard of it quite frankly.

04:45:06.620 --> 04:45:13.740

Branham, Robert
Uh but that group does a lot of this a lot of collaboration and data sharing?

04:45:14.520 --> 04:45:28.780

Branham, Robert
Which I think is another topic we're going to be talking about here in the coming days in this stem which I think is important. But we get that request that comes in and then we actually submit it. We validate it at the Pentagon.

04:45:29.070 --> 04:45:48.320

Branham, Robert
Uh in our interagency division. We take a look at it from a policy perspective from a requirements perspective and then we send it down to our lead command for further analysis. Then, it gets put into that process. The requirements process of of prioritization and and things of that nature.

04:45:49.860 --> 04:45:55.680

Branham, Robert
So that's kind of how we we process all of our requirements.

04:45:56.330 --> 04:45:58.270

Branham, Robert
Uh depending on.

04:45:58.860 --> 04:45:59.450

Branham, Robert
Ah.

04:46:01.300 --> 04:46:04.980

Branham, Robert
Uh you know, I think one of the things.

04:46:06.210 --> 04:46:35.710

Branham, Robert

It's important to note you know, too, that that's important is you know looking at a requirement that that all the agencies you know have from a I mean from a holistic perspective. I think it's important to when we look at those I mean, you know, we take a look at you know well. You know what's Noah doing with this capability or with this type of requirement. It is their capability that they're using you know currently too.

04:46:35.910 --> 04:46:49.300

Branham, Robert

To fulfill that or what's the FAA doing what's what's the Navy doing you know what are our partners. You know out there using to fulfill such a you know, such a capability and.

04:46:50.450 --> 04:47:15.870

Branham, Robert

I said that's the other you know important aspect when we tie. This in here. It's not we don't like using the term solutions when we take care of requirements its what capability are we trying to fill OK and it's it's like somebody today had a good conversation a question and I think it might have been from Captain Cox from the 15th oh WS it spoke earlier today.

04:47:16.330 --> 04:47:23.950

Branham, Robert

Uh it's it's you know what're you know what's what's Noah using up you know, in in the Arctic region, as far as.

04:47:24.700 --> 04:47:32.310

Branham, Robert

You know modeling capability or you know you know weather forecasting support capability there well, we look at capabilities.

04:47:33.460 --> 04:47:48.500

Branham, Robert

Gaps and you know you know what needs to be. You know fulfilled you know for that particular region. Like in the case of that that you know the DAF Arctic strategy, yeah, we have a go? Do from the secretary of the Air Force.

04:47:49.120 --> 04:47:52.690

Branham, Robert

To improve weather forecasting capabilities in the Arctic region.

04:47:54.110 --> 04:48:05.110

Branham, Robert

So that's a data gap. I mean that's a gap that we have currently and so you know how do we get after that I mean? Obviously, there's going to be a lot of a lot of different you know?

04:48:06.400 --> 04:48:10.670

Branham, Robert

For the avenues to to approach that so I I hope that answers your question.

04:48:11.810 --> 04:48:12.130

Branham, Robert
Matt.

04:48:12.380 --> 04:48:12.870

Branham, Robert
Uh.

04:48:14.320 --> 04:48:23.470

Matt Fronzak

It did it did Rob. Thank you very much for taking the time to to to do it again and and and bring me back up to speed here? Appreciate it.

04:48:21.080 --> 04:48:21.460

Branham, Robert
Yeah.

04:48:23.730 --> 04:48:51.460

Branham, Robert

Yeah, and somebody mentioned in here, I I think it might have been bill. They that talked about an aviation form that that they have for request. We do those 2. We have what's called a weather requirements request that are leaking man takes and it's it's a pretty well well built out form and matter of fact I was, I was, I help put that together myself when I was down there at 8:05. W few years ago of you know, I kind of had a hand in that boat.

04:48:52.040 --> 04:48:59.790

Branham, Robert

You know, putting that document together to to justify a requirement and and helps us understand that and and obviously for us.

04:49:00.500 --> 04:49:07.630

Branham, Robert

And 2 and I and I'll put a I'll put a foot stomp here on that when it comes to requirements for the DoD.

04:49:08.360 --> 04:49:09.300

Branham, Robert

As you can imagine.

04:49:09.850 --> 04:49:12.270

Branham, Robert

Uh if its tide to the NDS.

04:49:13.080 --> 04:49:17.150

Branham, Robert

Ah, we're gonna have better better luck of getting it funded.

04:49:17.820 --> 04:49:21.920

Branham, Robert

Ah, if it's not tide to the NDS. We're going to have a hard time.

04:49:22.870 --> 04:49:25.600

Branham, Robert

Uh pushing pushing to get money for that.

04:49:30.160 --> 04:49:36.450

Matt Fronzak

And I presume and and sorry for my ignorance. I presume NDS is National Defense strategy or something like that.

04:49:35.980 --> 04:49:36.250

Branham, Robert

Yep.

04:49:36.550 --> 04:49:43.430

Branham, Robert

Yeah, exactly. Yep, everything is gotta really be aligned with that in a matter of fact we're we're.

04:49:46.100 --> 04:49:49.160

Branham, Robert

Point to bring up also that we're in the midst right now of.

04:49:50.330 --> 04:49:54.930

Branham, Robert

Doing some revisions for that, so I believe the new ones are supposed to be coming out in the next year.

04:49:56.180 --> 04:50:06.590

Branham, Robert

So we're going to be. You know looking forward to that and I anticipate a lot of climate change coming in that one. Yeah, just based on the current administration.

04:50:12.600 --> 04:50:14.330

Branham, Robert

Which I think we're going to get into that top?

04:50:13.120 --> 04:50:13.950

Bass, Randy (FAA)

Alright well look.

04:50:13.530 --> 04:50:19.100

David A Strand

Format that is in terms of chat so I love playing back to Randy or Matt Matthias.

04:50:21.580 --> 04:50:24.990

Bass, Randy (FAA)

You'll say it's actually a little bit after after 4 so.

04:50:25.040 --> 04:50:27.890

Bass, Randy (FAA)

Well, I think our first day is over with.

04:50:29.740 --> 04:50:45.350

Bass, Randy (FAA)

I want to thank all the all the panelists and and actually everybody who participated today and and and dialed in. I apologize for some of the technical glitches. We had but I think that's kind of to be expected nowadays with.

04:50:46.090 --> 04:50:48.540

Bass, Randy (FAA)

Yeah, the sheer number of people we had an.

04:50:49.220 --> 04:50:53.990

Bass, Randy (FAA)

No, I'm trying to do this virtually but I think overall overall it went pretty well.

04:50:54.600 --> 04:51:02.370

Bass, Randy (FAA)

Uhm I will turn it over to Matt and or Matias to to wrap us up and get us prepared for tomorrow.

04:51:05.290 --> 04:51:09.070

Matt Fronzak

I defer to Matthias, he's he's much more erudite and well spoken.

04:51:10.950 --> 04:51:40.410

Matthias Steiner (Guest)

Well, well, I'm not commenting on that, but I would like to echo or Randy 's comments and thank all the speakers all the people who contributed to the stimulating discussions and comments in the chat room and life. I think this was a good day to create or share, or enhance a situational awareness of what's going on across various agencies from a navigation weather.

04:51:40.600 --> 04:51:42.290

Matthias Steiner (Guest)

Uh perspective so.

04:51:43.020 --> 04:51:48.290

Matthias Steiner (Guest)

That's it for today. Uh I would like to thank also Dave it's trained for.

04:51:48.340 --> 04:51:56.700

Matthias Steiner (Guest)

Or uh expertly shepherding our chat room discussions and questions this was well appreciated. Thank you Dave.

04:51:58.020 --> 04:52:00.000

Matthias Steiner (Guest)

Looking forward to.

04:51:59.200 --> 04:51:59.880

David A Strand

I don't think it's

04:52:00.920 --> 04:52:31.990

Matthias Steiner (Guest)

Looking forward to tomorrow, we have another interesting day coming up. This one will be focused on aviation weather for advanced air mobility operations. So this is certainly getting a lot of attention and I expect we have at least as many people participating as today. I noticed we were steadily around 100 people dialed in sometimes I saw 155 and it was coming and going so I think.

04:52:32.040 --> 04:52:45.430

Matthias Steiner (Guest)

Overall, we had well over 100 different people participate, which was great. That's exactly what we intended with this meeting to get as much participation across different stakeholders.

04:52:46.050 --> 04:52:54.620

Matthias Steiner (Guest)

So anyway. Thank you again for a good day and we look forward to seeing you tomorrow again back to you Matt.

04:52:57.730 --> 04:53:06.770

Matt Fronzak

I have nothing to add Matias. It was perfect. Thank you and and everyone. Thank you for being here and we hope to see you again tomorrow, bye bye.

04:59:56.190 --> 04:59:56.450

Matt Fronzak

Yeah.