

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

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PIPER PA46 CRASH *

NEAR CASTALIA, NORTH CAROLINA * Accident No.: ERA19FA188

JUNE 7, 2019 *

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Interview of: TODD BAKER
Meteorologist
ZDC CWSU

Washington Air Route Traffic Control
Center
Leesport, Virginia

Wednesday,
June 12, 2019

APPEARANCES:

PAUL SUFFERN, Senior Meteorologist
National Transportation Safety Board

BRIAN SOPER, Senior Air Traffic Control Investigator
National Transportation Safety Board

BRENT EBERHART, Air Traffic Control Specialist
Federal Aviation Administration

KAREN MARINAS, Air Safety Investigator
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<u>ITEM</u>	<u>I N D E X</u>	<u>PAGE</u>
Interview of Todd Baker:		
By Mr. Suffern		6
By Mr. Soper		18
By Ms. Marinas		24
By Mr. Eberhart		28
By Mr. Soper		28

I N T E R V I E W

(1:36 p.m.)

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2
3 MR. SUFFERN: So we are on the record at 1:36. And my name
4 is Paul Suffern. I'm an NTSB meteorologist, and this is for an
5 aircraft accident that occurred June 7th.

6 And just, Todd, for your information, the NTSB is an
7 independent federal agency charged with determining probable cause
8 of transportation accidents and promoting transportation safety.
9 We are not part of the FAA or DOT, and we're not regulatory at
10 all.

11 MR. BAKER: Okay.

12 MR. SUFFERN: And if those folks in the room there could
13 introduce yourselves, starting with Brian?

14 MR. SOPER: Yep. Brian Soper, air traffic investigator at
15 the NTSB. I'm the group chair for the air traffic control group.

16 MS. MARINAS: Karena Marinas, NATCA air safety investigator
17 and controller at Los Angeles Center.

18 MR. EBERHART: I'm Brent Eberhart, and I work for the FAA.

19 MR. BAKER: And I'm Todd Baker. I'm a meteorologist with the
20 CWSU here at Leesburg.

21 MR. SUFFERN: Okay. And just for the record, Todd, do you
22 have any objection, other than the NTSB employee, in taking part
23 in the interview?

24 MR. BAKER: No, I don't.

25 MR. SUFFERN: Okay. And for the record, today we'll be using

1 the services of a court reporter who will record and then
2 transcribe the interview. The transcript, not the audio
3 recording, will be made part of the public docket. And it sounds
4 like we've got a tape recorder going, so everything's good to go.

5 Overall, the purpose of this investigation is to determine
6 the probable cause and to prevent the reoccurrence of events. Our
7 role is not to assign fault, blame or liability. This interview
8 is part of the fact-finding phase. We're just trying to
9 understand, because none of us live up there in Leesburg or
10 understand the particular area and job it is that you work.

11 MR. BAKER: Okay.

12 MR. SUFFERN: Each group member will have a chance to ask
13 questions, and we'll ask questions one at a time and, then, when
14 everybody's done asking questions, we may have a round to follow
15 up, but that'll pretty much summarize the question -- Q&A part.

16 And if you could answer all the questions to the best of your
17 recollection. If you don't understand a question, you don't
18 remember or anything like that, then that's totally fine to say "I
19 don't remember" or "I don't recall."

20 MR. BAKER: Okay.

21 MR. SUFFERN: You're entitled to have one representative
22 there of your choosing. Is there anybody else in the room there
23 with you, Todd?

24 MR. BAKER: No.

25 MR. SUFFERN: Would you like to have somebody there with you?

1 MR. BAKER: I don't think so. I'm good.

2 MR. SUFFERN: Before we start, do you have any questions?

3 MR. BAKER: I don't. No.

4 MR. SUFFERN: Okay. So that's basically the first little
5 part. And the first couple of questions that I'm going to ask are
6 more like clerical types of things and stuff like that, so -- and
7 then we'll go from there.

8 MR. BAKER: Okay.

9 INTERVIEW OF TODD BAKER

10 BY MR. SUFFERN:

11 Q. So for the record, can you please state your full name and
12 your position?

13 A. Sure. My name's Todd Wilson Baker. I'm a meteorologist here
14 at the CWSU in Leesburg.

15 Q. Okay. And how long have you had a -- how long have you been
16 a CWSU meteorologist there at Leesburg?

17 A. Since October of 2011.

18 Q. Okay. And do you have any other work experience within the
19 National Weather Service before that?

20 A. Yes. I was a journeyman meteorologist in Riverton, Wyoming,
21 since -- let's see here -- it would've been May of 2000. And
22 before that, I was an intern there from June of '99 until then.

23 Q. That's quite a, quite a change going from Riverton all the
24 way to the East Coast.

25 A. Yes, it was. Lost my views.

1 Q. Oh, yeah. Not so many mountains or you're not that close to
2 Yellowstone or the Tetons --

3 A. Exactly. I could actually see some of the mountains from the
4 eastern part of Yellowstone from my house.

5 Q. Nice.

6 A. It was incredible.

7 Q. I used to -- I am (indiscernible) of the Weather Service
8 meteorologist up in Alaska, so -- and I'm now the East Coast. I
9 miss my views, to say the least.

10 A. Yeah, and even that puts Wyoming to shame.

11 Q. Yeah. Well, you know, I think it's just a different
12 perspective. As long as they're mountains, I'm happy.

13 A. That's true. That's true.

14 Q. All right. So do you hold any college degree?

15 A. Yes. I have a bachelor's of science in meteorology from SUNY
16 Oswego.

17 Q. And leading up to the day of the accident, do you remember
18 what your schedule was?

19 A. Yeah. I was on, I believe, day shifts the day before. And I
20 would've started at -- I'm sorry?

21 Q. Okay. No, go ahead. Sorry.

22 A. Yeah. I would have started my day at 5 o'clock in the
23 morning and ended my shift at 2 o'clock p.m. And that's the shift
24 that I worked when the -- on the day that the accident happened as
25 well.

1 Q. Okay. And then if you can recall -- so that would have been
2 Thursday and Friday. Do you recall what you were working Tuesday
3 and Wednesday?

4 A. Let's see. I believe I was on evening shifts the prior 3
5 days to that. So that would've been Monday, Tuesday, Wednesday.

6 Q. Okay.

7 A. Working from 12 noon till 9 p.m.

8 Q. Okay. And are those the -- the two shifts there at the CWSU
9 are the 5 to 2 and 12 to 9?

10 A. Yes.

11 Q. Okay. Do you recall having any unusual or any sleep problems
12 in the 72 hours leading up to the accident?

13 A. Could you repeat that, please?

14 Q. Do you recall any unusual things, such as medical issues --

15 A. Oh.

16 Q. -- or any sleep problems or anything like that in the 72
17 hours, 3 days, leading up to the accident?

18 A. No. No.

19 Q. Was any training being done on the afternoon of the accident?

20 A. No training, no.

21 Q. So there at the Leesburg CWSU, do you have any other
22 collateral duties, like a focal point, maybe, for technology or
23 satellite, or like you're in charge of the timecards or stuff like
24 that?

25 A. I do take care of the timecards and I'm also the satellite --

1 MR. SOPER: Satellite what?

2 MR. SUFFERN: All right. And (indiscernible) --

3 MR. SOPER: One second, Paul.

4 Satellite what? I'm sorry?

5 MR. BAKER: Like for the GOES and the --

6 MR. SOPER: Oh, okay.

7 MR. BAKER: -- and the polar orbiters, things like that.

8 So --

9 MR. SOPER: Okay.

10 BY MR. SUFFERN:

11 Q. Okay. And on a scale of 1 to 5, with 5 being the most
12 complex type of weather for your area, how would you rate the
13 weather during the day of your -- that you were working, for the
14 accident?

15 A. I'd probably say it was around a 3. I don't think it was
16 overly complex, but it still had its, it still had its -- what's
17 the word I'm looking for --

18 UNIDENTIFIED SPEAKER: Challenges.

19 MR. BAKER: Challenges, yes. Thank you.

20 BY MR. SUFFERN:

21 Q. All right. And do you recall any unusual distractions or
22 things occurring during the morning or afternoon of the accident?
23 It could be anything from somebody at the TMU bugging you all the
24 time or, you know, having trouble logging into the computer or
25 your computer went down for a little bit, something like that.

1 A. No, nothing that day. I did have other duties that were
2 going on that were occupying my time probably in the 2½ hours
3 leading up to it. I had several things going on probably between
4 11 o'clock and 12:15 that day.

5 Q. And since the day of the accident, have you had a chance to
6 review the weather conditions?

7 A. A little bit, yes.

8 Q. Okay. All right. So that's kind of the -- more or less, the
9 clerical work there. So if you could, and just, you know, step
10 back to that, to Friday or so, and just kind of in your mind's
11 eye, could you kind of describe the weather on the day of the
12 accident?

13 A. Sure. Yeah, the day really started out, it was pretty cloudy
14 across the airspace pretty much from -- actually I think the
15 entire airspace was pretty cloudy that day. And we had some
16 showers down across the southern half of ZDC. It was probably
17 scattered in nature, but I was expecting those showers to be on
18 the increase through the morning and into the early afternoon.
19 And I was expecting some thunderstorms probably to develop after
20 11 o'clock that morning, increasing throughout the early
21 afternoon, forming into west to east bands pretty much from the
22 Central Virginia area southward through North Carolina.

23 Q. All right. So that's kind of what you were expecting there.
24 As far as your standup brief, how often do you do standup briefs
25 there at ZDC?

1 A. Standups, we do one at 7 o'clock, or -- yeah, 7 o'clock a.m.
2 and 3:30 p.m. So twice a day.

3 Q. And do you recall, since you were on shift there for the 7
4 a.m. one, do you recall what you gave to air traffic control as
5 far as a weather briefing?

6 A. About basically what I had mentioned earlier, that we were
7 going to see showers increasing across the southern three-quarters
8 of the airspace or so, and there could have been some isolated
9 thunderstorms in the mix, but basically I wasn't expecting the
10 thunderstorms to start to develop until after 11 o'clock. And I
11 did mention that, you know, being 11 o'clock a.m., it's a little
12 bit sooner than they usually do. So I did mention that.

13 And then after -- during the early afternoon, I was expecting
14 them to develop in those east-west oriented bands and pretty much
15 persisting through the rest of the afternoon and into the evening
16 before dissipating.

17 Q. Okay. And so can you kind of step me through the process for
18 issuing the center weather advisory that you did there?

19 A. Sure. Well, we had a few areas with thunderstorms going on.
20 The first area that I was concentrating on actually was an area
21 pretty much from Richmond down through Norfolk area, and there
22 were some also down -- a small little cluster starting to develop
23 over by -- or Elizabeth City, and another area by Raleigh.

24 And so it looked to me that the thunderstorms up between
25 Richmond and Norfolk were probably getting a little bit more

1 active than the other ones. So I issued my first CWA there, I
2 think it was -- it was around just before 12:30 that day, I issued
3 the ones for that Central Virginia area. And then shortly, as
4 soon as I got that one out, that's when I had up the thunderstorms
5 down across the northern part of North Carolina, being the stuff
6 around Raleigh and the stuff around Elizabeth City. And so, yeah,
7 they -- I had been watching those storms for probably the past 45
8 minutes or so. They were kind of festering a little bit there,
9 not a whole lot of growth with them. But after noon I noticed
10 that the tops on them were getting substantially higher, getting
11 up into the mid to upper 30s. So that's when I decided to issue
12 the CWA.

13 Q. Okay. Is that kind of your criteria for when you're issuing
14 a center weather advisory for thunderstorms, you know, you're just
15 kind of waiting for them to get above, you know, 30,000 feet or
16 so?

17 A. Right, right. Yeah, that and -- it also would kind of depend
18 on where in the airspace that they're located. Like getting up in
19 the northeast part of the airspace, it wouldn't take a whole lot
20 for me to issue a CWA up there just because the jet routes are
21 really packed together. But when you work your way to the south
22 and -- south and west of our northeast, the jet routes tend to
23 open up so there's more room for deviation. So I use that as a
24 criteria as well.

25 Q. Okay. Is there any kind of -- is that just something you've

1 learned since being there since -- from 2011, or is there any kind
2 of a, you know, checklist that you guys use there at ZDC as far as
3 when it gets this over the northeast, then we do this, or anything
4 like that, or just experience?

5 A. Yeah, I would say it's more experience. There was an STMC
6 that worked here when I first got here that really explained the
7 impact on the NAS on -- you know, the impact on the NAS as far as
8 thunderstorms, how bad thunderstorms are in the northeast part of
9 the airspace versus how bad the thunderstorms can be across the
10 south. So he did a really good job at explaining that all to me
11 and to give me an idea on what to inform them on. If that makes
12 sense.

13 Q. Makes total sense to me.

14 A. Great.

15 Q. As far as discussions, do you remember, before you issued the
16 center weather advisory, do you remember having a discussion with
17 the Aviation Weather Center as far as if they were going to pull
18 the trigger on a SIGMET or anything like that?

19 A. No. There was no collaboration there.

20 Q. Okay. In general, how do you stay updated -- since,
21 unfortunately, I'm unable to travel up there, in general, how do
22 you become aware of the changing weather conditions? What are
23 your go-to things that you use there as far as being updated on
24 the weather?

25 A. As far as like the thunderstorms and --

1 Q. Yeah, the thunderstorms in general, yeah, this time of year,
2 I guess.

3 A. Yeah. I guess, I use CIWS quite a bit as far like the
4 thunderstorm development. It's a really great tool that not only
5 displays the reflectivity but also the tops as well. So that's a
6 -- that's probably my number one go-to tool for convection as far
7 as issuing CWAs.

8 Q. Okay. And is that something -- does the CWSU sit right there
9 next TMU, and so that's something you kind of make them aware of?

10 A. Right, right. We are actually separated from TMU probably by
11 maybe 40 feet, something like that. But we're in easily walking
12 distance between each other. We're actually co-located with
13 Flight Data ZDC.

14 Q. Okay. So was this thunderstorm activity unusual at all for
15 ZDC's airspace?

16 A. Not at all, no. No. In fact, the days leading up to it we
17 had had some significant thunderstorm activity, and even the days
18 after that, the event, there was some pretty significant
19 thunderstorm activity. So it was really basically another active
20 day for us, since it had been so active in the previous several
21 days and even the days afterwards.

22 Q. Okay. As far as the pre-duty weather brief video, do you
23 recall what things you discussed during that video?

24 A. Right. It was essentially what I had mentioned up at the
25 standup. I don't think I was as -- not as much information. I

1 think I was just -- kind of broad-brushed it, saying that the
2 showers would be on the increase across the southern three-
3 quarters, with those east-west bands forming after 11, 12 o'clock.
4 So it was pretty, pretty broad brush, no specific areas mentioned,
5 just because we get in at 5 o'clock and we pretty much have to get
6 going right away on the -- on that pre-duty weather briefing. So
7 there really wasn't a whole lot of time to do a lot of model
8 interrogation. So I knew it was going to be a fairly active day,
9 but just the exact locations weren't as apparent at the time, I
10 guess.

11 Q. Okay. About how often can you recall getting, I guess -- I
12 don't know the correct term for it, but a weather assist from the
13 air traffic control folks at ZDC?

14 A. Hmm. I don't know if we've -- are you talking like SIGMETs?
15 Or not SIGMETs but PIREPs and things like that or --

16 Q. No. I'm talking more along the lines of like they have
17 somebody who's a VFR on top or somebody who's icing, and air
18 traffic control or the supe comes over and says, hey, Todd, you
19 know, we have this guy here, can you come help, help us find a
20 spot to get this person down --

21 A. Oh, okay.

22 Q. -- something like that?

23 A. I've had that maybe twice since I've been here.

24 Q. Okay. As far as the standard procedure for PIREPs and
25 getting those out to the airspace, how is that handled at ZDC?

1 A. Right. As far as PIREPs go, Flight Data takes care of those
2 if they're -- actually, they take care of all of them. They're
3 the ones that distribute it out to the world, so to speak. But if
4 they are urgent PIREPs, either severe turbulence, severe icing or
5 low-level wind shear, then we'll issue a general information
6 statement out to the controllers, TRACON, and to the towers. And
7 we notify our TMU about them, the operations manager and the STMC.
8 And we also do a --

9 Q. Okay. So those --

10 MR. SOPER: Can you go back again? I'm sorry. I want to
11 capture that. You said that if you get UUAs for like air
12 turbulence, icing or low-level wind shear, that you'll put out a
13 general information to the controllers here.

14 MR. BAKER: Yep.

15 MR. SOPER: And where else?

16 MR. BAKER: To the center, to the towers, the TRACON, and I
17 -- yeah, I think covers it.

18 MR. SOPER: Okay. Sorry. I just wanted to capture that.

19 MR. SUFFERN: Okay. No, great.

20 BY MR. SUFFERN:

21 Q. As far as the -- so entering that UUA would still be up to
22 Flight Data, but they would let you know, hey, we just got this
23 urgent one, and then you would -- they would issue the PIREP and
24 you would issue the general information data?

25 A. Correct.

1 Q. Okay. I understand. Thank you, Todd.

2 A. Sure.

3 Q. So as far as the situational awareness displays there in the
4 sector, who controls the weather imagery that's on those?

5 A. As far as I know, their frontline supervisors do. Yeah, we
6 -- and I'm, more or less, just assuming there because we don't
7 have any control over that whatsoever. So --

8 Q. Okay. And was the CWSU, and I mean I don't know how fully
9 staffed the ZDC is, but were you guys able to have your spring
10 weather training or anything like that? For the controllers, I
11 mean.

12 A. We don't really do that here at ZDC. Are you -- do you mean
13 that the -- where the CWSU actually trains the controllers?

14 Q. Yeah, uh-huh.

15 A. Yeah, we haven't --

16 Q. Because I know some CWSUs do it.

17 A. Yeah, we don't do that here.

18 MR. SUFFERN: Okay. All right. That's all the questions
19 have now.

20 Brian, why don't we go to you.

21 MR. BAKER: Okay.

22 MR. SOPER: Okay. Again, I'm an air traffic controller, so
23 bear with me. I got to break it down to pictures and crayons and
24 stuff.

25 MR. BAKER: Sure.

1 MR. SOPER: I'm just not as adept. So some of my questions
2 may sound a little rudimentary.

3 BY MR. SOPER:

4 Q. But I'd like to step back to the pre-duty weather briefing
5 specifically. So now I know you guys have been doing that for a
6 little while here.

7 A. Um-hum.

8 Q. And they've been doing it across the NAS. Have you received
9 any feedback and can you tell me a little bit about how that
10 originated here? Was it just handed to you guys, you guys need to
11 develop something and this is what it needs to meet; go forth and
12 conquer? Or --

13 A. Yeah.

14 Q. -- did you work collaboratively with somebody in air traffic
15 control to come up with the best idea?

16 A. We did work with the local NATCA reps here on coming up with
17 what they felt would be, you know, good information that the
18 controllers could use and that, and we -- I sat down with their
19 union rep and came up with a list of seven or eight slides, and
20 that's how we came up with that. So --

21 Q. Okay. And how's the feedback, then, since you guys have been
22 doing it? Do you receive any feedback from the controllers? Do
23 you understand what I'm --

24 A. Every so often we do. Every so often we do, but --

25 Q. How's it been?

1 A. It's been, for the most part, positive. I think we've gotten
2 a few negative reports, but most of them have been positive and I
3 think the briefing itself has been very well received here.

4 Q. Okay. On the -- now to shift back -- I just wanted to make
5 sure I captured that before I forgot.

6 A. Um-hum.

7 Q. So going back to the evening or the -- actually, it wasn't
8 evening. Was it evening when it happened?

9 A. It was --

10 Q. The accident?

11 A. It was -- the accident itself or --

12 Q. Yeah.

13 A. I thought it was at 1:30 p.m.

14 Q. Yeah, that's right. Okay. The middle of the day. So on
15 that day of the accident, you were rounding out to the end of your
16 shift then, probably, right?

17 A. Yes.

18 Q. Just after it happened, but -- so do you recall, do you --
19 did you put out any supplemental information, other than the CWA
20 that went out, that you can think of because either the storms
21 were changing significant enough from what had been put out at
22 standup or it was coming in quicker or it was worse? Anything
23 like that, that you can think of, or is it strictly just getting
24 that CWA out there to cover that, that you noticed it?

25 A. That was pretty much it. I guess leading up to it, I had

1 walked over to our STMC and briefed him that, hey, you know, the
2 storms are starting to pop now, they are starting to grow a little
3 bit. So it was just a quick, you know, 20, 30 second briefing to
4 him.

5 MS. MARINAS: You said that was to the OM?

6 MR. BAKER: To the STMC.

7 MS. MARINAS: STMC. Sorry.

8 MR. BAKER: Yeah.

9 MS. MARINAS: Okay.

10 BY MR. SOPER:

11 Q. I had a quick question with regards to, kind of along the
12 lines of what Paul was asking when he was asking about tactical
13 weather support for air traffic controllers, like them actually
14 asking you for something to get somebody around icing or through
15 precip or whatever the case may be.

16 A. Um-hum.

17 Q. How often do you get asked for, and do you have access of any
18 accurate tops information that you can provide to air traffic
19 controllers at the time? Do you get calls for tops information
20 from them much or --

21 A. I'd have to say it's pretty rare that we do. I can't
22 actually recall a time where I was asked for tops. Aside from the
23 frontline manager, like the standup briefing, like they'll ask me
24 what the tops are going to be like with these storms or whatever,
25 but --

1 Q. You know what I find ironic about that? Is that if you ask
2 controllers one of their biggest limiting factors with weather,
3 they'll tell you it's because we don't have tops.

4 A. Right. On the -- you're talking on the glass?

5 Q. So I asked that, I asked the -- well, that they don't have
6 tops available other than to get PIREPs, you know. So they do
7 often try to get PIREPs to get tops information.

8 A. Um-hum.

9 Q. But I was kind of curious then, is that something that you
10 have access to tops information from the weather stuff that you
11 have that, if a controller were to come over and ask you or a
12 supe, say, hey, what are the tops of this cell? This cell that
13 we're seeing right over here, what are we looking at there; what
14 are the tops? Can you give me a relative tops to those? Is that
15 something you could give him a pretty good ballpark?

16 A. Yep. Because that CIWS terminal, that has all the tops of
17 each individual cell out there, I believe, above 20,000 feet or
18 so. And even if we didn't have access to CIWS, we get radar tops,
19 radar echo tops products in our AWIPS terminal, too. And AWIPS is
20 the National Weather Service's system where we access all our
21 computer models, satellite, radar data, things like that. So we
22 even have access to the echo tops in that. And each area, each
23 supervisor does have a CIWS terminal. So they have it. The
24 frontline managers have access to that as well.

25 Q. Are you aware, and you might not know the answer to this, but

1 are you aware is there any -- has there been any formalized
2 training or usage provided to them on what they're deriving from
3 CIWS, or was it more of a thing that was kind of handed to them so
4 they had access, and those that kind of work with it know and
5 those that don't, don't?

6 A. Right. That's what I'm guessing.

7 Q. Yeah.

8 A. Yeah, because like I was telling Paul, there really hasn't
9 been any request for the CWSU to offer any sort of training to the
10 controllers, frontlines or --

11 Q. But you feel you're adept at using it, right?

12 A. Oh, yeah.

13 Q. Like you know what it can be very useful for.

14 A. Um-hum.

15 Q. And if you were approached, if you were -- if we had a
16 situation where air traffic said, you know what, I'd like to get
17 our controllers -- you know, or I'd like to at least start with
18 getting our supes on board with understanding CIWS and what it can
19 provide them and how it would be a good tool in their box, would
20 you guys be willing to work with them in some sort of
21 miniaturized --

22 A. Sure.

23 Q. -- localized training program to step them through a little
24 bit, at least in a rudimentary fashion, to show them some of the
25 tools and how they can use it to their benefit?

1 A. Right. Yeah.

2 Q. Okay.

3 A. Absolutely.

4 Q. Okay. One last thing and then I'm going to pass it along.

5 A. Okay.

6 Q. With regards to inflight weather advisories like SIGMET,
7 convective SIGMETs, is there the ability on anything that you know
8 of down there, besides I know it's depicted like on the AWC
9 website and stuff, but is there anything available to air traffic
10 controllers where that information could be depicted graphically?
11 Meaning the graphic boundaries of the SIGMET overlaid on CIWS or
12 overlaid on anything else. Is there anything?

13 A. Not on CIWS at this point.

14 Q. Not on CIWS.

15 A. The -- I'm not sure how familiar you are with TCF?

16 Q. Not (indiscernible), but --

17 A. That's the traffic flow -- traffic management flow
18 collaborative forecast.

19 Q. Over in TMU -- did that at TMU?

20 A. Yeah. It's more of a TMU kind of product, but I know that is
21 now overlaid on CIWS. But as far as like SIGMETs, AIRMETs, things
22 like that, I think probably the biggest thing would be to go to
23 the AWC website.

24 Q. Okay.

25 A. Because I don't think that there's anywhere else in the

1 building where they can be displayed.

2 Q. Okay.

3 A. Yeah. And we don't have anything else either that --

4 Q. All right.

5 A. -- that could display it.

6 MR. SOPER: Okay. All right. I'm going to pass it along.

7 Karena, I'm going to -- I'm going to pass it along it to

8 Karena, Paul.

9 MR. SUFFERN: Go for it.

10 MS. MARINAS: Okay. If only I knew where my information just
11 went on the bottom of the page. How does that work?

12 MR. SOPER: Do you want Brent to go first?

13 MS. MARINAS: Oh, here it is. Never mind. Got it.

14 MR. SOPER: There you go. We're good.

15 MS. MARINAS: Scroll down.

16 BY MS. MARINAS:

17 Q. So for your weather briefings, how long are they generally,
18 the recorded briefing?

19 A. The recorded briefings are probably between a minute and a
20 half to 2½ minutes, I'd say.

21 Q. Okay. So do you guys just go with whatever, you know,
22 information you need to get in there is how long it's going to be
23 or do you try to shoot for a specific --

24 A. Pretty much. We try to go over the parameters that we have.
25 Like our first slide gives the general highlights, what the major

1 weather impacts are going to be, whether it's going to be
2 thunderstorms or turbulence, low ceilings, you know, things like
3 that. Then our next slide we get into a surface chart. Then
4 after that, it's usually radar, a forecast radar for one of the
5 computer models that we have. Then the slide after that would
6 probably be like AIRMETs for icing and turbulence. And after that
7 we give a terminal forecast for like the D.C. Metros and some of
8 the other terminals in the airspace. And then follow that up with
9 the Day 2 forecast. So we do that at a minimum.

10 Q. Okay. What do you think the controllers are using those
11 briefing for? And I know that's just a question of your opinion,
12 but --

13 A. Yeah, that's a -- I know some of them, they go through it
14 with a, with basically a fine-toothed comb. And others, you see
15 them walk into the room and, you know, they sign in the seat and
16 they walk out, so -- so it kind of really depends on the person.
17 Because we see them, see some -- a lot of people go in there and,
18 you know, they're -- watch the whole thing and pay attention to
19 it, and others, you know, don't really pay any attention to it.

20 Q. Right. So for -- you have said that you had given the -- in
21 the standup given the -- what do they call it -- OS is now I
22 guess, not F1 -- OSes the more detailed briefing and then broad-
23 brushed the briefing like --

24 A. Yeah. For the --

25 Q. -- for the weather --

1 A. For the weather.

2 Q. -- the recorded one?

3 A. Yeah.

4 Q. So is that because you only have those seven criteria to meet
5 or why would that be?

6 A. For the morning briefing, it's a time constraint.

7 Q. Okay.

8 A. We get in at 5 and that pre-duty weather briefing needs to be
9 out by 5:45.

10 Q. Oh, okay. So you've got to do all of that --

11 A. Yeah.

12 Q. -- interpolate all that data --

13 A. Interpolate the data.

14 Q. -- and then build all of that and --

15 A. And then build the presentation itself. So -- yeah. So
16 obviously the more weather, more things that are going on, the
17 more in depth the graphics need to be.

18 Q. So would you say that the afternoon one tends to be more
19 detailed?

20 A. More detailed, and we have a better idea of what the expected
21 weather's going to be, so -- so, yeah, I think the afternoon would
22 probably be a bit more, a bit more -- a bit better data in there,
23 I guess.

24 Q. And how often do you do those briefings?

25 A. Three times a day. Yeah.

1 Q. At a specific time?

2 A. Yep. The first one's out by 5:45, and the midday one, that's
3 our by 12:30 p.m., and our evening one's out by 8:30 p.m.

4 Q. Okay. And then I think you really already answered this
5 question, but just to be clear, CICs do not get training on the
6 CIWS equipment?

7 A. I couldn't -- I can't --

8 Q. What is that, C-W-I-Z or how does that --

9 A. It's C-I-W-S.

10 MR. SOPER: C-I-W-S.

11 MR. BAKER: Yeah, yeah, W-S. Yeah.

12 BY MS. MARINAS:

13 Q. Oh. Oh, now I know what that is.

14 A. Yeah.

15 Q. I never knew that's what it was called.

16 A. Oh, okay.

17 Q. I don't know --

18 A. Yeah.

19 Q. Okay. And so, no, they don't get --

20 A. Not that I know of. Not that I know of. I -- we're not
21 really involved with that, so --

22 Q. Right.

23 A. So I -- technically, I guess I can't answer that.

24 Q. Yeah. Okay.

25 MS. MARINAS: I think that's all my questions.

1 MR. BAKER: Okay.

2 MR. SOPER: Brent.

3 BY MR. EBERHART:

4 Q. Who completes the three briefings? You said the early person
5 does the 5:45. Who completes the, mostly the 12:30 one?

6 A. The day shift would complete the 12:30 p.m., and then the
7 evening shift would do the final briefing.

8 MR. EBERHART: That's all I have.

9 MR. BAKER: Okay.

10 BY MR. SOPER:

11 Q. Out of curiosity here -- this is Brian Soper again, for the
12 sake of the recording. With regards to MISes overnight, do you --
13 does this -- and I know some facilities work differently with
14 regards to MISes and when they put them out, how they put them
15 out. Some have a standard where they put out an MIS every night.
16 Like when they close up, they go ahead and put out an MIS. Do you
17 guys do that or do you only when required based on other things,
18 or how do you handle that?

19 A. We haven't issued them. We used to have a requirement where
20 we issue them basically at the beginning of the shift, and then
21 that would carry through, give a -- basically a brief synopsis of
22 the weather for the shift. And I can't remember if it was a year
23 ago, 2 years ago, we did away with that.

24 Q. And now you don't do MISes at all?

25 A. Very rarely. Yeah. Yeah, I think now we issue them mainly

1 for if when we're short staffed and there's just one person
2 working the -- working an entire day. But that person leaves at
3 like 5 or 6 in the afternoon, then we issue a MIS saying another
4 CWSU is going to be backing us up from 6 o'clock till 9 o'clock,
5 something like that.

6 Q. How many meteorologists do you have here including your MIC?

7 A. Four.

8 Q. Four.

9 A. Yeah.

10 Q. Is that normal staffing for you or are you guys understaffed
11 right now, or --

12 A. That's our typical staff; yeah, full staff.

13 MR. SOPER: Okay. All right, Paul.

14 MR. SUFFERN: I don't have any more questions. I appreciate
15 your time, Todd, unless anybody else in the group does?

16 MR. SOPER: That's great. Any other --

17 MS. MARINAS: No.

18 MR. SOPER: Nope, I think we're all good here, so you can sum
19 it up there, Paul.

20 MR. SUFFERN: Okay. Well, Todd, do you have -- is there any
21 questions that you think we forgot to ask or any other information
22 that you would, you think would be helpful here as far as factual
23 gathering that you'd like to speak of?

24 MR. BAKER: I can't think of anything now, Paul, but do you
25 have an email or phone number where I can contact you guys if I do

1 come up with something?

2 MR. SOPER: We'll give that to him here, Paul.

3 MR. BAKER: Okay.

4 MR. SUFFERN: Okay. Yeah, absolutely. You can either
5 contact myself -- I'm sure Brian can get you my information, and
6 then -- or Brian or both of us.

7 MR. BAKER: Okay.

8 MR. SUFFERN: And we're available pretty much any time, even
9 sometimes on vacation. But we'll -- some stuff that we can go --
10 we can go off the record here at 2:15 and we're all done there,
11 Todd.

12 (Whereupon, at 2:15 p.m., the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: PIPER PA46 CRASH
 NEAR CASTALIA, NORTH CAROLINA
 JUNE 7, 2019
 Interview of Todd Baker

ACCIDENT NO.: ERA19FA188

PLACE: Leesburg, Virginia

DATE: June 12, 2019

was held according to the record, and that this is the original,
complete, true and accurate transcript which has been transcribed
to the best of my skill and ability.

