UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * * * * * * * * * * * *		
Investigation of:	*	
	*	
BOEING 737-800 OVERRUN	*	
JACKSONVILLE, FLORIDA	*	Accident No.: DCA19FA143
MAY 3, 2019	*	
	*	
* * * * * * * * * * * * * * *		

Interview of: JACOB ELDRED

Naval Air Station
Jacksonville, Florida

Sunday,
May 5, 2019

APPEARANCES:

PAUL SUFFERN, Senior Meteorologist
National Transportation Safety Board

I N D E X

I N T E R V I E W

(10:57 a.m.)

MR. SUFFERN: All right. We're started here, we are on the record at 10:57 a.m., on May 5, 2019.

And before we get started, Jake, overall, so my name's Paul Suffern, for the record, and I'm an NTSB meteorologist investigator, and so I'm charged with investing the factual evidence surrounding the accident here that happened just on Friday evening.

The NTSB is an independent federal agency charged with determining probable cause of the accident, so we're not here for fault, liability, blame or anything like that. We just want to gather the facts, and then issue recommendations to help make things safer so that something like this doesn't happen again.

So sometimes we have other members as part of our group, but I'm the only one here, so you just get a meteorologist today.

So we can't offer liability or confidentiality in this case, so our design is just to be safety. We're just gathering factual evidence, but it will -- when the investigation goes out, it will all be part of the public docket, so that is one thing we can't. And like I said, if we're on the record, you are allowed to have one representative if you so choose. So would you like to have a representative?

MR. ELDRED: No, I'm fine.

MR. SUFFERN: Okay.

INTERVIEW OF JACOB AARON ELDRED

BY MR. SUFFERN:

Q. All right, so we'll start off, more or less it'll be clerical questions to start out, just to make sure I have everything correct, and then we'll get to what you experienced.

So for the record, could you state your full name and position?

A. Jacob Aaron Eldred, and I'm a METOC forecaster and observer for NAS Jacksonville.

Q. And could you spell your last name for the record?

A. My last name is spelled E-L-D-R-E-D.

Q. Okay. And how long have you been here at NAS JAX?

A. I've been at NAS JAX since August of 2016.

Q. And before NAS JAX, did you have experience as a weather observer or forecaster at any other facility?

A. Yes, I did.

Q. Okay. What were those facilities?

A. The first was -- excuse me -- United States Marine Corps, 2006 to 2011, METOC forecaster, analyst and observer. And that was the last job I held as a METOC forecaster.

Q. Do you hold a college degree?

A. No. I have college credits towards meteorology but not a degree.

Q. Could you describe your schedule leading up to the, and the day of the accident?

A. The schedule I was on was Monday through Friday, officially 1400 to 2200, but we come in 1330 to 2130.
Q. So you worked 2 to 10, Monday through Friday, including the accident?
A. For this week, yes.
Q. Yeah.
A. And including the accident, yes.
Q. Okay. Did you have any unusual sleep problems or anything like that in the couple days leading up, or everything was normal?
A. Yeah, everything was normal. Routine.
Q. Was any training being done on the evening of the accident?
A. No.
Q. As far as your duties here, do you hold any other collateral duties, like do you -- are you -- keep up the SOPs? Are you in charge of focal point for equipment or anything else?
A. No.
Q. Okay. So on a scale of just 1 to 5, with 5 being the most complex, how would you rate the weather during the day of your shift there? So a 1 would be like CAVU and then a 5 would be hurricane literally right over the station. What would you -- how would you rate --
A. I would say a 3.
Q. Okay. And as far as do you recall any unusual distractions or things occurring around the time of the accident or anything?
A. No. Outside of the weather, no.

Q. Have you had a chance to review the weather conditions from the afternoon to evening of the accident? Like gone back to look at the METAR or anything?

A. The night of, after the accident, we were archiving the data, was the only time really I looked back at the weather. I just got off shift, so I already had it engraved pretty much, the synoptic situation.

Q. All right. So that's kind of more or less the clerical stuff there. To the best of your ability and recollection, could you kind of describe the weather at this point surrounding the accident?

A. Yeah. So pretty much the entire shift, it started with just daytime heating initially. Pretty much it was the weak disturbance off the Atlantic coast. All it was really doing was enhancing our sea breeze effect, plus daytime heating. And we really saturated the whole day, so really ripe for thunderstorm activity, and there was pretty much one after another with different triggers.

At first, it was daytime heating starting the initial thunderstorm development. Storm motion at the time was southwest/northeast. And then later on it became a west coast sea breeze trigger at low levels. Temperatures aloft minus 9, minus 10 at 500 millibars, so there was atmospheric for sustaining thunderstorm activity for most of the afternoon.

Then after that, there were some thunderstorms in southern

Georgia that started a outflow boundary that came in from the north to due south, and triggered the last wave of thunderstorms during the accident. Watched it go down. I didn't see the outflow boundary on the radar until it went to a more sensitive mode with all the moisture in the atmosphere. Once the outflow boundary was identified, thunderstorms blew up along that line and then moved due east once they formed.

Q. Do you remember about how long before the accident the thunderstorm moved in over --

A. The thunderstorm developed about 30 to 45 minutes prior to the accident, initial development was noticed on radar, at least. The first lightning strike probably about 20 to 30 minutes prior.

Q. So those were -- or leading up to the accident there, that's kind of the weather conditions you -- do you -- could you describe kind of what you remember from the accident sequence? Were you --

A. Yeah.

Q. -- viewing it and whatnot?

A. So pretty much what was going on, we were doing turnover. Mr. Brockman was already sitting in the desk. I call it the "hot seat." You know, he was just sitting ready to go. And I was leaning up on the counter, right here, the tall counters, staring out the window while talking to him, and noticed as I was looking outside, lightning was pretty fierce, right on top of us, and didn't notice a plane landing or hear anything until about -- over in that direction, so maybe about --

Q. So for the record, so it was like -- I know the ASOS equipment there is like the half field mark. Do you remember --
A. Yeah, I'm trying to see here. Let me just -- I mean, it's about -- the runway's about 8,000 feet, so probably about 2- to 3,000 feet from the St. John's River point of the runway, I started to hear reverse thrusters almost instantaneously. I didn't hear an aircraft or see an aircraft landing. I didn't look due west at all to notice. But I was looking straight out the window and noticed the reverse thrusters kick on right about that 2- to 3,000-foot runway marker here. And the aircraft was going pretty fast with reverse thrusters going.

And first thing I do is say to Mr. Brockman, I was like, that airplane's going pretty fast, you know, pretty much in those words. And he turned around in his chair and looked out the window as well, and he was -- pretty much reflected the same thing, he was like, "Oh, man," you know. And we both got up and looked and Mr. Brockman was like, that plane's not stopping. And pretty much watched it go and go to the end of the runway.

After that, I did hear a splash. It was very subtle but I heard it. And as soon as that splash went off, that's when the crash phone went off, and Mr. Brockman answered the crash phone and immediately jumped into the taking the SPECI.

Q. Do you remember or do you recall seeing any type of rooster tail with the rain that had fallen? Any -- anything as far as the wheels or coming from the back of the airplane?

A. No. All I noticed was, like I said -- I mean, now that I'm looking at it now, I can see that Number 7 way out in the runway, and the reverse thrusters kicked on, you know, a couple hundred feet past that.

But no, I didn't notice anything of that. All I noticed was the lights of the airplane and just a bunch of water kicking up off the runway with their thrusters going on. Just watching this thing go by pretty quick.

Q. All right. So just in general, moving away a little bit from the accident sequence -- and if you need a break at any time --

A. That's fine.

Q. -- let me know. How do you become aware of changing weather conditions, just in general?

A. Just like going from like into thunderstorm development or --

Q. Just for your normal day ops, stuff like that, do you have, you know -- I mean, you obviously got the METAR and the ASOS right there, but are there programs that you use to --

A. Well, and I mean, as far as like changing weather conditions, we do go outside every hour to take the observations, so we do notice when we're taking our sky condition or our visibility marks. But outside of that, in between observations, if it starts getting -- especially if we're expecting it, you know, we have radar and lightning detection pulled up; one's supplied by Norfolk, and I pay for a Weather Tab program, that also has lightning detection within 25 miles.

I first noticed with this one the cell development on radar. I had base reflectivity, composite reflectivity, VIL, and hydrometeor classification and an echo tops. Then I noticed on first base reflectivity cells blooming up, then went straight to echo tops and then saw the growth pretty fast. From that point on, switched to lightning detection from Norfolk site and noticed the first strike. So, but in general, that's usually what it is. It's kind of a set up with radar and lightning satellite imagery. Things like that.

Q. And so, and I've learned about that ya'll particularly here -- there you go, I'm from North Carolina; you probably missed the "ya'll" -- have criteria for watches and warnings here for the base.

A. Yes.

Q. So was there a watch or warning out at the time that you can recall?

A. Well, I'll start from the beginning on that one.

Q. Okay.

A. At least from the 23Z TAF, which goes out at 1900 local. We initially had our thunderstorm watch to end at 2100 local. But when I wrote the TAF and submitted it at 23Z 1900, I went ahead and extended the thunderstorm watch until midnight. The atmospheric conditions were still pretty ripe for development, albeit not as robust as it was in the afternoon with the heating gone.

So we had the -- I had the watch out till midnight local, gave the turnover to Norfolk, and there was no warning out before the development. Once development started and the first lightning strike appeared on lightning detection, I called Norfolk, and they went ahead, and I talked to the RPDO Tom Tous (ph.), and he went ahead and issued a thunderstorm warning almost immediately. So we had a thunderstorm watch in place, a thunderstorm warning in place, and also I had lightning within 5 called out before the accident.

Q. So can you tell me about the ASOS out there? Do you feel its reliable as far as providing you information and stuff?

A. Absolutely. I mean, it has it faults, like every weather sensor we've ever dealt with. Usually certain things -- you know, it will have its issues and the techs will deal with it, but for the most part it's a very reliable system. I've had no personal problems with it.

Q. Okay.

A. Nothing that we couldn't back up anyway. So --

Q. So have you had to update things like the visibility or ceiling or things like that when you take the -- is there any of them that cause issues?

A. No. I've seen the wind sensors go down occasionally. Not often, you know, but they've gone down occasionally, usually during -- there's really not a pattern to when they go down; it's just sometimes they do.

Visibility -- visibility's reliable after maybe a minute. It has to catch up and do its calibration before it sees what's going on. We'll notice it first, and especially if it's foggy in one spot and not in the other, it sees it as a mile while we see it as sector viz, for instance. So it has those small faults but it's never crashed on my watch, at least, you know.

Q. And how does the relay of information go between you guys as weather observers and the air traffic control tower? Do they provide you with their tower viz and you guys input that? Or do they say, hey, it looks like the visibility or ceiling is different here and they don't, quote/unquote, "force you" to go take a SPECI but you go outside and take a look and see if it needs a SPECI?

A. It's been a mix of both.

Q. Okay.

A. It's been a mix of where they would call down and they'd have a tower viz. Usually they would just say, hey, tower viz is this, and we put it into METAR.

Q. METAR, okay.

A. Other times, tower would call down and say, hey, we think it's this, as you said, and we'd go out and double check. Because our check points are different from theirs, you know, so we go out and double check and see what it is, whether we entertain that visibility or not, dictate what we go outside and see.

Q. So when you said the checkpoints are different than -- their

checkpoints are different than yours, do they have a different book, as far as, you know, that location over there is --

A. I don't know what --

Q. -- a half mile --

A. I don't know what procedure book they have to be honest with you.

Q. Yeah. Do you guys have a local copy of your sector viz stuff --

A. Yes, we do.

Q. -- that I could get a copy of?

A. Yes.

Q. Okay. So I'm somewhat familiar of the weather observer position having been done one before. What does it mean to be a weather forecaster though, because you kind of have that dual capability there?

A. Really, it -- I think it's beneficial. We get to obviously observe the weather and it goes into our forecast instead of relying on a -- for instance, like Norfolk where the observer's on a station and they're somewhere else. We kind of see what we're getting and the reaction time is exponentially quicker. And conditions change.

Q. So as a weather forecaster, what do you provide? Do you do TAFs, watches and warnings, those kind of things, or is there anything else?

A. It's TAFs, watches and warnings, flight briefs; we do those

here.
Q. Okay.
A. For tenant commands and local commands here. You know, and also any kind of over-the-counter briefs, anyone needing a forecast, you know, just radar checks, METSAT, anything like that.
Q. As far as local briefs and stuff like that, is it folks from on base here, going to take off here and then go somewhere else, or is it a -- do you ever get calls from, hey, somebody's flying in from Tampa --
A. Right.
Q. -- and they need a brief because they're going to fly into --
A. What -- normally how it works here, if they -- we only give them a flight brief if they leave here.

Now there are exceptions to the rule. Like, for instance, if they fly to, say, Tampa but they're going to stay on deck for more than an hour or two past refueling time, then no, we'll make them get another brief from Fleet Weather Center Norfolk because they're leaving Tampa, as opposed to coming, you know, just coming back here. So they have to leave here. And once they leave here, it's pretty much our baby, in essence, you know.

Q. Okay.
A. Even round-robin flights, if they've left here, it's ours.
Q. All right. I mean, that's -- I think that's pretty much most of what I had. Is there any questions that I didn't ask that you -- or any information that I didn't ask of that you would like to

-- you can think of?
A. No. The -- and like I said, the weather situation was -- it wasn't anything outside of the norm. You know, it wasn't severe, and there's no storm prediction center, you know, anything like that involved in this. You know, for a thunderstorm, you know, the wind speeds were remarkably lower than what we anticipated, and, you know, it really -- and the visibility would seat down but it never really got below 3 statute miles. So it was really just a lightning show and some rain, you know, and -- but albeit, it's still a thunderstorm, dangerous nonetheless, but -- but just the essence of how it popped up and it was an outflow boundary, you know, things like that.

So no, I mean, outside of that, it was something we've seen normal time in the summer.

MR. SUFFERN: I have -- I'll end --

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	BOEING 737-800 OVERRUN JACKSONVILLE, FLORIDA MAY 3, 2019 Interview of Jacob Eldred
ACCIDENT NO.:	DCA19FA143
PLACE:	Jacksonville, Florida
DATE:	May 5, 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.

[redacted]