## DCA23FA149

# **OPERATIONAL FACTORS**

Attachment 1
FedEx Pilot Interviews and Transcripts
July 31, 2023

#### UNITED STATES OF AMERICA

#### NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

\*

FEDEX CARGO PLANE & SOUTHWEST
AIRLINES BOEING 767 INCIDENT AT

AUSTIN INTERNATIONAL AIRPORT, IN \*
AUSTIN, TEXAS ON FEBRUARY 4, 2023 \*

\* Accident No.: DCA23LA149
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Interview of: HUGO F. CARVAJAL, III, Pilot

FedEx

via Zoom videoconference

Wednesday, February 15, 2023

#### APPEARANCES:

WARREN ABRAMS, Operations Group Chairman National Transportation Safety Board

DUJUAN SEVILLIAN, Ph.D., Human Performance Investigator National Transportation Safety Board

MATT RIGSBY, AVP-100 Federal Aviation Administration

COREY FRANKLIN, Operations Group member  ${\sf FedEx}$ 

ROGER ANDY ANDERSON, Operations Group Member Air Line Pilots Association

TERENCE McTIGUE, Senior Labor Relations Counsel Air Line Pilots Association On behalf of Hugo Carvajal

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#### INTERVIEW

(2:00 p.m.)

MR. ABRAMS: All right, good deal. Hugo, you ready?

MR. CARVAJAL: Yes, sir.

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MR. ABRAMS: All right, thank you. I want to welcome everybody today. I'm Warren Abrams, I'm the group -- operational group factors chairman for this investigation with the NTSB and really, our purpose is to figure out what happened, Hugo, and try to enhance the safety to make sure it doesn't happen again. We use groups today and you can see there's a large group here with us right now and I'm going to go around the table and -- virtual table and ask everyone to introduce themselves and then when they do, if you will also give us your affiliation, I would appreciate it.

Dujuan, we'll start with you, if you'll introduce yourself.

DR. SEVILLIAN: Yes, Dujuan Sevillian. I'm a human performance investigator for the NTSB.

MR. ABRAMS: Thank you, Dujuan.

Matt, we'll talk with you next, please.

MR. RIGSBY: Okay. Hi, Hugo. My name is Matt Rigsby with the FAA's Office of Accident Investigation, and just to kind of give you and your FedEx colleagues some ease, I'm here purely for the safety side of the investigation. If you can imagine kind of like the Andy Griffith of the FAA, I have no enforcement activity that I can do, so -- not Barney, but Andy.

1 (Laughter.) MR. RIGSBY: And anything you say here is not admissible in 2 3 any enforcement, not that there would ever be a case, but just to 4 give you some ease, I have no enforcement authority and it's just 5 purely for the safety side of the investigation. Thank you. 6 MR. ABRAMS: Thank you, Matt. 7 Andy, we'll roll in with you, please. MR. ANDERSON: Yes, sir. 8 9 Hello, Hugo and others. I'm Andy Anderson, I'm a Memphis 767 10 captain with FedEx and I'm here as the FedEx/ALPA rep, accident 11 investigation team. Thanks. 12 MR. ABRAMS: Thank you, Andy. 13 And Corey. 14 Hey, I'm Corey Franklin. I'm also a Memphis MR. FRANKLIN: 15 76 captain, I'm also an instructor on 75 and 76. I used to be 16 called the standards manager but they changed my title, so I'm 17 still doing the standards manager job but now my job title is the 18 assistant fleet captain for the 76. 19 MR. ABRAMS: Thank you, Corey. 2.0 Hugo, as part of the regulations, you're allowed one 21 representative to represent you today, and do you have a 22 representative to help you or represent you today? 23 MR. CARVAJAL: I do.

Hi, Warren, this is Terence McTique.

MR. ABRAMS: And who is that?

MR. McTIGUE:

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senior labor relations counsel with the Air Line Pilots
Association.

MR. ABRAMS: Terence, do you go by Terry or Terence?

MR. McTIGUE: Terence is fine.

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MR. ABRAMS: Terence is fine, all right.

MR. McTIGUE: Warren, I do have just one preliminary matter which I think should be pretty simple. I just want to confirm that the only recording being made or to be made is that of the court reporter for the official transcription, in other words there's no Zoom recording or iPhone or separate recorder. Am I correct in that understanding?

MR. ABRAMS: Terence, you're a hundred percent correct. I have nothing and I am not recording and I have not directed anyone to make a recording, and I will just say if you're just going rogue on me and making a recording, you turn it off right now because that is not acceptable in this proceeding. We have worked long and hard to get ALPA, APA, and SWAPA to the table to allow us, the NTSB, to record these interviews and we don't want to jeopardize that in any way, shape or form. So Terence, you're a hundred percent correct and that is the only -- Scott has got the only recording that will be made of this proceeding.

MR. McTIGUE: Thank you, Warren.

MR. ABRAMS: Thank you.

MR. McTIGUE: I think we're ready to proceed, then.

MR. ABRAMS: Good deal, thank you.

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Hugo, you ready?

2.0

MR. CARVAJAL: Yes, sir.

MR. ABRAMS: All right. Well, let me start it off, let me back up a little bit here, Hugo. We're going to make about two rounds of questions, I'm going to lead it off and I got a bunch of questions to ask and I call them softball questions to start with, they're not that difficult, you know, kind of how did you get your flight training, things like that.

And then that's the first third of it, and then the second third of it is you telling us about the approach, what happened there and that will be keeping us on the edge of our seat, literally. And then the last third of it is just more questions, I'll just ask you about the event itself. So anyway, we go around the room and we do have -- we'll do two rounds and then I'll do all my questions for the first round, and then we'll go to Dujuan and he'll have a first round of questions. Like I say, we'll go around the virtual room and ask questions.

When I'm asking questions, Corey's not going to interrupt me with a follow-on question or Matt's not going to interrupt me, so we just -- it's just all one on one, you and me, when we're doing the question and answer and then I'll be quiet, as well, when others are asking questions. For what it's worth, Hugo, all the people you see here today have signed confidentiality agreements with the NTSB, with the -- I'm sorry, the FAA, they're exempt from that, but they know they can get in trouble, too, if they start

1  $\parallel$  speaking publicly and it's out there. So anything you say, it

2 | will not be repeated by any of the parties that are on this group

3 | right now. Some of the cameras are on and some of the cameras are

off right now. Just make sure you're the only one in the room

5 | with the exception of Terence and Hugo. And Hugo, if you don't

6 understand a question, "I don't know" is a perfectly acceptable

7  $\|$  answer, so that's fine with us, and if you don't understand a

question, if you ask us to repeat it, we're happy to repeat it.

9 | So I'm going to kick it off, as we said, and get going here.

INTERVIEW OF HUGO F. CARVAJAL, III

11 BY MR. ABRAMS:

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- 12 Q. Hugo, to start off, state your full legal name and spell your
- 13 | last name, please.
- 14 A. Okay, it's Hugo Francisco Carvajal, III, and it's spelled
- 15  $\| C-a-r-v-a-j-a-1 \|$
- 16 Q. And Hugo, how old are you?
- 17 | A. Fifty-five.
- 18 Q. And what is your job title?
- 19 A. I'm a captain 767, FedEx.
- 20 Q. What was your date of hire with FedEx?
- 21 | A. It was 2002, July 29th.
- 22  $\|Q$ . So how many years does that give you with FedEx?
- 23 | A. I'm in my 21st.
- 24 Q. Okay, very good. Are you a line check airman on the 76?
- 25  $\blacksquare$  A. I am not.

С

- 1 Q. Have you been a line check airman on other airplanes with
- 2 | FedEx?
- $3 \mid A. \quad I \text{ have.}$
- 4 | Q. Which airplanes were those?
- 5  $\mathbb{I}$ A. It was the backseat of the 727.
- 6 Q. Okay. Hugo, fill us in, Reader's Digest version of your
- 7 | flying, your progression, and not just with FedEx, but how did you
- 8 get started in flying your commercial multi-engine, where did you
- 9 get that flying, who did you fly for before FedEx, and if you can
- 10 get this in 5 minutes or less, I'd appreciate it. I'm not looking
- 11 | for real in-depth, but just a high-level overview of your
- 12 | experience level.
- 13 A. I went to pilot training with the Air Force, I flew -- after
- 14 pilot training, I went to C-21s in San Antonio and then flew C-5s
- 15 out of Travis Air Force Base, California. I was fortunate enough
- 16 | to get hired. Just before 9/11, I got notified that I was hired
- 17 | at FedEx. I got stop-lost in the Air Force for a bit, so I wound
- 18 | up delaying until 2002 and wound up flying the 727 and then the
- 19 MD-11 and the 76.
- 20  $\parallel$  Q. Excellent, very good. And just refresh my memory, the C-21
- 21 || is a Learjet?
- 22 | A. It is.
- 23  $\|Q$ . Okay, thank you. Next question, in approximation, how much
- 24 | total -- approximately how much total flight time do you have, Air
- 25 | Force and FedEx?

- 1 A. You know, I just did my physical and I put it on there, but I
- 2 | think I'd have to look it up --
- 3 | Q. Okay.
- 4 | A. -- just to refresh my memory, but --
- 5 Q. All right. Approximately, do you know approximately how much
- 6 | time you have on the 76?
- 7 A. It's easily accessible, but I can't -- I don't know. I never
- 8 | even looked, I haven't looked.
- 9  $\|Q$ . How long have you been a captain on the 76?
- 10 A. I finished training in November of 2019, so a little over 3
- 11 | years.
- 12 | Q. Do you wear glasses?
- 13 A. I do not.
- 14 | Q. Do you wear contact lenses?
- 15 | A. I do not.
- 16  $\|Q$ . Back to the Air Force, were you an IP on the C-21 or the C-5?
- 17 | A. Both.
- 18  $\|Q$ . Hugo, have you ever been involved in an NTSB reported
- 19 | accident or event?
- 20 | A. Not that I'm aware of.
- 21 Q. Hugo, who's in your chain of command? In other words, if you
- 22 | had a concern, who would you report it to or who would you report
- 23 | your safety concern to?
- 24 A. You mean a specific incident or just a general --
- 25 Q. General.

- 1 A. So assistant chief pilot Sid Graham and -- that's who I would
- 2 | go to if it was a general question, I guess.
- 3 Q. Okay.
- 4 | A. I've never met him, I never had a cause to really meet many
- 5 | managers here.
- 6 Q. My next question is have you ever met the chief pilot, but I
- 7 | think you just answered that, so --
- 8 A. Well, I do know the chief pilot, Robin Sebasco, because he's
- 9 | from San Antonio, which is where I live.
- 10 | Q. Okay. Kind of a staffing question. Is FedEx hiring pilots
- 11 | right now or do you know?
- 12 | A. I believe that two pilots started recently, but generally,
- 13 | no, is my understanding.
- 14 | Q. All right. No, I'm not looking for a job with you all, but
- 15 | back to these concerns you might have, we're going to kick it up a
- 16 | level and say if you have a safety concern, does FedEx have ASAP,
- 17 | FOQA, and SMS?
- 18 A. Yes.
- 19 Q. Did you file an ASAP report over this?
- 20 | A. I did.
- 21 | Q. Has the FOQA -- I'm going to call it the gatekeeper, I'm not
- 22 | sure what other airlines call it, but has the FOQA gatekeeper ever
- 23 | called you about the event?
- 24 A. Yes.
- 25  $\mathbb{Q}$ . Hugo, is there ever any pressure on you to complete a flight?

- A. I don't believe so at all.
- 2  $\|Q$ . Okay. Have you ever called in fatigued on a trip?
- 3 A. I never have.
- 4  $\parallel$ Q. Did you get, before this trip -- let me back up. Fourteen
- 5 | thirty-two was, I believe, Memphis to Austin, is that a correct
- 6 | statement?

- 7 | A. Yes.
- 8 Q. Was that your first leg of the trip or had you been flying
- 9 previously or when did your trip start?
- 10 | A. So 1432 is a one-day trip and I had another trip to Austin
- 11 | the day before, and earlier in the week I was in Sacramento and
- 12 got stuck there with an ice event, so I was there for, I think,
- 13 almost three full days, two and a half days.
- 14 Q. Do you recall what time you signed in for this trip?
- 15 | A. I don't. It was sometime after I landed, which was after
- 16 | midnight, I believe, and the show time of the trip, I believe it
- 17 was 2:30 that morning was the -- was the actual show time, so
- 18 | between midnight and 2:30.
- 19  $\parallel$ Q. When did you first become aware that there was weather in the
- 20 | Austin area, low visibility weather?
- 21 || A. Before show time, when I pulled up the trip, so I was in a
- 22 | sleep room and yeah, they have a wakeup program, so the start was
- 23 | delayed a little bit, I believe 30 minutes, so I had a 15-minute
- 24 | -- if it's delayed 30 minutes, then they would call me 15 minutes
- 25 before the delay time and then I -- what I always do, which I know

- I did then, as well, which is just pull up the flight release and go forward from there. So I saw the weather, potential weather, saw the gas, and I just started analyzing the flight release at that time.
- 5 Q. Did that cause you any concern?
- A. Not particularly. I believe I had to add gas, a little bit, 2,000 pounds.
- 8 Q. When you said you started analyzing the flight, do you recall 9 what the alternate was, if you didn't get into Austin?
  - A. Houston, I believe.

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- Q. This is kind of phase 2, Hugo, let's pick it up with you're going to the airplane with Rob, your first officer, and talk us through your little bit of preflight, taxi, takeoff, you can expedite some of that if it's just normal procedure, and we definitely want to hear your approach in, about your approach and what you -- what your briefings were and things like that going into Austin. Yeah, just -- it's yours, I mean, it's a cognitive interview and feel free to give us your interpretation, your definitions, what you saw with the flight, what you didn't like, what caused you concern, what was going on with procedures and what wasn't.
- A. Okay. Well, Rob and I met at the -- in the crew room in the air operation center after I was woken up. He noted the weather, he noted that I was going to be the pilot flying that day, just because of the weather and potential CAT III. Normally, I would

-- so one leg with a back end I had on this trip, so normally I would let the copilot do it, but -- so that was something different we had right away, that it's just one landing, so it was going to be me. Preflight went as planned. The only kind of unusual thing was that we were -- it was my first time using the -- a new deice system here in Memphis. Rob had got it one other time, I believe. So that's at the south end of the runway, which we were departing to the north, Papa 3-6 left.

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So we reviewed those procedures in the chocks because it's brand new, first time I did it. So that went -- it went pretty well, it took a bit longer, I think, because they were new at it. We needed to get -- we had just some ice on the plane already, it wasn't -- it wasn't bad conditions here. There was just some standing ice on the wings, for sure. So that went -- we sat there for quite a while, I'd say maybe 25 minutes, best guess. And then we're already right at the end of 3-6 left, so departed out of there.

I believe relatively quickly we were -- we were given direct to the airport. I believe that's the case or pretty much a direct route, something very close to Austin. Uneventful en route. Came time to brief the CAT III, we talked about that. We kind of reviewed what the procedures are. Rob mentioned that it was his first CAT III ever. So once we got done briefing, we used the QRH, it's got sample things to go over. We talked about CO48 as a backup, in case something happened with the CAT III when we were

nearing the approach, just if that was a possibility, so we at least touched base on that. This was early on in the flight, you know, once we leveled off. I also mentioned to him to make sure, when he checked in, that he told them it was the CAT III ILS 18L left, so everybody was aware. I believe he did it both with approach and tower. So it's not required to see to land, as long as everything is operational, so we discussed that. We looked at the -- I think Rob asked me about the low visibility taxi charts, so we touched on that, as far as where we'd be going.

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I'm very familiar with Austin, I flew there, well, for a solid year many years ago and then I was able to hold San Antonio after that, but I had quite a bit of experience, not so much landing on 18 left, but flying into Austin in general. And I got a CAT III before in Austin. So we configured early, we checked in early, I think we were cleared at about 10 miles. We're on an adjoining route to final, is what our clearance was, and so it's roughly 10 to 12 miles, I think that's what I recall, and they cleared us for the approach.

So we configured early, we slowed early, and it was pretty uneventful until we got to approximately 3 miles. I didn't confirm how far we were out, but Southwest checked in ready to go for 1-8 left. The tower cleared him for takeoff and told them there was traffic on 3-mile final. So I'm assuming he was approximately close to 3 miles, I didn't look at my distance at that point, but that got my attention and I was -- I was

definitely, I guess, maybe irritated that he was putting somebody up in front of me. I also thought about, you know, hey, what's -- what are his protections for the critical area. And then I asked Rob to confirm with the tower that we were cleared to land 1-8 left, I wanted to make sure everybody was on board, that we heard the right things, that they were taking the runway in 1-8 left and that -- that that's where, you know, they knew we were going. And the tower confirmed, said roger, clear to land 1-8 left, traffic departing. So I was kind of like -- I was perplexed, but I felt good, felt good at the time.

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I was -- well then, you know, a short time later the tower can't see anybody, presumably, so he asked "confirm your roll-in" to Southwest. The response was pretty quick and I think it said rolling now. And the term "now," that gave me a little bit more concern because I wanted to make sure, you know, obviously that we weren't in conflict, but I still didn't think -- my concern was that he was on the runway when we landed, I didn't think there was going to be a conflict, I assumed he was going to be well down the runway at that time.

But I think I mentioned to Rob, you know, how are we going to know if he's airborne and right when I said that, I could still see above the fog deck. So I lifted my head up and looked straight ahead and almost, you know, within a second Rob called go around, go around and you know, I immediately -- for me, it was a sim event at that point, I hadn't seen anything, I executed the

go-around and I had already -- at some point in there we had discussed, you know, readdressed, if we have to go around we're going to hit the go-around button and start to climb out, get the flaps 20, positive rate, gear up, and then do an LNAV VNAV. So at some point we had discussed that late, probably right at 3 miles, I can't remember exactly, but just reviewed it for 3 seconds, of what we would do. So I had already pre-found the go-around button again, it's not a button we get to use very often, but -- so I initiated the go-around, the plane started to pitch up, could feel it settling a little bit and while it was doing that, I said, "Rob, what did you see?" and he said, "I saw a light and the silhouette of an airplane through the fog," and I'm like okay, he's right there.

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Meanwhile we're flaps 20, positive rate, gear up. I think
Rob, at that point, said "Southwest, abort," and then "FedEx is on
the go." We were climbing away, I considered -- I go to a
thousand feet, LNAV was going to give us a left turn, obviously
going through a lot of thoughts in my mind at that point, you
know, where is he at, did he abort, unknowing, but it was pretty
calm and straightforward.

I got LNAV selected, maybe a little late, but I thought about off-setting to the left but I knew it was going to do it pretty quick after that. Rob discussed where they were, that they had gone airborne and they were 700 feet below us and at that point I was -- you know, we were starting a left turn and we were, you

know, really comfortable that there wasn't going to be conflict at that point. I do remember he was given 1-7-0 heading before the takeoff and after the takeoff, after his departure. I also believe that I think tower came on and said turn right when able and it was -- at the time it was my assumption that he was talking to him airborne, but reviewing it later I realized he thought he had rejected. And the response was "Negative," that was all the response from the Southwest plane. So at that point we made a left-hand turn, he gave us a heading, climbed to 3,000, I believe.

We cleaned up the flaps five, I told Rob hey, we're just going to fly slow and come back around for another one, so we left the flaps at five, doing that for takeoff and then the approach, and I think we were doing 205 knots, is what I set the bug at.

I'm just trying to slow things down so we could get ready to come back and do another approach. We didn't talk to tower, we just reloaded the approach. We got sent to approach control and he vectored us back in and from there it was uneventful.

- Q. Hugo, that is amazing when you say you guys were about 6, 700 feet above him, so that gives me chills and not in a good way.

  Help us to determine 6 or 700 feet, was that off the TCAS or how did you guys determine the distance from --
- 22 | A. When he went airborne we saw him on the TCAS.
- 23 Q. Okay.

2.0

A. So we were probably -- it would be speculation. I heard Rob call him out at 700. And meanwhile, I just wanted to keep it

- 1 | slow, I didn't -- you know, I thought the conflict was aborted and
- 2  $\parallel$  we'll just, you know, start our left turn shortly and then he
- 3 | immediately gave us a heading, which we just turned to that, I
- 4 can't remember what it was, but it was a hard left turn, as well.
- $5 \parallel Q$ . This is not an FAA oral -- or FAA oral, it's kind of like an
- 6 | FAA oral question. What RVR or below does the captain have to fly
- 7 | the approach with FedEx?
- 8 A. Well, the first officer can go down to CAT I mins.
- 9 ||Q. Okay. So anything below CAT I is the captain's approach?
- 10 A. Right. We used to have different procedures and policies,
- 11 | but that's what it turned into and of course, the captain's
- 12 discretion or after discussion with the copilot, even at higher
- 13 | altitude, higher minimums, you know, I'm going to consider that
- 14 based on his experience level.
- 15  $\parallel$  Q. Do you set any bugs for a CAT III approach? In other words,
- 16 do you have it set on the radio altimeter bug of any alert height
- 17 or anything like that, do you set anything?
- 18 | A. Right. So yeah, we set 50 feet in this case, which was the
- 19 | alert height.
- 20  $\|Q$ . Okay. On the approach, was weather, in other words was wind
- 21 | a factor at all or was it a smooth approach?
- 22 | A. It was smooth.
- 23 MR. ABRAMS: Okay. Hugo, I'm going to stop my line of
- 24 | questioning right now and I'm going to defer to Dujuan, but I'll
- 25 | have some more questions for you in the second round, but thank

you very much for the answers, appreciate it.

MR. CARVAJAL: Yes, sir.

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MR. ABRAMS: Dujuan.

DR. SEVILLIAN: Okay, thanks.

BY DR. SEVILLIAN:

- Q. Hugo, I appreciate the overview of the -- just coming into Austin and sort of the -- was discussed. I just had some other questions here. So prior to the incident, how often had you experienced flying into Austin airport and the weather was low visibility, like the day of the incident?
- A. My flying into Austin is I get it a few times in January, but I know I did at least one CAT III prior to that in Austin. And maybe two, but they were quite a while ago. I wouldn't even be able to guess when it was.
  - Q. Okay. And Warren discussed the RVR, but I had a quick question regarding can you recall when you received the RVR information when you were flying into Austin?
  - A. We get it on the ATIS, I can't remember what the ATIS was. I believe it was 1200 and 600 midpoint, 600 being the minimum for all of it on the first approach. On the second approach it was worse, I want to say 800 and 600, but I just made a mental note that, you know, hey, it got worse. But 1200 and 600 was what it was. I can't remember what it said the forecast was on the -- on our flight release, with our NOTAMs and weather, just that I knew -- I knew from the beginning that we were going to fly into CAT

- $1 \mid \mid III$  is what I thought.
- $2 \parallel Q$ . Um-hum.
- 3 | A. But definitely got it on the ATIS. It changed rapidly, the
- 4 different -- different amounts, especially the approach in. But I
- 5 can't remember, you know, when approach told us and the tower gave
- 6 | it several times for what the RVR was.
- 7 | Q. Okay. And just going back to your pilot statement that you
- 8 sent us, you noted that the first officer called for a go-around
- 9 | after visually seeing Southwest Airlines approximately a thousand,
- 10 | 1500 feet from the approach end of the runway. So did you ever
- 11 | see Southwest on the TCAS prior to conducting the go-around?
- 12 A. Did not.
- 13 Q. Okay. Are you familiar with SMGCS, so Surface Movement
- 14 | Guidance and Control System?
- 15 | A. I am.
- 16 Q. So from your perspective, what is the purpose of SMGCS?
- 17 | A. I mean, it just gives you low visibility information to have
- 18 | a specific route to whatever point you're going on the -- on the
- 19 | airfield. Does that make sense?
- 20  $\|Q$ . Yes, yes. And when you've flown into Austin, have you ever
- 21 experienced having, you know, SMGCS being activated?
- 22 A. I don't recall.
- 23  $\|Q$ . All right. And as part of our investigation we normally
- 24 | conduct a 72-hour history so that we can document your activities
- 25 prior to the incident. So can you tell me your activities

starting on February 1st all the way to the morning of the incident, which was February 4th. You can start by talking about what time did you wake up on February 1st.

A. What day is that on the calendar?

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- Q. So that was Wednesday. Wednesday, February 1st.
- A. So I'll back up a little bit. Tuesday morning we had a deadhead to Sacramento, so I took Southwest there. As soon as we landed, we found out -- pretty close to as soon as we landed, we found out the ice event was going to cause us to delay there until Thursday night. So I went from Central time to West Coast time. By leaving us there, it was going to change my schedule for the week.

Obviously, I had more trips. So they wound up dropping 3 days of trips and the only reason that's relevant is Wednesday, I'm not quite sure if I slept pretty well that night. Or Tuesday night to Wednesday morning, so Wednesday morning, but I was probably up by 6:00 a.m. West Coast time because I was still on body clock. And it might've been even earlier than that, I'm not quite sure.

But since we were there to Thursday night, I know I got up at 5:00 a.m. West Coast time and the reason I know that is I was short a trip, I didn't have a trip for Friday because they had not bid out. So we'll put in what's called substitution, I don't know if you're familiar with that, but my general rule is I decline substitution because substitution, they can assign you anything

they want and I didn't really want to do, you know, a trip to Calgary or someplace really cold or far. So I declined substitution and that left me going in to pick up a trip on my own, if there is any. I'm sorry, I had a hole on Friday, so Thursday morning I got up at 5:00 West Coast time and that's when trips for Friday would pop in with any sick calls or any other reason, so it's 7 o'clock Memphis time. I didn't find any trips there, so I stayed in bed.

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I don't recall if I went back to sleep much, I was in bed all morning, though, just -- just relaxing, nothing going on. The weather wasn't great in Sacramento, so it was chilly. I didn't do much of the 3 days' walk. But sometime later that day I got a trip to Austin on Friday, so that filled in my hole and I'd say I got a couple different naps later that day, but brief periods, probably an hour or less. Flew to Memphis, back to Austin Friday morning.

And Friday was a tough day of sleep. Housekeeping tried to come in the room twice, roughly 10 o'clock and then at 11:30, so both times waking me up. I think we were late that day to Austin, too, so I think best guess, roughly 3 hours of sleep, got woken up maybe an hour and 15 after that. And as you can imagine, that's very frustrating and it's something we contend with. Most of the time now it doesn't happen very often because the hotels know, they try to do a good job of protecting us, but it happened twice that day. So I gave up, I went outside, went on a walk, got some

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food, came back and just relaxed the rest of the afternoon and evening until we had to fly that night. I fell asleep once by accident, just laying in bed. I would say that would be 45 minutes. Hard to say. And then I laid down later to try, I had about 2 hours to nap and I maybe got -- you know, just struggled with it, so I got maybe an hour. Both nights I got maybe 30 minutes to an hour of sleep in the sleep room on Thursday night and Friday night, turning to the Saturday morning event to Austin. Okay. So in general, how many hours do you need of sleep to feel rested? I'd say my goal is at least five to six is what I like, I need five to six. I want more, but if I get -- if I can get close to six, I feel really solid. In the sleep room that you said you stayed in, was there any -- did you get woken up, was there any issues in terms of getting sleep? I think you said 30 minutes or so. The first night we got in pretty late, Thursday night we got in late. I want to say the trip was scheduled in at 12:45, I think we were roughly about that time. And then the show time on Friday morning is different than Saturday, I think it's 2:18. So then we might -- the start might have been 30

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minutes late so you can add 15 onto that, but it just varies.

don't really pay attention to that time because they're going to

wake me up if I'm asleep. So the sleep wasn't -- you know, it

wasn't great, I didn't fall asleep right away, you know, that's

- just -- that's hard to do sometimes. So I probably could've got
  more sleep in there, maybe an hour and a half, but it just didn't
  happen, so -- but no, the rooms are comfortable, the rooms are
- 5 ||Q.| And prior to -- go ahead.

flight and rested?

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great.

- 6 A. Nobody woke us up until the phone, the automated phone call.
- Q. And prior to the 4th, you know, being ready to go with the flight to Austin, did you feel rested, did you feel ready for the
- I actually did, I felt good that day. I felt -- yeah, I 10 recall feeling -- en route, that I felt pretty good considering it 11 12 was very choppy sleep the day before. I was very much aware 13 that, you know, my sleep was interrupted by housekeeping, but I 14 think in there I got four, four and change and then, you know, 15 some trickle, maybe an hour, maybe 45 minutes additional that day 16 and then whatever the sleep room was. But I recall feeling pretty 17 good.
  - Q. And you discussed that you had several times where you had sleep interruption. Is there a process that FedEx has in place where you can indicate, you know, any sleep issues that you may have had?
- A. I mean, you can definitely call in fatigued, which is -yeah, the process would be call the duty officer and just tell
  them you're fatigued and aren't going to be available for the
  flight.

- Q. Okay. Have you ever called fatigue in the past?
- 2 A. I haven't.
- DR. SEVILLIAN: Okay, thank you. Those are the questions I had for right now.
- 5 Warren, back to you.
- 6 MR. ABRAMS: Thank you, Dujuan.
- Matt, if you can come to life behind your camera and unmute yourself, we'll call on you.
- 9 MR. RIGSBY: Thank you, sir.
- 10 BY MR. RIGSBY:
- 11 | Q. Thank you, Hugo. Do you need a break or anything? You good?
- 12 | A. I feel okay.
- 13 Q. Okay. And all my questions have already been asked, so I'm
- 14 going to kind of go through them here, it may take me a minute to
- 15 | organize, but -- okay. You mentioned that on -- as you're on the
- 16 approach, you guys discussed the CAT III at about 10, 15 miles, is
- 17 | that correct?
- 18 A. We had briefed the CAT III at cruise.
- 19 Q. Briefed, okay. And when you were cleared for the CAT III
- 20 | approach, you were cleared with approach and then did tower do
- 21 | that again, once you made contact with them?
- 22 A. We were cleared by approach. So there's an adjoining
- 23 segment; we were cleared to, I think, Jedi.
- 24 Q. Yeah. Okay.
- 25 | A. Cleared direct to Jedi, cleared for the approach. Or if he

1 cleared us the approach, it might have been between Jedi and

- 2 | joining the actual inline final. Roughly 10 to 12 miles. And I'm
- 3 | almost positive that he had said, right there, that it was CAT III
- 4 | and then I think he said it again to the tower.
- 5 Q. Okay.
- 6  $\|A$ . I believe -- I know he said it to the tower, but --
- 7  $\|Q$ . Okay. And this is Roger, correct?
- 8 A. Rob, my copilot?
- 9 Q. Yes, yes.
- 10 A. Yeah, Rob.
- 11 | Q. Rob, Rob. Okay. Had you flown with Rob before this flight?
- 12 A. We flew in from Sacramento together.
- 13 Q. Okay.
- 14 A. And we had both had that hole on Friday, so he went somewhere
- 15 | else on Friday. Well, he can tell you, I don't think he -- I
- 16 | don't think he went, I think they had to cancel because of the --
- 17 | ran out of duty day or -- I believe he stayed in Memphis, but we
- 18 | flew inbound and had conversed on the long layover in Sacramento,
- 19 || so --
- 20 Q. Okay. Was that your first time meeting him?
- 21 A. I believe so.
- 22 | Q. Okay. Do you have a HUD in the 767?
- 23 | A. Yes.
- $24 \parallel 0$ . Was it in use?
- 25 | A. It was.

- 1 Q. Okay. Does that have any IR capabilities, like to help you
- 2 | see through the fog or does it just kind of white out?
- 3 A. It has EFIS --
- 4 | Q. Okay.
- 5 A. -- which I believe I mentioned, we had talked about the
- 6 potential for a backup approach with CAT III. And then I told
- 7 | Rob, I said that's out because whatever the RVR was it was below
- 8 the minimum for C048 approach. So I told him, I don't know when,
- 9 | but outside of -- so probably sometime in the descent I said hey,
- 10 | that's not going to be an option, we're doing just the CAT III and
- 11 | would have to go around if it didn't work for whatever reason.
- 12 Q. Okay. Could you all ever see the lead-in lights? Do you
- 13 | recall?
- 14 | A. I did not. I never saw anything, from the fog.
- 15 | Q. Okay.
- 16 | A. So we weren't -- I wasn't quite at that point, you know, but
- 17 | it's not a sea-to-land approach, per se, so we could land without
- 18 seeing anything. Rob obviously looked out, I was looking forward
- 19 | trying to see if he popped up above the clouds and right when I
- 20 | did that, shortly after Rob called the go-around because he had --
- 21 he told me had seen the silhouette of an airplane through the fog.
- 22  $\parallel$  Q. Okay. And was it on the approach that you guys briefed the
- 23 | go-around, you said, or was that en route, as well?
- 24 | A. We talked about it in a briefing and in a missed approach,
- 25 | had reviewed all that, but at some point along the way I said hey,

- 1 just to review, we'll hit the go-around button, flaps 20, positive
- 2 | rate, gear up and go from there.
- 3 | Q. Okay.
- 4  $\blacksquare$ A. So just a 3-second delay, it was probably right when he
- 5 cleared the guy for takeoff or shortly after that, just because,
- 6 you know, that became even more of an option, I guess, at that
- 7 | point.
- 8 Q. Um-hum. Do you recall, when you guys were talking to -- I
- 9 quess Roger was doing the radio communications? Rob was, I mean.
- 10 A. Right. You mean like 3 miles in?
- 11 Q. Right. Yes, sir.
- 12 A. Right. But I believe I have a good recollection of what was
- 13 said.
- 14 Q. Okay. Other than the comment about your self-discussion, did
- 15 | they ever refer to the air -- did the tower controller express the
- 16 concerns that Southwest was entering the runway?
- 17 | A. When Southwest checked in, tower cleared them into the runway
- 18 or cleared them for takeoff and he said, I think he said traffic's
- 19 on 3-mile final. My initial response was an expletive like
- 20 "What's he doing?"
- 21 | O. Sure.
- 22 | A. And that's when I asked Rob to confirm we're cleared to land
- 23 | 1-8 left.
- 24 | Q. Okay.
- 25 | A. Hoping to ping him if he wasn't on top of it.

- 1 | Q. Sure.
- 2 ||A. You know, I do assume that he's on top of it, as well, but we
- 3  $\parallel$  did have some concerns from, you know, the critical area, you
- 4 | know, and not knowing what their rules are and I didn't know what
- 5 the tower's rules were.
- 6 Q. Um-hum. Did you notice any CAT III issues with the aircraft?
- 7 | A. No.
- 8 Q. You didn't see, okay.
- 9 A. Yeah, sorry. I didn't notice any.
- 10 ||Q|. No deviations or anything other?
- 11 | A. No, it was pretty perfect how the plane was operating.
- 12 Q. Okay. Did you have a trip after this trip?
- 13 | A. I did not.
- 14 Q. Okay.
- 15  $\blacksquare$  A. It ended when we got there.
- 16 | Q. Okay.
- 17 | A. Just to explain, we had -- it had a backend deadhead and that
- 18 was it.
- 19 Q. Okay. Was it just yourself and -- did you have a jump-
- 20 | seater?
- 21 A. We did.
- 22  $\|Q$ . Okay. Was he in the cockpit or in the back?
- 23 A. He was.
- 24 | Q. Okay.
- 25 A. Yeah, there are three seats 10 feet behind us, 8 feet behind

us.

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- Q. Okay. Did he have any input into that or was he looking out of the aircraft, that you're aware of?
- A. I know he was awake because of after the fact, but not during it all, he was quiet.
  - Q. Okay. You mentioned that once you did the go-around, you treated it like a sim session. Can you explain, does FedEx, in their CRM or their general training program, did they go over a similar type scenario?
  - A. I guess FedEx identified that we could do better at our goarounds, you know, maybe 2 years ago, so they -- I don't believe
    it was this last sim, it could've been, but there was an emphasis
    on doing some go-arounds. Quite a few, as I recall. And they had
    made some optional ways of doing it, they added some optional
    ways, which is using the LNAV and VNAV during the go-around, which
    really makes it a lot like a takeoff. So I really like to use
    that, if possible, and that wasn't available before. We had a
    different procedure.

But then it becomes, you know, just like because we don't -I couldn't even tell you when the last time I did a go-around was
in an actual airplane. So it's not something that we actually get
to do very often but we -- you know, we do a lot of it in the sim
and that's, you know, great training. So I treat it -- treated it
just like that, you know, let's hit the go-around button, perform
the procedures and there's more, you know, there's more obviously

1 going on in your head --

- 2 | Q. Sure.
- 3 | A. -- during those moments, should I offset, I know, I think
- 4 | we're okay, let's just do the procedure, and then it was confirmed
- 5 when -- when Rob said they were 700 feet below us, considering we
- 6 were a lot closer at one point.
- 7  $\mathbb{Q}$ . Right.
- 8  $\blacksquare$ A. I was happy with 700 at the time that we were, you know,
- 9 starting our left turn.
- 10 | Q. Okay. And I believe you said the tower, the local
- 11 | controller, did give you RVR readings. You didn't say what they
- 12 were.
- 13 A. A 1200 RVR approach on the first approach.
- 14 Q. Okay.
- 15 A. And then 600 midpoint.
- 16 Q. Okay.
- 17  $\mid \mid A$ . He had also given it to the guys when they took off,
- 18 | Southwest, too. So I don't recall what he gave us whenever we
- 19 checked in initially, but I do recall that it was 1200 and 6. I
- 20 | think it was the same, but --
- 21 Q. Okay.
- 22 A. -- it might've been a thousand, I don't remember when we
- 23 | initially checked in.
- 24 Q. Okay. On that second approach in, had the conditions
- 25 | improved or degraded at all?

- 1  $\blacksquare$ A. They were worse. I think it was 800 RVR and 600.
- 2 | Q. Okay.
- 3  $\|$ A. They were worse. I don't know exactly what they were, but
- 4 | they were -- I noted that they were lower than what we had just
- 5 done.
- 6  $\|Q$ . Okay. And you did a CAT III on that, as well, correct?
- $7 \parallel A.$  Yes, sir.
- 8  $\parallel$ Q. Okay. After landing and while taxiing, did you have -- did
- 9 the controller have any more discussions with you or did you guys
- 10 | have words with the controller or anything?
- 11 A. He told us to turn right at whatever taxiway and then I think
- 12 he said like our apologies and thanks for your professionalism,
- 13 | something along those lines.
- 14 Q. Okay.
- 15 | A. And I think Rob said, you know, roger. I don't know what.
- 16 Rob responded with one word, I believe, but --
- 17 | Q. Sure.
- 18 A. And then we went to ground.
- 19 Q. Did ground say anything?
- 20 | A. No, they just gave us instructions back. The only other
- 21 | conversation we had with them was one more taxiway turn, I
- 22 | believe. Oh, I think they told us to report turning because they
- 23 | can't see anything, report turning onto our next taxiway and then
- 24 | at some point we had a very large flock of birds that flew across
- 25 | 1-8 left, the approach into 1-8 left, and they were using that, so

- 1  $\parallel$  we reported that there was high bird activity --
- 2 | Q. Okay.

- $\|A. --$  in the fog.
- 4 Q. Okay. And I know this is a bit subjective, but just in your
- 5 professional -- your experience, obviously you've been around the
- 6 | block and have flown into several airports. Did the controller
- 7 sound tired or fatigued or anything at all during any
- 8 | communications with him?
- 9 | A. He did not.
- 10 Q. Okay. Were his calls clear and concise?
- 11 | A. I believe so.
- 12 Q. Okay. At what point did you -- at that point, is that when
- 13 you filed your ASAP or did you go in to report this to anybody?
- 14 A. When we blocked in, we said goodbye to Justin, walked
- 15 | directly into what I call the crew room in Austin, and I called
- 16 | the duty officer, told him about the event and we -- you know, I
- 17 knew we needed to do a flight safety report, you know, we looked
- 18 | it up just to be sure, you know, we didn't -- it just made sense,
- 19 obviously, and then so, you know, as a matter of my personal
- 20 | operation I'll just do it, do an ASAP which covers everything and
- 21 you just kill all birds with, you know, that one stone. So we did
- 22 | that before we left the ramp.
- MR. RIGSBY: Okay, Hugo, I am done. I appreciate it
- 24 and I appreciate everything you've done, so thank you very much.
- MR. CARVAJAL: Thank you.

MR. ABRAMS: Thank you, Hugo.

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Gentlemen, I want to caution everybody about digging down into ASAP reports, that's a confidential safety program and we respect it very much here at the NTSB and we don't want to dig in any further, be it specified or you said that they filed an ASAP report and I think it was Rob who did that.

Corey, you're up next on my screen, so feel free to jump in there.

MR. FRANKLIN: So thanks, Warren, I don't have any questions, just maybe a couple of clarifications. Hugo talked about, you know, you can call in fatigued if you feel that you're tired. We also have a fatigue reporting system where you can fill out a report, as well as just calling in to the scheduler or the duty officer, so we have another reporting system that we track for fatigue reports.

And again, just another kind of difference from passenger world, the jump-seaters in the 76 are pretty far back, it's not a normal cockpit jump seat where you can see out the windows. There is a first observer seat that allows you to -- that a check airman can sit in, that you guys would consider a normal jump seat, but there's no real courier area in our configuration of our 76. So those other jump seats are probably 10 feet back, so if you're sitting in those seats, you really can't see out the window. They're pretty far back.

MR. ABRAMS: Corey, do you have any questions or where is

this -- where is this going?

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MR. FRANKLIN: No, no, sir, I just -- just clarification, I don't have any questions, no.

MR. ABRAMS: All right. Thank you, Corey, I appreciate that.

Andy, we'll give it to you, please.

BY MR. ANDERSON:

Q. Yes, sir. Hugo, absolutely fantastic job. I've gotten text messages and phone calls from folks all over congratulating me for your professionalism. So I'm just very, very proud and grateful and I thank God for you and Rob.

I did have a couple of questions. When you were coming in, I think you said you'd gotten possibly cleared direct to the Jedi point on the approach.

From there, you know, compared to your previous years when you were flying at Austin, were there any changes from that pressuring, you know, pressing you guys to get stable or anything like that or can you talk about that, just the initial transitioning, cleared for the approach phase, please?

- A. Are you asking me if previously if I had that?
- Q. Yeah, is that normal or is that different recently? We understand that the approach had been changed recently.

MR. McTIGUE: Hang on a second. Andy, can you just restate it one more time and maybe not so much talking about past versus present and just --

MR. ANDERSON: Sure.

- 1 MR. McTIGUE: -- seeking what you want to know about the 2 event, if you don't mind.
- MR. ANDERSON: Yeah, yeah, absolutely.
- 4 BY MR. ANDERSON:
- Q. You mentioned, Hugo, you configured early, it sounded like you guys were plenty stable well far out there, is that correct?
- 7 A. Very much so.
- Q. Okay, very good. And the other clarification question, when you -- I think you said, you said it before, when Rob said, you know, he was 700 feet below you on the TCAS, that was well after
- 11 you guys had started the go-around, gained separation and were
- 12 about to make your left turn, is that correct?
- 13 A. Exactly.
- 14 Q. Okay.
- 15 A. I was very happy with 700, I knew he was climbing, but so
- 16 were we and I was -- you know, I knew on instinct that as soon as
- 17 we started the turn, we're done as far as we're only gaining
- 18 separation at that point. So that was a good number when he gave
- 19 | that to me.
- 20 Q. Very good. And I may have missed it, was the autopilot
- 21 coupled from start to finish through the go-around event there?
- 22 | A. It was.
- MR. ANDERSON: Okay, very good. Sir, that's the extent of my
- 24 | questions.
- 25 MR. ABRAMS: Thank you, Andy.

1 BY MR. ABRAMS:

- 2  $\|Q$ . Hugo, we're going to start a second round, this is going to
- 3 | be a whole lot shorter than the hour and 6 minutes you've just
- 4 been answering the first round of questions. You mentioned C048.
- 5 | I got a lot of time in some airplanes, but I don't -- I'm not
- 6 | familiar with that chart, can you tell me what C048 is, please?
- 7 | A. Yes, C048 and it allows us, on a -- on a Category I approach,
- 8 | to continue past the minimums as long as certain weather
- 9 | requirements are met.
- 10 | Q. Okay.
- 11 A. And we can use the EFIS. So it let's you get down a little
- 12 | bit lower, to a hundred feet.
- 13 | Q. Okay.
- 14 A. And just to decide if you can land.
- 15  $\parallel$ Q. Okay, so C is for the op spec and 048, that allows that op
- 16 spec so okay, good deal. I understand perfectly now. SMGCS.
- 17 | You're taxiing to the ramp after you've landed on the second
- 18 | approach, did you happen to note what your ground speed was when
- 19 | you were taxiing on that SMGCS route?
- 20 A. Gosh, no idea.
- 21  $\parallel$ Q. Okay. I just found that people go a whole lot faster than
- 22 | they ever thought they were taxiing when it's reduced visibility.
- 23 | What auto-brake setting did you use?
- 24 | A. I believe it was three. I almost -- I'd say 99 of a hundred
- 25 | times I use three.

- 1 | Q. Okay. Were there any MELs on this airplane?
- 2  $\|$ A. There was one for, I believe, the auto-controller. I'd have
- 3 | to pull it up. I believe there's one that didn't impact the
- 4 | flight at all.
- 5 | Q. Good.
- 6 A. You only need one and we had one and it worked as advertised.
- 7 So a non-event for us.
- 8 Q. Great.
- 9 A. Other than confirm that we're legal.
- 10 | Q. Do you know if your training program is under AQP?
- 11 | A. I'm sorry?
- 12 | Q. Do you know if your training program is under AQP?
- 13  $\blacksquare$  A. Yes, we do.
- 14 | Q. And how often do you go -- I'm going to call it CQ,
- 15 | continuing qual or recurrent, how often do you go back as captain?
- 16 A. Every 9 months.
- 17 | Q. Every 9 months. And in that every 9 months do you do a CAT
- 18 | III approach, the low vis certification?
- 19 A. I'm not sure what the requirement is, if that's the
- 20 | requirement or not. I mean, I've definitely done them in the sim,
- 21 | but I don't know if it's every time, I don't recall.
- 22 | A. All right. I realize this was a CAT III approach. Can you
- 23 | hand-fly a CAT II approach or does it have to be coupled, as well,
- 24 | per your -- per your manuals?
- 25 A. You can land CAT II manual.

- Q. Yeah, okay. All right. Ground spoilers armed for landing?
- 2 A. Yes, sir.
- 3  $\mathbb{Q}$ . Were there any other airplanes that you know of in the
- 4 | traffic pattern at the same time as you were? In other words, was
- 5 | approach control working any other flights inbound to Austin?
- A. Not that I recall, it was pretty quiet. It was smooth as can be until 3 miles.
- 8 MR. ABRAMS: All right. Hugo, I got a round three question
  9 but I'm going to -- it's only one question on round three, but I
  10 want to defer at this time to Dujuan, so Dujuan.
- DR. SEVILLIAN: Yeah, thanks, Warren.
- 12 BY DR. SEVILLIAN:
- Q. Hugo, just one question. So we talked earlier about the
- 14 | first officer noticing the silhouette of an aircraft coming into
- 15  $\parallel$  1-8 left at a certain point in time in the approach. Is it
- 16 | typical for a pilot, on a CAT III approach, to be looking outside
- 17 of the aircraft in low visibility conditions?
- 18 A. So as long as everything's working on the airplane, we do not
- 19 | -- we're not even required to see the runway and we can allow it
- 20 | to land. So where systems monitors, they're going to execute a
- 21 go-around. If something fails and we can't continue that type of
- 22 | approach, we don't have to see the runway to land.
- 23 If there's a passive fail, then at 50 feet in this case, it
- 24 | becomes a decision, so we don't necessarily have to go around but
- 25 | we have to see the runway to continue if there's a passive fail in

the system. So I think you're always looking and you always want to look, it's just human nature, but there's no requirement to see it. There's a partial verbal call, it's optional if I were to see the approach lights, so let's say we're doing a CAT III in this situation and maybe at a mile I could see the runway and I might say "approach lights" to let him know I can see it. But in this case there's not -- there's not a requirement to see the runway to land, but I think it's typical to take a peek and I think most every pilot is going to look.

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Some of the instrumentation, you know, we have the HUD that sits in front of you and gives you all the flight information, but you need to look down, you know, down below it into your normal instruments. If you're looking through the HUD and flying through the HUD, it's real easy to see, if you see anything. But I think it's -- I think it's a normal thing on almost every type of approach to take a look and see what you see. So fortunately, he did at that moment.

Q. Yeah. And I just want to talk about, you know, obviously there's a lot of conversation and communication between the air traffic controller and pilots in any type of operation, but in this particular situation, if you could go back after the incident and ask yourself, you know, that interaction between you and the air traffic controller and the conversation, would you have expected a bit more information on the approach, in terms of Southwest location? What would you have expected, if anything,

from the controller?

- A. In terms of what he communicated?
- Q. Yes.

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A. From a legality standpoint, he did what I was wanting him to do, which was, you know, make sure we were clear to land, make sure he knows what he's doing. That's not necessarily from legality, but we're doing it in a legal fashion. And I will say this, you know, we always want to operate legally. Getting into a

different situation, I never expected that we would -- if I was

10 staring right at the runway, that I would see the airplane.

I expected that, if anything, from a legal standpoint, he might be on the runway 5,000 feet down when we were crossing the threshold. So that's an important thing for me, so definitely I thought we were definitely legal for it, in terms of what the controller stated to us and he confirmed that for me. But still, you know, we want the right solution, right, we want him to be airborne and then we touch down. So there was some concern there when Rob told me hey, there was a silhouette of the airplane a thousand feet down, which is where we're aiming, that that surprised me because I never expected that.

So I thought the tower guy was very confident and he was very clear. The thing that you were asking me about what he could've done. My assumption is he's operating under his rules and he's operating legally. I don't know what he could've said that would've been helpful to me to maybe reassure me even more. The

- 1 only question I had was did he protect the ILS critical area, is
- 2  $\parallel$  he doing that? I'm not sure at the moment. Didn't seem so. I
- 3 | had doubts. So definitely focused on this approach and what our
- 4 | airplane is doing, if it's functioning correctly. Other than
- 5 | that, I don't know what he could've done, other than not do what
- 6 he did.
- 7 ||Q|. Thanks. And then just maybe a difficult question here, but I
- 8 | know that you've flown into Austin before, did you recognize the
- 9 controller's voice, by any chance, working with him in the past,
- 10 | flying in?
- 11 A. I didn't.
- DR. SEVILLIAN: Okay. All right, that's all I had, Hugo,
- 13 | thank you very much.
- 14 Back to Warren.
- 15 MR. ABRAMS: All right, Matt, you're up again, sir. Thank
- 16 you.
- 17 BY MR. RIGSBY:
- 18 Q. Hey, Hugo, just a couple of questions. Do you recall your
- 19 approach speed on that?
- 20 A. I believe it's 142. I could be wrong, but --
- 21 | Q. Okay. And do you recall a descent rate?
- 22 | A. I don't recall what the descent rate was.
- 23 Q. Okay.
- 24 A. Or even -- like that.
- 25 | Q. Okay, no worries. And I know a lot was going on, but do you

- 1 | recall at what altitude that you hit the TOGA-button?
- 2  $\parallel$  A. Just discussing it, you know, I think around maybe 150, just
- 3 | inside of that, right around there.
- 4 | Q. Okay. Could you see the lights at all at that point or were
- 5 | you still in the fog? Obviously, your nose is pitching up and --
- 6 | A. No, I didn't see anything but fog when we started the go-
- 7 | around and that's why I wanted to know what he saw --
- 8 Q. Sure.
- 9 A. -- so I said what did you see, but at that point we had
- 10 | already hit the go-around button, you know, we monitored -- you
- 11 | know, and you could -- it's interesting because I -- you know, I
- 12 | felt the plane still settling, descending while it's pitching
- 13 | up --
- 14 | Q. Um-hum.
- 15  $\|A$ . -- knowing that we -- you know, I did want to get this go-
- 16 | around started quickly, which we did, and then got that
- 17 | information and we're climbing out.
- 18 MR. RIGSBY: Okay, that's it for me, thank you.
- 19 MR. ABRAMS: Thank you, Matt.
- 20 Corey, you got any questions for us this time?
- 21 BY MR. FRANKLIN:
- 22  $\parallel$ Q. So just one, Hugo. In your experience at that airport and
- 23 | other airports in IMC conditions, if you were on an approach,
- 24 would you expect a controller to clear an airplane for takeoff if
- 25 | you were at 3 miles?

- A. No. It definitely caught my attention right away.
- 2 MR. FRANKLIN: That's it.
- 3 MR. ABRAMS: Thank you, Corey.
- 4 Andy?

- 5 MR. ANDERSON: No further questions, Your Honor.
- 6 MR. ABRAMS: Thank you.
- 7 BY MR. ABRAMS:
- 8 Q. Hugo, I said round three here, I got one more quick question.
- 9 | Is there anything you could think of that we didn't ask you that
- 10 | you want to tell us about? And I'm serious. I'm actually serious
- 11 on that, I mean, try to get spooled up on these interviews and
- 12 they want to say this, this, and this and we didn't ask that, so
- 13 | is there anything that you want to say after all these questions
- 14 | you've been asked?
- 15  $\|A$ . I would say no, I think most stuff's been covered. The only
- 16 | thing I added, and I've added before with Terence and others, is I
- 17 | thought Rob did a phenomenal job and I'm thankful for him and I
- 18 | can't say enough good things about him --
- 19 Q. Thank you.
- 20  $\blacksquare$  A. -- and the job he did that day.
- MR. ABRAMS: Open question to everyone, any final questions
- 22 | for Hugo?
- 23 BY DR. SEVILLIAN:
- 24 | Q. Yeah, I just have just one, just a general question, Hugo.
- 25  $\parallel$  So in an event like this, an incident like this, how does -- does

FedEx have a process where they share the information in sort of a safety meeting or safety briefing to all pilots, you know, just for sort of awareness to the event?

A. I think they can do it many ways, you know, several different things might be addressed in the simulator, when you go back to the simulator, they can put out an FCIF. It's a -- you know, the file everybody gets, you know, everybody reads. I actually think they did just let everyone know that this incident occurred, so made everybody aware of it if they heard about it -- the media. And then there are safety channels that we can access online that might address specifics.

And then there are -- you know, through our different fleet captains, I think in the past they've put out information about events, just to share them, share the experience and what FedEx likes to call, within the cockpit and without, the shared mental model, so let's talk about whether it's in the plane or outside the plane and particularly in the plane, but make sure that guy knows what I'm doing and he's know what you're doing. So that applies to everything with what I think you're getting at, which ways to share the experience.

DR. SEVILLIAN: Yeah, appreciate the thoughts there and that's all I have, Hugo.

Back to Warren.

2.0

MR. ABRAMS: Hugo, I can't say enough or express how grateful we are and appreciative that you came in and talked to us today,

1	
1	it's been very helpful and we thank you more than you know. I
2	want to say to everyone that's on this call right now, and
3	specifically I'm talking to Terence here, that I appreciate what
4	ALPA has gone through these past several weeks to allow this
5	interview to happen. Just to let everyone know, the chair of the
6	NTSB signed a letter of agreement this morning, about noontime
7	today, that went out to the parties, ALPA, SWAPA, APA, and I
8	believe everyone is on board with the recording and what the NTSB
9	will be doing and not doing.
10	So Terence, thank you so much for your participation in those
11	talks and I thank you very much for that.
12	Any closing thoughts before we turn the recording off?
13	(No audible response.)
14	MR. ABRAMS: Scott, if you'll note the time and stop the
15	recording, I would appreciate it.
16	(Whereupon, at 3:25 p.m., the interview concluded.)
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### CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FEDEX CARGO PLANE & SOUTHWEST

AIRLINES BOEING 767 INCIDENT AT AUSTIN INTERNATIONAL AIRPORT, IN AUSTIN, TEXAS ON FEBRUARY 4, 2023 Interview of Hugo F. Carvajal, III

ACCIDENT NO.: DCA23LA149

PLACE: via Zoom videoconference

DATE: February 15, 2023

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.

David A. Martini Transcriber

## UNITED STATES OF AMERICA

### NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

\*

FEDEX CARGO PLANE & SOUTHWEST

AIRLINES BOEING 767 INCIDENT AT \* AUSTIN INTERNATIONAL AIRPORT, IN \*

\* Accident No.: DCA23LA149

AUSTIN, TEXAS ON FEBRUARY 4, 2023 \*

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

Interview of: ROBERT J. BRADEEN, JR., Copilot

FedEx

via Zoom videoconference

Wednesday, February 15, 2023

### APPEARANCES:

WARREN ABRAMS, Operations Group Chairman National Transportation Safety Board

DUJUAN SEVILLIAN, Ph.D., Human Performance Investigator National Transportation Safety Board

MATT RIGSBY, AVP-100 Federal Aviation Administration

COREY FRANKLIN, Operations Group member  ${\sf FedEx}$ 

ROGER ANDY ANDERSON, Operations Group Member Air Line Pilots Association

TERENCE McTIGUE, Senior Labor Relations Counsel Air Line Pilots Association On behalf of Rob Bradeen

# I N D E X

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### INTERVIEW

(4:00 p.m.)

MR. ABRAMS: Hey, Rob, I'm Warren Abrams, I'm the NTSB ops group chairman of this investigation today and we want to thank you immensely for coming in and talking to us. I understand it's been a little bit of an ordeal for you to get here today, but I thank you for persevering and showing up today, thanks, thanks so much, it's greatly appreciated.

Our purpose today is to try to learn more about your approach into Austin the other day, which is -- we heard from Hugo this morning and -- this afternoon and it's horrifying to listen to it, we want to hear your story because, you know, your story is important, as well. So to help us with that, we have an ops group and you can see these guys on your camera, or on the camera, who they are and at this time we'll introduce ourselves.

Dujuan, if you'll introduce yourself, please.

DR. SEVILLIAN: Yes, I'm Dujuan Sevillian, I'm a human performance investigator for the NTSB.

MR. ABRAMS: Thank you, Dujuan.

2.0

And Matt, if you'll introduce yourself, please.

MR. RIGSBY: Hey, Rob, Matt Rigsby with the FAA's Office of Accident Investigation, I work for AVP-100, which I know you're probably aware of it. I have no enforcement authority, so we're purely here for the safety end of it, so anything you say here cannot be used in enforcement nor do I have any authority for

1 enforcement. So just relax and feel free. Thank you. 2 MR. ABRAMS: Andy. 3 MR. ANDERSON: Hi, good afternoon, Rob. Andy Anderson, I'm a 4 Memphis 767 captain and your ALPA representative here on the call 5 with you. That's it, thanks. 6 MR. ABRAMS: Corey. 7 MR. FRANKLIN: Hey, Rob, I'm Corey Franklin, I'm the 767 assistant fleet captain and the standards manager is what I used 8 9 to be and I'm the company rep today. 10 MR. ABRAMS: Thank you. 11 Rob, you're allowed one person to represent you today, have 12 you got that one person in mind? 13 MR. McTIGUE: Yes, sir, this is Terence McTIGUE, 14 labor relations counsel with the Air Line Pilots Association, here 15 representing Rob. 16 MR. ABRAMS: Thank you, Terence, I do appreciate it, thank 17 you for coming. 18 Scott, we don't usually have the court reporter, it's a 19 pleasure of having you, so if you'll introduce yourself, please. 2.0 COURT REPORTER: Yeah, hi, I'm Scott Chervinski, I'm the court reporter for this session and also for the last session. 21 22 MR. ABRAMS: Thank you, Scott, I do appreciate it. 23 Rob, Terence, the last time I asked and made sure that Scott 24 is the only one recording this and we need to give Terence our 25 assurance that there are no rogue recordings. I'm not recording

this over any other device nor telephone and the only record is what Scott comes up with today, who's a court reporter.

MR. McTIGUE: Thank you.

2.0

MR. ABRAMS: Kind of the process today is we go around the virtual room and ask you questions, we ask a bunch of questions at one time, I'll lead off and I'll ask you probably 15 or 20 minutes' worth of questions, and then we'll pass the virtual microphone and another person and we'll go around the room and as we go around the room, we'll pass the mike and just ask questions, but we all do it one at a time.

Then Dujuan will have a series of questions, Corey will have some questions and we just go on and on that way. So anyway, that's kind of the process. If you don't understand a question, please ask us to restate it. If you don't know the answer, "I don't know" is a perfectly acceptable answer, as well. So if you need to take a break at any time, just let us know, we'll be happy to - take a break.

Everyone you see on these cameras, Rob, has signed a party agreement, which is also a confidentiality statement, and they agreed not to release any information that you tell us today, so there we have their signature on that, it is an NTSB form, it's not just a piece of paper that says I'm not going to talk, but it is the legal document from the NTSB. When I get started, I kind of break up my first round of questions into three parts. The first kind of part, what is your name, you know, where did you

- 1 | fly, where did you learn to fly, who did you fly for before FedEx,
- 2 | just some softball, how much time, when did you get your
- 3 | recurrent, what other airplanes you've flown, that kind of general
- 4 | type questions. Then we'll get to the event, which is kind of the
- 5 | second part, the approach, and we'll probably pick it up from
- 6 Memphis and how you were sleeping or not sleeping, and then we'll
- 7 | get into some more questions, kind of a third part of it. So do
- 8 you understand kind of the direction of the fire hose and you're
- 9 | ready to go? Well, you're smiling,
- 10 || so --
- 11 MR. BRADEEN: Yes, sir.
- 12 MR. ABRAMS: -- that's good.
- 13 | INTERVIEW OF ROBERT J. BRADEEN, JR.
- 14 BY MR. ABRAMS:
- 15 | Q. So I'll kick it off here. Rob, for the record, if you will
- 16 | state your full name and spell your last name, please.
- 17 || A. Robert James Bradeen, Jr. Last name is B-r-a-d-e-e-n.
- 18 Q. Thank you. And how old are you, Rob?
- 19 | A. Forty-nine.
- 20  $\mathbb{Q}$ . And what is your job title there at FedEx?
- 21 A. I'm a 767 first officer.
- 22 | Q. Okay. I couldn't tell how many stripes you have on your
- 23 | epaulets there, so yeah, my bad eyes there. When did you get
- 24 | hired at FedEx?
- 25 | A. January of 2019.

- 1 | Q. So how many -- 2019, this is '23, so you've been there 24
- 2 | years?
- 3 A. Four years.
- 4 | Q. Nineteen, I'm thinking --
- 5 A. Nineteen, yes, sir.
- 6 Q. Have you flown any other airplanes there at FedEx, other than
- 7 | 767?
- 8 A. Yes, I was on the 757 in the right seat for the first -- a
- 9 | little over 3 years, until July of this past year.
- 10 Q. Any thoughts of upgrading to triple 7 or a bigger airplane?
- 11 A. No, not at this point.
- 12 Q. Okay.
- 13 A. I like my seniority.
- 14 Q. I understand. Where do you live now, Rob?
- 15 A. I live in Colorado Springs, Colorado.
- 16 Q. Did you attend school at the little boy school out there?
- 17 | A. I did.
- 18 | Q. Air Force Academy?
- 19 A. Air Force Academy.
- 20  $\|Q$ . Yes, thank you. What did you fly in the Air Force?
- 21 A. After training, I flew F-16s, predominantly. I also did an
- 22  $\parallel$  assignment teaching fighter fundamentals on the T-38C and then I
- 23 | finished up flying gliders and Twin Otters.
- 24  $\parallel$  Q. Quite a -- quite going from F-16s to gliders and Twin Otters,
- 25 | that's quite a --

- 1 A. It was.
- 2  $\mathbb{Q}$ . Were you an IP on the F-16?
- $3 \parallel A$ . I was.
- $4 \parallel Q$ . Including your military time, approximately, and this is an
- 5 | approximate, how much total time do you have?
- 6 A. Approximately 4500 hours.
- 7  $\|Q$ . And approximately how much flight time have you had in the
- 8 | 767?
- 9 A. Approximately 250, 250 block hours.
- 10 Q. Okay. Do you wear glasses or contact lenses?
- 11 A. I wear glasses for distance vision while flying.
- 12 | Q. Did you have it on at the time of the approach?
- 13 A. Yes, sir.
- 14 Q. How often do you go through continuing qual training? In
- 15 | other words, what monthly intervals.
- 16 A. Every 9 months.
- 17  $\|Q$ . Every 9 months. Do you receive Category III or low vis
- 18 | training at that interval?
- 19 A. I don't recall if we get it at every single one of them, but
- 20 | I recall the last one I did, we did low visibility takeoff and
- 21 | landing training.
- 22 | Q. Can you fly a CAT III approach from the right seat?
- 23 A. No, it's for the -- the captain flies it.
- 24 Q. All right. Do you have any required callouts in the right
- 25 | seat?

A. Yes.

- 2  $\|Q$ . How did you do on your required callouts into Austin?
- 3 A. I'm trying to recall, because we did two approaches. The
- 4 second approach I did really well on them and on the --
- 5 Q. That's good, that's good, Rob. Thank you.
- 6 A. Yeah.
- 7 | Q. I was expecting oh, I did great, but you know, you drilled
- 8 down in there a little bit closer, so I wasn't expecting you to
- 9 throw yourself on the mercy of the court. Who is in your chain of
- 10 command? In other words, if you had a concern, who would you
- 11 | address your concerns to?
- 12 A. First would be my captain that I was flying with and address
- 13 || it with him.
- 14 | Q. All right. Let's say it's not a specific aircraft concern
- 15 | but a general concern within the organizational structure, who
- 16 | would you go to?
- 17 || A. Well, depending on what it dealt with, I'd either go to the
- 18 | fleet manager or the fleet captain.
- 19 Q. Okay. Do you know who the chief pilot is in Memphis?
- 20 | A. I do.
- 21 | Q. Have you ever had a conversation with him?
- 22 | A. I have, actually. Yes, I have.
- 23  $\|Q$ . Did you or Hugo have -- do you know if you or Hugo had
- 24 conversations with the dispatcher before your flight to Austin the
- 25 other day?

- 1 A. If I remember correctly, Hugo called the dispatcher because
- 2  $\parallel$  he wanted a little bit more gas added to it for our alternate of
- 3 | Houston based on the forecast of low visibility.
- 4  $\|Q$ . Do you ever get involved with the call to the dispatcher?
- 5 A. Not usually, besides listening in to the captain's side of it
- 6 | sometimes.
- 7  $\|Q$ . Okay. Where would you listen in, if the captain called the
- 8 dispatcher, where would you listen in on that call?
- 9 A. In my experience, the captain usually calls after discussing
- 10  $\parallel$  with me and is standing or sitting next to me when he calls the
- 11 dispatcher, so I'd listen in.
- 12 Q. Okay. Per the landing, do you compute a landing distance
- 13 | calculation for each airport?
- 14 A. Yes.
- 15 | Q. Did you do that for Austin 18 left?
- 16 A. Yes.
- 17  $\|Q$ . That landing distance calculation, does that require auto-
- 18 | brakes on or can you do it with all the brakes off for the landing
- 19 distance calculation?
- 20 A. When you run the calculation, it gives you a landing distance
- 21 | for, I think, three different auto-brake settings and then you can
- 22 | choose from there.
- 23  $\|Q$ . Okay. Do you recall which auto-brakes you used for your
- 24 | landing in Austin?
- 25 A. I don't recall, specifically.

- 1 Q. But did you use auto-brakes?
- 2  $\blacksquare$ A. Yes, he did have auto-brakes set.
- 3  $\|Q$ . On the approach -- or let me back up. When did you first
- 4 | realize that the weather was pretty lousy there at Austin, you
- 5 | know, the RVR was out on the ragged edge?
- 6  $\blacksquare$ A. Well, we knew the forecast was supposed to be there before we
- 7 | even left the AOC, before we even stepped to the airplane.
- 8 | Q. All right. Do you recall what it was reporting when you
- 9 | first looked at it?
- 10 A. Reporting, we were talking about, I want to say it was a half
- 11 | mile to a mile, but it was forecast to drop down to an eighth of a
- 12 | mile by the time -- around the time we got there.
- 13 Q. All right. What were the wind conditions on the approach
- 14 | into Austin?
- 15 | A. I'm sorry, the winds?
- 16 Q. Yes.
- 17 | A. They were pretty much calm.
- 18 | Q. Good. Headwind component, tailwind component, crosswind
- 19 | component, anything?
- 20 | A. There might've been a slight headwind component, but just a
- 21 | couple of knots, if I remember correctly.
- MR. ABRAMS: Well, I'm going to stop there, I've got a whole
- 23 | lot more questions for round two. Dujuan has dropped off the
- 24 | call, so I'm going to try to get him back on the call and with
- 25 | that, I'm going to turn it over to Matt.

- 1 Matt, if you will -- I'll turn it over to you, Matt.
- 2 BY MR. RIGSBY:
- 3 | Q. Hey Rob, thanks for your time today. How was the -- or when
- 4 was the CAT III approach briefed?
- 5  $\mathbb{A}$ . We briefed it in cruise before we started the arrival and
- 6 descent.
- 7  $\|Q$ . Okay. When you heard ATC clear Southwest to take the runway,
- 8 | at what point in your approach were you?
- 9  $\|A$ . We were approximately 3 miles out, maybe just slightly
- 10 | further out, so inside final approach fixed on the glide slope.
- 11 Q. Okay. Stabilized approach?
- 12 A. Yes.
- 13 Q. Did that give you a concern, at 3 miles out, that he's
- 14 | clearing them for departure?
- 15 || A. It started raising a couple of questions, yes.
- 16 Q. Okay. And at that point what did you do?
- 17  $\|A$ . At that point, the captain and I kind of looked at each other
- 18 | and I think he said go ahead and just confirm that we're cleared
- 19 to land, so I made a radio call, the tower confirmed FedEx, 1432,
- 20 | if I remember correctly, on the call sign, cleared to land 18 left
- 21 | and the tower confirmed that we were cleared to land and said the
- 22 | 737 would be departing before our arrival.
- 23  $\|Q$ . Okay. And was your head inside the cockpit at that point?
- 24 A. It was a combination inside and outside, yes.
- 25  $\|Q$ . Okay. I guess that's what the next guestion is, at what

point did you -- I understand your head went outside the cockpit

- 2 and what did you see?
- 3 A. At what point do you mean?
- 4  $\mathbb{Q}$ . After you did the discussion on the approach and that he was
- 5 | cleared to land, I guess what triggered you to look out and start
- 6 | looking for the Southwest?
- 7 | A. At the point of still cleared to land, after reconfirming
- 8 | that, I was still mostly inside monitoring instruments, we were
- 9 still VMC above the fog deck continuing down. There was a follow-
- 10 on call from tower and I would guess we were probably around 300
- 11 | feet or so, so I had already made the clear to land 18 left
- 12 | callout within our cockpit.
- Tower asked, "Southwest, confirm you're rolling" or something
- 14 to that extent and Southwest replied with kind of -- it sounded
- 15 kind of strained, like a strained tone, rolling now, kind of
- 16 clipped, and that's what kind of got us both concerned when we're
- 17 | at 300 feet, about a mile out and we can't see the runway. And so
- 18 | at that point I started glancing outside a little more frequently
- 19 | than I normally would on a CAT III.
- 20  $\|Q$ . Okay. Did you see the approach lights at that point?
- 21 A. Not the lights themselves, but we could see the glow through
- 22 | the fog and in fact, we had seen the glow through the fog out at
- 23 | like 8 or 9 miles.
- 24 Q. Okay. And did you ever see the Southwest airplane?
- 25 | A. Yes, I did.

- Q. Okay. And tell us about that, I guess.
- 2 ||A. I would estimate probably we were nearing the -- probably
- 3 between a hundred and a hundred and 50 feet above touchdown zone
- 4 | and I was glancing out, glancing in, glancing out and at one of my
- 5 | glance-outs there was a white light that did not match the runway
- 6 | lighting and so I glanced at it, it was kind of off to the left
- 7 | and then it quickly morphed into a silhouette of the left wing
- 8 | with the airplane, just above the glare shield from my point of
- 9 | view, so right about our aim point and I sensed closure on them
- 10 and that's -- and of course, it all happened much faster than it
- 11 | takes to describe it, but that was -- that was how I got sight of
- 12 | them.

- 13  $\|Q$ . Okay. And at that point what did you do?
- 14 A. I called for the go-around, I think I actually said it three
- 15 | times, I think I said go around, go around, go around.
- 16 Q. Okay. Have you been to Austin on a CAT III approach before
- 17 | in those conditions?
- 18 | A. I have not. In fact, it was my first time to Austin.
- 19 Q. Okay. Had you trained for a similar event through FedEx? I
- 20 | know they have a pretty good CRM program. A similar type event?
- 21 A. Yes. In fact, my most recent recurrent, part of the training
- 22 | profile was low visibility approaches with a startled go-around
- 23 directed by the instructor.
- 24 | Q. Okay. And I know this is somewhat subjective but, in your
- 25 professional experience and as a pilot and talking with other

- 1 controllers, did the controller sound tired, fatigued, anything
- 2 | like that? As best you could tell, you know.
- 3 A. As best as I can tell, he sounded on the radio like any other
- 4 | controller I've listened to.
- 5  $\|Q$ . Okay. Did you guys have any direct contact with Southwest
- 6 Airlines over the radio?
- 7 A. After we initiated our go-around, I keyed the radio and I
- 8 | said, "Southwest, abort, positive rate" and then said, "FedEx is
- 9 on the go."
- 10 | Q. Okay. Do you recall, did the tower give you RVR readings on
- 11 | every mile?
- 12 | A. I don't recall them giving us RVR at 3 miles, they gave
- 13 | Southwest RVR when they cleared them for takeoff. They had also
- 14 given us RVR previously when we checked in with them. And then I
- 15 | think they gave us RVR again after I reconfirmed that we were
- 16 | cleared to land.
- 17  $\parallel$  Q. Okay. On that second time around, was everything pretty well
- 18 | normal?
- 19 A. You mean when they --
- 20  $\parallel$ Q. With the controller clearing and the communications and
- 21 | everything?
- 22 A. Yes. You mean on our second approach?
- 23 Q. Yes, sir. Yes, sir, sorry.
- 24 A. Yes, everything ran smoothly and normally, as we'd expect.
- 25 Q. Okay. Any communications with the controller after the

- 1 landing and taxiing, either by the local control or ground
  2 control?
  - A. After we cleared the runway, I told them which taxiway -- he told us right when able and I told him which runway or taxiway we were clearing on. I don't remember if he cleared us to -- it would've been the second taxiway and contact ground and asked us to let them know when we were clear of the runway. And then I told them we were clear of the runway, when we had taxied far enough off and I remember him -- he said something followed by
- MR. RIGSBY: Okay, that's it, Warren. Thank you.

  Thank you, Rob.

"Thank you for your professionalism today."

- 13 MR. ABRAMS: Thank you, Matt.
- Dujuan, we'll defer back to you now. Since you're back with us, you can tell us what happened.
- 16 BY DR. SEVILLIAN:

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- Q. Hey, Rob, I appreciate you talking with us today, I had a computer issue earlier, so if I'm repeating myself, I apologize as to something that's been discussed before. But in your time working for FedEx, approximately how often have you flown into Austin airport?
- 22 A. This was my first time flying into Austin.
- 23 | Q. Okay. How about prior to working to FedEx?
- A. I had never flown into Austin. No, never flown into Austin myself, besides on the -- in the backside of a passenger plane.

- 1 Q. Okay. And in your statement you stated that as the captain
- 2 | began the go-around, you called for Southwest to reject due to a
- 3 conflict about them taking off and climbing into your aircraft as
- 4 | you overflew them. Did Southwest Airlines say anything to you
- 5 | after you told them to reject the takeoff?
- 6 A. I don't know if they said it to us after I said that and I
- 7 stated that we were on the go. There was a momentary pause and
- 8 | tower came back and I can't remember if they said roger or if they
- 9 said something along the lines of Southwest, turn right when able
- 10 and contact ground and after that, Southwest said negative.
- 11  $\|Q$ . Okay. And bear with me. So you stated that you saw the
- 12 | silhouette of an airplane at about a thousand to 1500 feet down
- 13 the runway. Did you see Southwest Airlines on the TCAS display at
- 14 | the time?
- 15 || A. I did not. I wasn't focusing on the nav display on my
- 16 crosscheck. When I was inside, I was on the situational display
- 17 | with the ILS data.
- 18  $\parallel$ Q. Okay. Are you familiar with Service Movement Guidance and
- 19 | Control System or SMGCS?
- 20 | A. I'm familiar with the concept.
- 21  $\|Q$ . I think you said this was your first time coming into Austin?
- 22 | A. Yes.
- 23 | Q. Okay. So part of our investigation, we normally conduct what
- 24 we call a 72-hour history and it's just so that we can document
- 25 your activities prior to the incident. So can you tell me your

activities starting February 1st, which was a Wednesday, all the way up to the morning of the incident, which was February 4th?

Start by discussing what time did you wake up on February 1st.

A. Okay. So February 1st, I went to bed -- and these times are Sacramento time because that's where we were. I went to bed at midnight, shortly thereafter, probably, and woke up, I estimate around 8:30 in the morning. Did some, you know, personal online stuff, went to -- got lunch, took maybe an hour nap in the afternoon, probably between 1:00 and 2:00 or thereabouts.

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Then dinner. I went for a walk around Sacramento, as well, during the afternoon there. Went to bed probably around midnight again or shortly thereafter, so that would be Wednesday night into Thursday morning, and woke up around 8:30 in the morning again on -- 8:15 to 8:30 Thursday morning. Once again went and got some -- an early-ish lunch there and took a nap for about an hour and a half, from about 2:00 to 3:30 and woke up to my alarm to go grab some -- go for a walk and grab some lunch.

We got, I think it was 5:40 local time, our pickup was from the hotel, to go to the ramp. We got back into Memphis probably about 12:30 a.m. or so, a little after midnight Friday morning. Once we got inside, we went to a sleep room, got comfortable, we got settled, fell asleep probably somewhere between 1:15 and 1:30 in the morning. We got right at 2 hours of sleep, but my wakeup call came at 3:30 in the morning for my next trip. That trip ended up, we were -- the start was a little bit delayed. Met with

my captain, we talked, briefed it all up, went out to the airplane and there was a long delay for deicing because of manning down there and I think maybe there were some IT issues, too, but I ended up timing out before we even left the chocks. So we went back inside at -- I think it was a little after 9:30 in the morning. I got a sleep room again in our ASE hub, relaxed for a little bit, went and got some lunch at the cafeteria, came back, I found a hotel that would let me check in early because I was in Memphis for the day now, until the show time for Saturday morning.

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And then I went down into the hotel down in Southaven,
Mississippi. Went to sleep at probably about 2:45, slept to about
5:45 when my alarm went off for me to go get some dinner. I went
and got dinner, came back, packed up most of my suitcase and
everything, went back to sleep, probably asleep around 9:15 to
9:30 and my alarm went off at 12:50 a.m. to get up and get ready
to drive in and park and everything for my 2:30 show time.

- Q. Okay, thank you. So in general, how many hours do you need to feel rested? Of sleep, to feel rested.
- A. Honestly, it really depends on what the rest of the week has been like. Some nights I'm okay with six, some nights I get closer to eight. Usually, when I lay down to sleep after I get to a destination, I'll set an alarm for a "no later than" time and usually I try and aim for closer to 8 hours, if I can, and if I wake up earlier and can't get back to sleep, then I get up and start my activities for the afternoon.

- Q. Okay. And you mentioned earlier about the sleep room in

  Memphis. Can you talk to us about what's in the sleep room, what

  -- you know, what's the environment like in terms of being able to

  sleep?
  - A. I sleep pretty well in the sleep rooms, in general. So the rooms themselves, it's just a small room with a twin bed, a chair and a little shelf, a box fan and a phone. That's pretty much all it is. There's rest rooms back there. And I like it because it gets dark and you can like get pretty cold, too, and I like it cold when I try and sleep. So I tend to go in and turn off the light, turn down the temperature and fall asleep, and you set a wakeup call so if there's a delay in your show time, it will let you get that extra 15, 20, 30 minutes of sleep.
  - DR. SEVILLIAN: Okay. Appreciate that. Let's see, I think those are all of the questions that I had for right now. I may have some here in the future, but thank you.
- 17 Back to you, Warren.

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- MR. ABRAMS: All right, thank you, Dujuan.
- 19 Andy, we'll roll in with you, sir.
- 20 MR. ANDERSON: Thank you very much.
- 21 BY MR. ANDERSON:
- Q. Rob, congratulations and thank you for the outstanding,
  amazing job you did saving of the lives, including your own. I've
  been getting calls and text messages from folks around the
  country, you know, thanking me for your professionalism, your

- 1 activities, and so I just wanted to go on record and say
- 2 | outstanding. You mentioned one -- when you talked about the
- 3 | training events, and it's a common phrase for us when we talk
- 4 about a startled go-around, could you explain what that is, maybe
- 5 | to elaborate?
- 6 A. So a startled go-around is one where you're not necessarily
- 7 | expecting it. You know, it's usually close to the ground, you're
- 8 | transitioning to a landing phase and for whatever reason you need
- 9 to go around, usually directed by tower or the instructor,
- 10 | depending on the scenario. So it's just an abrupt go-around to
- 11 | have you practice it without immediately thinking slowly about it
- 12 | and going through it.
- 13 Q. Very good. Yeah, thank you, thank you for that. You
- 14 | mentioned this, but I did just want to clarify, the time at which
- 15 | you saw the light, the bright light that did not match the rest of
- 16 the runway lighting, you said approximately a hundred and 50 feet
- 17 | above the runway, estimating, correct?
- 18 A. Estimating somewhere, it all happened between a hundred and a
- 19 | hundred and 50 feet, yes.
- 20 | Q. Okay.
- 21 | A. Because I remember the -- remember the approach lighting
- 22 under the nose, so we were near the -- not the threshold of the
- 23 | runway, but the over run.
- MR. ANDERSON: Understand, understand.
- 25 That's all the questions I have this round, Warren.

1 MR. ABRAMS: Thank you, Andy.

Corey.

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MR. FRANKLIN: No, sir, I think you guys covered everything I had.

MR. ABRAMS: All right, Corey. Thank you.

BY MR. ABRAMS:

- Q. Rob, how do you get weather on your airplanes? In other words, you're out there at a cruise altitude and you want to get the Austin weather, is there more than one way to get the weather, two ways, three ways, how many different ways can you get the weather?
- A. Well, our primary way to get the weather is via ACARS, our dialing system, because it will send for the ATIS and most of the big airports around the country have digital ATIS so we can get it digitally and that's our primary way of getting it. If that doesn't work or the airport doesn't have that, we have a FedEx weather option that goes through FedEx and we'll get the weather observation; it's not a full ATIS report, but it will tell you what the weather observation is. And then there's always the --you can fall back to the backup of using the radio and listening to ATIS on the frequency.
- Q. Yeah, what a step back in time to do that, I understand. Do you guys use iPads for your Jepp charts?
- 24 A. Yes.
- 25  $\mathbb{Q}$ . Is it connected to the Internet?

- 1 A. We have a few airplanes that have Wi-Fi on them and it's
- 2  $\parallel$  being retrofitted, but -- and I don't know exactly how many it is,
- 3 | but on the few airplanes that have it, we can also get digital
- 4 ATIS through the FliteDeck Pro app if it's -- if that airport
- 5 offers it.
- 6 Q. Okay, good. You answered that real good. You get a star
- 7 | beside your name for that one, so -- what's the lowest RVR you can
- 8 | fly approaches in the right seat? It's not an FAA oral, but --
- 9 A. Basically, it would be down to the CAT I mins.
- 10  $\mathbb{Q}$ . Okay. Can we say RVR at say, 1800?
- 11 A. Yeah, that sounds about right.
- 12  $\|Q$ . Okay. Did you notice if there were any MELs on this
- 13 | airplane?
- 14 A. The only MEL I recall being on the airplane was one of the
- 15 | automatic cabin pressure regulators -- I may be getting that
- 16 wrong, but -- was in-op, but it still operated normally on the
- 17 other one.
- 18  $\parallel$ Q. All right. On a CAT III approach, I believe the automatic
- 19 ground spoilers are required. Is that part of your -- do you arm
- 20 | the ground spoilers or does the captain usually do that?
- 21 A. If the captain's flying, then I will usually do that as part
- 22 | of the before-landing checklist.
- 23  $\parallel$ Q. Okay. Was there anything different about this CAT III
- 24 | approach? In other words, you haven't done that many and
- 25 especially into Austin, so what were your takeaways from this

approach?

- 2  $\parallel$  A. You mean afterwards, in retrospect, or during the briefing
- 3 | beforehand?
- 4 | Q. Let's go with the briefing beforehand.
- $5 \parallel A$ . The takeaways from it, if everything operated normally, is we
- 6 didn't even have to see the runway to land, as long as the systems
- 7 | stayed good, and my job was primarily to monitor the systems and
- 8 | tell the captain if something failed and that we can step back to
- 9 either the fail passive, where you have to see to land in alert
- 10 | (ph.) at the 50 feet, which becomes a decision height at that
- 11 | point, and then I give any steering updates if the airplane's not
- 12 | doing properly down the runway.
- 13 Q. On your CAT III approach, does it stipulate, are you inside
- 14 or outside, or it may not stipulate at all, so what is your
- 15 | primary focus on the approach?
- 16 | A. Primary focus is on monitoring the approach and the systems.
- 17 | I don't recall if it says that you will look only here, but that
- 18 | is -- my primary focus is pilot monitoring.
- 19 Q. Okay, good. When taxiing in after you landed on the second
- 20 | approach, do you recall what the ground speed was or -- yeah, do
- 21 | you recall what the ground speed was?
- 22 | A. I don't recall exactly what it was, but I know we were
- 23 | taxiing slow because the visibility was poor.
- 24 MR. ABRAMS: Okay. Rob, that's all I have at the moment.
- 25 We're going to skip a little bit out of order.

1 Dujuan, back to you.

DR. SEVILLIAN: Yeah, thanks, Warren.

BY DR. SEVILLIAN:

- Q. Rob, just a question. I know you said that the CAT III approach was -- this was one of your first approaches that you had done over in Austin, that's correct?
- 7 | A. Yes.

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- Q. So, is it correct to say that this type of approach is a fully automated approach and like you said, your head is down looking on the flight deck, looking at the displays, you know,
- monitoring and so forth, so -- and you don't need to see the
  runway to actually land the aircraft. In this case, what prompted
- 13 you to look outside the aircraft for traffic?
- 14 A. The concern about where Southwest was, that's what prompted me to look outside.
- 16 Q. And that's when you saw the left wing silhouette?
- A. Yes, during the cross-check. Now, when I say I looked

  outside, I was not focused solely outside, I was still cross
  checking from the instruments, outside, instruments, outside, but
- I was spending a little more time outside than I normally would on
- 21 the approach because of the concern about where Southwest was and
- 22 | it was on one of those glances outside that I saw that white light
- 23 that then merged into the silhouette of the airplane.
- Q. And in terms of sim training, has there ever been any sort of
- 25 sim training that takes into account looking, obviously on an

- 1 approach, CAT III approach, looking inside the airplane, looking
- 2 | outside the airplane, sort of what you just discussed there, you
- 3 know, is that something that you learned in the simulator in
- 4 | training or is that just something that it came up as a result of
- 5 | that concern?
- 6 A. Excuse me. I don't recall any specific training for CAT IIIs
- 7 | where they said look outside as well, so I think it was more just
- 8 experience and the concern that led to me looking outside more.
- 9 DR. SEVILLIAN: Yeah, thanks, Rob. I really appreciate that
- 10 and that's all the questions I have for now.
- 11 Back to you, Warren.
- 12 MR. ABRAMS: Thank you.
- 13 Matt, do you have anything?
- 14 BY MR. RIGSBY:
- 15 Q. Okay, just a couple, Rob. When did Southwest show up on your
- 16 TCAS?
- 17 | A. I can't say when they showed up on the TCAS, I can tell you
- 18 | when I noticed them on the TCAS, which was shortly after we
- 19 | started a left-hand turn as part of the published missed approach
- 20 | procedure, I glanced down at the nav display and saw the yellow
- 21 TCAS hit with 700 feet below us.
- 22  $\|Q$ . Okay. Have you flown with this captain before?
- 23  $\|A$ . Only earlier in the week, we flew from Sacramento to Memphis.
- 24  $\parallel$ Q. And I may have missed it, but is this your first civilian job
- 25 | outside of the Air Force, with FedEx?

1 A. No, I also -- after I retired from the Air Force, I had a --

- 2  $\parallel$  I spent about 5 months with Flexjet flying Phenoms before I got
- 3 | hired and started with FedEx.
- 4 | Q. Okay. Is FedEx the first company that you've done this
- 5 | startled go-around training with?
- 6 A. No. And I can't remember if we did it during my Phenom
- 7 | training with Flexjet, but I remember doing it in the Air Force,
- 8 as well.
- 9  $\mathbb{Q}$ . Would you credit that for this situation, for saving the day
- 10 | in this situation?
- 11 | A. I don't know. I think it was more experience and just the
- 12 | combination of luck that I happened to look out at the right time,
- 13 experience that made me a little concerned, and training that I
- 14 | fell back on with the startle. Honestly, I think all those just
- 15 merged into the perfect timing to be able to call the go-around.
- 16 MR. RIGSBY: Okay.
- Okay, that's it, Warren. Thank you very much.
- 18 And thank you, Rob, outstanding.
- 19 MR. ABRAMS: Thank you, Matt.
- 20 Yes, Andy, you're up.
- 21 MR. ANDERSON: I've got nothing, sir. Great job.
- 22 MR. ABRAMS: Corey?
- MR. FRANKLIN: No, sorry. No, I don't have anything.
- 24 | Thanks, Warren.
- 25 BY MR. ABRAMS:

- Q. Rob, I asked this last time to Hugo and it's really kind of a serious question. Is there anything that you could think that we didn't ask you that you would like us to know about?
  - A. No, but you asked about training and I talked about, you know, it's a combination of luck, experience and training, I feel, that helped me exactly where I saw that airplane and go from there, but I also credit the training. Hugo didn't see the airplane in front of us, but when I said go around, go around, go around, he didn't hesitate, he immediately did it and that's exactly the way it's trained and talked about in all of our refresher and recurrent trainings that I've been through. And he didn't ask why until we were already climbing away from the ground. So I want to credit that, as well. So it's not just me, it was there were two of us there and it made a difference.

MR. ABRAMS: Thank you.

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Closing thoughts, gentlemen?

(No audible response.)

MR. ABRAMS: Rob, we want to say an extreme thank you for getting here today to talk to us, you've been very helpful and been very informative, extremely informative, and I want to say publicly again, Terence, we thank you for your cooperation with the NTSB in allowing this interview to go forward in a recorded manner and with that, Scott, if you will note the time and stop the recording, I would appreciate it.

(Whereupon, at 4:44 p.m., the interview concluded.)

### CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FEDEX CARGO PLANE & SOUTHWEST

AIRLINES BOEING 767 INCIDENT AT AUSTIN INTERNATIONAL AIRPORT, IN AUSTIN, TEXAS ON FEBRUARY 4, 2023 Interview of Robert J. Bradeen, Jr.

ACCIDENT NO.: DCA23LA149

PLACE: via Zoom videoconference

DATE: February 15, 2023

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.

David A. Martini Transcriber