

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

June 12, 2020

Attachment 1 – Crew Interview Transcripts and Statements

OPERATIONAL FACTORS

DCA20CA058

January 23, 2020

Statement regarding United Airlines Flight 1754 MSY to EWR January 10, 2020

This segment was conducted as a Captain IOE with student Captain [REDACTED] as PF, I was acting as PM. Captain [REDACTED] had briefed the Flight Attendants prior to departure that there would be light turbulence in the climb out and that the seatbelt sign would remain on until we were in smooth air.

Climbing out we had the radar on and WSI tuned to radar reports. ATC reported weather at our 12 o'clock position some distance ahead and we confirmed. We were not going to be able to out climb the clouds (we were in clear air at the time) and asked ATC for a right turn to avoid the weather. We were told to standby. ATC called back shortly and gave us right deviations for weather. I made an announcement "Flight Attendants Take your Jump seats" as a precaution. No turbulence had been reported. As we were in the turn, auto flight on at about 30,500', we received a quick jolt followed by another light bounce, did not think anything of it at the time. Before I could make the "Flight Attendants Check In" announcement the Purser called to say she had fallen as she was turning to return to her jump seat from the area of 2B after my announcement. She stated that this occurred as we hit the first Jolt of Clear Air Turbulence. Evidently the turning of the aircraft, accompanied by the first bump and her turning to go to her jump seat occurred perfectly to cause her to lose balance and fall.

The remaining flight attendants made an announcement asking for a doctor. An EMT and Doctor both answered the call. The Doctor put ice on the Pursers ankle, a temporary splint and recommended Ibuprofen. I had numerous discussions on the intercom with the Pursuer. Our Purser wanted to continue to EWR and we agreed it was safe for her to do so. Dispatch was notified and they passed on to MedLink and case number GMDC62620 was created. We requested thru dispatch that paramedics and Inflight meet us upon arrival in EWR and they did. We were fortunate to have a deadheading crew onboard. One Flight Attendant agreed to help. She helped with the service in the main cabin and one of our original FAs became the acting Purser. The plane was full, no empty seats. For landing the working Flight Attendants were able to have a First-Class passenger take an aisle seat in the main cabin. That seat had been occupied by the deadheading Captain. Our injured Flight Attendant was then relocated in the First-Class seat as she was technically incapacitated. We then had a legal inflight crew in place for landing. The deadheading Airbus Captain was seated in the cockpit jump seat for landing.

Upon arrival in EWR we were met by paramedics and the Purser was removed from the aircraft and transported to the hospital as United Medical was about to close and the paramedics said that they would have been told to transport her to the hospital eventually anyway. I called the FODM on duty [REDACTED] and made the required report.

Respectfully,

Captain [REDACTED]

[REDACTED] LCA

Statement regarding United Airlines Flight 1754 (MSY-EWR) of January 10, 2020

This was my fifth flight of my OE for my captain upgrade. Part of my flight attendant briefing was that there may be some bumps on the climb out and would be leaving the seat belt sign on until we are past the weather. We were going to try to avoid the weather, but if necessary would make an announcement to have them take their jump seats. As we were climbing through 30,500 feet, weather radar indicated we should deviate to the right to avoid any chop. We had no other reports from other pilots or dispatch of turbulence in the area. As PF, I asked PM to request right deviation. ATC asked us to standby. We were cleared seconds later. As I was making the right turn, pilot monitoring made the PA "flight attendants take your jump seats" as a precaution. As I was turning, we encountered a couple bumps of light chop. Immediately we got a call from the flight attendants that our purser had fallen on her way to her jump seat. We had a dead heading crew who immediately came to our assistance.

Our purser's foot was swollen, and the FAs called for medical personnel on board. There was a PA and an EMT who were able to splint her foot, ice it on and off for 20 minutes, and recommended ibuprofen which she did take. We talked with our purser to determine her wishes, which was to continue to EWR. We then notified dispatch along with Med-Link to determine the best course of action. We continued to Newark and had paramedics meet the aircraft. Our deadheading crew assisted with the service and took over the duties of our incapacitated flight attendant. Prior to final descent, she was moved to seat 1B and the passenger was moved to the emergency exit row. The flight was met by an in flight supervisor and Debra was taken by ambulance to the hospital to be evaluated.

Captain [REDACTED]

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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UNITED AIRLINES FLIGHT 1754

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AIRBUS A320 TURBULENCE EVENT

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Accident No.: DCA20CA058

IN NEW ORLEANS, LOUISIANA,

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ON JANUARY 10, 2020

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Interview of: DEAN REYNOLDS, Captain, LCA/QCL
United Airlines

United Airlines Flight Training
Center
Denver, Colorado

Wednesday,
February 26, 2020

APPEARANCES:

SHAWN ETCHER, Operational Factors Investigator
National Transportation Safety Board

KATHERINE WILSON, Human Performance Investigator
National Transportation Safety Board

MICHAEL WHITEHEAD, Airbus Fleet Technical Manager
United Airlines Flight Training Center

KEITH PHILLIPS, Pilot - Air Evac Lifeteam
Air Line Pilots Association, International

JOHN HANSON, Staff Attorney
Air Line Pilots Association, International
(On behalf of Mr. Reynolds)

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I N T E R V I E W

(10:03 a.m.)

MR. ETCHER: Well, good morning again. My name is Shawn Etcher. I'm an Operational Factors Investigator with the National Transportation Safety Board. Our role here is to learn what we can from the event that occurred where a flight attendant got injured, so we can help hopefully mitigate injuries in the future and lessen them -- or completely get rid of them would be the ultimate goal, of course.

And along with me there's other members here on my group, and we'll go around the table and let them introduce themselves to you so you can kind of see what their role is here. Katherine?

DR. WILSON: Katherine Wilson, I'm a Human Performance Investigator with the NTSB.

MR. HANSON: And for the tape, I'm John Hanson, legal counsel for Captain Reynolds. I'm a staff attorney with the Air Line Pilots Association.

MR. PHILLIPS: Keith Phillips with ALPA.

MR. WHITEHEAD: Michael Whitehead, I'm the Airbus fleet Technical Manager working in the Denver Flight Training Center

MR. ETCHER: So that's everybody here. As part of our process, we do invite parties. That's why we have ALPA and United here as well. They know the policies, they know what pilots face more than we do. Yeah, we can read about it in books, but, you know, we want to know also real life as well.

1 There was also an FAA guy that's been assigned to this. He's
2 not -- he was unable to attend, so he will -- he is part of our
3 group as well to help us with that. He'll -- he's along with us,
4 but he just -- sadly he couldn't make it here as well.

5 So as part of our regulations, you're entitled to one
6 representative of your choice to attend. Would you like John to
7 be that individual?

8 MR. REYNOLDS: I would.

9 MR. ETCHER: All righty. As part of this process, we're
10 going to record this interview, have it transcribed. That
11 transcription will actually become part of our public docket for
12 this case, that way we capture everything you say correctly. Are
13 you okay with us recording it and having it transcribed?

14 MR. REYNOLDS: I am.

15 MR. ETCHER: All righty. Just a few rules before we get
16 started, if you will. During this interview, if you don't
17 understand a question, it's okay to ask for us to clarify it.
18 Because if you give me an answer or one of us an answer that we
19 don't understand, we're going to ask for a little better
20 clarification. So it's a two-way street, right?

21 And if you need a break, it's okay, just say so. We'll hit
22 pause, take a break. If you need to confer with counsel for some
23 reason, that's fine too, we'll pause it step out of the room, let
24 you guys have a moment. Or you guys can step out, whichever is
25 easiest. And the most important of all the rules, if you don't

1 know an answer, "I don't know" works fine.

2 If you -- you know, we're trying to get facts, but of course
3 sometimes the questions may help you -- you know, you may want to
4 give an opinion as well. That's fine. Just help us to understand
5 what's a fact and if you give us an opinion if you will.

6 MR. REYNOLDS: Okay.

7 MR. ETCHER: All righty? All righty.

8 INTERVIEW OF DEAN REYNOLDS

9 BY MR. ETCHER:

10 Q. So we'll get started with the real tough questions first.
11 Can you give us your full legal name and spell the last for us?

12 A. Dean Allyn Reynolds, R-e-y-n-o-l-d-s.

13 Q. All righty. And what is your age?

14 A. 60.

15 Q. All righty. What's your job title here at United?

16 A. I'm a captain, an LCA and QCL for United Airlines on the
17 Airbus.

18 Q. Okay. And for the transcript, can you tell us what LCA and
19 QCL is?

20 A. A line check airman and a quality control lead line check
21 checker.

22 Q. So you check the line of check airmen?

23 A. I check the checkers.

24 Q. Okay. All righty. Perfect. How long have you been at
25 United?

1 A. 33 years.

2 Q. All righty. What was your date of hire? Do you remember?

3 A. Let's see. February 9th of '87.

4 Q. All righty. Can you kind of tell us your -- what kind of
5 airmen certificates you have, type rating, things like that?

6 A. Yeah. Let's see. I've got CFI, AI, ME, ATP in 737s, 757,
7 67, Airbus. Flight engineer certificate on the L-1011 and DC-8.
8 And a Metroliner SA227 type certificate.

9 Q. Okay.

10 A. That's it.

11 Q. A little bit of experience there you've got, haven't you?

12 A. All over.

13 Q. Since you're not only just a line check airman but a line
14 check airmen checker, how long have you been doing that?

15 A. A little over 4 years.

16 Q. Okay. All right. And have you always just done that just in
17 the 320, or have you done it --

18 A. Correct.

19 Q. -- in other --

20 A. Well I -- in a -- I did in a previous life as well.

21 Q. Okay. Now this is probably going to be the toughest question
22 of the morning. Got an idea on your total time?

23 A. Somewhere north of 25,000.

24 Q. How much of that is in the 320? Ballpark works good if you
25 don't know; it's okay.

1 A. 12,000 --

2 Q. Okay.

3 A. -- and change. Yeah.

4 Q. And was all of that as pilot in command? Or did you have
5 some FO time?

6 A. In that airplane, it's all as PIC.

7 Q. All righty, perfect. What's your current class of medical
8 certificate?

9 A. First.

10 Q. And when was that issued?

11 A. It was in November.

12 Q. Okay.

13 A. Can give you an exact date if you need it.

14 Q. No, that's all right. November works just fine. Any
15 limitations or waivers on that? Or restrictions?

16 A. I think I've got glasses on there now for the first time.

17 Q. Must be nice.

18 MR. PHILLIPS: Well done.

19 MR. ETCHER: I've needed it since 6/2003.

20 MR. REYNOLDS: That far?

21 MR. PHILLIPS: Yeesh.

22 BY MR. ETCHER:

23 Q. All righty. Can you kind of think back when your last check
24 ride was, trained event in this, and what was that?

25 A. I've got a Q-check here -- no, I'd have to look at the

1 records to see when it was.

2 Q. Okay.

3 A. I think I'm due up in July of this year. So --

4 Q. All righty. Now go back as far as you want, but can you kind
5 of give us a CliffsNotes history of you and your flying career?
6 Just so we kind of -- I mean, you have a lot of certificate, a lot
7 of type ratings, all that, so just kind of give a CliffsNotes
8 version if you will.

9 A. Started flying in '77. First paying job was flying as an
10 instructor and corporate pilot in Portland. Went to work for
11 Horizon Airlines in '83 and flew in the Metroliner 6 months in the
12 right seat, left seat 6 months later as an LCA. Was in the pool
13 at United for 19 months, came here, new hire was on the L-1011 out
14 of San Francisco. Went to the DC-8, 737-200 right seat, 757 right
15 seat in Seattle. Everything else has been in San Francisco, and
16 then 737-300 and 500 Shuttle, San Francisco left seat, and then
17 Airbus left seat.

18 Q. Okay. Perfect. And your current base is San Francisco? Is
19 that --

20 A. Correct.

21 Q. Okay.

22 A. Yeah.

23 Q. I just want to make sure I understood you correctly.

24 A. Yeah. 30 out of the 33 are San Fran. I was Seattle for 3
25 years.

1 Q. Okay. All righty.

2 A. Back when we had a base.

3 Q. All righty. We're going to kind of start easing in if you
4 will to your -- to the event. If you would, kind of start us off
5 that day wherever it's easier. Whether it's that morning van
6 shuttle, wherever that was, to the event and then what occurred
7 after that. Just kind of like I said, let us be a fly on your
8 shoulder if you will.

9 A. Okay. We left the Sheraton in the van on time, and like a
10 lot of crews, we did our briefing with the iPads on route to the
11 airport. We were -- I had flown with Debby before, did her
12 initial OE on the airplane when she came from the 757 to the right
13 seat of the Airbus about a year prior, so I'd had some experience
14 with Debby.

15 We discussed the extra fuel for deviation wasn't much, wasn't
16 really any weather out there that we could see. There was a
17 little bit of a line of the weather to the west and slightly to
18 the north of New Orleans. Once we got past Memphis, we were going
19 to be past everything. You know, it was good all the way up to
20 Newark.

21 Got to the airport on time, no -- uneventful. Debby briefed
22 the flight attendants in the cabin with all three of them there
23 with her iPad. She -- I believe she showed them the weather. I
24 did the walkaround, came back in. We made the -- or both I and
25 she had told the flight attendants that we were going to keep the

1 passengers down until we got to altitude. There weren't any
2 reports of turbulence, we hadn't gotten anything from dispatch
3 either saying there was anything, but we said we'd just wait to
4 make sure until we got to the top of climb.

5 There was no -- I didn't give any directions to the flight
6 attendants to stay seated or when they could get up, so I don't
7 believe Debby gave them any restrictions as well. As we were
8 proceeding north, it appeared that one of the tail end of this
9 little weather was moving across our projected flight path, so
10 we'd asked ATC for a right deviation to the east. We were told to
11 standby. They were a little busy but not too busy.

12 No pilot reports in-route of the weather, turbulence or
13 anything like that at that point. We were getting -- we had the
14 radar on, we had WSI on, and we were depicting a yellow area some
15 distance in front of us, which ATC had acknowledged. We were
16 about to just turn anyway because we were going to be getting too
17 close to it. We were well outside the distance, but I went and
18 made -- picked up the handset to make the "flight attendants, take
19 your jump seat" announcement just as a precaution.

20 At the same time that, that was being made, ATC issued us a
21 clearance for the turn for the deviation -- right deviations were
22 approved. Debby answered that. I was still on the headset so I
23 was still -- heard that communication. And as we were in the
24 turn, I finished making the announcement, put the handset down on
25 the cradle, and we hit like a contrail. You know, it was just a

1 quick jolt while we were in the turn and then some minor bumps
2 thereafter.

3 Didn't really think much of it, finished the deviation. We
4 were in the clear prior to that point, and before I could make the
5 PA announcements, "flight attendants, check in," Debby -- or
6 Deborah, the first flight attendant, called to say that she had
7 fallen when she was turning to go back to her jump seat and she'd
8 hurt her ankle, and they were trying to get somebody for her.

9 So from that point, we coordinated with the back of the
10 airplane. We had a deadheading Airbus crew onboard. Well, four
11 out of the five. The first officer had deviated and went his own,
12 wherever he was from. Airplane was full. We did get two medical
13 personnel to volunteer. They made a temporary splint out of
14 magazines to wrap Deborah's ankle, put ice on it, and -- let's
15 see, I think the ranking of the two is a female. I don't think
16 she was a full doctor, but she had recommended Ibuprofen, and they
17 got something there.

18 One of the flight attendants in the back of the airplane that
19 was on the crew came up front to act as purser, and one of the
20 deadheading crew members agreed to work in the back to help with
21 the service in the back, and she completed the rest of the service
22 in the back of the airplane while we continued to coordinate with
23 the front and make -- and we talked to the flight attendant,
24 Deborah, and asked her what her preference was.

25 Was she okay to continue? Would she like us, you know, to do

1 anything different? And she said, no, for the passengers let's
2 keep going. As a note, she lives in West Palm Beach, which was
3 right over there. So we did continue and press on. She was in
4 tears and embarrassed that she had fallen, and we were -- multiple
5 conversations with her, it's just not -- don't worry about it,
6 it's not your fault, it happens. You know, the important thing is
7 you get taken care of.

8 So prior to landing, we solicited the jump seating -- or the
9 deadheading captain to come up into the cockpit and sit in the
10 jump seat. We were able to get a first class passenger to then
11 take his aisle seat at an exit row so that we could put the
12 injured flight attendant in a first class jump seat -- or a first
13 class seat, excuse me -- so that we didn't have any incapacitated
14 crew members at an exit. So we had two flight attendants working
15 in the back. We had first flight attendant in the front --
16 working the front, excuse me -- so we had legal crew for landing.

17 Upon landing, we had requested we talk to dispatch, we'd sent
18 messages back and forth. We did not talk to MedLink directly; it
19 was done through dispatch. MedLink did open a case. A case
20 number is in the FSAP report; I can get it for you if you need it.
21 Paramedics would meet the airplane, CS supervisors would meet the
22 airplane. They all did; they got Deborah off the airplane, took
23 her first off the airplane in a stretcher. They were going to
24 take her to United Medical, but it was 5 minutes before closing,
25 so they took her directly to the hospital.

1 She was at the hospital, received treatment there, and
2 afterwards came back to the airport rather than a hotel, and
3 United put her on positive space the next morning back to West
4 Palm. And so she came back to the airport about 1:30 in the
5 morning and waited for her 6:00 a.m. flight. She had a little
6 trouble navigating with three bags and a wheelchair, and no
7 assistance.

8 DR. WILSON: Sure.

9 MR. ETCHER: Wow. Just to get that done is a feat in itself.

10 MR. REYNOLDS: It is.

11 MR. ETCHER: Okay. Excellent. That kind of helped us get an
12 idea of what you guys went through from start to finish, so I
13 appreciate it. If it's okay with you, we'd like to back up just a
14 little bit.

15 BY MR. ETCHER:

16 Q. We'll start --

17 A. Absolutely.

18 Q. -- back to when you were on the van going -- and your
19 overnight was in New Orleans, correct?

20 A. Correct.

21 Q. Okay. Before I start there, what day -- how long was this
22 trip originally scheduled for and what day were you on?

23 A. We were on day two of a 4-day trip to the best of my
24 knowledge, and it was the first leg of that that day.

25 Q. Okay. All right. So you're on the van, you're briefing the

1 weather, and it -- please don't let me put words in your mouth, so
2 correct me if I'm wrong. You said that you had a little extra
3 fuel, but not much for deviations?

4 A. Um-hmm.

5 Q. What would be, considering what you were looking -- you said
6 it's not much. Would you have liked more?

7 A. No. We didn't -- dispatch will, at times, do that for either
8 altitude or heading deviations. And, you know, it's only going to
9 be 10 minutes, 15 minutes unless there's something significant,
10 and there really wasn't. A lot of times it's put on more for
11 altitude for rides than anything else.

12 Q. Okay.

13 A. If anything major, we would have added, but we didn't see
14 anything.

15 Q. And if you wanted to add, would you have to contact dispatch
16 first? Or could you just --

17 A. We can add --

18 Q. -- tell the agent?

19 A. We can add up to 2,000 pounds just by doing it in the iPad.

20 Q. Okay.

21 A. So anything over 2,000 pounds, we have to contact dispatch.

22 Q. Okay. All right. Now you said there was a little bit of
23 weather kind of. Once you got to Memphis, I think you said you
24 were going to be clear of it.

25 A. Correct.

1 Q. And was your route having you go up over Memphis and over?

2 A. We were actually to the west of Memphis is where the flight
3 plan was for.

4 Q. Okay.

5 A. So --

6 Q. Okay. Looking at the flight plan, looking at what you had on
7 your app, did it seem like a good routing? No concerns about
8 that?

9 A. No, yeah, we didn't see anything in particular. We climbed
10 above everything initially coming out of New Orleans. We were in
11 the clear most all the way. This area that we deviated around, we
12 knew we weren't going to be able to out-climb it. We could see in
13 front of us; it was dusk.

14 But it was -- we were at 30,500 at the time we made the turn,
15 and it was really insignificant, but it was enough that it --
16 there was something on the screen, a small yellow area. So avoid
17 it by at least 10 miles and we were -- weren't anywhere close to
18 that, but that's not something you want to -- there was no reason
19 to be anywhere near it.

20 Q. Okay. Now you said you could see you weren't going to
21 out-climb it. Was it because you -- it was a lot higher than you
22 were going to go, or was it just the performance of the airplane,
23 or --

24 A. Well, it was a combination of both distance and time.

25 Q. Okay.

1 A. And we didn't know what -- we couldn't -- at that time of
2 day, we couldn't visually see what the top was be -- was going to
3 be. And just climbing out of New Orleans, we weren't going to
4 make it.

5 Q. Okay.

6 A. So we didn't know for sure where the tops were.

7 Q. Okay. Now you were briefing on the van, and your flight
8 attendants, were they there with you briefing?

9 A. No.

10 Q. They were on a turn?

11 A. They were. They did a turn from Newark. They were Newark
12 based and they did a turn --

13 Q. Okay.

14 A. -- is what I --

15 Q. So it was just you and the captain?

16 A. Debby.

17 Q. Great. Okay.

18 A. Yeah. Right.

19 Q. All right. When you guys were talking about it in the van,
20 did she have any concern about it? Was --

21 A. No.

22 Q. And I know it's a unique experience because it's OE,
23 operating experience, and so who kind of leads that discussion?
24 Is that something you, as a line check airman, leads or is that
25 something you were letting her lead, that discussion on the

1 routing?

2 A. So as far as OE goes, especially with a captain, you -- part
3 of what you're doing is you're assessing their command skills. So
4 as the OE progresses, you take more of a following role rather
5 than a leading role with them, and you want to see how they're
6 going to conduct a briefing, how they're going to analyze the
7 flight plan, the fuel, and everything.

8 It was day two; Debby had been progressing well. She
9 basically -- it was just a verbal communication between, how do
10 you like the weather, weather's fine, what do you see, see
11 anything? You know, not really, might have to do a little
12 deviations to the east when we get going; we'll talk to the flight
13 attendants. You know, pretty uneventful.

14 Q. Okay. Now in your experience, it sounds like, you know, as a
15 line check airman, you were kind of going more from the teacher to
16 more of the leader to see if she had that command experience. Was
17 that -- was it progressing as you would say is a normal OE? Or
18 faster, slower? Kind of give me a ballpark of your experience --

19 A. It was progressing well. Debby had -- we have a real push
20 right now with new captains, they go back to a captain's school.
21 We're trying to get better participation with the passengers, so
22 to speak. So they've been trying to get pilots to do their PA
23 announcement briefing standing in the cabin facing the passengers
24 with the iPad or whatever, so that the passengers have visual
25 contact with her, and she was probably one of the first ones that

1 would -- took that absolutely to heart, and she was doing very
2 well with that.

3 So she was doing -- progressing normally as far as the flying
4 capabilities are concerned. She absolutely -- she's a good stick;
5 she had no problem with flying the airplane. Time management at
6 that point is the only concern. It's just getting everything done
7 with this attempt to have more passenger engagement.

8 Our goal during the OE is to have everything done, the
9 checklist finished, 10 prior to scheduled push, because that's
10 when CS is going to close the door. So we want to have everything
11 done, and we're ready to go when CS is ready to close the door.
12 And sometimes she was ready at that point, sometimes she was not,
13 but she was always ready when it was time to push. But she was
14 progressing absolutely normally.

15 Q. Okay. Perfect. Always good to hear. So you guys get to the
16 airport, was your plane waiting for you there or was it inbound?

17 A. I'm not positive, but I believe the airplane was there.

18 Q. Okay.

19 A. I don't believe we were -- I'm pretty sure the airplane did
20 the turn with the flight attendants, and I'm -- and I believe that
21 their deadheading had brought the airplane down. And I believe we
22 spoke to them, and they had no concerns, and -- but they had been
23 sitting there for -- before we got to the airport.

24 Q. Okay. All right. Did this flight push back on time? I
25 mean, I know going into Newark sometimes that's ground stop, so --

1 A. We had a -- and this was thinking back now, part of the
2 reason too for maybe a little bit of additional fuel, there was
3 ground delay program for high winds in Newark at the time of our
4 departure. And I think by the time everything was all said and
5 done, we were very close to on time. We did not actually have a
6 ground delay that I remember to leave. So it was a non-event.

7 Q. And I know it's been a while since this event, so things --

8 A. Yeah.

9 Q. -- might be a little fuzzy, and it's okay. That's perfectly
10 understandable.

11 All right. So you guys get into the airplane, you're getting
12 ready to push. Was there any mechanical issues with the airplane
13 that --

14 A. No.

15 Q. -- gave you any concern? Okay, perfect. And just so we have
16 it for the transcript, which seat were you seated in?

17 A. I was in the right seat.

18 Q. Okay. Is that normally what you do on OE for the captain?

19 A. For a captain OE, yeah, it is. Yes.

20 Q. Yeah? All right. Did you ever talk to your dispatcher at
21 the gate?

22 A. No.

23 Q. Okay. Was there -- did you feel like there would have been
24 any reason to?

25 A. No.

1 Q. Okay. All righty. Just so I have a good picture, if you
2 would have needed to talk to the dispatcher, would that have been
3 something would have done or your captain upgrade candidate to do?

4 A. Ideally what would have happened would -- she would have
5 called, and we would have had it on speaker.

6 Q. Okay. All righty.

7 A. And that would be the same with a maintenance issue. If we
8 have a maintenance issue, I have the new captain call, and then we
9 listen together.

10 Q. Do you do that with an FO?

11 A. Yes.

12 Q. So that way you both -- why do you do that?

13 A. I do it with the first officer so they can understand the
14 process and what is going on when the captain is on the phone. At
15 some point later, they're more -- excuse me -- they're more than
16 likely going to be making phone calls without the first officer's
17 involvement, and so just to let them know what the process is and
18 how the communications go, we generally like to have them
19 involved.

20 Q. Okay. All righty. So you're at the gate, doors closed,
21 you're pushed back, taxiing out. You had no ground delay?

22 A. No.

23 Q. Before takeoff do you turn the radar on, did you have it off,
24 do you recall?

25 A. The radar was off for takeoff.

1 Q. Okay.

2 A. It was in terrain mode.

3 Q. Okay.

4 A. So there was nothing right in the direct vicinity of the
5 airport, so there was no reason to have it on, on the ground. So
6 we did it turn on in the air.

7 Q. At what -- about what time -- about what point I should say,
8 did you turn it on in the air?

9 A. It was above 10,000 feet, but I'm not sure.

10 Q. Okay. So help me understand the Airbus radar. When you turn
11 it on, is there like a predetermined spot you're always going to
12 set it to? Or how do you make sure the radar's telling you what
13 it needs to tell you?

14 A. It depends on your location. Are you on the ground? Are you
15 climbing? Are you descending? Are you at cruise? Initially,
16 when you turn the radar on it's usually set at 15 degrees up.
17 That's where it's parked when someone turns it off. And then
18 you're going to bring it -- excuse me -- the angle of the radar
19 down to where you're getting ground clutter in the distance,
20 whatever range setting you have, and then bring it up to get rid
21 of the ground clutter so that you see what you're looking for,
22 which is weather, but not terrain.

23 Q. Okay. Can you recall if this weather radar was any different
24 to any of the other ones? Did you --

25 A. This was a China 320, and so it's still a Rockwell. I -- the

1 only difference in that is there's a three position switch,
2 because there used to be two systems on the China airplanes; we
3 only have one. So one of the switches is deactivated, so it's
4 just -- the only weird or abnormal thing about it is you have to
5 really make sure you're turning it to the off position -- to where
6 a normally off position would be on a mainline airplane, for lack
7 of better term.

8 Q. Okay.

9 A. So -- but it's the same system --

10 Q. And you said you had one of the switches in op or one the
11 systems? I apologize.

12 A. There was only one radar -- one of the radar systems per se
13 on the airplane. Where China had two, we only have one. So it's
14 common with all the of the rest of their fleet. So it's just a
15 switch that has three positions on it, and one is deactivated
16 because there is no second system.

17 Q. Okay. And I assume -- forgive me for assuming, but the off
18 would be in the middle then? Is that like the three --

19 A. Honestly, I --

20 Q. -- position switch?

21 A. -- would have to look at the switch.

22 Q. Okay. No, and that's okay.

23 A. You know?

24 Q. That's all right. It's -- I was just assuming, which is
25 always --

1 A. No. Yeah.

2 Q. -- bad on my part.

3 A. No, it's -- yeah.

4 Q. Okay. So you have the radar on, you've gotten rid of the
5 ground clutter. Do you use ground clutter suppression on the
6 radar? Does it have that? Or do you --

7 A. Just tune -- just tilt -- adjust the tilt.

8 Q. Okay. All right.

9 A. And the gain is set at automatic, or auto.

10 Q. Okay. Typically for you, what range do you -- climbing out
11 in this case, what range would you normally set it? Or is it just
12 depends on what you're looking at?

13 A. Yeah, it depends on whether you're trying to circumnavigate
14 something in the direct vicinity. The closer you get to it, the
15 shorter the range is. Anything over 160 in the Airbus really
16 isn't doing any good; you got to be 80 miles.

17 Q. Okay.

18 A. And if you were actually trying to go around some -- pick
19 your way through something, you're at 40 miles.

20 Q. Okay. All righty. Who typically runs the weather radar on
21 the flight deck?

22 A. Generally the captain, but it is not uncommon for a first
23 officer to adjust the tilt if they're pilot flying. But generally
24 speaking, the captain will do it.

25 Q. Okay. Why is it generally the captain? And forgive me if

1 that seems like a basic question.

2 A. It's kind of a command thing I guess.

3 Q. Okay.

4 A. Just a history, yeah.

5 Q. Okay. So on this flight, were -- since you were in the right
6 seat, was your upgrade candidate, was she operating the weather
7 radar or --

8 A. No.

9 Q. -- were you?

10 A. We were probably doing it at one point or another, you know,
11 just to -- making sure we were seeing what we wanted to see.

12 Q. Okay.

13 A. But she was definitely adjusting as well.

14 Q. All right. And you said it was only painting -- forgive me.
15 Again, I don't mean to put words in your mouth. It was only
16 painting a yellow cell? Or was there --

17 A. Correct.

18 Q. -- other weather around?

19 A. You know, and I don't know if you even want to call it a
20 cell. It was painting some yellow.

21 Q. Okay.

22 A. You know? And that time of day, and that part of the
23 country, I mean, it wasn't like there were thunderstorms in the
24 area. It's not like a fall or a spring type of event. It was
25 just an area that had some yellow in it.

1 Q. Okay.

2 A. And it was pretty isolated.

3 Q. All righty. So you're painting the yellow. Do you -- you've
4 asked ATC for right deviations. Was that a decision you made, or
5 did your captain make that? Or how did you guys come up to that?

6 A. Jointly discussed.

7 Q. Okay.

8 A. We -- when you're going to deviate around weather, it's a
9 question of which way do you go, left or right? And there was a
10 couple of, I mean, really small yellow spots to the left, whereas
11 if it had been a really nasty weather day, we could have gone that
12 way and gone through it. But always erring on the side of
13 caution, there is nothing to the right. Go to the right. So we
14 had a discussion, which way do you want to go, okay, and we asked
15 for a deviations to the right.

16 Q. Okay.

17 A. And we -- personally I prefer to ask for deviations in a
18 direction rather than a degree so we have the latitude to go more
19 than 10 degrees. If we ask for 10 and ATC only gives us 10, and
20 we needed 15 or we needed 20 -- so we asked for right deviations,
21 and we got right deviations, so --

22 Q. Okay. And I think you said when you were kind of walking us
23 through it at the beginning, that, you know, you were getting
24 ready just to make the deviation without their clearance because
25 you were getting too close. Did I understand that right?

1 A. We -- if we had proceeded along the track for a period of
2 time, a couple of minutes, it was going to be too close. It was
3 going to put us close enough to the vicinity that we were probably
4 going to get something out of it. They were not responding to our
5 request for a turn. Whether he had to coordinate -- we don't know
6 whether there was any coordinating with any air traffic control in
7 the area. There wasn't anything around -- there wasn't any other
8 traffic around in our immediate area and the direction that we
9 were turning that we could see on TCAS, so he was just busy.

10 But had we proceeded much longer on that, we were going to
11 get into cloud, and we did not know for sure whether it was going
12 to be turbulent or not, so we were going to eventually get to the
13 point where we were just going to announce, we're turning for
14 weather --

15 Q. Okay.

16 A. -- if he didn't respond, so --

17 Q. All right. So with this whole time, you're out of the
18 clouds?

19 A. Correct.

20 Q. Okay. And if you were -- just announced that you're turning
21 for weather, would you have declared an emergency to do that, or
22 would you have just deviated a few degrees to the right? Or how
23 would you have done that?

24 A. We would have announced that we were deviating for weather
25 and listened for their response. It was not to a point where I

1 needed to declare an emergency to move -- to do anything, but we
2 would be deviating off the clearance, so we would have to, you
3 know, make our intentions known and go from there based on their
4 response.

5 Q. Okay. Have you ever had to declare an emergency for
6 deviations around weather?

7 A. No.

8 Q. Okay. Do you feel that's an option? Or is it one that you'd
9 rather never exercise?

10 A. It's an option.

11 Q. Okay. All righty. And you said if you continued on down the
12 track you would have been getting too close. Help me -- if you
13 can quantify, what's too close?

14 A. You know, I'm -- I've struggled trying to remember the
15 distance, you know, since this event occurred. And our manual
16 basically says that, you know, flight -- the seatbelt sign will be
17 on with passengers seated and flight attendants seated if you were
18 going to be within 10 miles of yellow. We were not going to be
19 within 10 miles. How much further out of that, I honestly can't
20 tell you. It was less than 40, more than 10.

21 Q. Okay.

22 A. But it was close to 40, and I know it was in that range and
23 we were going to enter cloud.

24 Q. Okay. That's good. So that's just to avoid a yellow. Is --

25 A. Correct.

1 Q. Does United have any guidelines for how far to stay away
2 from -- I know we -- you're saying it's not really a cell, it's
3 just an area, but do they have any guidelines set aside that, you
4 know, you need to be away from a cell by so far?

5 A. Yeah. 5,000 feet on top if you're going over the top of one,
6 which I wouldn't advise. And then if you're going to pass an
7 anvil, the overhang of a cell, it's 1 mile per knot of wind
8 blowing in that direction. The seatbelt sign verbiage I believe
9 is magenta, flight attendants need to be seated 20 miles -- if
10 you're within 20 miles -- within 10 miles of yellow.

11 Q. Okay. Does the weather radar have a turbulence detection
12 ability?

13 A. Technically.

14 Q. Okay. Do you use that?

15 A. It does not appear that often.

16 Q. Okay.

17 A. I think WSI and TAPS is a little bit more valid --

18 Q. Okay.

19 A. -- in predicting or reporting. I guess I just don't see it.
20 TAPS, personally, we get a lot more alerts that seem to be -- I
21 don't want to say invalid, but nuisance.

22 Q. Through TAPS? Or --

23 A. Um-hmm.

24 Q. Okay.

25 A. So far.

1 Q. Well --

2 A. It's relatively new.

3 Q. Why do you say nuisance? Is it just a lot of them?

4 A. Yes.

5 Q. Oh, okay. So too much information?

6 A. That doesn't appear to be useful.

7 Q. Okay. Do you have any other way of detecting turbulence?

8 A. We do WSI altitude for -- we can turn on projected turbulence
9 areas based upon altitude route of flight.

10 Q. Okay. Is that -- I know technology is that: it's new, it's
11 changing. Is it easy to use? Is it complicated? Help me
12 understand, because --

13 A. It's pretty easy.

14 Q. Okay.

15 A. Yeah.

16 Q. How about for -- you know, since you do OE, how is it for a
17 new pilot going into that aircraft? I mean, if they're new hire
18 to United, they have to, I assume, learn that. Is it easy for
19 them?

20 A. They come out better qualified than I am honestly. No, they
21 are very well trained when they come out of the training center.

22 Q. Okay.

23 A. Yeah, it's pretty impressive. And a lot of them are younger,
24 so they adapt to the technology pretty easy.

25 Q. Okay.

1 A. Us old guys, not so much.

2 Q. I resemble that remark. All righty. So you use your WSI,
3 and forgive me, but I believe WSI has several different layers you
4 can apply?

5 A. Correct.

6 Q. Typically for you when you're -- if you can remember this
7 flight, great; if you can't, just typically in this kind of a
8 scenario, what would you have? What kind of layers would you have
9 on your WSI?

10 A. Well, I would be looking for turbulence layers on our route
11 of flight and our altitude. And then if we're going over an area
12 or through an area or close to an area that's going to have
13 projected turbulence or reported turbulence in that altitude,
14 we'll look above or below to see if there's an altitude that will
15 allow us to avoid the turbulence.

16 Also look at the flight plans for any notes from dispatch for
17 the same reason. A lot of times we'll get a, like an altitude
18 7,000, 8,000 feet lower than what you normally would have, and
19 it's just strictly for turbulence --

20 Q. Okay.

21 A. -- avoidance. So that works out well.

22 Q. Do you feel that the altitudes it gives you, when you're
23 looking at different altitudes for turbulence, does it appear to
24 be fairly accurate? Or --

25 A. I think so. I've found it so far, yeah. It's been a very,

1 very good tool.

2 Q. Okay. And you said sometimes your dispatch will leave
3 remarks or notes on your release if there's turbulence or
4 whatever?

5 A. Correct.

6 Q. Did you get any on this one that you can recall?

7 A. The only notes that I recall were the ground delay for high
8 winds in Newark.

9 Q. Okay. All righty. Did your dispatcher send you any messages
10 before you entered the turbulence?

11 A. No.

12 Q. Okay. And do you get messages about turbulence from
13 dispatch?

14 A. Yes.

15 Q. Often? How would you classify it?

16 A. We'll get TAPS messages, usually an automated message. And
17 we had one of our lead dispatchers in the jump seat, and I had
18 asked him about them sometimes, because they will -- when they are
19 generated, they will give you an area in which it's reported and
20 the type of aircraft that is reporting that turbulence. I've had
21 it where I was the aircraft in the report of my own -- but it --
22 sometimes it seems this is -- okay, this is behind us. Why are we
23 even getting this now?

24 And I asked -- Raj Singh is the guy's name, and he was the
25 guy who in Indiana Jones, the little kid that stabbed the heart,

1 was -- he was actually the actor that did that. But anyway, Raj,
2 I had asked him, why are we getting this after the fact? And he
3 says dispatch actually gets it at the same time. It's an
4 automatically generated report, and it gets sent to the aircraft
5 in that vicinity. So the fact that we're past it is not because
6 it's been omitted and we're not getting it in a timely fashion.

7 So it's a real time report. And so those are helpful as
8 well.

9 Q. Okay. Have you noticed, how long does it usually take for
10 you to get a message? Like your plane sent one, how long does it
11 take you to get that message? Is it instantaneous? Is it --

12 A. A short period of time, but I really --

13 Q. Okay.

14 A. -- couldn't quantify. Yeah.

15 Q. Okay. So it's not like 20 minutes or anything like that?

16 A. No, I don't believe so.

17 Q. Okay.

18 A. No.

19 Q. Okay. All righty. So you guys have started your deviation
20 to the right, and you were -- you said in your statement that --
21 or in, you know, walking us through it, that you were getting
22 ready to talk to the back to tell the flight attendants to take
23 their seat?

24 A. I'd -- I had -- it was almost a simultaneous event. I had
25 picked up the interphone to make the announcement. As I'm making

1 the announcement, air traffic control issued the clearance to
2 turn, and Debby responded to the clearance and began the turn.

3 Q. Okay.

4 A. So it was all within a very short period of time. It was
5 almost instantaneous.

6 Q. Okay. All righty. Now, as you're making the turn -- and I
7 know -- I don't know if we've talked about it on the recording yet
8 or not. Can you kind of describe the jolt I think you said?

9 A. If you have experience, it's kind of like flying through a
10 contrail. Very short lived, very rapid.

11 Q. Okay.

12 A. And, you know, in day -- in clear daylight, sometimes you can
13 see them. A lot of times you can't. And this was, like I said,
14 dusk or early evening, and we didn't see anything. But we were
15 just, again, about to enter clouds, so -- and there were no other
16 reports and no other airplanes that we saw on TCAS in the area.
17 So I don't -- I -- it was weather associated is what I'm going to
18 assume.

19 Q. Okay. So you hit this bump, and I think you said something
20 to the effect, you were going to have the flight attendants call
21 to check in? Or --

22 A. The proper procedure is if it -- if something is coming, the
23 announcement is, "flight attendants, take your jump seats," which
24 means they're supposed to store stuff and sit down as quickly as
25 possible. The other announcement if you're -- you don't have any

1 time for them to store anything and sit down is, "flight
2 attendants, be seated, flight attendants, be seated," and they are
3 to sit in a passenger seat if one's available or drop and sit on
4 the floor. That means we're there. We're in it.

5 And that was not the announcement I made. The announcement I
6 made was the normal precaution. Something's coming up, I haven't
7 had time to warn you in a interphone call, that in 15 minutes
8 we're going to enter some turbulence. Something is coming up in
9 the not too distant future. Take your jump seats. And then after
10 they're done, we make an announcement, or on the PA again, "flight
11 attendants, check in."

12 And the flight attendants communicate between the two, the
13 front and the back of the aircraft, their status. The first
14 flight attendant calls the cockpit, tells us what's going on back
15 there, and then we tell them whether they can get up or what the
16 situation's going to be.

17 Q. Okay. Have you ever had to make the call for the flight
18 attendants just to -- whatever, flight attendants get -- be
19 seated, be seated, or however you --

20 A. No.

21 Q. Never had to?

22 A. No.

23 Q. So you've always felt like you've had adequate time for them
24 to --

25 A. Yes.

1 Q. Okay. Excellent. So I, I've got one last question, then
2 I'll let you start talking to somebody else because you're
3 probably tired of talking with me by now.

4 A. Oh, no.

5 Q. Once you found out that the flight attendant was injured, I
6 think you said she told you she was hurt?

7 A. Correct.

8 Q. Okay. So once you found that out, what procedures did you do
9 next? I know you guys looked for a doctor in the back or medical
10 personnel, but how did you notify dispatch?

11 A. We sent ACARS a message.

12 Q. Okay.

13 A. Yeah.

14 Q. And he responded? He/she responded very quickly?

15 A. Yes.

16 MR. ETCHER: Okay. Like I said, I promised I only had one
17 last question for this time, but I'll go around and let others --

18 MR. REYNOLDS: You'll reserve the right.

19 MR. ETCHER: Absolutely. Do you need a break before we go?
20 We've been going for a little bit.

21 MR. REYNOLDS: No, I'm good. Thank you for asking.

22 MR. ETCHER: You're good?

23 MR. REYNOLDS: I'm fine.

24 MR. ETCHER: All righty. Kat?

25 DR. WILSON: Hi. Shawn covered most of my questions, so I

1 don't have too many more.

2 BY DR. WILSON:

3 Q. I was curious, I think you said when you made the call back
4 to the flight attendants it was just as cautionary?

5 A. Correct.

6 Q. And so there was no discussion with the captain before you
7 made the call?

8 A. I said, should we seat the flight attendants?

9 Q. Okay.

10 A. Again, this is a leadership type of role. You know, she
11 should be the one that is directing things in the cabin. So I
12 will, depending upon their phase of training, let things go to a
13 certain extent before I would step in.

14 Q. Okay.

15 A. So I said, you want the flight attendants seated? Yeah.

16 Q. Okay. And if you had to characterize the turbulence? Light,
17 moderate?

18 A. There was a moderate jolt.

19 Q. Okay.

20 A. And after that, it was just -- we didn't experience anything
21 more than light turbulence on the climb-out, and after that event,
22 it -- there was a short period of light turbulence after that, and
23 then it was it.

24 Q. Okay.

25 A. So that would have normally been very benign, and we were

1 very surprised that anything had transpired.

2 Q. Did you all make a report to ATC about the turbulence?

3 A. We did not.

4 Q. Okay.

5 A. Again, it was such a short thing. It was like a contrail.

6 Q. Okay.

7 A. That's the -- for lack of better term. I don't know.

8 Q. Who was the pilot flying during that flight?

9 A. Debby was.

10 Q. Okay. When it's OE, do you all still switch off legs? Or
11 because it's OE is she flying?

12 A. Traditionally, the first leg with a new student is flown by
13 the LCA, and then after that, depending upon how many legs there
14 are in the pairing or how many pairings you're flying together and
15 how well the student is doing, we may alternate again later. But
16 the whole point is for the student to get comfortable in their new
17 position.

18 Q. Okay. Do you find using the weather radar, are there any
19 challenges when using it?

20 A. No.

21 Q. No? Okay.

22 A. It's pretty straightforward.

23 Q. All right. Do you feel like it's accurate?

24 A. Yeah. I do.

25 Q. Okay. How do you decide using -- you know, you've got the

1 weather radar, then you've got WSI and a couple of other programs
2 on the iPad as well, right? SkyPath and FlightPro, is that --

3 A. Yes.

4 Q. How do you decide what you're going to use?

5 A. Weather radar is controlling. Everything else can be used to
6 supplement, but weather radar is controlling.

7 Q. Okay. Do you find that connectivity with Wi-Fi in the
8 cockpit is adequate to get the other programs?

9 A. Usually. It is getting better, much better.

10 Q. Does United use the term chop? Or do you all just train
11 turbulence?

12 A. Chop is one of the terms, correct.

13 Q. And how do you characterize chop versus turbulence?

14 A. Chop is a lighter version of turbulence.

15 Q. Okay. And it's defined in your manual?

16 A. Yes.

17 Q. Okay. Did you all have any drug or alcohol screening after
18 landing?

19 A. No.

20 Q. You mentioned that you're -- you thought your medical had a
21 limitation about glasses.

22 A. Correct.

23 Q. Were you wearing them at the time?

24 A. Yes.

25 Q. And glasses, not contacts?

1 A. Correct.

2 Q. Are they readers or --

3 A. Bifocals.

4 Q. Okay. At the time, how would you characterize the workload
5 in the cockpit?

6 A. Light.

7 Q. Okay. Second day of the trip, had you been off duty prior to
8 that?

9 A. Prior to the trip?

10 Q. Um-hmm.

11 A. Yes.

12 Q. Okay. Anything unusual about the off duty period that you
13 recall?

14 A. No.

15 Q. No?

16 A. No.

17 Q. Any problems with sleep?

18 A. Nope.

19 Q. Okay. Did you feel rested and alert?

20 A. Yes.

21 Q. Okay. What time do you think you woke up on the morning of
22 the event?

23 A. We were in New Orleans, and I try to stay on west coast time,
24 so it wouldn't have been early.

25 Q. Okay.

1 A. 10:00-ish local.

2 Q. All right. And what time do you think you went to bed the
3 night before?

4 A. Probably by the time I got to sleep, 1:00 local.

5 Q. Okay. Felt rested though during the flight?

6 A. Yes.

7 Q. Okay. Did Debby also seem rested?

8 A. Yes.

9 Q. Did she mention any issues with problems sleeping the night
10 before?

11 A. Not that I'm aware of, no.

12 Q. Okay. And just so that I'm clear, I asked you in sort of a
13 roundabout way, but -- and during that off duty period, you felt
14 like you got adequate sleep, no issues sleeping, or --

15 A. No.

16 Q. -- reduced sleep opportunities? No?

17 A. No.

18 Q. Do you take any medication?

19 A. No.

20 Q. Okay. Ever been diagnosed with a sleep disorder?

21 A. Nope.

22 Q. The trip pairing that you had with Debby, anything unusual
23 about it? Was it a typical trip pairing?

24 A. No, it was a typical pairing.

25 Q. Okay. How often are you -- excuse me -- how often are you

1 flying a line versus doing line checks? Or how do you -- how does
2 your time get split up?

3 A. I'm doing OEs the majority of the time.

4 Q. Okay. Any problems with color vision?

5 A. No.

6 Q. Any problems with your hearing?

7 A. No.

8 Q. In the 72 hours before the flight, did you take any
9 medication, either prescription or non-prescription, that you
10 think might have affected your performance?

11 A. No.

12 Q. Okay. Do you feel that going to -- switching gears to the
13 training that you received for the weather radar, do you feel that
14 that's -- it was adequate? Is there anything that you would have
15 liked to have seen different? More of regarding turbulence,
16 weather radar?

17 A. You know, it's been so long ago since I have done it, I
18 honestly don't remember. But I am -- I don't remember ever having
19 a problem with it. The training has always been adequate, so --
20 but honestly it's been so long.

21 Q. So given that you're doing OE fairly often, do you see any
22 challenges that other pilots are having with the weather radar?
23 How to set it, or --

24 A. No.

25 Q. How do you think the crew resource management with Debby was?

1 A. I thought it went really well quite honestly. We prioritized
2 everything in the cockpit, we got everything associated with
3 dispatch taken care of, we were coordinating with the cabin
4 continuously. Once everything was settled down, for lack of
5 better term, and the first flight attendant had been seen by
6 medical personnel, we'd done all of the communications with
7 dispatch, we were in clear air again proceeding north, before we
8 turned the seatbelt sign on, Debby left the cockpit, went back to
9 check on Deborah -- I know, it's confusing -- before we turned the
10 seatbelt sign on, let the passengers up.

11 And announcements were made in the cabin of what was going
12 on, so the passengers were aware, and they weren't being
13 overtaxing for the flight attendants that were there. And so
14 after Debby went back and spoke with Deborah and came back to the
15 cockpit, we were able to, again, coordinate with the back of the
16 airplane, turn the seatbelt sign on -- off, and proceed.

17 Q. Okay.

18 A. And the coordination was great for the rest of the way up
19 too, I thought, with the deadheading crew was -- it was a
20 blessing. I'm curious how we would have done it differently had
21 we not had a deadheading crew with the fact that you now have a
22 flight attendant who is technically incapacitated.

23 So now do you split the flight attendants up, put one in the
24 front, one in the back? Keep her away from a door or what? There
25 isn't any real specific guidance on how to proceed that way;

1 that's a captain's authority type of thing.

2 Q. Okay.

3 A. But I think it worked out very well.

4 Q. So that would be -- the captain's authority would be to how
5 the flight attendants would be divided up versus --

6 A. Yes.

7 Q. -- like a flight attendant procedure that they would have
8 done?

9 A. Yeah. It'd be -- the captain would be the final authority on
10 how they were going to --

11 Q. Okay.

12 A. -- sit in the cabin.

13 Q. Have you brought that up to anyone?

14 A. That particular -- no.

15 Q. Seems like that might be a good policy -- procedure to have,
16 or something to think through --

17 A. Yeah.

18 Q. -- right?

19 A. Yeah.

20 Q. In that situation --

21 A. Well I'm sure --

22 Q. -- what would you do when --

23 A. I'm sure that it, you know, it may, in a three cabin type
24 situation -- because we handle it different than like, the old US
25 Air used to do it where they put two in the front, one in the

1 back. We do one in -- you know, just the opposite. So I think
2 generally speaking, most everyone would have one flight attendant
3 at each end of the aircraft that was physically capable of
4 operating exits.

5 Q. Right.

6 A. I think that's how it would have been.

7 Q. Does the A320 -- what sort of handholds does it have in the
8 captain -- in the cabin for the flight attendants?

9 A. There is, for lack of better term, kind of like a rail
10 underneath the overhead --

11 Q. Bins?

12 A. -- bins when they're closed. There's a handhold all the
13 way -- it's broken in sections with the overhead bin sections.
14 But there is -- I -- it's really good in that regard.

15 Q. Anything in the galleys?

16 A. Not as far as other than the actual handholds on the doors.

17 Q. Okay.

18 A. You know? Up on the side for when they're arming or
19 disarming a door if they were to use it for emergency evac.

20 DR. WILSON: All right. Thanks, Dean. I think that's all
21 that I have for right now.

22 MR. REYNOLDS: Okay. You're welcome.

23 MR. ETCHER: Okay, thanks. Michael, do you have any
24 questions?

25 MR. WHITEHEAD: I think just a few that I kind of thought of

1 as we were sitting here. Dean, I kind of want to start by saying,
2 like you were just kind of alluding to, I think you guys did a
3 great job of taking a situation where we have somebody that is not
4 fully capable, and then trying to use the best CRM to, you know,
5 make sure that we have a plane covered. So I think you guys did a
6 fantastic job with all of that.

7 I don't know if you know this, but we met yesterday just so
8 we can kind of give them a little bit of, you know, you could --
9 you wouldn't really call it academics since I'm not an instructor,
10 but we kind of talked about some of the systems on the jet just to
11 try and give them some familiarity in the things like that with
12 regard to some of the different systems, and the iPad's apps, et
13 cetera.

14 But we also kind of talked about -- a little bit about
15 training and stuff like that too. So keep me straight if I'm
16 straying from what I'm allowed to essentially ask, or whatever,
17 but I think that we had a question about Debby's training and
18 where she had come from.

19 BY MR. WHITEHEAD:

20 Q. We talked about previously having been on the 737 and on the
21 756, and I think when I looked at the records, if I understand the
22 records correctly, I think she came from being an Airbus FO with
23 about 400 hours to an Airbus captain position.

24 A. Correct.

25 Q. Okay. So just trying to get us back into -- and that kind of

1 leads into a -- and I'll just go straight into this. One of the
2 things we talked about yesterday was, you know, if a new -- if a
3 captain upgradee is coming onto the Airbus from another aircraft,
4 potentially they have, depending on where they're coming from, no
5 experience operating the radar on the Airbus for example.

6 In this case, she came from -- so based on that, in this case
7 she came from an Airbus FO position to an Airbus captain FO
8 position, so she should be very familiar with all of the systems,
9 have experience, seen it. Do you have any concerns, I guess is
10 the question, with your upgradees and their experience of using --
11 having used or not used a radar? In this case it sounds like, you
12 know, she has lots of system background.

13 A. She has a system background. I had no problem with her
14 specifically. And as students go, I really have not had any
15 problems --

16 Q. Okay.

17 A. -- with -- nobody's had any wild questions, or "I don't
18 understand any of this." Everybody seems to be well aware of the
19 system and how to -- how it operates. And, you know, we use it on
20 OE. Sometimes we get more actual practice with it than others
21 weather-wise. I mean, you just can't always find weather
22 fortunately. But I have not had any difficulty with any students.

23 Q. Okay. And that was kind of, again, one of the things we
24 talked about yesterday. If, you know, if this is day one of your
25 OE, and this is the first time you've been on the Airbus, you

1 know, actually flying around, then potentially this is also the
2 first time you're seeing weather. And then if you're the captain,
3 you know, you have to make all those decisions as well.

4 So I'm just trying to get us a little bit of background
5 information from yesterday is really kind of what I'm trying to
6 do. Because yes, you could go through an entire OE and never see
7 a single cloud.

8 A. Correct.

9 Q. Okay. Do you, in your experience -- I have zero experience
10 on 4901 or 4902, so I've never flown either one to see how that
11 weather radar operates in the air. I can only talk to the 40xx
12 and on the Legacy for my own personal experience. Do you have any
13 comments with regards to the performance differences of the two
14 radars? And I don't know if you've flown the 49s once or ten
15 times.

16 A. Um-hmm, quite a bit. I don't, you know, have any problems
17 with differences. I -- quite honestly, the China airplanes are
18 better all-around just because of -- the screening is cleaner, I
19 mean, on the 19s especially. They got, you know, more thrust,
20 they're tighter, their radar operates basically the same. I mean,
21 if anything, the display is a little cleaner. Whether that's
22 perceived or actual?

23 Q. Thanks. No, I'm -- yeah, I'm with you. I happen to like the
24 old CRTs, but I'm one of the few.

25 A. You're that guy.

1 Q. I am. I am. I want us to get all new stuff. I, you know --

2 A. The font's smaller though in the China.

3 Q. You're right.

4 A. Do you notice that?

5 Q. You're right.

6 A. It is. And then it makes you have these.

7 Q. I -- I'm close. And then you kind of alluded to it, and it's
8 the same sort of thing, but I don't think that I've ever seen a
9 turbulence indication on a Legacy jet or a 48xx for that matter,
10 the purple magenta. And I was curious if --

11 A. Right. I think I've seen it. But I -- it's been nowhere
12 near -- I mean, you know, it's been like you're getting a radar
13 sweep, and there is -- it's there, and it sweeps again and it's
14 not there. It's not like something that's just, you know, you see
15 hanging there.

16 Q. Okay, thanks. And then this maybe goes towards a little bit
17 of clarification. One of the things you said this morning, I
18 believe, was that you don't think that you gave any direction to
19 the flight attendants to remain seated until you called --

20 A. Correct.

21 Q. -- a restriction if you will. And you didn't think that
22 Debby had either?

23 A. Correct.

24 Q. And that kind of caught me off guard. But then I went back
25 and looked at the actual statements, and what it looks like you

1 both said was that you were going to call before -- I think it was
2 something to the effect of you were going to call before you
3 turned off the seatbelt sign or something like that. But you
4 didn't give any -- I guess I'm just trying to get a -- I just
5 didn't want there to be any confusion between that direction and
6 the flight attendants' ability to get up on their own.

7 A. They had the ability to get up on their own. To the best of
8 my knowledge, no announcement -- no, I had not given them any
9 direction to stay seated --

10 Q. Okay.

11 A. -- personally.

12 Q. Okay, which jives with the statements --

13 A. Yeah.

14 Q. -- for lack of a better word.

15 MR. WHITEHEAD: Again, good job.

16 MR. REYNOLDS: Thank you.

17 MR. ETCHER: That it?

18 MR. WHITEHEAD: Yep.

19 MR. ETCHER: Keith?

20 MR. PHILLIPS: Being last, it's easy. I think everything's
21 been covered. Just one question though.

22 BY MR. PHILLIPS:

23 Q. Was this the first time you guys actually saw weather out
24 there or dealt with any? Or --

25 A. No. There was the -- there was that stuff we had briefed

1 about before that was off to the west.

2 Q. Okay. But this really was --

3 A. And mostly north of the airport, but this was the first that
4 was in our path that we were going to have to go around.

5 MR. PHILLIPS: Yeah.

6 MR. ETCHER: Okay.

7 MR. PHILLIPS: I'm good.

8 MR. ETCHER: That's good?

9 MR. HANSON: Or did you mean on prior flights on the OE?

10 MR. PHILLIPS: Out on prior flights, yeah. Thanks for
11 clarifying.

12 MR. HANSON: Prior legs on OE?

13 BY MR. PHILLIPS:

14 Q. On previous flights did you see any weather at all?

15 A. Oh, well this was the first flight of the day.

16 Q. Right. But the day prior, did you see any or deal with any?

17 A. Wow. I don't remember going around anything the day prior.

18 Q. Okay.

19 A. Doesn't mean it wasn't there. I just don't remember.

20 Q. You mean a month and a half ago?

21 A. Yeah. Yesterday, come on.

22 Q. Breakfast was one.

23 A. I know.

24 MR. ETCHER: Anything else?

25 MR. PHILLIPS: No, that was it.

1 MR. ETCHER: Okay. Well you made it through round one.

2 That's always the longest round.

3 MR. REYNOLDS: Lightning round, here we go.

4 MR. ETCHER: Exactly. Round two usually doesn't take as
5 long, but do you need a break or anything? You doing okay?

6 MR. REYNOLDS: I'm good.

7 MR. ETCHER: All righty.

8 MR. REYNOLDS: Everybody else is fine then I'm fine.

9 MR. ETCHER: Okay. You've answered most of our questions. I
10 just have a few follow-up. It's only like --

11 MR. REYNOLDS: Sure.

12 MR. ETCHER: -- a couple hundred. It won't take long. Just
13 kidding.

14 MR. REYNOLDS: There's a limit, 200 or less.

15 MR. ETCHER: Yeah. All right.

16 BY MR. ETCHER:

17 Q. You talked about you didn't -- you classified it as moderate
18 chop, I think you said, the turbulence itself?

19 A. Chop would be sustained or continuing in a pattern, and this
20 was like a jolt.

21 Q. Okay.

22 A. There may have been two jolts, but that was it. You know, it
23 wasn't a sustained event. So again, like you're going across a
24 railroad track or hit -- gone through a contrail.

25 Q. Okay.

1 A. Even though it was not a contrail.

2 Q. I know all airlines have guidance onto what is defined as
3 moderate, and light, and severe, and the bad one, the extreme, but
4 I want to know what -- how you would classify it. I mean, you're
5 not going to pull out your book every time and say, oh --

6 A. No.

7 Q. -- I think that met this criteria. How would you classify
8 different levels of turbulence?

9 A. Anything more than light turbulence is going to affect the
10 ability of the flight attendants in the back of the aircraft to
11 safely do their job. So if there's anything that is going to go
12 past that, it's moderate.

13 Q. Okay. Have you ever had severe?

14 A. Officially?

15 Q. Sure.

16 A. No.

17 Q. Unofficially?

18 A. I had some turbulence coming out of Denver in an Airbus
19 that -- severe is you're having difficulty controlling the
20 airplane. We never lost control of the airplane or got to that
21 point, but it was a hand-flown procedure from 11,000 to 25,000
22 feet. And it was bad.

23 Q. Okay. So --

24 A. And it was not forecast, and it was not advised on ATAS. It
25 was a problem I had with Denver, a couple instances. But we got

1 the pilot report from departure, the point we went from tower to
2 departure, we were going to the northwest, and the 737 had
3 reported severe turbulence south of the airport between 11,000 and
4 25,000 feet. And that was as we were going through 10-5 on the
5 climb-out. That was our first indication that there was anything
6 out there.

7 Q. Wow. Okay.

8 A. Yeah.

9 Q. All right. So I know you said officially you've never had
10 severe, so I'm guessing you never made that announcement to ATC?

11 A. Correct. And it really wasn't. I don't want to sound, you
12 know, facetious or anything, but severe is you're --

13 Q. Right.

14 A. -- possibly going to lose control of the aircraft, and I've
15 never been to that point.

16 Q. Do you -- and I know you interact with a lot of pilots,
17 mostly new, doing a lot of OE it sounds like. Whether they're new
18 hires, or upgrades, or whatever, do you ever get the feeling that
19 pilots might have a tendency to not want to make a severe
20 announcement to ATC, or report it as severe?

21 A. I think what I find more is the other direction, where
22 depending upon the size of the aircraft, the report of turbulence
23 intensity tends to be higher than lower.

24 Q. Okay. No, that makes sense.

25 A. Yeah.

1 Q. Okay. I know you said you do a lot of OE now. Is it
2 typically with FOs, with captain upgrades, or is it a mix?

3 A. It's a mix. It's probably more first officers than captains.

4 Q. Okay.

5 A. Just -- it's a mix of whatever is going through the system at
6 the time.

7 Q. All right. And forgive me, I don't know the seniority
8 rules --

9 A. That's fine.

10 Q. -- here at United, but is the Airbus, is it the junior
11 aircraft? Or are you getting FOs that have been at United for a
12 period of time?

13 A. Some of it depends on vacancies. Right now, San Francisco on
14 the Airbus is probably the junior right seat position for the
15 Airbus. And it's either the Airbus or the 737 is the junior right
16 seat position. And San Fran and Newark are co-leaders in that for
17 the 737.

18 Q. Okay. So you get -- some of your FOs are probably relatively
19 new to the company then, that you're dealing with?

20 A. They all are.

21 Q. Okay.

22 A. I -- virtually all of them. And Debby was a -- you know, we
23 will get -- Debby came over from another fleet with the intent
24 that she was going to take a left seat bid, so she wanted to get
25 acquainted with the airplane, I believe, before she went to left

1 seat. I will get sometimes a transition first officer like that,
2 or on occasion -- I think we're out of them now, but furloughees,
3 recalls will come back, and so they had been in the airplane
4 before. But with those exceptions, everybody's new to the company
5 that's coming to the right seat.

6 Q. Okay. And I know you said that the training center here
7 really -- crews, when they hit the line, when they get to you,
8 they're real well-versed in systems and weather radar.

9 A. Yes.

10 Q. Do you see any crews that come from other carriers? Or, I
11 mean, I know you guys are hiring really low-time pilots now that
12 are having trouble understanding weather radar, because it's
13 probably kind of hard to simulate it in the simulator -- the
14 accuracy of it.

15 Q. No, not the weather radar. You know, quite honestly, it's
16 one of the easier systems on the airplane, I mean, as far as the
17 bus and systems go.

18 Q. Okay.

19 A. I mean, it's not a difficult system.

20 Q. Okay. So it -- whether they come from a regional, or the
21 Military, or from just general aviation flying as an instructor or
22 whatever, and they get hired on, they -- they're -- when they get
23 to you, it's pretty simple? They're understanding is pretty easy
24 to fine-tune?

25 A. Yes.

1 Q. Okay. I know Keith had asked you if you had encountered any
2 weather the previous day -- on your previous day's trip. Where
3 were those flights to/from? I assume you started in San
4 Francisco.

5 A. Started in San Francisco and I ended up in New Orleans.

6 Q. And that's in between there somewhere, right?

7 A. Yeah.

8 Q. Somewhere in the U.S.

9 A. And, you know, I'm not positive, it may have just been the
10 one leg.

11 Q. Okay.

12 A. I honestly can't remember, but it may have just been one leg
13 into San -- to New Orleans. But I believe the pairing was two
14 legs a day is what the pairing was for 4 days, so eight legs
15 total. But --

16 Q. That -- it's okay. It's been a while. So I don't expect
17 that to be crystal clear. In your wonderful career that you've
18 had, have you ever had a flight attendant get injured?

19 A. No.

20 Q. How did you deal with that?

21 A. We were very -- both of us were very surprised. Couldn't
22 believe it happened quite honestly. As far as turbulence events
23 go, I've been in a lot worse, and we were very surprised. I
24 honestly think it -- we -- because we had gone back and forth and
25 back and forth of, you know, how -- what could we have done

1 different? What happened? That -- why was this so much different
2 than any other turbulence event that we've had?

3 And the only thing that we could surmise with us, correct or
4 not, is that the coincidence of the turn, making the announcement,
5 and having her returning to the jump seat, and the jolt all at the
6 same time is what brought her down, for lack of a better term. We
7 were questioning whether if we had not even made that
8 announcement, whether she would have just grabbed onto the
9 handholds and would've been fine.

10 But the act of turning from 2B, which was where she was at,
11 which is the way she described it to us, her turning to go back to
12 the jump seat, and the bump, and the aircraft being in a turn
13 caused her to lose her balance.

14 Q. Okay.

15 A. So I wonder -- you know, we're just -- you know, in trying to
16 second guess everything, saying, you know, man, if we had not made
17 that announcement, would she have just grabbed the overhead bin
18 and everything would have been fine, and it would have been a
19 non-event? Can't answer that.

20 Q. Well, you can Monday morning quarterback.

21 A. That's it.

22 Q. But, you know, that's all you can do. So when you got to
23 Newark, and you got her on the stretcher, taken care of by medical
24 personnel, did you guys feel you were fine to continue with your
25 trip? Or --

1 A. We were done. We were -- we went to the hotel.

2 Q. Oh, okay.

3 A. I mean, that was scheduled.

4 Q. Oh, okay.

5 A. And yeah, I mean we were trying to follow up with what was
6 happening with Deborah. You know, we talked to the paramedics
7 that were taking her to the hospital and discussed the fact that
8 yeah, you know, United Medical's closing, and they would send her
9 there anyway or would just take her direct to the hospital.

10 And then Debby did continue texting with her for part of the
11 evening, making sure she was okay and so on and so forth. United
12 had made arrangements to have a hotel for her, which she didn't
13 do, she went back to the airport and on a positive space, even
14 though she's Newark based, but to get her back the next morning to
15 West Palm.

16 Q. Okay.

17 A. So we followed through to the fact that she did get on the
18 airplane; she did get home.

19 Q. Okay.

20 A. And a couple of things since then, but we were fine.

21 Q. Okay. I want to show you some weather graphs that our
22 weather guy had pulled up of your flight. And the reason I want
23 to do that is you've described what you saw. You were in the
24 clear, you saw some clouds coming, and all of that. But the stuff
25 he was pulling up showed a little different. And I'm -- we're

1 trying to figure out if maybe there's something that we're missing
2 or anything like that.

3 So you probably recognize that, right?

4 A. Yep.

5 Q. That came off your flight plan. There's the first graph he
6 pulled up. And I know that's -- let's me see, that's number one.
7 That one is -- he said it was likely below your flight path, but
8 he wasn't sure by how far. And of course when we first saw that,
9 we thought, wow, that's a lot of red and yellow. But what you
10 described is entirely different than what that's showing to me, so
11 I was hoping you could help -- yeah.

12 A. We show -- we had some yellow to the left. But like I said,
13 it was below us; we were in the clear. And we were to the east of
14 it.

15 Q. Okay. So you -- there was no indication on your radar at all
16 of anything looking like that?

17 A. Yellow.

18 Q. Okay.

19 A. Yep.

20 Q. Okay. And then this one he said likely was right about your
21 altitude, but he wasn't 100 percent sure. But we saw that gap,
22 and of course the first thing in my pea-sized brain, I thought oh,
23 they were trying to shoot the gap. They found a soft spot to
24 punch through. But judging by your head shaking back and forth to
25 no --

1 A. Nope.

2 Q. -- I'm guessing --

3 A. No.

4 Q. -- that's not what you were painting either.

5 A. No. If this is -- I mean, where is the encounter?

6 Q. The encounter is right there.

7 A. Right there? Okay. So that would be --

8 Q. Oh yeah, sorry.

9 A. -- what we were going around.

10 Q. Okay.

11 A. And this would have been a dot off to the west that we talked

12 about. But we were over this. We were above that because we were

13 in the clear. So this is the only place that there was cloud --

14 MR. HANSON: So, if -- this is correct?

15 MR. REYNOLDS: -- that we were approaching that we were not

16 above.

17 MR. ETCHER: Yes. That's his.

18 MR. HANSON: Oh, okay. I'm sorry.

19 MR. ETCHER: That's his. We overlaid his ground track --

20 MR. REYNOLDS: Is this the track?

21 MR. HANSON: Oh.

22 MR. REYNOLDS: Yeah.

23 MR. ETCHER: -- with ATC radar. We put it --

24 MR. HANSON: Got you.

25 MR. ETCHER: He put it on there. Sorry. I should have --

1 MR. HANSON: Yeah.

2 MR. ETCHER: -- made that clear. My apologies.

3 BY MR. ETCHER:

4 Q. You were over the top of that -- well above that? Let me
5 rephrase that.

6 A. Yeah. That -- this was not a factor.

7 Q. Okay.

8 A. I mean, this was not a concern. This is the only thing that
9 we were concerned with right there.

10 Q. The little yellow and --

11 A. Correct.

12 Q. -- mixed with the green there at the north?

13 A. Yeah. That's where we were going around. And there was
14 something off to the distance in the west over here, which made
15 going to the west not a viable option. But as you can see in this
16 map here, there were areas that, had this been a solid line or
17 something, we could have gone that way.

18 Q. Right.

19 A. But there was no reason.

20 Q. Okay.

21 A. It -- honestly this looks reverse to what we were looking at.

22 Q. Oh, wow. Okay. And that was the number two one.

23 A. Okay.

24 Q. About how far would you estimate this was below you?

25 A. I have no idea.

1 Q. And that's okay.

2 A. Yeah.

3 Q. "I don't know" works fine.

4 A. Yeah. I don't know.

5 Q. This one he thought might have been slightly above you --

6 above your altitude. That painting.

7 A. This here?

8 Q. This whole picture would -- he thought was about -- estimate

9 around 31, 32.

10 A. I know that the --

11 MR. WHITEHEAD: So let me just say --

12 MR. REYNOLDS: -- area to the north --

13 MR. WHITEHEAD: You said you were at 35,500 when --

14 MR. REYNOLDS: 30,500.

15 MR. WHITEHEAD: 30,500, okay.

16 MR. REYNOLDS: So this one to the north was definitely

17 painting. I don't --

18 MR. ETCHER: Okay.

19 MR. REYNOLDS: -- remember seeing this at all.

20 BY MR. ETCHER:

21 Q. And these are -- remember, these are coming

22 from --

23 A. Yeah.

24 Q. -- all sorts of different Doppler --

25 A. Right.

1 Q. -- radars around.

2 A. I don't remember seeing anything --

3 Q. And it sounds like --

4 A. -- to the south at our turn.

5 Q. Okay.

6 A. Because this, the way this is depicted, without knowing what
7 else is out here, left would have been better. But left was
8 definitely not better --

9 Q. Okay.

10 A. -- that night.

11 Q. And that's -- this is why I want to ask.

12 A. Yeah.

13 Q. Because you guys have the bird's --

14 A. -- eye view. And that's -- I'll believe your eyes better,
15 even though you're like me, you have to have to cheaters on your
16 eyes. But that's okay.

17 Q. And here, let me see. Which one is number four? This one he
18 said was at flight level 400, so it would have been quite a bit
19 higher than you. And the star there is what he's saying is where
20 you -- our estimate is where you had encountered the turbulence.
21 This could be off, because we don't have FDR.

22 A. Sure.

23 Q. We don't have a perfect lat/long for you. But this is --
24 he's pretty confident this is close, but could be off a little
25 bit. And was that -- does that look anything like what you guys

1 were seeing?

2 A. Yes.

3 Q. Okay. The yellow up here --

4 A. Yes.

5 Q. -- with the red? Because he said that --

6 A. You know, I don't remember seeing any red at all.

7 Q. Okay.

8 A. And the yellow that we saw -- obviously this is pixelated,
9 we -- you know, obviously a little bit more circular, but I didn't
10 remember seeing any red at all.

11 Q. Okay. And then that would go back one. So now I want to go
12 back here to the company one, what they gave you with your flight
13 plan I believe, right?

14 A. Right.

15 Q. Or your weather briefing.

16 A. Which we're no longer doing.

17 Q. Do what now?

18 A. I believe this just went away.

19 Q. Oh, did it really? Was that --

20 A. Just this last week.

21 Q. Yeah, wow. Well, timing's perfect I guess. But was that
22 kind of accurate? Not really accurate? Help me understand how
23 this showed with what you actually saw and experienced.

24 A. Kind of accurate. You know, this would dictate or indicate
25 that there was more weather in our path. But everything for the

1 most part was to the north and west of our track except that piece
2 that you saw us going around.

3 Q. Right.

4 A. Quite honestly, for usefulness, this is an initial thing, and
5 then it's a WSI.

6 Q. Okay.

7 A. This is just saying, okay, there's some cat boxes out here or
8 there are some general areas for turbulence, but then WSI becomes
9 a little bit more predominate. And that's part of the reason I'm
10 pretty sure why that's going away --

11 Q. Okay.

12 A. -- or it went away.

13 Q. Went away.

14 A. We can still access this, but we -- it's not automatically in
15 our flight papers. As of --

16 MR. WHITEHEAD: Last week?

17 MR. HANSON: Yeah.

18 MR. REYNOLDS: Yeah. And so we can still get this.

19 MR. ETCHER: Okay.

20 MR. REYNOLDS: But it's not automatic.

21 BY MR. ETCHER:

22 Q. On the day of the event though, you still -- that was given
23 to you, easily accessible?

24 A. Correct.

25 Q. You didn't have to go searching for it?

1 A. No.

2 Q. Okay. All right. Have you -- and this may be a weird
3 question, so if you don't know how to answer it, it's okay. Have
4 you ever experienced different -- to me, looking at these
5 different radar pictures that our weather guy showed, it shows a
6 lot of differences that I can't put my head around. He's kind of
7 trying to figure it out, but we thought, well, you guys have the
8 bird's-eye view.

9 You know, we're seeing something different than what you've
10 described, but now that you're talking to me, have you ever seen
11 it that much different if -- on WSI or any other radars that you
12 look at?

13 A. You know what, in real time, what we're dealing with is
14 relatively accurate.

15 Q. Okay.

16 A. You know, I don't -- between the radar and WSI, I don't see a
17 whole lot of difference.

18 Q. Okay.

19 A. WSI can be up to 15 minutes behind, you know, so that's why
20 the radar is governing. But WSI is a great tool. It's a fabulous
21 tool.

22 Q. Okay.

23 A. So --

24 Q. Okay. All right, perfect. No, and I just -- like I said, we
25 just kind of -- originally we thought, boy, that's not exactly

1 what you guys were describing. And we wanted to see, is there
2 something that --

3 A. Yeah.

4 Q. -- these aren't showing correctly? And so that's why your
5 experience helped us kind of -- will kind of help us figure out,
6 all right, why is it different? Well, it will help him figure out
7 why it's different, the meteorologist guy.

8 A. Hopefully.

9 Q. All right. I know earlier we were talking about all of your
10 different apps, and you said you love WSI, which is good. It's a
11 great tool. And I know you've -- we've mentioned SkyPath a few
12 times, but you haven't really mentioned that much. Is it
13 something you ever have used or you don't find it --

14 A. Yeah.

15 Q. -- useful?

16 A. It is useful. It is probably more a function of familiarity
17 that makes WSI -- it's just that much more familiar, and it's a
18 matter of just getting into other apps more often, to try to -- it
19 becomes a certain point where, okay, how much is too much? Which
20 is easiest to get to? And which is, you know, the most relevant
21 at the time?

22 Q. Okay.

23 A. SkyPath is good. You know, it's just WSI seems to be the
24 most predominant --

25 Q. Okay.

1 A. -- for planning.

2 Q. Do you ever see other pilots just having SkyPath pulled up
3 versus WSI?

4 A. Yeah. And kind of a combination.

5 Q. Oh, okay.

6 A. Or back and forth.

7 Q. Okay.

8 A. Yeah.

9 Q. All righty. I have one last question, and then I'll let you
10 go, and we'll finish up round two so you can get out of here and
11 hopefully get -- catch a flight home hopefully.

12 A. I got time.

13 Q. Okay. It's always a curiosity. You said that you are a line
14 check airman checker. Big fancy title, but I use simple terms for
15 me. What does it take to have that qualifications?

16 A. I just recently got the QCL, and it is a -- basically it's a
17 LSM, line standards manager's, purview. It's his or her
18 determination when they need somebody else to do it, of the
19 available LCAs, who would fit doing it, and who is willing to do
20 it, I should say. And then it requires some training, some
21 involvement with the FAA; the FAA has to give their blessing, and
22 so nothing happens without their blessing as well.

23 MR. ETCHER: Okay. I promised that was my last question.
24 So, Katherine?

25 DR. WILSON: I just have one.

1 BY DR. WILSON:

2 Q. It was day two of your trip pairing that this happened. Did
3 you all continue the rest of the trip?

4 A. Yep.

5 Q. No issues?

6 A. Nope. I started another IOE the next week.

7 Q. Okay.

8 A. I was halfway through a new hire.

9 Q. And is -- I said one, and now I've got another one. And I
10 think we heard that the captain finished her OE?

11 A. Correct.

12 Q. Okay. Was her OE completed at the end of this trip? Or she
13 had an additional trip after that?

14 A. I believe this was the end of this trip. Honestly I'd have
15 look it up, but she completed with me.

16 Q. Okay.

17 A. And she was signed off, and she was released to the line, and
18 was assigned her first trip on reserve, and they pulled it. So
19 she has not --

20 Q. Okay.

21 A. -- flown since OE.

22 DR. WILSON: Okay. Thanks, Dean.

23 MR. REYNOLDS: Yeah.

24 MR. ETCHER: Okay. Michael?

25 MR. WHITEHEAD: That -- I didn't have any questions until

1 Katherine just mentioned that. We talked a little bit yesterday,
2 and so I thought it might make sense to get your perspective on
3 this. Again, I am not an instructor. I'm obviously not an LCA,
4 and I haven't even looked deep into the documents to know what is
5 on the -- for lack of better -- task requirement list for an OE.

6 Do you guys find ever you end up in a situation where you
7 don't have items completed that need to be completed, that you
8 then have to, you know, recommend another OE or something like
9 that? And this only goes back to, we were talking about radar
10 experience with regard to thunder storms and stuff like that.

11 MR. REYNOLDS: New captains, new first officers have to have
12 25 hours minimum in the airplane. That generally is not enough to
13 get someone signed off. I've had them -- one come real close, but
14 he was in the right seat for 17 years.

15 Any tasks that are not done on the LCA briefing guide will
16 get passed either to another event that the LCA is doing, or if
17 they're not able to complete it, it goes to another LCA with the
18 paperwork of what has not been completed. So everything on the
19 list is done before the candidate is signed off.

20 MR. WHITEHEAD: Okay.

21 MR. REYNOLDS: So we're not allowed to not do a flaps-free
22 landing or something, with the only exception is that new captains
23 are required to do an auto-land, and first officers are not. So
24 we try to do it if we can, but we're not going to sacrifice their
25 ability to have an additional landing for practice by letting the

1 airplane do a landing unless they are so proficient at it that,
2 okay, this is great to see. We hear -- we still brief it anyway
3 even if the first officer's not actually going to experience an
4 auto-land in the airplane.

5 MR. WHITEHEAD: Thanks. That's it.

6 MR. ETCHER: Okay. Keith?

7 MR. PHILLIPS: Again, it's great to be last. I have nothing.

8 DR. WILSON: I do have one.

9 MR. PHILLIPS: Oh.

10 MR. ETCHER: Oh, no. It just --

11 DR. WILSON: I know.

12 BY DR. WILSON:

13 Q. Well I started thinking about it. I was asking you about
14 your sleeping in the days before, and I didn't really ask you
15 about the 2 days that you were off duty. Do you recall when you
16 might have gone to sleep or woken up on those days?

17 A. I'm more of an owl than a lark, so I would not have been up
18 early.

19 Q. Okay. What -- okay.

20 A. I had no issues sleeping.

21 Q. Okay.

22 A. Quite honestly, my wife will tell you that. And I -- if I go
23 to sleep before -- you know, if she's not asleep by the time I get
24 up there, then --

25 Q. So let me ask you, when you're not working, when do you

1 typically go to bed and wake up?

2 A. I will go to bed midnight-ish, 8:00.

3 Q. Bed at midnight, wake at 8:00?

4 A. Yeah.

5 DR. WILSON: Okay. Thanks.

6 MR. ETCHER: Anything else? No? Everybody good? All right.
7 Well we've been asking you lots and lots of questions, but sadly
8 we probably missed some.

9 BY MR. ETCHER:

10 Q. Is there anything you can think of that we haven't asked,
11 that you're like, oh, if they could just -- if they would ask me
12 this, it might help them learn?

13 A. Well, you know, that's the thing. You know, I mean, the
14 Monday morning quarterbacking thing. I can't -- you know, in
15 putting it together, doing it again, I don't know what we would
16 have done different.

17 And I don't know, you know, because flying any amount of
18 time, you get the inadvertent clear air turbulence, whether -- you
19 know, it doesn't get so much where you're in an area anymore
20 without somebody reporting it as it would be flying through
21 somebody's wake, you know, a contrail or something.

22 And obviously I'm an -- I will admit that I am a nervous --
23 I've been rolled at 33,000 feet before behind a 747 going into LA.
24 So if my path is going to cross a 747 or a 380, and we're not
25 going to have the dissipating distance, I will request lower

1 before I cross the path, so -- and I have done that many times.

2 Even though you're going perpendicular or at an offset, I
3 don't like the experience. I -- so call me chicken, but so be it.
4 But I don't know how or what we could have done different again
5 with the exception of not have made the announcement, which is the
6 absolute wrong thing to do, and her just grabbing a hold.

7 Q. Okay.

8 A. I -- we're perplexed. Or at least I am. I don't know, Debby
9 may have it all figured out, but I don't.

10 Q. All right. We always like to at least try and end it more on
11 a happier note, but if you were king for a day, is there anything
12 you could say that you would be like, this is what I want?
13 Because as a line pilot, you experience things differently than
14 people sitting in offices that make decisions.

15 A. You know, the only way that I can see totally avoiding a
16 flight attendant injury is never letting them up. And
17 unfortunately, you know, I've been on carriers like Air Tahiti
18 Nui, for example, going from LA to Papa -- Haiti, and the seatbelt
19 sign's on for 6 of 8 hours, and people are ignoring it.

20 So I think that, you know, we've -- we -- I commute
21 obviously. I've been doing it for a long time, and you see
22 different approaches. And I think leaving the seatbelt sign on
23 when it's not turbulent leads to complacency by the passengers,
24 and they're up and moving about. But personally, to completely
25 avoid a flight attendant, or a passenger, injury they would have

1 to stay seated the whole flight. I just don't know what else to
2 say.

3 Q. Okay. All right. Well, since we've asked you thousands and
4 thousands of questions it probably feels like, do you have any
5 questions for us?

6 A. What's the procedure from here on?

7 Q. From here on, I mean, United will do whatever they do.
8 Whether they put you guys back on line, that I don't know. For
9 us, we'll have this transcribed, and then part of our case is --
10 part of our investigation, you know, me and the meteorologist and
11 Katherine and other members of our investigative team will try and
12 write up a report to try and figure out what we've learned from
13 it. That goes into our public system.

14 And then, because we have that turbulence study going on,
15 they'll pull from these accidents that have occurred where
16 injuries have -- and try and look at all of them as a big whole,
17 and try and figure out is there some way -- is there something
18 we're missing? Is the weather charts -- do they need to be -- you
19 know, is there something wrong with them? Is there -- are the
20 apps great, but is there too much information?

21 You know, we're trying to kind of figure out is there some
22 way to help reduce these risks? So your event is one of several.
23 And I say several; I think there's ten that we've looked at over
24 the last 12 months that will go into this big pool, if you will,
25 to kind of draw from and look at. Because every airline does

1 things differently -- every pilot at every airline does things
2 within standards, but still a little different. So we're trying
3 to learn from that and trying to figure that out.

4 A. So is -- so this is multiple airlines obviously?

5 Q. Yes.

6 A. Are you seeing different between operators as far as the
7 things that United's not doing that others are or vice versa that
8 you can say?

9 Q. I've seen different things. I mean, procedure-wise, you
10 know, like you guys have the, you know, "flight attendant take
11 your seat, flight attendant take your seat," where they just
12 drop --

13 A. Stop and drop.

14 Q. -- and sit wherever they are.

15 A. Yeah.

16 Q. That's the -- I have not seen that at any other airline. So
17 every airline does things procedurally different. That may be a
18 great thing that airlines never thought of, and through this study
19 they might think, oh, that might be a good procedure for them. So
20 it's kind of -- yes, we're looking at a lot of airlines.

21 A. Okay.

22 Q. Not just United, not just the big ones. You know, we're
23 looking at regionals as well, all Part 121 carriers. But, you
24 know, everybody does things a little different, and my philosophy
25 is, why reinvent the wheel? If somebody has something that works

1 really well, maybe other airlines will use it as well.

2 A. Yeah. I think the flight attendants be seated immediately is
3 a good -- I mean, that's somewhat new for us. But I think it's
4 a good thing.

5 Q. And, you know, when you guys explained to that to me, it's
6 kind of like, huh, makes sense. I've never -- I admit I never
7 would have thought of something like that, but it makes sense. So
8 is there a better way yet? You know, there might be, and we
9 haven't necessarily found it, or a combination. And that's what
10 this whole study is trying to do. Does that kind of clear it up a
11 little bit?

12 A. Yeah. So will I get anymore -- any direct communication from
13 the NTSB? Or will it just be when you release something to the
14 public, this is kind of our recommendation?

15 Q. We'll just release it to the public. A lot of times --
16 because ALPA's here and United's here; they're part of our group.
17 They'll know beforehand when we're going to release stuff, and
18 they'll be able to reach out to you and say, hey, FYI, your case
19 is going to be released to the public, you know, in the next
20 whatever period of time, and so they'll be able to help you.

21 Unless you really want to talk to us, which most people
22 don't -- at least most pilots don't, you won't necessarily -- on
23 this event, you won't have to deal with us as far as I can tell.

24 MR. HANSON: And so there will be an individual report for
25 each of the incidents, and then there will also be a larger

1 turbulence study?

2 MR. ETCHER: Yes.

3 MR. HANSON: So they'll be -- this may feature in its own
4 report like any other --

5 MR. ETCHER: Every event that meets --

6 MR. HANSON: -- desk -- simpler investigation --

7 MR. ETCHER: -- an accident --

8 MR. HANSON: -- you might have done for this absent the --

9 MR. ETCHER: Correct.

10 MR. HANSON: -- turbulence study, you're going to have that
11 report. And then you'll have the larger one --

12 MR. ETCHER: Everything is treated like --

13 MR. HANSON: -- coming out?

14 MR. ETCHER: -- this is an event. It has its own case number
15 and everything, so all case numbers -- we're a transparent agency.
16 We're the government, so we have to be transparent. But we
17 produce a report out of all of that. So every one of these that
18 has a number will have its own report, and then the big study just
19 grabs it all and mashes it up and figures out, trying to
20 understand.

21 MR. REYNOLDS: How long is the study?

22 MR. ETCHER: The study -- actually we were open for a year
23 for any accidents that occurred during that time -- turbulence
24 events that occurred during that time. That just ended 2 weeks
25 ago.

1 DR. WILSON: I think you're our last case.

2 MR. REYNOLDS: Woo-hoo. Lucky me.

3 MR. ETCHER: No, there was one after them, so --

4 DR. WILSON: Oh, was there?

5 MR. ETCHER: Yeah. Going into Knoxville.

6 DR. WILSON: Oh, this was our -- the last trip --

7 MR. ETCHER: Right.

8 DR. WILSON: -- for the investigative side.

9 MR. ETCHER: Right. But yeah, you -- and so we're not -- I'm
10 not saying we're not looking at other events that come in, but
11 we're not doing the -- necessarily the big, in-depth look at
12 everything we can. And then it takes us a little bit of time,
13 because frankly I wish this was the only case I had. I could do
14 it a lot quicker.

15 But it takes us time to get all of those cases out, because
16 it's got to go through a whole process before it becomes public
17 anyway. So we've got deadlines -- is it the end of summer?
18 Something like that, to have all of these cases closed. Then the
19 study looks at all of them.

20 And so in theory, by next summer, the study's going to
21 produce a big report looking at everything that we've looked at
22 over the last 12 months. And we're looking at cases that were
23 before that, but because they were turbulence injuries, we didn't
24 necessarily do the big in-depth. So they're not a lot of --
25 there's not a lot of information in those necessarily.

1 But they're -- in theory, by next summer, there should be a
2 very large report out about turbulence, and recommendations to
3 operators, radar manufactures, FAA, whoever we see that could help
4 make some change.

5 MR. REYNOLDS: Nice.

6 MR. ETCHER: Is that kind of clear as mud?

7 MR. REYNOLDS: Yeah. That's great. Okay, yeah.

8 MR. ETCHER: Any other questions?

9 MR. REYNOLDS: No, sir.

10 MR. ETCHER: Then -- you were sitting there awful quiet,
11 John. Do you have any questions? Which I always like it when
12 lawyers are quiet, don't get me wrong.

13 MR. HANSON: We're good.

14 MR. ETCHER: Okay. Well let me turn this off then.

15 (Whereupon, at 11:49 a.m., the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: UNITED AIRLINES FLIGHT 1754
AIRBUS A320 TURBULENCE EVENT
IN NEW ORLEANS, LOUISIANA,
ON JANUARY 10, 2020
Interview of Dean Reynolds

ACCIDENT NO.: DCA20CA058

PLACE: Denver, Colorado

DATE: February 26, 2020

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.



Christy Wilson
Transcriber



Autumn Weslow
Corrections made 4/7/2020

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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UNITED AIRLINES FLIGHT 1754

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AIRBUS A320 TURBULENCE EVENT

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Accident No.: DCA20CA058

IN NEW ORLEANS, LOUISIANA,

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ON JANUARY 10, 2020

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Interview of: DEBRA BALSLEY, Captain
United Airlines

United Airlines Flight Training
Center
Denver, Colorado

Wednesday,
February 26, 2020

APPEARANCES:

SHAWN ETCHER, Operational Factors Investigator
National Transportation Safety Board

KATHERINE WILSON, Human Performance Investigator
National Transportation Safety Board

MICHAEL WHITEHEAD, Airbus Fleet Technical Manager
United Airlines Flight Training Center

KEITH PHILLIPS, Pilot - Air Evac Lifeteam
Air Line Pilots Association, International

JOHN HANSON, Staff Attorney
Air Line Pilots Association, International
(On behalf of Ms. Balsley)

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I N T E R V I E W

DR. WILSON: Good afternoon. I'm Katherine Wilson. I'm a Human Performance Investigator with the NTSB.

MR. ETCHER: Good afternoon, Captain. Is -- can I call you Captain? Or --

MS. BALSLEY: Sure.

MR. ETCHER: Okay. My name is Shawn Etcher. I'm an Operational Factors Investigator with the NTSB.

MR. WHITEHEAD: This is Michael Whitehead. I'm the Airbus fleet Technical Manager.

MR. PHILLIPS: Keith Phillips with ALPA.

DR. WILSON: And so, if you could state your full name for the record as well?

MS. BALSLEY: Captain Debra Balsley.

DR. WILSON: Okay. And do you go by Debra? Is it okay --

MS. BALSLEY: That's --

DR. WILSON: -- if I call you Debra?

MS. BALSLEY: Yes.

DR. WILSON: Okay. You are allowed to have one representative with you. Is there someone that you would like to have with you during this interview?

MS. BALSLEY: John Hanson.

DR. WILSON: Okay.

MR. HANSON: Okay, great.

DR. WILSON: And so, John, if you could state your name also?

1 MR. HANSON: And so -- yeah. John Hanson, ALPA staff
2 attorney with the United MEC Office.

3 INTERVIEW OF DEBRA BALSLEY

4 BY DR. WILSON:

5 Q. Debra, if you could spell your last name for us please?

6 A. B-a-l-s-l-e-y.

7 Q. And what is your position?

8 A. I'm a newly trained captain on the Airbus.

9 Q. Okay. And how long have you been with United?

10 A. Almost 5 years.

11 Q. Okay. Do you know what your date of hire is?

12 A. 07/07/15.

13 Q. Okay. And you said that you're a new captain. What -- how
14 long have you been a captain?

15 A. I was qualified December 14th of 2019.

16 Q. Great. Okay. And the other positions that you've held with
17 United?

18 A. I was -- started as a first officer on a 737, and then I was
19 a first officer on the 757, 767, and then I became a first officer
20 on the Airbus.

21 Q. Okay. And about how much total time do you have?

22 A. Total time? Probably 15,000 hours.

23 Q. Okay. And time on the Airbus?

24 A. Probably about 800 hours.

25 Q. All right. How much of that is PIC?

1 A. 24 and a half -- or 29. I just finished --

2 Q. Okay, great.

3 A. -- seven days.

4 Q. Okay.

5 A. So I have -- it's all in there. The Airbus is easy to figure
6 out because it's all of my qualifications, so I can tell you
7 exactly, I'm just -- I'm rounding off numbers.

8 Q. That's fine. And if you could give us a brief overview of
9 your aviation history and how you got to United?

10 A. I started flying with the Navy, flew single-engine jets.
11 Then I had some time off from flying, went to American Eagle in
12 2004, which -- for about a year. And then I was 10 years at
13 SkyWest, and then I got hired here.

14 Q. Okay.

15 A. And I flew a private jet while I was at SkyWest as well. I
16 forgot about that.

17 Q. Okay. In any of your previous companies, were you a line
18 check airman or in management?

19 A. They designated me as a -- an instructor for the private jet
20 that I flew, but no other line check airman --

21 Q. Okay.

22 A. -- positions.

23 Q. And what certificates and ratings do you hold?

24 A. ATP.

25 Q. Okay. And type ratings?

1 A. Type ratings 737, 757, 767, CL-65, SJ30S, Airbus, and E170,
2 90.

3 Q. Okay. First class medical?

4 A. First class medical.

5 Q. Do you recall the date? Timeframe month and year?

6 A. February 2020.

7 Q. Okay. Any limitations?

8 A. No limitations.

9 Q. So if you could go back to January 10th and walk us through,
10 let's start with in the morning when you're leaving the hotel --
11 or the afternoon when you're --

12 A. Afternoon.

13 Q. -- leaving the hotel, and then through the turbulence event,
14 and then what happened once you found out about the injury until
15 you landed.

16 A. We got on the crew van together and discussed the flight
17 plan, the weather. We discussed just different aspects of how OE
18 was going. We were going to -- when I was going to do the check
19 ride on the way back from the last flight. So I -- so we still
20 had another 3-day trip to do.

21 We talked about just the briefings. I was going to be doing
22 all of the briefings, and he was going to be doing the walkaround
23 for the aircraft. And then talked about possible deviations for
24 the weather. And the dispatch really -- didn't really talk about
25 extra -- any extra fuel, but we would deal with that and -- when

1 it occurred.

2 And so I get to the airplane and the flight attendants are
3 there, so I give the briefing. I have the actual picture out and
4 said, you know, kind of not -- that we'd be leaving the seatbelt
5 sign on until the top of climb, which was approximately going to
6 be when we got through Mississippi, and that after that it should
7 be a pretty smooth ride the rest of the way. Just warning them
8 that would be about the first 45 minutes of the flights or so.

9 And they asked if they needed to stay seated. I said,
10 shouldn't be a problem. We will call back and do our standard
11 making sure the -- you know, our standard PA, taking their jump
12 seats if we needed them to. I -- and, you know, informing them
13 I'm a new captain going through training, so I would appreciate
14 any feedback from them to make it -- make them -- make me be a
15 better captain for them.

16 So I talked to all three of them at the same time and just
17 made sure that they were familiar with the Airbus, because a lot
18 of times we have new -- newer continental flight attendants that
19 aren't as familiar with the Airbus. So they were -- they didn't
20 have any questions for me.

21 And actually, Deborah's the one who told me -- you know, I
22 said, I haven't -- I've only had -- I hadn't had any delays at all
23 my entire captain career. So she was like, good; I'm a West Palm
24 commuter, and I have an 8:30 flight, and we're just getting in
25 like, I think about 7:30. So I said, I don't see anything

1 changing. We're getting out early, we'll get in probably 10, 15
2 minutes early.

3 So that was about the extent of it. I did tell them that I
4 would like -- before I turn off the seatbelt sign, I'd check with
5 them because I'd like to do a bathroom break. Because that's my
6 standard thing once we get the top of climb, but not to -- so I
7 won't interfere with their duties kind of thing.

8 Q. Okay.

9 A. So we're climbing out, nothing of note of any other flight
10 that I've ever done. And so we see the weather ahead and, you
11 know, so we're -- Dean asked -- said, do you want the radar on?
12 So I'm like, well yeah, let's get the radar on.

13 And then ATC had mentioned something about, you know, there's
14 some weather ahead of you. So we acknowledge, and as we get
15 closer, I don't know, about 80, 100 miles out, we ask for a right
16 deviation. And they say standby. And so Dean makes the
17 announcement for flight attendants to take your jump seat just as
18 a precaution.

19 We weren't experiencing anything yet, but since we didn't
20 have the turn yet -- and that's kind of the rule there, is
21 impending, if you're making a deviation for weather, we should
22 just ask them to be -- take their jump seats. So that occurred.
23 As Dean makes the announcement, they cleared me for that right
24 deviation. I acknowledge, I turn right, and then basically right
25 after that turn, that's when we get the call from Deborah, the

1 purser, saying that she'd been injured.

2 So we didn't have time to do -- I mean, we had -- right when
3 I made that turn we had, I would call it light chop. I mean,
4 there was no -- I mean, even reading the definitions, I've read
5 them 1,000 times since, it still agrees with what I've said
6 before. It's light chop. There was no turbulence. That's why I
7 was surprised when it was called a turbulence event.

8 But a little bit of light chop, it was just one bump followed
9 by a second bump. So no, we did not have any other aircraft
10 reports, we did not have anything come up on our TAPS, or our WSI.
11 We did not have anything from dispatchers because there didn't
12 need to be anything coming. I mean, it was just a routine -- just
13 as if you were going through somebody's -- a little bit of wake
14 turbulence.

15 So it was just two bumps, and so Dean took -- of course, I'm
16 pilot flying, so Dean took the call from Deborah, and I mean, we
17 were -- after that kind of event, we were so surprised that
18 anybody was hurt. So we start coordinating, asking if she was
19 okay, and asking her if she wanted us to divert. I mean, we had
20 Raleigh-Durham right there, we could have gone to D.C., I mean, we
21 had so many options for her, and she says, no, no. Let's -- I'm
22 going to be fine.

23 And so then we're trying to -- so we asked her to coordinate
24 with the other flight attendants, see if there's any doctors
25 onboard. And so they do all of that coordination as the flight

1 attendants. I'm not on the PA, so I'm kind of repeating what Dean
2 and I talked about. I'm handling ATC and flying the aircraft.

3 And so there was a couple doctors -- there was a doctor
4 onboard -- a PA onboard and an EMT onboard, and they did a splint.
5 We left the seatbelt sign on. We're -- we -- there was a lot of
6 coordination between the flight attendants and us, and, you know,
7 we just felt it was best to get Deborah taken care of first and
8 not deal with the seatbelt sign until after she was taken care of.

9 So they did all of that, the service was continuing, the
10 other -- the jump seating -- not jump seating -- the deadheading
11 flight crew or flight attendants were very helpful. They came up,
12 assumed her duties and made sure she had medication, everything
13 was taken care of, and she had her foot splinted. So once it got
14 calmed down in the back, they let us know that.

15 And then I said, well, I'm -- and again, I'm going to wait to
16 turn off the seatbelt sign until I go back to the bathroom. And
17 so I wanted to assess -- I wanted to talk to her personally and --
18 because she -- I knew she had been crying, and she was embarrassed
19 and apologetic. So I went back there, and I'm a hugging kind of
20 person, I just gave her a hug, and I just kind of -- I'm so sorry
21 this happened. You know, we -- what can we do for you?

22 I gave her Dean and I, our cards, and I said, if you want, I
23 mean, I'll stay with you. I'll do whatever we need to do. We had
24 already talked about -- by that point we had already had MedLink,
25 everybody involved. At that point I said, we have an ambulance

1 waiting for you when we get there, and they're going to meet us at
2 the gate. We're going to get you taken care of tonight, and if
3 you want to go back to West Palm tonight, I'll help you get there.
4 If you want to stay tonight, I would suggest staying in the
5 hospital, but it's your choice. You call me if something doesn't
6 go right. If you need a hotel room tonight, I'll take care of
7 you.

8 And she's just like, you know, just giving me hugs and just
9 crying too, and just -- I'm so sorry, I'm so embarrassed. I fell
10 right in front of, you know, right in front of the whole airplane.
11 And I'm like, don't be embarrassed. It happens. You're never
12 going to see these people again.

13 And so we -- flight attendants towards the end of a flight
14 call up, and they're concerned that -- we didn't want to move
15 Deborah. Deborah didn't want to move. As I said, oh, we'll do
16 whatever you want. What -- I'll get you moved. And she's like,
17 no, I think I should stay here. And everybody thought that was a
18 good idea. But one of the flight attendants was really concerned
19 that she was blocking an exit.

20 So we had a full flight, and I said, well, you know your
21 rules a lot better than I do. I would not want her moved. But if
22 she's okay with being moved, and the doctor is okay with her being
23 moved, then you guys do what you need to do. We can bring the
24 jump seater -- the -- there was a pilot deadheader on there. We
25 can bring him up front.

1 So that's what happened. I said, but we're going to be
2 displacing a first class passenger, so let's do it as late as
3 possible in the flight. And so that's what we did. As late as
4 possible, we brought our deadheading captain up, and she went to
5 1B, and then 1B went to the -- he was in an emergency exit aisle.
6 So that's what occurred.

7 We get -- it's a tow-in gate. At the last minute, they
8 changed our gate, so that was my only delay of OE was that flight.
9 But -- so we had to get towed into that gate just as -- I mean,
10 everything went according to all of the expectations. The EMTs
11 were right there waiting for us. They came onboard, we got her
12 stuff off, we got her off, we took her right across the way to an
13 elevator and got her to the hospital.

14 And I'd -- she hadn't called me. It was about 10:00 and we
15 had an early show the next morning, so I ended up calling
16 scheduling and -- to try to get -- or just to get connected to
17 her, because I didn't take her phone number. I was hoping she
18 would -- I told her to call me when she got situated. And so I
19 was on hold for about 30 minutes, and of course now it's even
20 getting later.

21 So I called my dispatcher, who said he couldn't really help
22 me get -- I wanted to get ahold of flight attendant scheduling.
23 And he gave me a little bit of hassle about that, but he finally
24 got me through to flight attendant scheduling, who also gave me
25 hassles, but I finally got through to her voicemail, and then she

1 called me back about -- a couple of minutes later. And she said
2 she was just leaving the hospital, and she was going to be going
3 to -- on a positive space the next morning to West Palm.

4 And then I've talked to her a few times since. I know she
5 was only -- she was supposed to be off for -- sorry, I can look at
6 my texts to find out, but they ended up having to keep her off a
7 little bit longer. So she's going a little bit stir crazy at
8 home, but she was grateful for the help of everybody that was
9 there, the entire crew, the deadheading crew, and all the support
10 she did get.

11 Q. Great. So going back -- that was really helpful. Thank you.
12 I'm going to ask you a few follow-ups on that. So the discussion
13 that you had in the van with Dean, what -- you had your dispatch
14 weather package? Is that --

15 A. Yeah. So --

16 Q. Okay.

17 A. And WSI.

18 Q. And WSI, okay.

19 A. And then the TAPS reports are on that. I put my flight
20 number in for that extra where, if we have it docked, it'll tell
21 if our aircraft is going to -- is in turbulence. And we'll
22 actually get something on ACARS if -- even if it's from our air --
23 our own aircraft.

24 Q. Okay. And with the WSI, there's layers that you can use.
25 What layers were you using for that call?

1 A. RPM turbulence, radar -- let me just pull it up there. So
2 just on the bottom here, FPGs. Those are the -- and so just in
3 summary it was radar, FPGs, RPM turbulence.

4 Q. Okay. And you mentioned that there was no extra fuel for
5 this flight?

6 A. I think we had extra fuel for having arrival demand into
7 Newark, but there was -- usually if we are expecting turbulence,
8 again, and this, like, I don't -- we didn't have turbulence.
9 There -- the dispatch will write that in the remarks section, and
10 then they'll give us, you know, 10 minutes of deviation fuel,
11 or --

12 Q. Okay.

13 A. -- something like that.

14 Q. And you did have that?

15 A. We did not have that.

16 Q. Okay. And if you wanted to -- if you looked at the weather
17 and felt like you needed to add extra fuel, are you able to do
18 that?

19 A. Oh, easily. Yes.

20 Q. Okay. Do you have to call dispatch for that?

21 A. No. We can just on the release do that.

22 Q. Okay. Briefing of the flight attendants. You briefed all
23 three flight attendants, you said. Did you do that because you
24 were a new captain? Or is that something that's encouraged by the
25 company to brief all flight attendants versus just the purser?

1 A. I was a captain at SkyWest for probably 7 years. I only had
2 two flight attendants there -- one or two. I just -- if it's
3 possible, I think it's a good idea to brief everyone. And I'm
4 just -- I really liked -- I do my briefing from the back for the
5 passengers as well.

6 So I even told the passengers that, you know, I'm going to
7 have the seatbelt sign until the top of the climb. Just please
8 respect that, and I'll get it off as soon as possible. It'll
9 probably be off most of the flight until we took -- until we start
10 our descent.

11 So I'm -- I like to eyeball everybody. I like to kind of
12 assess everything going on in the cabin with the passengers, and
13 I'm kind of a type of person that just likes to be talking to
14 everybody.

15 Q. And when you show the flight attendants the weather picture,
16 do they -- do you feel like that helps them to visualize it? Do
17 they understand --

18 A. I --

19 Q. -- what they're looking at?

20 A. I think most of them do. And if they don't, a lot of them
21 will ask you about it. And it's -- it -- I think it helps them a
22 lot, understand when is the best time to do their service. We
23 only had that small weather at the very beginning of our flight.
24 And the rest of it, you don't see any boxes.

25 It -- you know, and even if they just think of it as, you

1 know, red box bad, nothing good, I think it helps them a lot. And
2 it gives them more confidence in that the flight really should be
3 a good, easy flight.

4 Q. So using the iPad, is that more your technique versus
5 something that the company encourages?

6 A. You don't have to show them the pictures. I think a lot of
7 people encourage it just for that same reason, that it gives a lot
8 of insight for the flight attendants.

9 Q. Okay. So the onboard weather radar, when was that set? At
10 takeoff? Or you've got the terrain mode, and then you've also got
11 turbulence mode --

12 A. Right.

13 Q. -- correct? So when did you set it to turbulence mode?

14 A. Oh, no that --

15 Q. Oh.

16 A. When you turn it on, that's --

17 Q. Okay.

18 A. We turn that on when we're at taxi-out.

19 Q. Okay. And --

20 A. And so the weather radar we didn't turn on until we were on
21 the climb-out, until we needed it. We --

22 Q. Okay.

23 A. We saw the weather ahead, and we just wanted to have a clear
24 depicture, and so that's when we went to weather.

25 Q. Okay.

1 A. And --

2 Q. When did you -- that was after takeoff you said?

3 A. Yes. After takeoff.

4 Q. Okay. Do you recall around the altitude that you might have
5 done that?

6 A. Oh, I would probably say 24,000 feet or so.

7 Q. Okay. And how do you set it? What -- what's the range, the
8 tilt, those things?

9 A. You kind of just -- a good range, it just depends on how
10 close you are to it. I -- you kind of bring it down as you get
11 closer. I'd say I probably had it on an 80 range.

12 Q. Okay.

13 A. And as you get closer -- we never got close to it. So I
14 mean, I -- as you get closer when you're deviating around, you
15 could go, you know, 20, 40 range, something like that.

16 Q. Okay. And what was the weather radar depicting that you
17 recall?

18 A. There was some -- there were yellow, which would -- and, you
19 know, it get -- would indicate moderate turbulence possibly. So
20 that's why we were avoiding it. And it was just, kind of just off
21 to the northwest of us.

22 Q. Okay. Just yellow? You didn't --

23 A. Yes.

24 Q. -- see any red?

25 A. Further down. But it wasn't -- like if it's going to be --

1 it -- there was no anvils, or sharp angles, which would indicate
2 thunderstorms, nothing that we would be getting anywhere near.

3 Q. Okay.

4 A. Hundreds of miles out.

5 Q. And I think you said this, that there were no pilot reports?

6 A. No.

7 Q. And then on your iPad you had WSI pulled up --

8 A. Yes.

9 Q. -- after takeoff? Did you have anything else? SkyPath or
10 the --

11 A. SkyPath, yes.

12 Q. Okay. Did you get any alerts from that?

13 A. No. Like I said, there really wasn't any turbulence to get
14 those type of reports. And if we would've encountered turbulence,
15 it would've given a report from that. Because it -- it's doc'ed
16 on the iPad as far as I understand.

17 Q. Okay.

18 MR. WHITEHEAD: Yes. You need to verbally answer.

19 BY DR. WILSON:

20 Q. And about what altitude were you at when you requested the
21 deviation? Around?

22 A. 28, 29,000 feet.

23 Q. Okay. And then do you recall about what the altitude was
24 when you encountered the turbulence?

25 A. About 30,500 feet.

1 Q. And just to clarify, you would categorize the bumps that you
2 felt more as like chop, not --

3 A. Light --

4 Q. -- turbulence?

5 A. -- to moderate chop.

6 Q. Light to moderate chop, okay. And how do you -- how would
7 you define chop versus turbulence?

8 A. There's no altitude or aircraft displacement when you're in
9 chop. And in turbulence, you'll get actual aircraft -- hard to
10 control, you're going to get altitude deviations when we're
11 climbing. But an easier way to see, in the back of the aircraft
12 you might have your drink shake a little bit if it's moderate
13 chop, versus if we're in moderate turbulence, it could actually
14 bounce off your tray table, you're going to have the flight
15 attendants having stuff come off their carts, so turbulence is a
16 lot harder to control.

17 Q. Okay. Have you encountered moderate and/or severe
18 turbulence --

19 A. Yes.

20 Q. -- before? Moderate or severe?

21 A. Both.

22 Q. Both? Oh.

23 A. Generally not over the United States.

24 Q. Okay.

25 A. Flying over to Europe in a 7 -- in a 75 and 76 --

1 Q. Okay.

2 A. -- is more where -- and that's why a lot of my friends will
3 ask me about it, some turbulence on flights. I'm like, that's
4 chop. That's -- usually we don't get that over the United States.
5 Maybe coming into Denver you might get some turbulence -- again,
6 light turbulence.

7 Q. Did you report the turbulence to air traffic control after?

8 A. It's not required for chop, so no, we did not.

9 Q. Chop, okay.

10 A. Chop. Yes, we would have to --

11 Q. Sorry.

12 A. -- if it was turbulence.

13 Q. If it was turbulence, you would have.

14 A. We would have.

15 Q. But because it was chop, you did not. About how far away do
16 you think you were from the yellow that you were depicting on the
17 radar when you started your turn?

18 A. About 80 miles.

19 Q. Okay. So mentioning -- you mentioned the flying the 75, 76
20 across Europe where you had experienced some of that moderate to
21 severe turbulence. Was that more clear-air turbulence? Was it
22 convective? Were you painting anything on the radar typically
23 when --

24 A. Mostly it was --

25 Q. -- you encountered that?

1 A. -- clear-air turbulence.

2 Q. Okay. All right. And you are based out of where?

3 A. San Francisco for 2 more days.

4 Q. Okay. Oh. And then where?

5 A. LA.

6 Q. Okay. And you were based out of San Francisco flying the 75,
7 76?

8 A. Right. But I go between both bases quite a bit.

9 Q. Okay. How does that work?

10 A. It's the same. They have the same type of flying between the
11 two bases. It's just I have more seniority in San Fran.

12 Q. Okay. Yeah. How often would you encounter turbulence or
13 chop coming out of San Francisco?

14 A. You talking about just the airport or on my flights?

15 Q. Yeah, on your flights being like, based out there on the 75,
16 76. You know, just being --

17 A. Well, during the flights I was --

18 Q. -- that weren't going to Europe, I mean.

19 A. Yeah. Mostly you'd almost always encounter chop.

20 Q. Okay. Yeah. And was most of that -- would you consider that
21 to be clear-air also or was it like convective activity?

22 A. Mostly -- most often it's clear-air turbulence. We do our
23 best to avoid and make it as smooth a ride for the passengers as
24 we can. During the summers going through the Midwest, you can't
25 avoid it. You avoid the thunderstorms absolutely, but you will

1 get some moderate chop for sure.

2 Q. Okay. How do you think the weather radar on the 75, 76
3 compares to now on the Airbus? Is there any --

4 A. Very similar.

5 Q. Very similar? Okay. And the aircraft that you were flying
6 on this day was one of the newer -- had the newer --

7 A. Correct.

8 Q. -- radar? Any differences between that and other Airbus?

9 A. Not too -- I mean, it's -- it may be a little bit better.
10 But again, we never -- it was painting just what it should have
11 been painting.

12 Q. Yeah.

13 A. We didn't really get close enough to use it to -- we don't
14 use it to penetrate. We use it to avoid the weather.

15 Q. When you say it was better, in what way might it have been
16 better?

17 A. It's a little bit more enhanced.

18 Q. Okay. How would you know whether you're -- if you're on an
19 aircraft with that newer radar versus the -- an older system?

20 A. It -- just the display. Like when you test the function, it
21 just has a little bit more color --

22 Q. Okay.

23 A. -- graphics.

24 Q. It -- so when you get assigned a tail number, can you -- or
25 an N number, would you be looking at -- can you look -- like is

1 there bulletins that you can look up to see what the differences
2 are?

3 A. Yeah. Oh, it's in our manuals as well.

4 Q. Okay. Do you -- is that something that's -- that you'd look
5 at before a flight?

6 A. I mean, they're interchangeable, so often you don't -- I
7 think we learn it enough when we're in training that when we --
8 and we switch into those aircraft so often, it's not something
9 you'd have to study every time.

10 Q. Okay.

11 A. It's not that different.

12 Q. Okay. So tell me about the training. What type of training
13 do you get on the weather radar?

14 A. Well we get tested on it in the ground school. We use it a
15 little bit in the simulators.

16 Q. Yeah.

17 A. And then when we do OE, we'll go through it as well. And
18 when you're out on the line, part of the job as the captain is
19 also to help teach the first officer too, and it's the first
20 officer's to learn more about the aircraft as well, so a lot of
21 on-the-job training.

22 Q. Yeah. When you mentioned ground school, are you talking
23 about your upgrade -- the captain upgrade, or initial, or
24 recurrent? What ground school? All of it?

25 A. Yeah. Initial -- the initial for captain and first officer

1 is the same, so actually I've got -- had a lot of training. I've
2 had -- you know, I've been here -- well, at that point it was
3 about 4 years, and I'd been through four type rating classes, so I
4 feel I have great foundation with the systems.

5 As I said, the radar's not much different between the three
6 fleets. And, you know, it -- the biggest thing, especially the
7 75s and 76s, is there's so many different control pods that you
8 would have to -- that's about the only difference. But once you
9 look at it and just -- you can figure it out pretty easily.

10 Q. It's intuitive to --

11 A. Well, yeah. I mean, it -- yes.

12 Q. How accurate do you feel the -- so of all the systems that
13 you can use, whether it's the onboard weather radar, or the WSI,
14 or the different programs, how accurate do you think they are in
15 helping to anticipate turbulence?

16 A. I think they're pretty accurate. Obviously PIREPs are the
17 most accurate, and the reason we're not getting all these reports
18 on this flight is because they -- I don't think they were a
19 factor. Unfortunately -- and an incident did occur, but it wasn't
20 because of a lack of preparation or a lack of resources available
21 to us as pilots.

22 Sometimes things happen for no reason at all. And yeah, it's
23 unfortunate that she got hurt, but it wasn't because of not having
24 better resources.

25 Q. When Dean made the announcement to call the flight

1 attendants, ask them to be seated, did you all have a discussion
2 about that before he --

3 A. Yes.

4 Q. -- made that call?

5 A. Yes.

6 Q. Okay.

7 A. And it was just because we were getting a delay in the turn.
8 And we weren't in any turbulence. We were still very far away
9 from it, but just a precaution we did that.

10 Q. Did he initiate that? Or is that something that you
11 initiated, asked him to call back?

12 A. I don't remember.

13 Q. And the two bumps, a second or two? Five seconds?

14 A. Just a second or two.

15 Q. Okay. Did you all declare an emergency?

16 A. No.

17 Q. No? Okay. Did you all receive drug or alcohol screening
18 after landing?

19 A. No.

20 Q. Have you been on any other flights where like a flight
21 attendant has gotten injured from turbulence? Or --

22 A. No.

23 Q. No. The trip pairing that you were on, where were you in the
24 trip pairing with the -- this flight?

25 A. Day three of four.

1 Q. Okay. And first leg of the day?

2 A. Only leg of the day.

3 Q. Only leg of the day? Okay. Anything unusual about this trip
4 pairing, or was it pretty normal?

5 A. Very normal.

6 Q. Okay. How is it flying with Dean?

7 A. I actually asked to fly with Dean. I flew with him on my
8 first officer OE and really respected his experience and his
9 knowledge, and I was very grateful I could fly with him again.
10 He's been with United for 33 years and a check airman for a long
11 time, knows the Airbus inside and out. So I knew I would benefit
12 a lot from flying with him.

13 Q. And where were you in the OE process?

14 A. Day three of four. So we had that --

15 Q. Oh, this was your first trip? Oh.

16 A. -- for the first trip. And then we had another 3-day trip
17 after that.

18 Q. Okay.

19 A. That's when I was going to get my check flight.

20 Q. Was that with Dean also? Or that was with another --

21 A. That's with Dean.

22 Q. Okay.

23 A. And then I had a -- the following day I think I had a FAA
24 observation.

25 Q. Do you recall what time you woke up on the morning of the

1 event?

2 A. 9:00 a.m.

3 Q. Okay. And about -- how about your activities between? What
4 time did you have to leave for the airport?

5 A. 2:00.

6 Q. Okay. So you had a lot of time.

7 A. Yes.

8 Q. Did you hang out at the hotel or did you get out?

9 A. Yeah. I went and had breakfast at the hotel and walked
10 around New Orleans, went shopping, came back, had lunch.

11 Q. And how about on January 9th? Do you recall when you might
12 have gone to bed?

13 A. Probably around 11:00 p.m.

14 Q. Any problems falling asleep or staying asleep?

15 A. Not that I recall.

16 Q. No? Okay. Any -- anything stand out in the 3 days prior to
17 that? Any reduced sleep opportunities or problems sleeping or
18 staying asleep?

19 A. No.

20 Q. No? Okay. Prior to this trip pairing, were you on duty? Or
21 were you --

22 A. No. I was waiting for OE.

23 Q. You were waiting for the OE, okay. Anything unusual about
24 those activities during those days?

25 A. No.

1 Q. No? Okay. When you're not working, typically when do you go
2 to bed and wake up?

3 A. Typically I go to bed around 10:00, 10:30 or -- and then I
4 typically wake up about 6:00.

5 Q. Do you take any medications?

6 A. Not on a regular basis.

7 Q. Okay. And the 72 hours beforehand, did you take any either
8 prescription or nonprescription medication that affects
9 performance in any way?

10 A. No.

11 Q. Okay. Ever been diagnosed with a sleep disorder or talked to
12 a doctor about any sleep issues?

13 A. No.

14 Q. Okay. Did you feel rested the day of the event?

15 A. Absolutely.

16 Q. Yeah? How did Dean seem?

17 A. Normal.

18 Q. Okay. Do you wear glasses?

19 A. Sometimes.

20 Q. Were you wearing them during the flight at all that you
21 recall?

22 A. I probably wore them out for taxi-out --

23 Q. All right.

24 A. -- and taxi-in is when I normally wear them.

25 Q. Any problems with color vision?

1 A. No.

2 Q. Hearing?

3 A. No.

4 Q. How would you describe the workload on the takeoff leading up
5 until the time of the event when it occurred?

6 A. Normal routine.

7 Q. Okay. How'd you feel the crew resource management with Dean
8 was?

9 A. Fabulous. Like I said, I -- it's textbook. I mean, if
10 flying with a check airman, any check airman, you just -- actually
11 flying with just about everybody, it's all standard. And that's
12 why we have that standard operating procedure, because you can fly
13 with anybody, and it's going to be pretty much the same responses.

14 Q. Great. Going back to the training that you had, either
15 initial, recurrent, upgrade training, is there anything that you
16 wish you had more of related to turbulence or the weather radar?

17 A. I think we do a lot of training on that. I think it's quite
18 adequate.

19 DR. WILSON: Okay. All right. Thanks, Debra. That's all
20 the questions I have for now.

21 MS. BALSLEY: Thank you.

22 DR. WILSON: Do you need to take a break?

23 MS. BALSLEY: No, I'm fine.

24 DR. WILSON: Okay. Shawn?

25 MR. ETCHER: Okay.

1 BY MR. ETCHER:

2 Q. Thank you so much for all you've given us so far. I
3 appreciate it. It's kind of helped me filling in a few blanks.
4 If it's okay with you, I'd like to go back just a little bit to
5 the flight. Kind of the climb-out part. You said you turned on
6 the weather radar -- or I'm sorry, you guys turned on the weather
7 radar mid 20s or somewhere in that range? Just --

8 A. Somewhere in that range.

9 Q. Okay. Do you recall -- did you turn it on? Did the line
10 check airman turn it on? Help me understand it -- what that --
11 who normally runs the radar?

12 A. Well, we can run it a range -- our own ranges. So we set our
13 own range, and we have one radar that's turned on. So I believe
14 Dean turned it on, and I adjusted my range.

15 Q. Okay. Can you be on a different range than --

16 A. Yes.

17 Q. -- the other pilot? Okay. And you'll -- and it'll still
18 give you a picture and give them a picture?

19 A. Right.

20 Q. Okay. So if the line check airman had turned on the radar,
21 how often as an FO -- because you're in a unique position. You
22 just upgraded, so you've got a unique set of experiences. You've
23 been on the right seat and now you're working to the left. How
24 often, seated in the right seat, did you use the radar? Adjust
25 it, the tilt, the range, the gain, all of that. Range, sorry.

1 That's on your side. But how often did you do that?

2 A. Probably once a pairing.

3 Q. Okay.

4 A. Quite a bit.

5 Q. So it's easy?

6 A. It's easy, yes.

7 Q. Okay. All right. Is that kind of the standard? Captains

8 didn't say, no, get away, that's my switch or anything like that?

9 A. No.

10 Q. Okay. All right. And as you guys were climbing out, you had

11 the radar on. Forgive me, do you recall what kind of an angle you

12 had the tilt at?

13 A. I don't recall.

14 Q. Okay.

15 A. I mean, we keep it on an auto --

16 Q. Okay. And --

17 A. -- most times.

18 Q. -- what does that do? What does auto do? It -- for -- I'm

19 not an Airbus guy, so I'm sorry. You're -- I want to make sure I

20 understand the Airbus radar that you guys have, so I make sure I'm

21 kind of playing on the same page as you. When you put it on auto,

22 what does it do? Does it get rid of ground clutter? Does it just

23 park it at a certain angle for a certain altitude? Help me kind

24 of understand if you can. And it's -- if you --

25 A. It's supposed to suppress the ground clutter and just kind of

1 give an optimum tilt for the -- whether we're climbing or -- we
2 weren't climbing an extreme angle, but just take -- it gives --
3 kind of gives it the optimum tilt.

4 Q. Okay. So it looks at the tilt of the -- or the angle of the
5 aircraft and the altitude? Is that how it -- is it like -- I
6 mean, I know it's all behind the scenes, so I'm not asking you to
7 re-engineer it there. Sorry. I'm just trying to make sure I
8 understand what the auto function does, or how it -- how you
9 perceive it works.

10 A. I know how to operate the radar. I don't know all of the
11 inner ways of it -- of actually how it determines what it does.

12 Q. Okay. I always figured it's all some kind of black magic.
13 It just knows, right? Okay. It -- can you take it out of --

14 A. Yes.

15 Q. -- auto?

16 A. And then -- so if you're getting something that doesn't make
17 sense, you can either bring the tilt back down or bring it less up
18 to force it out of its ground clutter if it's reading too much or
19 it's just not giving you what you think it should be giving it --
20 giving you.

21 Q. Okay. And when you set it, if you want to manually set it,
22 how would you -- you're flying, how would you set that tilt so you
23 know it's -- if you're manually set it -- setting it, that it's
24 doing what you want it to do?

25 A. Well, if you're on takeoff and you're going to use it for

1 like if we're taking off and there's supposed to be storms ahead
2 of us, you might set it at a 6-degree, nose-up tilt so that it can
3 see what's more above you. Because you're going to be climbing,
4 and that's what you're more interested in.

5 Q. Okay. And so that's takeoff. How about climbing out the
6 in-route portion?

7 A. Well, the less angle you're going to be climbing, the less
8 tile you're going to need because it -- you don't need it to be
9 tilting all the way. And I mean, you can adjust it as you can
10 determine if it's giving you the information that you are wanting
11 it to give you.

12 Q. Okay.

13 A. So you can't have it tilted too far down because it will get
14 too much ground clutter.

15 Q. Okay.

16 A. And then you'll kind of just -- you'll force it up so that it
17 won't give you all that ground.

18 Q. So do you -- forgive me, this probably sounds like a very
19 elementary question for you. But do you want it to give you a
20 little ground clutter, or not very much, or not?

21 A. Oh, if you can -- just so that you know what you're seeing.
22 You may have a little bit of ground clutter. I mean, it depends
23 on what kind of terrain you're in.

24 Q. Okay. And that kind of helps. Sorry, it's -- I'm just
25 trying to compare it to something I've flown just to see how it

1 sets. Okay. Does it detect turbulence as well, the weather
2 radar?

3 A. Yes. It's got a Doppler turbulence switch on there.

4 Q. Do you use that?

5 A. That should be on all of the time.

6 Q. Okay. Have you ever seen it show -- or let me rephrase that.
7 How would it show you turbulence?

8 A. As image in the -- if it's got yellow, that's going to
9 indicate that there's moderate turbulence possibility.

10 Q. If it's in turbulence mode? Or is it -- because it --
11 forgive me, there's colors, you know?

12 A. Right.

13 Q. But you have red, yellow, green I know on weather radar --

14 A. Right.

15 Q. -- correct? So do you have that same color on your
16 turbulence?

17 A. Yes.

18 Q. So if you have it on weather radar, does it show turbulence
19 as well?

20 A. Yes.

21 Q. Okay. Is there a way to detect it between the two? I know
22 we all see red's bad, right?

23 A. Right.

24 Q. And so we avoid that. It's probably going to be pretty
25 rotten.

1 A. Right.

2 Q. But does --

3 A. We try to avoid the yellow as well.

4 Q. And I appreciate that sitting in the back, so thank you very
5 much. I don't like my drink spilling on me. I appreciate that.

6 But how would it show turbulence? I mean, I would assume it
7 would be a different color maybe? Or is it a similar color? Or
8 maybe you've never seen it. I don't know.

9 A. Usually when we're -- we've got weather ahead of us, it's all
10 turned on.

11 Q. Okay.

12 A. And so I don't believe there is a way to distinguish between
13 the two.

14 Q. Okay.

15 A. Usually with the -- with bad weather, there's -- the
16 turbulence is a factor as well.

17 Q. Okay. And that makes sense. Sorry, I didn't mean to --

18 A. Yeah.

19 Q. You know, it's just when people start throwing colors out, I
20 just want to make sure I'm thinking the same color as they are.

21 All righty.

22 How does -- I know you talked about flying the 756, and you
23 said that radar's similar, but you have a lot of other experience
24 as well. You have flown the CRJ, the Embraer jets, even a private
25 jet. How does this weather radar compare to other weather radars

1 you've flown? Is this one similar, better, not so good?

2 A. All the ones I've flown are very similar.

3 Q. Okay.

4 A. The only thing we had better on the private jet is we had
5 satellite weather. And that's -- I think that's the best weather
6 source out there. But on any of my airline jobs, I've never had
7 the satellite weather available.

8 Q. And what do you mean by satellite weather? Is that like the
9 WSI app weather? Or is it like --

10 A. It's put in with your Garmin. It's an XM product.

11 Q. Okay. And forgive me, the -- do those have delays as well,
12 correct?

13 A. Not very much of a delay.

14 Q. It -- does WSI have a delay?

15 A. Not very much.

16 Q. Okay. Would you compare -- would you say they're comparable?
17 Or one a little quicker?

18 A. Well the XM satellite, I -- like I said, that's probably the
19 best weather product I've had in an airplane.

20 Q. Okay. All righty. Forgive me, we probably asked this and I
21 completely missed it. Were you the pilot flying or the monitoring
22 one?

23 A. Pilot flying.

24 Q. Is that how it was this whole trip? Or did he -- did your
25 line check airman fly a couple legs?

- 1 A. He flew a couple legs.
- 2 Q. Okay. And you said this was -- you said this was day three
3 of four? Or did my --
- 4 A. Yeah. Day three of four.
- 5 Q. Do you remember how many legs you did the day before? The
6 first 2 days? And it's okay if you don't. I don't know --
- 7 A. Yeah, I can --
- 8 Q. -- works fine. It's --
- 9 A. No, I can look it up. He flew the first leg to Portland.
- 10 Q. Okay.
- 11 A. And then I believe I probably flew the previous three legs.
- 12 Q. Okay. And that's -- I just kind of wanted to get an idea of
13 how much flying you were doing versus him and --
- 14 A. I was doing most of the flying.
- 15 Q. Okay. How do you guys -- as an FO, how did, how did that
16 usually work on line? Did you guys alternate legs?
- 17 A. Alternate legs.
- 18 Q. Okay. So OE's a little special?
- 19 A. A -- it's a special.
- 20 Q. Okay. All righty. I know you said you flew the Airbus a
21 little bit as an FO.
- 22 A. Correct.
- 23 Q. Did that help you with your transition? Did it, you know --
- 24 A. Yeah. It definitely helped with the transition.
- 25 Q. Okay.

1 A. I -- it was flying the same airplane just from the seat --
2 you know, from the right seat to the left seat.

3 Q. Was it a hard transition to come from -- was it the 756 you
4 flew before the Airbus?

5 A. Correct.

6 Q. Was that -- how was that decision coming -- that transition
7 coming from a Boeing to an Airbus? Was the -- I know that you say
8 that the training here was good and really got you ready, but was
9 that a hard transition or a simple transition? Were they
10 likeable, comparable?

11 A. I mean, they're both airplanes. They're -- I mean, they're
12 different terminology. So it was mostly learning the different
13 terminology, and the flight management system was different. But
14 they prepared us really well for that. They gave us these packets
15 beforehand to -- you know, for Boeing terminology versus Airbus
16 terminology.

17 Q. Okay. All righty. We'll go back now, if you will, to the
18 climb-out. Kind of talked about the radar, and you kind of helped
19 me with that. So I -- my brain hopefully can recall it as you
20 tell me a little bit more. You saw some weather coming ahead.
21 Did you detect it on your radar or did you visually acquire it?
22 Both?

23 A. Both.

24 Q. So you were in the clear?

25 A. We were in the clear.

1 Q. Okay. Did you ever get into the clouds?

2 A. No.

3 Q. Okay. So you saw the weather, you requested a --

4 A. Right deviation.

5 Q. Right deviations, thank you. I knew if I -- I had a 50/50
6 shot, and I was going to guess wrong. So you asked for right
7 deviations, and they didn't give them you?

8 A. Correct.

9 Q. Okay.

10 A. Maybe 30 seconds later. It was enough time for us to discuss
11 about seating the flight attendants, and Dean made the
12 announcement to have the flight attendants seated.

13 Q. Okay.

14 A. And then like I said, that was simultaneous. While he was on
15 the PA, they told me I could make the right turn. So that's why I
16 responded, and I made the right turn.

17 Q. Okay. What -- help me understand. If I'm sitting on your
18 jump seat, I just kind of want to see what you would be thinking.
19 If they told you standby, and you kept getting closer to the
20 weather and closer to the weather, what actions could -- would you
21 have done? Could you have done?

22 A. Oh, I could have exercised my captain's authority and made
23 the right turn and advised them we were turning right for weather.

24 Q. Okay. How close would you get before you exercise that
25 authority?

1 A. I don't know, 40 miles.

2 Q. Okay. Is there any guidelines with United on how close to
3 get to weather -- or not get to weather actually?

4 A. Right. Well there is, and again, it's when we're getting
5 towards convective activity. Something with sharp edges. Then we
6 have absolute definitions of when we're supposed to -- we're
7 supposed to avoid the anvil side by so -- by 20 miles. But we'd
8 never even -- we didn't have that type of weather, but we didn't
9 even get double that away. I mean, it was -- we were much further
10 away than that.

11 Q. Okay. All righty. So you were painting a cell kind of
12 off -- a little off left. Is it -- is that what I'm --

13 A. Yeah. Oh, it's -- when we're calling for our deviations,
14 it's pretty much in front of us.

15 Q. Okay.

16 A. But -- so that's why we were going to go off to the right.

17 Q. Okay. Was there anything else off to the left? Besides that
18 one that was looking right at you, was there any weather off to
19 the left?

20 A. Yes.

21 Q. Okay. So help me understand why you guys chose right versus
22 left.

23 A. Because that's our flight path.

24 Q. Okay.

25 A. And also the wind direction, that kind of stuff. And it

1 was -- it just made the most sense --

2 Q. Okay.

3 A. -- for our flight path and our flight direction and the
4 weather.

5 Q. Were you showing anything off to your right --

6 A. No.

7 Q. -- towards your deviation? Was that going to keep you
8 from --

9 A. Yeah. That was going to keep us completely to the clear and
10 give us the least amount of deviation to our flight plan route.

11 Q. Okay. All right. Now I think you said as you were starting
12 to turn, you hit a little light chop?

13 A. Right.

14 Q. I won't call it turbulence, sorry.

15 A. Right.

16 Q. A little chop. It's like 2 seconds worth?

17 A. Correct.

18 Q. Did you guys see any aircraft in your area --

19 A. No.

20 Q. -- that could have produced anything?

21 A. No.

22 Q. Nothing was showing up on your screens?

23 A. Nothing was showing up on our screens. So the only time ATC
24 even said something to us was further back when they said they
25 were painting weather ahead of us. We confirmed it, that's when

1 we turned on our radar, and -- but we saw it, and it was painting
2 on WSI, everything.

3 Q. Okay. And I know pilots -- inherently we listen to what
4 other pilots are screaming about, because we don't want to
5 encounter --

6 A. Right.

7 Q. -- what they're having --

8 A. Right.

9 Q. Did you hear anybody talking about any turbulence? Any
10 weather?

11 A. Not in our area.

12 Q. Any deviations?

13 A. Not in our area that I recall.

14 Q. Okay. No, and that -- and I know sometimes we don't really
15 pay attention to what we didn't hear, but I'm just kind of seeing
16 if you're --

17 A. Right. And our dispatchers are really good about sending us
18 the information over ACARS. And if other aircraft are --
19 especially with this new TAPS program, we get it pushed to us.

20 Q. Okay. Did your dispatcher send you anything?

21 A. No.

22 Q. Did you get -- did TAPS push you anything after --

23 A. No.

24 Q. -- you went through it?

25 A. No. That's what I'm saying. That -- that's why I --

1 Q. Okay.

2 A. -- we were both surprised when we heard it was a turbulence
3 event, because we didn't get even our own -- and you'll get it
4 if -- even if it's your own aircraft. And we didn't get anything.

5 Q. Okay. All right. So you've started your deviation, you hit
6 the bumps, and I get a little fuzzy. Maybe it's just because
7 there's a lot of, you know, the line check airman did this, you
8 did that. So kind of, just a little detail if you will, what did
9 you do when you guys -- when you hit the bumps? I know you were
10 in the turn, and you hit the bumps. Did you do anything
11 different?

12 A. No. Again, there -- it was a very standard light chop.

13 Q. Okay.

14 A. No aircraft, I mean, it wasn't like I -- I mean, the
15 autopilot, everything was fine. I mean, there was no corrective
16 action needed.

17 Q. Okay. And then you said I think -- and forgive me, don't let
18 me put words --

19 A. Yeah.

20 Q. -- in your mouth. But I think you said that very shortly
21 thereafter, the line check airman was going to call the back to
22 have them check in, and you said that they called up before he had
23 a chance?

24 A. Right. He didn't get to call back. Because you normally
25 have them -- the flight attendants check in. And I mean, that was

1 the only bump we had, so that would have been his next call.

2 Q. Okay.

3 A. But before he could make that call, Deborah called up --
4 Deborah, the purser, called up and informed us that she had been
5 hurt.

6 Q. Okay. When you found out she was hurt, what went through
7 your mind? That you -- if you can recall? And --

8 A. Oh, I --

9 Q. -- keep it clean of course.

10 A. Yeah.

11 Q. No, I'm just kidding.

12 A. No, I was upset. I've never had an injury on any of my
13 flights, ever. I've been, I mean, flying for a long time. I
14 started flying in '92, so I mean, I -- it's just -- and when
15 you're -- when some -- when you're in charge of an aircraft of
16 people, and other folks, and they get -- somebody gets hurt, it
17 bothers me a lot.

18 And so my first concern was, you know, if she's going to be
19 okay, what we needed to do with -- we needed to land immediately.
20 I mean, what's wrong? What could we do? And so we just got as
21 much information as we could, made sure she was happy with what
22 decisions we were ultimately doing, and she had all the input on
23 that as well. And I really feel that was -- worked really well
24 for her wellbeing as well.

25 Q. And when you mean she was happy, what do you --

1 A. Not -- so I mean, we asked her, do you need us to divert now?

2 Q. Okay.

3 A. I mean, we can divert right now. We can get you on the
4 ground. No, no, I want to continue to Newark. Okay, well let's
5 get you medical help. Let's find out what we can do.

6 And I mean, it was -- we had all these resources available,
7 and they were all utilized. And that -- I mean, it was amazing
8 how everybody just came together and did what they were trained to
9 do. And I think we had the best possible outcome given the
10 situation as it occurred.

11 Q. Okay. And that helps. I just want to make sure I knew what
12 you meant. So thank you. I want to show you a few graphic -- or
13 graphics, if I will --

14 A. Okay.

15 Q. -- that our weather guy had generated for us --

16 A. Okay.

17 Q. -- which kind of got us looking at this a little bit. It
18 kind of seems a little different than what you're describing.
19 It's not uncommon. You guys had the bird's-eye view. I'm
20 trusting your eyes a lot better than computers.

21 You probably recognize that, right?

22 A. Right.

23 Q. And I understand United may not use that anymore with their
24 weather packet? Or they do? Or --

25 A. I heard that they are -- I haven't flown since, but I heard a

1 bulletin came out maybe next -- last week or so that they aren't
2 using that anymore. I mean, this gives you a great picture. I --
3 this is the picture I showed to the flight attendants just to
4 encourage them that, for the rest of the flight, it's going to be
5 smooth. I just need to get us through the top of climb.

6 Q. Okay. Do you feel that picture was an adequate, accurate
7 depiction of what you were seeing?

8 A. Well, this is all forecast. This is before the flight. So
9 it just -- and that's all we can do on our briefings, is just --

10 Q. Right.

11 A. -- say, this is what we're going to encounter. And not that
12 it's necessarily going to happen, because I'm going to deviate.
13 I'm not going to go through weather. I'm going to keep it as
14 smooth as possible, but just in case, this is my worst case
15 scenario.

16 Q. Okay. And is it -- is the forecast -- I know, they're
17 forecast, right?

18 A. Right.

19 Q. They're only as good as the person that created them --

20 A. Right.

21 Q. -- 2 hours before.

22 A. Right.

23 Q. Or more.

24 A. I mean, this came out, yeah, 2 hours before. Most of this --
25 most of the time when we download our -- while we're still at the

1 hotel, we're able to download this.

2 Q. Okay. But did that kind of give you a picture of what you
3 were dealing with, and then when you got airborne it was like, oh
4 yeah, it's a little different than that, but not a lot? Or, oh
5 wow, that was way off? Or just -- did you even think about it
6 after you looked at it, talking to the flight --

7 A. Yeah, we -- I mean, we have the current stuff coming up on
8 our WSI. And then -- and we're working off that, we're working
9 off what -- obviously our eyes and what we see is really the most
10 accurate. And then also having the radar --

11 Q. Okay.

12 A. -- on the airplane. So we're, again, using all our available
13 resources to make the best decision at the time.

14 Q. Okay. All right. Now this picture, you see these white dots
15 coming across here? That's your overlaid ATC ground track.

16 A. Okay.

17 Q. We estimate -- and I say estimate that, that's where the
18 turbulence occurred. The only reason I say we estimate that is
19 because we don't have an accurate lat/long on --

20 A. And do you know what the elevation is for each of these?

21 Q. I've got to see, because he put it all on the back. If I
22 could just read it, I'd be great. It's -- he said -- our weather
23 guy is what pulled this up. And he said it was likely below your
24 flight path. He thought --

25 A. No, that's what I was going to say. With -- that would have

1 been well below our flight path. Again, when we talk about our
2 weather training, if we're going to go over thunderstorms, you
3 have to clear them by at least 5,000 feet. You don't even -- I
4 mean, and this would have been -- if there was any weather, it
5 would have been well below us at 30,000 feet if that was something
6 down there at 5,000.

7 If you look at this, this moderate turbulence they're talking
8 about, that's between 10,000 and 19,000. So you got -- I mean,
9 that -- we would not have been anywhere near that. I said, the
10 yellow that I saw on my radar was past the half ring, so if I'm at
11 a 80 to, you know -- or further range, that was way -- well far
12 away. Far away enough that I didn't have to exercise captain's
13 authority to --

14 Q. Okay.

15 A. -- make a turn.

16 Q. But let me just make sure I understand. This picture that I
17 have labeled one here, it is --

18 A. Below us.

19 Q. -- not an accurate depiction of what you guys were looking
20 out --

21 A. No.

22 Q. -- the window? Okay.

23 A. No.

24 Q. All right. This is another one, and this one is at about
25 flight level 270.

1 A. Okay.

2 Q. So a little bit below you, not a lot. And again, the flight
3 track, this is just our estimation of where it was.

4 A. So we're in the clear. That's showing we're in the clear.

5 Q. Right. But does this kind of resemble what you guys were
6 seeing? Or is it not? And I'm only asking because if it's not
7 what you guys were seeing with your eyes, then I want to -- he
8 wants to make sure that he looks at, how could that be different?

9 A. Well it could have been below us. We're looking -- I mean,
10 if it's well below us, we're looking above us, around us, because
11 we're still climbing. And we're going to be deviating off to the
12 right.

13 Q. Okay. And he said this was about 27,000 feet. So it would
14 have been a little bit --

15 A. Below.

16 Q. -- 3,000, 3,500 feet below your turbulence encounter.

17 A. Okay.

18 Q. So I just -- I wasn't sure if like the yellow up here to the
19 left, is that what you guys were looking at that you were wanting
20 to get -- deviate away from?

21 A. Yeah.

22 Q. Or --

23 A. I mean, we had something further away --

24 Q. Okay.

25 A. -- that -- I don't know how -- what your scale is on this,

1 or --

2 Q. And I --

3 A. -- how close that is.

4 Q. I wish I knew. I don't. I should have had him give me a

5 scale.

6 A. Right. I mean, that could have been 100 miles ahead of us,

7 yes.

8 Q. Okay.

9 A. There was -- it looks like we're in the -- we're going this

10 direction, so that would have been off to our left.

11 Q. Okay.

12 A. Correct? Because we're --

13 Q. Right.

14 A. -- flying this way off to our left.

15 Q. And this is you guys coming up --

16 A. Yeah.

17 Q. -- this way, and in theory you go that way. He just tried --

18 A. Right.

19 Q. -- tried to do the ground tracker.

20 A. And so, like I said, we'll -- before I made that right turn,

21 it was off our nose about 80 miles.

22 Q. Okay. And this one is, I believe, right around 310 -- 330,

23 sorry. So that'd be a little bit above you. And again, about in

24 here --

25 A. So it's going to be off to our left at that point.

1 Q. Yes. And I don't want to assume a thing, but I'm going to
2 guess that this is probably the stuff --

3 A. Well --

4 Q. Let me rephrase that. Was -- were you painting anything up
5 in this direction?

6 A. Well, off to the left and ahead of us, yes, we had stuff
7 painting.

8 Q. But how about this stuff south of you, to the right of you?
9 Do you --

10 A. I don't remember that.

11 Q. Okay. And that's -- it's -- I know it's been a long time
12 ago, so --

13 A. Right. And --

14 Q. -- it's understandable. I just -- it kind of gave us a
15 little concern when we heard, oh, they were in the clear, there
16 was no clouds, but we're showing different. And so we want to
17 make sure that what we're pulling is accurate --

18 A. Right.

19 Q. -- or not.

20 A. Yeah. I mean --

21 Q. And if it's not accurate, we want to know why.

22 A. Yeah. I mean, this will still -- say you pull up something
23 like this, this is still going to be showing, but it's going to be
24 from 17 to 24.

25 Q. Right.

1 A. So if we're at 36,000 feet, we're not so concerned about
2 that.

3 Q. Right.

4 A. Or that's why, you know, if it's up higher, we're going to
5 stay lower.

6 Q. Okay. And in this one is what he says would be equivalent to
7 40,000 feet. And you -- the star here is where he says is your
8 turbulence encounter.

9 A. Okay.

10 Q. This little cell up to the left is around 40,000 feet
11 according to the Doppler readings that he got from different
12 radars. Does that even remotely look similar? Not even in the
13 ballpark? Help me kind of understand.

14 A. Again, the weather that was ahead of us, we -- the reason we
15 were deviating is we knew we wouldn't be able to clear it.

16 Q. Okay.

17 A. So it was far enough away that we just did -- we waited for
18 our clearance for our turn.

19 Q. And by not being able to clear it, is it -- it was way --

20 A. Well, that -- so --

21 Q. -- high above you? Or was it just --

22 A. Well, yeah. I mean, it sounds like it'd be at least 40,000
23 feet.

24 Q. Okay. I just wanted to make sure it wasn't -- your
25 performance of your airplane wasn't going to get you up there, or

1 it was just --

2 A. It was just higher. Yeah. No, I mean --

3 Q. It was just higher? Okay.

4 A. -- we don't climb that high.

5 Q. Okay. So as -- that's part of the reason we wanted to sit

6 down with you and just kind of look at this. Because you guys had

7 two eyes --

8 A. Right.

9 Q. -- in your head looking out. Probably it's going to --

10 A. And we could see. And that's what so nice about being able

11 to see the weather ahead of you. You can avoid it.

12 Q. Right. And you kept saying you were in the clear. And it's

13 like, okay, so they're seeing --

14 A. We're seeing everything.

15 Q. -- they're seeing it.

16 A. Yeah.

17 Q. They're just -- they're not in the clouds and going --

18 A. Right.

19 Q. -- by just their radar. Okay. So I just want to make sure

20 that these pictures aren't -- I mean, obviously it depends on

21 altitudes and everything.

22 A. Right.

23 Q. But they're not what you guys were actually painting and

24 visually seeing?

25 A. Correct. And we'll paint stuff below us too.

1 Q. Right.

2 A. But that doesn't mean we're feeling anything from it.

3 Q. Okay. Nope, and that makes sense. I just wanted to make
4 sure we knew, because our meteorologist, that was some questions
5 he had.

6 A. Okay.

7 Q. And he wanted to have a clear understanding of it. So thank
8 you, that helps us some.

9 A. Okay.

10 Q. We've still got to figure out what this is really showing
11 him, and he's working on that.

12 A. Okay.

13 Q. But that was just some questions he had. All right.
14 Excellent. I only have a few more questions --

15 A. Okay.

16 Q. -- then I'll let somebody else go, because you're probably
17 tired of me, I know. You just came through training?

18 A. Correct.

19 Q. Upgrade training?

20 A. Well, I mean, it was November and December.

21 Q. That's pretty recent, right?

22 A. Yes.

23 Q. To me in my mind. And I think you said earlier that you were
24 qualified as a captain on December 14th?

25 A. December 14th was my final check ride, yes.

1 Q. And it -- forgive me, are you qualified as a captain when you
2 finish your type rating in the sim? Or is it when you finish OE?
3 I just want to make sure I understand what you're saying is
4 qualified.

5 A. It's -- we're qualified, we get -- so if I hadn't been type
6 rated on the aircraft, I would have got my type rating that day.
7 But I got the type rating as a first -- we all get the -- it at
8 United as a first officer. So yes, I was qualified. But part of
9 my qualification is to have supervised training with a line check
10 airman. And that's what I was doing, was my 25 hours of that.

11 Q. Okay. I just -- that's why I wanted to make sure when you
12 said you were qualified. I just wanted to make sure I understood
13 what that meant.

14 MR. HANSON: Is it helpful to say checked out and signed off?

15 MS. BALSLEY: Checked out and signed off was what I did at
16 the completion of my time with our line check airman.

17 MR. ETCHER: Okay. Now I understand it. I have to use
18 simple words, so --

19 MS. BALSLEY: Yeah.

20 MR. ETCHER: My apologies.

21 BY MR. ETCHER:

22 Q. And you -- I think you told Katherine earlier that you
23 thought the training on the weather radar was good. Do you think
24 the training overall made you ready to sit in that left seat, felt
25 confident in it? Or was there areas that could have been

1 improved?

2 A. Oh, I felt very confident.

3 Q. Okay.

4 A. As I -- it's an unfortunate incident that occurred, but I
5 don't know if there's anything we could have done better. I mean,
6 we had -- and even after the event, everything went really well,
7 those people working together. Great CRM.

8 I mean, it was -- we didn't even have to ask for volunteers.
9 People came to us. And that was -- well, I think that's
10 indicative of the training and the -- that they have for the
11 flight attendants to look out for each other. And it was really
12 good.

13 Q. Okay. I think earlier you said that -- we were talking about
14 the weather radars and how the airplane you were on was one of
15 those newer radars, and they sent out a bulletin to train you --
16 or to -- did you say something?

17 A. No. I didn't say that.

18 Q. For some reason something about training and bulletins that's
19 written down here, and I'm like, I don't know why.

20 A. No. I -- the only thing I had used a word about a bulletin
21 is there -- I haven't even been back to work, but I think a
22 bulletin came about taking something off of our package --

23 Q. Okay.

24 A. -- our weather package. But it -- no, I didn't say anything
25 else about bulletins.

1 Q. Okay.

2 A. I just went through the full training -- full course, and we
3 have retired folks teaching the beginning of ground school, and
4 they go through this in depth with us.

5 MR. ETCHER: Okay. Excellent. I think that's all I have for
6 now. Thank you.

7 DR. WILSON: All right, thanks. Michael?

8 MR. WHITEHEAD: Oh, hello again.

9 MS. BALSLEY: Hello.

10 MR. WHITEHEAD: Just based on what -- well, let me start by
11 saying this first. Great job handling it. You know, it sounds
12 like in the end a lot of good things came either from a CRM
13 perspective, and it went very well after the event. And I fully
14 understand that, you know, it was a surprise to you guys. You
15 didn't expect anything.

16 BY MR. WHITEHEAD:

17 Q. So that said, just based on really what we were just talking
18 about, so if you're a line pilot and there is a new change to the
19 fleet, you know, we could issue a pilot bulletin.

20 A. Correct.

21 Q. The pilot bulletin in this particular case is Bulletin 1602
22 for the 48xx and 49xx aircraft. This is just kind of piggybacking
23 on to what you were just talking about.

24 So if you're a line pilot, you know, there is various
25 training that we have, whether it's the CQDL or pilot bulletin

1 training, if you will, or messages or that sort of thing. Maybe
2 kind of going to back to his question just a little bit more.
3 From the training that you just went through for the captain's
4 course, since we already had -- or really, I guess you'd even say
5 from your first officer's course.

6 So we already had the 48 and 49s in the fleet.

7 A. Correct.

8 Q. Did the training that you got -- that you received include
9 differences?

10 A. It did.

11 Q. Okay.

12 A. And that's why I wouldn't have gotten a bulletin on it,
13 because it was actually -- I got here late enough that they would
14 have already incorporated it all.

15 Q. Whereas, if a pilot that went through training 10 years ago,
16 for him, he wouldn't have had it in his initial qual course. Just
17 trying to kind of clarify that.

18 A. Thank you.

19 Q. Okay. That one just hit me. Just -- this is totally
20 anecdotal, maybe from talking to other guys or other, you know,
21 pilots. As you're flying, whether you're a first officer or
22 during your two training courses for the Airbus, again, just
23 curiosity, have you heard any anecdotal information about one
24 radar being very much better than the other radar? And what I'm
25 specifically getting at is the two, 4901 and 4902, that have the

1 multiscan radar. Just curious.

2 A. I don't think people really talk about how different it is.
3 We just -- it is what it is, we use what we have.

4 Q. That's kind of what I expected. Just trying to kind of cover
5 the bases. Because part of that goes to -- I may be speaking a
6 little bit out of turn here, but part of I think what they're
7 looking into is, do companies need to be, you know, looking at
8 different radars or better radars or things like that if we're
9 trying to avoid -- so that's the only reason. Just a little
10 background --

11 A. I don't --

12 Q. -- of where that came from.

13 A. I don't know. We could have had XM satellite.

14 Q. Yeah.

15 A. It wouldn't have changed what happened on this flight.

16 Q. Yeah, and that's fair.

17 A. I mean, I love that XM satellite. I wish we -- it's almost
18 so easy to have just on a Garmin like I had on my little airplane.
19 But it wouldn't have changed the outcome on this flight. I
20 avoided it. There wasn't -- and it -- we weren't close enough
21 even.

22 Q. No, and that's fine. And honestly my question was kind of
23 going more towards just in general.

24 A. Okay.

25 Q. Just trying to get essentially more information for them

1 just, you know, for kind of the broad spectrum of --

2 A. Okay.

3 Q. -- overall trying to minimize turbulence events. And that's
4 all where it's kind of coming from.

5 I think this is the last one. We were talking about TAPS a
6 little bit, and I don't think I mentioned this to you. We talked
7 yesterday separately about the various systems in the Airbus or
8 the iPad, whether it's TAPS, or SkyPath, et cetera, just to try to
9 give them some background information and a little bit of -- you
10 almost might call it academics.

11 I am not an instructor, but that's where they -- just so they
12 kind of have a little bit of a systems knowledge coming in, and
13 know what is available to our pilots. But kind of on that note,
14 one of the things we talked about was SkyPath. And so I think we
15 talked about it a little bit, but I just wanted to get your take
16 on SkyPath. How much you use it, if you put any faith in it, I
17 guess is maybe a way to say it, or what your experience has been
18 with it. Because it's still kind of relatively new.

19 A. I've used it for 7 days on the line.

20 Q. Okay.

21 A. And that was my 7 days that I flew it in January, because it
22 wasn't on the line when I left.

23 Q. Okay.

24 A. Because I went out for training --

25 Q. Right.

1 A. -- pretty much November.

2 Q. Okay.

3 A. So it wasn't available to me before. I read up on it. It
4 was already -- it was pushed to my iPad, and I thought, why not
5 try it? It's not required as far as I know, but it's just another
6 tool, and why not have it up?

7 MR. WHITEHEAD: Okay. That's it. Yeah. Just trying to get
8 more data points. That's it, thank you.

9 MS. BALSLEY: Thank you.

10 DR. WILSON: All right. Keith?

11 MR. PHILLIPS: I, again, have the great luxury of being last,
12 and I think every question's already been asked. At least what I
13 had written down I had to cross off, so --

14 DR. WILSON: Awesome.

15 MR. PHILLIPS: My sad (indiscernible).

16 DR. WILSON: We're going to go around for just a quick -- any
17 follow-ups that anybody has. Do you need to take a break?
18 This --

19 MS. BALSLEY: No, I'm fine.

20 DR. WILSON: -- second round's always much shorter.

21 MS. BALSLEY: Okay.

22 DR. WILSON: I don't even have any questions. So that's
23 good.

24 MS. BALSLEY: Thank you.

25 DR. WILSON: Shawn, do you have any follow-ups?

1 MR. ETCHER: I usually do, but she's answered so many of
2 them, it's been amazing.

3 BY MR. ETCHER:

4 Q. But I guess the one question I have, and -- the WSI app. It
5 has lots of layers, right?

6 A. It does.

7 Q. Can it get too cluttered?

8 A. You can unclutter it.

9 Q. And is it user friendly?

10 A. It's --

11 Q. I know that's always the buzzword, but --

12 A. I think so.

13 Q. Is there a way to make it better? From a user-end
14 standpoint, is there something you can do better to it to -- that
15 you would think, oh man, if this was different?

16 A. I mean, copy XM. But --

17 Q. I'm getting a theme here.

18 A. Yeah. I love that. My boss was trying to get me to get rid
19 of it, and like, I would get rid of a lot of stuff on the
20 airplane, but not that.

21 Q. Okay.

22 A. I mean, especially going through the Midwest, I just, I loved
23 that XM weather. And WSI is very good. I was very pleased when
24 we got that. It's -- I mean, you can have it as cluttered as you
25 want it or as uncluttered as you want it. And with -- you can

1 figure out where the turbulence is just by changing the altitudes.

2 It's great.

3 Q. Okay. Just because I'm nosey, and it's my job I guess, but
4 what does -- what makes XM, in your mind, that much better than
5 you'd give up almost anything else on an airplane versus --

6 A. I would give up my radar and then -- rather than that. It
7 was just -- you know, it had the whole country as well. Well, I
8 mean, this does too. It just helped me avoid weather a lot
9 better.

10 The aircraft that I flew was very dynamic as well. I could
11 go up to 49,000 feet, so I could avoid a lot of weather that way.
12 I can't do that in the Airbus. So that combined with the
13 performance of the aircraft made it a much smoother ride for my
14 passengers.

15 MR. ETCHER: Okay. I -- that helps. Thanks. That's all I
16 have.

17 MR. WHITEHEAD: Nope, nothing else.

18 MR. PHILLIPS: Still nothing.

19 DR. WILSON: I -- just one question came to mind.

20 BY DR. WILSON:

21 Q. Did Shawn ask you whether, on the previous legs or the
22 previous days, if you all had any weather that you had to deviate
23 around?

24 A. I would say yes. I mean, it's pretty much every flight
25 you've got to deviate a little bit.

1 Q. Okay.

2 A. I mean it's -- unless you're just in SoCal. I mean, it's
3 just part of our job.

4 Q. All right. So this flight wasn't unusual?

5 A. It was very routine, and that's why -- I mean, we've had much
6 worse chop.

7 Q. Yeah.

8 A. Even a little turbulence.

9 Q. Yeah.

10 A. But I've never had anybody get hurt. And that's why I took
11 it personally. I still follow-up with Deborah, and I -- praying
12 she's back soon. And I know it'll be soon.

13 Q. Great. So we've asked you a lot of questions. Is there
14 anything that we didn't ask you that you think we should have
15 asked you or were hoping we would ask you?

16 A. No.

17 Q. Okay. Anything that you can think of, if you were, you know,
18 queen for a day, what you might want to see done differently?
19 Either -- you know, the keys to the kingdom, what would you want
20 to see to help you as a pilot?

21 A. I mean, it's just like when I came up here. I'm talking to
22 the flight attendants, and I'm telling them I'm coming up for
23 something like this. And I say, when the captain tells you -- or
24 when whoever comes over the PA and says, flight attendants, take
25 your jump seats, what does that mean to you? And so it means just

1 what it says in there is what they tell me. Of course, it's not
2 occurring. And actually, while I was talking to them, the captain
3 did say that. And so --

4 Q. Right.

5 A. And they were like, well, just like now. You know, we have
6 time to put the brakes on our carts, we have time to get to our
7 jump seats, we have time to put on our shoulder harness. We have
8 time. And I said, so that does make you think you have to run?
9 And I think that's what happened, is Dean made the announcement,
10 and I think Deborah just reacted too quickly.

11 And so I would have it where -- I think we're so worried
12 about turbulence events, and we scare the flight attendants so
13 much, that instead of them doing exactly what, under calm
14 situations, they say they would do, that they overreact, and when
15 you have time, they twist -- they fall, they twist their ankle,
16 and then they fall in front of everybody. And that's what I think
17 happened.

18 And if we hadn't made the announcement -- it wasn't -- it was
19 moderate chop. The Airbus has a handhold right below the overhead
20 bins, and had we got the bump, she was right there at 2B, she
21 might have just held her handhold instead of twisting around to
22 get to her jump seat.

23 Q. All right.

24 A. So if I could do -- if I could talk to the flight attendants
25 and ask them to make sure they understand the difference between

1 be seated immediately, be seated immediately versus flight
2 attendants jump seats, you got time. If I say be seated
3 immediately, you know what to do. Just stop and drop. You go.
4 But that wasn't what we had.

5 Q. Have you ever had to do that?

6 A. Yeah, we have.

7 Q. Yeah?

8 A. And we still don't have injuries. We do not have injuries.
9 And, you know, sometimes you'll tell them to stay seated coming
10 out of Denver or something like that, and they'll get up anyway.
11 And you'll hear them getting up. It's like, oh my gosh, I just
12 told you not to get up.

13 And I mean, again, it's because we do try to avoid the
14 weather, so half the time when we tell them to stay seated, we do
15 a good enough job of avoiding the weather that they're like, well,
16 she said that last time. We can get up.

17 Q. Right.

18 A. You know, the last time we never saw -- we never got
19 anything. It's a 2½ hour flight. You don't need to hurry. You
20 know, just wait.

21 DR. WILSON: Okay, great. Thank you so much. It was really
22 helpful, all the information that you gave us. You have our
23 contact information.

24 MS. BALSLEY: Thank you.

25 DR. WILSON: So if you think of anything else and want to

1 reach out to Shawn or myself, please don't hesitate.

2 MS. BALSLEY: Thank you.

3 DR. WILSON: Okay. Thank you.

4 (Whereupon, the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

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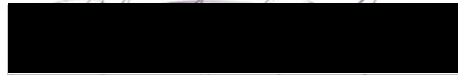
IN THE MATTER OF: UNITED AIRLINES FLIGHT 1754
AIRBUS A320 TURBULENCE EVENT
IN NEW ORLEANS, LOUISIANA,
ON JANUARY 10, 2020
Interview of Debra Balsley

ACCIDENT NO.: DCA20CA058

PLACE: Denver, Colorado

DATE: February 26, 2020

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.


Christy Wilson
Transcriber