

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

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DELTA PRIVATE JETS CRASH *

OROVILLE, CALIFORNIA *

AUGUST 21, 2019 *

*

Accident No.: WPR19FA230

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FLIGHT CREW INTERVIEW

[Erik Severance Interview #1]

Oroville Municipal Airport
 Oroville, California

Thursday,
 August 22, 2019

APPEARANCES:

ADAM GERHARDT, Air Safety Investigator
National Transportation Safety Board

HENRY SODERLUND
Textron Aviation

DON COULTER, Line Captain
Delta Private Jets

LYNEE CAMPOS, Chief Legal Counsel
Delta Private Jets

ERIK SEVERANCE, Pilot
Delta Private Jets

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I N T E R V I E W

MR. GERHARDT: Okay. This is Adam Gerhardt with the NTSB, and I am here with Erik.

MR. SEVERANCE: Erik Severance.

MR. GERHARDT: And, Erik, are you okay with me recording the interviews to produce a written transcript?

MR. SEVERANCE: Yes I am.

MR. GERHARDT: Thank you. And if we can just go again through the room of who is here?

MS. CAMPOS: Lynee Campos, Delta legal.

MR. COULTER: Don Coulter, line captain, Delta Private Jets.

MR. SODERLUND: Henry Soderlund, Textron Aviation air safety investigations.

MR. GERHARDT: And again, this is Adam Gerhardt with the NTSB, air safety investigator. Perfect.

INTERVIEW OF ERIK SEVERANCE

BY MR. GERHARDT:

Q. So, Erik, if we can start with basically the accident morning, that day, hotel to the airport, preflight, taxi, takeoff, evacuation. If we just start there first, and then we'll just do some follow-ups. And I'm just going to jot down --

A. Okay.

Q. -- highlight notes.

A. Sure. I can't recall what hotel we were at. I apologize. I stayed at too many of them. I believe we left about -- I don't

1 know, about an hour and a half prior to scheduled departure, or to
2 our scheduled departure. I'm not sure again.

3 So I arrived at the airport, upon arrival parking, I went to
4 the aircraft to preflight, and Cory was handling other
5 obligations, I guess fuel and catering and such as that.

6 Standard walk-around, nose cabinets --

7 (Interruption at the door.)

8 MR. SEVERANCE: Standard nose compartment, actuators, gauges
9 were all checked, verified. Continuing on with the walk-around,
10 no discrepancies with wings, vortex generators, static wicks,
11 everything continuing along the back. No issues with stabilator
12 or static wicks on the tail. Continuing on the other side, open
13 hydraulic bay, no issues/leaks noted in the hydraulic bay. Lav
14 door was checked, and I -- the spare key was also noted in the
15 hydraulic bay.

16 BY MR. GERHARDT:

17 Q. Okay.

18 A. On the backward inspection, the brakes were -- had not been
19 set yet, verified no leaks underneath. Continued around, checked
20 fuel doors, fuel door was fine. Continued to the front nose
21 compartment, verified the O2 bottle was secure, wiring pins were
22 installed, and the wing vane was checked. The Pitot-statics were
23 non-clogged.

24 Came back around, turned on the AP -- turned on the battery
25 switch, set the brakes, verified that the accumulator in the nose

1 was set and it was within the plus or minus 5 of the gauge.
2 Verified the brakes were within limits on the pin, at which point
3 we waited for fuel.

4 Fuel truck arrived, I can't recall how much was pumped in. I
5 did not handle that. End of -- at the end of fueling, I believe
6 the gauges were at about 4,170 on board. Again, I can't verify
7 that.

8 Q. Sure.

9 A. The truck had disconnected, verified disconnection, and
10 started the APU.

11 Q. Is that 4,170 pounds?

12 A. 4,170 pounds is what --

13 Q. Perfect.

14 Q. That's what I --

15 A. -- I vaguely remember.

16 Q. Got it. Yep. And again, this is to the best of your
17 recollection.

18 A. Yeah.

19 MR. GERHARDT: So, yeah.

20 MR. COULTER: The gauges aren't -- this is not --

21 MR. SEVERANCE: Yes, it was digital gauge.

22 MR. COULTER: Oh, okay.

23 MR. SEVERANCE: So this is --

24 MR. GERHARDT: Okay.

25 MR. SEVERANCE: This is what I had calculated --

1 MR. COULTER: Okay.

2 MR. SEVERANCE: -- from the digital readout that I'm --

3 MR. COULTER: Okay.

4 MR. SEVERANCE: -- pretty sure is what was on board. As I
5 said, APU power switch was turned on, test was -- button was
6 pushed, verified. Sequence of the APU numbers, 5, 500, 0 I think
7 it was. Verified my APU gen light was on and the two associated,
8 and red fire button were eliminated, at which point I started the
9 APU. No discrepancies there. The APU fired up, gen was
10 available. I turned on the gen, and then I had turned on the
11 bleeder for air movement in the cabin.

12 MR. GERHARDT: Okay.

13 MR. SEVERANCE: Then it was standard cockpit setup. I
14 verified the standby HSI. Battery was good, switched that on, it
15 went through its startup cycle. I turned the emergency light
16 switch on, not to the arm, verified that the internal emergency
17 lights were working, exit lights were working.

18 Went outside to the right side of the aircraft and verified
19 that the exit lights, I think they were LED, were working on the
20 right side.

21 MR. GERHARDT: Okay.

22 MR. SEVERANCE: Went back in, pushed that to the armed
23 position, turned on the avionics for the aircraft. This had a
24 Honeywell system, so as soon as the power turned on, the FMS
25 started its cycle also.

1 Went through the standard checks, tested the autopilot
2 features with the button on one side. It doesn't have to be done
3 on both. They passed, no flaws. I engaged the autopilot, hit the
4 trim switch to guarantee that it would disengage, it did. So that
5 was the secondary.

6 After that, FMS was on, I hit the accept button, I was
7 waiting up for GPS alignment, and I loaded from the GPS location.

8 MR. GERHARDT: Okay.

9 MR. SEVERANCE: I had gotten the ASOS. I can't recall
10 vaguely, I want to say that it -- winds were variable that day.
11 At that time the decision was made to use Runway 2. Flight plan
12 was put into the box from the ARINC flight plan that was filed,
13 and the perf data was entered into the FMS per the ARINC data
14 also.

15 MR. GERHARDT: Okay.

16 MR. SEVERANCE: No flags were noted. Other than that, the
17 packs arrived, loaded the bags, did another walk around, verified
18 everything was good, brakes were set. I went on board after the
19 passengers were on, got in the right seat.

20 Cory came out, he was handling I guess like, coffee pots or
21 something like that. He did a walk around, he pulled the chocks
22 after he verified with me that the brakes were set. He pulled
23 them, he came in, he briefed the passengers, he shut the door.

24 MR. GERHARDT: Okay.

25 MR. SEVERANCE: Standard checklist procedures were started

1 for startup. He had called for the start checklist, we went
2 through that, start checklist was completed. Right engine was
3 started first, no issues there. Left engine was started, no
4 issues there. After start checks were done, the APU gen was
5 turned off so gen checks could be completed on left and right
6 engines. No flaws there. Gauges were even, APU gen was turned
7 back on.

8 MR. GERHARDT: Got it.

9 MR. SEVERANCE: It was hot, so the bleed air remained on
10 also.

11 MR. GERHARDT: Okay.

12 MR. SEVERANCE: After that --

13 BY MR. GERHARDT:

14 Q. So no single engine taxi ops or anything like that?

15 A. No. No, no, no.

16 Q. Yeah. That makes sense. Got it. Just checking. Okay.

17 A. A review of the flight plan was done between Cory and I. We
18 saw no flaws or issues. He -- we did the single call, I guess it
19 was, taxi out Runway 2. My head was down, I told him my head was
20 down. I was looking at frequencies and flight plans to make such.
21 I don't know how long that lasted.

22 Brought my head up, he called for taxi checks. He had done
23 the rudder bias check on the ramp here prior to taxi, after which
24 we taxied out to Runway 2. I made a radio call, was it 1331 here,
25 I think, to cross there. Crossed that active -- or inactive

1 runway, and taxied down to Runway 2, during which time we did the
2 check, taxi checklist.

3 All checks were good, the TRs were deployed, and we had six
4 lights (indiscernible); two lights, paddles down; lights out. No
5 issues on the TRs. Arriving at the end of Runway 2, I said, head
6 down. I picked up the cell phone, I took my headset off, I called
7 Fresno Center for the clearance.

8 I got a hold of Fresno Center, they gave me the clearance,
9 they said hold for release. They came back, they amended one
10 waypoint on the initial flight plan and gave me a separate
11 departure frequency.

12 Q. Okay.

13 A. I had written this down on the TOLD card. Cory had seen it,
14 and he had corrected that in the FMS. I verified that, and he
15 changed the departure frequency in Com 2 -- of Com 1, which I also
16 verified.

17 Q. Okay.

18 A. We made a call, taking active Runway 2 departure. We took
19 the active, the before takeoff above and below items were called.
20 Per his request, we followed them, I called them, he verified, and
21 we started departure.

22 Cory advanced the throttles, as the power was coming up, I
23 said, speeds alive, it's usually around 50 knots or so. Eighty
24 knots, I called crosscheck, panel clear, verified. At V1 I called
25 V1. I called rotate, at which point Cory pulled the yoke

1 completely to his chest very quickly, which took me a little off
2 guard.

3 I don't know what the timeline was. It could have been a
4 couple of seconds, it could have been instantaneous, I don't know,
5 but as soon as there was no lift rotation -- literally the nose
6 never came off the ground, I called abort. I don't know where
7 that was on the runway. I don't know how much runway was left.

8 After that, it's kind of a -- I don't know. The air --
9 Q. Yeah.

10 A. Basically the aircraft came to a stop. I didn't know what
11 would happen -- what happened.

12 Q. Yeah.

13 A. When the aircraft stopped, Cory looked at me, he said
14 evacuate. I released my five point. I got up. As I was getting
15 up, I was looking out the left side window of the cockpit to
16 verify there was no issues outside the cockpit. I knew that we
17 were lower to the ground than usual. And that was shown as I
18 tried to open the main entry door.

19 I pushed, it was reluctant to open. And that's when I kicked
20 the door open. I don't know how far it came down, but it didn't
21 go down all the way. It came down enough for me to get out of the
22 aircraft. I stood on the left side of the door and asked the
23 passengers to evacuate.

24 I had eight passengers on board. The first two that got off
25 were sitting in the bench seat in front of the door, and they

1 followed the directions.

2 Q. Okay.

3 A. As they were coming off, I told them to go to the hangar. I
4 guess it was 100, 200 yards away.

5 Q. Got it.

6 A. And as the first two got off, the rest of them were coming
7 off. I told them to follow their associates.

8 Q. Got it.

9 A. After the last person got off, I turned around, verified that
10 they were all eight out there, and that they were moving towards
11 the FBO, at which point I got back onto the aircraft, came up to
12 the cockpit, and I had told Cory that the left engine is still
13 running -- left engine is surging, at which point I reached down
14 underneath my seat, unclicked the fire extinguisher, and exited
15 the aircraft.

16 I went to the back of the aircraft and started to put out
17 fire around the left side of the aircraft, even knowing that the
18 right engine was still surging.

19 Q. The right engine?

20 A. The right engine, yes.

21 Q. Right engine?

22 A. Yes.

23 Q. Okay.

24 A. The right --

25 Q. I wrote down left.

1 A. -- engine. The right. If I said left --
2 MR. COULTER: You said the left.
3 MR. SEVERANCE: It was -- okay. If I said left, my
4 apologies.
5 MR. COULTER: No, it's --
6 MR. GERHARDT: No, don't worry about it.
7 MR. SEVERANCE: No. It was --
8 MR. GERHARDT: Don't --
9 MR. SEVERANCE: It was the right engine.
10 MR. COULTER: Oh that's good.
11 MR. GERHARDT: Okay.
12 MR. SEVERANCE: Yeah, no.
13 MR. GERHARDT: The right engine.
14 MR. SEVERANCE: No, because I was surprised when I came back
15 to the --
16 MR. GERHARDT: Copilot's side.
17 MR. SEVERANCE: Yeah.
18 MR. GERHARDT: Right engine.
19 MR. SEVERANCE: Yeah.
20 MR. GERHARDT: Okay.
21 MR. SEVERANCE: Copilot's side.
22 MR. COULTER: Depending on which way you're facing the
23 airplane.
24 MR. SEVERANCE: The actual -- the TR was still deployed --
25 MR. GERHARDT: Okay.

1 MR. COULTER: Okay.

2 MR. SEVERANCE: -- on the right engine. So as I was coming
3 onto the aircraft, and I was standing on the stairs looking over
4 the top of the cabin, I could still see the TR --

5 MR. SODERLUND: Wow.

6 MR. SEVERANCE: -- deployed --

7 MR. GERHARDT: Wow. Okay.

8 MR. SEVERANCE: -- on the right engine. And as I stated, I
9 went in, grabbed the extinguisher, and went out, at which point, I
10 don't know what timeline that was. I saw Cory get off the
11 aircraft, he came back, he was doing something, I don't know what
12 it was, and then he basically said, come on man, it's time to go.
13 We've got to go. Evacuate.

14 MR. GERHARDT: Got it.

15 MR. SEVERANCE: And that's when we walked away. The aircraft
16 was not on fire at that point, but the right engine was still
17 running.

18 BY MR. GERHARDT:

19 Q. So as you guys were walking away, the right thrust reverser
20 is deployed, still going?

21 A. The right engine was still running.

22 Q. Yeah.

23 A. I could hear it.

24 Q. Got it. Okay. Perfect. Okay. And again, you were outside,
25 you saw the fire, you went back in, got the -- I think it's a --

1 it -- was it a red fire extinguisher?

2 A. Underneath the right seat, yes.

3 Q. And then you were spraying the grass?

4 A. The grass area in the rear and left of the aircraft.

5 Q. Got it.

6 A. On the dead engine.

7 Q. Got it. And again, at that point, the fire was contained to

8 the -- it wasn't under -- was it under --

9 A. It was not --

10 Q. -- the wing? Or --

11 A. It was not under the wing.

12 Q. Okay.

13 A. The fire was on the rear of the aircraft. I can't give you a

14 distance from it.

15 Q. Sure.

16 A. It was enough -- the brush was -- it was like in a little

17 grass fire.

18 Q. Yeah.

19 A. You know what I mean?

20 Q. I walked it once. It's really, yeah.

21 A. Yeah. And it just grew quick.

22 Q. Yeah.

23 A. I was back there, I used one fire extinguisher, and I wanted

24 to go back and get the other one. In fact, I think I did go back

25 to get the other one.

1 Q. Got it.

2 A. And at that point, it was just, nope, we had to go --

3 Q. Just get out of there, yeah.

4 A. -- and so we went.

5 Q. Okay. So some of the follow up questions -- clearance

6 delivery and the -- anything abnormal with the taxi out? Or --

7 A. I didn't notice anything --

8 Q. Yeah.

9 A. -- abnormal with the taxi. There was no real power used, we

10 were taxiing out. It's not like it's in uneven ground really --

11 Q. Right.

12 A. -- out here.

13 Q. Yeah. When you're getting your clearance and making the --

14 talking to clearance, making the flight plan changes, do you

15 remember where you were on the airport property at that point?

16 Were you holding --

17 A. We were holding short of Runway 2.

18 Q. Okay.

19 A. I did not make the call for clearance until we were number

20 one at the runway.

21 Q. Okay. So there was a couple, or one other plane?

22 A. I didn't see anything on -- out there.

23 Q. Oh, okay. Yeah.

24 A. There was not -- to the best of my knowledge, there wasn't

25 another plane down there.

1 Q. Okay. Do you remember about how long you held short of the
2 runway?

3 A. A couple minutes.

4 Q. Would have been the --

5 A. Probably in a -- I can look at my phone. I can try and tell
6 you.

7 Q. Yeah. If -- would it -- so yeah, that's a good way to put
8 it. So if you can remember -- again this is the best you can
9 remember, but how long -- when you talked to clearance, where you
10 were, and about how long that would have been.

11 A. That was yesterday's call, that was just to verify with them.
12 That was the second call. I don't know if it has the first call.
13 Is there a way to do that on these phones?

14 MR. COULTER: If you select the clearance call number, it
15 should have a call log below it.

16 MR. GERHARDT: Yeah. It should have --

17 MR. SEVERANCE: Here you go. Okay. Number I called, I
18 thought it was Fresno. Apparently it's Sacramento. That is the
19 clearance delivery number. I called at 11:23 a.m., and longevity
20 of that call was 5 minutes.

21 MR. GERHARDT: Okay. Was the -- were you taxiing when you
22 first made the call, or you --

23 MR. SEVERANCE: No.

24 MR. GERHARDT: -- holding short?

25 MR. SEVERANCE: We were holding short.

1 MR. GERHARDT: Okay, perfect. And that's -- yeah. It's not
2 for -- it's just to try to line up where you guys were. Not a --

3 MR. SEVERANCE: Yeah. No, I understand.

4 MR. GERHARDT: Okay, yeah. Okay, 11:23, 5 minute call
5 to --

6 MR. SEVERANCE: I thought it was Fresno. Like, apparently
7 it's Sacramento. Or maybe it is Fresno and they just have a
8 Sacramento number, I don't know.

9 MR. GERHARDT: That -- yeah. That's probably --

10 MR. COULTER: Yeah. It's --

11 MR. GERHARDT: It's Fresno. Or is it Oakland?

12 MR. SODERLUND: I don't think you were -- well you'd have
13 Oakland Center, and it just depends on where -- if you were with
14 Oakland Center or if with NorCal.

15 MR. GERHARDT: Oh, okay.

16 MR. SODERLUND: I just don't -- I'm not sure --

17 MR. GERHARDT: Let's -- yeah.

18 MR. SODERLUND: -- what the clearance would be.

19 MR. SEVERANCE: I would assume --

20 MR. SODERLUND: I was kind of --

21 MR. SEVERANCE: -- we were probably Sacramento since it's
22 closer to Sacramento.

23 MR. GERHARDT: It's fine.

24 MR. COULTER: Well, we've got two control -- yeah, two
25 control or two control frequency, or --

1 MR. GERHARDT: The FAA saves all of that. So --

2 MR. SEVERANCE: I figured as much. There's your timestamp.

3 MR. GERHARDT: Yeah, there you go. Yeah. That's about as
4 good as it gets.

5 MR. SEVERANCE: The second one that I showed you that was
6 like a minute, it was just me calling back to make sure that
7 somebody told them that we never got off the ground.

8 MR. GERHARDT: Got it.

9 BY MR. GERHARDT:

10 Q. So it's -- the 5 minute call, waypoint changed, departure
11 frequency changed?

12 A. Frequency change, yes.

13 Q. And then --

14 A. We were cleared for departure. We had a 5 minute window,
15 call back if not able to.

16 Q. Got it. So after the 5 minute phone call ends, about how
17 long -- so can we walk through that through the best of what the
18 captain did, and basically from the end of that phone call, the
19 change in the FMS --

20 A. Okay.

21 Q. -- frequency change. Any other checks, or parking brakes,
22 or, you know, anything like that?

23 A. I can tell you. As I previously stated, when I got the
24 clearance, and the change was made, I had it on my TOLD card.

25 Q. Yep.

1 A. Cory read it, he changed it in the FMS, I verified it, and
2 they had also changed the departure frequency. And because it was
3 a heavy workload, he changed the departure frequency in both Com
4 1, Com 2, and again, I verified.

5 Q. Perfect. Okay.

6 A. And after that, it was standard protocol. Follow the before
7 takeoff checklist.

8 Q. Got it.

9 A. Above and below.

10 Q. Got it.

11 A. Of which time, we did, and off we went. And that's when it
12 just went downhill.

13 Q. Got it. Now one of the things that we mentioned, the parking
14 brake check, is that something -- I know that some operators do,
15 is that something that you recall? Do you know if the parking
16 brake was set?

17 A. The parking brake, to the best of my knowledge, was not set.

18 Q. Okay. At any point in the taxi?

19 A. No.

20 Q. It wasn't announced? It was not announced?

21 A. The parking brake was set. The parking -- was that -- I
22 can't say for sure whether that was part of the -- before -- after
23 starts or not. I don't recall. I'd have to have the phone in
24 front of me. I do --

25 Q. That's -- yeah.

1 A. -- so much. I don't know. But I do know that the parking
2 brake was set when we did the rudder bias -- when he did the
3 rudder bias check, the brakes were set. And as I stated before,
4 that was before we left the ramp on the FBO.

5 Q. Got it. Before, okay. So overall again, it sounds like to
6 your knowledge, that point of clearance -- there was no call of
7 parking brake set or -- and then the rudder checks were done,
8 again at the -- in the ramp area.

9 A. In the ramp area, correct.

10 Q. Okay.

11 A. It's the easiest place to do it. There's no aircraft or
12 anything around it --

13 Q. Okay.

14 A. -- that was going to be jeopardized by the advanced
15 throttles.

16 Q. All right. So there's -- any annunciation -- annunciators
17 that you can recall?

18 A. No annunciators were done. And as part of the checklist on
19 startup and everything, you do the rotary test and verify all are
20 working. They were all working.

21 Q. They were all working?

22 A. They were all working.

23 Q. Okay. Captain did walk us through the one MEL item and the
24 one NEF item.

25 A. There were a total of three items.

1 Q. Okay.

2 A. To the best of my knowledge, one was a divider, a plastic
3 divider for the liquor cabinet. I don't know whether it was an
4 NEF or what it was.

5 MR. COULTER: Yeah, it was the liquor cabinet and the coffee
6 cabinet. So he did state both of those --

7 MR. SEVERANCE: The --

8 MR. GERHARDT: Okay.

9 MR. COULTER: Yeah.

10 MR. SEVERANCE: The coffee cabinet door, which was also
11 deferred, NEF most likely. And then the only item that was
12 specific to operation -- I don't remember whether it was a Class B
13 or Class C, I can't recall. I know the due date was on the 21st,
14 the same day of operation. And that was with the engine sync
15 knob. It was not the light, it was the engine sync knob.

16 MR. GERHARDT: Okay.

17 MR. SEVERANCE: So the engine sync was inoperable.

18 MR. GERHARDT: Got it.

19 BY MR. GERHARDT:

20 Q. Can we -- so again, this is what we -- at, you know -- very
21 standard in the process of, to the best of you can -- the best
22 that you can recall.

23 A. Okay.

24 Q. The takeoff roll, the captain advances the thrust --

25 A. And --

1 Q. -- and is there anything abnormal with the engine sounds,
2 indications, or speed? The speed of the -- the pace of the roll
3 it was accelerating?

4 A. It was warmer out. Other than that, that's about all I can
5 recall. I don't notice any specific differences on the roll. We
6 had been operating this aircraft for the previous -- I think it
7 was 6 days. I came into this aircraft, he came into this
8 aircraft. It seemed pretty standard. And I -- as stated, he
9 advanced the throttles to take off, I verified takeoff, takeoff
10 thrusts set. We had above the required speed for our N1. And it
11 just -- it went from there.

12 Q. Do you remember what the V1 was? If you don't, it's okay.

13 A. I can --

14 MS. CAMPOS: It's fine if you don't remember.

15 MR. GERHARDT: Yeah.

16 MR. SEVERANCE: Okay.

17 MR. GERHARDT: Yeah. Don't worry.

18 MR. SEVERANCE: Okay.

19 MR. GERHARDT: No, that's fine. We don't need to -- we don't
20 need a guess.

21 MR. SEVERANCE: Okay.

22 MR. GERHARDT: So don't worry about it.

23 BY MR. GERHARDT:

24 Q. The -- when you did call -- so you, again, I know there's
25 some outside noise, I'm sorry. But --

1 A. It's okay.

2 Q. -- when you called V1, so you saw V1 come up?

3 A. I saw V1, yes.

4 Q. And you called Vr?

5 A. I called rotate, yes.

6 Q. And then you observe him pull the yoke all the way back to

7 his chest?

8 A. I saw him literally pull that yoke -- he's sitting in this

9 position, proned, and he yanks it all the way to his chest.

10 Q. All the way to his chest?

11 A. All the way to his chest.

12 Q. Which catches your attention?

13 A. It actually took me --

14 MR. COULTER: Yeah.

15 MR. SEVERANCE: -- a little beyond my attention.

16 MR. GERHARDT: Yeah.

17 MR. SEVERANCE: I mean, I've been flying the plane long

18 enough to know that that doesn't --

19 MR. GERHARDT: Yeah.

20 MR. SEVERANCE: That doesn't happen.

21 BY MR. GERHARDT:

22 Q. And about how long does it -- I mean, is it -- in your

23 recollection, is it basically this catches your attention, and you

24 call abort?

25 A. He mutters something. He says like, nothing. And I -- I'm

1 literally looking -- at as he's pulling back, I look at him, and
2 his eyes are big, and he's like, nothing. And I say abort, at
3 which time he pulls the throttle completely back, he opens the
4 TRs, and I can hear it going back as far as he can pull it, and I
5 seem standing on the brakes. And I mean, at that point, I'm just
6 bracing. I'm holding on.

7 Q. Yeah.

8 A. And that's all I can do.

9 Q. At that time, does it feel like the airplane -- does it feel
10 like you're decelerating?

11 A. Yes and no.

12 Q. Okay. Yeah, it's, you know --

13 A. I don't know.

14 Q. Yeah.

15 A. I mean --

16 Q. It's really just, you know, is it -- it's a question in
17 relation of does something stand out to -- you know, so again,
18 it's not --

19 A. I can tell you that there were no --

20 Q. It's obviously a very unusual situation. So --

21 A. It's -- there were no -- I can tell you as soon as he had
22 done that, and I grabbed on, I'm still looking across. There were
23 no lights up there other than the six lights for the TRs.

24 Q. Got it.

25 A. That's all I saw.

1 Q. Got it.

2 A. That's all I know.

3 Q. Okay. And --

4 A. We hit some bumps, and that's it. It was slow, but quick at

5 the same time.

6 Q. So you did not -- you weren't on the brakes either at --

7 A. He's the --

8 Q. You basically just brace.

9 A. He is the pilot flying. It's not --

10 Q. Right.

11 A. -- my --

12 Q. Of course.

13 A. Yeah, no.

14 Q. Sometimes we, you know, see where both -- you know, it's just

15 reaction. So --

16 A. No, yeah. No, it -- I -- no.

17 Q. Yeah. Got it.

18 A. If he can't stop it, there's nothing that I can do to assist.

19 Q. Absolutely. So the day before, probably be a little more

20 brief than some of the discussion. But the day before the flight

21 in, and the -- it -- was anything -- did you fly in the leg to

22 this airport? Or --

23 A. Can I look and find out?

24 Q. Yeah. Absolutely, yeah.

25 A. I don't recall the day that I -- I think he flew one leg and

1 I flew another.

2 Q. And if you can't get internet or something in here, it's
3 fine.

4 A. It's not the internet.

5 MR. COULTER: Yeah, I was at --

6 MR. SEVERANCE: It's --

7 MR. COULTER: -- their Wi-Fi code.

8 MR. SEVERANCE: It's trying -- just trying to figure out --

9 MR. SODERLUND: I can't get my phone to connect.

10 MR. SEVERANCE: -- what -- so we had three legs yesterday.

11 MS. CAMPOS: I was going to offer you my (indiscernible).

12 But it's --

13 MR. SEVERANCE: Three legs yesterday, we started in -- I
14 think it was Santa Barbara. We flew to Santa Ana with no
15 passengers. That was at 10:40 a.m. I'm sorry. Is this okay?

16 MS. CAMPOS: Yeah.

17 MR. SEVERANCE: Okay. And then at 1 p.m., we had a departure
18 with the group from Santa Ana to Visalia, California. I guess we
19 arrived, from the timestamp on our log, it looks like we arrived
20 at -- blocked at 1:55, and then we departed Visalia at 5:15, and
21 arrived here in Oroville at 6:24 p.m. local. And I don't know
22 which one I flew. Post flight. Okay.

23 MR. GERHARDT: It's --

24 MR. SEVERANCE: Yeah. I don't --

25 MR. GERHARDT: Yeah. It really doesn't --

1 MR. SEVERANCE: I know I flew one of the legs yesterday, I
2 just don't know --

3 MR. GERHARDT: Yeah.

4 MR. SEVERANCE: -- which one it was.

5 MR. GERHARDT: Overall, we just establish that it's a common
6 practice to the switch off in the pilot flying, pilot monitoring
7 role.

8 MR. SEVERANCE: We did.

9 MR. GERHARDT: Was that --

10 MR. SEVERANCE: We did.

11 MR. GERHARDT: Okay.

12 MR. SEVERANCE: Yeah.

13 MR. GERHARDT: Okay. The -- and those specific trip logs
14 would be something we can --

15 MR. COULTER: Yeah.

16 MR. GERHARDT: -- get a copy of? Okay.

17 MR. COULTER: Absolutely.

18 MR. GERHARDT: Perfect. Thank you.

19 MR. COULTER: And if you want to notate both calls so when I
20 confirm with her, it's dual captains.

21 MR. GERHARDT: Oh okay. Dual captains. Perfect. So it'd be
22 wrong to call -- you're not a first officer?

23 MR. COULTER: No.

24 MR. SEVERANCE: I am whatever --

25 MR. GERHARDT: I apologize. I'm not flying --

1 MR. COULTER: He has the (indiscernible) --

2 MR. SEVERANCE: Wherever I'm supposed to sit is what I do.

3 MR. GERHARDT: Okay. Yeah. Whatever. Absolutely. Okay.

4 Some of the other -- let me go through my list here. New
5 hire date of a year?

6 MR. SEVERANCE: For me?

7 MR. GERHARDT: Yeah.

8 MR. SEVERANCE: Oh, a couple of years. Five --

9 MR. COULTER: Like I say, now I got the --

10 MR. SEVERANCE: I don't --

11 MR. COULTER: I got some --

12 MR. SEVERANCE: It's right here.

13 MS. CAMPOS: 5/3/15.

14 MR. SEVERANCE: Yep.

15 MR. COULTER: There you are.

16 MR. SODERLUND: Thank you.

17 MR. GERHARDT: Perfect.

18 BY MR. GERHARDT:

19 Q. And are you flying any other different models right now? Or
20 is this the only --

21 A. This is the only one.

22 Q. Okay. This is the only model that you're -- okay.

23 A. I'm typed in other aircraft, but this is the only model that
24 I fly.

25 Q. Okay. All the flight planning, weight and balance, is done

1 through ARINC?

2 A. Yes.

3 Q. In the app there?

4 A. Yes.

5 Q. Or an app? Is it an app? Or is it --

6 A. Yeah, it's both.

7 Q. Okay. To the best of the captain, what he could recall, was
8 that you were about 1,000 pounds under max takeoff weight.

9 A. I couldn't recall without having access to the --

10 Q. Perfect.

11 A. -- actual weight and balance.

12 Q. That's fine. So some of these other questions, we do a 72
13 hour history of basically how you were feeling. Fatigue is like
14 something we always ask about. Do you feel like, fatigue played a
15 factor of --

16 A. Of me personally?

17 Q. Yeah. Just --

18 A. No.

19 Q. -- thinking up to --

20 A. No. We had a decent time for overnight and such. I
21 personally was not fatigued.

22 Q. Okay. Other standard questions, alcohol? Last -- did you
23 have a drink the day before?

24 A. I had a beer the night before after we were -- got to the
25 hotel.

1 Q. Got it. Do you remember about the last time it was?

2 A. I don't remember what time we got to the hotel.

3 Q. If you don't remember, it's fine.

4 A. No. It was, I don't know, probably around 7:00 or something
5 like that.

6 Q. That's fine.

7 MR. COULTER: And how many? One?

8 MR. SEVERANCE: One.

9 BY MR. GERHARDT:

10 Q. The -- your home base, where do you reside?

11 MR. SEVERANCE: Seattle, Washington.

12 Q. Seattle? Okay. And is the -- so were you on the same
13 duration of the 8-day rotation as the captain?

14 A. He flew in from -- it was Columbus.

15 Q. Yeah.

16 A. So he was --

17 Q. But what did --

18 MR. COULTER: Your start rotation, are you a Thursday start
19 as well?

20 MR. SEVERANCE: I'm a Thursday start as well, yes.

21 MR. GERHARDT: Okay.

22 BY MR. GERHARDT:

23 Q. So you both started your 8-day rotation on Thursday?

24 A. Yes, we did. Yes.

25 Q. Last Thursday?

1 A. Yes.

2 Q. Okay.

3 A. Sorry. I didn't know where you were going with that
4 question.

5 Q. Yeah. I'm trying to sound coherent. I think I'm about
6 halfway there.

7 A. That's what happens when you come from the east coast --

8 Q. Yeah.

9 A. -- to the west coast.

10 Q. Yeah.

11 A. It's past your bedtime, sir.

12 Q. It is.

13 MS. CAMPOS: Yeah. I was looking at that. I'm like, you've
14 got another hour with me. And --

15 MR. SODERLUND: Yep.

16 MR. GERHARDT: Okay. Perfect. Henry?

17 BY MR. SODERLUND:

18 Q. Do you guys use the -- utilize the control lock at all?

19 A. No.

20 Q. Okay.

21 A. If it's windy, we won't use the control lock actually. I
22 mean, personally, I wrap the seatbelt around the yoke instead of
23 the control lock.

24 Q. What position -- do you know what position the flaps were in
25 when you did your walk, your pre takeoff walk around?

1 A. Flaps were up.

2 Q. Flaps were up?

3 A. Stabs up, flaps up.

4 Q. Okay. That's how you parked the airplane the other day?

5 A. That's how we park the aircraft.

6 MR. SODERLUND: Okay.

7 MR. GERHARDT: Do you remember the flap setting for the
8 takeoff?

9 MR. SEVERANCE: Seven.

10 MR. GERHARDT: Seven? Your most recent type rating for this
11 or recurrent?

12 MR. SEVERANCE: Recurrent was last month.

13 MR. GERHARDT: Okay.

14 MR. SEVERANCE: I might have it right here. It's okay?

15 MS. CAMPOS: Yeah. (Indiscernible) this. You guys have to
16 carry a lot of stuff.

17 MR. GERHARDT: Tell me about it.

18 MR. COULTER: And if you don't have it, Erik --

19 MR. SEVERANCE: No, it's right here.

20 MR. COULTER: -- records will send it.

21 MR. SEVERANCE: 23rd of July, 2019.

22 MR. GERHARDT: Okay. July 2019 down in -- was it Dallas?

23 MR. SEVERANCE: Dallas DFW CAE.

24 MR. GERHARDT: Yeah. I've been there one time. Pretty nice
25 place. It was fine.

1 MR. SEVERANCE: It's not bad.

2 MR. GERHARDT: Yeah. I mean --

3 MR. SEVERANCE: It's a little warm that time of year, but --

4 MR. GERHARDT: Yeah.

5 MR. SEVERANCE: -- it's not bad.

6 MR. SODERLUND: Yeah. Beats Morristown.

7 MR. SEVERANCE: Oh yeah. Oh --

8 MR. GERHARDT: Oh man.

9 MR. SEVERANCE: For an east coaster to say that --

10 MR. SODERLUND: Easy for me to say.

11 MR. SEVERANCE: Well --

12 BY MR. GERHARDT:

13 Q. Do you guys switch seats --

14 A. No. I --

15 Q. -- when, on trips when -- just in general, do you -- so you
16 still go off pilot flying, pilot monitoring, and you're both
17 captain rated, but you --

18 A. Yeah. This rotation -- I think it was San Francisco we
19 started. I flew -- I sat left seat the first 4 days, and I
20 swapped I think it was Monday or something with him. We
21 alternated back and forth on rotation -- on flights, but in the
22 same seats.

23 Q. Got it.

24 A. So then on Monday I think it was, I swapped with him. I took
25 the right seat, he took the left seat, but we still alternated

1 between flights.

2 Q. Got it.

3 A. So basically that the control -- the command of PIC was
4 swapped.

5 Q. Got it.

6 A. So I had PIC the first 4 days and then he had PIC the
7 following.

8 MR. GERHARDT: Okay.

9 MR. COULTER: So designated?

10 MR. SEVERANCE: Designated, yes.

11 MR. COULTER: So you were --

12 MR. SEVERANCE: Yes, sir.

13 MR. COULTER: -- designated as SIC --

14 MR. SEVERANCE: I was.

15 MR. COULTER: -- on this flight?

16 MR. SEVERANCE: I was. On the first 4 days. Designated as
17 PIC on this flight was --

18 MR. COULTER: Okay.

19 MR. SEVERANCE: -- in Cory's hands.

20 MR. COULTER: Got you. Okay.

21 MR. GERHARDT: Got it.

22 MR. SEVERANCE: He was handling all of the flight planning
23 and such from, I think Monday.

24 MR. SODERLUND: Signing for the aircraft?

25 MR. SEVERANCE: Basically, yes.

1 MR. GERHARDT: I want to go back to the evacuation real
2 quickly.

3 MR. SEVERANCE: Sure.

4 BY MR. GERHARDT:

5 Q. So the airplane stops?

6 A. The airplane does stop, yes.

7 Q. And then Cory calls for --

8 A. Evacuation.

9 Q. He says evacuation?

10 A. He says evacuate.

11 Q. You hop out, and can you describe how it was to -- were any
12 passengers standing up? Were they --

13 A. I don't know.

14 Q. Okay.

15 A. I literally disconnected my harness, as I was putting my arm
16 up and pushing off, as my head came around, I was looking out the
17 front left and the back behind Cory's head to make sure that there
18 was no fire or anything out there that I could --

19 Q. Out the left side?

20 A. That I could --

21 Q. Left side of the airplane?

22 A. Left side of the aircraft from the frontal portion which I
23 could see.

24 Q. Yes.

25 A. Went out, pulled the handle out, opened the door, pushed it

1 out, that's where the bruises and such came from.

2 Q. Yeah.

3 A. Pushed it out as -- far enough as I could to verify there was
4 nothing going to come in.

5 Q. Yeah.

6 A. Tried to push more, it wouldn't open. I stood back, used my
7 foot -- left foot to push the door down as far as I could, at
8 which point, I don't know how far it went, but I literally had to
9 use my bodyweight on the base as far as I could to move the door
10 down even further.

11 Q. Got it.

12 A. Because it was not going to open any other way.

13 Q. And then the passengers --

14 A. I said evacuate.

15 Q. And they --

16 A. I was standing there, the first two people from the bench in
17 front of the door followed directions, and they were getting off.
18 All of the associates behind them were following suit after the
19 first two people were off of the aircraft.

20 Q. Do you know if any of the passengers are holding bags when
21 they got off?

22 A. None of them were. I don't know which gentleman it was, or
23 two, but I did have to reiterate, leave your bag here.

24 Q. Okay.

25 A. They did -- I did make them leave their bag. I got it --

1 Q. Okay.

2 A. But like I said, it was one or two of them. I don't know who
3 it was.

4 Q. This is another difficult question, but about how long did it
5 take to get the passengers out? There's eight of them, so --

6 A. Not even a minute.

7 Q. Yeah, okay.

8 A. Not even --

9 Q. Under a minute?

10 A. It was under a minute.

11 Q. Okay.

12 A. They were basically single file. They listened. The first
13 two got off, and it was like mice, they just came following suit
14 right of one another. And I -- like I said, two gentlemen I told
15 to go over here to the hangar. It was close to the FBO, and the
16 other ones as they were coming off were following suit. I said,
17 follow your associates.

18 Q. Perfect. Was this the last flight with this group?

19 A. To the best of my knowledge, this was the last flight with
20 this group on this tail.

21 MR. GERHARDT: Okay. Got it. Okay.

22 MS. CAMPOS: And if you need to know where they were going
23 on, we can get that. I think one of them was going back to Europe
24 or something.

25 MR. GERHARDT: Okay.

1 MR. SEVERANCE: There was one foreign gentleman on board,
2 yes.

3 MS. CAMPOS: So we kind of owe him a passport when he comes.

4 MR. SEVERANCE: Yeah. I figured that was going to be an
5 issue.

6 MR. GERHARDT: Yeah.

7 MR. SEVERANCE: I'm going to have a problem with that too.

8 MR. GERHARDT: I don't have anything else.
9 Henry?

10 BY MR. SODERLUND:

11 Q. So you talked about -- so thinking about aircraft layout. So
12 we've got our two crew seats up front, it's a two-person couch --

13 A. Correct.

14 Q. -- across from the door?

15 A. Correct.

16 Q. And then double club, the seat -- backwards seats with the
17 exact tables?

18 A. Correct. Another set of seats --

19 Q. And then --

20 A. -- two more back there.

21 Q. Forward facing?

22 A. Forward facing.

23 Q. Okay. Anybody on the toilet?

24 A. No. It does not --

25 Q. Is it a belted toilet?

1 A. It's not a belted a toilet.

2 MR. SODERLUND: Okay, not belted. Okay.

3 MR. GERHARDT: That's good. Thank you, Henry. Yeah.

4 MR. SODERLUND: Yeah, because that's the one -- and that
5 manufacturer, that's the one thing we never know, is what it looks
6 like now. Because the interiors get changed a lot. So --

7 MR. COULTER: You've seen one Excel, you've seen one Excel.
8 You guys even get to put the landing gear on different sides.

9 MR. SEVERANCE: That's a bit of -- it's a bit of a learning
10 curve every time you come out to a plane.

11 MR. SODERLUND: Yes. No, that was it.

12 MR. GERHARDT: Okay. All right. I'm going to stop the
13 recording.

14 (Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: DELTA PRIVATE JETS CRASH
 OROVILLE, CALIFORNIA
 AUGUST 21, 2019
 Erik Severance Interview #1

ACCIDENT NO.: WPR19FA230

PLACE: Oroville, California

DATE: August 22, 2019

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


Christy Wilson
Transcriber