

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

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DELTA PRIVATE JETS CRASH *

OROVILLE, CALIFORNIA * Accident No.: WPR19FA230

AUGUST 21, 2019 *

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FLIGHT CREW INTERVIEW

[Erik Severance Interview #2]

Delta Private Jets Headquarters
Erlanger, KentuckyWednesday,
August 28, 2019

APPEARANCES:

ADAM GERHARDT, Air Safety Investigator
National Transportation Safety Board

DON COULTER, Line Captain
Delta Private Jets

ERIK SEVERANCE, Pilot
Delta Private Jets

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I N T E R V I E W

MR. GERHARDT: This is Adam Gerhardt with the NTSB. I'm an air safety investigator, and I will let Erik introduce himself.

MR. SEVERANCE: Hello. This is Erik Severance.

MR. GERHARDT: Erik, are you okay with me recording this interview, and again, strictly for the purpose of producing a transcript, and again, under -- strictly for the NTSB safety investigation?

MR. SEVERANCE: Yeah. No worries.

MR. GERHARDT: Perfect. The other thing I have to note again, you're fully entitled to have one representative here with you. Are you okay -- nobody is here. Are you okay proceeding?

MR. SEVERANCE: That was my decision, and I am comfortable with that.

MR. GERHARDT: Okay. Perfect. Thank you, Erik.

And I also have Don here.

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

MR. GERHARDT: Perfect. All right.

So, like I said, I will go through -- we'll start with -- and any questions, stop me.

MR. SEVERANCE: Sure.

MR. GERHARDT: Say that doesn't make any sense; I don't know. This is all to the best of your recollection --

MR. SEVERANCE: Sure.

MR. GERHARDT: -- of course.

1 INTERVIEW OF ERIK SEVERANCE

2 BY MR. GERHARDT:

3 Q. So we'll start with Wednesday morning, the morning of the
4 accident, 8/21. So can we go through where the hotel was, what
5 time you went to bed, what time you woke up, and was there
6 anything regarding the quality of your sleep that was remarkable?

7 A. The event was 7 days ago. I don't recall what hotel I was
8 at, and I don't recall issues with sleep. Other than that, that's
9 all I can say.

10 Q. Okay. Do you remember if you ate breakfast the morning of
11 the accident?

12 A. I did eat breakfast the morning of the accident.

13 Q. Okay. Do you remember about what time you left from the
14 hotel to the -- to drive to the airport?

15 A. It may have been previously stated on the first interview,
16 and I do not recall that at the moment.

17 Q. Okay. When you -- let's keep going through the 72 hour
18 before we get back into -- so the night previous, so now we're to
19 Tuesday night, we have -- that again was in the Chico -- what we
20 have as the Chico area.

21 A. Yes. We landed in Oroville with eight passengers, and we had
22 a rental car that was required to transport us to a -- the only
23 hotel available in Chico, which was almost a one hour drive.

24 Q. Got it. Okay. Let's keep going. So now we're to Monday
25 night. This is August 19th, potentially what the schedule may --

1 what the schedule shows is Santa Barbara. Same item. If you can
2 recall when you went to bed, and what time you woke up, if there
3 was anything remarkable about your sleep.

4 A. I can't say for sure the time that I went to bed or go to
5 sleep. I would -- yeah, I can't recall that.

6 Q. Okay. Sunday night, I show Santa Ana, California as the
7 overnight hotel?

8 A. Correct.

9 Q. Anything remarkable about when you're going to bed, waking
10 up? The --

11 A. No. I live on the west coast, so I was basically on my same
12 time zone since the beginning of my rotation. So I don't think
13 that there was any issues regarding rest.

14 Q. Got it. Okay. Thank you for that. Let's go back to the
15 morning of the accident --

16 A. Okay.

17 Q. -- which is Wednesday morning. Can you walk me through --
18 are -- have you done any preflight planning the day -- the days
19 before, and then the morning of? I'm trying to be holistic -- the
20 preflight planning.

21 A. It -- the position of PIC was switched, I believe on Monday,
22 from my name to Cory.

23 Q. Okay.

24 A. I did no flight planning for the duration of that week.

25 Q. Got it. When you -- so when you arrived at the airplane, the

1 accident morning, do you remember about what time it was?

2 A. I don't recall.

3 Q. Okay.

4 A. It was previously stated in the last interview.

5 Q. That's fine. The -- any conversations with -- any
6 conversations or email with Delta Private Jets that you're doing
7 as part of the planning or --

8 A. Again, I was not the PIC. I was not doing any of the
9 planning, and there was no -- the best of my knowledge, there was
10 correspondence that morning regarding myself, the flight, or
11 flight control.

12 Q. Perfect. Okay. Any communication with the passengers that
13 morning that was -- you know, any communication with them when
14 they arrived?

15 A. Standard passenger greeting, loading their bags, and walking
16 -- welcoming them on board. Standing outside the aircraft and
17 allowing them to board.

18 Q. Okay. Do you know how many bags they had?

19 A. There was one roller board, I -- for, what, eight passengers?

20 Q. Yeah, eight.

21 A. They were all very light.

22 Q. Very light?

23 A. Yeah.

24 Q. Okay. Light bags. Do you recall if the -- to your
25 recollection and your understanding, where the passengers late, or

1 early, or just normal?

2 A. I would say it was a standard arrival for the passengers.
3 Most passengers arrive 10 or 15 minutes prior to their scheduled
4 departure time.

5 Q. Okay. Perfect. So what we understand is that this trip, per
6 the schedule for you and Cory, 91GY was the airplane?

7 A. Correct.

8 Q. Your trip -- you know, you didn't have any airplane swaps?

9 A. Correct.

10 Q. Was there any sort of maintenance -- flight maintenance
11 related items not including the non-equipment (sic) --
12 nonessential equipment furnishings, are there any sort of
13 maintenance issues that were not recorded as MEL items?

14 So if you -- if there was anything regarding the performance
15 of the airplane leading up to the accident day, and the accident
16 day, anything mechanically wrong with the airplane that you can
17 recall?

18 A. Took the aircraft on Thursday of that previous week. Upon
19 arrival, reviewing maintenance logs, there were no known physical
20 issues regarding the air worthiness of the aircraft. And as
21 stated in the previous, there were two NEFs and one MEL, which was
22 for the engine sync.

23 Q. Perfect. Thank you, Erik. I know -- I believe you may have
24 previously stated it, that you have flown in the past with Cory?

25 A. Correct.

1 Q. Can you characterize the crew resource management between the
2 two of you? Is there anything that was good, or bad, or normal?
3 Your crew resource management functioning as you as the PIC, and
4 then next of course for the accident flight, you as the SIC?

5 A. As a work environment with Cory, I've only flown with him two
6 rotations to the best of my knowledge. And as for crew resource
7 management, everything is very thorough. It is checklist oriented
8 to the point of actually briefing the -- what do we call it? It's
9 on the tip of my tongue.

10 Darn in, Don. I'm trying to think of it. It's on the tip of
11 -- engine out procedure. So it was the -- it's on the tip of my
12 tongue. What do we call that? It's a DP procedure for engine
13 out. It's on the tip of my tongue. I can't say it.

14 MR. COULTER: Oh, an APG?

15 MR. SEVERANCE: APG. Thank you. APG procedure for the
16 purpose of an engine failure prior to -- after V1.

17 MR. GERHARDT: Is that the Aircraft Performance Group?

18 MR. COULTER: Yeah. Did that airport require that?

19 MR. SEVERANCE: To the best of my knowledge, I don't recall.

20 MR. COULTER: Okay.

21 MR. GERHARDT: Okay.

22 MR. COULTER: I can -- yeah. I can --

23 MR. GERHARDT: Yeah. We can look up that.

24 MR. COULTER: I don't think there was.

25 MR. GERHARDT: But -- well okay. Well that's a -- I

1 appreciate the -- that makes sense.

2 MR. SEVERANCE: Previous airports that we had flown in and
3 out of were briefed as such because we were in and out of Sedona
4 three times during that rotation.

5 MR. COULTER: Yeah.

6 MR. GERHARDT: Okay.

7 MR. SEVERANCE: So that did have an actual DP charted --

8 MR. COULTER: Correct.

9 MR. SEVERANCE: -- and also an APG department performance
10 procedure.

11 MR. GERHARDT: Got it. Okay.

12 BY MR. GERHARDT:

13 Q. You just told me when you two switched from PIC to SIC. Is
14 there any additional context to why that decision was made? Was
15 that always the plan to the best that you can recall? Or --

16 A. Co-captain environment. We were splitting up the workload.
17 I worked the first four as PIC handling the flight planning and
18 such as that. And then as such, switched for the next 4 days.

19 Q. Perfect. Is that something -- would you say that that is
20 typical?

21 A. I would say that is up to the crew themselves. It is not a
22 company policy, and it is not a company mandate.

23 Q. Okay. How long have you been a PIC designation? Of course I
24 know that you all -- DPJ pilots have PIC type ratings, but about
25 -- you know, was it within the last 6 months, or year?

1 A. It's been more than a year. So it's been over 2 years,
2 because I did my second annual last month.

3 MR. GERHARDT: Okay.

4 MR. COULTER: It's been a while.

5 MR. SEVERANCE: Yeah.

6 MR. COULTER: I did your OE.

7 MR. SEVERANCE: Yeah.

8 MR. GERHARDT: We'll look up the date, but we just want to
9 characterize it here of --

10 MR. SEVERANCE: Sure.

11 MR. GERHARDT: -- you know, it wasn't 2 months ago.

12 MR. SEVERANCE: It's 2 years 2 months, or 2 years 1 month, or
13 something along those lines. I don't know.

14 MR. GERHARDT: Perfect.

15 MR. COULTER: Matter of fact (indiscernible) --

16 MR. SEVERANCE: I lied. I can't recall. Yeah.

17 MR. COULTER: Yeah.

18 BY MR. GERHARDT:

19 Q. So now specifically talking about the Excel, do you -- the
20 question is how often do you fly with eight passengers on board?
21 Would you characterize that as something that routinely happens?
22 Have you ever flown -- obviously you flew in the days leading up
23 to the accident, you had previous flights with the eight
24 passengers. Before that, can you characterize how routine it is
25 to fly with eight passengers on board?

1 A. I -- it -- I don't pay that much attention to it, so I cannot
2 give you an accurate answer for that.

3 Q. That's fine. That's really a broad question, so no problem.
4 Okay. Getting into more of the preflight, so looking at the
5 takeoff performance and weight and balance. I know you've told me
6 that you were the SIC, and you didn't do any preflight planning.
7 Can we talk about the takeoff performance? Basically the takeoff
8 and landing data, is that something that you completed, or help
9 complete?

10 A. I don't recall.

11 Q. Got it. Okay. As the SIC, would it be an appropriate
12 expectation for the SIC to input the data for your V speeds, your
13 takeoff data, into the FMS?

14 A. Yes.

15 Q. Okay. And that's fine that -- so basically we're trying to
16 get at, was there any -- looking at how the takeoff data -- if you
17 can't recall the -- obviously the specific takeoff data, but can
18 you comment on anything in general about how the takeoff
19 performance was obtained to depart for the accident flight?

20 A. I don't understand the question.

21 Q. So, yeah. It's -- how -- can you remember how you as a crew
22 obtained your takeoff distance required, what systems you would
23 have used, what data?

24 A. That data would have been used -- would have been inputted
25 into ARINC, and used through that weight and balance system, which

1 have been used all week.

2 Q. Got it. Do you remember any -- can you provide the process
3 or any details with using ARINC to generate the V speeds, takeoff
4 data, maximum takeoff weight, any details about how that -- how
5 the V speeds are generated?

6 A. The numbers were entered, I looked at them, I verified them,
7 and based on previous flights, they were well within limits.

8 Q. Got it. So the -- if I'm understanding the process right,
9 the weight, how -- for this flight can you recall how you obtained
10 a takeoff weight?

11 A. Takeoff weight was -- how do I explain it? Actual weight of
12 passengers plus 20 pounds I assume, I can't remember, was added to
13 each person for carry-ons. I loaded the bags, the bags were not
14 heavy. And I had put 150 pounds in the tail. And I know I had
15 verbalized that Cory on his review of the flight plan. And again,
16 I can't verify that. I don't have my weight and balance form.

17 Q. Yeah.

18 A. I can tell you vaguely off the top of my head. I vaguely
19 remember telling you that I think the weight was -- the fuel
20 weight was at 4,170. With the 150 in the tail, and the weight
21 with the passengers on board, we were I think at 1,809 I believe.
22 And it gave us I believe a factored distance of I think about
23 4,000. And I don't recall the actual V speed numbers, I'm sorry.

24 MR. COULTER: I believe he stated that --

25 MR. GERHARDT: That's fine. Okay.

1 MR. SEVERANCE: And as stated, these numbers were compared --
2 comparable to the previous flights that we have had, and there was
3 more than enough runway --

4 MR. GERHARDT: Yeah.

5 MR. SEVERANCE: -- to get this plane up.

6 MR. GERHARDT: Got it.

7 BY MR. GERHARDT:

8 Q. Okay. So ARINC, because I was made aware of you have
9 iPreFlight?

10 A. We do.

11 Q. And ARINC?

12 A. Correct. Per our FOM, there is no mandate saying which one
13 we use.

14 Q. Got it. So if I have it right, ARINC was used with -- ARINC
15 was used to generate your takeoff and landing --

16 A. Our number --

17 Q. -- data?

18 A. Our takeoff and landing data, correct.

19 Q. Got it. And --

20 A. Takeoff flap 7, landing 15 35.

21 Q. Got it. And again, you knew the -- you loaded the bags?

22 A. Correct.

23 Q. It'd be correct to say that none of them are heavy?

24 A. No. I could have tossed them --

25 Q. Got it.

1 A. -- 20 yards easy.

2 Q. Perfect. And then the actual passenger weights --

3 A. Correct.

4 Q. -- were used. Is that something that was based upon previous

5 flights? Or --

6 A. The -- based on previous flights. We cannot use standard

7 numbers in ARINC for the purpose of weight and balance. It has to

8 be actual weights.

9 Q. Got it. Okay. Perfect. We're trying to get an

10 understanding of the curtailments listed in -- for weight and

11 balance.

12 A. Okay.

13 Q. Can you describe what the curtailments reference, pertaining

14 to weight and balance, what they mean to you?

15 A. Curtailments pertaining to what?

16 Q. So when you have the weight and balance --

17 A. Correct.

18 Q. -- and the CG locations --

19 A. Correct.

20 Q. -- you have the -- and this is --

21 A. You have limits on what can be in there. Forward for the

22 cabinetry, coffee, snacks, beverages, 30 pounds. And as for the

23 rear, the life raft, which is 35.

24 Q. Do you know if these curtailment lines that are within -- I

25 believe they're only within iPreFlight?

1 MR. COULTER: Yeah. And --

2 MR. SEVERANCE: They are only within iPreFlight, and they
3 were --

4 MR. COULTER: Yeah.

5 MR. SEVERANCE: -- added to the ARINC. They were added.

6 BY MR. GERHARDT:

7 Q. Okay. They were added?

8 A. Yes.

9 Q. Okay. Do you know if they are -- is that the -- what I'm
10 trying to get at is, that curtailment line, is that the forwarding
11 limit or aft limit? Or is it the manufacturer CG limits?

12 A. I couldn't tell you. I don't know that.

13 Q. Okay. That's -- yeah. And that's what we're just trying to
14 characterize.

15 A. I can tell you that after the weight and balance was done
16 with the information that I had just provided you, there was still
17 more than enough weight that could have been added to the
18 aircraft, and still had that aircraft get off the deck.

19 Q. Got it. And what about the forward and aft CG? Is that
20 something that you recall?

21 A. Forward CG was within the max zero weight, and the aft CG was
22 appropriate for its position.

23 Q. Got it. Okay. We're going to talk about when your -- you
24 weren't the captain for the flight coming into Oroville the night
25 before, that's correct?

1 A. That's correct.

2 Q. And obviously not for the accident flight. When you arrived
3 at the airplane the morning of the accident, was the parking brake
4 set?

5 A. The parking brake was set.

6 Q. Okay.

7 A. The sign -- there was a placard in the window that said, do
8 not tow, and it is in red.

9 Q. Got it. Okay. Is it common to set the parking brake for
10 when you're leaving the airplane on the ramp?

11 A. Yes.

12 Q. Okay. So this would -- been, you know, you're leaving the
13 airplane --

14 A. I can't say that for sure. And I have to rephrase that.

15 Q. Okay.

16 A. Small airports such as this, where there's nobody there, yes,
17 I would leave the parking brake set. If it's an occupied airport,
18 for set periods of time, or if the 24 hour facility, and the
19 aircraft is chocked, the brakes are released and usually a sign is
20 left in the window saying, able to tow.

21 Q. Perfect. Okay. And in this case, to the best of your
22 knowledge, when you came back out to the airplane again, Cory, who
23 was the captain, set the parking brake the night before?

24 A. The parking brake was set the night before.

25 Q. Okay.

1 A. I turned the aircraft on with the parking brake set, and
2 reset the brake. The hydraulics needed to bleed back in to set --

3 Q. Okay.

4 A. -- the calipers.

5 Q. Can you describe -- when you're setting a parking brake, can
6 you walk me through how you normally do that and how you did it
7 the morning of the accident?

8 A. If the parking brake is not set on power up, power -- battery
9 power comes on, I wait for the nose accumulator to build. Then I
10 pull the brake, and a stand pedal again, to see if any residual
11 needs to build again, at which point I release. The morning of
12 the accident, the parking brake was set. I turned the power on,
13 the accumulator built again, and I did the same thing, stood on
14 the brake to see if any residual needed to build.

15 Q. Got it.

16 A. No issues.

17 Q. Okay. So again, the -- if I have it correct, the order is
18 toe brakes --

19 A. Toe brakes.

20 Q. -- press, and then pull the handle?

21 A. I stand on the brakes, yes. The brakes come out, let it
22 build, and then I'll do it again --

23 Q. Got it.

24 A. -- to verify brakes are set.

25 Q. Okay.

1 A. Accumulator runs once, press them again and see if the
2 accumulator builds again.

3 Q. Got it. Okay. Can you describe -- was there a discussion
4 about the density altitude in the preflight? Can you recall
5 anything about the discussion of density altitude?

6 A. It wasn't that big of an issue. I mean, it was I think 27
7 degrees Celsius. It didn't have much bearing on the performance of
8 the aircraft.

9 Q. Do you remember about what the field elevation was just off
10 the top of your head?

11 A. I round it out to 200 feet.

12 Q. Okay. Perfect. We -- okay, the next question is about the
13 takeoff briefing.

14 A. Okay.

15 Q. Can you recall what was -- when the takeoff briefing
16 occurred, and what was discussed?

17 A. Takeoff rating is part of the actual checklist. It's -- I
18 don't remember, was it -- is it after the start? Let me look at
19 here real quick.

20 Q. No problem.

21 A. I don't remember which one it was. Crew briefing, so it's
22 actually the before start checklist.

23 Q. Okay.

24 A. It was reviewed, it was confirmed, and it was just a standard
25 brief from my recollection.

1 Q. Okay.

2 A. We had been flying with each other for a week. Nothing was
3 abnormal. Nothing had changed. Nothing needed to change. So it
4 was just a standard, okay, pilot flying, pilot not flying.

5 Q. Got it. Can you recall if the runway required versus the
6 runway available to take off was discussed during that briefing?

7 A. There was no -- Runway 2 was the longer runway, and the winds
8 were variable. So it was decided to use Runway 2.

9 Q. Got it. Okay. To the best of your knowledge, did you give a
10 passenger briefing to the passengers?

11 A. I did not give the passenger briefing.

12 Q. Okay. Got it. Is there anything else about the -- we're
13 really just talking about preflight, before engines are on. Is
14 there anything else you'd like to add? Anything remarkable that
15 were not?

16 A. You know, the first interview was pretty thorough on the walk
17 around. I don't think that I had seen anything to say there was
18 issues.

19 Q. Got it. Okay. Now we're going to jump to the point at which
20 you're walking away from the airplane.

21 A. Okay.

22 Q. It's -- there's -- as we know, there was a grass fire.

23 A. Correct.

24 Q. The airplane was not on fire --

25 A. Correct.

1 Q. -- at that point.

2 A. Correct.

3 Q. Anyway, did you make a phone call to anyone after? Did you
4 call 911?

5 A. That is -- that was not my position. It was not my job, at
6 the time I was not PIC. My requirement was just to make sure my
7 passengers got off the aircraft safely, at which time I came back,
8 as stated in the previous interview, and I told Cory what was
9 going on.

10 Q. Can you -- were you asked to give a statement, of course
11 other than by NTSB on -- the day after. But can you --

12 A. I was not.

13 Q. Were you --

14 A. I was asked by -- I don't know which passenger, or who it
15 was, but I -- it was -- I could not comment. The sheriff's
16 department was there, and they wanted a statement, and had also
17 said, I cannot comment. They did take my driver's license to
18 verify my ID, at which point I received it back later.

19 Q. Okay. Assuming now that you're near the airport terminal.

20 A. Okay.

21 Q. After -- if -- does that sound about correct? Did you stay
22 outside the ramp area while the -- the questions now are generally
23 towards the firetrucks.

24 A. Yeah. Other than previously stated, using a fire
25 extinguisher to put out some of the brush fire behind the aircraft

1 on the left side, that's all I could do. Other than that, it was
2 over at the terminal with the passengers.

3 Q. When did you -- it's -- can you recall about the time it took
4 for firetrucks to get there?

5 A. Time is relative. I couldn't give you an exact measure of
6 that. I can tell you that it looked like a local fire department
7 showed up. It was a red tanker. I don't remember if they were
8 assisted by anybody else.

9 Q. When -- if you can remember when they got there, did they
10 start spraying -- to the best you could see, did they start
11 spraying the airplane, or the grass fire, or any combination of
12 thereof?

13 A. The best of my knowledge, they were a little delayed after
14 getting there. They didn't seem to have an exact plan on how to
15 address the current issue.

16 Q. Is there -- so I know we already -- we don't want to make you
17 repeat things here. Our understanding again, as you previously
18 stated, you were after the captain. Cory issued the evacuation
19 instructions?

20 A. Yes he did.

21 Q. Then you proceeded to the back of the -- you -- the cockpit,
22 and you opened the --

23 A. As --

24 Q. -- main cabin door?

25 A. As previously stated in the previous interview, after

1 receiving the evacuation order from Cory, I unleashed myself. As
2 getting up, I looked outside the captain's side window to verify
3 there were no issues outside the door, at which time I tried to
4 push the door down to peek outside. It wouldn't go down. I
5 kicked the door the rest of the way.

6 Q. And I think we covered that in detail the first time.

7 A. Yeah.

8 Q. So, okay. We're moving towards the phase of flight -- phase
9 of the accident sequence. We're on the runway.

10 A. Okay.

11 Q. This is something that we do want to -- we want to go over
12 again.

13 A. Okay.

14 Q. The position that we -- the phase now is we're lined up on
15 Runway 2.

16 A. Okay.

17 Q. And can you walk me through who's advancing throttles, the
18 acceleration to the best of your recollection --

19 A. Okay.

20 Q. -- and what the callouts were?

21 A. As stated in the previous interview.

22 Q. Is there - now that you've had a little bit of time to think
23 about the takeoff roll, is there anything remarkable about the
24 roll that was unusual this flight compared to the previous flights
25 you've had with this passenger group?

1 A. At the top of my head, no. It seemed a standard takeoff.

2 Power came up, we moved down the runway.

3 Q. Do you recall hearing any warnings, chimes, annunciators?

4 A. Again, as noted in the previous interview, I called speed
5 alive. Rolling down the runway, we went through our callouts,
6 takeoff, takeoff set, 80 knots, panel clear, nothing's on the
7 panel, no audible, no visual.

8 Q. Was there any issue with directional control that you could
9 tell as you were rolling down the runway? Of course prior to the
10 abort.

11 A. Motion, for me personally sitting in the right seat, I didn't
12 see any issues with directional control. It was on center line,
13 and as for anything that may or may not have been there, I
14 wouldn't know. My hands aren't on the yoke, and my hands -- my
15 feet are not on the pedals.

16 Q. Got it. To the best of what you can remember, when you're
17 looking at calling V1, for some pilots, it's -- you can anticipate
18 it. If you've ever -- it's a thing that some --

19 A. Give or take 1 knot.

20 Q. -- pilots do -- right.

21 A. Give or take a knot, yeah, okay.

22 Q. If you can describe what your normal practice is, and what
23 you do in this flight, is that something you normally do of, you
24 know, calling it 5 knots early?

25 A. I would never call it 5 knots early.

1 Q. Got it.

2 A. This specific aircraft, a lot of times your V1 and your Vr
3 are very close together, if not the exact same exact number.

4 Q. Yeah.

5 A. So -- but I would never call it prior to being -- I would
6 never call V1 prior to V1.

7 Q. Got it. And again, is this a digital display in this --

8 A. This aircraft had a digital display, yes.

9 Q. Got it. Okay. And we're not asking what the V speeds were.

10 A. That's good, because I can't remember.

11 Q. Yeah. Do you remember setting the V speed bugs during
12 preflight?

13 A. I don't remember, no.

14 Q. It's --

15 A. I'm sure I probably did, but I can't -- it's --

16 Q. That's something -- if we could characterize it, it's
17 something that as the SIC, it's something that you'd normally do?

18 A. Characterize it SIC would set it, but it's also verified by
19 the PIC on the check.

20 Q. Okay. To the best of your knowledge, did you receive a no
21 takeoff warning?

22 A. There was no no takeoff warning.

23 Q. Have you ever experienced a real no takeoff warning in the
24 Excel?

25 A. Define that question.

1 Q. So -- and that's got --

2 A. I don't know which direction you're leading with this. So --

3 Q. Yeah. So what we're trying to get at is if a -- the airplane
4 has certain parameters that if the takeoff is initiated --

5 A. Correct.

6 Q. -- if the airplane is out of configuration in a whole
7 different --

8 A. Are you trying to ask about the trim wheel?

9 Q. Well no. I'm trying to ask about -- what, if any, conditions
10 -- so one, it's -- it would be correct to say there was no --
11 there was not a no takeoff annunciator in this airplane. And I
12 don't know --

13 A. There was an -- there was no no takeoff annunciator on this
14 aircraft prior to departure. And there is a takeoff check on the
15 checklist for this pertaining to the rudder and the trims.

16 Q. Got it. Do you know if the no takeoff annunciator -- is that
17 an audio alarm? Or is it a light?

18 A. It's a light.

19 Q. It's just a light? Do you know if it --

20 A. Top row of the annunciator panel.

21 Q. Do you know if it has any sound to it?

22 A. To the best of my knowledge, it does not have a sound.

23 Q. Okay. When --

24 A. All trims were set, and it was verified after the checklist,
25 because I had actually cycled on the Pitot EADs (ph.), and the

1 Pitot EADs would have lit up if there was another -- I mean, not
2 the Pitot EAD, but there would have been annunciator for no
3 takeoff if they were on.

4 Q. Got it. Okay. I don't -- so what other conditions, to the
5 best of your knowledge, what other conditions would make that
6 alarm come on, the no takeoff?

7 A. The no takeoff?

8 Q. Yeah.

9 A. If there was a flap issue, a stab miscompare. But you would
10 get the stab miscompare before you would get the no takeoff. Like
11 I said, if the trim wheel was out of takeoff position, either a
12 fore or aft. The best of my knowledge, right off the top, that
13 would probably be about it.

14 Q. Do you know if the parking brake is included in the no
15 takeoff warning? Is it part of that group that would give you a
16 warning light?

17 A. Knowing the basic knowledge of that -- of that the aircraft
18 from that standpoint, you would not get a no takeoff.

19 Q. Got it. Now we're to the phase of flight, we're holding
20 short of Runway 2.

21 A. Okay.

22 Q. On the taxiway there, we previously talked about the standard
23 process of calling clearance. Is it still a correct assumption
24 that the majority of that phone call and clearance process took
25 place at the hold short?

1 A. As previously stated in the previous interview.

2 Q. Perfect. Is it correct -- the best of your recollection,
3 that your waypoint was amended?

4 A. Correct.

5 Q. And the departure frequency was changed?

6 A. Correct.

7 Q. And one of the questions is still, did you change the radio
8 frequency?

9 A. I did not.

10 Q. The -- so can you recall what the captain may have changed
11 after you got the updated clearance?

12 A. I was on the phone with Sac, or Fresno, whoever.

13 Q. Yep.

14 A. And I had gotten the original clearance. And it -- as I was
15 holding for release, they came back and amended that. And I had
16 written it down, and Cory had seen me write it down. And I had
17 written down the change in frequency, both of which were changed
18 in the box and verified by me prior to hanging up on the read-back
19 to clearance.

20 Q. Okay.

21 A. I know that he swapped in the FMS. I agreed with it. I know
22 we swapped with it in Com 2, and I agreed with it.

23 Q. Got it. Do you know if the airplane, the best that you can
24 -- when these changes are being made in the FMS, and with the
25 frequency, was the plane stopped?

1 A. The best of my knowledge, the aircraft was stopped.

2 Q. Okay.

3 A. My head was down. And I made that call prior to making the
4 phone call.

5 Q. Okay. Do you remember if the captain, Cory, if he completed
6 the rudder bias check holding short?

7 A. As previously stated on the previous interview.

8 Q. Got it. One of the things that has come to -- one of the
9 things that Cory mentioned, the captain, was that the autopilot
10 kicked on at the hold short line. Can you recall this --

11 A. I --

12 Q. -- and anything about this?

13 A. I don't recall of that to the best of my knowledge.

14 Q. Okay. Do you -- can you recall if there was any callout made
15 regarding the use of the parking brake, which of course is on the
16 left side, available for the captain. Can you recall if there was
17 any callouts with whether or not it was --

18 A. There were no calls regarding any parking brake.

19 Q. Okay. Is -- as part of the before you're going, as -- when
20 you're sitting in the right seat, is there any sort of standard
21 SOP per Delta Private Jets or the, you know, aircraft manufacturer
22 that you're aware of that would incorporate the parking brake for
23 your role as the SIC? Is that part of of any --

24 A. I am not privy to any CESSNA checklists specific to this
25 aircraft. I only follow the mandated checklists provided by our

1 company, which is signed off by our FSDO.

2 Q. Got it. Okay. Were there any sort of -- and this is high
3 level. Were there any sort of operational pressures to get in the
4 air quickly, to take off now, to the best of your recollection?

5 A. No.

6 Q. Did Cory -- did you feel like he was the pilot in command?
7 Were there any sort of -- did you feel rushed as the SIC? Was any
8 -- everything normal per --

9 A. No.

10 Q. -- previous flights?

11 A. Everything seemed normal. I didn't feel rushed. It felt
12 like normal flow that we've been doing the last couple of days.

13 Q. Got it. Let's see. I want to jump to the taxi. The taxi
14 out from the -- a lot of this we have discussed previously. Can
15 you remember if the taxi from the ramp -- where there any extended
16 stops --

17 A. No.

18 Q. -- on the taxi out?

19 A. No.

20 Q. Got it.

21 A. It was a continuous taxi from the time of doing the rudder
22 bias, as stated previously, from the ramp, and a continuous taxi
23 to the short line of Runway 2. TRs were checked. That's the only
24 thing I didn't mention before. The thrust reversers were checked.

25 Q. Okay. Got it. Moving to the engine start ramp area, when

1 you're starting, was there any sort of unusual indications or
2 anything abnormal with the airplane as you're going through your
3 normal checklist?

4 A. No. APU was running, standard right engine stat first, it
5 spooled up, no issues. The flaps were cycled to 7, the speed
6 boards were checked. Then it was left engine start, left engine
7 was a little slow as it had been, but it was still within
8 parameters.

9 Q. Got it. Okay. I want to go back to -- up until the time,
10 you've said this previously, for the aborted takeoff. Is it
11 correct to say that when you saw the captain pull the yoke nearly
12 to his lap or in his lap, is that the main -- is that what caused
13 you to -- is that the main reason of why you called for the abort?

14 A. The yoke came back to his chest after rotate -- I called V1
15 rotate. He pulled the yoke back quickly to his chest, we looked
16 at each other, and his expression was nothing verbally, at which
17 point I called abort. It was an abnormal situation for the yoke
18 to come back that far and for the nose not to come off the runway.

19 Q. Okay. Is there any point prior to this point that you --
20 there's any indication that would have been given to you whether
21 or not you were seeing anything outside or inside, that you would
22 have wanted to abort or thought about calling for the abort?

23 A. I don't recall seeing any reason to do that. The aircraft
24 built speed in the allotted time for the distance of the runway.
25 I called the speeds as they came up.

1 Q. Got it. To your understanding -- so when you're the captain,
2 have you ever experienced a situation where you have set the
3 parking brake, and the airplane can move -- then moves after you
4 -- the parking brake is set, and the airplane then rolls?

5 A. I have of course done my rudder bias checks static position
6 with the parking brake set, and cycled each engine accordingly, so
7 right throttle, right rudder, left throttle, left rudder, and
8 verified the engine to the rudder bias system is working
9 correctly. With the parking brake set and doing that test, the
10 aircraft does not move.

11 Q. Okay. Is that something that if you set the parking brake,
12 your expectation as, you know, let's just go to you're a captain
13 flying this. If you set that parking brake, is it your
14 expectation that that airplane will not move, even with takeoff
15 power set?

16 A. I have no expectations for anything.

17 Q. Got it. Okay. Going through this experience, reflecting on
18 Delta Private Jets' training and the training at CAE, is there
19 anything that sticks out to you right now that you don't feel like
20 you are prepared for?

21 A. No. In fact I think the opposite. I feel that the training
22 that I have received is the reason I'm sitting here right now.

23 Q. Got it. Something we ask, it's pretty early in this stage,
24 but any sort of recommendations that -- from your perspective?
25 Obviously we have a long investigation, and we are far from

1 drawing any conclusions. That's not what we do at this stage.

2 A. Oh no. I understand.

3 Q. But any sort of -- our job at the end of this is of course to
4 make recommendations, prevent accidents from happening again in the
5 future. Anything right now? You know, we always give -- you
6 know, if there's any --

7 A. I -- personally I don't see anything really that was done
8 incorrectly. That's why you guys are here. I followed my
9 policies, I followed my procedures, I followed my checks, and as -
10 - the best as I can tell, I don't see there's any need to have a
11 recommendation for something that I don't know.

12 MR. GERHARDT: Perfect. Yeah, that makes sense. I don't
13 really have any other. Is there anything else that you'd like to
14 add? I don't have any questions.

15 MR. SEVERANCE: No.

16 MR. COULTER: Might have Don passed on here.

17 MR. SEVERANCE: Yeah, it's up to him. I'm here for you guys.
18 So --

19 MR. COULTER: Yeah. I just want to make sure we get
20 everything squared so we don't have to do this again. I'm just -

21 MR. SEVERANCE: I'll come back.

22 BY MR. COULTER:

23 Q. I'm going through notes, you know? Let's see. TOLD cards,
24 that wasn't emailed to, correct?

25 A. I'm sorry?

1 Q. The TOLD cards from Cory?

2 A. I don't recall.

3 Q. And you think that wasn't emailed? Okay.

4 A. I don't recall.

5 Q. That's fine. Do you recall the approximate location of the

6 RTO? Any land markers that you can recall that you would've been

7 -- you probably wouldn't have been outside during it. So --

8 A. What are you talking about?

9 Q. Anything that went by you that caught your eye? Or looking

10 up or anything that you would have remembered --

11 A. At the --

12 Q. -- at the time of abort? Like when the abort was actually

13 called, do you recall anything at all? Any something that -- and I'm

14 not even saying like, what triggered it.

15 A. To be --

16 Q. I'm just saying --

17 A. -- honest --

18 Q. -- like anything that went flying by you?

19 A. To be honest with you, that's just -- that's --

20 Q. Your head's in because you're a pilot monitor. I get it.

21 A. Yeah. And even after the abort was called and I looked up, I

22 blacked out, man.

23 Q. Yeah.

24 A. My hand was on the dash, my other hand was on the monkey bar.

25 Q. Yeah.

1 A. That's all I remember.

2 Q. Yeah.

3 A. I'm sure it will come back to me later this week --

4 Q. Yeah. No, and that's fine.

5 A. -- in a form of hot sweats in the middle of the night.

6 Q. Yeah. The epiphanies. You -- in your previous statement,
7 you recall the thrust reversers deployed -- you recalled all six
8 lights?

9 A. All six lights were deployed --

10 Q. Okay.

11 A. -- yes.

12 Q. When you called for the abort, and Cory, you know, initiated
13 that, did you recall those six lights coming on in a reasonable
14 amount of time?

15 A. Yes.

16 Q. Okay. So as expected?

17 A. As previously stated --

18 Q. Yeah.

19 A. -- he was full max TR, and he was standing on the brakes.

20 Q. Correct. Did you notice the maximum braking feeling from
21 what you can recall?

22 A. He was standing.

23 Q. Yeah. Okay. I've got some other questions as far as after
24 the aircraft came to a stop, and you guys were outside -- or you
25 got the passengers outside --

1 A. Correct.

2 Q. -- Cory was securing the aircraft, I believe it was in
3 statement, I can go back and look. You had told Cory the right
4 engine was still running?

5 A. Yes. I said the right engine is surging.

6 Q. Okay.

7 A. And it --

8 Q. It's surging, correct.

9 A. And the TR is deployed.

10 Q. Correct. What actions do you recall were taken from that?
11 Was it you who initiated to try to re-shutdown and confirm --

12 A. It's not --

13 Q. -- it was called --

14 A. It wasn't -- it was not my position.

15 Q. Okay.

16 A. I verified that he had the throttles in the cutoff position.

17 Q. Okay, yeah.

18 A. They were in the cutoff --

19 Q. Yeah.

20 A. -- at which point, I leaned forward underneath the first
21 officer's seat, pulled the extinguisher --

22 Q. Yes.

23 A. -- and exited the aircraft.

24 Q. Okay. And so to your best of knowledge, it was him -- he
25 pressed the fire button when the engine --

1 A. Yes.

2 Q. Okay. Was the battery still connected?

3 A. I don't know.

4 Q. Okay.

5 A. I can't recall that.

6 Q. Okay. That's fine.

7 A. Dude, there is so much on that plane that --

8 Q. Trust me.

9 A. -- was not working. Everything was broken and --

10 Q. Yeah.

11 A. I don't know what switches were running where and it --

12 Q. No, I understand that. It's just if a sequence comes in

13 question about how this was taken care of -- in a position of

14 securing the aircraft, to the best of your ability, even though

15 there was fire.

16 A. He followed his sequence.

17 Q. Yeah. No, I got you, a hundred percent. Okay.

18 When you peeked your head in there, do you recall any engine

19 fire light being illuminated?

20 A. I can't recall.

21 Q. Okay. And I think that's it. Did you abort -- did you

22 assist in the abort procedure at all?

23 A. I made the call. That's all I did.

24 Q. Okay.

25 A. He's pilot flying --

1 Q. Yeah.

2 A. -- my hands stay off. He gives me a command, I follow.
3 That's how it works.

4 Q. Yep. Sorry, I've just got to get notes.

5 A. No worries, man. It's all right. I'm here all night.

6 Q. We've got these -- your thought process with running around
7 with that fire extinguisher in the back back there, what made you
8 just finally just go, hey, I'm out?

9 A. My thought process with the fire extinguisher was I knew that
10 the brush fire was going to ignite the aircraft.

11 Q. Yeah.

12 A. I went back to try and put out as much as I can --

13 Q. Yeah.

14 A. -- at which point, when I guess Cory was unable to get the
15 right engine shut down -- when I saw him come off the aircraft,
16 that was my time to say, oh this isn't going to happen.

17 Q. Okay.

18 A. He came back, he jumped up and down on it a little bit,
19 and --

20 Q. Yeah.

21 A. -- he walked, I walked.

22 MR. COULTER: He said that was it.

23 MR. GERHARDT: Yeah.

24 MR. COULTER: Yeah.

25 MR. GERHARDT: Yeah.

1 MR. COULTER: Yeah. Okay.

2 MR. SEVERANCE: The aircraft was not in danger of fire until
3 that brush got close to the right wing.

4 MR. COULTER: Ever experience a similar event?

5 MR. SEVERANCE: Do I have to (indiscernible)?

6 MR. GERHARDT: No. Let's -- okay, we'll -- we're going to
7 stop the recording, and --

8 (Whereupon, 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: DELTA PRIVATE JETS CRASH
 OROVILLE, CALIFORNIA
 AUGUST 21, 2019
 Erik Severance Interview #2

ACCIDENT NO.: WPR19FA230

PLACE: Erlanger, Kentucky

DATE: August 28, 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