

NATIONAL TRANSPORTATION SAFETY BOARD

Investigative Hearing

Alaska Airlines Flight 1282

Boeing 737-9, N704AL

Left Mid Exit Door Plug Separation in Portland, OR

January 5, 2024

Docket No.	SA-543
EXHIBIT	
11M	

**Manufacturing Records and Human
Performance - Attachment 12
FAA Interview Transcripts
(782 Pages)**

DCA24MA063

**MANUFACTURING RECORDS AND HUMAN
PERFORMANCE**

Group Chair's Factual Report

Attachment 12 – FAA Personnel Interview Transcripts

July 8, 2024

Federal Aviation Administration Personnel Transcripts

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UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

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ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

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Interview of: JONATHAN ARNOLD, Aviation Safety Inspector Federal
Aviation Administration

FAA Facility
Des Moines, Washington

Wednesday,
May 8, 2024

APPEARANCES:

SABRINA WOODS, Ph.D., Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer Investigator
National Transportation Safety Board

NILS JOHNSON, Maintenance Investigator
National Transportation Safety Board

MATT RIGSBY, Accident Investigator
Federal Aviation Administration

TROY LEVANEN, Director of Maintenance
Alaska Airlines

DAN MARCOTTE, Air Safety Investigator
Boeing

JOHN PETRUZZELLI
International Association of Machinists (IAM)

MIKE RINEY, Onsite Representative
Spirit AeroSystems

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I N T E R V I E W

(8:03 a.m. PT)

1
2
3 DR. WOODS: Good morning. It is May 8th, 2024, and the time
4 is 8:03 Pacific Time. My name is Dr. Sabrina Woods, and I'm the
5 human performance investigator with the NTSB. Along with me to my
6 right here is Pocholo Cruz. We are co-leading the Manufacturing
7 and Human Performance Working Group for accident investigation
8 number DCA24MA063 involving Alaska Airlines flight 1282. The
9 National Transportation Safety Board is congressionally mandated
10 with determining probable cause in transportation accidents and
11 significant incidents, and with promoting transportation safety.
12 We cannot do that on our own, however, so what you see here in the
13 room are parties to the investigation that help inform that
14 process. So because you need to know who you're going to be
15 talking to today, we're going to take this time to go around the
16 room and I'm going to have each of these parties introduce
17 themselves to you starting to my right with Pocholo.

18 MR. CRUZ: Good morning. Thank you, Jonathan. My name is
19 Pocholo Cruz. As Sabrina says, I'm the co-chair to this group.
20 I'm an aerospace engineer with a structures and maintenance
21 background.

22 MR. ARNOLD: Okay.

23 MR. RIGSBY: Hey, Jonathan. Matt Rigsby. We've met. Just
24 the FAA investigator on this accident and lead coordinator.

25 MR. RINEY: Good morning. Michael Riney. I'm Spirit

1 AeroSystems Onsite representative here in Washington.

2 MR. ARNOLD: Okay.

3 DR. WOODS: Over here to Dan.

4 MR. MARCOTTE: Yep. Good morning. I'm Dan Marcotte. I'm a
5 Boeing air safety investigator, and I'm based in southern
6 California.

7 MR. ARNOLD: Okay.

8 MR. PETRUZZELLI: Morning, Jonathan. John Petruzzelli. I'm
9 representing the International Association of Machinists, and I
10 also work at Boeing.

11 MR. LEVANEN: Good morning. I'm Troy Levanen with Alaska
12 Airlines. I'm the director of maintenance and engineering safety,
13 and I've been with the airline about 34 years.

14 MR. JOHNSON: Morning. Nils Johnson, National Transportation
15 Safety Board, aviation accident investigator. My specialty is
16 maintenance.

17 DR. WOODS: So that's it, Jon. That's everything --
18 everybody's who's going to be asking you questions today. We're
19 here for you to share your insight, and your understanding, and
20 your knowledge as a member of the regulatory and oversight team
21 for Boeing commercial airplane company. To capture that insight,
22 we will be using a digital recorder. After the interview, we will
23 be sending that recording out for transcription, and the party
24 members will have an opportunity to review the transcription to
25 correct it for any typographical errors, but we do not change the

1 content. Once we receive the certified copy back from the
2 transcriber, it will go forward to become a matter of public
3 record in the docket for this investigation. Each of the group
4 members here will have a chance to ask you questions. We're going
5 to go one at a time. And usually we go in two rounds, the first
6 being the bulk of the questions, and the second round being like
7 any follow up thing that might have triggered along the way.
8 Please answer all the questions to the best of your ability.
9 However, recognize that I don't know is a perfectly acceptable
10 answer if you don't know the answer to a question. If there is
11 anything that we ask that you do not understand, please ask for
12 clarity. We will provide that. We're going to do likewise if we
13 don't understand an answer that you might have. And if at any
14 time you feel that you misstated something or weren't clear, you
15 want to go back and correct or add on to, feel free to do so at
16 your discretion. As always with these types of interviews, you're
17 entitled to have one representative of your choosing. I see you
18 have legal counsel here sitting next to you. I just want to
19 ensure that you understand that this is your representative and
20 that you accept this representative.

21 MR. ARNOLD: I do.

22 DR. WOODS: Thank you for that. With that, counsel, thank
23 you for being here. Please recognize that this is an interview
24 and not a deposition, so please refrain from interrupting the
25 process or attempting to answer on behalf of your client. If you

1 would please for the record state your name, spelling your last.

2 MS. LIPE: Rebecca Lipe, L-I-P-E, FAA Office of Chief
3 Counsel.

4 DR. WOODS: Thank you. So with that, Jon, that's everybody
5 in the room. Are you ready?

6 MR. ARNOLD: Yep.

7 DR. WOODS: Is everybody else ready?

8 UNIDENTIFIED PARTICIPANT: Yes.

9 DR. WOODS: Okay. We're going to do the hardest question
10 first which is if you would please for the record state your full
11 name and spell your last.

12 MR. ARNOLD: Jonathan Arnold, A-R-N-O-L-D.

13 DR. WOODS: Okay. So we're going to work our way around the
14 room kind of this way starting with Pocholo here to my right.

15 MR. CRUZ: Good morning.

16 MR. ARNOLD: Good morning.

17 INTERVIEW OF JONATHAN ARNOLD

18 BY MR. CRUZ:

19 Q. Thank you for speaking with us today. Currently, what is
20 your -- Jonathan, what's your position with the FAA?

21 A. I'm an aviation safety inspector.

22 Q. Okay. And how long have you been in that position?

23 A. One year, eight months.

24 Q. Okay. Could you please describe to us your professional
25 background prior to coming to the FAA?

1 A. Well, I started out in U.S. Navy as an aviation electronics
2 technician. Did 24 years, so I went from just being a basic
3 technician to becoming a full system quality assurance
4 representative. And, ultimately, I became the divisional
5 supervisor for quality in that role. Once I left the U.S Navy, I
6 became an operations supervisor and quality supervisor for Johnson
7 and Johnson medical products. And then I left there and went --
8 transitioned over to the Department of Defense under Defense
9 Management Agency, and I was a quality specialist there for
10 aviation on the P-8 aircraft and the KC-46. One is a derivative
11 of the 737, and the other one is a derivative of 767 aircraft.
12 And I applied to the FAA, and transitioned from there over to the
13 FAA back in 2019 [sic]. So, overall, I sum it up by having about
14 38 years of actual aviation experience, pretty much in the -- as a
15 maintenance background, flight line type work and some, I would
16 say, theory type background doing calibration and equipment, you
17 know, working in a laboratory-type work, but that was only about a
18 year or so on that type of work.

19 Q. Okay. And, currently, who is your supervisor here in the
20 FAA?

21 A. Mike Hager.

22 Q. Okay. And as an ASI, what are your duties and
23 responsibilities?

24 A. We provide oversight and certificate management of the Boeing
25 company.

1 Q. Okay. And can you run me through a typical day for you?

2 A. A typical day for me, I work in predominantly two areas in
3 Boeing. I'm either out on the flight line doing aircraft
4 inspection to certify aircraft on a certification for
5 airworthiness. If I'm not doing that, I will be in a factory
6 conducting audits.

7 Q. Okay. And who provides you your work program that you need
8 to work for a fiscal year?

9 A. Well, the FAA and our -- well, my manager sets the priority.
10 There is what we call a certificate management schedule, and based
11 on risk analysis, and we call it the RBRT risk-based targeting
12 resource targeting. Based on that and the risk, it determines how
13 frequent, and often, and where we would do our oversight for
14 certificate management, and that typically consists of audits and
15 inspections unless there is other things that may come up like a
16 whistleblower call, that will be more like an impromptu type of
17 investigation, not really scheduled. It will be unscheduled. You
18 would go do an investigational audit to find the information
19 concerning that. Or things like a voluntary disclosure,
20 announcement that Boeing may release. We would go investigate
21 that to gather information to try to make a determination as to
22 the risk and what corrective action that needs to be put in place.
23 But, basically, there is a CM schedule comes out, and based on
24 risks, that pretty much sets your schedule for a year. It comes
25 out every year. And then based on data that the FAA has gathered

1 through what resources they have, it puts out a plan on where we
2 should focus our attention, and our supervisor assigns us certain
3 areas based on that risk that's been identified, and you would go
4 audit according to that schedule.

5 Q. Have you worked in that -- I guess help me understand how
6 risk is developed to develop your work program. Is that something
7 that -- do you see how the risk-based analysis is being conducted,
8 or is it just your lead and your supervisor that develops that?

9 A. I think our -- my understanding is I don't see it directly.
10 I know there is a FAA database where all of this information is
11 gathered. Say if I submit -- go out and do an audit --

12 Q. Yeah.

13 A. -- and then based on what I find in my audit, that all gets
14 uploaded into the database, and my understanding, it all gets
15 collated into the RBRT system. And based on that, my manager
16 above me runs that report and he decides what the risks are, and
17 that's how it's decided. And they take data from all parts of the
18 National Aerospace system are all feeding into this risk tool, and
19 that's how they come up with the schedule, my understanding.

20 Q. Okay. And is there like a minimum number of elements that
21 need to be accomplished per year for the Boeing production
22 certificate?

23 A. I'm not aware of a minimum. I know there are elements. We
24 basically do our audits in accordance with 15 elements that's
25 identified in the CM plan. And there's an order that comes out,

1 8130-23 if I'm not mistaken. Don't quote me on that. I'd have to
2 actually go look it up. And it gives a general guideline from the
3 FAA on the order on what we do our audits on based on the CM
4 planning --

5 Q. Okay.

6 A. -- of their QMS system.

7 Q. Okay. I don't know -- I don't remember if it's -- can you
8 run me your typical -- well, your typical day you already talked
9 about, right? So at the Boeing facility, when you're doing -- I'm
10 mostly interested in the production side, so when you're in the
11 factory. So who do you contact -- if you have to do one of your
12 elements or surveillance in the factory, who do you contact at
13 Boeing to be able to get in the factory and do your surveillance?

14 A. Okay. So the way it typically works, say you have a schedule
15 and I know I have to go to the Renton factory.

16 Q. Yeah.

17 A. Based on that risk, so they'll tell me I need to look at
18 wings or --

19 Q. Yeah.

20 A. -- you know, the factory itself, or go look at flight line.
21 So if I'm going in the factory itself, there's a whole lot of flow
22 days in the factory. We have the discretion, and what I typically
23 do based on what I think are safety-related type items. That's
24 what I want to look at, you know, the big ticket, what we call the
25 big tickets items, things that directly affect safety because they

1 have a lot of different areas in there. So we could -- we're not
2 required, but there is a practice of 30 days prior to you knowing
3 you have to do an audit, I know I have to do an audit in a
4 factory, I will contact their representative, RQSO or the DQMRs
5 and let them know that I'm scheduling an audit for this particular
6 day and time, would that be good for you guys to set up a time.
7 And, generally, based on the risks, that audit could be a one-day
8 audit, or it could be up to five days depending on the complexity
9 of the area or the sophistication of the area that we're looking
10 at. Sometimes it's a one-day thing if we're just looking at a
11 small area, or if we're looking at a major area in the factory, it
12 could be a whole weeklong. So in that whole week, you -- I
13 probably -- well, more like two weeks ahead of time I start
14 preparing. I go in the system, start trying to pull up Boeing's
15 BPIs, their instructions that's related to the area that I've
16 chosen to look at, and I try to get a good review. And then I
17 inform Boeing that I'll be looking at this area and I'll be
18 showing up at this time and I'll be there from this time, and I
19 will leave on this date. And, generally, when I show up on the
20 morning of, I would meet with what they call a DQMR, and they'll
21 have a representative to escort me around and give me any
22 information that I need for the particular area. DQMR stands for
23 designated quality management representative if I'm not mistaken.
24 Don't quote me on that. And, usually, they have a legal
25 representation person there from Boeing which falls on the RQSO.

1 Don't know what that acronym means. Regulatory I think
2 something -- qualification. And they have their representative.
3 And then once I start inspecting, we'll go around based on my
4 review of their instructions, I pick out an area that I think
5 would be at -- produce the most risks, and I go out, and what I
6 like to do is actually watch the mechanics perform whatever tasks
7 they have to do as far as production from the beginning to the end
8 of that task, and I like to watch them do that. And based on
9 their instructions that they have, and just go through that
10 instruction step by step to the end to see if they are in
11 compliant and following that instruction verbatim.

12 Q. So what happens if you find a discrepancy, where does that
13 get -- what happens?

14 A. Well, then there's -- the ultimate goal is that they do
15 corrective actions, and there is a process in which we do that.
16 We notify them, there's a database for the FAA, the CA plan. So I
17 will either -- depending on how critical or how bad, let's use
18 that term, that departure from being compliant or from being safe
19 determines what type of enforcement action I'm going to produce.
20 It can be a formal compliance action, or it can be an informal.
21 Informal is something that's, you know, it wasn't, you know, that
22 big of a risk to safety, but you did deviate or you departed
23 from, you know, being compliant. But it doesn't create a big
24 safety thing. So that could be an informal something that they
25 could, you know, fix within a day or up to 30 days. If they can

1 get that done, then it can be informal. But anything above that
2 is usually going to be a formal compliance action. And if it's
3 something that really creates a deviation that could cause a major
4 catastrophic, that could result in what we call an investigation
5 -- a letter of investigation. That is something we determine that
6 they willfully -- how I read it, my interpretation, that they
7 willfully departed from being compliant or willfully violated
8 regulations or a statute that could cause harm to the aerospace,
9 so.

10 Q. So is there a debrief at the end, and then how does that
11 information get into your database?

12 A. So at the end of the completion of our audit, we generally,
13 as a practice, produce a -- what we call a brief to the DQMR or
14 RQSO. Generally, the vice president of Boeing for the Renton
15 factory would typically show up at that brief, and we would brief
16 out any non-compliances or non-conformances that we identified at
17 that time. Generally, during the whole audit, say, if we do a
18 week-long audit, every day we have an informal brief, say, yep, we
19 find this to give them time to give us some feedback prior to
20 getting to the end of the audit, so. But at the end of the audit,
21 this is the final brief that the audit, for me, the determination
22 is made unless -- when I let them know it may or not be a
23 compliance action, but I have to get that approval before I issue
24 it to them from my supervisor. But I will let them know that this
25 is what we found, and the expectation is -- be that it would need

1 to be corrected in accordance with the regulation. We'll do that.

2 And so that tends to happen at the end of the day on the last day.

3 Q. Okay. And then once you leave there, do you put it into the

4 FAA's system what you did --

5 A. Yes.

6 Q. -- during that day?

7 A. Yeah. So there is a database that we use called ACAIS. It's
8 where you write up what we call dash 6s, you know, it's basically
9 a form that identifies what you found, what was required to be
10 done and what wasn't done to that requirement, and you give all
11 the details and the facts, you list all your objective evidence in
12 there. You gather your objective evidence, you load all that up
13 into the database, and then that's what forms a record. And if
14 you're going to issue a compliance action, then you move over to
15 the CEA's program --

16 Q. Okay.

17 A. -- where you actually write up the compliance action that
18 would be communicated to Boeing.

19 Q. Okay.

20 A. And then use the results in a formal letter.

21 Q. Okay. So you've been with the FAA now since 2019 [sic] you
22 said?

23 A. Yes, sir.

24 Q. Correct? And from the work that you did inside the factory
25 audit-wise, do you see any systemic issues? What systemic issues

1 do you see with regards to the production side?

2 A. Systemic, well, not following the instructions. That seems
3 to be systemic where they deviate from their instructions. And
4 typically, tool control is what I see most.

5 Q. Okay. Do you feel that the production personnel has the
6 right training to do their job?

7 A. It's hard to pin down what is the right training --

8 Q. Okay.

9 A. -- that they have. I would have to do some further
10 investigation to tell you what the right training is because they
11 have so many different areas that they need to be trained in. So
12 I generally look at that when I audit, say, if they -- if a
13 certain job they do require special training, it's easier to
14 identify what that special training is needed. So, for example,
15 if a person was actually working on weight and balance, and, you
16 know, there is a policy that says they got to have weight and
17 balance training. So that's easily defined. But other training,
18 just general manufacturing, production training, it's hard to pin
19 down a specified, say, training course that a person would need to
20 work in the factory in my experience.

21 Q. Yeah. So you said that failure to follow instructions.

22 A. Right.

23 Q. What's the reason -- when you bring that up to Boeing, what's
24 the reason for the employees not following instructions?

25 A. I can't really pin down an actual reason. I would probably

1 have to ask the person why did you deviate. But some of the
2 things that I see -- because they're required to follow an
3 installation plan.

4 Q. Yeah.

5 A. Sometimes they just don't do it, you know, and sometimes the
6 installation plan, what I've seen, is that certain steps may be
7 missing out of that installation plan. And a lot of the
8 installation plans allow them to not follow in sequence. So I
9 think that could be a contributing cause that if you're not
10 required to follow in sequence, there's more opportunity to miss a
11 step.

12 Q. Is the issue then with the content that's in the installation
13 plan, or is it the training that that employee says that -- that
14 you don't have to follow what's in the installation plan? I'm
15 trying to get a sense of -- is it the installation plan that's the
16 issue because the mechanic or whoever's not following it? Or are
17 they allowed to not follow it and do whatever they need to do just
18 to get the job done?

19 A. I wouldn't say it like that.

20 Q. Okay. Correct me.

21 A. Sometimes the installation plan is verbatim. The person just
22 didn't do it is quite simple. It's -- I'm giving you an example
23 to say turn the nut to 120 inch-pounds.

24 Q. Okay.

25 A. And for some reason he did 100 pounds. And you ask the

1 question, well, why did you do that. Basically wasn't paying
2 attention. That's one example. Or you could see something like,
3 well, you're following the step and they're doing something that's
4 other than in the installation plan. When you ask the question,
5 well, why are you doing that, it's not here in the installation
6 plan, and they will tell you that's the way I was trained. So how
7 were you trained? Well, I was trained through OJT, so. And that
8 leads you down another path for investigation.

9 Q. So in your time as the ASI, have you ever had to write an LOI
10 against a specific IP?

11 A. I've never had to write one.

12 Q. Okay.

13 A. I've wrote corrective actions and I've written non-
14 compliances against the IP.

15 Q. Okay.

16 A. But not in the LOI.

17 Q. Okay. So you've been there for quite a while, what's the
18 biggest concern you have regarding the Boeing's quality system?

19 A. My biggest concern, and this is based off my --

20 Q. Your experience.

21 A. -- quality experience, is that -- when I read Boeing's
22 instructions, you know, BPIs and things of that nature, and I'm
23 trying not to give my opinion, in my experience, a lot of the
24 instructions have open-ended requirements or general requirements.
25 Then for me as an auditor or an inspector, it's hard for me to pin

1 down an actual requirement. That's what I see.

2 Q. Okay. Have you witnessed as an ASI any traveled work that
3 goes through the production line?

4 A. Have I witnessed?

5 Q. Have you witnessed, I guess, a lot of -- while doing an
6 audit, a lot of traveled work as the airplane goes down the
7 production line?

8 A. No.

9 Q. No.

10 A. I haven't actually witnessed that work.

11 Q. Okay. But do you see a lot more --

12 A. Because when I'm auditing -- if I can clarify. When I'm
13 auditing, I'm auditing to a specific installation plan.

14 Q. Okay.

15 A. So say we're -- give you an example. Say flow day one.

16 Q. Yeah.

17 A. There's a specific production --

18 Q. Right.

19 A. -- things that happen on flow day one. So in accordance with
20 that installation plan for flow day one, that is what I'm auditing
21 to. There may be other work going on, but I'm looking at this
22 installation plan. They may have five or six different operations
23 going on on that flow day, but I'm focused on this one. So I
24 couldn't say there's not traveled work going on.

25 Q. Is there an element in your work program that looks at

1 traveled work?

2 A. Not specifically --

3 Q. Okay.

4 A. -- in my experience.

5 Q. How would you describe the culture within the quality system
6 at Boeing?

7 A. How do I describe the culture?

8 Q. Yeah. Or I mean are employees able to speak their mind
9 without any repercussions? Are they hesitant to do that? Are
10 they --

11 A. No, I can't speak to that specifically. I know Boeing has
12 what they call a Speak Up program.

13 Q. Okay.

14 A. And I've had employees approach me about things they thought
15 was wrong, and I asked them have they utilized their Speak Up
16 program or have they talked to their manager about the situation.
17 And sometimes they say they didn't know about the Speak Up
18 program, and sometimes they just say no.

19 Q. Okay. In your experience, does the FAA consider a SAT a
20 production record?

21 A. Say again?

22 Q. A SAT. Does the FAA consider a SAT a production record?

23 A. Are you talking about a --

24 Q. Shiplside action tracker.

25 A. Do the FAA consider? Well, I can't speak for the entire FAA.

1 I've never read a regulation or an order that spoke to a SAT
2 specifically. But in my experience, any document that you do to
3 document work on an aircraft is a record.

4 Q. Okay. You said you've previously wrote non-compliance issues
5 with Boeing. Was there ever a case where you used a SAT record as
6 part of evidence that -- of non-compliance?

7 A. I've never done that.

8 Q. To your knowledge, what -- do you know what Boeing's record
9 retention policy is? If so, what do you know about it?

10 A. Well, they have a record retention policy, and it identifies
11 items that they consider are records. And there is -- based on
12 that record, there is retention time categories. However, but I'm
13 more concerned what their QMS manual says and what the FAA
14 considers a record. So I generally look at what the FAA considers
15 a record, a quality record.

16 Q. So do you know if Boeing's QMS has anything with regards to
17 what a SAT is? Is it a production record or not, do you know?

18 A. It doesn't speak to -- I've never -- from what I read, but I
19 could be wrong. From what I read in their QMS manual, it doesn't
20 speak to a SAT specifically.

21 Q. Okay.

22 A. And that's one of the things -- if I can clarify. When I say
23 like generalized terms, it has generalized terms in there where
24 that may fall in a category of being a generalized term with,
25 let's say, records. So it leaves a lot of room for

1 interpretations.

2 Q. Okay. In your experience, have you ever noted issues
3 regarding part assembly and removal issues? Basically BPI 1581?

4 A. Is that the removal BPI?

5 Q. Yes.

6 A. Yes, I have.

7 Q. Can you give me --

8 A. Matter of fact, I've wrote a compliance action on that.

9 Q. Okay. Great. Give us an example of what happened.

10 A. I received a VDR for an aircraft that they left a rag in the
11 engine column, and they flew that aircraft down to Victorville,
12 California. So in my investigation I went over there just to see
13 how that could happen. And I was reading their investigation on
14 their BPSM plan because they was -- I had to recommend a
15 corrective action or approve their corrective action. And reading
16 through that, it was hard for me to ascertain what was the root
17 cause of this rag being left in this column. So after a few weeks
18 of going back and forth with the quality team, I'm telling this
19 not adding up, there's something missing out of here, why were you
20 in the cowling. It was hard for them to answer that question. So
21 long story short, we found out that they actually removed a part
22 off the engine is the reason why they end up going into that
23 cowling, which wasn't initially put in the investigation documents
24 that were presented to me as far as in the VDR. So I pulled out
25 it was a fuel line that they had removed. So their initial

1 argument in their VDR was that based on that rework document, and
2 I was asking them, well, why wasn't there a FOD inspection done
3 prior to closing up this column and releasing that aircraft safe
4 for flight because you went into the engine? And the quality team
5 answered to me at that time they didn't have to do a record or a
6 removal record for that because all they had to do was open a
7 cowling. Well, in that BPI it speaks to -- there's a table in
8 there of things that based on these particular actions, you don't
9 have to create a removal record. And in their rules, a cowling
10 was listed, and then -- but if you read the first part of that
11 BPI, it talks about exceptions to that rule. So when I pointed
12 out to them, well, did you read this paragraph because in this
13 paragraph it says exceptions. If you're doing rework, you're
14 required to do a removal. So when you went in there and removed
15 that fuel line, that was rework. You should have created a
16 removal record was my interpretation and then based on my
17 investigation. And they didn't do one. So I referred that VDR to
18 an EIR (ph.) because you didn't provide the necessary, what I
19 thought, proper corrective action to mitigate that. You was
20 telling me the root cause was the fact that the mechanic used the
21 wrong type of FOD containment plan -- tool which was this tray
22 they used to put their tools and stuff in. And I pointed out to
23 him that, well, even in that aspect if you're saying that's a root
24 cause, that doesn't address the root cause because you violated
25 another thing because the picture you showed me as evidence where

1 you had this containment tray, you put that in the aircraft in the
2 motor itself, and clearly your BPIs say you don't use the aircraft
3 as FOD containment. So that's not the root cause, but -- well,
4 that's why I said. But getting back to that BPI and my
5 interpretation of that BPI, it was quite hard to understand and
6 read. But I would be injecting my opinion in that, and I don't
7 want to give that opinion. But that is an approved document that
8 they can use. But in that instance, they didn't follow it.

9 Q. I guess that you have already answered my question, so you
10 think -- do you think that BPI needs an overhaul to make it more
11 understandable because of all the exceptions that you're saying?

12 A. In my -- well, I don't want to give my opinion. But I could
13 say the FAA approved that, so if FAA decides, you know, higher
14 than me.

15 Q. Okay. Are you familiar with Boeing supplier assist process?

16 A. No, I'm not.

17 Q. Okay. Have you ever worked with any of the door crew people
18 doing surveillance?

19 A. No, I haven't.

20 MR. CRUZ: That's it for me for now.

21 DR. WOODS: Matt?

22 MR. CRUZ: Thank you.

23 MR. RIGSBY: Okay. Hey, Jonathan, you doing okay?

24 MR. ARNOLD: Yeah.

25 BY MR. RIGSBY:

1 Q. Okay. Pocholo's asked a lot of my questions, and you've
2 answered a lot of the questions already. After this -- after the
3 door plug event, the FAA went in and performed this enhanced
4 investigation or enhanced oversight investigation. Were you part
5 of that team?

6 A. Yes, sir.

7 Q. Okay. What have -- is that still ongoing, that
8 investigation?

9 A. From my -- the enhanced?

10 Q. Well, this -- after the door plug, have you guys written
11 results of what you determined that --

12 A. I know we've -- that enhanced audit, we've -- my
13 understanding we've closed out that audit.

14 Q. Okay.

15 A. And there is still deliberations that's going on about how
16 that would be communicated within FAA and outside the FAA.

17 Q. Okay. You mentioned tool control is one of the things that
18 you see on a -- say when you go out and do your audits. Can
19 Boeing do on the spot corrections?

20 A. Absolutely.

21 Q. Okay. How do you document those? Is that --

22 A. Usually I still write the compliance action, and I put a note
23 in my (indiscernible) they corrected on the spot by such and such.

24 Q. And I think you mentioned the -- when you talk to the
25 employees, that they will say they didn't understand something.

1 Is that -- does that happen more frequently than not that whenever
2 you find a compliance issue or a safety issue, do they come back
3 and say I didn't understand or I didn't have the information?

4 A. No, I don't usually -- no, I couldn't say that.

5 Q. Okay. When they talk to you about an issue that they see,
6 and you mentioned the Speak Up program, are there other options
7 that you can give them for the FAA?

8 A. I tell them if they can contact the FAA hotline if -- or
9 whistleblower program.

10 Q. Okay. Are you allowed to go to Boeing training when --

11 A. No.

12 Q. Okay. What shift do you work?

13 A. First shift.

14 Q. First. Okay. Have you ever performed off-shift audits?

15 A. Yes, sir.

16 Q. How frequently do --

17 A. Not very frequently.

18 Q. Okay.

19 A. We did it during the enhanced inspection.

20 Q. Okay.

21 A. And I just did one a couple of weeks ago.

22 Q. Okay. Do you get the support from your management if you
23 bring an issue to them?

24 A. Absolutely.

25 Q. All in all, how do you approach your job and your ultimate

1 responsibility?

2 A. Well, my ultimate responsibility is making sure aircraft are
3 safe to fly in the public. And that the organization is compliant
4 to the regulations that Congress and the FAA has stipulated for us
5 to be compliant with and to follow.

6 Q. Okay.

7 A. That's how I approach my job.

8 Q. Okay. Do you feel that's the general attitude of the
9 oversight section that you work for?

10 A. Absolutely.

11 MR. RIGSBY: Okay. Okay. I think I'm done.

12 DR. WOODS: Mike.

13 MR. RINEY: Okay. Good morning, Jon.

14 MR. ARNOLD: Good morning.

15 BY MR. RINEY:

16 Q. You had spoke about the whistleblower or hotline items that
17 you get to see. Have you seen an increase in those since the
18 incident?

19 A. I have not. I've heard there is an increase, but I have not
20 actually seen an increase. And speaking from my year and eight
21 months, I think I've actually participated in two. But I don't
22 know the history of how -- maybe the FAA was getting it, I haven't
23 done that research yet. But my understanding there have been a
24 major increase.

25 Q. In your year and eight months that -- the audit findings that

1 you've identified or that you're team's identified, how many
2 severe items that -- you mentioned, the egregious, where they
3 willfully deviated from the plan?

4 A. I have not seen it because when you say egregious, that means
5 they got shut down in my opinion.

6 Q. Okay.

7 A. But I've seen, you know, formal and informal audit -- formal
8 and informal. But that's a year and eight months.

9 Q. Were you present during the quality standdown that the Boeing
10 leadership had?

11 A. No, I wasn't.

12 Q. Since the standdown, have you seen an improvement prior -- I
13 mean for the activity prior to?

14 A. When you say an improvement, an improvement in --

15 Q. The --

16 A. Can you specify, be more specific?

17 Q. Types of findings?

18 A. No. I would say my findings are still consistent with what I
19 always find.

20 Q. So with the repetitive items, is Boeing not providing good
21 enough RCCA, or --

22 A. I can't speak for everyone. I can just speak for what I've
23 seen. It's pretty much the same.

24 Q. I'm going to piggyback on Pocholo's question on the traveled
25 work. Because there is a 30-day notice for the planned audit, do

1 you do surprise -- or, you know, pop up audits that specifically
2 target traveled work?

3 A. I've never done that.

4 Q. Do you know if it's occurred?

5 A. I don't know specifically. You could -- like when I go do
6 a -- for one of my VDRs, I don't know if you'd consider that pop
7 up. But it's not on a schedule, so Boeing wouldn't know. I just
8 call them the day before, my point of contact, say I need to be
9 over there tomorrow. I need to take a look at something.

10 Q. Okay.

11 A. That's how I do mine. And I don't know how every other ASI
12 approach that.

13 Q. Are the VDR -- but the VDRs are from a previous failure?

14 A. Right. Those are Boeing disclosed failures that they
15 notified the FAA that there was an escape from one of their
16 processes, and they notified us, so. And then they are required
17 to submit a CAPA, corrective action plan and preventative action
18 plan based on that that has to be approved by FAA representative.

19 Q. How successful are they -- is Boeing with their instituted
20 plan on those types of the items?

21 A. I've seen where they've -- I'd say for the most part, I'd had
22 to look at a metric to tell you that the FAA, I haven't seen a
23 metric based on that. But in my personal experience, they're
24 pretty successful. I'd go there because we're required to go do
25 a, you know, a follow up. At the conclusion of their long-term

1 preventative action plan, there is a measure of effectiveness. So
2 then we go back in to verify that the plan that they had is
3 effective. So in my personal experience, it's pretty much been
4 effective other than tool control.

5 Q. Is there an additional follow-up to ensure effectiveness?

6 A. Usually if we go in and they failed on that, a compliance
7 action is generated. Now as far as tool control, it may have
8 changed here recently because I think they're trying to close --
9 they do have a letter on that, a letter of investigation. And a
10 lot of our tool control findings are added to that letter of
11 investigation because they are so frequent in my -- if I can use
12 that word.

13 Q. Sure.

14 A. And pervasive and ubiquitous across the entire enterprise.
15 There is a letter that is generated and we refer them all to that
16 for the most part.

17 Q. For your day-to-day activities, are you specifically assigned
18 to the Renton area?

19 A. Yes, sir.

20 Q. Do you ever go to Everett?

21 A. I have been to Everett, but twice, so I've been down there.

22 Q. Not -- okay.

23 A. But it's usually the certified aircraft for Everett. This is
24 not to audit.

25 Q. The delivery of 37s out of Everett?

1 A. Yes, sir.

2 MR. RINEY: Okay. I think that's all I've got. Thank you.

3 DR. WOODS: Okay.

4 MR. ARNOLD: Again, I have inspected the 787-2 up in Everett.

5 MR. RINEY: Okay.

6 MR. ARNOLD: Assisted with inspection.

7 MR. MARCOTTE: Okay.

8 DR. WOODS: Dan.

9 BY MR. MARCOTTE:

10 Q. Thank you. Just in general, how do you think the
11 relationship is between the FAA and Boeing, you know, for the
12 people you work with, you know, are they open and honest? Do you
13 think they're -- hold things back, or --

14 A. I think with the particular people I work with, the DQMRs,
15 they're fairly open and honest. I think we have a pretty good
16 working relationship.

17 Q. Yep. And when you're on the floor, you feel the same thing
18 about the mechanics or inspectors you work with, or --

19 A. Mechanics, yes.

20 Q. Okay. And going back to one of Pocholo's, you know, one of
21 your large concern with QMS or our quality system or culture is
22 you said many instructions have open-ended requirements. Could
23 you give me an example?

24 A. I'll give you -- so I'll give you an example. So they will
25 say let's talk about tool control. Managers are required

1 periodically to conduct an audit of their tools. What does
2 periodically -- is that once a week? Once a year? Biannually?
3 What do you mean by periodically?

4 Q. Right.

5 A. So what you find is that when you go audit, there's a
6 requirement for managers to periodically audit their tools, and
7 you see no signatures there for the manager to do that. And you
8 have ask them when did they -- when are you doing it? Oh, I did
9 it on this month, this day, and this month I didn't do it. And it
10 hadn't been done in six months, so. But can you write them up to
11 that because that word periodically doesn't say thou shall do it
12 weekly.

13 Q. Right. Right.

14 A. And that's what I would like to see as an auditor because --

15 Q. Okay.

16 A. -- that's what I can hold people accountable to. But if you
17 say periodically --

18 Q. Right.

19 A. Or you say --

20 Q. Do you have --

21 A. -- management -- another one, management shall control this
22 process.

23 Q. Right.

24 A. Well, define control. What do you mean they shall control?

25 Okay. Where are --

1 Q. Right.

2 A. -- the parameters of which they got to provide that control.
3 It's kind of open. It's kind of hard to audit to that.

4 Q. How about in the documentation a mechanic uses when he's
5 building the airplane, like an IP. Do you find open-ended
6 requirements in IPs?

7 A. Yes, and I've found them in specifications. I'm glad you
8 asked that question.

9 Q. Yeah.

10 A. Because I've found in the specifications there was this one
11 thing, it was on a 767. It was required in the leading edge,
12 there was a wire they were required to put a heat shrink on it.
13 In the spec it says the mechanic may or may not shrink this heat
14 shrink. So I'm like may or may not, to me that's open-ended. Do
15 it needs to be heat shrink, or do it not need to be heat shrink.
16 The reason I ask the question because when I'm inspecting, I go up
17 there, I find this loose heat shrink floating around in a movable
18 flight surface just floating around in there. Immediately I think
19 safety, well, this could get caught up in, you know, in the
20 movement of the leading edge or whatever. Shouldn't this be
21 shrunk down? And then on one plane you will see it's shrunk down.
22 And on the other plane, you don't. But when you look at the
23 drawing or the specification, it have a word in that says may be
24 shrunk. So then you ask the question, when is it supposed to be
25 or when is it not supposed to be. This is, you know, it could be

1 confusing, so. And with me, I'd look at that, I'm thinking
2 potential safety issue. You know, one, you -- it contains water
3 with loose plastic up there, so are you introducing, you know, you
4 can make corrosion speed up because you're retaining water on
5 metal. And you got this loose thing floating around up here in
6 the wing, and it could probably come apart and get jammed up with
7 all this movement. But based on their spec, it is allowed to be
8 like that.

9 Q. Okay. So when you brought that to Boeing's attention, what
10 was the response?

11 A. That there was no compliance action. That they were in
12 compliance. End of story.

13 Q. Did you bring that up with your leadership?

14 A. Oh, yeah.

15 Q. And what did --

16 A. And we can only audit to their specification. If the
17 engineers say it's good, then the engineer say it's good. You
18 can't write them a compliance action.

19 Q. Okay.

20 A. You can make a recommendation.

21 Q. Did you do that?

22 A. Of course.

23 MR. MARCOTTE: Okay. All right. Thank you.

24 DR. WOODS: Okay. John, you're up.

25 BY MR. PETRUZZELLI:

1 Q. Trent, just to follow -- or kind of close the loop on what we
2 were just talking about, do you and your peers -- peer ASIs,
3 because you referenced drawing requirements and you referenced
4 specification requirements, do you guys -- has anyone ever talked
5 to you about what our document hierarchy looks like and what takes
6 precedence?

7 A. If who ever talked to me? What was your question?

8 (Indiscernible)

9 (Simultaneous speaking)

10 Q. My question is do you understand the document hierarchy and
11 what takes precedence because you were referencing drawings and
12 you were talking about specs.

13 A. Right.

14 Q. So there's a hierarchy and which one takes precedence.

15 A. Right. The drawing.

16 Q. Okay. When you're out doing an audit in the factory
17 specifically, we talked about certs and training, have you had the
18 opportunity to go in with -- because I know you talk to employees
19 and take them to computers and look for planning and stuff, have
20 you ever taken a look at their certifications or walk them what
21 you look at basically?

22 A. If I took a look -- let me rephrase your question so I can
23 make sure I'm understanding. So when I'm auditing and I'm -- do I
24 take my computer to go look at their certifications?

25 Q. No, sir. Mechanics have quality people at the Boeing

1 company, and they all have certifications and training
2 requirements. We've heard regularly that specific ASIs have said,
3 hey, these guys don't have the training. There's two -- there's a
4 couple ways you can look at training and certs, and when you guys
5 are talking to these employees, do you ever say, hey, pull up your
6 certs?

7 A. Oh, yeah. So have I actually done that?

8 Q. Yeah.

9 A. Yeah. So in CMES, let's say, for example, there is -- if
10 there is a requirement, if I'm looking at a special process, and
11 they say -- which I haven't really done this in the factory but
12 one time when the person was installing oxygen sensitive
13 components, they're required to have an oxygen cert. And I have
14 them pull it up because in certain parts of CMES, they're required
15 to have that cert, you can click on it and bring up whether or not
16 they have that cert.

17 Q. That's exactly what I was asking. Perfect. Thank you. Last
18 question this round, talked about tool control. You sound like
19 you were talking specifically, again, the factory?

20 A. Okay. Full disclosure, I've audited more than just the
21 factory. I've audited the fabrication down in Auburn. A lot
22 different sites. I originally started when I came on the FAA with
23 fabrication down in Auburn which is an internal supplier for
24 Renton factory. And in the factory, same issues with tool control
25 is in the fabrication and in the Renton factory. That's why I

1 made that comment enterprise-wide because everywhere I've gone --

2 Q. You're seeing --

3 A. -- you say the same tool issues.

4 Q. And when you say you're seeing the same issues, are you
5 talking stuff missing out of shadow boxes, or not checked out?
6 Just kind of expand on that?

7 A. Stuff not checked out. Stuff missing. Edging, inventory
8 sheets missing. Tools that should be on there. Things not being
9 checked in and checked out. Managers not conducting their audits
10 and inspections. Those type of things. And personal tools being
11 used, people making up their own tools.

12 Q. Have you, as an ASI, have you come across a tool in one of
13 the completed aircrafts, say at the SDC or at Wichita? Or not
14 Wichita. Moses Lake. Have you actually seen somebody leave a
15 tool in the aircraft?

16 A. Never been to Moses Lake. Have I seen tools? Not since I've
17 been with the FAA.

18 Q. Okay. But at DCMA you did?

19 A. Yeah.

20 MR. PETRUZZELLI: Okay. That's good for me this first round.

21 DR. WOODS: Okay.

22 MR. PETRUZZELLI: Thanks.

23 DR. WOODS: Troy?

24 BY MR. LEVANEN:

25 Q. Still going on that tool control thing, what are your

1 thoughts on why it's how you see it? I mean, you know, you
2 described it like it's a little bit sloppy or at least complacent,
3 loose maybe. What are your thoughts on why it would be hard to be
4 a regimented thing in a factory environment? Like is it the
5 mindset of the people doing the work and they just, you know, like
6 they're complacent that way, or is it -- do you feel like it just
7 needs to be a more aggressive program with the management? Or
8 what would -- like what would move the needle? Like, you know,
9 what is -- why is it like that?

10 A. So, sir, you're kind of asking me my opinion. What would
11 move the needle? I can't avoid giving you my opinion on this.

12 Q. That's okay. Yeah.

13 A. Because a lot of times they're not compliant because they do
14 have an instruction on how they do their tool control. And in
15 that tool control plan, it comes back to me where there is a lot
16 of generalized requirements in the tool control instruction. But
17 that's based off my experience. And I think because to -- I think
18 you said it needs to be more regimented in a way because it is not
19 more regimented. There is a lot of room for error. And it's kind
20 of like my opinion, I'm trying not to give my opinion because
21 based on their instructions, they are following their
22 instructions. But the instructions, based on my experience, could
23 be better.

24 Q. Okay. Thank you. Some of these guys asked the questions I
25 had. I was going to ask, you know, maybe you kind of said it.

1 How many audits like per month or per year do you end up doing?

2 It sounds like some of them are a pretty big process. Like you

3 have to give a 30-day notice that --

4 A. Yeah. So those are typically the larger ones where we're
5 going to an organization that has a higher risk assigned to it.

6 So we're generally there for a week. We give them notification.

7 But say, for example, like going through an audit at a propulsion

8 lab, it's only a one day thing. Not very many moving parts there.

9 Q. Yeah.

10 A. So it could be one day. But on general, since I've been with
11 the FAA, I average scheduled audits about six a year. That's not
12 including things I go audit myself as part of VDRs or we hear
13 about a whistleblower or things of that nature.

14 Q. How often can you just freelance? Or are you allowed to do
15 that where you just say I'm going to, you know, here's what I'm
16 doing today, I'm going to go out and just cruise around the
17 factory?

18 A. We can do that, but you need to give notification and you
19 should have justification for doing that. Yeah.

20 Q. Oh, really?

21 A. Yeah. There's no freelancing if you could use that term.
22 But, generally, like I say, by -- like we also do aircraft
23 certification, like most of my time actually spend more doing
24 aircraft ticketing. If we start to see a trend on certain items
25 when we inspect an aircraft in a certain area, then we can say,

1 hey -- talk to my boss, I'm seeing this trend of say, you know,
2 clecos left on the airplane. Let's go over here and take a look
3 and see how these clecos keep getting missed. And we'd go over
4 there, and then we notify the factory, hey, I'm going to come over
5 there. I'm going to take a look at this.

6 Q. Do you ever get to kind of look at day zero/one like when
7 they do the incoming shake down basically? Do you ever get to
8 kind of be around that and see what the discrepancies are and kind
9 of see how they're going about it?

10 A. When you say day one?

11 Q. Well, like when they roll it into the factory, sometimes they
12 call it day zero where they're even doing the shake down
13 inspection before it kind of gets into the factory, and then day
14 one is just --

15 A. I've never witnessed that.

16 Q. -- flow day one?

17 A. Yeah. I've never witnessed that. Yeah. But I have looked
18 at flow day one items. In particular, I've looked at horizontal
19 stabs that come in. Those are one -- a couple of things that I
20 looked -- horizontal stab and the rudders that come in is what I
21 looked at on flow day one specifically on the receiving part of
22 that. But that was because I had a VDR about FOD being discovered
23 in the horizontal stabs, so I wanted to find out -- do my own
24 investigation to try to determine what would be the root cause of
25 that.

1 Q. Regarding still kind of on those audits, regarding that, how
2 do you feel about the staffing that your team, which we know it's
3 not a huge team for the oversight has to be able to do that as
4 much as you would like? Do you feel like if you had more people,
5 you would do more auditing or you personally would get to do more,
6 or what -- how do (indiscernible) that?

7 A. Yeah. We can -- my opinion now, I haven't looked at a human
8 resource plan that says you're adequately staff.

9 Q. That's fine.

10 A. But, sure, I would love to have a few more team members, you
11 know, because you're always trying to improve and, you know,
12 continuous improvement what we're doing. So can we improve?
13 Yeah.

14 Q. You mentioned the OJT programs, do you get to look in on
15 that? I know you mentioned it as some of the reasons why, you
16 know, when you ask somebody a question, they say, well, this is
17 how I was trained. But maybe it's not really a shortcut. It's
18 just kind of a deviation from the IP or whatever. How do you see
19 the OJT programs from your perspective when you're out and about
20 in the factory? Do you feel like they're -- besides the things
21 you mentioned, do you feel like they're pretty solid and you feel
22 like they're pretty well -- or is there any opportunity for
23 improvement there do you think?

24 A. Well, I haven't looked at their OJT programs, specifically,
25 their training. Generally, we don't look at their training other

1 than if it's a specialized training, something like, you know,
2 part marking or, you know, NDI. And then in that, we don't --
3 can't get into, you know, I've never looked at how they are
4 trained specifically. I just know they are supposed to have
5 training. We're never -- my understanding, we're not allowed to
6 actually witness their training. We just got to know they got to
7 have certain training. As far as OJT, I would say from my
8 experience, what I see, a lot of their training is done through
9 OJT. And a lot of that OJT is based off institutionalized
10 knowledge, not following a formal OJT plan specifically. I have
11 not seen that. No one has ever shown me that. And when I've
12 inquired about it, no one has ever mentioned that there is a
13 formal OJT plan that they follow.

14 MR. LEVANEN: All right. Thank you. Let's see if I have any
15 more. I think that -- I think that's good for me for this round.
16 Thank you.

17 MR. ARNOLD: Yeah.

18 DR. WOODS: Okay. Nils.

19 MR. JOHNSON: Good morning, Jonathan.

20 MR. ARNOLD: Good morning.

21 BY MR. JOHNSON:

22 Q. How many FAA inspectors are assigned to Renton for
23 surveillance?

24 A. Right now, five.

25 Q. What is the correct number of inspectors that would be needed

1 to perform proper surveillance of the Renton production
2 certificate?

3 A. I couldn't speak to that because that's going to be based on
4 risk, and someone above me would have to make that determination
5 through the RB and RT tool. And something would probably more
6 than likely have to be changed to decide that. So I can't speak
7 to that directly because everything we do is based off of risk and
8 that was determined how often we should be there and my
9 understanding how many personnel we should have. Now having said
10 that, I hadn't seen an HR roster said how many we're supposed to
11 have. We may or may not be staffed properly.

12 Q. Okay. What areas at Boeing Renton do you believe are the
13 highest risk and does this align with your ACAIS work plan?

14 A. What areas of?

15 Q. What areas of the production certificate at Boeing Renton do
16 you believe are the highest risk, and does that align with what --
17 basically the work plan you're being given?

18 A. I don't know that offhand. I would be giving you my personal
19 opinion on it without looking at the risk-based model that we have
20 in our -- in ACAIS right now. Specifically, I couldn't tell you.
21 I haven't committed that to memory.

22 Q. I mean you're boots on the ground, so I'm valuing your -- if
23 you want to call it your opinion, I'm interested in what you think
24 because you're there and see it day in and day out.

25 A. Well, me, if you ask my personal, we should always be looking

1 at what we consider critical items of flight.

2 Q. Okay. Have you done any quality system audits in 2023?

3 A. QMS, I have not done a full QMS audit. But when we did the
4 enhanced audit of Boeing a couple of months ago, it was similar to
5 what -- if you read what a QMS audit is supposed to be and
6 described, that's pretty much what we did. It just wasn't called
7 QMS audit.

8 Q. Got it. Have you ever observed an MED plug opened during any
9 one of your inspections --

10 A. I have not.

11 Q. -- at the factory? So (indiscernible) without specific
12 qualifications or authorizations, so I mean if there's no qual to,
13 let's say, be a door person, or a door rigger, or a door installer
14 at Boeing, how can you determine whether or not an
15 assembler/mechanic is able to -- or is qualified to perform their
16 job? Is there a way of doing that? I mean is it just opinion
17 or --

18 A. I don't know. We don't look at that. We don't determine
19 what their qualifications are other than if it's a special
20 certification they need, i.e., NDI, weight and balance, and all
21 that. But I have not -- I couldn't speak to that.

22 Q. I'll ask it a different way. Do you think that there are
23 enough special certifications based on the work you see being
24 performed at Renton?

25 A. I can just say we got to follow the regulation.

1 Q. Okay. That one was already asked. What is the FAA doing to
2 ensure the quality system at Boeing is working?

3 A. Well, we have a CM plan that's on our oversight. We audit to
4 the regulations and -- to ensure they -- and to their own
5 processes that's been approved by the FAA. So we make sure they
6 follow those because those were approved as being adequate.

7 Q. Is there a history of undocumented maintenance or a failure
8 to follow process at Renton?

9 A. I can't speak to that. I don't know if there's a history of
10 it. Or can you ask that question again?

11 Q. I'm guess I'm asking is it systemic -- is undocumented
12 maintenance, not writing a removal but yet removing a part, for
13 example, is that a systemic problem at Renton?

14 A. I only know of that one incident that I spoke about earlier
15 about the fuel line that was done. I don't know if you can
16 qualify that as being systemic. It's the only one I knew of,
17 but --

18 MR. JOHNSON: That's it for me in this round. Sabrina.

19 BY DR. WOODS:

20 Q. Okay. A couple questions because we're -- we've gone a
21 little over an hour, so I want to get us to a break. What is your
22 past experience in auditing for or providing oversight for safety
23 management system processes?

24 A. From my understanding, I've never -- well, maybe answer the
25 first part. I've never done an audit specifically for a safety

1 management system. And my understanding is that safety management
2 system is -- right now is kind of voluntary. I have had people at
3 Boeing mention that they were transitioning to the safety
4 management system as well as the FAA, we're still transitioning.
5 It doesn't -- my understanding, it doesn't come mandatory until
6 part five is approved and finalized. Myself specifically, I'm
7 scheduled for SMS training later on this year. We all are. But
8 we haven't started auditing to that yet.

9 Q. So outside of doing what you do now as an ASI, you have not
10 had any experience implementing an SMS plan, or providing
11 oversight, or being a functionary under an SMS plan?

12 A. No, I haven't.

13 Q. Okay. What do you know about how the adoption of the new
14 rule requiring now an SMS is going to change your workload?

15 A. I don't know. My understanding is that it's going to be
16 harmonized with the QMS structure. I would think we would look at
17 that concurrently when we're doing QMS. But it may be broken out
18 separately. But I don't have enough knowledge on how it's going
19 to be implemented yet to give an informed answer on that, educated
20 answer on that. I imagine there'll be more since it is in
21 addition, you know?

22 Q. I know you briefly touched on that you are not aware of what
23 the manpower standard is for your job. That's above your level,
24 which I appreciate. However, you also stated that, you know, a
25 couple more bodies wouldn't hurt. Right now as you are in your

1 day-to-day job, do you feel that you have the tools you need to do
2 your job effectively?

3 A. Absolutely.

4 Q. Do you feel you have the support you need to do your job
5 effectively?

6 A. Yes.

7 Q. And do you feel that if there was something you strongly felt
8 you needed in addition to, that at least somebody would listen to
9 your take on the situation?

10 A. Yeah. To be as open and transparent, the FAA has been one of
11 the very few jobs I've ever worked on where they are open to
12 making things better, and if you need it, just ask for it.

13 Q. Okay.

14 A. And they're very open, at least my leadership, they're open,
15 tell us what you need and what we need to do and what's your
16 opinion on how we can do things better.

17 Q. So when interacting with -- I know you said that your
18 counterparts that you interact with and work with and provide a
19 head's up notice that you're coming in Boeing are receptive. But
20 generally, when you're walking around after the fact, do you feel
21 that your presence is receptive at the Boeing company?

22 A. That's kind of hard to answer. I can just tell you a lot of
23 what I see sometimes. Usually when we show up, people disappear.
24 And you have to pull things out of management level type people.

25 Q. About that, have you quantify that, which people are

1 disappearing on you?

2 A. Yeah. A lot of people, almost everybody disappears except
3 for QMRs who we're required to be there with us and our DSL (ph.).
4 And sometimes the mechanics on the floor are doing the work.

5 Q. Okay.

6 A. But generally a lot of people disappear, or all of a sudden,
7 there's a non-workday when we get there.

8 Q. Do you --

9 A. I don't know if that's my schedule, or just lately when we
10 show up to do audit and say you want to look at a specific thing
11 oh, this is a non-workday and they're not working that job today,
12 or that's only done on the second shift, or that's done on the
13 third shift is what I see a lot.

14 Q. But given that you're coordinating in advance, shouldn't that
15 information be relayed to you prior to your arrival so that you
16 could adjust accordingly and set up something that suits your
17 needs?

18 A. Absolutely.

19 Q. Okay. What recourse do you have when that happens?

20 A. To just work it out and be, you know, flexible.

21 Q. But with whom are you working it out, your management or
22 Boeing's management?

23 A. Boeing.

24 Q. Okay. Has that been a recently new -- I guess in what
25 timeline have you --

1 A. I'll give you an example.

2 Q. -- experienced that?

3 A. So if I show up and they say, oh, we're not working that
4 today. And then I could say, you know, there's a choice you can
5 make. You can say, okay, I'm going to look at something
6 different, or you can just say, okay, I'll come back tomorrow when
7 they are working it and I'm going to look at it. At least that's
8 what I do.

9 Q. Has it always been like that since you've been here for a
10 year and eight months, or has that -- is that a recent phenomenon?

11 A. It occasionally happens, but here recently, it's become more
12 frequent.

13 Q. How often do you, I guess, table talk or watercooler talk
14 with your fellow ASIs?

15 A. Almost every day we talk.

16 Q. Okay.

17 A. The ones on our team. Either, you know, either by phone or
18 whatever, we talk about trends that we're seeing almost every day
19 they're called.

20 Q. Have they reported similar experiences?

21 A. Oh, yeah.

22 DR. WOODS: All right. Well, that is it for all of us for
23 this round. We have, again, been going well over an hour so I'm
24 going to go on and call for --

25 MR. ARNOLD: Can I ask for clarification --

1 DR. WOODS: -- a break.

2 MR. ARNOLD: -- on a question?

3 DR. WOODS: Sure.

4 MR. ARNOLD: When you say have they reported, they don't
5 report to me --

6 DR. WOODS: I understand. No.

7 MR. ARNOLD: -- about how we've talked about it, so I don't
8 know if they reported that because that kind of makes it sound
9 like they told the chain of command or they officially made some
10 record of it or --

11 DR. WOODS: Yep.

12 MR. ARNOLD: -- whatever.

13 DR. WOODS: You're correct.

14 MR. ARNOLD: (Indiscernible).

15 DR. WOODS: That was a poor choice of words on my part.

16 MR. ARNOLD: Yeah.

17 DR. WOODS: I just wanted to know if that's something that
18 you've talked about and that other people have mentioned that
19 they've experienced as well, or if that's just something that may
20 you've experienced due to timing or whatever.

21 MR. ARNOLD: Yes, ma'am.

22 DR. WOODS: Okay.

23 MR. ARNOLD: Yeah.

24 DR. WOODS: So it is something that they have also --

25 MR. ARNOLD: We've talked --

1 DR. WOODS: -- shared --

2 MR. ARNOLD: -- amongst ourselves --

3 DR. WOODS: -- their experiences?

4 MR. ARNOLD: Yeah.

5 DR. WOODS: Okay. Okay. Well, with that, we are going to go
6 off record at 09:20 Pacific Time for a break.

7 (Off the record)

8 DR. WOODS: Okay. We are back on the record on the record at
9 9:31 Pacific Time.

10 BY MR. CRUZ:

11 Q. Hey, Jonathan, just a couple of follow-up questions from me.
12 Matt mentioned something about Boeing training. Are you not -- is
13 the FAA not allowed to take Boeing training?

14 A. Not that I know of. I don't officially know we're officially
15 not allowed to do that, but --

16 Q. How are you --

17 A. My understanding is that, no, we don't do that -- go to their
18 training.

19 Q. So how are you able to audit their computer system or inputs
20 into the computer system and IPs without knowing how the system
21 works?

22 A. When you say computer system?

23 Q. Like if you --

24 A. Elaborate.

25 Q. -- either audit any of the production records in the computer

1 system that Boeing has?

2 A. No. They have to pull them. We ask and then RQSO, the
3 regulatory, their lawyers will actually pull those documents out
4 and send them to us. But we have to request them.

5 Q. Do you ever watch a production employee input stuff into
6 their computer systems?

7 A. No.

8 Q. Is that not one of the elements that --

9 A. Well, I take that back.

10 Q. -- you guys --

11 A. I take that back.

12 Q. Go ahead.

13 A. Yes. I have seen them go into CMES and put their buy on
14 there, sign off a certain area --

15 Q. Okay.

16 A. -- while I'm standing there.

17 Q. How would you know whether they're doing it properly or not?

18 A. I don't think their CMES program is -- falls under our
19 auditing purview.

20 Q. Okay. Is --

21 (Simultaneous speaking)

22 A. (Indiscernible) if I can give my opinion.

23 Q. Sure.

24 A. It is a record, so I don't know all the ins and outs on how
25 we look at that other than legally we have to request that

1 information. But that's just -- CMES is a depository or a
2 suppository rather I would say, depository of information, and we
3 have to request to get that information out. There may be some
4 entities in the FAA that can go directly in there, but I don't
5 have access. Now having said that, when I worked for DCMA, I
6 could go in there. I had access.

7 Q. Would you know if Boeing in their computer system, would you
8 know if Boeing put something in there, can they remove it and be
9 permanently removed from the computer system? Let's say an IP, or
10 any type of production package, or any type of non-conformance,
11 could they potentially delete that information without it being
12 retrieved?

13 A. Well, you're asking me my opinion and personal experience on
14 those types of things, when it comes to computers and electronic
15 media, anything's possible.

16 Q. Okay. But you said before doing audits, you do a lot of
17 research. Do you research just that specific item within the 737,
18 or do you look at trends with regards to other models as far as
19 types of issues that come up specific to that audit?

20 A. We have situations, things it's called like COS items, that's
21 where I review COS, and it may necessarily -- may not necessarily
22 be a 737 type item, but, yes, sir, we look at trends that's going
23 around --

24 Q. Okay.

25 A. -- in the NAS.

1 Q. Has there ever been any trends regarding part removal and
2 part assembly installation issues?

3 A. Not that I've stumbled across. I haven't seen that specific
4 one other than what I told you about now we know about the door
5 plug.

6 Q. Speaking of the door plug, what's your opinion on the issue?
7 I'm asking for your opinion.

8 A. As far as --

9 Q. What happened?

10 A. Elaborate. I don't know what happened. I haven't seen all
11 the investigative documents to determine. I can't have an
12 opinion, an informed opinion. I haven't seen all the facts.

13 Q. You said in your enhanced audits that you did that there were
14 some QMS audits that were accomplished during that time. Could
15 you provide some insight into what QMS audits you guys found?

16 A. Well, I would say that whole audit --

17 Q. Okay.

18 A. -- umbrella that we did would fall, in my opinion --

19 Q. Yeah. Similar to a Q --

20 A. -- falls on a QMS --

21 Q. Yeah.

22 A. -- audit. Now they weren't all little separate audits
23 because a QMS is you do a lot of multiple --

24 Q. Sure.

25 A. -- what I describe as process audits. You look at the entire

1 QMS system, all the 16 elements at one time. Whereas, like for
2 example, we also need -- we'll go do a principle inspector audit.
3 Say, I go over the board, and I don't look at all 16 elements at
4 one time. I may only look at certain elements.

5 Q. During your time as an ASI, have you audited any out-of-
6 sequence work?

7 A. Yeah.

8 Q. Can you explain what you found?

9 A. So there was a process over at Wings, there's this IP where
10 it's called the scapelet (ph.), and it's part of the wing that
11 they are fabricating to go on the leading edge of the wing, left
12 hand side. So they're allowed to do out-of-sequence work
13 according to the IP. So they don't do it in any specific order,
14 and there's certain parts in there where they're required to do
15 fay sealants and provide bonding, things of that nature, and take
16 measurement, tolerances of holes. They're required to drill
17 holes, things of that nature. So some of the things I found
18 that -- a particular IP that stands out is, one, the IP, the
19 individual didn't use a certain tool that it was called out in the
20 IP. So when you ask that question, well, why didn't use this
21 tool, this tool is designed kind of like a brace to go on the
22 middle part to keep it from twisting and other while they're
23 drilling to keep the holes and stuff aligned. So I asked the
24 questions to three MIT (ph.) tool, why did you not use this brace
25 when you was drilling. And the mechanics say, well, I don't have

1 to use this tool anymore. It's hanging up on the thing. So I was
2 like IP say you're supposed to use it, why are you not using it?
3 Well, the engineers told us two years ago we didn't have to use
4 that. So that -- I wrote a compliance action for that, they
5 didn't use it. On that same job, he put the sealant on prior to
6 drilling the holes and doing this part and I, right here on this
7 step, it doesn't say apply the sealant. But when you find out out
8 of-sequence, he say, well, I'm allowed to work out-of-sequence.
9 And I understand why he did that. The reason why he did that
10 because later on in that sequence, and it says to apply the
11 sealant. It'd be kind of hard to put this brace on here and drill
12 the holes, and then he would have to later on take that brace back
13 off to put the sealant on there. So, initially, I didn't know he
14 could do out-of-sequence work so I asked the question, you're out
15 of sequence. But I see why he went out of sequence because they
16 were required, you know, to take that all back apart to apply the
17 sealant. So my initial question, well, why doesn't that step go
18 here, and it tells you apply the sealant prior to installing the
19 brace and, you know, putting all the bolts in and fastening the
20 bolts, you know? Well, there was another thing on there that I
21 know was with that one. And I thought that could lead to a
22 mistake because if that out of sequence, if the individual didn't
23 know he can go out of sequence, potentially if he wasn't reading
24 that IP verbatim, or haven't been trained somehow outside of using
25 this IP, he wouldn't knew that and he'd putting this thing

1 together, and then he would have to unrivet the part later on. So
2 I thought there's a potential for a mistake to be made or to
3 produce some work down the line because of that out of sequencing
4 of that IP, but he had been doing the job for quite a while, so he
5 knew to put the sealant on there. So my question would be if you
6 was a brand new person and we trained them to follow the IP, how
7 would that person know that because on that IP, all you have to
8 look at in the notes it says you're allowed to work out of
9 sequence. So I thought that could be an opportunity for a
10 continuous improvement, you have this IP, there's -- you want to
11 defect proof the IP. So I thought there was an opportunity for
12 that. Another part that he was required to drill some angled
13 holes in that article, and he had to use a blank-off plate that he
14 put in there to keep from drilling into the item itself. So my
15 question in the IP was it didn't specify where he's supposed to
16 get this protective material from. So the individual had made up
17 his own metal plate that he was carrying around with him that he
18 installed on this article, and I'm asking the IP doesn't tell you
19 to do this, where did you get this from? So here's a home-
20 generated tool he's now putting on there. But the IP did say put
21 a protective plate, but it don't identify where this protective
22 plate, he's supposed to get it from and it -- then also it didn't
23 identify when he's supposed to take it off. So pointed out to
24 them, and I wrote a compliance action for that because you now
25 introduce a potential for FOD onto this article. One, it doesn't

1 tell you when to take it off and two, it doesn't provide no
2 standard of what type of protective material you should use. And
3 you're carrying around in your tool container that's tool
4 container is not being in inventory, FOD. So there was another
5 one. So I thought that was an area for opportunity because why
6 don't you just give the person a jig, and -- so that was something
7 I noticed with that IP. And again, I want to go back to where he
8 wasn't using a 3M tool, and one of the things he said was
9 engineers told them they didn't have to do it and it's been two
10 years. And I asked that question, two years and why isn't this --
11 I asked for the manager, why haven't this installation plan been
12 updated? So then the guy said, well, I guess we can do a SAT, you
13 know, shipside action tracker where you implement a change to --
14 so we asked the quality person, well, was one produced? Well,
15 they say we didn't need it. It was at our discretion. So to me,
16 you're just leaving a lot of ambiguity into this process,
17 opportunity for mistakes. So I wrote a compliance action for that
18 because two years, come on. You were saying follow this IP, but
19 you have all these missing steps in this IP, and you have
20 engineers through word of mouth is telling you to deviate from the
21 written plan, but there is no documentation of that. So that was
22 one particular thing I would say, but that answer your question?
23 Q. Where does that stand right now?
24 A. I haven't followed up on that yet. And I'll find, we just
25 did an audit last week, so my understanding is they are saying

1 that's allowed, and I'm asking for the evidence to show that.

2 Q. So did they do a root-cause analysis on all that stuff?

3 A. I haven't seen that yet.

4 Q. Okay.

5 A. Because that particular audit haven't been released for
6 correction yet. It's part of the follow-on enhanced audit.

7 Q. Okay.

8 A. And there's still deliberation on how that needs to be
9 communicated and the expectation of what the FAA is going to
10 require for a fix because it may become a letter of investigation.

11 Q. Okay. You mentioned that you have discussions with your
12 fellow ASIs regarding the trends. What are the trends of the
13 discussion between you and your ASIs?

14 A. Well, we kind of thought the tool control issues, the fact
15 that we show up to do certain audits and the person who was
16 supposed to be the SME, subject matter expert, is not there, or
17 somehow they're on leave and stuff and we have to wait around, or
18 we have to choose something else to look at, those types of
19 things.

20 Q. Getting back to the questions that Nils asked with regards
21 to -- you're saying it's a risk-based analysis determines your
22 work program, correct? Nils asked a question how do you know that
23 risk-based analysis that's being conducted for your work program
24 is what's actually -- is that metrics -- do you concur with that
25 metrics when you go and do a production audit? Is the risk that

1 they're saying is high, is that what you're seeing in the factory?

2 A. I have not done any independent analysis to go against what
3 the FAA has produced and said this is what they want us to
4 inspect.

5 Q. So you --

6 A. And something that's going to deviate from the regulations.

7 Q. So --

8 A. I don't have -- I haven't had that latitude to do that.

9 Q. So you're basing your work program and you accept what the
10 FAA says is a big risk, and that's what they have you do in your
11 work program?

12 A. If I accept it, yes.

13 Q. Okay. Have you worked any door plugs outside the facility?

14 A. No.

15 MR. CRUZ: That's it for now.

16 DR. WOODS: All right. Matt.

17 BY MR. RIGSBY: Just a couple, Jonathan.

18 Q. You mentioned on the tool control issue that he went back to
19 his box for something. Are Boeing employees allowed to have their
20 own tools on the job?

21 A. No.

22 Q. Okay. Does that happen though?

23 A. Yes. Well, you know what? Let me rephrase that. I don't
24 know if Boeing employees are allowed to have their tools --

25 Q. Okay.

1 A. -- enterprise-wide. I just know where I've been they're not
2 allowed.

3 Q. Okay.

4 A. In the factory they're not allowed.

5 Q. Okay. But you have seen it?

6 A. Yeah.

7 Q. Okay. You document that through your compliance action?
8 Have you ever seen like how that process works? I don't know.
9 John, maybe you could provide a little more. Does the manager
10 confiscate the tool, or is it -- I mean, you know, yeah, it's
11 there, but we just walk away, or we -- I mean how do we prevent
12 that from happening again?

13 A. I've seen times where a manager will take the tool. And I've
14 seen where a manager just walks off.

15 Q. Okay. With safety being one of your core values, I guess,
16 would be the word, if you see something egregious on the floor,
17 can you stop production?

18 A. Yes.

19 Q. In your year here, have you ever seen that?

20 A. I wouldn't say egregious, but I have stopped once when I was
21 in the factory. A guy was on top of the airplane. He was
22 drilling some holes up on the skin of the airplane, he was up on
23 top of the aircraft. And he had a bucket full of drills, and he
24 was drilling and breaking them. And they was just falling off the
25 side of the airplane down onto the platform or rolling off. And

1 we were standing there, and then I'm looking at everybody. And
2 the rule says you're supposed to stop and pick up this FOD. And
3 then he's just breaking them, and they fall out and he'd just grab
4 another one and keep working. And I go stop, time out. Is he
5 going to go pick this stuff up before it migrates into the side of
6 the airplane? It was amazing to me that, you know, you had
7 quality inspectors standing there and you had the managers
8 standing there, and you had quality people all standing there
9 watching this and none of them saying nothing.

10 Q. Okay. And I guess with a case like that, that would be
11 documented through another compliance --

12 A. Yeah.

13 Q. -- action, a your dash 6? Okay.

14 A. I would like to say, you know, I did point that out to the
15 quality DQMR person who was there with me, and she took action and
16 went up there and made them clean it up.

17 Q. Okay. When you do these audits, are you by yourself, or is
18 it usually a pair of you guys, a pair of inspectors who go
19 (indiscernible)?

20 A. No, we're usually by yourself. Sometimes another FAA person
21 will come along.

22 MR. RIGSBY: Okay. Okay. I think I'm done.

23 MR. RINEY: I didn't have any further questions.

24 DR. WOODS: Okay. None for Mike. Over to Dan.

25 BY MR. MARCOTTE:

1 Q. Yeah. Just a few. At Boeing's RCCA, so when there is a --
2 like whether it's a VDR or CA letter from the FAA, I'm assuming
3 Boeing's response would typically involve some type of root cause
4 corrective action. So what format do you usually -- and I'm -- do
5 you get to personally see those?

6 A. Yes. They submit them to us. They call them BPSM, and I
7 can't remember what a BPSM is. It kind of comes across as a
8 PowerPoint type of plan, maybe a four-blocker type --

9 Q. Yep.

10 A. -- document where they breaks it down into a little different
11 areas. And they give you some solutions what they think the root
12 cause was. There's a little fault tree kind of type of analysis
13 they did where -- how they kind of came to the root cause. And
14 then they give you their solutions of what they think the fix is.
15 And then we buy off on that or approve it and say, you know, that
16 looks like a good plan and we agree. If not, we give them
17 feedback saying, no, you need to do more because this -- don't
18 address the actual issue or the root cause, or you got the wrong
19 root cause. That usually comes with a formal letter pretty much
20 stating the same thing in writing.

21 Q. Right.

22 A. So you get the BPS plan that's more graphical type, you know,
23 with all that. And then the formal letter that comes along with
24 that that says exactly what they're going to do and the solutions
25 they've identified.

1 Q. Okay. Just in general, you know, what do you think of the
2 quality of the BPSMs for the root cause and the corrective action?

3 A. I'll say for me in my experience, they're mostly 50/50.
4 Fifty percent of the time I usually have to give them feedback and
5 say I don't agree with this, and I'm probably going to have to
6 kick this back or reject it. And I typically say what I think is
7 wrong, and they will submit a revision to me, and occasionally
8 someone will want to argue that, and so then I just formally
9 reject it.

10 Q. Okay. So about 50 percent of the time you give feedback, and
11 out of the times where you did that -- 50 percent where you give
12 feedback, how frequently do you think it turns into an argument or
13 they just don't come back with a change, or --

14 A. Well, I'll give you one example. The one where we talked
15 about the fuel line --

16 Q. Right.

17 A. -- with the VDR, I give them feedback and there was a lot of
18 deliberation going back and forth between me and them before they
19 actually saw the light.

20 Q. So is there ever times where they respond to your feedback
21 with more information, and then you say now I get it and the
22 original plan was I'll accept that maybe there wasn't enough
23 background information or --

24 A. That hadn't happened for me. Usually it's -- generally if I
25 give feedback to them, they generally have to come with a

1 revision.

2 Q. Okay. How many BPSMs do you think you've looked at where you
3 give --

4 A. I can't give you a number. I can go research it and get back
5 with you on that. There's a lot. I think right now I currently
6 got eight VDRs in my queue. And two of them I know for a fact I
7 just got recently, I haven't given any feedback on it yet, I'm
8 still looking it over.

9 Q. Okay.

10 A. That's just between -- well, let's say probably September to
11 this timeframe about eight.

12 Q. Okay.

13 A. I have -- that haven't been closed out CMP action,
14 certificate management --

15 Q. Yep.

16 A. -- (indiscernible).

17 Q. Yeah.

18 A. I have to go look. There's quite a few.

19 Q. Okay. So out of the six, you have some --

20 A. And I have some pending ones --

21 Q. Right.

22 A. -- that haven't been submitted yet based on the investigation
23 that's still sitting out there. I know at least probably 15 to 30
24 of those.

25 Q. Okay. So out of the six you have in your workload that

1 you've reviewed, how many of those you think will have feedback
2 where you're not going to accept the --

3 A. These last three, I just gave feedback on two of those that
4 needs revision. They've already agreed to the revisions, yes.
5 I'm just waiting on the documentation on what we agreed upon for
6 you --

7 Q. Yeah.

8 A. -- to give me.

9 Q. Okay. Once they're agreed on, do you load the data from the
10 BPSM into an FAA database, and how does --

11 A. Yes.

12 Q. Okay. Do you know is that included into what --

13 A. There's another part. After we agree, then I submit it to
14 our BPSM FAA senior leadership team to get their buy-in --

15 Q. Right.

16 A. -- because they may still tell me, nope, Jonathan, you're
17 off-track and we want more. So I submit it to them, and then they
18 buy off on it. And then I give feedback to Boeing again and say,
19 yes, I agree and now my team agree, move forward. Until that
20 happen, they can't move forward.

21 Q. Right. So once there is an agreed action, is that loaded
22 into an FAA database?

23 A. Yes.

24 Q. And is that part of the risk analysis for the following year
25 for the work plan? Is that taken in --

1 A. Yes.

2 Q. -- consideration?

3 A. It goes into the CA database.

4 MR. MARCOTTE: Okay. All right. That's all I got for now.

5 Thank you.

6 DR. WOODS: Okay.

7 MR. RIGSBY: Can you say again which database?

8 MR. ARNOLD: CEA.

9 MR. RIGSBY: CA?

10 MR. ARNOLD: CEA

11 MR. RIGSBY: CEA.

12 MR. ARNOLD: Certificate enforcement, don't ask me what the A
13 stand for.

14 DR. WOODS: John.

15 BY MR. PETRUZZELLI:

16 Q. One question. Trent, do you have -- actually two questions.
17 Do you have a MyBoeingFleet account?

18 A. Yes.

19 Q. Could you share what applications or systems you have access
20 to there, please?

21 A. Message courier.

22 Q. Basic (indiscernible)?

23 A. 1PP -- well, not 1PPM. There's a portal to the QMS manual.

24 I can go to that. There's a REDARs (ph.). They don't call it
25 REDARs on my portal. On the DCMA were called REDARs, but it's

1 called something else. But I can get into that.

2 Q. Can you get into the supplier drawings?

3 A. No.

4 Q. Okay.

5 A. We're not allowed to look at any supplier data.

6 Q. Okay.

7 A. That's another component of the FAA that does that. I can
8 get in and see some of the BACs and specifications portal. I can
9 see some of those that Boeing give us access to. But I can't see
10 it all. But there is a portal set up for us for that.

11 Q. Do you -- have you guys talked about it internally about
12 asking for additional accesses?

13 A. Oh, yeah. Yeah. Yeah. Well, there's certain things that
14 Boeing are not going to allow us to see based on proprietorship.
15 Is there something specific you're asking about?

16 Q. No. Obviously, we got a bunch -- we spend time together, you
17 see this and it's like why don't they just get the access, and I
18 wanted to hear from your guy's perspective. Have you asked for
19 it? What is it you do need? And, again, like when we're
20 ticketing, I can provide you with what you need, I can't give you
21 a copy of it necessarily, but we can always look at it. So --

22 A. Right.

23 Q. I've been led down a path that -- in MyBoeingFleet, you guys
24 had some really good access, and it's sounding like you don't.

25 A. We have access to a lot of things we need, you know, like

1 BPIs and, you know, things you're going to do to do certificate
2 management. But there are certain things that we don't have
3 access to.

4 Q. And then do you get some of that information that you may or
5 may not need like from the ODAs for example?

6 A. The same situation in which you just described for yourself,
7 we -- they have access to things that we're not allowed to look
8 at. But if we have questions, they will pull it up for us. For
9 example, if I want to see an NCR, someone has to generate that for
10 me.

11 MR. PETRUZZELLI: Okay. That's all I got Jonathan.

12 DR. WOODS: Okay. Troy.

13 BY MR. LEVANEN:

14 Q. You had mentioned the enhanced oversight. Can you tell me a
15 little bit more about that? So we know it started this year. Did
16 it start this year?

17 A. Yes, sir.

18 Q. And then is this still going now, or, you know?

19 A. I don't think it falls in a category enhanced oversight
20 anymore, if you were using that term. But, yeah, our auditing
21 onsite is still higher than what it previously were.

22 Q. Oh, it is. Okay. And then that was kind of my question is
23 how well it worked or how well it's working that, you know, like
24 the enhanced oversight.

25 A. Well, I think it's working. We're identifying more and more

1 opportunities for improvement. A lot more work.

2 Q. That was a question I had.

3 (Simultaneous speaking)

4 Q. Yeah.

5 A. Which is probably the reason why you're saying we need more
6 people now because --

7 Q. Right. You did.

8 A. -- administratively, it can get kind of a lot.

9 Q. Okay. Thanks for doing it. And then the other question I
10 was going to ask about the longevity of it is what your thoughts
11 is on how well -- if it was still going, how it could be sustained
12 with such a small group. But I think you answered that, too.

13 A. All right.

14 Q. Has Mike Hager, has he been your, I guess, boss the entire
15 time that you've been with -- for this -- was it one year and
16 eight months or for Boeing Renton?

17 A. Yeah. For like the first three months, I had a boss named
18 Tyler Feely (ph.), and he had some personal family issues going
19 on, and he left for a while, and then he eventually -- my
20 understanding, he retired. And then I came over to Mike Hager.

21 Q. Okay. What about -- what's your thought on if you think of
22 the word transparency, and I know you mentioned it earlier, like
23 how do you feel about -- what's your opinion on the transparency
24 between the FAA and Boeing as a -- just as a general word in
25 whatever -- however that seems to you?

1 A. I think we -- there's transparency to keep a good working
2 relationship going. The VDR program is all based off
3 transparency, so there is a formal process in place that
4 facilitates that. There is certain DQMRs on a regular basis going
5 through my day-to-day job that I can work with as far as Boeing
6 that I feel is fairly transparent on a working level. But the
7 higher you move up in the chop chain I should say, that
8 transparency gets less and less, understandable.

9 Q. So you were there before and after this specific door plug
10 event and the different enhancements that were made as a result of
11 it, but do you feel like the transparency got better, worse, or
12 about the same after the event or since the event?

13 A. I have seen no change on my day-to-day interactions.

14 Q. Understand. And -- oh, one other question. Have you ever
15 been to Wichita to check out that operation?

16 A. No, I have not.

17 MR. LEVANEN: Not yet. Okay. Thank you. That's it for me.

18 DR. WOODS: Okay. Nils.

19 BY MR. JOHNSON:

20 Q. One question. You mentioned you joined the FAA in 2019
21 [sic], and you said you've been an ASI on the Boeing certificate
22 for one year and eight months. What was the -- what were you
23 doing before the Boeing certificate?

24 A. I was still doing PC700 just in the fabrication side, what
25 they call fabrication. Boeing's internal supplier.

1 MR. JOHNSON: Okay. That's it for me. Sabrina.

2 BY DR. WOODS:

3 Q. Okay. I'm curious about your -- and this can be either your
4 experience or your opinion based on what you've experienced. How
5 you feel communication flows between the hierarchies of Boeing.

6 A. Usually I don't communicate with them on a day-to-day basis.
7 The only time I communicate with them if they ask -- I would say
8 at the vice president level is usually when I'm out briefing my
9 audit findings, and if they will ask me a specific questions
10 related to a certain non-conformance or a non-compliance that I'm
11 documenting. That's pretty much all the interaction I get as --
12 would be usually at the quality manager or the production manager
13 level. And occasionally, the vice president on quality or
14 production may ask a question directly.

15 Q. To clarify, what I meant actually was between the hierarchies
16 in Boeing, so you've got that executive level, that mid-level
17 manager level, that front-line manager level, and that worker bee
18 level, how from your experience oversighting this, how does the
19 communication flow between those levels? Like front-line managers
20 to worker bees that sort of thing, how does information get
21 passed?

22 A. I don't know how it get passed. I --

23 Q. What's your assessment of it?

24 A. My opinion of it don't flow very well down.

25 Q. From who to who? Which level to which level?

1 A. From management level to work on the floor.

2 Q. Okay. Do you have any examples of how it might not be
3 flowing?

4 A. I don't have any specific examples. I would say let's say
5 safety policy, or your quality policy, you can ask the worker on
6 the floor, so what's your role when it comes to safety or quality,
7 and he go I'm not in quality and I don't do safety, that's their
8 job. But I'm basing it off my experience in aviation industry,
9 but, man, you work on the floor, you should know that everything
10 you do all day involves safety and quality. We're in aviation,
11 you know? So is this being -- the quality policy being
12 communicated down to the lowest level to make them understand
13 because you can have a quality policy in your statement, but if
14 you're not frequently communicating that to the lowest levels on
15 the floor, your communication is, in my opinion, not very good.
16 But I'm basing that off my background in aviation history as a
17 whole. Safety and quality, it was like an everyday thing, you
18 know, we were always talking about it. Even on the floor, you
19 know, even when I was in the military, your commanding officer
20 would come to you directly on the floor and say, hey, I know you
21 doing -- working on the floor, if anything feel unsafe, you stop
22 doing what you're doing and you communicate. I don't think that's
23 being reinforced down to that level anymore like that. But that's
24 what I'm used to.

25 Q. Have you any experience with just among that worker bee

1 level, them talking amongst themselves about safety topics or
2 quality topics?

3 A. I couldn't speak to that. I only -- only time I really get
4 to talk to the employees is when I'm actually pretty much auditing
5 them. And for a lot of times, they are very quiet unless you ask
6 them a direct question.

7 Q. Understood. What is your assessment of how the worker bees
8 understand their role in providing a safe, quality product for
9 what the people are going to go fly in, the critical nature of
10 their job?

11 A. In my opinion, a lot of the floor employees in the factory,
12 and this is -- I don't have no evidence to say this just other
13 than my gut feeling, is that they don't feel that direct
14 attachment to the aircraft actually taking off on the ground so to
15 speak. I make this one product, I make this one widget, and it's
16 part of this big, old airplane. I just do this widget. They
17 don't feel -- in my opinion, and a lot of them don't have that
18 connection that this little widget eventually becomes part of the
19 bigger picture that could ultimately affect safety.

20 Q. You've got a long history in aviation, what do you think
21 would drive that point home? I don't mean -- I'm not likening it
22 specifically to your job and tasks as an ASI. I mean in your
23 experience, what are some things that you think that would drive
24 that idea home or that would make people understand better?

25 A. Well, I think you kind of touched on it, you know, upper

1 level needs to be ensuring that this is communicated to the mid-
2 level. And the mid-level needs to be on the floor communicating
3 that with the people. I think there's a gap there. And I don't
4 even know if the upper level, the executive level is really
5 communicating the quality policy, you know, because as I walk
6 through the facility, quality and safety policy -- as I walk
7 through the facilities, particularly Renton, very few signs about
8 safety. You know, it's just stuff I'm used to being in a, you
9 know, aviation environment, you know, you see signs about safety
10 everywhere, you know? And you see people walking around in, say,
11 green safety vests or safety hats and all that type of thing, you
12 know, it's foremost in your face all the time and this -- I don't
13 see that in the factory.

14 Q. Okay.

15 A. I think even if I read their mission statement, it takes a
16 long time for in that mission statement, which is very long and
17 kind of all over the place, where they actually come out and say
18 safety or our priority is safety, our priority is quality. It's
19 all these other things.

20 Q. And as a FAA -- now going back specifically to your tasks as
21 an FAA ASI, do you feel you have anything in your toolbox in your
22 power to affect change for that specific issue?

23 A. Well, you know, we -- I do. I talk to the mechanics on the
24 floor, and part of my introduction when I go, hey, I'm with the
25 FAA and, you know, I always tell them I'm not here to specifically

1 audit you as a person but I'm looking at the processes. If
2 there's anything that you think you can make things safe or
3 better, you know, well, let me know and I can work with you and we
4 can -- I'll make sure it gets forwarded up, you know, to your
5 chain of command, any opportunities that you see for improvement.
6 Other than that, we just have to follow the regulations, and the
7 policies, and the statutes.

8 Q. Has anybody ever taken you up on that?

9 A. Yeah. I've had people -- I've had a couple employees tell
10 me, you know, what -- this IP is terrible, you know, and so, well,
11 show me what you're talking about. Let's go through it. And he
12 was right. And so in my non-conformances, I -- or my compliance
13 actions, I make note of that.

14 Q. Okay.

15 A. I also give feedback to the quality people (indiscernible).

16 Q. Do you ever ask if those individuals who bring these things
17 to you, what they've done to try to work it through their own
18 Boeing chain of command?

19 A. I've had occasion where a person have told me they did Speak
20 Up program, and I had occasion where they say they didn't know
21 about the Speak Up program. And then to be fully honest, I've had
22 mechanics come to me with issues that they thought should be a
23 whistleblower type thing and it would be HR issues. You know, it
24 doesn't really fall into FAA safety of the aircraft is the issues
25 I'm having with my supervisors and all that type of stuff.

1 DR. WOODS: Okay. All right. I think that's it for me with
2 the exception of I always conclude with two questions. But before
3 I get to those concluding questions, I want to make sure -- it
4 looks like Pocholo has one. Anybody else?

5 UNIDENTIFIED PARTICIPANT: (Indiscernible).

6 DR. WOODS: You do?

7 MR. LEVANEN: No, I'm good. I wanted to -- well, okay. One
8 quick one. You had talking about -- I mean what you perceive as
9 the safety -- kind of the safety culture when you're walking
10 around on the floor and what you see in terms of compared to what
11 you were used to. How would you -- and in a word, how would you
12 rate, I guess, if you want to call it safety culture, of what you
13 see when you're out and about in the factory from your
14 perspective?

15 MR. ARNOLD: Yeah. I know they probably do have safety
16 training or safety stand downs occasionally. But I don't think
17 it's robust in my opinion.

18 MR. LEVANEN: Okay. Thank you.

19 DR. WOODS: Okay. Pocholo.

20 BY MR. CRUZ:

21 Q. How many -- you said you've done -- the team has done
22 enhanced audits since the accident, right? How many findings were
23 there?

24 A. I wouldn't know total.

25 Q. Hundreds?

1 A. I'd have to look that up and get back with you on that.
2 There's a lot.

3 Q. Okay. So were those risk-based findings?

4 A. Can you elaborate? Everything we do is risk-based.

5 Q. I guess the question that I have is that the work program is
6 risk-based prior to this accident happening, why weren't these
7 hundreds, or whatever, found as a risk-based issue prior?

8 A. So when you say risk-based --

9 Q. There's a --

10 A. -- what level --

11 Q. Well --

12 A. -- are you talking about?

13 Q. Your work program is based on risk-based you say.

14 A. Right.

15 Q. Right? And there's 18 elements to that risk-based issues
16 right? And now because of the accident, there is more findings
17 that the FAA found, which is, I don't know, I'm giving a number,
18 50, 100, I don't know what you guys found. What is the reason why
19 you've identified a lot more that wasn't found prior to the
20 accident? Is there something wrong -- is there an issue with the
21 risk-based that the FAA is putting together for their work program
22 because you're finding it after the fact because of a big
23 accident?

24 A. Well, so when you say a lot more --

25 Q. Well, I don't know how many you guys are finding.

1 A. Is there really a lot more, or did you -- it was enhanced,
2 which the level of inspection increased. So is that -- did it
3 really? Is it still consistent with what we was --

4 Q. Right. I mean --

5 A. -- the initial finding?

6 Q. -- is there enough people -- like people have said, is there
7 enough inspectors in place in your group?

8 A. Well, I can't answer that.

9 Q. I realize that.

10 A. So I can tell you doing the enhanced --

11 Q. Yeah.

12 A. -- to answer your question, doing the enhanced, we got
13 augmented. So there's --

14 Q. You got, I'm sorry?

15 A. We got augmented.

16 Q. Okay.

17 A. So there was other inspectors that came --

18 Q. Okay.

19 A. -- from within the FAA.

20 Q. Yeah.

21 A. We had some that came from the FSDO, about five that came
22 from the FSDO to assist with that. So on the surface, it looks
23 like you have a lot more. But in reality, is it still
24 statistically the same? I don't know because you add more
25 inspectors, therefore more eyes, you should get more returns. So

1 I don't know if you do that analysis on it, that is it really that
2 many?

3 Q. Well, Boeing has to answer to a lot more.

4 A. Right.

5 Q. Right?

6 A. But there's a lot --

7 Q. Based off of your enhanced inspections now --

8 A. Right.

9 Q. -- aside from the previous work programs that you had.

10 A. Right.

11 Q. Right? So does that mean the risk base -- either it's a
12 manpower issue within the FAA, or there's a lot more risk in the
13 processes that are not being accounted for?

14 A. I don't know. I would have to do -- you'd have to do some
15 deeper analysis on that because, you know, for example, all those
16 could be considered safety issues. But are they minor safety
17 issues or major safety issues? You know, what level are you
18 saying because when you do your dash 6 you, you know, you've
19 documented your compliance, I mean there's that question, is this
20 a direct safety issue.

21 Q. Okay.

22 A. And a lot of times you check that block no because when you
23 answering that question, they're asking you if you allow this to
24 go right now, this non-compliance, is it going to down an airplane
25 tomorrow or right now.

1 Q. Yeah. I understand.

2 A. More than likely, no. So --

3 Q. But a finding is a finding --

4 A. But a finding is a finding.

5 Q. -- regardless of whether it's --

6 A. Right. So if you aggregate all of that up, I mean that's --

7 I'm thinking about how they do the risk --

8 Q. Right.

9 A. -- based. If you get a whole lot of minor findings, then,
10 you know, from the safety standpoint, or is there something big
11 lurking on the horizon because you have this aggregate of all
12 these little, small little things happening, you know, they're all
13 over the place. Are they adding up to something that may happen.

14 Q. Again.

15 A. Right.

16 Q. I mean little things can add up to a lot eventually.

17 A. Right. But under the enhanced, for example, I would go into
18 that factory once a week and I'm -- say I'm looking at rudder
19 rigging because that's definitely, you know, I think threat to
20 safety. So I'm going to look at this process. But I'm in there
21 once a week, but if you give me ten other guys and I'm just
22 looking at flow day seven, but you got ten other guys, they
23 looking at flow day one through nine now. So you're getting a
24 more comprehensive look at that organization, simply be case. So
25 chances are you're going to get more findings in that short window

1 of time, so it look like you had that spike --

2 Q. Okay.

3 A. -- on the pareto chart.

4 MR. CRUZ: Yeah. That's it. Thank you.

5 BY DR. WOODS:

6 Q. Okay. Anyone else? All right. Seeing none. So my final
7 two questions are, the first is that I call the king for a day
8 question. And that if you were a king for a day, I'm going to
9 give you a magic wand that you can wave and anything, giving your
10 experiences that you've had in this job, anything that would make
11 your job better, ergo, make Boeing better or within Boeing itself,
12 you can wave that wand, what would it be?

13 A. If I was king for a day. That's asking a lot.

14 Q. It's got to be Boeing specific, sir.

15 A. Boeing specific. I can't really answer that question because
16 I'd be stepping on some people's toes that's wouldn't be fair to
17 them because the only way we can change Boeing is you got to have
18 better regulation.

19 Q. So you feel better regulation -- so who's responsible for
20 establishing regulation in the first place?

21 A. People higher than me.

22 Q. Yeah.

23 A. Lawmakers.

24 Q. So to kind of quantify that, your concerns lie in how the
25 regulation establishes how you are to do your job right now?

1 A. Yes.

2 Q. Okay. Is --

3 A. And we audit to regulation.

4 Q. Yeah. So it sounds like there is some --

5 A. And if I can elaborate. The regulations are really --

6 Q. Please.

7 A. -- on a broad spectrum because they don't want to tell
8 businesses exactly how to run your business. We're just saying it
9 has to be ran within these general parameters. So as a business,
10 they get a lot of latitude on how to manage their business, so.
11 And we audit to the regulations. The regulations say it's their
12 business policy has been approved and that's what we audit to.
13 They met the minimum standard, and, unfortunately, we audit to the
14 minimum standard.

15 Q. Okay. And the second question I have, and the final one, is
16 that you had some time to know that we were coming, and again, we
17 appreciate that by the way. We know that we are -- that you guys
18 are busy, and it sounds like recently you've gotten even busier,
19 so we appreciate taking time to share your experiences and what
20 you know to help us understand all of this better. But given that
21 you've had some time to know that we were coming, so given that
22 experience that you have and what you've seen in your day-to-day
23 interactions as an ASI on the Boeing production line, what would
24 be the number one takeaway you would want this team of
25 investigators to know and appreciate as we walk away from here?

1 A. The number one thing. Everybody comes to work to do the best
2 job they can. Other than changing the regulations, we got a lot
3 of work to do. But if I can, and come back to this question, I
4 thought about it when we were out there, he was asking about that
5 BPI for work, what was it that didn't work, BPI?

6 MR. JOHNSON: Fifteen or [REDACTED] --

7 MR. ARNOLD: Yeah. And I just thought about this.

8 MR. JOHNSON: [REDACTED].

9 MR. ARNOLD: All the aviation I've ever done has always been
10 said whenever in doubt, document. So I was confused about that
11 particular BPI because why would you have a BPI that talks about
12 not documenting work in aviation. In aviation, we've always been
13 taught whenever in doubt, at least I was, document, document,
14 document because it provides a trail. People can't read your
15 mind. And what we do, a lot of lives can get lost at one time.
16 So document, document. Why would you ever go do work on an
17 aircraft and feel you don't have to document it? So that BPI kind
18 of contradicts aviation principles to me.

19 DR. WOODS: Okay.

20 MR. ARNOLD: And that would be my last word.

21 DR. WOODS: Okay. Okay. Well, then we appreciate you, your
22 time and your last word. Nobody else? Everybody good? All
23 right. With that, we will conclude this interview at 10:27
24 Pacific Time.

25 (Whereupon, at 10:27 a.m., the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the
NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9 MAX
IN-FLIGHT STRUCTURE FAILURE
NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Jonathan Arnold

ACCIDENT NO.: DCA24MA063

PLACE: Des Moines, Washington

DATE: May 8, 2024

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.

Jami McNear
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of: *

*

ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

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* * * * *

Interview of: JOHN D. BAKER, Aviation Safety Inspector Federal Aviation Administration

FAA Facility
Des Moines, Washington

Thursday,
April 11, 2024

APPEARANCES:

DR. SABRINA WOODS, Human Performance Investigator
National Transportation Safety Board

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Aerospace Engineer and Manufacturing Investigator
National Transportation Safety Board

NILS JOHNSON
Aviation Accident Investigator - Maintenance
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MATTHEW RIGSBY, Office of Accident Investigation
Federal Aviation Administration

MICHAEL RINEY, Onsite Representative
Spirit AeroSystems

JOHN PETRUZZELLI
International Association of Machinists Union (IAM)

DAN MARCOTTE, Air Safety Investigator
Boeing

TROY LEVANEN, Director of Maintenance and Engineer
Safety
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FAA, Office of Chief Counsel

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I N T E R V I E W

(9:17 a.m. PT)

1
2
3 DR. WOODS: Good morning. It is April 11th, 2024. The time
4 is 0917 Pacific.

5 My name is Dr. Sabrina Woods. I am the human performance
6 investigator with the National Transportation Safety Board. Along
7 with Pocholo Cruz to my right, we are co-leading the manufacturing
8 and human performance working group for Accident Investigation
9 Number DCA24MA063 involving Alaska Airlines Flight 1282.

10 The NTSB, as you know, is congressionally mandated to
11 determine probable cause in aviation accidents and significant
12 incidents and to support transportation safety as a whole.

13 When we conduct investigations, we have parties to
14 investigations that help inform the process. What you see here in
15 the room are those parties to the investigation.

16 So at this point, I'm going to have them introduce themselves
17 to you so you know who it is you're going to be talking to. We're
18 going to start off here to my right, with Pocholo.

19 MR. CRUZ: Good morning, John. I'm Pocholo Cruz. I'm the
20 co-chair for this particular group. I'm an aerospace engineer
21 with a structures and maintenance background.

22 MR. BAKER: Good morning.

23 MR. JOHNSON: Good morning, John. Nils Johnson, NTSB. I'm
24 an aviation accident investigator, and my specialty is
25 maintenance.

1 MR. BAKER: Good morning.

2 MR. RIGSBY: Hey, John. I'm Matt Rigsby with the FAA's
3 Office of Accident Investigations. We met earlier. So that's it.

4 CAPT ANDERSON: Good morning, John. Bjorn Anderson. I'm a
5 captain for Alaska Airlines. I'm representing the Air Line Pilots
6 Association, and I have an aviation maintenance background for
7 about the last 30 years.

8 MR. BAKER: Good morning, sir.

9 MR. LEVANEN: I'm Troy Levanen. I'm the director of
10 maintenance and engineering and safety for Alaska, and I've been
11 with the airlines for about 34 years.

12 MR. BAKER: Good morning.

13 MR. RINEY: Good morning. I'm Mike Riney. I'm with Spirit
14 Aero Systems. I'm the onsite leader here in Washington.

15 MR. BAKER: Good morning, sir.

16 MR. RINEY: Good morning.

17 DR. WOODS: John.

18 MR. PETRUZZELLI: I'm John Petruzzelli. I am a FAA
19 coordinator inspector at North Boeing Field. I'm here
20 representing the International Association of Machinists.

21 MR. BAKER: Good morning.

22 MR. MARCOTTE: Good morning. I'm Dan Marcotte. I'm the
23 Boeing air safety investigator. I'm out of Southern California.

24 MR. BAKER: Good morning, sir.

25 MR. MARCOTTE: Good morning.

1 MR. LOVELL: And John Lovell with the NTSB.

2 MR. BAKER: Good morning, sir.

3 MR. LOVELL: Good morning.

4 DR. WOODS: So that's it. That's everybody whose going to be
5 asking you questions today.

6 We're here for you to share your insight as a member of the
7 regulatory and oversight team for the Boeing Commercial Airplane
8 Company. To capture that insight, we will be using a digital
9 recorder. After the interview, we will send that recording out
10 for transcription. The parties members will have an opportunity
11 to review the transcription, correct it for any typographical
12 errors. We do not change the content. Once we receive the
13 recertified copy back from the transcriber, it will go forward to
14 be a matter of public record in the docket for this investigation.

15 Each of the group members here will have a chance to ask you
16 questions. We usually go in two rounds, the first round being a
17 little bit longer than the second. We will ask questions one at a
18 time however. There will be an opportunity for each group member
19 to ask their questions but please recognize that answer the
20 questions to the best of your recollection. I don't know is a
21 perfectly acceptable answer. If you don't know, just let us know,
22 and we'll move on. If you don't understand a question, please ask
23 for clarity. We will do the same if we don't understand an
24 answer. And if at any time you realize you misstated something or
25 remember something from a previous question, feel free to take us

1 back there. That's fine.

2 You are entitled to have one representative of your choosing
3 for this process. I do see that you have a representative there.
4 I just want to make sure that this is somebody that you have
5 chosen to be your representative.

6 MR. BAKER: Yes.

7 DR. WOODS: Okay. With that, representative counsel, if you
8 would please introduce yourself. State your full name, spelling
9 your last.

10 MS. LIPE: Rebecca Lipe, L-i-p-e. I'm with the Office of
11 Chief Counsel.

12 DR. WOODS: And thank you for that. Thank you for being here
13 and for being a representative. Please recognize that this is an
14 interview and not a deposition. So please refrain from
15 interrupting the process or attempting to answer on behalf of your
16 client.

17 With that being said, however for both of you, if at any time
18 you would like to take a break, please don't hesitate. Just let
19 us know. We will pause the recording. You can do what you need
20 to do and we will come back on and start again.

21 So with that, do you have any questions at this time?

22 MR. BAKER: No.

23 DR. WOODS: Okay. Is everybody good to go in the room?

24 MR. JOHNSON: Yes.

25 DR. WOODS: All right. Then for the record, John, if you

1 would please state your full name and spell your last.

2 MR. BAKER: John David Baker, B-a-k-e-r.

3 DR. WOODS: So now we are going to start again off to my
4 right with Pocholo and go around the room that way.

5 MR. BAKER: Okay.

6 INTERVIEW OF JOHN D. BAKER

7 BY MR. CRUZ:

8 Q. Thank you, John, for being here. Can you please tell us what
9 your position is with the FAA?

10 A. I'm an aviation safety inspector. I'm assigned to Boeing
11 Renton, the 737 Program.

12 Q. Okay. And how long have you been in that position?

13 A. Three years, almost three and a half. I started July 20.

14 Q. Okay. All right. July 20. Is that with the FAA itself?

15 A. Yes.

16 Q. Okay. Prior to holding this position, have you held any
17 other positions besides what you currently have now?

18 A. As far as FAA or --

19 Q. Or being an ASI for Boeing?

20 A. For Boeing. So I was with the Defense Contract Management
21 Agency. So I had DOD oversight of Government programs over
22 Boeing. So I was assigned Boeing Wichita, Boeing Seattle, Boeing
23 Oklahoma City. So working Government programs, different
24 aircraft.

25 Q. Okay. And can you please describe your professional

1 background?

2 A. So 24 years Air Force. I was KC-135 crew chief, held
3 different positions within the Air Force, heavy maintenance, ISO
4 phase inspection, flying crew chief, AR, flight control landing
5 gear, repair, removal, crash recovery, PSA quality, and then my
6 last 8 years with the Air Force, I was active duty with the
7 Defense Contract Management Agency where I was a Government ground
8 rep over Boeing Wichita, the maintenance modification center
9 here. So I did ground operations, tool/FOD control training, all
10 the special processes, approved procedures with my Government
11 flight representative, you know, worked per contract there. And
12 then after that, 2015, after I retired, I came on up here DCMA
13 Boeing Seattle where I was on the P-8, KC-46 program up here as a
14 quality assurance specialist for 3 years. Then I went to Oklahoma
15 City for 2 years where I was an industrial specialist down there,
16 Boeing Oklahoma City. And then came back up here in 2019, back to
17 DCMA Seattle and then back to -- and then I got hired with FAA in
18 '20, July 20. So that's kind of my aviation background.

19 Q. Great. Okay. And are you a full-time employee with the FAA?

20 A. Yes.

21 Q. And which shift do you typically work?

22 A. My shift is dayshift, you know, 6 to 2:30, will extend
23 earlier or a little later, depending on the workload.

24 Q. Okay. And can you describe for me what your typical is like
25 when you first come in?

1 A. Well, it's all depending on our schedule, right. It's -- if
2 I'm doing airworthiness inspections, I'll go out to Boeing Field
3 where I do ticketing. We call it ticketing, airworthiness
4 inspections. So ticket an aircraft prior to delivery. We've got
5 oversight scheduled at Renton or wherever, we'll go do our PI
6 audits, if there's audits there. Catch up on paperwork. We've
7 got other duties we do. HOSP (ph.), just our normal oversight.
8 Compliance/enforcement actions that we keep track of. So it's
9 real dependent on what's going on, what our schedule's looking
10 like. If we have audits scheduled or not or aircraft ticketing or
11 just -- so it varies.

12 Q. Okay. So I'm pretty familiar with the regular surveillance
13 of an airline certificate. What is it like -- I mean what do you
14 do as a production certificate? I mean what's the role?

15 A. So we've got our certificate management plan, we call a CM
16 plan, where we've got audits scheduled out over the year for the
17 factory, for our 737 program, you know. Depending on our plan, we
18 have audits about twice a month, and it could be anywhere in the
19 Boeing facility, how the plan's laid out, which part of the
20 production line, wings, the main production line, preflight. We
21 do storage inspection. So it's just based on our plan there,
22 certificate management plan. Ticketing falls under there. That's
23 under our duties.

24 Q. Okay. And is that a yearly -- it's basically your work
25 program, right?

1 A. It's our -- the certificate management plan is our risk-based
2 plan as to how our oversight over Boeing is.

3 Q. Okay. What type of training have you had to become -- to
4 work under production certificates?

5 A. So we have -- we go through our FAA training where it's -- I
6 don't have my whole list but it goes over production oversight,
7 airworthiness, all our basic facets of our duties, auditing,
8 inspections, you know, just a pretty robust plan. You can't be
9 let loose on your own. There's a, you know, there's a process we
10 follow in our training. You have to be cert qualified, have, you
11 know, there's certain classes. You're not to do airworthiness or
12 anything like that, right. Just like any job out there. So.

13 Q. Okay. One thing I forgot to ask you. Do you have an A&P
14 certificate?

15 A. No, I don't.

16 Q. No. Okay.

17 A. No.

18 Q. So what does a FAA -- what do you look for when you're
19 overseeing a production certificate?

20 A. So, when we're out there doing an audit, there's policy or
21 word-for-word auditing to the quality management system. Quality
22 management systems, you'll have things in place, policies,
23 procedures. So just say I go out for an audit, are they working
24 per plan, their installation plan? Do the drawings match?
25 Correct drawings. Are they working to the correct BSS, BAC, BSS

1 standards that are called out in the IP? Are the IPs correct?
2 You know, so we're validating kind of the whole installation plan.
3 Can they do -- can they retrieve the data? So we're looking at
4 like everything. Basic policies and procedures, based upon the
5 basics of signing open a toolbox to closing it, you know. There's
6 a policy and procedure for everything per QMS, per their own BPIs
7 and PROS.

8 Q. Okay.

9 A. We're out there validating.

10 Q. So did you have Boeing training into their type of
11 nomenclature and process and procedures?

12 A. It's kind of more experience. We can attend some Boeing
13 classes if we request. Being formally DCMA, I kind of -- I
14 already had an understanding of Boeing processes. In DCMA we went
15 through a few classes that related to Boeing but that's defense
16 and space side of the house, not the commercial side of the house.

17 Q. Right.

18 A. So it's -- if we need it, we can get it. We can attend any
19 training if we want. We can request to go to some training.

20 Q. But have you been to any of the training for the commercial
21 side?

22 A. No.

23 Q. Okay.

24 A. No.

25 Q. And are you the only one that looks over the production

1 certificate --

2 A. Oh, no.

3 Q. -- for the 737?

4 A. No.

5 Q. How many are there? How many personnel?

6 A. So on my team, there's -- let's see. Our manager, my senior,
7 myself, Trent, John, Nelson. So there's five of us right now
8 assigned to this program.

9 Q. Okay.

10 A. And then, of course, we've got our 777 team, 67 team. So we
11 backfill each other as necessary. We'll help each other with
12 audits, if need be. So. And for certificate management, we're
13 just a small part of it, right. We're the boots on the ground,
14 where we've got engineering support.

15 Q. Sure, sure.

16 A. You know, all the different offices that are there.

17 Q. So when you go out and do surveillance, who's your point of
18 contact when you arrive at Boeing?

19 A. So when I arrive at Boeing, typically if I'm -- we do
20 anything out there, with DE (ph.). It depends on who -- what
21 area, right, we're in. So if I'm in the factory, I deal with the
22 DQMRs. Typically that's Kerry Geisler (ph.) at Boeing or Alan
23 Lily (ph.) and if we're out there also, we typically have RQSO.
24 They're the go between Boeing and ourselves. So we pass on
25 information. If I request a drawing, a procedure, a D document,

1 they have to -- it goes through them first or IP, anything like
2 that, NCR. I request it through RQSO. They have to redact any
3 data that, you know, personal data before you get the document.

4 Q. So you don't have, you don't have access to their system then
5 from here?

6 A. No.

7 Q. So everything needs to go through --

8 A. Well, we get -- so when we have My Boeing Fleet access. So I
9 can get to basic PROS, policies. I can get into D docs. I can
10 get to. I can get to drawings. I can get the standards, BACs,
11 whatnots. So, I can get to a lot of things but there's a certain
12 point where we can't get into certain part drawings and things
13 like that. That's when I have to request through RQSO.

14 Q. Okay.

15 A. And that's their process.

16 Q. All right. So when you go to do your surveillance of Boeing,
17 run me through that day. Do you -- is there an in brief? Is
18 there an out brief? What happens?

19 A. Yeah. Typically like if we have -- we set up a PI audit,
20 right. So that will be an audit, a principal inspection audit.
21 We'll go out. We'll do a product audit and look at things. So
22 we'll have an in brief, say we're going to be here for this week.
23 Primarily I'm looking at this area, right. In my schedule, I'm
24 looking at flow day 1 through 3. We're going to be here from
25 Monday through Friday. This is the plan. Here's how we're doing

1 it. This is what we're going to be doing. So they know what --
2 kind of what I'm going to be looking for. And then from there, we
3 look at what work's going on, the box score, what's happening in
4 each flow day. I'll pick a job. Typically we will pick
5 something, you know, we're looking for the critical jobs, right.

6 Q. Sure.

7 A. The real technical, critical main things like that part. I'm
8 not going to watch piece insulation going in because that's, you
9 know, it's not critical but we'll see that. We can see that going
10 on as we're there. So it just, it just depends. So we're trying
11 to catch the work, trying to catch those big jobs and then run
12 through the process.

13 Q. Is it typically just you or do you have a couple --

14 A. Between two of us.

15 Q. Okay.

16 A. Sometimes there's three of us. It just depends, right.

17 Q. Yeah.

18 A. What we all have going on.

19 Q. Do you basically walk the production line while you're doing
20 this?

21 A. Yes, yes.

22 Q. Okay. And then at the end of let's say your day, do you have
23 an out brief or anything like that?

24 A. Yeah, at the end of the day it's like, we'll discuss what we
25 found that day, if we had findings. This is what we found. Is it

1 a legit? You know, we'll research that and say, hey, this is
2 pending.

3 Q. Yes.

4 A. So it's never a gotcha or anything like that.

5 Q. Sure.

6 A. We're saying this is, this is the discrepancy. This is what
7 we saw. This is going in our report.

8 Q. Right.

9 A. So. And at the end, we'll do a wrap up and an out brief.
10 These are our findings. These are the actions. I'll get back
11 with you on the compliance and enforcement side of the house, how.
12 Does it require a corrective action plan?

13 Q. After each day, does Boeing know what your findings are?

14 A. Yes.

15 Q. Or do you wait until after --

16 A. No, typically they know, right.

17 Q. Okay.

18 A. Because sometimes if you find something of significance, they
19 need to start containment, right. So you want to have containment
20 starting at that point.

21 Q. So how would you describe the personnel in the organization?
22 As far as their experience, their qualifications?

23 A. Are we talking Boeing, FAA?

24 Q. Yeah, yeah, Boeing.

25 A. Boeing. You've got, you know, it's ebb and flow. You've got

1 a lot of experience. You've got a lot of young folks, new folks,
2 training going on. So as you see Boeing hires and reduces their
3 employee work, you know, the amount of people they have. So you
4 kind of the ebb and flow of their hiring practices.

5 Q. Based on your surveillance, do you think that their personnel
6 has experience to do the jobs that they're doing?

7 A. Yes, they've got, they've got really good, experienced
8 people, and you know, they've got the younger folks. So they're
9 working on the training side of house.

10 Q. Okay. So do you also do the Spirit surveillance from their
11 production certificate or who does that?

12 A. That's our supplier quality side of the house, right. So we
13 have what's called supplier quality. They do the quality audits,
14 but we do go out and assist. We'll assist on supplier audits if
15 they need help.

16 Q. All right. Is that a different person or is there here or is
17 that in Wichita?

18 A. So that's Wichita, right. We've got our team here to do the
19 local supplier and then we've got the Wichita office also.

20 Q. Okay.

21 A. Just to give you an example, I went out and assisted in
22 October at Spirit for an audit. So.

23 Q. All right.

24 A. So it's assists.

25 Q. Is there a specific person that looks over the production

1 certificate?

2 A. Of Spirit?

3 Q. Yes. Similar to you.

4 A. Yeah, that's going to be the Wichita Office, Charles Pryor.

5 Q. I'm sorry. Who?

6 A. Charles Pryor and Dek (ph.) Jones, Derrick (ph.) Jones
7 because they're down in Wichita.

8 Q. Okay. So how would you characterize the line quality system?

9 A. It's in place. It works but however there's escapes, and we
10 try to stay on top of those escapes. And, you know, those escapes
11 come out, and there could be multi units, whatnot. So it's
12 effective. I find it's effective but, of course, as we've seen,
13 some things have slipped through.

14 Q. And based off of your experience, of your surveillance, how
15 do they examine the trends? Good or bad.

16 A. I'm not sure on that side of the house how they examine the
17 trends, but if we -- if they have issues, they, you know, they do
18 deep dives, internal CARS, finding root cause, corrective action.
19 They do root cause corrective action, or if we find an issue with
20 our own, we issue a formal compliance action, drive them for
21 corrective action. That's how we monitor those. We get the
22 fixes, the corrective actions I'll say.

23 Q. Is there a monthly meeting to go over any issues with the
24 FAA?

25 A. Yeah, we have -- there's a factory quality meeting once a

1 month. There's a field quality meeting where they talk trends,
2 what's happening. So to see where they're -- it's their own
3 internal metrics, right. And they track any open compliance
4 actions we have. So there is monthly meetings with Boeing on that
5 on all issues. It's a monthly quality meeting.

6 Q. And prior to the accident, what were the issues that were
7 still outstanding?

8 A. I would have to look at my list, right.

9 Q. Okay.

10 A. And if Boeing would provide -- they have metrics. They can
11 probably provide you from what was talked in those meetings in the
12 minutes or whatnot.

13 Q. What type of LOIs has the FAA initiated at Boeing within the
14 year starting September of 2023?

15 A. I don't have that list with me. So I couldn't really tell
16 you. They're letters of investigation. So some items were -- I
17 know a few were the corrective actions failed their verification.
18 So we, you know, we elevate from a formal compliance to a LOI,
19 things like that. So I don't have the list. I don't have our
20 system with me to look in there.

21 Q. Are they pretty receptive in answering those LOIs?

22 A. Yes, they're willing and able, per our compliance and
23 enforcement, they need to be willing and able, which they are.
24 They put together corrective action plans, verifications, and we
25 go in and verify their effectiveness afterwards, right. We review

1 their CAPS as well. We have -- we review those and make sure we
2 feel they're hitting the necessary areas and not focusing on
3 something not pertinent to the root cause. And we will check
4 their CAPS if we need to and then sometimes that would be -- cause
5 a LOI, going from a formal compliance to a LOI.

6 Q. Okay. I know there's been a lot of inspectors looking at
7 Boeing lately.

8 A. Yes.

9 Q. What would you say is the biggest concern with their quality
10 system?

11 A. Right now were (indiscernible), you know, our big audits are
12 still open, so I can't really say on that but, you know, it's just
13 following process.

14 Q. Are you seeing a lot of issues with regard to that?

15 A. Oh, yeah, yeah. Just follow the process. You just need to
16 follow the established processes.

17 Q. Do you think the workforce experience plays a role in them
18 not following the process?

19 A. Yes and no. It's -- like I said, there's a lot of good,
20 experienced folks, a lot of new folks. It's just trying to I
21 guess get the right training to those folks about the policies and
22 processes because sometimes it's -- that's -- it's as simple as
23 not following that process.

24 Q. Do you see a lot of turnover with those people?

25 A. Turnover? No, I haven't a lot. Well, when I started during

1 COVID, there was a big reduction in force --

2 Q. Sure.

3 A. -- at Boeing. So we've seen -- and then a recent hiring.

4 Like I said, it's the ebb and flow of the aircraft industry.

5 Q. Does the FAA suggest any fixes to the issues that you guys
6 are seeing or do you let Boeing fix it and then you guys assess
7 whether it's good or not?

8 A. So I -- well, you know, I can't tell them how to fix.

9 Q. Sure.

10 A. Right.

11 Q. Yeah.

12 A. So we identify the problem. They provide us the corrective
13 action plan and we review that. Are they, are they on target? If
14 we feel they're not, if we feel they're off target of the
15 corrective -- of their root cause and they're investigating, you
16 know, we feel it's not the right corrective action plan, we will
17 return it. I can't tell them how to do it. I just say we feel
18 this isn't meeting the requirements. You're not, you're not
19 focusing on the root cause, and they have to go back and resubmit.

20 Q. Okay.

21 A. And they do deep investigations. Like I said, they do look
22 backs, interviews. If you've seen their -- if you guys are able
23 to see a BPSM, Boeing Problem Solving Model is what we call it,
24 they do deep investigation, trying to find the root cause and to
25 provide a good corrective action. Sometimes they're off the mark

1 and we return them.

2 Q. Okay. What's your assessment of the traveled work coming
3 Spirit to Boeing?

4 A. As we've seen -- as you've seen, there's a lot of it, and
5 they're trying -- from what I was just reading in the news,
6 they're trying to hold that now at Spirit because, you know, with
7 travel work, it just -- it interferes with the build process.

8 Q. Sure.

9 A. And that's, you know, that's always an area that could cause
10 concern. So.

11 Q. So what about the process from -- within the factory, from
12 flow day 1 to RO or --

13 A. Yeah, they're, you know, they give you held for parts --

14 Q. Sure.

15 A. -- things like that. So, yeah, it's just -- it happened as
16 part of the build process. Unfortunately I, you know, that's
17 their process to let it have that travel work.

18 Q. Do you see that as a big issue within Boeing?

19 A. Just -- sometimes, you know, you're doubling effort, yeah,
20 because of travel work because they can push it down and then they
21 have remove something to go back and fix that problem, but that's
22 where we watch, try to watch for that documentation, right, and
23 make sure that's done correctly. So.

24 Q. Are the Boeing employees able to talk to you directly? Are
25 they allowed to talk to the FAA?

1 A. Directly, yeah. Yeah.

2 Q. Have you heard any issues regarding traveled work or being
3 overworked or --

4 A. No, not directly. Not during our interaction, nothing of
5 that nature.

6 Q. How would you describe the culture within the quality system?

7 A. The culture within the quality system?

8 Q. Yeah.

9 A. Again, you've got some great quality people, and then there's
10 -- you have some escapes because of not following the process.

11 So. And we document those. And when we document those, there's
12 formal corrective actions. So we get corrective action plans.

13 When we see it, we document it and it's of that level.

14 Q. Okay.

15 A. So it's a formal compliance.

16 Q. Are employees able to speak their mind without any
17 repercussions in your opinion?

18 A. To me, yes. Yeah. So, we'll speak to them, and if they have
19 issues, I'll recommend the Boeing Speak Up program, and if they're
20 having any issues, you know, I let them know about the FAA hotline
21 whistleblower program as well. So let them know all their
22 options.

23 Q. Have you been approached by an employee regarding issues with
24 their -- with his or her management?

25 A. Yes, and I -- I can say, yes, and those have been documented.

1 And those are still open investigations.

2 Q. What's the latest safety related issue that's been raised to
3 you or to anybody in the FAA?

4 A. We've got hotline whistleblowers. I can't expand on,
5 unfortunately.

6 Q. Okay.

7 A. That's typically how we get those safety issues and are
8 relayed to us that, you know, from the employees. And then we
9 investigate those.

10 Q. Okay. Does quality have an incident reporting system that
11 you know of?

12 A. Their internal system, yeah. Typically if they find quality
13 issue, they're supposed to write, I believe it's a CAR, an
14 internal CAR to find root cause.

15 Q. What's car. I'm sorry.

16 A. Corrective action.

17 Q. Oh, okay.

18 A. Corrective action report request. So they do an internal
19 investigation. So --

20 Q. Can you describe that process whatever you know about it?

21 A. Say if you identify something, they're write an internal CAR,
22 and say we're doing a product audit, okay. I find an issue with
23 something that was signed off. It's a quality issue. So I
24 document that as an issue and then part of their investigation,
25 they'll back at their reporting system for a CAR, and I believe

1 it's the same way internally for them. If they find an issue,
2 they run it up through their, you know, they document that there
3 is a quality escape, whatnot. So that would drive a NCR, NCO, a
4 CARs through their system. I don't know the BPI offhand, but
5 there is a process for it.

6 Q. Well, what type of results has the FAA gotten in regard to
7 the latest audits out of Boeing?

8 A. I can say prior to the mishap, through our normal oversight,
9 typically we'll have, we have discrepancies which drive a formal
10 compliance, a corrective action. Typically we have, you know, we
11 do come out with findings which are documented through our
12 oversight.

13 Q. What's your experience or assessment with Boeing pressuring
14 employees to move the airplane down the production line?

15 A. My perception?

16 Q. Yeah. Your perception or are any employees complaining about
17 it or --

18 A. Yeah, it's been brought up but I haven't personally witnessed
19 that. So if we witnessed that, I would definitely take action on
20 that. And then we've got -- there's policies for our ODA if
21 they're pressured from Boeing or anything like that, too. That's
22 a different side of the house, but we've heard of pressure,
23 haven't been able to substantiate those claims.

24 Q. Okay.

25 A. That's a tough thing.

1 Q. All right. Thank you. That's it for now.

2 DR. WOODS: Nils.

3 BY MR. JOHNSON:

4 Q. So what system do you guys use to document the production
5 certificate oversight?

6 A. So we use a ACAIS is our system. That's where we track our
7 audits. That's where our 8100 or our product audits, for our
8 discrepancies, 8100-6s are documented, objective evidence of that.
9 If we wrote a compliance action, that goes against that, and then
10 the compliance actions are in the compliance enforcement database,
11 CEA. So that's where we document all of that.

12 Q. Okay. And a ACAIS, do those CAS generate a risk profile for
13 the production certificate?

14 A. That I don't know, but that data is used by our seniors and
15 our managers for a yearly risk rating of the applicant, be it
16 Boeing or whoever, whichever manufacturer. So.

17 Q. Okay. Does a ACAIS generate work plan for the production
18 certificate?

19 A. A work plan? No, that's -- well -- no, because we review and
20 we set up our certificate management plan. It generates our
21 numbers, our tracking numbers and we insert all that into the
22 ACAIS.

23 Q. Okay.

24 A. But we build the plan.

25 Q. And as to the certificate holder oversight which is SAS --

1 A. Yeah. That's --

2 Q. -- and SAS generates a score and SAS generate a work --

3 A. Yes. SAS is on the FSGO side of the house. So CAS is
4 manufacturing. So when the FSDO ASI try -- they can't get into
5 our system. I can't use their system, and it's two separately
6 systems, and I've heard that. We've had some FSDO support on some
7 audits. So -- but they're talked about their system. So they're
8 both. It's a little different, yeah.

9 Q. So is there a system within the production side that generate
10 a work plan or do you have to do that manually is what -- I guess
11 what I'm trying to understand.

12 A. So, yeah, I'm fairly still a rookie, 3 years in, but the
13 planning side of the house is done by our seniors and our
14 managers. So they might be able to answer a little better on that
15 one.

16 Q. Okay. I think you answered, do you have any inspectors?
17 Quality system audits, how many are conducted at Boeing Renton
18 manually?

19 A. Quality system. We call the quality system audit a QSA,
20 which is every 2 years per policy because their risk -- the risk
21 rating for Boeing is high 1. It's R1 I believe or it's 1 high.
22 So every 24 months is a quality system audit, a QSA, but during
23 the year because of, because of that risk rating, our planned
24 audits are 18 plus. So we'll have our planned PI audits. The
25 minimum is going to be 18. We have pop up audits though that come

1 into play depending on hotline whistleblowers or whatnot. So the
2 minimum is 18 and we can do more as we see fit. We'll do -- we'll
3 pop in, you know, management by walking around, seeing what's
4 going on, and if we see something, we can start an audit right
5 then and there if we see something not going right, right away.
6 So.

7 Q. Okay. Is there a history of undocumented maintenance or
8 failure to follow processes at present?

9 A. I believe if you look in our system, there's been documented
10 instances of that happening. But we look for that, you know. If
11 we see a job in place or something removed, we'll go, hey, let me
12 see, do you have a removal record, you know, if I see a panel off
13 an aircraft or a part missing or whatnot. So we look into that to
14 see if they're doing proper documentation.

15 Q. So you --

16 A. That's part of our audit process.

17 Q. Sorry. Didn't mean to interrupt.

18 A. No.

19 Q. So you're familiar with removals?

20 A. Yes. Yes and no. So.

21 Q. How do you feel the consistency is with the removals that are
22 generated? Do you think they're consistent, adequate?

23 A. They're, you know, there's a process, they follow it but
24 there are escapes unfortunately as we know. So -- and that's why
25 we try to identify any issue like that when were out there on our

1 audits, and that's -- when I started, that's always been an issue
2 that we always try to look for.

3 Q. Okay. So you're seeing a history of it.

4 A. Yeah, we have a documented history of issues through our CEA
5 process.

6 Q. What is the FAA doing to ensure the quality system a Boeing
7 is working?

8 A. That's, you know, doing our audits, our oversight, our QSAs.
9 Because of the mishap, we had our special SAI -- special audit
10 that we did where we dove into the full quality system again which
11 is pending. You know, that's -- we did -- that's our audit
12 process. When we audit, it's to their quality systems. That's
13 how we audit that system.

14 MR. JOHNSON: I think that's it for me for the first round.
15 Matt.

16 BY MR. RIGSBY:

17 Q. Hey, John. Just a couple of questions. There's some
18 acronyms like DQMR. What does that --

19 A. Directly -- director of quality manufacture -- director of
20 quality manufacturing representative, DQMR. Deputy quality
21 manufacturing representative.

22 Q. And he's your Boeing --

23 A. Yeah, there's he, she.

24 Q. Yeah.

25 A. It's a team.

1 Q. Okay.

2 A. There are four or five individuals on that DQMR team, and
3 that's for the 37 program, and you'll see that in other program,
4 too.

5 Q. Those are your people that you go to when you --

6 A. Yes.

7 Q. -- show up at Boeing?

8 A. Yes.

9 Q. Okay.

10 A. When we're doing oversight, there's those folks, the DQMR and
11 then the RQSO folks.

12 Q. How many -- on a general, average week, how many times are
13 you at Boeing?

14 A. Again, it's depending on what's going on. So if it's a -- if
15 I'm ticketing, I'm at Boeing Field which we've got an audit
16 scheduled. We'll do drop ins. So we might be up there. Right
17 now, we've got PI audit going on. So we've got folks in house
18 right now going on. So. It just varies. I can't give you like a
19 specific number.

20 Q. Explain ticketing.

21 A. That's an airworthiness inspection. That's us issuing the
22 airworthiness certificate. So we call that ticketing. It's where
23 we inspect aircraft prior to delivery to the customer, before
24 Boeing can deliver the aircraft to the customer, we have to
25 inspect it, make sure it's safe for flight and meets type design.

1 We do a big inspection, make sure it meets type design, no obvious
2 errors and then review the big paperwork review. And then we
3 issue the ticket and then that allows Boeing to process the
4 aircraft to the customer.

5 Q. Okay. You guys used to be called MIDO. What are you called
6 now?

7 A. Yeah, we were the CMO, the Certificate Management Office and
8 now we're the Aircraft Oversight Section. So we've had some
9 changes. We were AIR-871. Now, we're AIR-582, 581, 82, 83. So
10 we've have kind of a restructure.

11 Q. Is there a title that you guys call yourselves?

12 A. The Aircraft Oversight Section.

13 Q. Aircraft Oversight Section.

14 A. Again, it was formerly the Certificate Management Office,
15 CMO.

16 Q. Are yourself or other inspectors, are you guys assigned to
17 specific areas at Boeing, working on?

18 A. We can work anything but like we're typically assigned to a
19 program. I'm the 737 -- I'm on the 737 program. Again, we've got
20 a 67, 777. We had 47, 87 also when they were in house. So that's
21 -- we're just kind of assigned teams. I'm assigned down here to
22 this team.

23 Q. Okay.

24 A. Again there's a -- so, yeah, that's how we're assigned.

25 Q. Okay. What guidance do you use to do your job?

1 A. So there's 8120.22 Alpha, the for production certificate, 23,
2 the 8120.23 is certificate management. We look at -- well, AC43
3 is for -- that's to Boeing how to run their production system.
4 Those are the basics that are our guidance for that and then
5 compliance and enforcement. There's -- we have an order for that.
6 I think it's 2150. -- I don't know all the numbers offhand. I
7 know we've got a supplement 35 for compliance and enforcement. So
8 we've got -- those are our policies, our orders that tells us how
9 to do our job.

10 Q. Okay. Does AIR-580 have a designee for Boeing?

11 A. The ODA, yeah, we have unit members, ODA. So we've got
12 Boeing Field. There's ODA office, and that office actually and
13 there's several ODA members in the factory. I think four or five
14 folks. So they all work together for the conformities and things.

15 Q. Okay. Can you explain just for the group kind and what ODA
16 is?

17 A. So those are the Boeing -- it's Boeing mechanics who they go
18 through an interview process to make sure they're qualified. And
19 they work on our behalf. We're able to delegate certain
20 inspections to those folks. They're reviewed annually I believe
21 or every couple years. If there's, if there's any issues with
22 those folks, we can remove them from that -- having that
23 permission. It's a -- I'd say it's an appointed position. So
24 again we interview and they review. There's a big process for
25 that. So again they work on our behalf. Sometimes we can

1 delegate for them to do a conformity inspection for us. If we
2 can't do it, they can do it. And I'll say this, the 37 ODA team
3 is highly skilled. They're very good at what they do and, you
4 know, they walk that fine line between Boeing and the FAA, and
5 they know when they've got the FAA hat on, you know, they're
6 working for us, and when they do their positions, do their job.
7 We haven't had any pushback. We watch for pressuring from Boeing
8 Manufacturing onto the ODA which we haven't see. So. And if we
9 did, that's, you know, kind of an egregious issue and we reporting
10 that directly and we've got a process for that. So.

11 Q. Okay. As far as the Boeing quality manual, who writes that?

12 A. Boeing writes it.

13 Q. And what about the quality flow down requirements to
14 suppliers?

15 A. That's -- Boeing, they flow that down but that's per -- so
16 they're requirements, flow down requirements from 21.137, from the
17 CFR. There's also in that AC43, for Boeing, that the production
18 talks about flow down requirements, that's mentioned for our
19 oversight in our 23, in our order, 8120.23. So Boeing -- it has
20 to ensure their requirements are flowed down to their supplier and
21 they have to audit that. And if we audit a supplier, it's to
22 Boeing's policies. They want that.

23 Q. If you see during the audit or you're out on the floor and
24 you see something egregious, a critical safety of flight issue,
25 what actions do you take?

1 A. We document or if we're in the middle of audit, and you're
2 see they're about to make a pretty bad mistake, we'll stop, you
3 know, like stop right here. You're about to do something wrong
4 which we've done in the past when we've identified something.
5 Just say I was doing an audit and there's a piece of FOD and
6 they're about to -- actuate something that could have got jammed
7 into something, and I'm like stop right here. We're stopping the
8 audit because of a safety condition right here, you know. So if
9 we see something, we say something, all right, because that's the
10 -- that's why we're there, you know. So we see an issue, we talk
11 about it and we document it. So.

12 Q. Things like tool control. If you see an unauthorized tool
13 being used on the floor during just your normal walk around, what
14 actions can you take?

15 A. Again same thing. We stop. We have -- I don't confiscate
16 it, a tool. So if we find an unauthorized tool in use, which has
17 happened, we stop, let me get that tool. DQMR or RQSO have the
18 ability to take that because they're the manufacturer
19 representative. So they can -- they see it, they take, they
20 confiscate it. We document it. And then that drives our
21 questions, you know, say it's an unauthorized tool. The first
22 question I ask is, okay, open honesty, how long have you been
23 using this because that's going to drive -- that could drive multi
24 units, things like that, look backs, right. So if they've been
25 using the wrong tool and that's going to drive Boeing engineering

1 to determine the consequence of using that. So again, we
2 document, formal compliance, to get corrective action. That's
3 going to drive a multi unit, the inspections, ADs, whatever that
4 may entail right down the line. So.

5 Q. Okay. As you're out on the floor and you stop the process,
6 do you have the badge on? If you board the aircraft during the --

7 A. So it's -- yes and no, because it's all dependent on where
8 the aircraft is in the lockout/tagout process, right. Say in flow
9 day 1 through 3, we'll sign in in a book because there's no power.
10 There's no hydraulics, nothing. It's still a tube, right. Now,
11 when down to 4 and on, if they're in a lockout/tagout condition,
12 then we badge in, badge out, and then if that system's down,
13 there's a book you write in. Like if we're out on Boeing Field,
14 we sign into the stall, sign into a book. So there's tracking.
15 So we do. We sign in and sign out. That's where we have Boeing
16 badges. So -- for that process.

17 Q. I think we've already covered this, but what types of audits
18 are required by the FAA for an approved quality system production
19 certificate?

20 A. So that's going to be our PI audits, QSA, if there's supplier
21 control audits, you know, those audits.

22 Q. Okay. Does Boeing also -- I mean they have an approved
23 quality system for production of aircraft. Is Boeing certified by
24 any other outside agencies?

25 A. No. They're based on an AS9100. They self-certify. So

1 that's --

2 Q. And does the EASA or other regulators ever participate in
3 quality audits?

4 A. I don't have enough experience to tell you yes or no, but
5 I've heard EASA might be popping out. We've had some customers
6 come follow our process. So.

7 MR. RIGSBY: I think I'm done.

8 BY CAPT ANDERSON:

9 Q. Hey, John.

10 A. Sir.

11 Q. The certificate management plan, is that your guiding
12 document for the year for doing audits?

13 A. Yes.

14 Q. And then is it -- who develops that?

15 A. That's our team. That's our seniors and our managers looking
16 at the previous year's data, things we have found. We build that
17 plan. They risk rate the company and that drives our audit plan.

18 Q. Okay.

19 A. And then we can do pop up audits as we see necessary. Just
20 drop in and we see something in work, we can, you know, follow up
21 that process.

22 Q. Is that an annual plan? Is it modified each year or is it
23 pretty dynamic?

24 A. It's modified each year, but again it's based off of risk,
25 right. So if the risk is reduced, then it might adjust the audit

1 numbers but they've been steady in their current position for a
2 while. So.

3 Q. All right. You mentioned the audits about twice a month. Is
4 that within the 18?

5 A. Yes, sir. Yes, that's in our audit plan, yes.

6 Q. How often is -- the audit, you mentioned that the audit
7 findings are given to Boeing that day. How often is the
8 turnaround the same day to have corrective action or what would
9 you say is the typical timeframe?

10 A. It varies on the complexity of the finding, right. Some
11 things -- so some things can be corrected on the spot. Some
12 things -- but if it's something that we've seen a repeat of, we
13 want corrective action. So if we see repeats, that drives
14 corrective actions up. The corrective action process, again it
15 just takes very -- they need to -- they see a finding. They do
16 their investigation of what happened. They have to find out the
17 root cause of why that happened. So again, it's all dependent on
18 what the finding is.

19 Typically that -- they can have a fix in place but then they
20 have to monitor to verify that. Their fix is valid and working.
21 They'll do -- after they have their corrective action in place,
22 they do their verification of corrective action, make sure it
23 works. Then once they feel that's good, they notify us that, hey,
24 we feel this meets. And then we do a verification of their
25 corrective action. We'll go out and audit to make sure that it's

1 good or not, and if it's not, then we elevate because it's a
2 failed verification. You told me this was good, and you had
3 containment of the issue and you don't. So that drivers, you
4 know, further action. So it just depends. Or, if it's good, then
5 we close that action. Yes, your corrective action was -- it was
6 effective, right. So.

7 I can't give you a turnaround because some things are complex
8 and they kind of hang out there. You know, does it, does it
9 require a drawing change, and IP in its installation plan change.
10 Those things take a while, like if it's an installation plan
11 change, it -- they might not be able to drop that into build line
12 number this down the line, right. So it might be 5, 10 planes
13 down the line before that fix can get into place. So it's just,
14 it's just all dependent on what the finding is.

15 Q. Um-hum. Okay. On the trends, you mentioned that there is
16 just following the process. Would you -- in those findings, if
17 you get feedback from Boeing for the corrective action, do you any
18 information of how much of that is not knowing the process or
19 willful noncompliance, knowing the process but not choosing the
20 follow it?

21 A. I'd have to look at each of our corrective actions to tell
22 you that, and I just don't have that with me.

23 Q. No, I understand. That is just a trend.

24 A. Yeah, no, sir.

25 Q. Okay. During the audit process, how often would you interact

1 with a mechanic, just to go up, audit them, their process
2 specifically, check the work that they're doing? Are the
3 following the IP?

4 A. Yeah, that's the typical process, right. Just see what's
5 going on, the work going on and, hey, how you doing? Or if we're
6 just walking around over the shoulder like. Hey, what do you got
7 going on? Hey, my name's John, FAA. I'm going to audit you from
8 what you're doing from here to the end of this process or setup.
9 I want to see this from start to finish. So it's all dependent on
10 how we want to do it, or you can look at a finished product and
11 see who signed that job off and have them walk you through the
12 process, see if they understand what they just did, you know, and
13 the criticality of what they're doing also. So there's several
14 different ways to do an audit.

15 Q. And then in your audit process, how much of it is management?
16 How much of it is the mechanic, to see the process and flow?

17 A. A lot of it's the mechanic and the quality individual because
18 every job has quality on it. So I'm auditing the mechanic and
19 quality as well. It's that whole process, that installation plan,
20 the whole process from start to finish, like I said to look at the
21 drawings and whatnot. The management side of house is not, you
22 know, they're not touching the product. So we don't kind of --
23 it's more of the product. It's product based inspection. So.

24 Q. Okay. And some of the investigations that we have done with
25 the Boeing employees touching on on-the-job training. A lot of

1 the experience that the mechanics get to do their specific job is
2 through on-the-job training. Is there anything that you have as a
3 function for an audit to be able to audit on-the-job training?

4 A. So, the OJT, not really because what we, what we look at is
5 their certifications. If somebody's doing a job, and it requires
6 a certification, we -- that person can't do that, sign that job
7 off of, unless they're certified. CMES is supposed to supposed to
8 prevent an unqualified person from doing that but we found that
9 slipped through here and there but -- so we review that person's
10 training record when we do that. OJT, we know can be better, and
11 we've brought that up and Boeing's looking to fix that issue on
12 the OJT side. There's not a -- what do I want to say --
13 regulatory requirement on the OJT. Boeing has processes that --
14 in their quality system, they have a training process. We run
15 down that system but if I can't put a, you know, something I can
16 -- for OJT, I don't have the oversight to push that issue. It's
17 an opportunity -- I can say this is an opportunity for
18 improvement. I see an issue and we can -- we address it that
19 way --

20 Q. Okay.

21 A. -- for better training.

22 Q. I think that's all this round. Thank you.

23 DR. WOODS: Troy.

24 BY MR. LEVANEN:

25 Q. Hi again, John.

1 A. Yes, sir.

2 Q. Do you guys -- what kind of mechanism do you have from a
3 voluntary self-disclosures from Boeing to the FAA?

4 A. So Boeing has the voluntary disclosure program, VDR,
5 voluntary disclosure reporting. So if they have an escape, they
6 send, they send us a notification through message courier. We
7 review that, what their escape was, when it happened, and if we
8 feel -- we reviewed it, and if it's a safety or whatnot, we can
9 elevate from their voluntary disclosure to a formal compliance
10 action. But if it's -- if we feel it's within the realm of their
11 reporting through the CEA process, we'll accept their -- we do an
12 exception. We accept their VDR and that drives them to provide us
13 with a corrective action plan. That's the whole process,
14 corrective action plan via leas (ph.) and we track that from start
15 to finish. And again, we evaluate their corrective action plan.
16 Is it good? Is it not? We can reject it again. So anywhere in
17 that process we can evaluate it.

18 Q. Then do you have visibility to those or would that be --

19 A. Yeah, we have visibility to those. Those come in directly to
20 us, and then they've got the informal voluntary disclosure where
21 they had an escape. Maybe it's a paperwork or something. And
22 those do get reviewed by -- we've got engineers who review those.
23 If it's -- we watch those in case it needs to be a documented VDR,
24 it needs a corrective action plan. Then we'll have it -- we'll
25 front those up. There is a process for that.

1 Q. Do you get -- so if you have visibility of them, when is --
2 do you get a lot of them? What kind of trend is that? Like I
3 don't really how to quantify it per se. Like is it one a week or
4 one a month or --

5 A. You might get one a month, one or two and, you know, and
6 those could be driven by a factor they find an issue that's going
7 to drive a multi unit, you know, mechanic goes like, hey, I didn't
8 do this or during one of their internal audits they find an issue,
9 that will drive that. So it's all dependent on, you know, where
10 it was found in the process and how it was found. Was it a COSP
11 from the customer reporting back a service issue? Those have
12 happened, too, that will drive voluntary disclosures, right.

13 Q. So in your opinion, how well do you think that process works
14 as far as like when you're out doing an audit, you're going to
15 find things and you'll be thinking this one should have been -- we
16 should have known. Why are we finding this? This should have
17 been told to us to begin with, but we kind of discovered this in
18 our audit kind of thing. Like how well do you think that that
19 process is? Do you feel pretty solid that you're getting all the
20 information you need through that voluntary self-disclosure
21 process or VDR process?

22 A. Yes. Yes, but that's -- I don't say we come across a lot of
23 those kind of issues. They're -- they've been very receptive and
24 open and honest with us, with the FAA, and will report those
25 issues. So.

1 Q. So you kind of got there during -- it sounded like during
2 COVID itself.

3 A. Yes.

4 Q. And so when you got there, were they, were they already
5 pulled back or were they just starting to pull back or --

6 A. So, yes, yes, for two things, right. The grounding of the 37
7 because of the mishaps, COVID. So as I came on, things were kind
8 of getting back into that reactivation side. So I get to see kind
9 of the spool back up to doing production as I was in my training.
10 So it was a different time I guess. So with COVID and whatnot.

11 Q. And so I was going to ask you what you thought about today
12 versus 2021 and a half or something, with -- how you feel the
13 workforce is in terms of maybe experience and errors, that kind of
14 thing?

15 A. I think they were, you know, our data shows it's really
16 steady and their own data shows they're reporting their escapes
17 and whatnot. It's going to be about the same. Of course, during
18 COVID, they did have a voluntary retirement program. So they lost
19 a lot of experience there. So, and then like I said, here in the
20 last year, they've hired a lot of new folks. So it's that ebb and
21 flow of industry. So.

22 Q. Most of your findings, when you have your audits and you have
23 a finding, I know they have corrective action plans. So like how
24 much time do you normally assign those? Do they have like 10, 30
25 days? Is that kind of like we have?

1 A. So once we say issue a formal compliance, they have to get
2 back to us within 10 days. Sometimes they'll need a little more
3 time to, you know, to do a good root cause analysis. So we'll
4 give them an extension of up to 30 days, to get that good root
5 cause and get that good plan in place, right. And then that's
6 when we review it. The initial reporting is 10 per policy and
7 then if they require an extension, then we'll typically give them
8 that because we monitor the product, right. We want to get a root
9 cause and corrective action. You know, we want to drill down on
10 the issue and take care of it.

11 Q. Yeah. Okay. That sounds similar to ours, a similar process.

12 A. Um-hum.

13 Q. I was going to ask you how much time you spend at the
14 facility, and you said it was kind of depending on the workload.
15 I mean you and your team I should say, spend in the facility.

16 A. Yes, yes.

17 Q. But maybe a better way to put it is like roughly what
18 percentage of your time do you spend in the actual factory, for
19 example, in a Boeing facility?

20 A. Typically I'm in a facility, you know, be it typically, that
21 could be at Boeing Field, the preflight or whatnot. So again it's
22 all -- it's hard to really put a number on it. Sometimes we're in
23 there less. Sometimes we're in there more. It just -- like
24 currently we're in there daily right now, you know, meeting our
25 Administrator's plan of better, you know, better oversight and

1 things. So we've got to make a presence right now. And then
2 again, coming out of COVID was -- we had a little less oversight
3 because of COVID. We've been steadily getting in deeper in there.
4 So it's -- honestly, it's hard to give you a good percentage
5 because usually we've got somebody in the plant or we're at Boeing
6 Field again doing ticketing activities or whatnot, checking out
7 storage or whatever. So we're pretty engaged.

8 Q. Any time when you are onsite, are you under escort,
9 specifically, or do you have -- I know you're wearing a badge and
10 you have --

11 A. Yeah.

12 Q. So you do not need an escort?

13 A. No, we do not. There's, you know, again we can -- if I'm
14 doing an audit, I want to have a Boeing representative with me so
15 they can see what we find, right.

16 Q. Um-hum.

17 A. So if there's any dispute you've got a witness to what's
18 going on. Hey, this guy's not following policy. He's got an
19 unauthorized tool, whatever, right.

20 Q. Yeah.

21 A. So that's case spot, again, you know, kind of -- we can --
22 we're free to roam anywhere we want and we do. At times, you
23 know, we're wearing FAA gear, so they know a vest that goes, hey,
24 the FAA is in the house, or just walking around like this. But
25 it's just we've got free rein but if we're doing an audit, we give

1 that courtesy of hey, we're coming. Here's, you know, we have a
2 rep. So -- and then, you know, sometimes -- so, yeah, we have
3 free rein to go around wherever we want, and that's all
4 facilities, all the Boeing facilities (indiscernible) down south,
5 in Everett. So we can -- and as we're walking, we're looking for
6 things too, right. So we're watching what's going on. And we
7 have had where we'll identify something and jump into audit mode
8 or see what's going on, right.

9 Q. Yeah. You were talking about the onsite liaisons I guess. I
10 can't remember the exact acronym for it that actually helps you --

11 A. The ODA, the unit members.

12 Q. Yeah, okay. So how does that team stack up with your team in
13 terms of like volume. So do you have like -- like how many people
14 do you have and then how many do they have on that team say, for
15 example, at Boeing Renton?

16 A. At Boeing Renton, there's probably five folks. I think
17 there's five in the ODA office, and there's five over at Boeing
18 Field. And they'll shift people between because it's the same
19 office. So they might help with the ticketing aspects. Sometimes
20 they're able to help assist us with ticketing. They'll do
21 conformity inspections. They have conformities they do. Or we'll
22 have --

23 Q. (Indiscernible).

24 A. Yeah, we just call it conformities, but we'll assign them
25 inspections to do for us as well. So they're pretty -- we're

1 pretty integrated.

2 Q. So my question -- my general question to using that template
3 was why but then to narrow that down a little further, is it --
4 specifically why? Is it because of their expertise that we use
5 them or is because of -- to get additional resources?

6 A. Well, one, it's expertise; yes. Two, it takes a little bit
7 of the workload out. I would assume a little bit off of us
8 because we can't, you know, sometimes we can't be there for all
9 that. Sometimes it's off shift or whatnot or weekend stuff.
10 Again, they're an internal part of the process in the -- if
11 there's any issues, they fill out what's called a survey, and then
12 if there's an issue, that goes -- bypasses us and goes to
13 headquarters. Then it comes back down. So there's -- really they
14 don't have too many issues. The ODA team is, I think it's a good
15 team for us, for on the mechanical side. There's an engineering
16 side of the house. I don't know that side of the house, but we've
17 done oversight through the FAA oversight also.

18 Q. Has the ODA team been in place kind of in that format ever
19 since you started?

20 A. Yes, sir.

21 Q. And then which led me to my next question. How do you feel
22 about your workload and/or your staffing in general from the FAA
23 for this role? I mean, you know, like say you had double the
24 people, would you not use the ODAs, and even if you did, would you
25 maybe do other things or what's your thought on it?

1 A. I think we would still utilize ODA. They're valuable in what
2 they do and their experience. Again, they can -- they assist us
3 because they know the systems like the CMES system, and they can
4 get in there and dig where we don't have the access to that. So,
5 you know, as far as I -- they're valuable part of the process for
6 assisting us and the Boeing Company themselves because even if
7 they had findings, things are documented. They fill out 8100-1s
8 and whatnot. So it's a documented process on the FAA's side,
9 right. So there's documentation of what they find and we see
10 that. If we had more people, that just helps us audit better,
11 right, cover more ground. So.

12 Q. So then how do you feel about your workload in general? Like
13 for you and your team, like are you guys feeling like you're --
14 are you working hard? I mean having to work overtime to get your
15 work done.

16 A. No, I mean we're busy. I'll tell you, we're just like
17 everybody else. We're busy. We -- because not only is it the
18 certificate side of the house. It's all the other additional
19 duties we have that's our job, right. Like COS oversight, things
20 like that, maintaining our -- following up on all CEA actions, you
21 know, our daily stuff, our training, meetings, you know. So. And
22 if we, if we run into an issue like we've had just like, just like
23 anybody, if you're short somebody, the other team pitches in to
24 help. If we need, if we need another inspector, they'll come down
25 from the north or we'll go north to help the other team, right.

1 So it's just -- we've got a pretty -- we've got a really good team
2 where if we need help, we say, hey, we need help. So it's
3 covered. Our management is great. They back us 100 percent. So,
4 you know, out there making sure we can do what we need to do. We
5 don't let things slide. So.

6 Q. Okay. That's good. I appreciate all that. And I think
7 that's all for me. Thank you.

8 A. Okay. You're welcome, sir.

9 DR. WOODS: Mike, sorry to interrupt you. We're going to
10 stop it here for now because we're already an hour and a half in.
11 So I think some people would appreciate a break and the relief.
12 So with that, we're going to go off the record and take a break at
13 10:30 Pacific Time.

14 (Off the record at 10:30 a.m. PT.)

15 (On the record at 10:41 a.m. PT.)

16 DR. WOODS: Okay. We're back on the record at 10:41 Pacific
17 Time.

18 BY MR. RINEY:

19 Q. Hey, John.

20 A. Yes, sir.

21 Q. So specifically about your team size, so you said you have a
22 senior manager and a manager. How many other inspectors
23 specifically are day in, day out on the 37 --

24 A. So my senior, he's day in, day out, myself and --

25 Q. When you say senior, is that your like a lead?

1 A. He's our lead. They call him a lead, right. Our senior,
2 he's a lead, and then you've got the manager. So the senior, he
3 floats between administrative and hands on, right. So he's an
4 active team member. So there's five of us.

5 Q. Including your manager.

6 A. Not the manager.

7 Q. Okay.

8 A. Our manager does come out and assist.

9 Q. And, has that team size increased since recent or has it been
10 that size?

11 A. Let's see, when I came on. It was about that size because
12 when I came on, some folks had retired. So I was backfilling some
13 folks. So it's been consistent. It's been pretty consistent.

14 Q. The next question I was going to have was about the audits
15 themselves. Do they mainly take place on first shift?

16 A. Yeah, they do because we're trying to -- we can do off shift,
17 like I'll come in, you know, like in the Renton Plant. Third
18 shift, a lot of things, that's more of moving it, right. So I'll
19 say later in the second shift or I'll come in early to catch --
20 because dayshift will start at 5 a.m. So we'll come in early to
21 start an audit early to catch that, whatever that IP we want to
22 witness. And then we have come in on the evenings.

23 Q. I was just curious because normally if it's like Spirit, the
24 less senior individuals are on second shift.

25 A. Yeah, yeah.

1 Q. So I didn't know if that --

2 A. And we're focusing, you know, we see that and we're focusing
3 a little more on the second shift side of the house because that's
4 where a lot of training happens, right. So.

5 Q. And do you feel like specific to the Seattle Delivery Center,
6 your team or the FAA team is more involved with the ticketing or
7 that the ODAs or is it --

8 A. It's a 50/50, right. Because we still have the ticketing
9 oversight for the return to service, right. Eventually that's
10 going to handoff. Right now we're kind of in a 50/50. We both,
11 you know, we do paperwork. We do the inspections together and,
12 you know, we're looking for the stability, the ticketing process
13 stability. That's to hand it off and it's not there yet. That's
14 above me. We just, you know, we report our findings and whatnot.

15 Q. What are the severity of the findings that you're seeing in
16 that ticketing?

17 A. Well, it's, you know, general things, wire ride conditions,
18 FOD. You might find a missing fastener, a missing fastener or
19 something, a missed shop fastener. You know, it's just we find a
20 variety of things. Leaks, minor damage, you know, tool marks, you
21 know, just -- it's the gambit of the ticketing process. So -- I'm
22 trying to think. So it's -- yeah. It's just we're looking for
23 those obvious defects, right, anything that escaped the building
24 process.

25 Q. On the Boeing corrective actions, for like the first pass

1 quality of those, what would you feel like they get, the root
2 cause correctly the first time? Depending, you know. And how
3 many do you feel like you guys send back?

4 A. Typically, they're on point but, you know, we have a handful
5 of rejections, right. So it's a small percentage for the
6 rejections.

7 Q. Since the incident aircraft occurred until now, once Boeing
8 gave the -- had the quality stand down, do you feel like the
9 traveled work within the factory and has the team seen changes?

10 A. The processed has slowed, right. So we see that. Things are
11 pausing, being told things -- aircraft are staying in position.
12 So you'll have traveled work. Fuselages are being held at Spirit
13 to fix the traveled work. So we're seeing an effect. You know,
14 that transfers down to what we're seeing coming out of the
15 factory, ticketing, whatnot, right. That's the whole process.
16 So, yeah, there's -- and they're having a lot of what do they call
17 them, production dates, productivity days. So they're working on
18 their teams and whatnot which is good. So, you know, they've
19 slowed down to address their issues which they need to do.

20 Q. And do you feel like since that has occurred, the findings
21 have been reduced?

22 A. I can't really say right now because we're still doing audits
23 and collecting data. So. I can just say we're still -- we're
24 having findings still.

25 Q. Okay. That's all I've got. Thank you.

1 DR. WOODS: Okay. Hopping over here to John.

2 BY MR. PETRUZZELLI:

3 Q. Hey, John. You talked a little bit about the stability of
4 the production system as a whole. How -- and I'm talking
5 specifically of the ticketing. How does Boeing do -- since
6 November 30th, 2020, when we got ungrounded, how have we done --
7 how has the company done with stability, predictability in our
8 process?

9 A. Initially we saw the oversight. So we haven't been able to
10 really see that good stability, scheduling, whatnot, is still up
11 and down. Findings up and down. So we're still, you know, that's
12 why we still have the oversight, and it gets reviewed through our
13 upper management. So.

14 Q. Has it improved, gone down, since we started ticketing?

15 A. We're on an uptick of findings. So that's concerning.

16 Q. You touched on training. OJT got brought up. We talk about
17 -- at the company about tribal knowledge and can you talk about
18 what you see? Is the tribal knowledge, the transfer of knowledge
19 from the -- I don't want to say older, but the more experienced
20 people, is it, is it effective? Could it be better? And if so,
21 how?

22 A. Just training overall could always be better, better OJT,
23 better base training. Our audits have seen deficiencies in
24 training. Issues with not being able to access drawings, BACs,
25 you know, I don't know if that's from the training side, not being

1 trained correctly on how to access that data. Again, it's hard to
2 say why. But, we've brought up the OJT. There are some past
3 practices out there, preflight, the SOGT program, and we've
4 brought that up to factory and other areas that that could
5 potentially help. So.

6 Q. When you're doing audits, is it, in your auditing, pick on
7 the wing line, if somebody's installing a system. Is there a
8 level of -- what's your comfort level that somebody, that those
9 mechanics understand how to pull a drawing, how to pull a spec,
10 how to identify something doesn't jive in an IP, for example, the
11 order of work or certifications?

12 A. So when we audit, we're looking at how familiar they're with
13 the systems. Can they pull the drawings? If they can't pull the
14 drawing, you know, you just keep digging deeper to see why they
15 can't get to that drawing. Do they know the drawing? Where they
16 trained on it? Hey, this is how I do it. You know, potentially
17 tribal knowledge. So we try to dig in, if I'm auditing somebody,
18 you know, why can't they get to that? Is it a computer issue that
19 they were trained? So we try to -- we bring that up. It's, you
20 know, one of the things that in an audit, if somebody is not
21 familiar, we might, we will mention that. They've been trained
22 but, you know, but they could be trained better.

23 Q. We've talked a lot about removals and getting both factory,
24 field. Are there areas that have better success dealing with --
25 doing removals appropriately versus places that don't do removals

1 correctly?

2 A. I'd just say we've seen it across the board.

3 Q. Okay.

4 A. We've seen issues across the board, and that's all areas, the
5 factories, the fields, the storage locations. So. I can't put a
6 finger on one more than another.

7 Q. Okay. Do you -- how often do you come across where somebody
8 doesn't do a removal?

9 A. I haven't come across that or been looking for it. I
10 haven't. Other inspectors have. There's been documented CEA
11 cases for that, formal compliance actions. So. And then there
12 have been voluntary disclosures from Boeing because of removal
13 issues I believe. So.

14 Q. Last question for this round for me is part of what you do
15 for -- when you ticket, for example. You see the IPs, when you
16 pick a flight squawks, for example. Can you -- is a number of
17 those documents that there's only shop buy off and not shop and
18 quality buy offs. How does that affect the process that quality
19 is not looking at each and every operation per your IP?

20 A. So it is per the IP if there's a quality buy. So I can only
21 go by is there a documented quality buy for that, you know, was it
22 process monitoring, you know, the process monitoring, there won't
23 be that quality buy, right. So it's a statistical sampling. So
24 we would want to review documentation what we're looking for. Is
25 it document properly? If there's a QA buy, is it stamped

1 correctly? Did they stamp it right? Did they short stamp it,
2 whatnot, right. So that's when we're reviewing that document,
3 that's what we're looking for, the proper process there.

4 Q. Do you find more issues that happen in areas where there is
5 no quality inspection buy off?

6 A. I really -- I don't know. I don't have the data for that
7 one.

8 Q. Okay.

9 A. From what I've seen.

10 Q. That's all I have for this round. Thank you.

11 DR. WOODS: You're done. Dan.

12 BY MR. MARCOTTE:

13 Q. Again, it's one of the nice thing going last, is a lot of my
14 questions get answered.

15 A. Yeah.

16 Q. And I'll ask you to bear with me. I've never worked in a
17 production environment. My experience is all mostly operator
18 maintenance, engineering, some quality in Boeing engineering. So
19 your management plan is risk based. And I'm trying to get a
20 better understanding of what it means to be risk based.

21 A. So, it's kind of -- our audits, you know, the severity of
22 findings we find. The fact that we are having findings, that kind
23 of drives things and do the findings tie in with the criticality
24 of the severity. You know, was it -- what's the finding we have?
25 Does it drive a safety issue, whatnot, right? So it could be a

1 potential safety, things like that.

2 Q. Okay.

3 A. I don't have the risk based rating data to --

4 Q. Okay.

5 A. -- to really -- and the parameters that they look at for
6 that.

7 Q. Okay. And I was interested, too, you talked about monthly
8 factory and field meetings. You know, so -- and again, I come
9 from more of the in service world. So operators, QMS system and
10 other systems, that go on something called CASS where they look at
11 reliability, potential safety issues for airplanes for people.
12 And so operators have at a high level, you know, very senior
13 people in companies, they sit in on a monthly meeting called a
14 CASS board or something. And the FAA's generally invited to come,
15 witness and participate. It's not a meeting for the FAA. It's
16 the operator running its normal business and he's keeping the FAA
17 informed. So these monthly meetings, are they meeting just to
18 brief the FAA or are these the kind of equivalent to a CASS
19 meeting?

20 A. It's the equivalent.

21 Q. Okay. Good. Thanks. And we got into the CAPS, and I was
22 ask if they're generally good, but you just kind of talked to
23 that. One thing I was wondering, how do you think Boeing does
24 with timeliness and quality with some type of containment plan
25 when one's needed? You know, say something, you know, they get --

1 the root cause is going to be an extended of period, but there's a
2 concern in the interim.

3 A. Yes, we -- usually it's really good and we want to see a good
4 containment plan right away, right.

5 Q. Yeah, we all do.

6 A. Because again, is that going to drive a multi-unit, AD, does
7 that require an immediate ADs, or anything like that. So when we
8 have an issue like that, we try to stay on top of it. Our
9 engineering's involved typically also. So, you know, we try to
10 look for that good containment. Like I said, you don't want
11 something hanging out there --

12 Q. Right.

13 A. -- that's a potential issue.

14 Q. Right. But do you feel when Boeing brings it to you
15 generally the containment plan is --

16 A. Yes.

17 Q. -- is a good one?

18 A. It's usually good.

19 Q. Okay. And again, unit members I've dealt with in the past
20 are all engineering, you know. They're the ODA program. So the
21 unit members you deal with, is there -- as the UM are they
22 manually tasked with finding compliance or do they help you audit?

23 A. No, but like I said, they do well. So they help with the
24 ticketing process, you know, special flight permits or the
25 ticketing process, export, request for conformities, the internal

1 conformities like interior components --

2 Q. Right.

3 A. -- things like that. So it's a lot of that. They don't do
4 audits for us.

5 Q. Right.

6 A. They're not part of the audit process. Where they kind of do
7 auditing is the ticketing side of the house, where we go out and
8 inspect together.

9 Q. Right. And even then, would you say that's more like -- so
10 in engineering, we say the unit member are finding the compliance
11 with FAA requirements, whether they're FARs, and we might get ACs
12 (ph.) to work, too. So is it similar for your unit members,
13 they're finding compliance to your requirements?

14 A. Yes.

15 Q. Okay.

16 A. That's their whole purpose, just to make sure that Boeing is
17 complying with the regulation --

18 Q. Right.

19 A. -- right, for the type design or whatnot.

20 Q. Okay. Great. That's it for me for this round. Thank you.

21 BY DR. WOODS:

22 Q. I want to follow up on the audits please. I understand the
23 process. I understand your timelines. And I understand how you
24 use the findings of those audits to kind of generate future work.
25 I guess what I need to know then is it sounds awfully reactive.

1 So what programs and processes do you have in place for the
2 preventative side of quality assurance and safety?

3 A. Well, just our meetings with the quality folks to try to, you
4 know, going over what we have found, what we can do to prevent,
5 you know, that's -- again it is reactive because we have found an
6 issue that we were trying to drive to prevent those issues from
7 happening again, right. So yeah. I don't really have a good
8 answer for that one I guess.

9 Q. Okay. Going back to having those meetings with the quality
10 side, what are some of the products that Boeing's QMS team are
11 producing that you then use to help inform your oversight process?

12 A. Like in the QS meetings, we're looking at their data, what
13 they find internally, right. We look at their internal audit
14 process, what they're finding. Things they're seeing. There's a
15 lot of metrics that come up, and we'll question some of those and
16 if I see -- say we see a high driver from their own metrics, that
17 could -- that will be a focus area for my audit. I'll go look
18 there. And the same with, you know, we're looking at voluntary
19 disclosure actions, things like that. Or again like if I see
20 things in the ticketing realm, issues, I can drive directly back
21 into the factory and audit that process to see why is there an
22 escape? Why does that keep coming to us? We're seeing the same
23 thing, and audit that process to see, is it a person? Is it the
24 plan? Is it, you know, what's going on.

25 Q. In your experience, do you feel that Boeing's QMS process

1 does an adequate job of capturing the small oopsies for lack of a
2 better word prior to becoming a full blown escape?

3 A. I don't have enough to say yes or no from my time. I feel it
4 does but, you know, we don't know what we don't see, right. So,
5 you know, that's my -- that's an opinion question. And I'm just
6 -- I'd rather have more data to give you a better answer.

7 Q. So you did say that you work in a team. Is that a team of
8 five individuals?

9 A. Um-hum.

10 Q. Presumably do some of those individuals, have they been here
11 about the same amount of time as you or as long as you or longer
12 than you?

13 A. Less, a little less on our team. About a year less, but we
14 have the same -- we come from the same background, aviation
15 background. Some of us have been DCMA. So we've got that. We
16 still have the auditing -- come from that auditing background
17 already, dealing with Boeing, just the defense side. We're very
18 similar. So.

19 Q. And do you guys work together as a team to provide
20 assessments or is it just kind of each individual handling their
21 own piece of the puzzle?

22 A. Oh, no. We're a team. We talk, right. We share what we're
23 finding because we need to know because that's our -- that's how
24 we, you know, that's our oversight. We need to know what's going
25 on, where, when. So if somebody sees something on an audit, we're

1 talking, hey, this is happening. Keep an eye out for this,
2 whatnot. Or, again typically we'll have two of us on an audit.
3 So we'll see the same thing and then pass on to the team. So, you
4 know, we've got our meetings, our weekly meetings where we talk
5 and informal, just talking, you know, staying abreast of what's
6 going on and what we're seeing. So we've got really good
7 communication within the team.

8 Q. How often do you share information across other aircraft
9 oversight sections that are responsible for other certificates?

10 A. For other certificates? We mainly deal with the Boeing
11 product. So I haven't had a whole lot of interaction with any
12 other PC holders because this is our main deal, and it's very
13 large, right. So we've got our team, but we do crosstalk between
14 our programs because they come to help us. We'll go up and help
15 them, but as other PC holders, I haven't because this is our --
16 this is where we're assigned and this is, you know, a big
17 facility, a lot of work.

18 Q. So I guess if there was a trend that was establishing itself
19 amongst all manufacturers, different manufacturers, how would you
20 be informed? In other words, something that you're seeing here at
21 Boeing, for instance --

22 A. Yes.

23 Q. -- and it could be happening over at, you know, Cessna Beech.
24 I'm just wondering how you receive information for trend analysis
25 across all manufacturers.

1 A. That I -- it's above me.

2 Q. Okay.

3 A. I believe our upper management is in the know on that. And
4 in our all hands meetings, stuff does get passed down, but
5 typically, you know, it's not directly from my team. So it comes
6 down from above. But we do watch for trends and things, you know,
7 industry news, whatnot. So we stay abreast of all that.

8 Q. At what point do you and your team interface with like, for
9 instance, Boeing's speak up program or any one of their formal
10 feedback programs?

11 A. So I don't have a direct input. I advocate for the program
12 like I said. If I'm on the floor talking to an employee and they
13 have a concern, I give them their options, right. Like hey,
14 you've got a speak up program. You've got your ethics program,
15 and if you feel that those don't meet your needs, FAA has a
16 hotline whistleblower, you can be anonymous. And we explain their
17 options, right. So sometimes employees aren't happy with their
18 own speak up program. So they may end up submitting a hotline
19 whistleblower. So I advocate for it because that helps, you know,
20 document the issue and get it to where it gets investigated on the
21 Boeing side, on our side.

22 Q. To clarify that question, are you at all privy to the
23 information that might be aggregated out of those formal feedback
24 systems particularly if it has to deal with something along the
25 quality or safety of the production?

1 A. I personally have received any feedback from a speak up
2 report. You know, our investigation of a whistleblower or
3 hotline, we may receive some information if requested, right, but
4 other than that, no. Their internal processes, the speak up in
5 the -- when I read the BPI for the speak up program, they report
6 back to the individual if they request to be contacted through the
7 speak up program. That's in the Boeing side of the house. That
8 doesn't come out to us.

9 Q. Okay. I know you mentioned before, somebody had asked about
10 whistleblower. It might have been Matt, and I recognize that that
11 is confidential information. It's not something that you can
12 specifically talk to, but can you tell us at a high level like I
13 guess an aggregate of what seems to be the most predominant issues
14 based by subject? So is it concerns with production, concerns
15 like interpersonal issues, concerns with workplace environment?
16 Those are what I mean by high level subject groupings

17 A. We see the gambit.

18 Q. Okay.

19 A. The full spectrum. I can just tell you that.

20 Q. Okay. Talking about safety management systems, I'm going to
21 break it down into individual questions. How often do you
22 interact with Boeing's oversight representatives -- I'm sorry,
23 Boeing's FAA oversight for their voluntary SMS, that person?

24 A. Are we talking FAA side of house?

25 Q. FAA side.

1 A. So, yeah, that's our engineers. We participate in some of
2 the -- because it's in its infancy for the Boeing production side.
3 It's not mandated yet, right. It's not a regulation. It's coming
4 online. I think it's in the industry. It's on the flight side.
5 So it's just starting right now on the production side of the
6 house. So our engineering side, we've got a couple focals. We've
7 attended some of the Boeing meetings on their SMS digging into a
8 problem. So we're participating. It's new for us, too. So we're
9 understanding the process and assisting as we can.

10 Q. What guidance have you been given on what your role is going
11 to be in their voluntary SMS and potentially future operational
12 SMS program?

13 A. I've just had general reading over the policy. There's -- we
14 have in our training division in Oklahoma, we have formal training
15 for SMS. So we have to get scheduled up for a class and go to
16 that training. So it's -- FAA has training for that, formal
17 training. So we have a class. I think it's a 4 or 5 day class.
18 I haven't been tagged for that yet. I need to get into that one,
19 but we have that training as well.

20 Q. And then going back to the question of safety culture, I know
21 somebody had asked and you had said, you know, obviously there's
22 always going to be a component of where things are good and things
23 could get better. But if you were to label it with a grade, and
24 we're going to go old school here, like A through F, to include
25 pluses and minuses, what would you label prior to the incident

1 occurring the safety culture for Boeing?

2 A. And this is just strictly opinion, right?

3 Q. Of course, yes.

4 A. It's in place. It's -- they've got a safety culture in
5 place. Again, it's -- there's issues. Kind of a B, you know.
6 But that's just -- again, that's my opinion. There's always room
7 for improvement. A safety culture can always be better. So, you
8 know.

9 Q. Thank you. I respect your opinion. After the incident has
10 occurred, has that remained the same or has it fluctuated one way
11 or the another?

12 A. All I can say is they're focusing on it. So it's in work.

13 Q. Okay. And at this point, given that they are focusing on it,
14 do you feel that they have the tools they need in place to make
15 that focus sustainable?

16 A. Yes. They just need to again focus and keep the pressure and
17 make that priority. It has to be a priority, right. So.

18 Q. Well, that is all the questions I have for this round.
19 Congratulations, for the first round.

20 DR. WOODS: It has gone a little bit long. At this point,
21 since we just had a break, can I presume everybody's ready to
22 continue?

23 (No response.)

24 DR. WOODS: Okay. We'll do so then with the second.
25 Pocholo.

1 BY MR. CRUZ:

2 Q. Okay. I'm going to be jumping around a bit. When an airline
3 -- airlines use basically a general maintenance manual. What's
4 the equivalent to that on the production certificate side?

5 A. The production certificate gets per drawing, right, drawing,
6 IP, work instruction. The only time they can use the AMM, the
7 Aircraft Maintenance Manual, if it's called out in a NCR, it's a
8 specific call out per engineering to do a job per the AMM. So
9 it's per drawing spec standard.

10 Q. So there's actually a manual that tells you that that's what
11 the production certificate is? You're going to be working off of
12 these certain documents?

13 A. Yeah, there's a BPI out there somewhere but that's -- the AMM
14 is the -- that's not --

15 Q. Right.

16 A. -- the production side.

17 Q. Okay. Okay.

18 A. And like I say, you can only used if it's called out per the
19 engineering which some rework or something might call out.

20 Q. Okay. Since you're overseeing the production certificate,
21 does the FAA consider a SAT a production record?

22 A. No, it's not a production record.

23 Q. What do you consider a SAT?

24 A. A SAT, that's their internal messaging system. If they have
25 a problem, hey, we need help. They do this. It's not a

1 maintenance record. A maintenance record is CMES, NCRs, NCOs, MRD
2 actions. That's a maintenance record, and again that SAT system,
3 and even the BPI, this is not a maintenance record. It's for
4 bringing up concerns and whatnot within their system, help needed,
5 things like that.

6 Q. Has there ever been a case where they use a SAT record as an
7 example in a LOI to prove the FAA's point?

8 A. I don't know, sir. I don't know the answer for that one.

9 Q. Okay. To your know, what's Boeing's FAA approved record
10 retention policy for the production certificate?

11 A. What's their --

12 Q. Record retention policy.

13 A. We've got several PROs, BPIs for that. Their RIM records,
14 you know, depending on the document, 5, 10 years, they have
15 maintain the records. It's all dependent on what it is. So they
16 have a policy in place and recently we audit that if we see
17 quality record issue, we'll document it against their RIM (ph.)
18 records, and we have to add that found discrepancies with their
19 record retention.

20 Q. During your time looking over the certificate, have you ever
21 worked any type of plug removal?

22 A. The plug specifically, no.

23 Q. Okay. What does the FAA consider a MED plug? Is it a door?
24 Is it -- what do you guys consider it?

25 A. I can't say what the overall, but it's a plug, right, filling

1 in for a door. It's still a door technically, the plug. It's
2 built the same way. The only difference is it doesn't have -- if
3 it were a MED exit door, it's got to have the actuator, the
4 handle, whatnot, to open it versus the plug where it's, you know,
5 it's in place. It's kind of locked in place. It still uses the
6 same -- build process with the stops, the arrester bolts to keep
7 the door from moving. So.

8 Q. Based off what you know with regards to the plug, what does
9 Boeing consider -- who does Boeing consider is able to work on
10 that particular component?

11 A. As far as I know, the door team. The door riggers.

12 Q. Okay. Have you or any of your coworkers ever done an audit
13 of a door team?

14 A. Yes, we have.

15 Q. Any findings?

16 A. Yep, documented in formal compliance actions.

17 Q. What type of findings because we didn't get copies of that or
18 whatever?

19 A. So just an example, over a wing exit, quality didn't witness
20 the stack up. They witnessed the torque but not a stack up per
21 the call out. So something like that. That's what they should
22 have.

23 Q. As far as you know, is there a certification to be on the
24 door team?

25 A. There's no special cert for that job.

1 Q. So you mentioned something about ODAs and is there a
2 qualification to be an ODA?

3 A. Yes. You'd have to -- we have a policy. There's experience
4 level. They get interviewed, whatnot. I don't know it 100
5 percent to tell you. They have a policy for it.

6 Q. Are they A&Ps? Are they A&Ps?

7 A. Some might be. It depends on if they came from the preflight
8 or manufacturing. So I don't believe it's requirement because
9 it's still manufacturing.

10 Q. Okay.

11 A. I don't believe they're doing any of the post ticket work.

12 Q. So I know the FAA has put out LOIs within the past year
13 regarding removal documentation. And I know that there's probably
14 -- Boeing has had a lot of time to rectify those issues. Why do
15 you think we're seeing more removal issues even though it's been
16 10 years of documented removal issues with the company?

17 A. Yeah, on that one. I don't know. I couldn't really answer
18 that. I don't, you know, it's all speculation, my opinion and
19 whatnot. So I can't give you an answer.

20 Q. Okay. Do you know if any of your other colleagues have
21 worked on removal with Boeing?

22 A. On my team, no, I don't believe so. Not before the incident,
23 but I don't believe so, but some of them are older. The other
24 team members may have who have moved around. So I can't really
25 say, sir.

1 Q. And during your time working at Boeing, have you ever seen a
2 main entry door plug removed or opened?

3 A. No. So those are within the build process.

4 Q. Yes.

5 A. It's kind of rare, you know, here and there. It's not like a
6 daily, you'll see --

7 Q. Yeah, during your audit or whatever, you assume by the fact
8 that --

9 A. Yeah, yeah. It's all good. It depends if that dash nine's
10 coming through right. So -- because if it's an 8200, it's the
11 regular door.

12 Q. Do you see the audit results from your Spirit counterparts on
13 their production certificate?

14 A. We can request those. We do talk with the Spirit team, our
15 FAA team members down there, if we see an issue with something
16 that had come in. We'll pass that back, and then they'll look
17 into it but -- can you say that again?

18 Q. Do you see the audit results from your counterparts in
19 Wichita?

20 A. Yeah, if we request them, we can.

21 Q. Yeah. So has there been anything from them since obviously
22 this has been a high profile issue?

23 A. Yeah, we crosstalk. We crosstalk. Again, there's -- we've
24 got audits that have just finished but everything's still in the
25 work. So we talk by means and whatnot, right. So.

1 Q. Is there a specific issue that's more predominant that
2 they're finding?

3 A. No, it's just, just the general -- how do I say it, you know,
4 it's a lot of structural work, bad rivets, whatnot, place
5 brackets, things like that.

6 Q. What is your understanding of the supplier assist process at
7 Boeing?

8 A. Supplier assist?

9 Q. Yeah.

10 A. I don't know what you mean by supplier assist.

11 Q. Meaning in this particular case, obviously Boeing wrote up
12 the issue with the edge frames on this particular incident,
13 correct?

14 A. Um-hum.

15 Q. And our understanding is that Boeing production has asked
16 Spirit personnel to work the issue, because this is essentially
17 traveled.

18 A. Oh, the travel.

19 Q. The travel work, right.

20 A. Yes, I see what you're saying.

21 Q. So what is your understanding of the process when Boeing asks
22 supplier assist from?

23 A. Yeah, so as far as I know, you know, you've got Spirit in
24 house, and if they're flight inspection, they find issues before
25 flow day 1, you know, it's inspected by Spirit inspects, Spirit

1 quality, Boeing quality or Boeing mechanics, Boeing quality,
2 customer quality, you know, inspect the tube before it starts a
3 process, and if there's findings, as far as I know, if it's
4 directly correlated back to Spirit, my understanding is that
5 Spirit fixes those issues, they're documented fixed, and then
6 things press on.

7 Q. Do you know if Spirit's allowed to gain access to certain
8 things on the airplane?

9 A. As far as I know, yes. I don't know specifically.

10 Q. As far as requesting opening of a plug, who does that? Is
11 that Spirit or is that Boeing?

12 A. That would be Spirit requesting Boeing to -- maybe if they
13 need to access something pulled out. I assume. I don't know for
14 sure but that's, yeah, they're only dealing with their side, their
15 equipment.

16 Q. Yeah, okay.

17 A. So that's my understanding.

18 Q. You mentioned you looked at the IPs with regard to, you know,
19 some production work that's done. Do you see a lot of not
20 applicable signed off on the IPs? And if so, what type of audits
21 have you found that it was N/A'd but it shouldn't have been N/A'd?

22 A. I haven't found something where the N/A wasn't appropriate.
23 You will see that here and there. But that's for -- it's
24 requesting a certain thing that's not -- because sometimes it's a
25 general IP, and it might not have that piece of equipment, you

1 know, a different customer might have a different requirement for
2 something. So I've seen it that way. But nothing where I've had
3 any issue, where I had to document something myself. So.

4 Q. Just out of curiosity, before the incident, had the FAA done
5 any audits on removals as far as door plugs are concerned?

6 A. The door plugs, no. As far as for my team, I can't say but
7 for me, I haven't audited that door plug itself.

8 Q. Okay.

9 A. Pre-accident I'll say.

10 Q. Yeah.

11 A. Yeah, pre-accident.

12 Q. Okay. You also mentioned with regards to your work plan, you
13 have senior managers or senior team members make the plan for you?

14 A. We all. We review it, too. They develop a plan. They build
15 it, and then we review it with them.

16 Q. Okay. So are some of these senior guys, are they managers
17 or --

18 A. Our lead. So my lead. He's a senior. He's like my lead ASI
19 and then our management. They do it also.

20 Q. Okay. So your management, are they in the factory that
21 actually walk the floor and tell you what the risk assessment is
22 like?

23 A. Yeah, they've been there. Yeah, like recent managers, they
24 were ASIs and our leads and then, you know --

25 Q. So they have a pulse of what's happening in the factory.

1 A. Oh, yes.

2 Q. Okay. To determine what risk assessment --

3 A. Yes.

4 Q. -- and what work program you're working the following year?

5 A. Correct, yeah. They're hands on. They'll come out and do
6 audits also. So it's not like it's a manager just sitting in a
7 cubicle, you know.

8 Q. So is there a difference between the manager because you said
9 the manager's the lead.

10 A. Well, yeah, a lead, our senior, which is a lead.

11 Q. Okay.

12 A. And then --

13 Q. Okay. I got it. I got it. Okay. That's all I've got right
14 now. Thank you.

15 A. Thank you, sir.

16 DR. WOODS: Nils.

17 BY MR. JOHNSON:

18 Q. A couple things. Can you describe what the fuselage
19 receiving inspection should be when the train car pulls in to
20 Renton? Is there some inspection that occurs? I'm thinking of
21 like a receiving inspection like --

22 A. There's -- they've got an IP, right, an installation plan,
23 that they go through for their inspection process. It goes --
24 it's a documented inspection. It's not an IP offhand but there is
25 that. So it is documented as a receiving, you could say a

1 receiving inspection. And then I do know Spirit goes through and
2 looks at -- they've got like a hot item list of things they found
3 in the past and they look for. And so again, it's a lot of sets
4 of eyes per IPs, that go through and inspect all those.

5 Q. Okay. Does the Boeing FAA approved quality manual accurately
6 reflect the process being used at the assembly line in Renton?

7 A. I believe it does.

8 Q. Okay. And, last one for me. About the time you started,
9 there was a significant number -- significant reduction in the
10 number of inspectors. There's a significant number of items
11 requiring inspection. Was that change FAA approved? And if so,
12 what actions were taken to prevent any reduction in the safety or
13 quality of the units being produced?

14 A. I couldn't tell you at that time when I came on because I was
15 in training for 6 months, learning my position. So I don't have a
16 good answer for that. I'm sorry.

17 Q. Thank you.

18 MR. JOHNSON: Matt.

19 BY MR. RIGSBY:

20 Q. Just a couple, John.

21 A. Yep.

22 Q. Is there ongoing compliance actions at Boeing now? I know we
23 can't talk about it but is there compliance actions taking
24 place --

25 A. Oh, yes.

1 Q. -- in relation to the door?

2 A. Yes.

3 Q. Once Boeing gets a compliance action report, how long do they
4 have to respond to the FAA's letter?

5 A. I think we talked about that earlier. Initially it's 10 days
6 to get that out, and then sometimes they'll request an extension
7 to give them time, another 30 days to get the corrective action
8 plan together, root cause analysis, right. Some things are
9 pretty, very detailed and take a lot of looking into. So it just
10 depends.

11 Q. But it's your team that tracks that?

12 A. Yes.

13 Q. On the hotline complaints, most of those, are they typically
14 anonymous or do people put --

15 A. 50/50.

16 Q. 50/50.

17 A. Um-hum.

18 Q. Okay. Do you manage other production certificates for other
19 companies?

20 A. No, just PC 700.

21 Q. Okay. I know we talked about Speak Up, but you do not have
22 access to the Speak Up?

23 A. No.

24 Q. When you're performing an audit and just talking to the
25 people on the floor, do they recognize or have they mentioned or

1 do you mention to them the criticality of their job?

2 A. So, when I audit a person, I always ask their experience and
3 whatnot. And I do ask and part of my audit is do you understand
4 what -- again what the criticality of the component you're putting
5 in, the process you're doing because, you know, the experienced
6 folks do. The new folks don't because you've got people coming in
7 straight from high school, no aviation experience. You know, they
8 might not know that if I drop this washer what the consequences of
9 just a washer is in the wrong place, right. Or they don't
10 understand what they putting together. So, I ask. I typically
11 ask, and if they don't, I explain, hey, this is what this part is,
12 this is why it's critical, how it's tied into the overall picture
13 of the aircraft, things like that, right. So we try to pass that
14 on. Again, that's in Boeing's training that could probably
15 touched on a little better, people understanding the criticality
16 of what they're doing, you know, that part, the component, that
17 piece, you know.

18 Q. Okay. My other questions have already been asked. So.

19 A. Okay.

20 DR. WOODS: Bjorn.

21 BY CAPT ANDERSON:

22 Q. One question to go off of Sabrina's question about the
23 reactive nature of the audits. When the certificate management
24 plan is being developed, it is dynamic enough that if there is a
25 trend that is being found in an audit regularly the you can modify

1 or the team can modify the plan?

2 A. Yes, we can because we can do what's called pop up audits and
3 we just -- if we need to focus on something, we'd go and focus on
4 something. Like I said before, we found issues before where we've
5 driven back into the factory because of something we found on the
6 flight line, drive back to see is it a person, a process, what's
7 causing the issue. So -- and we'll document that as a -- our
8 system we have, it gets assigned it's own audit number. It's what
9 we call a pop up audit. So we do and we do and can, you know,
10 adjust on the fly if we need to, which we do.

11 Q. Okay. I don't know if it was asked but how is the findings
12 from the audits, how is that tracked? How do you guys store it,
13 track it, follow it?

14 A. That's in our ACAIS system, right. So everything, everything
15 we find is documented and is part of Boeing's corrective action
16 plan. Be it an informal corrective action plan is something that
17 was fixed within -- could be fixed on the spot or 30 days. They
18 have the finding and they tell us, this is what we did to fix it.
19 For an informal, a quick, you know, on-the-spot fix but if it's
20 again the bigger stuff, it is reported and tracked through the
21 corrective action plan. So -- and that's CEA and those findings
22 are in a corrective action plan. So it's tied between our ACAIS
23 where we document everything, the findings and then the corrective
24 action plans are tied to the CAS when they're fixed through our
25 CEA system.

1 Q. And that is through -- and that data from that system, is
2 that stored within the FAA servers?

3 A. Yeah, CEA, our Compliance Enforcement System, it's a
4 database. It's a program we have. It's our FAA system.

5 Q. Gotcha. And the data that comes say from a year's worth of
6 audits, in an aggregate form, is that data available to the end
7 user say it be the airline or the aircraft owner?

8 A. That I couldn't tell you, sir.

9 Q. Okay. Do you know if it could be made available?

10 A. I don't -- you'd have to talk to our upper management about
11 that. I'm not sure.

12 Q. Okay. That's all I have.

13 A. All right. Thank you, sir.

14 Q. Yeah, thank you.

15 DR. WOODS: Troy.

16 BY MR. LEVANEN:

17 Q. I have a couple from what these guys were saying that kind of
18 went along with it. How often do you get a whistleblower or
19 hotline because I know you say you have some? Some are in work.
20 Some, they come in. Like is that -- do you get one of those like
21 once a week, once a month? Do you see them all?

22 A. No, we don't see them. The process it comes through, our
23 upper -- a higher division, and then it filters down. So it might
24 be assigned to a different team member. It depends on where it's
25 at, what it is. Some are reviewed prior to. Is it, you know, is

1 it a legitimate issue because sometimes it might be somebody's
2 just thoughts on something, right. So, they come down and if we
3 get assigned, that's the priority. You work that. That's the
4 number one priority. So it depends. It fluctuates. I mean right
5 now there's an uptick with what's going on, and we see kind of
6 depending on just external factors. Sometimes we'll see an uptick
7 in things, layoffs, things like that, whatever. So.

8 Q. So even though I know you don't see them all, approximately
9 what does that represent though? When you say like an uptick, is
10 that you can go from one a week to five a week or what?

11 A. Again, I don't get to see all of them. I just, you know, we
12 might get a couple extra, you know. I might get assigned -- we
13 might hear one or two extra being assigned, you know. So it's
14 just --

15 Q. So, would you be able to take a guess at like roughly how
16 many would come in? How often do you get assigned them then?
17 Maybe I can ask it a different way.

18 A. Again, it gets distributed throughout the team. So, I can
19 say I've been assigned a couple in the last couple of months. So
20 it's just -- it's dependent. Like I said, it depends. Is it
21 here? What location? Is it on this program? Is it a different
22 program?

23 Q. Where does it fall into play?

24 A. Which team member gets assigned that.

25 Q. We have a similar program, hotline program and when we get

1 them, they get assigned, for example, to me ASAP. They need to
2 become the priority of the day.

3 A. Oh, yeah. That's the same process, right.

4 Q. Yeah. These guys mentioned it, but how often do you get --
5 are you at flow days 0/1 for the incoming inspections?

6 A. It just -- again, it depends on, am I auditing that area?
7 Because sometimes if I'm doing it for an audit, it might be, you
8 know, a different section of a factory, not per se that. The last
9 time I did flow day 0 was last summer sometime for the actual flow
10 day 0 review, maybe fall. I forget. But I have been in there
11 auditing in that process, in that flow day. Again, it's dependent
12 on our plan where we go and then with our new oversight, we might
13 be in there more now. So.

14 Q. That was kind of my next question is, you know, that part and
15 then how -- does your team review the initial findings when they
16 come in even if you're not there at the, you know, just review
17 them, look them over? I looked through the packages for the 62
18 MAXs that we had to see what the incoming, right, and I saw a lot
19 of patterns there in for multi-unit and not multi-unit. I was
20 curious, does your team review those?

21 A. I haven't personally. When we're in there doing audits, we
22 can request where we have the floor, what's a high driver and
23 maybe look at what's going on. So -- but not -- I don't believe
24 we specifically request what the findings coming in from Spirit
25 are on their teams.

1 Q. Which kind of led me to my next question which you may not
2 have an answer for but it was just something I was curious about.
3 Are the incoming findings more, less or about the same as what it
4 would have been prior to the accident?

5 A. Yeah, see I couldn't, I couldn't tell you because all I can
6 tell you is tubes are being held at Spirit before getting fully
7 shipped out to ensure there's minimal traveled I guess, and
8 they're doing a better inspection process there.

9 Q. Because some of them are. Would you manager be able to
10 answer that question?

11 A. He might be able to. I can't speak for him. So I don't
12 know. He has more information than I do.

13 Q. Okay. All right. Thank you.

14 DR. WOODS: Is that it, Troy?

15 MR. LEVANEN: Yeah, that's good for me.

16 DR. WOODS: Mike.

17 BY MR. RINEY:

18 Q. So, John, on the team members, there are specific individuals
19 assigned to the Everett factory and then the Renton factory. Do
20 you guys compare, you know, are there similar type findings in
21 Everett or less findings in Everett as far as best practices?

22 A. I can say sometimes our -- we have the same findings, right.
23 So tool issues, things like that. So, sometimes a -- our
24 compliance action will drive not just -- we'll call it the Puget
25 Sound, it's not Renton or Everett, you know. It's the whole

1 process, the Puget Sound production environment. So it
2 encompasses -- if we have an issue, it's distributed out through.
3 The company has been looking as a whole, not just here, you know,
4 say just if we have a finding here at Renton because that problem
5 has been found potentially up north as well in the Everett plant.

6 Q. Were the 18 minimum PI audits that you guys perform, is that
7 -- does that get to every flow day or --

8 A. Again, it's dependent not -- because we're looking at the
9 wing build up process. We're looking at, you know, from the basic
10 panel to delivery. So we're kind of focused on, we'll go to this
11 area and hit here and we'll hit this area, try to hit the things
12 we haven't hit or if we have an issue following up on issues. So
13 I can't say that every single flow day, but we're touching
14 somewhere along the flow days. Again major -- we're looking for
15 major things like engine hangs, strut installation, looking for
16 those big jobs, horizontal stabilizer install, rudder, a bunch of
17 those big critical installations. Again, it's dependent. We look
18 at the build plan, what's available, what are we, you know, what
19 we have, haven't seen, you know. You don't want to keep hit --
20 we're not doing repeats of something that we've already looked at,
21 you know.

22 Q. Okay. For the responses that are due back from Boeing, do
23 you know how many are delinquent?

24 A. I don't have that information. And if a response is going to
25 be delayed, then they let us know that this might slip. So we

1 have a tracking. They do -- they -- some things -- they're very
2 receptive. They let us know. So I mean we have our own trackers
3 everything, but typically they know that if they're coming up on a
4 close date, they let us know.

5 Q. How long does the FAA allow something to be open?

6 A. That's -- I'd have to look into our policy on that. So
7 typically we don't let it go too long, and if, you know, things
8 get reevaluated if that's the problem. If we feel it's not being
9 -- if it's -- if we feel it's not effective, then we can up our
10 compliance and enforcement, say if it was formal, it would go to a
11 LOI, if they're not responding in time. So we have processes to
12 elevate as needed.

13 Q. Do the LOIs have a specific timeframe that they have to be
14 completed by or --

15 A. It's requested in the letter and again if they need an
16 extension, they can extension and it's up to our management, yay
17 or nay.

18 Q. Okay.

19 A. All of those requests are reviewed by management, too.

20 Q. Okay. That's all I have.

21 A. Yep.

22 Q. Thank you.

23 DR. WOODS: John.

24 BY MR. PETRUZZELLI:

25 Q. In your auditing duties or surveillances or during ticketing,

1 have you -- or reports to the hotline, have you had any experience
2 or knowledge of Boeing managers telling a worker bee to just get
3 it done, not necessarily follow a process? Taking a shortcut is
4 what I'm asking.

5 A. I have not personally witnessed that.

6 Q. Have you heard anything at that level in there? Like your
7 hotline, for example. And it could be an answer in general.
8 That's fine.

9 A. So, yeah, we hear reports but to validate something like that
10 is very hard unless you witness it, something like that. So I
11 can't say for sure.

12 Q. Last question I'll ask. This is definitely opinion based
13 thing. Is there any bright spots -- in these 3 1/2 years you've
14 been here, are there any bright spots at the company, Boeing
15 Company?

16 A. That's just -- I would just hold that one.

17 Q. Huh?

18 A. It's been steady. There's good work going on. I'll just
19 leave it at that. I've seen good stuff. There's good stuff going
20 on out there.

21 Q. Okay. Thank you, John.

22 A. Um-hum.

23 DR. WOODS: Dan?

24 BY MR. MARCOTTE:

25 Q. Just real quick. How do you feel the relationship is between

1 the people in your office and Boeing? The people you deal with in
2 Boeing or general Boeing.

3 A. I could say coming from the Defense, jumping in in 2020,
4 there's been a lot of transparency. I can say a lot of open,
5 honest transparency, which is beneficial to the FAA and the Boeing
6 Company to do things right.

7 Q. Okay. Good. So you don't have a feeling like, you know, you
8 don't feel they hold back or say find us something, you think
9 you're pretty -- you have a pretty good feeling or certain level
10 of confidence that they'll report it to you?

11 A. Yes. Definitely a lot of open, honest transparency, and
12 that's from the folks we deal with from the floor that I've dealt
13 with. So I can say yes.

14 Q. Okay. Good. And like the phrase you use, the FAA, willing
15 and able, pretty much describes us?

16 A. Yes.

17 Q. Okay. Thank you.

18 DR. WOODS: That's it for you.

19 MR. MARCOTTE: That's it.

20 DR. WOODS: Okay. I don't think I actually have any
21 additional questions.

22 So before we conclude, I want to make sure if there are any
23 other follow ups?

24 (No response.)

25 DR. WOODS: Okay. I see a lot of shake head nos. All right.

1 BY DR. WOODS:

2 Q. The only additional, I conclude with a similar with everybody
3 that we interview is that if there was one thing that you could
4 change, and it can be anything. It can be, you know, a certain
5 type of tool, a certain type of task or manpower, environmental,
6 if there was anything that you could change that would make your
7 job and what you have to do as oversight of the company better,
8 what would that be?

9 A. For us, more manpower, but the Administrator has already
10 authorized hiring for us. So we're going to be plussing up, which
11 is good.

12 Q. Um-hum.

13 A. That's our main thing.

14 Q. It would be more boots on the ground?

15 A. Yep.

16 Q. What do you feel that would help alleviate for you?

17 A. I mean, you know, I don't think it will alleviate. We're
18 going to still maintain our oversight, whatnot. It's just I feel
19 extra people, extra eyes, better oversight. So.

20 Q. Okay. And then you've had a little bit of time to, you know,
21 acknowledge that we're coming, we wanted to talk to you, we wanted
22 to get your expertise. Is there anything that we did not ask you
23 that you thought for sure that we would ask or that you feel we
24 need to know that would help shed onto this situation?

25 A. No, you guys were very detailed in your questions and

1 whatnot. So.

2 Q. Okay.

3 A. Yep.

4 DR. WOODS: All right. With that, again same nos.

5 (No response.)

6 DR. WOODS: All right, sir. We appreciate your time, taking
7 time out of your schedule, to come talk with us. We're going to
8 conclude this interview at 11:52 Pacific Time.

9 (Whereupon, at 11:52 a.m. Pacific Time, the interview was
10 concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9
MAX IN-FLIGHT STRUCTURE
FAILURE NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of John D. Baker

ACCIDENT NO.: DCA24MA063

PLACE: Des Moines, Washington

DATE: April 11, 2024

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.

Kathryn A. Mirfin
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *
Investigation of: *
*
ALASKA AIRLINES BOEING 737-9 *
MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063
FAILURE NEAR PORTLAND, OREGON *
ON JANUARY 5, 2024 *
*

* * * * *

Interview of: JESSE CANTU, Senior Aviation Safety Inspector Federal
Aviation Administration

FAA Facility
Des Moines, Washington

Wednesday,
May 8, 2024

APPEARANCES:

SABRINA WOODS, Ph.D., Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer Investigator
National Transportation Safety Board

NILS JOHNSON, Maintenance Investigator
National Transportation Safety Board

MATT RIGSBY, Accident Investigator
Federal Aviation Administration

TROY LEVANEN, Director of Maintenance
Alaska Airlines

DAN MARCOTTE, Air Safety Investigator
Boeing

JOHN PETRUZZELLI
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MIKE RINEY, Onsite Representative
Spirit AeroSystems

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I N T E R V I E W

(10:49 a.m., PT)

1
2
3 DR. WOODS: Good morning. It is May 8th, 2024, and the time
4 is 10:49, Pacific Time. My name is Dr. Sabrina Woods and I am a
5 human performance investigator with the National Transportation
6 Safety Board. I am here with, to my right, this is Pocholo. We
7 are co-leading the manufacturing and human performance working
8 group for accident investigation number DCA24MA063 involving
9 Alaskan Airlines Flight 1282.

10 The NTSB is congressionally mandated with determining
11 probably cause in transportation accidents and significant
12 incidents and with promoting transportation safety. We cannot do
13 that by ourselves, however. So, with us as you see here at the
14 table are parties to the investigation that helped inform that
15 process.

16 So, at this time I'm going to have Pocholo and everybody else
17 introduce themselves so that you have an understanding of who
18 you're going to be talking to today. Pocholo?

19 MR. CRUZ: Good morning, Jesse. My name is Pocholo Cruz.
20 I'm an aerospace engineer with structures and maintenance
21 background.

22 MR. CANTU: Good morning.

23 MR. RIGSBY: Jesse, I'm Matt Rigsby with the FAA Office of
24 Accident Investigation. I'm the FAA investigator-coordinator for
25 this accident.

1 MR. CANTU: Good morning.

2 MR. RINEY: Good morning, Jesse. My name's Michael Riney.
3 I'm Spirit AeroSystems onsite representative here in Washington.

4 MR. CANTU: Good morning.

5 DR. WOODS: We're going to hop over to Dan.

6 MR. MARCOTTE: All right. Good morning. I'm Dan Marcotte.
7 I'm a Boeing Air Safety Investigator from Southern California.

8 MR. CANTU: Good morning.

9 MR. PETRUZZELLI: John Petruzzelli, I'm also Boeing, but I'm
10 here representing the International Association of Machinists.

11 MR. CANTU: Good morning.

12 MR. LEVANEN: Hi Jesse, I'm Troy Levanen with Alaska
13 Airlines. I'm the director of maintenance and engineering safety
14 and I've been with the airline about 34 years.

15 MR. CANTU: Good morning.

16 MR. JOHNSON: Good morning, Jesse, Nils Johnson, National
17 Transportation Safety Board and I'm an aviation accident
18 investigator with a specialty in maintenance.

19 MR. CANTU: Good morning.

20 DR. WOODS: So, that's it. That's everybody that's going to
21 be asking you questions today. We're here for you to share your
22 insight and experiences as a member of the regulatory and
23 oversight team for the Boeing Commercial Airplane Company.

24 To capture that insight, we will be using a digital recorder.
25 After the interview we will send recording out for transcription

1 and the party members here will have an opportunity to review it
2 to correct for any typographical errors. We do not change the
3 content. Once we receive the certified copy back from the
4 transcriber, it will go forward to be a matter of public record in
5 the docket for this investigation.

6 Each of these group members here, they're going to have a
7 chance to ask you questions. We will ask questions one at a time.
8 And then usually we go in two rounds, the first one being the
9 longer and then everybody will have a chance to ask follow-up
10 questions after the fact. Please answer the questions to the best
11 of your recollection.

12 If you don't understand a question, just say so. We'll try
13 to clarify. If you don't know the answer to a question, I don't
14 know is a perfectly acceptable answer. And if at any time you
15 realize that you misstated something or that you want to go back
16 and elaborate on something, please feel free to do so. While we
17 will be respectful and go one at a time, you can, you can bounce
18 around people as you see fit.

19 MR. CANTU: Okay.

20 DR. WOODS: With this you are always entitled to have one
21 representative of your choosing. I see here that you have counsel
22 that's sitting with you. I just want to ensure that the counsel
23 that you have with you is somebody that you accept to be your
24 representative in this case?

25 MR. CANTU: That's correct.

1 DR. WOODS: Okay. With that, Counsel, thank you for being
2 here. Please recognize that this is an interview and not a
3 deposition so please refrain from interrupting the process or
4 attempting to answer on behalf of your client. With that,
5 Rebecca, if you'll please state your full name and spell your
6 last?

7 MS. LIPE: Rebecca Lipe, L-I-P-E, FAA Office Chief Counsel.

8 DR. WOODS: Thank you. At any time if you feel, Jesse, you
9 feel you need to take a break for whatever reason to include
10 talking with counsel, please do not hesitate. Just let us know.
11 We'll go off record. We'll make sure that happens and then
12 whenever you're ready to go we'll come back on record. So, with
13 all of that does anybody have any questions at this time?

14 MR. CANTU: I do not.

15 DR. WOODS: Okay. That's great. I'm going to start us off
16 with the hardest question that there will be hopefully, which is
17 please state your full name, spelling your last?

18 MR. CANTU: Okay. The full name is Jesse Frausto Cantu, Jr.,
19 last name is C-A-N-T-U.

20 DR. WOODS: Okay. So, Jesse, with that we're actually going
21 to start to my right here with Pocholo and then we're going to
22 work our way around the room that way.

23 INTERVIEW OF JESSE CANTU

24 BY MR. CRUZ:

25 Q. Jesse, thank you for sitting down and talking with us. We

1 know you're pretty busy. So, what is your current position with
2 the FAA?

3 A. I'm a senior aviation safety inspector.

4 Q. Okay. And how long have you been a senior?

5 A. I've been a senior since August of '23.

6 Q. Okay. And then prior to that?

7 A. Prior to that I was an aviation safety inspector with the
8 FAA. Joined the FAA in May 2021, so this is three years.

9 Q. Okay. Yeah. I was going to ask, so what is now your -- can
10 you give us your professional background before coming to the FAA?

11 A. Sure. So, aviation experience started off working on
12 helicopters with the U.S. Army between 1997 and 2003. I joined
13 the Air Force Reserves as an electrical environmental technician
14 on C-5s. Did that for as a Reservist and then as an Air Reserve
15 technician in 2007. And if I said 2005, I apologize, 2004 is when
16 I joined.

17 So, I was a propulsion technician around 2012 timeframe,
18 moved into a supervisory position so I wouldn't say necessarily
19 was performing aerospace propulsion work. Came to DCMA at
20 December of 2016, where I started as a quality assurance
21 representative working -- performing oversight of the Boeing
22 Company on the DOD side, on P-8 aircraft.

23 From that time to when I joined the FAA, I was with DCMA.
24 Became a lead in DCMA around 2019, if I'm not mistaken. So, that
25 a few years as a quality representative and then moved to a lead

1 quality assurance representative soon after that. Again, P-8
2 work, oversight, KC46, some oversight on KC46 and my last position
3 was supplier quality for VC25B.

4 Q. Okay. And currently who is your supervisor?

5 A. My first line supervisor is Mike Hager (ph.).

6 Q. Okay.

7 A. Or Michael Hager.

8 Q. Okay. As a senior ASI what are your duties and
9 responsibilities?

10 A. So, basic to ensure the oversight entity, in this case the
11 PAH, the Boeing company is compliant to the regulations, to their
12 quality manual, and their procedures that basically stem out from
13 that quality manual. Be sure -- my job is to ensure the safety of
14 those aircraft and address any safety concerns that are addressed
15 during our oversight activities to the appropriate whether it's
16 engineering or other entities.

17 In addition to that of course there's, you know, ensuring
18 audits are performed when they should be in the yearly basis,
19 tracking personnel cases and ensuring they don't go past their
20 time requirements per the orders and other administrative details
21 such as handling all these cases and working through the CEA or
22 compliance and enforcement actions that's required by the orders.

23 Q. Are there regular ASIs that report to you?

24 A. So, I have -- and you've probably met all of them. So, John
25 Baker, Jonathan Arnold, Trent Lyles are the ASIs that report

1 directly to me.

2 Q. Okay.

3 A. There's other ASIs that I provide information to and some
4 guidance and you maybe met him as well, Nelson Visaya, who handles
5 mainly the SDC, to Seattle Delivery Center.

6 Q. Do the people, the ASIs in Spirit, do they report to you?

7 A. They do not.

8 Q. Okay. As a senior ASI how is your work program developed for
9 you? And how do you develop that for the people that report to
10 you?

11 A. Right. So, the PAH using the tools that the FAA provides,
12 the risk-based, resource targeting tool. That's pretty much where
13 it starts as far as what kind of oversight is going to be
14 performed at a particular PAH.

15 So, in this case the PAH, the Boeing Company is the highest
16 level -- or level 1 the highest rating you can get for -- that the
17 order allows. So, basically there is 18-plus audits that must be
18 performed within a fiscal year that we schedule. That schedule
19 can include Renton. That schedule can include Moses Lake
20 activities. Other activities around the area such as the
21 propulsion division which we do I think one or two audits a year
22 there so it encompasses basically the quality system as a whole.

23 And then within that basically it's broken down and currently
24 how we have Renton broken down is by in sections. So, will have
25 an audit for the East line, an audit for the West line, an audit

1 for the Center line. Although the similar work is done, we're
2 still auditing in parallel, if you will, on different times
3 throughout the year.

4 Since I just joined in August the plan was already set up for
5 this fiscal year for me. Right. Going -- and also '25 is already
6 kind of scheduled. I just need to make tweaks to it for next
7 year.

8 But we take into consideration kind of the escapes that have
9 been occurring throughout the year as to what we're going to look
10 at when we're auditing. So, as issue arise throughout the year
11 that we're identifying or we have compliance action, voluntary
12 disclosures that Boeing provides, that type of information, that
13 kind of focuses or narrows our scope if you will to what it is
14 that we should probably be looking at throughout the year and
15 that's kind of how we address it.

16 So, if we have issues in the Renton facility previously, we
17 should be taken that information and then focusing it on, you
18 know, the current year what's coming up and also taking what we
19 find at the delivery center because we are ticketing now. Right?
20 And we flow that back into the factory to kind of hit those point
21 where we're seeing non-compliances occur at ticketing so how do we
22 get that back to the factory where it could have potentially
23 becoming, if you will.

24 So, that's how kind of we set up our oversight activity, or I
25 set up my oversight activity and how I plan to address, you know,

1 identifying and capturing.

2 Q. 8120.23A is what you guys by, right?

3 A. That's correct.

4 Q. And there's, there's 162 elements let's say for the work
5 program. Is that correct?

6 A. 162?

7 Q. Yeah?

8 A. I'm not aware --

9 Q. Appendix D.

10 A. Appendix D, list of code which identify the specific
11 noncompliance within the 15 parts of Part 21-137, so that is just
12 a break -- so there are -- technically there are 162 ways to
13 identify a noncompliance but that's not necessarily what we're
14 looking at. We're actually looking at the 15 elements and how the
15 PAH is meeting the 15 elements within their approved quality
16 system.

17 Q. Are those the headers in that Appendix D, or no?

18 A. Yes. So, those, besides for the last one which is --

19 Q. It's other.

20 A. -- O, it's other.

21 Q. Yeah.

22 A. That is not part of the regulation. That's part of the
23 order.

24 Q. I've got you. Okay. And so, all that risk-based analysis is
25 what drives basically the work program for the next year?

1 A. Well it drives how many audits we conduct. The other data
2 would come from what's already occurred or items we've seen during
3 previous audits, items that say noncompliance what we've seen here
4 in previous audits that drive the areas we should be focusing on.

5 Q. Okay. So, you're saying -- is there -- you said there's a
6 memo of 18 that you do per year. Is that per ASI?

7 A. No. It's per the quality system. It's per the facility and
8 quality system. So, Renton and -- we'll speak to Renton which I
9 oversee. So, Renton encompasses the SDC, the PSD, which is the
10 propulsion section, it encompasses storage facilities, like Moses
11 Lake and Victorville. But I don't think Victorville is still
12 doing work but all those areas it encompasses --

13 Q. Right.

14 A. -- for the 737-program specifically.

15 Q. Okay.

16 A. So, if -- yeah, so Everett has its own amount, Renton has its
17 own. So, it's broken up that way.

18 Q. So, I know that you -- since the accident you guys have done
19 an enhanced investigation and have basically outlined more issues.
20 Can you give somewhat of a number to how many more you guys have
21 found?

22 A. This number would not be exact.

23 Q. Yeah, yeah.

24 A. But --

25 Q. In general.

1 A. So, individual -- so we -- when we're documenting
2 noncompliance we can put them -- we have four. We can add them to
3 one as under this scope or umbrella for that to say tool control.
4 Sure, we have this many issues and we'll just call that one. So,
5 using that scenario I want to say we're probably around the 30
6 range.

7 Q. Okay, 30.

8 A. Yeah. But if you break them out individually --

9 Q. There's more.

10 A. -- it would be a lot more.

11 Q. Yeah, yeah. So, with those 30 additional that you have and
12 this obviously depending on that risk you throw at each one of
13 those 30, right, will that make it into more surveillance or
14 audits for next year work program?

15 A. It potentially could. So, the 18 is the requirement, at a
16 minimum. Anything about that is, you know, if it's, if it's
17 necessary I would say, yes.

18 Q. Okay. Do you think you have enough personnel, ASIs, to do
19 the actual work to oversee Boeing production certificate, the 737
20 line specifically here in Renton?

21 A. Well more is always better. But right now, I think the team
22 is doing a good job of sustaining both air worthiness
23 certification, AWC, because we're doing that as well with the same
24 amount of folks and auditing. We've now scoped out audits to
25 cover an entire month and so we have a month that basically will

1 consist of one audit, wherein the past there were between three to
2 five days.

3 Q. Okay

4 A. So, yes, I think we have enough, but we could always use
5 more.

6 Q. Sure, sure. Okay. Can you describe the Boeing production
7 organization? What's it like?

8 A. So, the production organization as it has been put out in
9 many documents is a very complex organization. It has multiple
10 layers of quality requirements, quality management system
11 requirements, QMS requirements.

12 So, it's somebody coming into as an oversight entity
13 would -- it would take some time to learn the scope and
14 complexity. Right. As an example, manufacturing process controls
15 what, you know, BPIs and procedures, what quality manual
16 references cover that. Boeing does provide a quality systems
17 matrix which basically states, these pros are relevant to, let's
18 say 21-137BEC, right, whichever element you choose and kind of
19 helps outline that to navigate that quality system.

20 Q. Okay. Who is your typical point of contact with you're doing
21 audits when at Boeing?

22 A. At Boeing, I will send the RQSO, regulatory quality system
23 oversight, I think is the right name for that acronym. So, I
24 would go through them and do the DQMR quality -- deputy quality
25 management representative. Kari Geiser (ph.) who is I normally

1 contact that I'm coming to the factory. So, but the RQSO, if
2 going to be anywhere else they would, they would be notified.

3 Q. Okay. And do you typically give them notice that you're
4 coming and how long, how far along or --

5 A. So, the orders state -- the order doesn't give a timeline. I
6 normally give 30 days, a 30-day notice.

7 Q. And when you're doing an audit is there multiple audits that
8 you're doing in those 30 days or multiple items in that audit or
9 is it just one audit?

10 A. That is one audit.

11 Q. That's just one.

12 A. So, one of the, one of the 18. And so, the 18 again
13 encompasses the Renton facility and Moses Lake.

14 Q. Yeah.

15 A. So, it's a few areas. So, depending on who or where we're
16 going depends on who we normally contact. But the RQSO is the
17 focal point to receive that notification so that they can identify
18 who's going to be covering it for the Boeing company.

19 Q. Okay. How would you describe the personnel in that
20 organization? Are they experienced? Are they qualified do do
21 their job?

22 A. RQSO and the DQMRs?

23 Q. Yeah.

24 A. Yes. Yeah, they're very knowledgeable concerning these
25 processes, their processes. I would say yes.

1 Q. Okay. So, run me through when you're going to do audit, just
2 a typical audit with Boeing. Let's say you're going to go like a
3 month from now, right? So, you're making a call like you said to
4 let them know you're coming and then when you get there and they
5 say, okay, come on this day, run me through your typical day?

6 A. So, an in-brief is not necessarily required. I normally like
7 to give an in-brief and the expectations of, you know, what's
8 going to occur. I would normally -- this is where the team lead
9 part comes in.

10 So, if it's a one-person audit per se then obviously that
11 same person is the team lead. But if it's multiple people then
12 there's a team lead who can -- it doesn't have to be me. It can
13 be another ASI and that team member. So, we'll go over basically
14 who's going to be in the audit.

15 You know, we could technically say what we're going to be
16 looking at but we don't necessarily state that. We'll have the
17 in-brief and then we'll -- whatever section we're going to be
18 auditing -- now I'm talking prior to January. After January
19 things completely changed.

20 Q. Okay.

21 A. If it's the wing build up area we'll go out, we'll pick an
22 area, or pick an installation plan we want to look at or a process
23 and then we'll go out and audit that installation plan and
24 process. So, if we go out and do that so we'll just have
25 the -- let's say we're doing an installation plan we'll have

1 whoever's involved kind of walk us through what that is, you know.

2 I like to say, you know, tell me, tell me what you use, what
3 kind of tooling, how you do it, any special, you know, equipment
4 that's needed and then they'll walk me through it.

5 We'll make a determination or an assessment as we go and
6 there -- we don't necessarily have to start in the very first
7 operation. And we don't have to stop at the end. We can pick an
8 area in between if they've already begun or, you know, we have the
9 leniency to move that around.

10 So, we'll make our assessment. At the end we'll -- the RQSO
11 by that time probably already knows because there's one of them
12 with us and normally a DQMR with us if we're talking the Renton
13 facility. And then we'll discuss any potential findings that we
14 have and we'll document those using our tools.

15 Q. Okay. So, at the end of the day you document it, you tell
16 them this is basically -- it's basically -- do you do an out-brief
17 with them before you --

18 A. So, the out-brief -- so, yeah. They will know by the time we
19 leave that day by COB, close of business, they will know what the
20 potential issue is. If there's still some open discussions, if
21 you will, you know, we need, we need the paperwork, we need
22 justification why this is allowed then that may not happen. But
23 they'll know they is a, they is a potential issue. So, we need X,
24 Y, and Z provided to us to show that it's compliant because with
25 our determination is it's not compliant.

1 Q. How does that get into input into the FAA system?

2 A. So, using the compliance enforcement tool, that normally
3 occurs at the end. So, right now we have an alleged
4 compliance -- noncompliance, we have an alleged noncompliance
5 which will need to eventually get, you know, debated if you will
6 between the PAH and the FAA.

7 If they disagree with our finding, that can be worked out.
8 Is it a finding? Is it not? -- they have to provide the
9 justification to what we believe is a noncompliance. Once that's
10 done and at the out-brief, all those non-compliances are then
11 finalized.

12 So, Boeing has -- they've know about it since we started.
13 They have the opportunity to rebuttal our findings, alleged
14 noncompliance. If they do not then we proceed to enter them as
15 noncompliances within the compliance and enforcement tool and then
16 issue the appropriate informal, formal or letter of investigation,
17 EIR or higher.

18 Q. Okay.

19 A. And that process would follow the same suit when it comes to
20 a Boeing manufacturing process. If we're looking at a process
21 then we would follow that same tree. We would debate whether it's
22 in compliance or noncompliance if we find something. And then
23 when at the end it will be entered into the CEA tool.

24 Q. Okay. So, you've been working as an ASI for Boeing for
25 awhile.

1 A. At the FAA.

2 Q. Yeah. And on behalf of the FAA obviously. How would you
3 characterize the quality system at Boeing?

4 A. Well like I mentioned the quality system is complex. There
5 are many layers to it, which I think is -- or not think -- which I
6 would give an assessment of there are systemic problems we have
7 documented within it. So, that information is in the tool where
8 we've listed multiple findings as systemic since I started which
9 initially that I should probably clarify this.

10 So, I didn't start working in the factory until January of
11 '23. I was doing supplier quality for the FAA from May of 2021
12 until December of 2022. I was in the SQ group, supplier quality
13 group. So, but I am familiar with the Boeing system because of my
14 DCMA time in DoD.

15 Q. Okay. So, go ahead --

16 A. Yeah, can you repeat that. I've lost my train of thought.

17 Q. Yeah. So, I mean you mentioned that you see systemic issues
18 with regards to their quality.

19 A. Yes.

20 Q. Can you elaborate what those systemic issues are and maybe
21 give some examples if you can?

22 A. Sure. So, the first one that comes to mind, in which we have
23 an open case for FOD and tool control. Systemic tool control
24 issues across multiple sites, FOD the same. We had a QSA, quality
25 systems audit in June of '23, right before I became senior, which

1 I was a part of, which further could speak to that as far as
2 systemic and we documented I think multiple -- this is not a
3 single screw or nut or a -- screw, nut, or washer in a particular
4 area. This is multiple pieces everywhere within the FOD critical
5 and FOD awareness areas.

6 So, that's one of the systemic issues they have. Tool
7 control again there's repeated findings I think almost every audit
8 that identify failure to account for, failure to report a tooling.
9 So, there's that aspect where more recently we're identifying
10 issues with the documentation the technicians are utilizing, such
11 as the installation plans which I was referred to earlier.

12 Potentially incorrect references listed, failure to follow
13 the installation plan as it's written, so there's systemic issues
14 with that as an example, too.

15 Q. Okay. In your current position have you had to write an LOI
16 for any Boeing processes or issues that they've had?

17 A. Have I had to write an LOI?

18 Q. Yeah. Yeah.

19 A. I was -- I would say that the LOI that was issued for the
20 door plug, I provided a supplement which was basically the 98 or
21 so audit findings for the SAI and the two PI audits and the SAI
22 that was issued just this January and February. So, in addition
23 to that I've already started a process for a current case for two
24 previous audits. The two previous audits after -- or the two post
25 audits after the SAI.

1 Q. You mentioned you wrote an LOI for a door plug?

2 A. No, no, not the door plug. For the findings for the PI
3 audits and the special audit item, the SAI after.

4 Q. Okay. After the door plug issue. Got it. Okay.

5 A. Yeah. The LOI was issued because of the door plug and I
6 provided a supplement to it which included the audit findings for
7 those audits.

8 Q. Okay. So, what's your assessment of traveled work coming in
9 at Boeing or as the airplane go through the production line?

10 A. So, traveled work I think has been part of that production
11 process for some time, at least that's my assessment of that. I
12 have no opinion one way or the other whether it's -- or
13 assessment, whether it's acceptable or not.

14 If the PAH can perform that type of work without escapes,
15 then there's obviously no concern. But if they cannot then they
16 shouldn't be performing it.

17 Q. Okay. How would you describe the culture within the quality
18 system at Boeing? Like are employees able to speak their minds
19 without any repercussions? Are they able to flag an issue and
20 management actually listen to them? What's your assessment of the
21 culture there?

22 A. So, I haven't had to deal with some repercussions or be
23 involved in any type of activity or whistleblower concerning that.
24 So, I couldn't say one way or the other. I only hear what is on
25 the news about that type of, you know, activity. So, I couldn't

1 speak directly to it from any personal experience.

2 Q. Okay. As an ASI does Boeing -- or does the FAA consider a
3 SAT a production record?

4 A. Boeing does not consider an SAT a production record. It's a
5 communication tool that although it to me it does provide some
6 additional details to the production system, it is not part of a
7 build record. It's not necessarily attached from my knowledge to
8 any build record, which are the QMS records.

9 Q. Right. Has there ever been a case where the FAA used a SAT
10 record as an example in an LOI to prove the FAA's point?

11 A. Not to my knowledge.

12 Q. Okay.

13 A. Minus the -- well the door plug is a separate issue. Unless
14 you're talking prior to that. If you're talking any, at any time,
15 I guess we can speak on anything here. Right? So, we're
16 currently writing the statement of the case for Boeing and the SAT
17 is part of that to show evidence that something occurred.

18 Q. Okay. And to your knowledge what's Boeing's record retention
19 policy for its production certificate?

20 A. The policy is calendar year plus 10 for quality records.

21 Q. So, in the surveillance of -- I know you've only been here
22 since 2023, right. In the surveillance of the Boeing certificate
23 in the past, has the FAA noted issues where removal of records
24 should have been documented?

25 A. Can you say that again?

1 Q. In the surveillance of the Boeing certificate, production
2 certificate in the past, as the FAA noted any issues where a
3 removal of records should have been documented, basically BPI
4 1581 --

5 A. Yes.

6 Q. -- which I'm sure you're familiar with.

7 A. Yes.

8 Q. The assemble and removal, right, of parts.

9 A. Yeah. So, we have documented in the past non-compliances
10 using that BPI as a requirement for the noncompliance. Just to
11 talk about the noncompliance, so normally we will list the quality
12 manual as the first requirement of the noncompliance and then the
13 pros, the procedures, BPIs, key documents, whatever states you
14 should have done something that would be in the requirement
15 section and then of course you have your alleged noncompliance
16 below. So, yes, we had to use that BPI as a requirement for
17 previous non-compliances. And in addition to that we are
18 currently -- we currently have non-compliances to that requirement
19 as of yesterday.

20 Q. As of yesterday?

21 A. Yes.

22 Q. So, based off of your recent audits --

23 A. Based off recent audits we have an alleged noncompliance, not
24 following that BPI as of was yesterday.

25 Q. So, I don't know if you know the history so for the record,

1 I'm showing Boeing data with regards to BPI 1581. This is the
2 history of what Boeing has with regards to that particular BPI.

3 A. Okay.

4 Q. So, it shows back from 2013 there have been revisions to the
5 BPI based off of some regulatory issues and obviously some
6 enhancements to make sure it works better. So, if you flip the
7 page, it basically shows some audits, internal audits based off of
8 that BPI from 2018 to 2023 with a list of all the LOIs that either
9 closed or opened since then.

10 A. So, if I may?

11 Q. Go ahead, sure.

12 A. I don't see an LOI listed here. Just --

13 Q. They're all CMPs, I'm sorry.

14 A. Okay.

15 Q. CMPs --

16 A. Formal compliance action.

17 Q. Yeah.

18 A. Okay.

19 Q. And VDRs, right?

20 A. Yes, sir.

21 Q. And it's across not just the 737 line but obviously through
22 the whole production airplanes, I guess. Is there -- in your
23 opinion, and obviously you've only been there since 2023. And
24 you've had time to actually look at the quality system and talk t
25 to the quality people there and interface with them as far as the

1 issues with nonconformance issues. In your opinion what is the
2 reason why Boeing cannot fix this issue as far as removal? You
3 said, yourself you just found an alleged --

4 A. Right.

5 Q. -- compliance issue yesterday?

6 A. Right. So, identification of a noncompliance and identifying
7 the actual root cause that is going to correct that are two
8 different, two different things.

9 Q. Okay.

10 A. I don't know how I can speak to why, the why. But
11 nevertheless, the PAH is required once they have a noncompliance
12 to identify it, identify the root cause and then correct the
13 noncompliance. Right? To bring it back to compliance and
14 hopefully we don't see it for a while. Unfortunately as the
15 documentation shows we're seeing that that process is continuously
16 going and it's not stopping.

17 So, but as to what's going to fix it, that's for the Boeing
18 Company to come up with a plan, I would like to say once and for
19 all, right, to address this issue. But that is, that is
20 definitely something that would take X amount. I don't know the
21 timeframe that you could put on that. But that's the only thing I
22 can speak to.

23 Once we find something, they provide a corrective action
24 plan, we accept it, they implement it, and it should fix the
25 problem. If it doesn't, this is where we identify it again and

1 then we go through that process over and over again.

2 Q. I appreciate what you're saying and I also obviously know
3 that you've only started in 2023 but if you look at that
4 particular, the FAA basically has said you've got an issue from
5 way back when.

6 A. Yeah.

7 Q. Like in 2013. You know, I know it's, it's only an opinion
8 from your standpoint, why hasn't the FAA's been able to put a
9 finger on it as well?

10 A. I don't -- I would say that we're not -- it is not within our
11 direction to state how you're going to fix it. Boeing company
12 provides us the plan, we have a BPSM review board that looks at it
13 and then it's agreed upon whether the plan is going to be
14 effective or not and there are difference of opinions within those
15 discussions as you'd call it or with any discussion, right.

16 There's multiple embedded, multiple inputs. The plan is
17 either accepted or rejected. If that plan for whatever corrective
18 action it rejected, we issue a letter of rejection and explain why
19 we're rejecting a plan and then Boeing must go back and get it
20 corrected. So, why we have so many CMP actions, I can't speak to
21 at the different facilities.

22 Q. Yeah.

23 A. I can only speak to what is occurring in Renton and how, you
24 know, we're basically following a model that's provided to us
25 through the order of how we get it. We find a noncompliance, we

1 issue the compliance and enforcement action, Boeing provides us
2 the plan on how they're going to fix it and then we either accept
3 or reject it.

4 If we accept it then it goes forward until it's verified.
5 One of the team members goes out, verifies if they fixed what they
6 said they were going to fix and then we close the case. If it
7 comes up again then we should have a failed corrective action,
8 which should drive either the rejection of the plan again or not.

9 It just, you know, it -- I don't know what Charleston is
10 doing. I don't know what Everett's doing. I only know what
11 Renton is doing. So, I have to -- I'm approaching it from that
12 standpoint.

13 Q. Okay.

14 A. Yes. But as a whole, as the Boeing Company a whole, yes, I
15 can see where that -- yeah.

16 Q. Yeah. Okay.

17 A. Any acronyms that I need to repeat? I'm trying -- I'm sure I
18 might have thrown one out there.

19 DR. WOODS: You're good.

20 MR. CRUZ: You're good.

21 MR. CANTU: Okay. I just wanted to clarify.

22 BY MR. RIGSBY:

23 Q. PAH?

24 A. I'm sorry. Yeah. Production Approval Holder.

25 Q. Yeah. For the record. Have you ever -- doing your audits,

1 have you ever worked with a door crew?

2 A. I have, I have not worked with a door crew until after the
3 door plug.

4 Q. Okay. Not until after the door plug.

5 A. Until after the door plug. So, the first, the first audit
6 that was conducted after that accident I was the team lead on and
7 I was the one that basically performed the oversight of that
8 activity.

9 Q. And I guess what element would that BPI 1581 fall into in the
10 audit, in your audit?

11 A. Without looking at -- again the matrix kind of shows where
12 Boeing states it falls under, but I would -- my assessment of that
13 would be that it falls under manufacturing process control.

14 Q. Okay.

15 A. Yeah. But I could be incorrect but I'd have to look at what
16 Boeing states it falls under.

17 Q. Right. So, with the door plug, do you know who -- which team
18 in Boeing would typically work on door plug if it needed opening
19 or removing?

20 A. I do not know who would. Yeah, I don't know if there
21 was -- if there's another team that does that because the door
22 group.

23 Q. The crew? Besides the door group?

24 A. Yeah.

25 Q. Okay. You said you did an audit with door team while you

1 were there after the accident?

2 A. After the accident, that's correct.

3 Q. Okay. Could you be, would you be able to provide us with
4 findings you got with regards to that door team?

5 A. So, if you're -- yeah. They were -- they're on the, they're
6 part of the 98 non-compliances to the LOI. I'm not sure if that's
7 already been provided.

8 Q. No.

9 A. Yeah, yeah, because it's still under --

10 Q. Yeah. It's under investigation so they probably wouldn't,
11 the FAA would not give that to us.

12 A. Yeah. It definitely wouldn't come directly from me.

13 Q. Yeah.

14 A. So, but yeah. They are annotated within that LOI as the
15 supplement that I was referring to earlier --

16 Q. Yep.

17 A. -- of the issues that were, the non-compliances that were
18 identified during my assessment of the door crew and how they were
19 performing that work.

20 MR. CRUZ: Okay. Obviously, that's something that can't be
21 provided as far as what the findings are or is that available?

22 MS. LIPE: Because it's open that wouldn't be something that
23 would be available.

24 MR. CRUZ: Okay. Fair enough.

25 BY MR. CRUZ:

1 Q. So, are you familiar with the supplier assist process within
2 the Boeing facility?

3 A. I am not that familiar with it.

4 Q. Okay. Do you know if -- I guess since you're not familiar
5 with it it's kind of hard to get the question in as far
6 as -- would you know if the supplier assist is needed whether the
7 supplier, as far as opening and closing access panels or
8 assemblies that have already been I guess bought off, would a
9 supplier be able to open the door themselves or do they let
10 Boeing, do they let Boeing know they need access to it?

11 A. I could not say for sure what the, what the process is.

12 Q. Okay.

13 A. I am aware that suppliers have the ability to document their
14 work within the Boeing system to accept work and even the quality
15 part of that to accept the work of their personnel. But if that
16 work were even to occur, they wouldn't necessarily need to notify
17 the FAA of that activity if we were to -- right.

18 We would basically -- if the only way we would even know is
19 if we were out there performing oversight activities on a
20 particular product article and they just happen to be part of that
21 installation plan for the process we're looking at then that's how
22 we would identify the type of work.

23 Q. Okay. Do you know what Boeing's process and procedures for
24 out of sequence work?

25 A. My understanding of that process is unless the installation

1 plan states that it must be conducted in sequence that out of
2 sequence is authorized.

3 Q. Okay. Have you, yourself worked on a main entry door plug by
4 any chance?

5 A. I have not.

6 MR. CRUZ: Okay. That's it for now. Thank you.

7 MR. CANTU: Thank you.

8 DR. WOODS: Matt?

9 MR. RIGSBY: Okay. Just a few Jesse.

10 MR. CANTU: Sorry, my stomach is loud.

11 BY MR. RIGSBY:

12 Q. Do you have a Boeing badge?

13 A. I do.

14 Q. And I know you said you have to notify them, Boeing, that you
15 are coming to perform an audit. Can you --

16 A. Well I don't have to notify them.

17 Q. Okay.

18 A. We can show up at any time depending on the situation. If we
19 have, if we have a whistleblower hotline that we need to pop in
20 on, we can just show up and basically perform or ask the questions
21 right then and there.

22 Q. That was where I was going. Okay. Have you had
23 whistleblower complaints or hotline complaints?

24 A. I have worked, yes, whistleblower hotline complaints.

25 Q. Not an exact number but approximately how many in before the

1 event and how many since the door plug event?

2 A. I believe it was -- I've worked three prior. I have worked
3 zero since. I have not worked any since. I know the team has
4 been provided those from the manager but I have not be assigned
5 one since then.

6 Q. After Boeing submits the plan for some of the systemic
7 issues, how long do they have to make that change and then the FAA
8 to go back and follow up on it? Is there something in that order
9 that defines that?

10 A. I do not recall a time frame of when the corrective action
11 plan has to be presented after the noncompliance or when the
12 corrective action verification, CAV, has to be completed after the
13 corrective action plan. Hopefully, I said that correctively.

14 It's noncompliance, corrective action plan, corrective action
15 verification by the Boeing's requirements and then we kind of
16 accept the corrective action plan and then verify their
17 verification if you will for an additional step. So, no time
18 frame that I can recall.

19 Q. Okay. Going back to your DCMA days, are the --

20 A. Sorry. Let me, let me backtrack.

21 Q. Sure.

22 A. If a noncompliance cannot get resolved -- and this deals to
23 the severity of it. If a noncompliance -- if you find out that we
24 believe this noncompliance can be resolved quickly or if it's
25 corrected on the spot and we, the ASI does not believe additional

1 investigation by PAH is necessary and an informal corrective
2 action is issued.

3 They have 30 days, the guide 002.035, is a guide we use for
4 compliance and enforcement says, around 30 days, I think is the
5 language that's used. If it goes beyond that, if they can't get
6 it fixed within 30 days then a formal compliance action will be
7 issued. That's really the only -- for CEA that's really the only
8 time frame that I can think of.

9 Q. Okay. If you recall back in your DCMA days some of the
10 activities that you did and the audits that you did, are there
11 very similar to what you do in the FAA?

12 A. Yes.

13 Q. Okay. Is it kind of like ground hog day for you?

14 A. Well the FAA's approach is different than DCMA. DCMA,
15 defense contract management agency was -- they're contractually
16 required to do it based on the customer, in that case is the
17 Department of Defense and the military services.

18 So, there are certain requirements that are set forward and
19 there are federal acquisition regulations FARs as that govern
20 that. Similar -- the parallel to that is FAA, we have CFR and
21 whichever applicable CFR to the position you're currently in that
22 you utilized, you know.

23 So, there are similarities there, but I will see the access
24 to DCMA doc versus what the FAS gets to the production, to the PAH
25 is different. We do not -- from my experience, DCMA gets more

1 access to internal systems than the FAA does because I, you know,
2 how to say, they treat, PAH treats DCMA as a customer, therefore
3 the customer has different access than the regulator, which is the
4 position I'm in now. So, that would be the similarities and the
5 differences to the PAH's information.

6 Q. And I believe you said this, back when Boeing submits their
7 plan of action, once a noncompliance is identified does the FAA
8 approve that or accept it?

9 A. So, we accept their corrective action plan.

10 Q. Okay.

11 A. We have a discussion within the clearing house as its called
12 of is it acceptable or not. There's concurrences of a manager and
13 at least two seniors, and I -- that's internal, you know,
14 procedure if you will. It's not -- there's no order that says who
15 can approve what. But that's how we, that's how we basically give
16 concurrence to the CAP, corrective action plan.

17 Q. So, it's yourself and then --

18 A. It could --

19 Q. -- Mike or --

20 A. It could be myself, Mike, normally Brian Kilgroe, the
21 principal inspector is in that meeting. He's ultimately
22 responsible for the certificate management so yeah, he's normally
23 there and at least two seniors so it doesn't have to be me.

24 Q. How often do you report to the PI?

25 A. Daily.

1 Q. Daily, yeah.

2 A. Anytime there's any issue that comes up that he should
3 probably be aware of or the PI should be aware of I forward that
4 on. So, yeah, I would say daily.

5 Q. During your post-accident audits did you see any records that
6 indicate how or who opened the door plug and then closed the door
7 plug?

8 A. So, we -- on January 6th, the day after John Baker and myself
9 went to Boeing to kind of start gathering some information
10 concerning the aircraft in question. However, because of the NTSB
11 investigation we stopped short of going down that road completely.

12 So, we changed focus that Monday, which was the 8th, I think,
13 to look at how the door plug was installed or what was done at
14 Boeing concerning the door plug and that's when we identified that
15 the -- they basically performed a rig verification of the plug
16 itself and not necessarily any type of installation or final
17 assembly, if you will, but rather a verification of what was
18 already done at Spirit.

19 Q. And was that done as part of the receiving inspection do you
20 recall?

21 A. I never asked why Boeing does that. But normally when any
22 manufacturing process they interject and additional inspection,
23 it's because they probably had issues. That's what I -- that's
24 from my experience because if as far as I'm aware, Boeing -- or
25 not Boeing.

1 Spirit had inspection delegation to basically deliver the
2 fuselages without an inspection from the Boeing Company even
3 though Boeing does additional verifications of the tubes.

4 Q. We've heard that you guys are in line to get more help. How
5 does one become a manufacturing inspector? Well, what are the --

6 A. Submit --

7 Q. -- qualities that you're looking for?

8 A. -- your resume for USAJobs. Yeah. I mean it, you know,
9 it's -- that's really part of the hiring process. Do you have the
10 experience whether it's in quality, whether it's in auditing,
11 whether it's in any type of oversight, that's parallel to what we
12 do, what we do here. I think for those of us that came from the
13 certificate management office, which is the DCMA part, we had that
14 parallel.

15 We understood the system. Some of us before have been
16 involved in accepting or concurring with noncompliance records,
17 NCRs. So, we were embedded in that system. So, we kind of
18 had -- we understood what was going on per se. But I think that's
19 where it starts.

20 Do you have the experience auditing, oversight, any type of
21 oversight activity, you know, regulatory background, maintenance
22 background or a quality background. That's the start. And then
23 obviously once you're onboarded there's the training that the FAA
24 provides to get you ready for these oversight activities and some
25 of the stuff you're going to be running into during your

1 oversight.

2 Q. Okay. As a team lead do you get input into who you hire?

3 A. Yes. We're actually getting ready for hiring boards right
4 now and I'm part of that or I put my name in the hat if you will,
5 but yeah.

6 Q. I'm going to jump to supplier audit.

7 A. Okay.

8 Q. Do you, do your -- is that completely separate group?

9 A. It is a completely separate group. Yep. It's an AIR 583.

10 Q. Okay. Right. Fair enough. So, when it comes to Spirit, is
11 that who would be doing the audits at Spirit?

12 A. So, when the reorg occurred AIR 583 absorbed the team from
13 Spirit so it is now. In the past, and I don't recall exactly when
14 that transitioned for that adjustment or change was made but, in
15 the past, they were not part of the CMO at the time. They were
16 separate.

17 Q. Okay. As you perform your audits if you find items,
18 repetitive items say coming from a supplier, how do you
19 communicate those findings with the supplier group?

20 A. So, it's --

21 Q. Was there a process for that?

22 A. Yes. Was there an established process within the order? I
23 would -- I don't recall an established process within the order.
24 But as part of, you know, the oversight division I notified the
25 team lead and manager of the SQ group, supply quality group of

1 these issues and that notification actually appeared today for an
2 issue that we're working through. So, yeah, it's a constant.

3 And that kind of creates -- to me that kind of creates, I
4 don't want to call it, you know, a circle, but, you know, we have
5 findings, we see potential non-compliances at the SDC. We see it
6 at the factory. And we also seen it at suppliers that who were
7 kind of constantly communicating with each other on what we're
8 seeing.

9 So, they can address the supplier quality problems through
10 their SQ focal through Boeing and we can see how that affects the
11 build in the Renton factory on our side.

12 Q. Okay. 30,000-foot view of you position as the senior ASI
13 what's your primary responsibility?

14 A. Ultimately responsible to ensure inspection conformity of air
15 worthiness of the article or product in which we have oversight,
16 quality oversight of so yeah, safe compliant aircraft --

17 Q. Okay.

18 A. -- to sum it down quickly.

19 MR. RIGSBY: Yeah. Okay. I'm done.

20 DR. WOODS: Mike?

21 BY MR. RINEY:

22 Q. So, Jesse, you had mentioned the debated items. Is there a
23 requirement for the debates of those items, you know, a time frame
24 where they have to be settled by a certain time or is there, is
25 there a number of those debated items that are still open?

1 A. So, the debated items that are identified in an audit, is
2 that the debated items you're referring to? And not necessary the
3 debate about the BPSM or the corrective action plan? Just so,
4 just because there's two different debates, I think I mentioned.

5 Q. Yeah, the audit items.

6 A. The audit items. Okay. So, by the -- so if we have, if we
7 believe we have a noncompliance, we have the, we have the
8 requirement that we assess is that is a correct requirement. We
9 request information. If by the end of the audit Boeing hasn't
10 provided that information, then we would proceed to issue the
11 compliance action.

12 Now of course that is not like one day to the next. There's
13 still processes of inputting the information and getting the
14 letter created or signed off by managers. So, there is still time
15 for Boeing to provide that information. And even if after we
16 submit the CEA action, they can come back. If they do provide it,
17 we can also issue a letter of correction to the alleged
18 non-compliances to get it changed so.

19 I'd like to state by the end of the audit I know that that is
20 not a hard fast rule. There's nothing that states it has to be at
21 the end. It's either, it's noncompliant or it's compliant. So,
22 if we proceed down the path of noncompliance until the PAH, the
23 Boeing Company provides us anything that changes that then it's a
24 noncompliance.

25 Hopefully, that answered your question. There is not a time

1 frame. But we, you know, by the end of the audit is that's when
2 it ends. We have five days to close out the audit. So, we're on
3 a time frame for that piece. But to issue the letter, not
4 necessarily the same thing.

5 Q. How many findings do you think you guys identified within a
6 month time frame, or if you, if you can identify that?

7 A. So, there's not a number associated to a particular audit or
8 audits. I can speak to, you know, to these last couple months if
9 you will. So, since -- and let's stick with the year 2024, since
10 January and of course this is not an exact number.

11 I mentioned 30 or so for the previous two audits. We have
12 prior to that, which is part of the special audit item and the two
13 principal inspector audits, the PI audits that were done, we had
14 98 non-compliances for the Renton facility during that time frame.
15 So, that's what, what did I say, 128 over roughly four months.
16 And again, some of those individual findings may have multiple
17 pieces within. I heard a number about 280 for the SAI and two PI
18 audits, 280 findings we had total.

19 Q. And do you guys delineate those into the severity or --

20 A. As far as critical and noncritical, we do not. Well, I
21 should say, how that is done is with the ICA, which I mentioned
22 earlier, informal compliance action, and the formal compliance
23 action, and of course your LOIs which -- right.

24 So, that's kind of, that speaks to the severity of it. If
25 it's an informal compliance action this is a minor one-off, no

1 risk to the product or safety. Right? Let's say it's, I don't
2 know, somebody dropped a screw on the floor and it's in the FOD
3 critical area, one screw, okay. Did you clean it up? Yes. Okay.
4 We're still going to issue a finding for that. If the screw is on
5 the airplane that's a different thing. Right.

6 Q. How many BPSM do you -- have you had to require Boeing
7 provide this year?

8 A. I couldn't give you a number per se. Boeing is still working
9 through the BPSM for the two PI audits and the SAI, which they're
10 required to have a plan. That's the 90 day plan the administrator
11 requested from them, if I'm not mistaken? So, there's that. But
12 we go through quite a bit of BPSM throughout the previous years
13 that I'm aware of. I can't give you a number.

14 Q. Okay. There was from previous interviews there was
15 discussions around the audit itself and the time frame that you
16 provided to Boeing for notification and they had spoke to delays
17 because of productivity days or something that occurred within the
18 factory. And do you guys get notice of those?

19 A. We were not notified of the productivity days prior to them
20 occurring. I recall coming in or being informed, one of the two
21 that they're not doing any work today in this area because they
22 were having a productivity date which was kind of like a standdown
23 and talk about the issues that are going on.

24 We didn't go out to those areas per se to see what was going
25 on in the productivity days, but rather still continued to

1 performed our oversight. I mean just because they're technically
2 not working doesn't mean we couldn't be looking at processes
3 within those areas being compliant or noncompliant. So, the delay
4 you're talking about is probably somebody wanting to perform a
5 product audit and look at the build, one of the build processes
6 that wasn't available. That's what I think.

7 Q. How frequently do you think that --

8 A. I hadn't heard of them until that time.

9 Q. Okay.

10 A. Yeah. Not to say that they didn't occur prior but I was not
11 aware it, of those productivity days prior.

12 Q. Did you take part or where you present during any of the
13 quality standdowns?

14 A. I was not.

15 Q. What in your opinion is the most frequent -- or excuse
16 me -- that leads to the most frequent findings for not following
17 instructions?

18 A. So, not to -- are you stating what did we see as the highest
19 driver of why someone was not following instructions?

20 Q. Yeah.

21 A. Is that what you're asking?

22 Q. Yeah.

23 A. So, for me handling or dealing with that situation during my
24 oversight activities the responses that I've received were -- that
25 is how they were trained to do the work and but that training

1 necessarily didn't align with the, with the plans themselves as
2 they were written. And when I mean training, I mean on the job
3 training.

4 Q. Do you feel like the planning that you've witnessed is
5 sufficient for the mechanics?

6 A. So, there are times and we have documented where the plan was
7 not sufficient. That is not every case. There are -- whether the
8 insufficient plan contained again incorrect references, the
9 references were not there, or the instructions didn't necessarily
10 align with the specifications. So, that's kind of what I seen.

11 But there is no -- to me I haven't done a data analysis on
12 the number one cause of someone not following the IP to answer
13 your question. Right. So, I couldn't, I couldn't tell you for
14 sure why. It's just what I've seen it's around other individuals'
15 training, you know, training would probably be up there. But I
16 would have to do a data analysis. That's just what I'm recalling
17 off my memory.

18 Q. Okay. Do you believe that it is -- that there's too much of
19 the mechanics relying on the on-the-job training rather than
20 reviewing the planning?

21 A. Well based on again the audits that I performed I would say
22 that's part of it.

23 MR. RINEY: Okay. That's all I've got. Thank you.

24 DR. WOODS: Dan?

25 BY MR. MARCOTTE:

1 Q. Yeah, I'm going to bounce around a little bit. I'm sorry.
2 But yeah. Pocholo had asked a little bit about traveled work.
3 You know, as the FAA's risked-based analysis tool identified
4 traveled work has an issue?

5 A. Not that I can recall.

6 Q. Okay. All right. The other thing, you know, when Pocholo
7 was asking, you know, and you said it's Boeing and the FAA
8 together seems to be stuck in a loop on the BPI [REDACTED], you know,
9 removals.

10 A. Well the loop unless I stated it wrong, I think the loop was
11 around the corrective action plan, the corrective action
12 verification, and then back.

13 Q. Yes.

14 A. Yeah, okay.

15 Q. Yeah. You know it's an ongoing issue.

16 A. Yes, they're ongoing issues, yes, sir.

17 Q. It's an ongoing issue. And it sounds like, you know,
18 you'd -- when it comes approving a corrective action plan from
19 Boeing, you can only -- you know, you're -- the basis for your
20 acceptance is on guidance and an order?

21 A. I don't, yeah, I don't think I stated that to that -- I don't
22 think I stated that. The acceptance is based on the team
23 basically coming to an agreement, the team is the clearing
24 house -- coming to an agreement whether or not the plan is
25 acceptable.

1 Now I probably should restate that. The individual
2 presenting the BPSM, we'll use myself as an example, if I have a
3 case that I'm working on, if I'm reading the BPSM and in it I
4 don't feel that either the corrective action, the implemented
5 solution, or both solutions, implemented solutions are effective
6 then using my experience I would either not concur with it and
7 present that and of course I can be overwritten. Right.

8 The team could say, no, we all concur with it, proceed.
9 Normally that -- I don't recall once where that's happened in my
10 memory. I could be, I could be wrong. But normally the person
11 presenting is -- already comes in stating their case why it's
12 acceptable or not acceptable. So, me personally I've rejected
13 several BPSM because I didn't feel they went far enough so I hope
14 that answered --

15 Q. Yeah.

16 A. There's no, there's no order that speaks to this
17 accept/reject as a group per se. Yeah.

18 Q. No, I misunderstood you because I thought you said, you know,
19 you accept our CCA is based on order guidance and I was just going
20 to ask well --

21 A. Oh okay. I don't, yeah, I don't remember saying that if I
22 did.

23 Q. Okay. No problem. I was just going to ask --

24 A. Hopefully, I clarified that if I stated that.

25 Q. I was just ask, you know, is there -- could the guidance be

1 improved or processes being improved upon so that, you know, you
2 helped Boeing address the issue.

3 A. Could processes be improved upon to help them address their
4 issues?

5 Q. Within the FAA, you know, when they give you a root cause,
6 corrective action plan, a BPSM, and it gets approved, it gets
7 implemented and the problem comes up again, and you write it up
8 gain. We have another finding.

9 A. Yep.

10 Q. I'm just asking, I wondering, you know, process-wise is there
11 anything within the FAA that could be improved?

12 A. Well I think, you know, the FAA is ISO-9001 compliant so the
13 ISO standards, that loop that you're referring to as far as is it
14 good enough? Do we need to make improvements? Do we need, you
15 know, feedback? If I'm not mistaken all of that is part of the
16 ISO requirement as far as being compliant to it. So, that process
17 should be there that we have to --

18 Q. But could the ISO be improved? I'm just -- you know, you've
19 been, you've been doing these for a while now so I'm just trying
20 to figure out how can you guys help the Boeing Company get better?

21 A. Okay.

22 Q. We're, both sides I think are kind of involved in it. Right?

23 A. Yeah. That's probably a much higher decision than myself.
24 You know, like I said, there's always room to improve any entity
25 or agency.

1 Q. Yeah.

2 A. Right. There's always ways to look at policies and -

3 Q. I always think it's good to ask the guys on the floor who are
4 really using it.

5 A Well yeah, exactly.

6 Q. Or how would you improve it? You know --

7 A. Exactly. So, yeah. Yeah, I don't know if, you know, I would
8 have enough to say whether it 100 percent has to be improved but
9 there's always, you know, room for improvement, I'll say that.

10 Q. Okay.

11 A. Yeah. Regardless of the entity or agency. But I just want
12 to, I just wanted to be sure that I'm stating this as best as I
13 know it. So, because I think I jump back and forth on whether or
14 not the order has a requirement to accept the plan so yes, there
15 is. The order does state we have to accept their plan. It
16 doesn't say how we accept it. Right. We have to say it's either
17 acceptable or not. The team concept as far as I've -- as long as
18 I've been part of this CMO now, the oversight division, that's how
19 we've done it as far as a team concept of getting that input. So,
20 yeah, there is an order requirement to accept it, to review it,
21 accept it, and make a determination, so just to clarify that.

22 Q. Okay. Thank you.

23 A. Okay.

24 Q. Yep. Okay. You kind of led me into my next. I was just
25 going to ask you what was your opinion on the quality of Boeing's

1 BPSMs or our CCAs?

2 A. So, I have rejected some BPSMs because I felt they did not
3 address the root cause of why the noncompliance occurred. So, I
4 hope that answered your question. So, are they without
5 corrections or are they coming, you know, necessarily answering or
6 addressing all the root causes and are they implementing
7 solutions, you know, to the ASI's expectations, or, you know,
8 based on their experience? No. They do not come every single
9 time that way.

10 That's why we reject them back so that they get readdressed
11 to ensure they're going to correct the noncompliance and hopefully
12 that will be the end of it. Right? That is the goal. We don't
13 need to be going in circles.

14 So, we -- you know there is, there is a thought process using
15 each ASI's individual experience whether or not these plans are
16 acceptable and then the ASI has to make a determination if it is
17 if it is or isn't. Going through the process I was referring to.
18 We present it to the team. We plead our case, either acceptable
19 or not, and then the team makes a decision.

20 Q. Okay. Whether it's a percentage or some other type of rate
21 how, you know, how frequently would Boeing provide a BPSM that's
22 not acceptable that you're going to go back with suggestions or at
23 least more questions? And I understand you're -- you don't have
24 any data to analyze so to the best of your best estimate?

25 A. I would say the majority of time they are found acceptable.

1 Yeah.

2 Q. Okay.

3 A. Yeah. Only a few instances are we rejecting them from my
4 being involved in the cases that I've been involved in and
5 meetings, that's what I recall.

6 Q. Okay. And when it's done, the BPSM, you load them into some
7 FAA database and their, would they be used for risk-based --

8 A. So, --

9 Q. -- plan next year?

10 A. Yeah. So, the CEA tool captures, right, because the CEA
11 tool, compliance and enforcement tool they capture, we have to
12 enter that corrective action plan and provide the details that are
13 in the BPSM in that, in that tool. And then we either accept it
14 or reject it in the tool itself as well. And then start, you
15 know, send a letter of rejection or wait for them to present the
16 corrective action verification which could be depending on what
17 the situation is could be a year, could be two months, could be
18 whatever.

19 Q. Okay. Thank you. And I realize you might be limited on what
20 you can describe to me but you had, you said yesterday there was
21 another alleged noncompliance with the BPI 1581.

22 A. Yes.

23 Q. In general terms can you give me some details on it like was
24 a removal not written or were there --

25 A. That is correct.

1 Q. Okay. Can you give a general level tell me how it was found?
2 Because honestly sometimes I don't --

3 A. During oversight activities we were conducting an audit in
4 Renton now. Like I said, we're doing it now in month periods.
5 So, there's somebody there today or yesterday performing oversight
6 and I got a call from one of the ASIs about an issue that was
7 identified not only in Renton but in Moses Lake a few weeks back.

8 Q. Okay. And I'm asking because I have a, you know, I don't do
9 audits but I'm kind of a practical guy, I think. So, how do you
10 discover that someone didn't do something when there's no paper
11 trail, you know?

12 A. Well so the ASI during his oversight activity decided to, you
13 know, talk to some folks to see what kind of work's going on.
14 Let's take a look at this aircraft. He actually was going to go
15 look at something else. But once he was told what kind of work
16 was going on it was very similar to what was going on in Moses
17 Lake.

18 So, walking on the aircraft he identified a panel that he had
19 found in Moses Lake that was not completely installed and started
20 asking questions. Show me the documentation that you opened that
21 panel and none could be provided.

22 Q. All right. Like I said, I get -- sometimes it's hard for me
23 to grasp when you find something that wasn't done. So, yeah,
24 thanks for writing it up.

25 A. Right.

1 MR. MARCOTTE: And I think that's it. Thank you very much.

2 MR. CANTU: Yes, sir.

3 DR. WOODS: John?

4 BY MR. PETRUZZELLI:

5 Q. Jesse, you talked about the team that reviewed the BPSM.

6 A. Mm-hmm.

7 Q. Who or what positions are on this, some with Boeing or is it
8 just you guys or --

9 A. It's just -- yeah, so the clearing house, the BPSM clearing
10 house that is the FAA. So, it's like we have to manager -- or
11 either Mike Hager, Brian Kilgroe, Sue Kirkis (ph.), Julie Moon.
12 We have to have one of them and then two seniors, right? And then
13 the person that's presenting.

14 Q. Okay. Okay. Got that.

15 A. So, yeah, it's only FAA.

16 Q. So, it's strictly you guys, not Boeing right now?

17 A. It's strictly us.

18 Q. Got you.

19 A. Yep.

20 Q. And you can answer this based on the Renton factory or SDC or
21 pick the activity, but do you guys still see instances where
22 management puts pressure on the line mechanics to just get things
23 done, cutting corners?

24 A. I have, I have not seen that personally.

25 Q. Any of your team have they that you know of?

1 A. I do not recall that my team telling me that they witnessed
2 it.

3 Q. And the last question, nice part about going where I'm at in
4 the process here, everybody's already asked a lot of questions.
5 You were thinking.

6 A. Well I'm thinking because I want to be sure that I'm not
7 forgetting when you talked about the pressure, management applying
8 pressure. So, let me, let me back, let me backtrack.

9 I do recall now having a conversation with FAA coordinators
10 in the Renton facility that had concerns about management pushing
11 for, it was either a noncompliance or an issue to get addressed
12 and they felt that it was, it was quick. That they were being
13 rushed basically or they were -- they were being persuaded either
14 not to write it up or something to that effect. I don't have
15 exacts so I don't want to -- because I'm going off my memory here.

16 So, my advice to them was if you feel that please document it
17 on the hotline or whistleblower, you know. One other ASI was with
18 me at the time and we basically instructed them to do that. If
19 you feel -- provide as much detail as you possibly can.

20 If you don't want to give names that's fine. But if it does
21 come, you know, if it is substantiated, we need to be able to have
22 that information if you're not going to be able to provide names.
23 So, yeah, one time. I take it back.

24 Q. Now my last question. Again, like I said it's nice to go
25 where I'm at all the good questions have been asked already but --

1 A. Right.

2 Q. Since you've been around in this role how -- what's your
3 perception or your read on the transparency and the honesty and
4 integrity of the relationship between you guys as the regulators
5 and the Boeing Company in your opinion?

6 A. Yeah. So, the PAH must be willing and able, right, are the
7 two words that they use but when we talk about being able to
8 correct the noncompliance, so from what I've seen is Boeing is
9 very willing to get these issues addressed.

10 You know, the able part I think is the one that's in question
11 because if the constant cycle of the repeated issues, you know,
12 it's the willing and able part that I think -- or the able part
13 that gets me. But do I think, you know, people on the floor are
14 trying to do the right thing based on what they know? Yes.

15 Q. Okay.

16 A. Yeah. You know, it's just the information that's being
17 consumed at the time and how it bumps up against, you know, type
18 design, that's where, that's where we're seeing some issues but I
19 think for the most part most people are trying to do the right
20 thing to what they know.

21 Q. Okay. Do you guys have an opportunity, particularly you as a
22 lead, to give any of the feedback, you know, just pick on this
23 last example we were talking about. Do you have ability to -- or
24 do you guys regularly engage in any dialog with the leaders for
25 example, executive leaders to give them that feedback? How does

1 that go?

2 A. So, during the out-briefs is basically when I kind of, you
3 know, I used this last -- was it last week when I out-briefed.
4 Whatever the first was. Was it last week?

5 Q. Yeah.

6 A. Yeah. To give my out-brief for April's audit. So, during
7 that time I'll provide my assessment of how the audit went.
8 Normally we, you know, go over the non-compliances. This last
9 out-brief I gave it was a little different.

10 They should, you know, from my viewpoint, the Boeing Company
11 should know every finding that I'm about to inform of them because
12 RQSO was with us, DQMRs are with us so that information should be
13 flowing. There should be no surprises.

14 But that's when, you know, as an example, you know, I already
15 talked about employees not following the IP and when they're
16 stamping off that IP, they're stating or attesting to they
17 completed the IP as it is written. Right.

18 So, if you have -- that's where the conflicting information
19 on how they're created is causing the issue because as an example,
20 if the instructions say to use X cloth and the spec calls out X
21 cloth and B cloth, but the instructions say you only use X cloth,
22 then that's the expectation. That's not following it. Right.

23 But the spec allows both so to me it's, you know, these
24 instructions they probably in some cases, not all, some cases
25 could be changed or updated. But I hope that answered your

1 question and I wasn't going off topic.

2 Q. It does and the follow up to that is, when you -- and using
3 this last one that you did, did you get, did you get the
4 impression there weren't any surprises to -- I mean whoever you
5 met with, VP level or whatever, was there any surprises to him or
6 had that already been communicated like you said?

7 A. To the person that was communicating to me there were no
8 surprises because the findings we identified this last month were
9 not new. So, there was nothing new. We provided in the sense of
10 wow we didn't know that was out there existed. These are, these
11 are the same systemic issues we've seen.

12 Q. Okay. Do you -- when you're doing that do you like from
13 where I sit what we see, what we say what's going on doesn't
14 always get up to this level. Our group, for example, if you
15 worked with the FAA coordinators, we have a little bit more
16 horsepower. We can get message across here. Are you still seeing
17 the divide that things get muddied up in the middle communication
18 up and down.

19 A. Well I'll use a finding we had concerning the Cleco (ph.) and
20 two fasteners installed not installed.

21 Q. Right. I remember that.

22 A. Do you remember that?

23 Q. Yep.

24 A. The technicians that worked that area, this probably was
25 three weeks or four weeks, a month later --

1 Q. Right.

2 A. -- were not even aware that that even occurred.

3 So, the technicians in the area where that escape occurred,
4 manufacturing escape occurred were not aware that that had
5 occurred and was found on the SDC. So, there is, there is
6 something not making it back down to the people that are actually
7 performing the work that, hey, by the way, please ensure you, you
8 know, you double check this because there was an escapement. It
9 didn't make it back to them.

10 MR. PETRUZZELLI: Thank you. That's all I have, Jesse.

11 DR. WOODS: Troy, you're up.

12 BY MR. LEVANEN:

13 Q. Okay. Circling back a little bit to the, you talked about
14 the process of the findings or the non-compliances and then did
15 you say that it goes to the company and they have the -- or along
16 the way the process gives Boeing an opportunity to reject the
17 finding or the compliance thing on a basis?

18 A. So, we give Boeing the opportunity to rebuttal or provided
19 evidence to the contrary if you will that what we identified as a
20 noncompliance is not. Right. So, that's why we call it an
21 alleged noncompliance. We're alleging you're not performing this
22 process, you're not building this per spec until we're provided
23 evidence to the contrary.

24 So, that is the, you know -- the non-accept part I think, you
25 know, we're telling them they have problem. Now they have to show

1 us why they don't. I'll put it that way.

2 Q. Yeah. Yeah, whether they accept it or not?

3 A. Right.

4 Q. With that said, what percentage of the rebuttals are
5 successful to say like, you know, like would you say is that
6 a -- what kind of a percent would that look like. They're just
7 cruising and no, you wouldn't know for sure?

8 A. I really don't know. I can only speak to my cases. I
9 would -- and of course I'm going off memory here. I don't have
10 the exact number. But maybe one out of five that I submitted were
11 successful in showing that they were complaint. So, --

12 Q. In one out of five attempts?

13 A. One out of five attempts, right.

14 Q. And then along that same line on the BPSMs, what -- and you
15 had that process to review them. What percentage of those do you
16 reject roughly, that you know of?

17 A. That I --

18 Q. You know if you've got a team, like that, like when it goes
19 to the team. I know you said that whoever authors it kind of has
20 that -- I think you're saying that but I know it's the process and
21 we've got a name for it on your team.

22 A. Yeah. The clearing house.

23 Q. The clearing house. Yeah.

24 A. I think -- yeah, that's --

25 Q. Yeah.

1 A. BPSM clearing house is what we, what we call it. But but if
2 you're asking me to give a number, I don't have a number overall.
3 But I have -- again using my cases, I recall of one where I did
4 not want to accept it but the team did not necessarily concur so
5 we accepted it. So, --

6 Q. And then -- but there's also a percentage that the team kind
7 of unanimously rejects.

8 A. Yes.

9 Q. And is that a very high percent or is that fairly low too?

10 A. Well I would say from my experience for the most part once
11 the individual who's presenting the case provides their
12 justification.

13 Q. Oh yeah.

14 A. You know, there is times when there's debates about either
15 it's a regulatory issue or not or, you know, it's a quality
16 management issue or not but for the most part it's accepted based
17 on the presenter for the most part. But not always.

18 Q. So, usually you'll just pick that off at the pass and it
19 won't even get to the clearing house?

20 A. Well that -- so once we determine that it's not acceptable
21 that's where the letter of rejection comes in and if not then we
22 issue a formal compliance action acceptance letter if it
23 acceptable or -- I'm sorry, a FCAA if that's what it is or some
24 type of acceptance letter for the CAP.

25 Q. Okay.

1 A. Hopefully, that answered your question.

2 Q. Mm-hmm.

3 A. Okay.

4 Q. Yeah, I'm getting a better feel for it. So, it sounds like
5 you prescheduled a lot of your visits. How many -- how often do
6 you get to just some random ones when you just go, you know, like
7 today I'm going to go drive by and check it out, or do you?

8 A. That's -- prior to this event or this accident I would say
9 that we just didn't just show up randomly. Again, we were
10 working -- the team as small as it is we were still doing air
11 worthiness certification and other activities. So, you know, we
12 kind of -- if we didn't need to be there, we wouldn't necessarily
13 show up.

14 So, the audit activities were our reason to go in there
15 unless we had other information such as hotline and whistleblowers
16 which then drove us to go in there. One other thing I would add
17 is voluntary disclosures. When I came on as a team lead if I
18 received a voluntary disclosure or became aware of it and it
19 occurred in the factory, I would pay the factory a visit the next
20 day. So, I would let them know I'm showing up tomorrow.

21 Q. Yeah. That was before this event.

22 A. That was before.

23 Q. Then how about, then how about after the event?

24 A. We're in house, besides for, besides for -- there was a gap
25 between the end of the special audit item. I think that was

1 February 15th and March 12th. We've been in there almost every
2 day.

3 Q. Yeah.

4 A. That's the enhanced part --

5 Q. Yeah. The --

6 A. -- of the oversight.

7 Q. -- enhanced oversight. Speaking of enhanced oversight
8 how -- is it kind of done now or is it still going on?

9 A. It's not done. So, we're -- we have, we still have our 18
10 audits that we must perform. That didn't change. So, we're
11 coming up close to the end of the fiscal year so we're going to
12 have to double up on our audit activities to catch up and kind of
13 realign to how we used to do it, to how we need to do it now. So,
14 we're still doing 18. They're just a lot longer than what they
15 were in the past.

16 Q. Have you ever got to get into that OJT programs at all when
17 you were there as far as oversight or review?

18 A. So, I have not. I know one of the team members has been
19 asking multiple questions who was just in here concerning OJT and
20 the requirements and what it, you know, what's the training
21 required for a quality inspector? So, our team is looking into
22 how Boeing trains people. Yeah. But I personally have not dug
23 into it if you will.

24 Q. A couple more. With -- I know it sounds like you're spread
25 pretty thin and we've heard that, you know, obviously from others

1 probably. But with -- it sounds like there's chance you might get
2 additional staff and with that will that directly translate to
3 more boots on the ground at Boeing Renton and then oversight so to
4 speak?

5 A. So, I'm not the manager but if I have any say I would say
6 yes. Yeah.

7 Q. And last question kind of just in your opinion maybe in a
8 word, what is your opinion of the safety culture as you see it
9 with the team at Boeing and that you're, that you're around and
10 work with?

11 A. Safety culture, I really, I really don't have a good answer
12 for that as far as the safety culture specifically. You know, I
13 can talk about the production process and things like that but I
14 know SMS is not finalized, so we anticipate we're going to be more
15 involved in the safety aspects.

16 You know, I look at how the quality system is set up and
17 normally encompasses some safety aspects within it. Obviously,
18 you don't want to damage the product, you don't want to hurt
19 people and things like that. There's other regulations out there
20 to cover those requirements.

21 So, I can't speak to the OSHA part of it as far as safety.
22 But we are going to be looking I think at safety a little harder
23 and how it's embedded in the QMS system and how it affects, you
24 know, just the build process overall and give it a more direct I
25 guess oversight because of I think Part 5 is the rule. So, that's

1 probably going to change some things.

2 MR. LEVANEN: Okay. Thank you.

3 DR. WOODS: Nils?

4 BY MR. JOHNSON:

5 Q. I think it's still morn -- nope, good afternoon.

6 Good afternoon, Mr. Cantu. Earlier -- sorry, yeah, earlier
7 you said the Boeing production certificate work plan is almost
8 complete for 2025.

9 A. Mm-hmm.

10 Q. Can you explain how the real time risk profile guides the
11 work plan that is generated so far in advance?

12 A. So, we have an activity mix mixing up or SQ requirement with
13 our manufacturing requirement. But basically, we have a number of
14 audits that are performed which is we have set around 18.
15 Historically the way it's built, it's been built as I mentioned
16 Center, East, West line and we get some wing activity so those
17 activities are set. So, we know we're going to look at each one
18 of those.

19 Now what we look at that's where it -- that's the tailoring
20 if you will after the plan is in place. So, we're going to hit,
21 we're going to hit those 18 audits. Right. But it doesn't break
22 down specifically what we're going to look at. That comes from
23 the information throughout the year.

24 And I know from my -- for the Renton team what I plan to do
25 is basically data mine what issues we've identified in 2024 to

1 kind of address in FY 2025. And there's quite a bit of items that
2 we need to look at.

3 But we're also as we're auditing now, right, because we've
4 changed our audit process, we're no longer doing center, west and
5 east lines. Specifically, we're doing the entire facility. We
6 can go at any location at any time. So, if we identify, for
7 example, a part that has a noncompliance that we're ticketing the
8 next day or that day, I sent out a notification or someone does
9 and the next day we're in the Renton facility looking at the
10 installation, at the factory.

11 So, I think that's where it's changed dramatically is from my
12 short experience as the senior here, as soon as something
13 identified is communicated and then we're in the factory that day
14 or the next day figuring out how they installed it, what does the
15 IP state as far as installation and how did this occur.
16 Hopefully, that helps.

17 But for '25 specifically to get back to your question, the
18 reason its built is because it's built off historical areas that
19 we've looked at in the past. That's why we can have it, but the
20 specifics of what we look at is not yet determined.

21 Q. That's what I was interested in is that the risk profile was
22 allowing guidance to look at the appropriate areas based on what
23 you're seeing now, not what you saw two years ago.

24 A. Right. So, the risk rating on how it's determined the
25 quantity of audits that has pretty much been the same since I've

1 been, you know, with this agency.

2 Q. So, my understanding is because Boeing produces more than 100
3 airplanes a year it would never been any less than a 1A?

4 A. There's -- yes. So, I've never removed or added, you know,
5 blocks to see if it would change. Obviously, I don't want to do
6 that and hit enter to figure out what it's going to be. But there
7 are the issues how many, how many escapes do they have? How many
8 suppliers are providing parts? Things of that nature.

9 It's not just the amount, the quantity they produce. They
10 could be a level 1, but are they level 1 high? Are they level 1
11 medium? Are they level 1 low? I mean those are, you know, in my
12 short experience with the tool I'm not sure if it would affect
13 their overall rating. So, but yes, they are rated at the highest
14 risk factor that the FAA has.

15 Q. Okay. In what areas of Renton do believe the highest risk
16 parts are? And what areas of Renton do you believe are the
17 highest risk and does that align with your workplan? I've heard
18 you say wings.

19 A. Well so we have several, you know, based on my experience
20 and, you know, quick analysis I'm going to do right now. We have
21 risk for parts that are being received to the Boeing Company which
22 I understand is supplier quality but there are escapements that
23 are occurring that are making it to the ticketing operations that
24 we're finding.

25 So, one area that I want to focus on for the team is what

1 kind of receivable was done for these parts because the majority
2 of, you know, articles are, they're supplied. So, that's where
3 supply because some -- you know, supply quality because big. So,
4 that's an area that I want to focus on, receivable, what kind of
5 receiving inspections are done? They have the capability to
6 perform it. They have a coordinate measuring machine which some
7 Boeing personnel there that kind of helped us through the audits
8 had no idea existed. We found that out a while back.

9 So, to that point supplier quality and receivables is one
10 area. We want to take a look at basically flight surface
11 installation, those are critical parts obviously so we want to
12 focus on those areas and we have performing product audits. And
13 by the way, normally our audits are comprised of process and one
14 product audit.

15 We have now turned that upside down if you will, where we're
16 looking at product audits the majority of the time that we're in
17 there, the product itself and not necessarily the process.
18 Because the processes will show themselves within the product
19 audit for the most part. Right.

20 So, while we're going to be looking at that, we're going to
21 be looking at preflight and aircraft that getting ready to go over
22 to the Seattle Delivery Center to get ready for ticket. We've
23 identified multiple issues with air worthiness inspections prior
24 to delivery in the preflight area, which is back to the question
25 of, you know, the removals. That was the area we already

1 identified a panel that wasn't documented removed.

2 Wings has its own issues. The build up process, there's some
3 FOD that's been embedded in sealant that they've identified
4 previously. There's issues with installation of hydraulic tubing
5 not being done to the specification. These are recent items, so
6 there's quite a few areas that can be focused on.

7 And storage and handling was another big area that had
8 non-compliances so although it seems like now it's not necessarily
9 that impactful to the build process, I would say that it is and it
10 is part of the regulation that they have a process and procedure
11 that I think it's handling and storage and not storage and
12 handling that we're looking at. So, there's many areas that we
13 could look at but hopefully that answered your question and I'm
14 not just talking but.

15 Q. You're doing fine.

16 A. Okay.

17 Q. I think you've answered this but I'll ask, is there a history
18 of undocumented maintenance at Renton?

19 A. Well, yes.

20 Q. Undocumented removal. And I think --

21 A. Yes, there is.

22 Q. I think you've indicated.

23 A. So, I think I've laid out a few cases already in recent
24 history but yes, that's true.

25 Q. All right. Without specific qualifications or authorizations

1 how can an FAA person tell if an assembler/mechanic is able,
2 qualified to perform the job they're performing? So, one of the
3 things I heard from talking to some folks at Boeing was that for
4 example in Everett, there were many qualifications and
5 authorizations to the work, were Renton didn't have those same
6 kind of limitations, controlling who could do a specific function.
7 Are you seeing there and --

8 A. Well that, you would have to be specific on what operations
9 you're referring to. So, as an example there are personnel that
10 are certified to do let's say bond and ground. That one is the
11 first one that comes to mind. They have a certification and
12 they're the only ones that can sign off those jobs.

13 The system is, to my understanding has the ability to know
14 that, to know whether or not they have their certs and prevent
15 them from stamping the job complete. Not to say that somebody
16 else couldn't do that but that's not what I'm stating that that is
17 happening. Right?

18 But there are personnel that have these certifications
19 depending on the specification requirement that directs them to
20 have it. So, if you're referring to, let's say engine run. You
21 have to have a special certification in engine run. You know, yes
22 or no, you know. Then I could kind of talk to that a little bit
23 but in a general sense I would state that there are jobs that have
24 certifications that are required.

25 Q. The last one I'll ask is BPI 1581, do you feel that the

1 removal installation procedures are adequate in that BPI?

2 A. So, I am not an expert of that BPI. I would, I would have to
3 perform my own individual assessment of it and I have not.

4 MR. JOHNSON: Okay. Thank you. That's all I have.

5 DR. WOODS: Okay.

6 BY DR. WOODS:

7 Q. Just a couple of questions. Going back to, it was mentioned,
8 I believe we were talking about Troy about safety risk management.
9 Have you ever been a part of developing, executing, or assessing
10 an SRM program?

11 A. I have not.

12 Q. So, as you mentioned that is something that is coming. The
13 rule is being finalized and this is something that the Boeing
14 Company is going to have move from a voluntary to fully
15 operational. And that it's a move that will arguably be brought
16 into your function as the one who provides oversight. Is that
17 something -- I guess what is the plan for that? What have you
18 been told? How are the ASIs going to adopt that new part of their
19 role?

20 A. So, we do have SMS training that's already being put out to
21 the FAA. I would say that from my understanding that's the
22 starting point. Boeing obviously has to put their plan together
23 and show us how it, you know, how it's going to be implemented and
24 then based off that we would just as we do with their quality
25 system, that's how we would perform our oversight of it.

1 I'm not aware of any other training that's going to be
2 provided to our personnel yet or when that time frame is or when
3 we're going to be ready to go to perform that oversight activity.
4 I haven't heard anything.

5 Q. And I don't want to assume but if you haven't been a part of
6 an SRM program have you ever run or been part of a safety risk
7 assessment panel?

8 A. I have not been part of a panel. So, there was a SRM
9 conducted by Boeing that I was a part of for a brief time
10 concerning uncertified parts being installed that were identified
11 at the SDC. So, I was involved in those discussions and provided
12 inputs. I don't if they would call that a panel or maybe you
13 would. But, yeah, I've participated in those types of discussions
14 in the past, one time. So, that's my experience on that.

15 Q. Okay. Okay. Well, that's really all that I have for this
16 round. We are going to break for lunch, especially since we're at
17 almost two hours at this point. I am going to conclude this
18 recording and start a new one just because of the duration that
19 we'll have for the time off in between. So, at this time I'm
20 going to conclude this recording. It'll be part 1 for Jesse Cantu
21 at 12:43 PT.

22 (Off the record at 12:43 p.m.)

23 (On the record at 1:15 p.m.)

24 DR. WOODS: Good afternoon. It is May 8th, 2024. The time
25 is 1315 PT. This will be part 2 for Jesse Cantu. We're going to

1 start over here with Pocholo to my right.

2 BY MR. CRUZ:

3 Q. So, Jesse, just one more question for you. We've heard from
4 your one, one of your ASIs, that you don't get any Boeing
5 training. Is that true?

6 A. Yes. There's no mandatory Boeing training that I'm aware of
7 that's required by the FAA.

8 Q. So, if you guys have to do an audit with regards to their
9 processes, how are you able to determine the viability of the
10 process if you don't know how Boeing's computer system, how it
11 works, how are you able to do that?

12 A. So, we don't necessarily -- well speaking to the computer
13 system part of it and I guess the other, we don't necessarily deep
14 dive their system in that aspect as far as how it operates and how
15 it collects information and things like that. But going back to,
16 we'll just stick with myself, my history.

17 Q. Yeah.

18 A. So, I have experience working in the Boeing system.

19 Q. Sure.

20 A. Granted it was the Boeing defense system, not necessarily
21 their commercial system. So, I have an understanding of how the
22 process and procedures work per se and that's where I, I think I
23 mentioned, it takes a while to kind of navigate the layers of the
24 QMS system.

25 So, how we're able to do it -- for I think everybody on my

1 team has had experience working within that system in one form or
2 fashion. So, it's really the experience you have prior to coming.
3 If you were to hire somebody that didn't have the experience it
4 would take, if I had to put it in a year time frame, probably one
5 to two years to get a real strong grasp of how the Boeing system
6 works and understand the complexities between -- in navigating
7 that system.

8 It is not an overnight thing. In particular of all the
9 specifications they have to produce aircraft that takes time to
10 know. So, and that's the crucial part I think during the audits
11 is you may not be able to see much, but when you do focus on one
12 area, and I'm speaking historically, not in today's time frame,
13 you would have to research that noncompliance or alleged
14 noncompliance to ensure that it is one by listing the
15 requirements, the requirements to what, and you would have to find
16 the requirements. Right?

17 It's not -- we don't write things down based on how we feel
18 or what we think, but what is the documented requirement starting
19 with the regulation and working its way down within the QMS system
20 of Boeing. And hopefully that answered your question.

21 Q. Yeah. Yeah.

22 A. It takes time for someone new, for someone who had
23 experience, that's where it become crucial if we can get folks
24 like that already have it, it makes it easier for us in the
25 beginning.

1 Q. When you're doing audits, I know some of your ASI says they
2 do research as far as previous issues. Not just on that 737. If
3 there's trends or issues, nonconformances that have been outlined
4 previously on previous audits, not just on the 737, it could be
5 767, 787 line, do you guys look at that data as well to see if
6 there's any trends that would potentially hit the 737 line, you
7 know, that you guys could maybe tap on or maybe pull that string a
8 little bit to see if there's any issues in the 737 line?

9 A. So, for process specific issues?

10 Q. Yeah.

11 A. A lot of the processes are similar but however there are site
12 specific processes that necessarily wouldn't line up with Renton
13 per se. Like Charleston could have any Boeing process or
14 procedure that is specific to that location that may not be
15 applied in the Renton facility. The QMS system as a whole was the
16 same, meaning the top document, the quality manual. It is the
17 same. But the flow down requirements within the BPI and the pros,
18 those could technically be different.

19 Q. Okay.

20 A. So, it's site specific in some cases. And in some cases, it
21 covers the entire system. But it just depends on the document.

22 Q. What about 1581, do you know?

23 A. I couldn't tell you off the top of my head. The
24 applicability of it I would imagine that it is the only removal
25 document that it'd applied to all facilities.

1 MR. CRUZ: Okay. All right. Thank you. Matt?

2 BY MR. RIGSBY:

3 Q. Jesse, do you feel you get the support that you need from
4 your management in the FAA?

5 A. Yes.

6 Q. Okay. Have you ever had any pressure put on you by your
7 supervisor or anybody in there?

8 A. No. I would say there's the difference of assessments or
9 opinions, whichever word you'd prefer. I prefer assessment on,
10 you know, whether a process is compliant or not. But I think
11 that's, you know, normal. Right? There's a disagreement of how
12 people see the same thing. Right?

13 But yeah, it, I think management is supportive, you know. I
14 think we do well with other teams, and kind of integrating when
15 we're shorthanded. As an example, you know, we had one of the
16 other seniors kind of meet the charge of making sure we had
17 coverage next week because a lot of us are going to be out. So, I
18 think we work well within our oversight division to kind of handle
19 stuff. But everybody has their opinion on how things should be,
20 or an assessment.

21 Q. Yep. Sure. And I apologize if you've answered some of these
22 while I was, while I was gone. So, with the special emphasis or
23 enhanced oversight program, do you, do you feel like that will
24 become the norm of operation for you guys here at Boeing in the
25 near future?

1 A. Well my experience with basically stepping up anything is in
2 some cases it's not sustainable in the long term. But ultimately,
3 it's up to the managers and all the way up to the administrator
4 how, you know, they want operations to go forward. So, with
5 enough personnel it could definitely be sustainable. But at our
6 current rate, you know, it's taxing for sure in the short-term.

7 Q. What level is your general interaction with the Boeing
8 people? At what level is it, senior management, mid-level
9 management?

10 A. I would say at mid-level management at my position.

11 Q. Okay.

12 A. So, we do deal with a lot of first level managers on the
13 floor when we're going out auditing most of the time, they're
14 present. If there are issues that arise and there has to be
15 further discussions it elevates, so yeah.

16 Q. Do you know is Boeing, are they ISO certified as well?

17 A. So, AS9100 is ISO-9001, but it has additional requirements,
18 that's what makes it AS9100. So, if you're AS9100, you're
19 technically already doing ISO-9001, if that's the ISO you're
20 referring to?

21 Q. Yeah.

22 A. Okay.

23 MR. RIGSBY: Okay. That's it for me.

24 DR. WOODS: Mike?

25 BY MR. RINEY:

1 Q. So, you say that you plan all the inspections at the Boeing
2 Delivery center.

3 A. For air worthiness certification, yes, we do. We do a
4 conformity inspection on the aircraft.

5 Q. Is Boeing working to get that delegation back for
6 certification?

7 A. I'm not sure what Boeing is working to. I've heard amongst
8 Boeing members that that's something that they're interested in
9 getting (ph.) back for sure.

10 Q. Do you think that current performance would allow them to get
11 that delegation back?

12 A. My assessment of the ODA team is they're more than capable of
13 performing that oversight activity themselves. Yeah.

14 MR. RINEY: Okay. That's all I've got.

15 DR. WOODS: Dan?

16 MR. MARCOTTE: No. No further questions. Thank you.

17 DR. WOODS: John?

18 MR. PETRUZZELLI: Mike took my thunder. I'm done.

19 DR. WOODS: Troy, you're up.

20 BY MR. LEVANEN:

21 Q. One more question, we visited with the PI, your PI and he's
22 based in Charleston and we -- I'm just curious how is that
23 arrangement -- how does that work. How well does that work?
24 Could there be an advantage to having a PI that's actually here, I
25 mean physically? Or maybe not just -- maybe there would be more

1 of them so that there's one in Charleston and one here for example
2 or what's your thought on the whole PI arrangement?

3 A. I don't necessarily, I wouldn't necessarily say the PI would
4 have to be onsite. I mean preferably, you know, I think you
5 would want that but a must, I don't think it's a must. I think
6 the way we communicate with the PI now, you know, now that we have
7 all this technology, I mean we can call him up in an instant,
8 provide him the same details. If he wanted to see it with his own
9 eyes that's separate. Right?

10 He's going to have to fly down here. So, that would be the
11 benefit but I think we're, you know, I would say it's acceptable
12 the way it is. I mean it's been operating that way for some time.
13 I think before even -- well I should say this. The PI used to be
14 onsite. Yeah, the PI was here. During the change that's when
15 Brian became the PI and he was in Charleston, so yeah.

16 Q. Okay.

17 A. I haven't noticed a difference to clarify.

18 Q. Okay.

19 A. Yeah.

20 Q. That's good to know. How about on flow day 1 for the visit?
21 You know, when they come in and they do the initial shake and the
22 findings and the maybe travelers so to speak. Do you try to get
23 any of your team out there for flow day 1, or do you ever get
24 there for flow day 1?

25 A. So, we have, we have conducted oversight activities on flow

1 day 1. If I'm not mistaken there are no permanent floorboards
2 that are installed on flow day 1, where you can just walk on the
3 airplane.

4 Q. Yeah.

5 A. So, you know, the doors are closed. Yeah, I mean you would
6 have to crawl through that area. So, we normally don't go in
7 there. But we have done some oversight activities in the past if
8 I'm not mistaken. Yeah.

9 Q. And then does that -- would that give you an opportunity to
10 review the incoming discrepancies so to speak or do you get a
11 chance to look at those either way, you know, as far as the list
12 of travelers so to speak?

13 A. So, to date, to date I have not looked into that. The
14 process has now changed where that the level of incoming
15 non-compliances, at least this is what I've been informed of is
16 dramatically lower so they're working to get those, I call them
17 tubes, those fuselages fixed down in Spirit prior to being
18 accepted which again I think I always question if it's a
19 noncompliant tube why is it being accepted? Right. So, I think
20 they're working to get rid of that and drive those non-compliances
21 which is the traveled work part of the question.

22 Q. Yeah.

23 A. Because that's basically what it turned into as it went down
24 the line.

25 Q. Yep. And that's, that's good news to me from a, from the

1 receiving end aspect of it, because the less that those are
2 traveling, the less opportunity to have the situation like we had.
3 then the last one I had for you -- well, okay, one last question,
4 Flow Day one. When you have more staff, when you have a beefier
5 team, will that afford you an opportunity to put more resources
6 towards flow day 1, kind of the first few days to really get out
7 in front of what's there, what's traveled, what time sequence?

8 A. Right. I think speaking, you know, future tense I want to be
9 involved in that receival. I want to see the paperwork that comes
10 in. I want to see the certificate of conformance, although that
11 is normally handled by our supply quality team.

12 Supplier control is one of the 15 elements that we can audit
13 to and it doesn't matter if it's here or in a supplier quality
14 group, or the FAA supplier quality group. So, that is something
15 that I had planned to do prior to these events. I think I was on
16 the job four months, roughly before this kicked off.

17 So, yeah, so there was, I had some things in plan that I
18 wanted to focus on and that was one of them. And even though it's
19 changed I'm still going to go that direction.

20 Q. Well, that's great. I appreciate that and I'm impressed that
21 you had picked that up ahead of time. And then the last one
22 about, is about transparency and I know you said you, a lot of
23 times will interact with kind of middle management. So, thinking
24 of it from that perspective and then from and then from an overall
25 perspective what's your thought on the transparency between the

1 FAA and Boeing kind of currently? I know you a little bit about
2 safety culture, but how about transparency?

3 A. So, are you asking if Boeing is being transparent with the
4 issues they're having or --

5 Q. Well more -- I mean just as a general concept of like you
6 feel like nothing is being kept from your, you and your team or
7 vice versa even, you being fully transparent with Boeing, you
8 know, you and your team?

9 A. Now I would say speaking only for the Renton team, I would
10 say that we are pretty transparent to the level that we can be.
11 Obviously when you're dealing with some compliance and enforcement
12 issues some items cannot be disclosed at the time. But and I
13 would say that's probably true reverse, right? Boeing may or may
14 not be providing information until they know for sure what the
15 facts are.

16 So, that's where I think we, you know, there's some
17 disagreement of how soon should we be notified of an issue if they
18 haven't technically run it to ground. How much time should they
19 have, right, to identify these problems to us? If they haven't
20 fully vetted where the issue came from so there's always, you
21 know, discussions about that.

22 So, we, I think we worked through it and for the most part I
23 think I would stated that I have no issues with transparency with
24 Boeing in my position.

25 Q. Okay. That's good. And I know you don't have a ton of

1 history to compare it to with how it was and how it is. But
2 that's good to know what your perspective of it is currently.

3 A. Okay.

4 MR. LEVANEN: Okay. And I think that's it for me. Thank
5 you.

6 DR. WOODS: Nils?

7 MR. JOHNSON: Nothing further for me.

8 BY DR. WOODS:

9 Q. Okay. I do have a couple of questions and these are more of
10 any of your experience in what you've been doing for the past few
11 years and reflecting on that.

12 When you're out there, particularly when you're doing, I
13 guess even ticketing, but when you're doing audits in particular,
14 what is your assessment of the worker bees understanding of how,
15 what their role is in quality and safety of, you know, eventually
16 creating an aircraft?

17 A. That's a tough one because that's a few parts and they would
18 have to be asked that question by me specifically to give you like
19 a good answer of what my assessment is of what they believe their
20 part is. I've never asked them about, you know, well how do you
21 feel about quality? Or where do you fit into the quality system
22 directly? So, I couldn't -- I don't know if I could give a good
23 answer on that.

24 Q. I appreciate that you haven't had asked directly but there
25 are things that we say and there are things that we do that

1 reflect how we feel or what we know. And so presumably in your
2 role you've had the chance to observe.

3 A. Yes.

4 Q. So, what you've observed do the workers understand and
5 respect the level of criticality their role is in producing an
6 aircraft?

7 A. So, if they completely understand in every situation, I would
8 say no. There are some that do and there are some that don't in
9 my experience.

10 Q. I'm assuming that the FAA does not really take into account
11 how long an employee has been there when they're doing a task. Is
12 that correct or am I being presumptuous?

13 A. Well if you're training to do a specific task or job or even
14 an ASI, right, experience does fall into it. So, if you consider
15 somebody as myself who's only been in the job technically three
16 years should that be a, you know, a point to say that person
17 doesn't have enough experience without looking at the historical
18 aspect of it, I don't know. I guess that's up to the person
19 making that determination.

20 So, and on the flip side of that just because someone has
21 been there for 25 years doesn't necessarily mean that they full
22 understand the job they're performing at that time. There could
23 be aspects of it where they're using knowledge that they've built
24 up over the years, to say, I'm doing it right. This is how we've
25 done it.

1 But not necessary how it's done or required to do, be done
2 today. Because processes change, instructions change, and if
3 you're not constantly looking at it on a daily basis there could
4 be an escapement of a quality requirement. Hopefully, that
5 answered your question.

6 Q. I guess what I'm asking to clarify though is that when you
7 were conducting an audit do you take into account at all or is a
8 factor in the auditing process how long that mechanic has been
9 doing the job?

10 A. So, we're not there to look at like the mechanic per se. But
11 rather the quality system, how the instructions are being consumed
12 by someone who's -- a manager has made determination that employee
13 is qualified to do the work. That's not the FAA's part.

14 We're there to determine is the work being done to meet the
15 type as that requirements that the PAH has established, they said
16 that they were going to do regardless of the number of years that
17 person has done it, they should be able to perform it or they
18 shouldn't be doing the work.

19 But we're not the ones to decide if they should or should not
20 be performing the work.

21 Q. Okay. And that's what I was getting at. That's why I said
22 I'm presuming that that's not something that you really take into
23 account.

24 A. No, we don't.

25 Q. I guess and I know it has been three years. I guess what I'm

1 trying to determine is have you seen -- what changes have you seen
2 in the workforce in that three years with regards to experience in
3 the performance of the task?

4 A. So, I would say that -- I mean that's a tough one to judge.
5 So, I didn't start off in the Renton facility so we're speaking
6 only the Renton facility. I could not tell you that's like half
7 of my time there if that. But again, if the quality manual does
8 speak to having qualified, experienced, knowledgeable personnel
9 doing this work.

10 So, the Boeing Company has to provide or make an assessment
11 of those people. And the FAA is not part of that assessment. Our
12 assessment is, and I believe this was documented within one of our
13 findings, the assessment is if management is not, is not
14 conducting that assessment appropriately would they hire the right
15 people for the job.

16 So, again it's the PAH that makes the determination who is
17 the right person for the job to do the work to produce the
18 airplane.

19 Q. Earlier I had asked you if you felt like you were receiving
20 the work support you need to do the job and you answered in the
21 affirm, but what about the support from Boeing to do your job? Do
22 you feel that you are getting what you need?

23 A. Yes. I have not experienced any roadblocks, if you will. I
24 mean granted there is some times where it takes a couple of days
25 to get certain information. But as I mentioned if they don't

1 provide by the end of our audit then it's a noncompliance until
2 you prove otherwise. So, that's how we address it. All right.
3 If that's the information or, you know, what you're speaking to.
4 Yeah.

5 Q. In the time that you've spent in your assessment what is
6 Boeing doing well?

7 A. Well, you know, as I mentioned, willing and able, they're
8 willing to get, to try to get this right. I see that. But it's
9 the steps to prevent the reoccurrence that they're having issues
10 with. So, and that's the cycle that I was talking about. Right.

11 From my understanding of our procedures, our procedures are
12 written for a PAH to have an issue, figure out how they're going
13 to fix it, verify that it's fixed and then we don't see it for
14 some time. That's how our orders and instructions are written.
15 Unfortunately, we -- in this instance, we're having to constantly
16 go back through the cycle for some issues and that's where I
17 think, you know, we're having trouble aligning with their policies
18 and procedures.

19 But I do see that there's a willingness to correct the
20 noncompliance but figuring out exactly why or what is the issue
21 and how to prevent it from reoccurring again or at least for a
22 substantial amount of time, that's where they're going to call it.
23 So, if you ask me, what are they doing right, I think they're
24 really trying to get it right but they're having trouble figuring
25 out why it's wrong.

1 Q. And typically, I always ask like, you know, the antithesis of
2 the question which is what needs work? What they could they be
3 doing better? But it sounds like you might have just answered
4 that. Is there anything else you would add on to what needs work?

5 A. Well so I think going back to the previous question and kind
6 of answering this question the same way, if -- and this is for
7 any, you know, regulated entity or any entity. If you have a
8 problem and you're only looking at it to a pinpoint, you're never
9 going to fix, you know, the white marker problem.

10 It's a big problem but that one implemented solution per se
11 or fix may not necessarily address the entire issue. As we
12 mentioned this quality system covers multiple sites around the
13 country. So, the same, technically the same issues here should be
14 fixed in those other locations if they're occurring, right, with
15 the fix here.

16 It should be systemic as in a systemic problem. This
17 is -- the fix should also be systemic across all areas. That
18 would, that would my input.

19 Q. Okay. So, now I'm going to turn that eye inward, as a Boeing
20 ASI, you and your team, so it's kind of the royal you, what are
21 you guys doing well in your assessment?

22 A. Well what I've think we've started doing well is the
23 communication part of it where we, we're flowing that information
24 from supplier group to what we find at Seattle Delivery Center
25 back into the factory and that's the circle that I want to

1 maintain.

2 I think if we can, we can keep that, you know, motion going I
3 think it will help us -- I don't want to say be ahead of the game,
4 but if we're finding it and we're able to communicate to all three
5 sections within 582, 583 and depending on if it needs to go to
6 another AIR group, I think we can kind of address things prior to
7 even Boeing notifying that other team, if you will. So, we'll
8 know it, we'll know it first or as soon as it happens and be able
9 to communicate that out.

10 That's going to help us address issues I think better and
11 point out where we need to adjust our surveillance for the
12 particular team or area or oversight, that's the area.

13 Q. So, that was a little bit of a present tense, future tense
14 answer to what you do well, which I again asking the opposite
15 question is, what as a Boeing ASI team needs work. So, I'm not
16 sure what your answer just -- which question your answer just
17 answered.

18 A. Did you say what we do well or what we did well?

19 Q. Before I asked you what you, what are you guys nailing, what
20 do you do well?

21 A. That, yeah.

22 Q. But then you proceeded to say that, you know, these are the
23 things that you put in place for a future goal which makes me
24 wonder then is that something that you needed to do better and is
25 now being fixed. So, I just -- it was a little confusing for me.

1 So, do you have a different answer for what needs work?

2 A. I think for -- I can't think of anything that works right
3 now.

4 Q. So, my takeaway is that right now in your assessment the
5 Boeing ASI team is doing everything that they need to do well and
6 that there's nothing that could use improvement in order to
7 facilitate your job or to ensure better outcomes?

8 A. At the Renton factory, I'll say, yes.

9 Q. So, I'm going to follow that up, is there another location --

10 A. So, we also do --

11 Q. -- that needs work?

12 A. Well I won't say it needs work but there's also, we also do
13 ticketing. Right. So, that's another aspect of our, of our
14 team's job. So, there are multi facets if you will for performing
15 AWC where there's an experimental transport, so on and so forth,
16 so, you know, one thing that I've asked is to get some additional
17 training on those AWC operations to get a better understanding of
18 the different, you know, aspects of it. So, that's something I
19 think we could, we could probably improve on is experience within
20 that.

21 Q. Okay.

22 A. But as far as auditing, oversight activities, yeah, I think
23 we're doing well.

24 DR. WOODS: Okay. Well, that is all of the typical questions
25 I have. I always ask two concluding questions to everybody we

1 interview but before we get to that I want to make sure that
2 everybody has asked the questions that they wish to?

3 BY MR. LEVANEN:

4 Q. I'll ask one more. We talked about the SMS coming. It
5 sounds like there is some SMS at Boeing, right? And but it sounds
6 like it's going to be beefier with the new -- and you'll have
7 oversight for that.

8 Do you think with that enhanced SMS and oversight that it
9 will help drive to what you said Boeing struggles with, which is
10 steps to -- which identify the problem and then identifies steps
11 that are sustainable to correct it? Do you think that SMS, do you
12 think there's some value that that's going to, that'll help move
13 the needle in the right direction especially with your guys, with
14 the FAA oversight kind of riding herd on it?

15 A. So, the SMS from my understanding is going to focus mainly on
16 the safety aspect, you know, of whatever it touches. I don't know
17 how safety would play into the quality system non-compliances and
18 how that would affect your corrective actions. They are not
19 safety related. Right?

20 To me that's still falls under the quality part of it. You
21 know what -- obviously they're both trying to prevent reoccurrence
22 of whatever the issue is, quality, safety and maybe look, safety
23 looking at some points that maybe quality is not considering,
24 right, because we're just looking at, okay, how to build it, is it
25 built right, is it built to drawing.

1 Whereas safety is like, is it safe, is it going to cause
2 injuries, is it going to affect other systems when it's
3 implemented, things like that. So, I know that's not really
4 answering your question but I'm not sure how it will change that
5 much.

6 Q. Well I could offer that for us at the airline, we use it, we
7 use it the SMS, we apply it liberally toward quality and safety as
8 one. So, for example if you see four non-compliances like leaving
9 an oil cap off to just pick a crude example, we're going to
10 immediately institute an SRA for that.

11 It's going to be, it's going to be as a, you know, risk,
12 basically as a risk and you're going to do an SRA. You're going
13 to mitigate that. And then if you continue to have it now, you're
14 going to do a, you're going to do an ineffective risk control SRA
15 to follow on to that so you'll continue to grind through the SMS
16 system and so there might be some good opportunities.

17 Just something to think about, you know, like as it starts to
18 unfold to be able to really use that SMS to leverage the
19 consistent quality.

20 A. Okay. Yeah, because I think quality already does what -- I
21 think they're just changing the name and I don't know. I haven't
22 work in your, in your side of the house but yeah.

23 Q. Well as it, as it becomes more of a mandatory thing it might
24 even, there might be leverage that can be gained from it for both
25 sides.

1 A. Right. We'll get further instructions on how we're going to
2 integrate it. Yeah.

3 MR. LEVANEN: There you go. Thank you.

4 MR. CANTU: Yeah, thank you.

5 DR. WOODS: Go ahead, John.

6 BY MR. PETRUZZELLI:

7 Q. Jesse, the last comment you made was about training for you
8 guys for more as it relates to ticketing. Can you talk a little
9 bit more about that?

10 A. Oh yeah, I was just talking about more, you know, if you want
11 to call it OJT for us, right, there's a few folks out there, Dan
12 Swords is one who dealt with many experimentals, you know --

13 Q. Okay. And I'll --

14 A. -- and that sort of thing, so he would have been -- he's gone
15 now but we do have other folks there that I think we need as the
16 Renton team need to become more experienced with having those and
17 not just standards or exports but the other part of AWC. That's
18 what I was referring to.

19 Q. Okay. Got you. All right.

20 A. Yeah, yeah.

21 DR. WOODS: Is that it?

22 MR. LEVANEN: Thank you.

23 DR. WOODS: Pocholo?

24 BY MR. CRUZ:

25 Q. So, I just want to touch on a couple of things that Sabrina

1 said with regards to the employees know how critical they are in
2 their position. Based off the interviews that we've done with
3 Boeing there's numerous people that we identified that were fairly
4 new to the manufacturing and aerospace industry. Obviously, they
5 worked in McDonalds or somewhere else to bring in.

6 A. Right.

7 Q. I realize that your job is not to, as the FAA not to
8 determine whether they're qualified to do their job or not but --

9 A. Whether or not they're qualified to be hired to do the job.

10 Q. Right.

11 A. Once they're in the job it is our job to check their
12 qualifications.

13 Q. Sure, sure. But at that point since they are not -- don't
14 have experience in the production type facility when they're
15 building big airplanes, they don't see the big picture of what
16 they're doing could affect some thing downline. Right?

17 A. Mm-hmm.

18 Q. Because that's -- I guess that's the thing that we're seeing
19 is that some of these people that we've interviewed are quite
20 young, have no production experience working big airplanes, right,
21 and don't realize how important they are in the process. But
22 anyway that's, I know that that's something that you, as the FAA
23 you guys don't go into that. Right?

24 A. Yeah, we don't --

25 Q. Yeah.

1 A. -- determine if they're good enough to hire to perform
2 manufacturing, but once they're in manufacturing they have to
3 demonstrate that they can do the job which is our oversight
4 activities we'll identify if they're able to or not. Right? Do
5 they meet it -- do they build it to the instructions they are
6 provided.

7 Q. Yeah.

8 A. Yep.

9 Q. Okay. Is the FAA privy to all the internal audits that
10 Boeing does?

11 A. It's, yeah, from my understanding that we are, we can ask for
12 those.

13 Q. Okay. So, you, if you're doing an audit or something and
14 Boeing does internal audits themselves, all take the example of
15 the BPI 1581. They've done several internal audits, I think 30 or
16 so and closed x-amount and they're still, some of them are still
17 open. You guys are open, you guys get to see that, right?

18 A. We can request it and yeah.

19 Q. Okay. But does that happen most of the time, if you guys
20 ask, can we see what internal audits you've done on this
21 particular BPI or anything like that?

22 A. So, I think the, if I'm not mistaken, that happened during
23 the SAI, it was requested --

24 Q. Okay.

25 A. -- to review. Yeah. And there were some non-compliances

1 identified, in particular with scheduling and how they scheduled
2 the audits.

3 Q. Okay. Based off of your assessment, and you up within the
4 FAA communication, do you think Boeing has a communication issue
5 between employees, starting top to bottom?

6 A. Yeah. I think I gave one. I gave one example of that.
7 Yeah.

8 Q. Okay. Do you know if there's -- if Boeing has a fix for that
9 or are implementing something to help communication even better?

10 A. I'm not aware.

11 MR. CRUZ: Okay. That's it. Thank you.

12 BY DR. WOODS:

13 Q. Okay. Anybody else? All right. Final two questions and the
14 first one is I called it my king for a day question. So, if you
15 were king for a day and I handed you a magic wand that you could
16 wave and make a determination to change whatever you feel is
17 necessary to better things and that is specifically pertaining to
18 your job as an ASI over the Boeing company, what would that be?

19 A. I don't think -- I mean obviously king for a day is a pretty
20 big, pretty big title. Yeah, there's nothing I can think of.

21 Q. There's nothing that you would change to make things better?
22 I find that interesting because we're sitting in the middle of an
23 NTSB investigative interview --

24 A. Yep.

25 Q. -- for cause but there's no takeaways, there's nothing that

1 you would change with your magic wand?

2 A. (No verbal response.).

3 Q. Okay. So, the last question that I have would be given your
4 experience over the three years and I know you've been in Renton,
5 sure, so this is just in general your experience.

6 A. Right.

7 Q. But you had a little time to recognize it. You know, we had
8 asked you to come in to share your experiences and for the reason
9 that we are here, what is the one takeaway you would like us to
10 have as we leave and as we continue on our investigative process?

11 A. Can you repeat that again?

12 Q. What is the one takeaway that you want us to know as we go
13 forward, because we're going to continue --

14 A. Right.

15 Q. -- doing the investigative part, the data collection all of
16 that and make a determinations. What's the one thing that you
17 want us to know as we leave here?

18 A. Well we've stepped up our oversight as, you know,
19 we've -- it's been put out. I think the team is focusing more as
20 I mentioned prior on product. We're performing our assessments on
21 the product and ensuring that it's safe and not to say that we
22 weren't doing that in the past but we've kind of changed the way
23 we looked at our audit activities to move from the process part to
24 the product and I even thing the administrator mentioned that as
25 well if I'm not mistaken.

1 So, that's going to be our focus going forward. We're going
2 to continue to provide the oversight that's required of us to the
3 orders and that at least the team in Renton and I'm pretty sure
4 actually the entire team here, you know, is doing what we can to
5 identify any non-compliances and address them. We obviously we
6 cannot -- we don't -- we're not there 24/7. We can't see
7 everything. But we're doing what we can to address issues that we
8 find and get them corrected.

9 DR. WOODS: Okay.

10 MR. CANTU: That's it.

11 DR. WOODS: With that, any last questions? We good here?
12 Okay. We are going to conclude this interview at 1359 PT.

13 (Whereupon, at 1:59 p.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: ALASKA AIRLINES BOEING 737-9 MAX
IN-FLIGHT STRUCTURE FAILURE
NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Jesse Cantu

ACCIDENT NO.: DCA24MA063

PLACE: Des Moines, Washington

DATE: May 8, 2024

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.

Romona Phillips
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *
Investigation of: *
*
ALASKA AIRLINES BOEING 737-9 *
MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063
FAILURE NEAR PORTLAND, OREGON *
ON JANUARY 5, 2024 *
*
* * * * *

Interview of: MIKE HAGER, Frontline Manager, Airplane Oversight
Section AIR 582(A)
Federal Aviation Administration

Seattle, Washington

Tuesday,
May 7, 2024

APPEARANCES:

SABRINA WOODS, Ph.D., Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer Investigator
National Transportation Safety Board

NILS JOHNSON
Aviation Accident Investigator - Maintenance
National Transportation Safety Board

JOHN LOVELL, Investigator in Charge
National Transportation Safety Board

MATT RIGSBY, Accident Investigator
Federal Aviation Administration

TROY LEVANEN, Director of Maintenance
Alaska Airlines

DAN MARCOTTE, Air Safety Investigator
Boeing

JOHN PETRUZZELLI
International Association of Machinists (IAM)

MIKE RINEY, Onsite Representative
Spirit AeroSystems

REBECCA LIPE, Legal Counsel
Federal Aviation Administration
(On behalf of Mr. Hager)

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I N T E R V I E W

(9:42 a.m. PT)

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2
3 DR. WOODS: Good morning, it's 9:42 Pacific time on May 7th,
4 2024. My name is Dr. Sabrina Woods, I'm a human performance
5 investigator with the National Transportation Safety Board, along
6 with Pocholo Cruz sitting over there to your left, I'm co-leading
7 the manufacturing and human performance working group for accident
8 investigation Number Delta-Charlie-Alpha-Mike-Alpha-0-6-3
9 involving Alaskan Flight 1282.

10 The NTSB is congressionally mandated with determining
11 probable cause in transportation accidents and significant
12 incidents and with promoting transportation safety. But we can't
13 do that on our own, we're a pretty small organization, so what we
14 have here is parties to the investigation that help inform the
15 process and these are all the people that you're seeing here in
16 the room. So that you have a better understanding of who they are
17 and who they represent, we're now going to go around the room and
18 have them introduce themselves to you, so we're going to start out
19 on this side of the room with Pocholo.

20 MR. CRUZ: Hello, Mike. My name is Pocholo Cruz, I am the
21 co-chair, as Sabrina says, for this particular group. I'm an
22 aerospace engineer with a structures and maintenance background.

23 DR. WOODS: And we're going to come over here to Mike.

24 MR. RINEY: Good morning, Mike. Mike Riney, I'm with Spirit
25 AeroSystems, I'm their on-site representative here in Washington.

1 MR. RIGSBY: Good morning, Mike. Matt Rigsby, FAA's Office
2 of Accident Investigation. We know each other.

3 MR. HAGER: Um-hum.

4 DR. WOODS: Nils.

5 MR. JOHNSON: Nils Johnson, NTSB, I'm an aviation accident
6 investigator, my specialty is maintenance.

7 MR. LEVANEN: Troy Levanen, I'm with Alaska Airlines, I've
8 been with the airline for about 34 years. I'm the director of
9 maintenance and engineering safety.

10 MR. LOVELL: John Lovell, NTSB.

11 MR. PETRUZZELLI: John Petruzzelli, I'm representing the
12 International Association of Machinists.

13 MR. MARCOTTE: I'm Dan Marcotte, I'm a Boeing air safety
14 investigator from Southern California.

15 DR. WOODS: Okay, with that -- and Mike, is it okay to call
16 you that?

17 MR. HAGER: Yes.

18 DR. WOODS: Okay. That is everybody who's going to be asking
19 you questions today, so you have an understanding of who it is in
20 the room. We're here for you to share your insight as a member of
21 the regulatory and oversight team for the Boeing commercial
22 airplane company. To capture that insight, we will be using a
23 digital recorder. After the interview, we send the recording out
24 to be transcribed, the transcript comes back in, the party members
25 will have an opportunity to review it for any sort of

1 typographical errors and of that nature, we do not change the
2 content. Once we receive the certified copy back, that's what
3 will go forward to be a matter of public record in the docket
4 assigned to this investigation. Each of these group members here,
5 these party members, will have a chance to ask questions, we're
6 going to ask them one at a time, one person's going to go at a
7 time. We usually do two rounds, so everybody will ask theirs
8 first and then we'll have an opportunity for follow-up questions
9 because they know they're not to interrupt the person who's
10 currently talking.

11 Please answer all the questions to the best of your ability,
12 recognizing that "I don't know" is a perfectly acceptable answer,
13 if you don't know the answer, just say so, we'll move on. If you
14 don't understand the question, please ask for clarification; we're
15 going to do the same if we don't understand an answer. And if at
16 any time you realize you misstated something or you want to
17 reiterate something, feel free to go back, while we'll go in order
18 and go one at a time, you feel free to address whatever it is that
19 you need to. You are always entitled to one representative of
20 your choosing, I see that you have counsel here next to you, I
21 just want to make sure that you are recognizing this person as
22 your legal counsel.

23 MR. HAGER: Yes, I am.

24 DR. WOODS: Okay. Thank you, Rebecca, for being here, as
25 always, if you would please introduce yourself for the recording.

1 MS. LIPE: Rebecca Lipe, FAA, Office of Chief Counsel.

2 DR. WOODS: Okay. Please recognize that this is an
3 interview, this is not a deposition, so refrain from interrupting
4 the process or attempting to answer on behalf of your client, but
5 given that, if at any time you need a break, just let us know,
6 we'll go off record and for whatever you're choosing, if you want
7 to talk to counsel, if you just want to take a break, we'll make
8 that happen, just don't hesitate to say so. So with that, do you
9 have any questions at this time?

10 MR. HAGER: No.

11 DR. WOODS: Okay. Is everybody ready to begin?

12 UNIDENTIFIED SPEAKER: Yes.

13 DR. WOODS: All right, hardest questions first. If you would
14 please, for the record, state your full name and spell your last.

15 MR. HAGER: Michael Hager, H-a-g-e-r.

16 DR. WOODS: Okay. And the structure of this room is set up a
17 little bit unusually, but we're going to start over here to the
18 left with Pocholo.

19 INTERVIEW OF MICHAEL HAGER

20 BY MR. CRUZ:

21 Q. Hello, Mike, again. Thank you for being here and talking to
22 us. What is your current position with the FAA?

23 A. My position is a frontline manager or a supervisor of
24 aviation safety.

25 Q. And how long have you been in that position?

1 A. June of 2022.

2 Q. Okay. And prior to that, what position did you hold with the
3 FAA?

4 A. Senior ASI. Senior Aviation Safety Inspector, ASI. And
5 prior to that, was an Aviation Safety Inspector.

6 Q. Okay. And were you always here at -- here in Seattle?

7 A. Yeah, here in Seattle.

8 Q. Okay. And your positions in the ASI, was that strictly with
9 the Boeing Company?

10 A. No, I also worked with the -- what used to be called the
11 Seattle Manufacturing Inspection District Office, which is now the
12 Certificate Management Section, CMS. I started there when I first
13 hired in to the FAA and then I moved to the -- what was then
14 called the Boeing Certificate Management Office.

15 Q. Okay. And -- okay. And all basically overseeing the -- you
16 were the MIDO --

17 A. Um-hum.

18 Q. -- for the Boeing certificate, is that right?

19 A. No, I was at the MIDO for 23 other aviation companies --

20 Q. Okay.

21 A. -- in Northern California and here in Washington.

22 Q. Okay. So could you also please describe your professional
23 background before you worked for the FAA?

24 A. Before the FAA, I -- well, I was in the Air Force for 10
25 years and then I worked at the Boeing Company for 24 and a half

1 years or so, right around 25.

2 Q. Okay. And currently, who is your supervisor here in your
3 position, in your current position?

4 A. My current supervisor is Brian Knaup in AIR 580 and the
5 principal inspector is Bryan Kilgroe, he's in South Carolina.

6 Q. Is Bryan Kilgroe an equal to you on the --

7 A. I'd like to think so, but no.

8 (Laughter.)

9 MR. HAGER: The principal inspector is the principal
10 inspector for the entire Boeing Company and there's only one, and
11 that's Bryan.

12 MR. CRUZ: Okay.

13 MR. HAGER: Mr. Kilgroe.

14 BY MR. CRUZ:

15 Q. Okay. And currently, what is the biggest challenge in your
16 job, in your current job?

17 A. My current job, like you said, is being equals because we've
18 now stood up more frontline managers correctly, I mean, and that's
19 a new division, right, in the ICMD, the Integrated Certificate
20 Management Division, which is what the FAA has transitioned to.
21 Recently, what, last year in June, I believe it was, in 2023,
22 which is when we first did that changeover from the Boeing
23 Certificate Management Office, that was part of the MIO, the
24 Manufacturing Inspection Office for the manufacturing side.

25 Q. Prior to that change, where was Bryan Kilgroe in that

1 hierarchy?

2 A. Prior to the change, Bryan was the PI, still, and that was
3 when Jim Phoenix left in December, he left us here in December.
4 Jim Phoenix was the PI and the manager, overall.

5 Q. Oh, okay.

6 A. Prior to the change. And Jim left and came back from
7 Southwest, so --

8 Q. Okay.

9 A. We like to bounce around, it seems.

10 (Laughter.)

11 BY MR. CRUZ:

12 Q. As a manager, how many ASIs work for you or oversee the
13 Boeing production certificates?

14 A. Eight.

15 Q. Okay.

16 A. And two senior. So I have four down south and four up north.

17 Q. Okay, do you also receive -- do you oversee the ASIs in South
18 Carolina?

19 A. No. That's Bryan Kilgroe's area.

20 Q. Okay.

21 A. Only if it's delegated, right, and if he's out of office --

22 Q. Okay.

23 A. -- then there would be, but other than that, no, not direct
24 line.

25 Q. Okay. Do you correlate directly with anybody from Boeing as

1 an equal --

2 A. Nobody at Boeing is equal to me. In the FAA, including the
3 IAM, but --

4 (Laughter.)

5 BY MR. CRUZ:

6 Q. All right, okay. To your knowledge, I know you were -- you
7 worked at Boeing for a while, what is -- what's the quality system
8 at Boeing like?

9 A. It's very complex, I would say, because the quality system --
10 the quality system that I knew at one time was included in what we
11 called the Quality Operating Instructions because it was a QOI and
12 there was QOI [REDACTED] that I first started on and then it became part
13 of the enterprise Boeing system, which they've gone to an online
14 system now and they use the procedures and the BPIs, what they
15 call Boeing process instructions, and then they call them the
16 BPGs, the Boeing Process Guides, and then there's also desktop
17 instructions and other lower-level D documents, the documents that
18 they write from engineering, and from quality engineers and from
19 production engineers. So it's stretched out into that entire
20 system because quality is also included with all of that. Instead
21 of being a totally separate document, right, other than the
22 quality manual that they have.

23 Q. How does your ASIs -- how do they do trend analysis with
24 regards to Boeing quality or do they do trend analysis?

25 A. The Boeing quality?

1 Q. Yeah.

2 A. We use the Boeing ACAIS or airplane -- what do they call it
3 now? I have to get the acronym right. Aircraft certification
4 information system --

5 Q. Okay.

6 A. -- that we use.

7 Q. Okay. And does Boeing input stuff into that system and then
8 the ASIs review it or do the ASIs, based off of their audits, put
9 input into that system and then --

10 A. The ASIs put the input based off of the audits that they
11 perform in ACAIS, yes.

12 Q. Okay.

13 A. Boeing doesn't have a direct input into that. They are
14 working on having one because we're working toward that in the
15 ICMD.

16 Q. Okay. Just for my education, I know on a yearly basis Boeing
17 builds a work program for each of the ASIs, how does the ASI --
18 how does the FAA build that work program? I know that you have a
19 hundred and 63 elements that you oversee, right, is there a
20 minimum number for the Boeing production certificate that ASIs
21 need to do --

22 A. Yes.

23 Q. -- need to accomplish each fiscal year?

24 A. Yes.

25 Q. And if so, how many of those and how is that determined, how

1 is that built?

2 A. So the minimum is built out of FAA Order 8120.23 and Boeing
3 doesn't build anything for the ASI that was stated there.

4 Q. Okay.

5 A. The ASI builds their own certificate management plan using
6 the FAA order and there is a minimum chart, and I'd have to look
7 back again, it's on page 3-118, used to be, and it's a minimum
8 amount of audits that's required based on the level of severity of
9 the company.

10 Q. Is that per ASI or --

11 A. No, that's per location. Well, they do it per location.

12 Q. Okay.

13 A. Because ASIs are each assigned different areas, so --

14 Q. Okay.

15 A. Right.

16 Q. So how do you -- how do you determine which ASI is going to
17 work what area in the workplace?

18 A. It's done by the senior and the manager --

19 Q. Okay.

20 A. -- when we do our certificate management plan. They're also
21 assigned as what we call project managers because each project is
22 assigned, and each Boeing project has a project number and those
23 numbers are assigned to the individual ASIs.

24 Q. Okay.

25 A. That's what we call it, anyway.

1 Q. So it's basically, like you said, a minimum number --

2 A. Um-hum.

3 Q. -- that's assigned. I think we've heard the word, number of
4 18, 18 elements, and is that typical, is that minimum or do you --
5 can you do more, can you do less?

6 A. We always do more.

7 Q. More, okay.

8 A. We've never done less than what's required in the order.

9 Q. Okay.

10 A. That I've ever seen at Boeing --

11 Q. Okay.

12 A. -- since hiring in the FAA. There's always an overage, in my
13 opinion.

14 Q. Okay. Based off of prior to this particular --

15 A. Um-hum.

16 Q. -- fuselage leaving Boeing, which is in October of last year,
17 I believe --

18 A. Um-hum.

19 Q. -- what type of surveillance was being conducted by your
20 ASIs, were there any systemic issues prior to October with regards
21 to the Boeing certificate in Renton for the 737?

22 A. There's the tool control and the foreign object debris and --
23 and then there's also the -- what was the third one? We had three
24 that I was looking at.

25 Q. Okay. Were there -- were those LOIs against those particular

1 issues or were they VDRs by Boeing?

2 A. There's all, there's VDRs and there's CMPs, the FCARs, and
3 there's an LOI --

4 Q. Okay.

5 A. -- for FOD. Internal tank.

6 Q. Internal. Do you also look at the Everett facility or was
7 that --

8 A. Yes.

9 Q. -- strictly -- okay, so it's both, both Everett and Renton.

10 A. Um-hum.

11 Q. And as far as the ASIs were concerned, do you believe or do
12 they believe that Boeing was trying to do everything that they can
13 to fix the issue?

14 A. I believe they are. We have also quality management review
15 meetings and other meetings that we conduct monthly.

16 Q. Can you explain what those meetings are and what happens in
17 those meetings?

18 A. So the quality management review is like you were saying
19 about Boeing showing us what they're doing for their status of
20 what they're looking at and also what they're doing with the
21 company as far as their tool control, their certifications, they
22 have to be certified to do certain work and then they have
23 qualifications and then they provide all of that in a chart and a
24 graph.

25 Q. Okay.

1 A. And we discuss it.

2 Q. Okay. I know that the majority of the issues, obviously,
3 we're seeing in this particular case is specific to part assembly
4 removal. And I know, based off of the information that the FAA
5 provided the NTSB, there's been issues previously with regards to
6 removals, part removals with the Boeing production system. To
7 your knowledge, has this been a chronic issue with Boeing with
8 regards to trying to fix the issue of part removal or unauthorized
9 removals on production aircraft?

10 A. Yeah, removals are always an issue, in my opinion, because a
11 removal is based on out-of-sequence work, to begin with, right,
12 because if you have an actual installation plan and assembly and
13 if you never have to take it back apart, then you would never need
14 another removal. But the removal system is basically for out-of-
15 sequence work, in my opinion, and based off of the quality reviews
16 that I've done because the removal is simply that, you're removing
17 something for a reason, supposedly, and it should be a documented
18 reason, I mean. And if it's a documented reason, it's sometimes
19 out-of-sequence work because someone installed something before
20 something else got installed or something needs reworked, right?
21 So the removal process itself is basically, for me, it's out of
22 sequence.

23 Q. Okay. Are you familiar with the supplier assist program that
24 Boeing has?

25 A. Familiar, yeah.

1 Q. Okay. Are suppliers allowed to -- if there's work that needs
2 to be done on an aircraft, like you said, out-of-sequence work,
3 are suppliers allowed to gain access to the -- to the unit itself,
4 remove stuff and put stuff back in by themselves?

5 A. In my understanding of it, no. The suppliers should get hold
6 of the Boeing folks and then have them do the removal or the
7 rework that they give them access for so that they can do the work
8 on their, what they call warranty work, is what I hear the term
9 used most of the time is it's called warranty work and it's been
10 delivered to the final assembly areas and then they come in and do
11 their own work on their own systems and structure.

12 Q. So based off of that, we do expect them to also have Boeing
13 reinstall that, whatever was removed previously.

14 A. Yes. Yes, I would.

15 Q. There's been a lot of talk about the SAT system that Boeing
16 has. In the FAA's opinion, is a SAT a production record for the
17 airplane?

18 A. No. It's a shipside action tracker, is the SAT, and it's
19 just tracking like a work order or a problem that somebody thinks
20 that they have and it's not part of the actual production work
21 order, so --

22 Q. Has the FAA used or referenced a SAT previously in an LOI
23 that was used basically as evidence of an issue with regards to a
24 nonconformance issue on the production aircraft?

25 A. More than likely. Have I seen one? I can't recall seeing a

1 SAT used, but probably when we do what we call a request for
2 information, an RFI, we could request all of, you know, the SAT
3 and everything else that we would ask for.

4 Q. And that --

5 A. It could be used, right?

6 Q. Okay. So that's how you build the case as far as a
7 nonconformance with regards to Boeing's production then, right?

8 A. Um-hum.

9 Q. Has that potential.

10 A. Yeah.

11 Q. To your knowledge, what is Boeing's approved record retention
12 policy?

13 A. I think it's PRO [REDACTED] and they call it RIM, records
14 information management --

15 Q. How long do they --

16 A. -- and the policy is 10 plus.

17 Q. Okay.

18 A. It's in the quality manual, also.

19 MR. CRUZ: Okay. That's it for now, for me.

20 DR. WOODS: Okay, we're going to come across this way to
21 Mike.

22 BY MR. RINEY:

23 Q. Good morning, Mike.

24 A. Good morning.

25 Q. So have you taken part in recent -- within -- since -- just

1 prior to the accident, have you taken part in audits with your
2 team?

3 A. No, I don't usually take part in the audit. They do the
4 audits and the senior comes to me, tells me what the audit
5 findings were or they'll call me direct if they have an issue, but
6 I usually let boots on the ground, yeah.

7 Q. Since the incident, have you seen a change in behavior from
8 Boeing on their responsiveness to the FAA?

9 A. Yeah. I would say yes.

10 Q. Positive?

11 A. It's a positive. It's a positive to me, I know there's
12 higher-level meetings than what I attend, so I know that they're
13 getting information there when we have our lower-level meetings
14 that they're relaying to the team and I relay that to my team.

15 Q. What level within the Boeing leadership do you normally deal
16 with?

17 A. I deal with the quality management people and it's the VPs
18 and above.

19 Q. Okay. Pocholo was describing, as far as issues with
20 removals, are there any other items that are systemic types of
21 issues that Boeing's trying to address?

22 A. Most of them that come to me is the tool control, their
23 certifications, and the FOD, the foreign object debris, or I call
24 it housekeeping.

25 Q. Do you manage only the Renton and Everett teams --

1 A. Um-hum.

2 Q. -- or are there any supplier teams that you manage?

3 A. No, I don't manage the supplier teams unless she is out of
4 the office, just like I said, with Bryan Kilgroe's team in South
5 Carolina, we do have a supplier team and a fabrication team now
6 that we have the ICMD, but we've always had the supplier control
7 system and there's always been a separate manager for that.

8 Q. The fab team is in Auburn, here, locally?

9 A. Auburn.

10 Q. Okay.

11 A. Auburn, Winnipeg, they're all over. Salt Lake, yeah.

12 MR. RINEY: Okay, I think that's all I've got for now.

13 DR. WOODS: Okay. Matt.

14 BY MR. RIGSBY:

15 Q. Okay, just a couple. Mike, the -- you mentioned the
16 inspectors assigned to specific areas, is that -- by areas do you
17 mean Renton and Everett or --

18 A. Yeah.

19 Q. -- like a flow day assignment?

20 A. Yeah, so the ASI assignment is Renton and Everett for me, and
21 then I also assign them to the project, like Jesse Cantu has the
22 3-7 Renton factory and preflight and then I also have another
23 senior, Neil (ph.), has SDC and flight test, as we call it, right
24 there at Seattle, and then I have my senior up in Everett and the
25 ASIs that are assigned there are also assigned to each model, so

1 they're assigned to a 6-7 and the trip 7 in my group up there.

2 Q. When the inspectors do audits, is it just the inspectors that
3 are assigned to that facility or do other inspectors come in to
4 assist?

5 A. Other inspectors can come in to assist because if we have a
6 lot of people be in training down is Oke City, Oklahoma City, at
7 the Mike Monroney academy, especially since we have -- we have a
8 few new people, right, that's come in from D.C. in May or -- what
9 is that -- well, I forgot the acronym.

10 Q. Defense Contract Management.

11 A. Defense Contract Management Association or Division. But
12 anyway, if they're gone, then they'll have other team members.
13 There's usually a team lead and a team member, there's usually at
14 least two on an audit.

15 Q. Okay.

16 A. We try for. Or sometimes they go alone, as they get more
17 progressive in the system.

18 Q. And when they do these audits, is -- they're auditing for
19 compliance?

20 A. Um-hum.

21 Q. Do they -- if they see a -- I mean, can they stop production
22 if they see something critical?

23 A. If it's safety related, yes. If they deem its safety and
24 they will ask the engineers because an ASI can't deem safety, they
25 can see something and know that this is probably wrong and they'll

1 call our engineering office and our engineering team to determine
2 if it is a safety related issue because during the QSAs it's the
3 same way, the quality system audit, it's the same.

4 Q. Okay.

5 A. If there's a safety item and it's critical, they can shut it
6 down, yeah.

7 Q. Okay. I guess when you're looking for an inspector to come
8 in and work for AIR 582, I guess what are the qualities or what
9 are the backgrounds that you're looking for, for an inspector?

10 A. It's usually a minimum of five years in a quality system
11 organization, working at industry or working in the military or
12 somewhere that they've done some kind of auditing, also, and
13 inspection and aircraft inspections, so that's usually what I'm
14 looking for.

15 Q. Okay. And I know this is somewhat subjective, but --

16 A. Um-hum.

17 Q. -- do you have current positions that you're trying to fill?

18 A. Yes, we do. I have six right now I'm trying to fill.

19 Q. Okay. So that would bring your team up to 14?

20 A. Um-hum. Ten to fourteen because I have three in each spot
21 that I'm looking for.

22 Q. Okay.

23 A. Yeah.

24 Q. After this accident, what actions has 582 taken in response
25 to the door plug?

1 A. In response to the door plug, we were there the day -- that
2 Saturday after, and then we also did what they call a principal
3 inspector audit that same weekend and that week, and then we went
4 into what they call the special attention item audit in the order
5 and then we did that for four to six weeks and now we've done what
6 the Administrator called upon us to do, the enhanced oversight,
7 which we're calling EO, which confuses Boeing because they call it
8 emergent operations, we call it enhanced oversight, so we're doing
9 that monthly now, we have a monthly open audit that we're doing at
10 Boeing. And we've also done second shift during those audits for
11 a week at a time.

12 Q. As a result of those audits, have there -- have there been
13 any LOIs issued?

14 A. Not at the moment, we're working on doing that.

15 Q. Okay.

16 A. And we're working with our AGC friends to determine how that
17 will be done through the order of 2150.3.

18 Q. Okay. When you're doing these audits, what are the flow-down
19 requirements to the suppliers like Spirit?

20 A. The suppliers, it's usually the supplier control audits and
21 they'll do production orders or their purchase orders and they
22 flow down their quality system through their notes and their
23 contract.

24 Q. Do FAA ASIs participate in those -- or those supplier audits,
25 as well, with Boeing?

1 A. Yes. Yes, ASIs do the supplier control audits.

2 Q. And how many in Wichita, for Spirit, how many ASIs do we have
3 assigned?

4 A. Currently, I believe it's two, which is Deke (ph.) and Chuck,
5 and we're looking at getting more, I know that Sue is working on
6 that as the manager of that operation. Before, we had a handoff
7 and we still use the handoff system in the audit for the ACAIS
8 system that we use, so we had handed that off to Chuck Prior at
9 the -- at the Kansas MIDO previously, prior to all of this.

10 ICMD, that we stood up there this year, I call it this year
11 because, you know, it hasn't made it to June yet, but -- yeah. So
12 Chuck was still there at the moment and doing SCAs and we were
13 looking for others, because I know it's a big facility, also, and
14 they do more than one model.

15 Q. So the Boeing production certificate is approved by the
16 FAA?

17 A. Um-hum.

18 Q. Is Boeing an ISO certified --

19 A. No.

20 Q. -- company?

21 A. No, they follow a lot of the ISO and put it into quality,
22 their system, talking about ISO but no, they don't have a third
23 party.

24 Q. Okay. My last question is on SMS and the training that
25 inspectors get. Have all of your inspectors been through the --

1 at least, the CBT or eLMS SMS training, that you're aware of?

2 A. That I'm aware of, yes, they've taken the CBT and then
3 they're scheduled for the academy.

4 MR. RIGSBY: Okay. Okay, that's all my questions.

5 DR. WOODS: Nils.

6 BY MR. JOHNSON:

7 Q. Good morning. I'd like to dig back into the -- how the work
8 plan is generated. When we had a previous interview with the PI,
9 he told us that the senior manager or the -- sorry, the manager
10 and the senior ASIs generated the work plan for them. I think I
11 heard, when you answering Pocholo, that you said that the ASIs
12 build their own work plan, so I just want try to get that clear in
13 my head.

14 A. They do. So the ASIs will put together their plan and then
15 the senior would review that plan, and then the manager reviews it
16 and they can change it based on what we know is risk after we've
17 evaluated the year through the RBRT, what they call risk-based
18 resource targeting in the system, yeah.

19 Q. Okay.

20 A. Basically, the same thing.

21 Q. All right, that goes to the next question, which is how is a
22 risk profile generated and I think you just answered that.

23 Systemic problems, you answered that. Number of inspectors at
24 Renton was four, is that correct?

25 A. Um-hum.

1 Q. Current. What is the FAA doing to ensure the quality system
2 is working at Renton?

3 A. Enhanced oversight and other QMR-directed meetings, right,
4 with the Boeing Company, is what I would say.

5 Q. And you mentioned out-of-sequence work is a problem for
6 Boeing, is anything being done to minimize or reduce the out-of-
7 sequence work that's --

8 A. They targeted it as one of their items of targeting, as they
9 say, but I know that they've also put out at Spirit, it wasn't a
10 3-7 for our Max line, but it was for the P-8, they put it out with
11 zero travelers, as they call them, they call them travelers or
12 out-of-sequence work that is incomplete and then would be sent to
13 final assembly, so I know that's happening, according to the
14 higher-level maintenance folks.

15 MR. JOHNSON: Thank you, that's what I have for this round.

16 DR. WOODS: Okay. Troy, you're up.

17 BY MR. LEVANEN:

18 Q. When you say -- just following with that, with the travelers,
19 you say that they did it for one of the lines but not for the Max
20 line?

21 A. They're working on all the lines, right, but that one just
22 happened to be for the P-8 that they presented as an example.

23 Q. (Indiscernible)?

24 A. Yeah. And I forget what line number that was, but --

25 Q. Seems like a good idea.

1 A. Seems like it.

2 Q. What was your -- if you don't mind me asking, what was your
3 experience at Boeing before you -- before you worked your way
4 toward the FAA? You said you were there for 24 years, but I
5 was --

6 A. Um-hum.

7 Q. -- curious what that looked like.

8 A. Yeah. So I started out as a quality inspector at the Boeing
9 Company and then I moved into functional tests and then over to
10 the field as an AMTI, what they call an AMTI, an airworthiness
11 maintenance technician or whatever. And then I went on into the
12 management side as a production manager and then I went over to
13 the ODA for a little while, the ODAR, they were ODARs then, and
14 then the ODA. And then I went into the quality management side
15 for a little while, delivering Triple Sevens and 6-7s and 4-7s
16 there in Everett.

17 Q. So when you were a quality manager, you were at -- or when
18 you were a production manager, you were at Everett.

19 A. Everett.

20 Q. Got it. I like what you said about the EO and then also that
21 it was a path to, you know, a better oversight product, how long
22 do you anticipate that that will stay in place or is that kind
23 of --

24 A. Forever.

25 Q. Think so?

1 A. I anticipate that being here forever, as the Administrator
2 told us that's what we do. I feel that way about doing
3 airworthiness, also. The Administrator told us we'd do that,
4 also, after the two crashes, unfortunately, with 400 and some
5 lives. So we've been doing airworthiness since then.

6 Q. Okay. Thank you for that.

7 A. Um-hum.

8 Q. I was going to ask about your challenges at Boeing/Renton,
9 but you covered those pretty well. One of the things I was still
10 curious about, just to get my head around, was the PI is from --
11 is a PI at multiple facilities, so to speak, do you feel like
12 that's a good jump-lift (ph.) that works or would it be better to
13 have an individual PI for each facility?

14 A. We're looking at doing that. So the PI, the principal
15 inspector, has worked for manufacturing, I don't know for how
16 long, with the FAA, with the MIO, the manufacturing inspection
17 office, so you have -- you know, no company's as big as Boeing, I
18 guess, right, but if you take, you know, the mom and pop shops and
19 stuff, you know, and I've been out to those facilities where it's
20 just the broom closet, right?

21 Q. Yeah.

22 A. That's their PMA or TSO, parts manufacturing approval or
23 technical standard order. And then the principal inspector is the
24 inspector for those companies and that's what it is here, what
25 used to be the Boeing CMO, there was one principal inspector that

1 the company could talk with, the same as we do with the company,
2 we have one point of contact for the quality system and that's the
3 VP of quality, right, that we've got in the order and then we made
4 it that that's who they talk to, each other.

5 But the rest of us, I agree, I think that there could be more
6 PIs for each model, I'd even like to see the production
7 certificates split up for each model, if you want to treat them
8 that way, because then you could shut it down, in my opinion.

9 Q. Yeah.

10 A. I don't see shutting down the PC no more than you've shut
11 down the type cert.

12 Q. Right. That's good information, that helps me get my head
13 around it, it feels like that was kind of -- I share some of your
14 thoughts. And then one quick question on the number of -- so
15 you're going to add, it sounds like, maybe up to six inspectors,
16 which is great, that's music to my ears from the airline
17 perspective. Would you roughly split those half and half of
18 Everett and Renton is what you got in mind?

19 A. Yeah, I think the Renton factory's had more, overall, since
20 I've been in the FAA, they've always had more because they also
21 included the fabrication division, but now we split that up, also,
22 so now you have two different sections, right?

23 Q. Um-hum.

24 A. So yeah, they'll usually have more at Renton than they do in
25 Everett, there's always been only one ASI in Everett on each

1 model, even though they're twin isle, but they're a slower
2 production line, as you know.

3 Q. Yeah. Okay.

4 A. Um-hum.

5 MR. LEVANEN: That helps, thank you. And I think that's all
6 for this round. Thank you.

7 DR. WOODS: John.

8 BY MR. PETRUZZELLI:

9 Q. Mike, you talked about you guys do requests for information
10 to the company, how, in your opinion and your experience, how
11 responsive has Boeing been and I mean both from a timeliness
12 perspective and a complete and transparent perspective?

13 A. Well, at the Boeing Company we usually have a 10-day draw on
14 requests for information, so within that 10 day's time frame
15 they've been better in the last four years, I would say, or five
16 in getting that information to us versus prior to and they also
17 run it through their legal and sometimes it's redacted information
18 and then we'll have to go back and ask them for unredacted because
19 we also try to include that in our requests now, for unredacted
20 information because we don't want it redacted, it's no good for
21 items approved or any other thing, once it's messed with. It's
22 got to be the original.

23 Q. Okay. It seems that I've heard this term a number of
24 different times and from your perspective, do you still see it,
25 "blame and train"?

1 A. See a lot of that sometimes in their responses to our FCARS
2 or CMPs or formal corrective action requests, you'll see the blame
3 and train. What we call blame and train is where they blame the
4 individual employee and they say they need training or retraining
5 or something like that is what we call blame and train, if that's
6 what you're calling blame and train.

7 Q. Can you describe for everybody in here what -- and I'm
8 talking current state and stick to the 3-7 for this question, but
9 what help, support or other resources do the Boeing ODAs give to
10 you and your team? And has it been value added?

11 A. The Boeing ODA is always value added, in my opinion. They
12 represent the FAA when we're not there and they have always been a
13 part of that team and they always share the information with us,
14 any kind of concern or items.

15 I have had a pretty open communication with their
16 administrator, Walt Greer (ph.), also with Steve Eckhart (ph.)
17 there on the 3-7 and now it's Karen and Mike Szekely, so they
18 always share and we always share back, and I try to always make
19 sure they know what the order changes are and any forms because
20 some of them don't have access to forms, so -- but yeah, they're a
21 great asset, as far as I'm concerned.

22 Q. Do your FAA coordinators help you?

23 A. Yeah. Also, the FAA coordinators do assist and they also go
24 through the AWT, the airworthiness tool that they developed at the
25 Boeing Company, which is different than our FAA airworthiness

1 certification tool. And so do the DQMRs, the deputy quality
2 manufacturing representatives, they're very instrumental on the
3 program.

4 Q. What else? You said that things have gotten better,
5 particularly with RFIs in the last four years, so basically post
6 the two accidents?

7 A. Correct.

8 Q. Do you or does your team hear or see -- I'm not poking at
9 undue pressure on ODAs, I'm poking at do you guys still see the
10 pressure that's placed on shop floor mechanics to get the job done
11 at any cost?

12 A. We would only see that during an interview during the audit,
13 we don't normally see that during our airworthiness time spent at
14 SDC, but the crew is not normally there.

15 Q. But during the audit?

16 A. That's usually one of the questions that I ask people to ask,
17 is the schedule versus quality aspect.

18 Q. What's been the general consensus last year, for example?

19 A. The consensus so far is it's quality over schedule.

20 Q. Okay. And that was after all the stand-downs that the Boeing
21 Company performed?

22 A. Prior to the stand-down it still hasn't changed, as far as a
23 safety culture.

24 Q. Is there -- and again, using you and your team as an example,
25 the interactions you have with the shop floor people and the

1 quality people and the field people, what could that
2 communication, how the things they talk to you about versus the
3 senior executives you also have to deal with, do -- do the
4 concerns from down here get up to here, unfiltered, today?

5 A. I think today they do better. I think in the past, they
6 weren't and I've always said, at most of the higher-level meetings
7 that I attend and can be at, I've always asked is that information
8 getting to the floor, I always ask the representatives there and
9 anyone that's in the meeting that's saying they're changing things
10 and they're fixing, say, PROs and BPIs and anything like that, is
11 that information making it into the floor. And in many cases, it
12 hadn't, but it does now.

13 Q. And do the concerns that the people on the floor, are they
14 getting up top unfiltered or is there still some filtering going
15 on?

16 A. I think it's unfiltered, in my opinion.

17 Q. Is it better today than it was six months ago?

18 A. Yes.

19 MR. PETRUZZELLI: I'm good for this round. Thank you, Mike.

20 DR. WOODS: Dan.

21 MR. MARCOTTE: Yeah.

22 BY MR. MARCOTTE:

23 Q. Just a couple things, just kind of -- one's going back a
24 little bit, so I think it was Pocholo who was asking about
25 analysis, so if I understood correctly, your ASIs, they go out and

1 do their audits, their audit findings are put into a system and
2 then at some time there's a process for data analysis on their
3 findings. Kind of at a high level, what's coming out of the
4 analyses?

5 A. Failure to follow the process.

6 Q. Okay.

7 A. So the top level was failure to follow the process and
8 procedures.

9 Q. Okay. Did you -- and I don't know if it would come out of
10 this process, but you know, it sounds -- you know, you had some
11 issues around out-of-sequence work --

12 A. Um-hum.

13 Q. -- driving risk.

14 A. Yeah.

15 Q. Would your analysis show that, also?

16 A. Yes. The analysis does show out-of-sequence being a risk.

17 Q. Okay. So when the analysis is performed and you see whether
18 you call them issues or concerns or I'm sure they turn into
19 metrics or presentations, how is that reviewed, I mean, what
20 happens after the analysis so that it can turn into FAA's actions
21 or activities?

22 A. Um-hum. So it's reviewed by the PI, the principal inspector,
23 and then also our branch level, it used to be the MIO and now that
24 would be the Brian Knaup level at 580 --

25 Q. Okay.

1 A. -- prior to it being instrumented as our next year's
2 certificate management plan, right.

3 Q. Okay. So then, I think we heard in the prior meeting that,
4 you know, last year's actions or activities were pulled in, so
5 that's the process to --

6 A. Um-hum.

7 Q. -- building the new plan, okay.

8 A. Yes.

9 Q. And building off of some of John's questions, just in
10 general, what are you -- you know, how's the Boeing -- and let's
11 go back before, you know, last year, not January since, but going
12 back to last year, two years, how do you think the Boeing/FAA
13 relationship is, do you think Boeing's been, you know, open,
14 honest, transparent, timely?

15 A. Yes, I do. Since Jim Phoenix came on board. Jim Phoenix
16 came on board to implement what they call the voluntary safety
17 management system, Mr. Phoenix came over from the Alaska CMO and
18 then they've been much more transparent and open in their
19 communication with the FAA. Prior to that and prior to AC 00-68,
20 you know, in one area the FAA says we're consolidating and another
21 area we split up, right? So you have AC 00-58, the voluntary
22 disclosure program that Flight Standards now uses, and then AC
23 00-68, the voluntary disclosure plan for manufacturing. So once
24 68 was implemented, Mr. Phoenix and the Boeing Company are much
25 more transparent in talking and sharing information. Prior to

1 that, there were no VDRs, there was no discussions at Boeing, in
2 my opinion.

3 Q. Um-hum. How far back was that implemented?

4 A. What was that, five years, four years?

5 Q. Okay.

6 A. AC 00-68, what was that, 2016, '17, something like that.

7 Q. Okay.

8 A. Same with those consolidating.

9 Q. Yeah. And so do you think that communication now, you know,
10 open, honest, transparent, is that at all levels now, do you
11 think, from your auditors who go and do the stuff on the floor up
12 through all levels of leadership?

13 A. In the FAA or at Boeing?

14 Q. Well, both.

15 A. Both?

16 Q. It's a relationship, so both sides, right?

17 A. Both sides, yeah, like mom and dad, yeah, they're -- you
18 know, if you split them up, you get two different answers, but --
19 you know.

20 (Laughter.)

21 MR. HAGER: So yeah, in the FAA, it's totally transparent and
22 I think that the auditors on the floor get a lot of transparency
23 from the individual working, though, because they're the working
24 people, right?

25 MR. MARCOTTE: Um-hum.

1 MR. HAGER: And they're always open and willing to talk to
2 us. And then the upper leadership is now starting to be that
3 way --

4 MR. MARCOTTE: Okay.

5 MR. HAGER: -- along with their voluntary SMS.

6 MR. MARCOTTE: Thank you.

7 MR. HAGER: Yeah, you're welcome.

8 DR. WOODS: That's it, Dan?

9 MR. MARCOTTE: That's it.

10 DR. WOODS: Okay. I guess I'm up.

11 BY DR. WOODS:

12 Q. So we've mentioned a couple times the voluntary SMS, the
13 voluntary SMS, but that's changing, it's changed --

14 A. Um-hum.

15 Q. -- essentially, full implementation, TBD 36-ish months from
16 now.

17 A. Yes.

18 Q. How do you foresee that workload changing for your people in
19 their day-to-day activities? How do you foresee how you guys are
20 going to "do SMS"?

21 A. Do SMS? More data analysis and more reviews, because it's
22 just another tool in the toolbox because for manufacturing they
23 have to abide by their quality management system. And it's a
24 voluntary, like you said, they got three years to implement and be
25 on board and be compliant with the SMS.

1 Q. How do you -- how would you explain the link between SMS and
2 QMS to some, like, noob off the street?

3 A. New off the street, oh, I see. The quality management system
4 is their operating procedure and the FAA order says they have to
5 have one, and now the FAA orders also say they have to have an
6 SMS, a safety management system. So a safety management system,
7 to me, is ensuring, before you make changes, you've evaluated that
8 system to ensure the change doesn't influence and inject safety, a
9 problem or risk or anything that happens.

10 Q. So if we're taking on -- I know you said it's another tool in
11 the toolbox, right now, like today, do you feel you are
12 appropriately poised to take on that new responsibility?

13 A. Oh, absolutely.

14 Q. Your people? The royal you.

15 A. Yeah. Well, my people will be. Me, I am, but my people will
16 be, yeah, as they get trained and brought up to speed on the SMS
17 because, like you said, it's already there for the airlines, it's
18 been there for a while now, five, six years. Seems to work, it's
19 another tool, right?

20 Q. So prior to this incident occurring, so let's go from, you
21 know, December of 2023 back, from a manpower point of view -- I
22 guess manpower and tools, did you feel you had what you needed in
23 adequate measures --

24 A. So --

25 Q. -- and again, the royal you, your team?

1 A. -- in any meeting -- the royal me, in any meeting, if I would
2 go to as far as FAA, you know, you never have enough tools and you
3 never have enough personnel. And you never have enough money,
4 so --

5 Q. Yeah.

6 A. -- that's always the three, right.

7 Q. But could you quantify this is what I need more to meet
8 inroads to --

9 A. Um-hum.

10 Q. -- make like significant strides?

11 A. So that would be like 15 to 20.

12 Q. And what do you have now?

13 A. Right now I've only got six or actually eight, four in each
14 spot. And at one time there was only one, so -- as we say, you
15 know, it's Highlander movie, there can only be one, one PI, and
16 that's it, so --

17 Q. Are they lopping each other's heads off?

18 A. I hope not.

19 Q. Okay.

20 A. But they are very competitive, though, right, you know,
21 everybody is. Humans.

22 Q. So since this incident, have you seen -- what changes have
23 you seen in potential for manpower, tools, money?

24 A. The empire's growing and it's an open checkbook, right, right
25 now, it seems like, and for people, which we've never had before,

1 the government doesn't have any money other than the taxpayer's
2 dollar. But it seems to be that it's growing, it's an empire
3 building exercise at the moment. Yeah. At one time I knew the
4 FAA, there was two people that oversaw the whole entire Boeing
5 Company. And now there's 45 of us and we'll probably grow to at
6 least a hundred. As the company grows, right? And it's got its
7 fingers in every piece of the pie.

8 Q. I want to talk about that term, the EO, the enhanced, you had
9 said earlier, I think somebody asked you, I think it was Nils, who
10 asked how -- or maybe Troy -- how long do you foresee that
11 continuing in your life, forever and ever?

12 A. Forever.

13 Q. I find it interesting because the word enhanced inherently
14 means like a step above, a cut above, something a little extra,
15 something a little better --

16 A. Yeah.

17 Q. -- and so for sustainability purposes, it seems like that
18 concept would actually be finite to me, and you're talking about
19 infinite and so for sustainability purposes, is that feasible?

20 A. No, just like airworthiness isn't feasible, to continue to do
21 that forever. It's not our main objective, it's our oversight, we
22 do oversight.

23 Q. Um-hum. Because, to be honest, when I heard it, it also
24 means that if you're enhanced --

25 A. Um-hum.

1 Q. -- I mean, obviously, maybe there's been a deficiency before,
2 let's be realistic, we've identified that --

3 A. Um-hum.

4 Q. -- but if this is enhanced, this is not the only production
5 game out there, well, what about some other industry
6 manufacturers, does that mean that they're -- it triggered a lot
7 of questions for me.

8 A. They do. And I agree.

9 Q. So are they just oversight or do they get enhanced, too,
10 or --

11 A. I don't know, I can't speak for them.

12 Q. Okay.

13 A. I only oversee the Boeing Company --

14 Q. Yeah.

15 A. -- here in the ICMD.

16 Q. Okay. And I respect that, I just had questions about how
17 long does enhanced last for. Okay. Going back to -- I think Nils
18 brought up about travelers, essentially, the nonconformance
19 issues, you know, that has been -- I guess, compare -- I feel like
20 everything pivots on, you know, January 5th of this year, so prior
21 to that, was there the same level of attention and scrutiny and
22 concern over these travelers versus now? Have you seen a change
23 there?

24 A. There's a change at the Boeing Company.

25 Q. Yeah.

1 A. There hasn't been a change at my level.

2 Q. Okay. And I do mean from an FAA point of view.

3 A. But I've always -- I've always thought there was a problem
4 with the travelers and the out-of-sequence work and we've voiced
5 that at many meetings, but -- yeah. And one of the oversight or
6 the out-of-sequence problems for me is when you build 400, 500
7 airplanes in a production system and then you don't finish them,
8 they park them everywhere, including the parking lots, which I'm
9 sure you have pictures of from the first two crashes and then
10 they're everywhere, right, they built 500 of them, so there's a
11 lot of out-of-sequence work, in my mind, with doing that.

12 Q. Um-hum. So when these things are recognized, and I know it
13 goes into your risk assessments and then also into, you know, what
14 you tend to audit for the next few years, the out years, how many
15 lines of communication are built off of a concern like that, like
16 who are all of the different players that you would be talking to,
17 ASIs up through you, up, who are all the different players,
18 identify them for me, please.

19 A. There's only three levels for me --

20 Q. Okay.

21 A. -- and that's my level, the PI, and then the branch level.
22 And then the branch level builds with everybody above them, right.

23 Q. Okay.

24 A. Up to the Administrator.

25 Q. That's within the FAA with --

1 A. Um-hum.

2 Q. -- the oversight, what about to Boeing?

3 A. To Boeing?

4 Q. Yeah.

5 A. I deal with the frontline managers, the VPs, and above. I
6 can talk to anyone at Boeing and I usually do. And I do the same
7 here in the FAA, I've been talked to about that, too. You know,
8 because I just call whoever I want to call and then they tell me,
9 you know, there's a chain of command.

10 (Laughter.)

11 MR. HAGER: Yeah, so I just think everyone should be able to
12 talk to anyone, so -- when it comes to safety.

13 BY DR. WOODS:

14 Q. Yeah. I'm just trying to figure out how the information --
15 because some things I hear, it seems like it's pretty stovepiped,
16 like everybody works in their little neat lane and then sometimes
17 it sounds like it's more of a collaborative effort and I'm trying
18 to figure out where this kind of information -- the knowledge that
19 you know, that you've harnessed through your years of experience,
20 the knowledge that your ASIs bring up through you, is that more
21 collaborative or stovepipe?

22 A. It's collaborative now, it was stovepipe.

23 Q. When was that change?

24 A. Jim Phoenix.

25 Q. Okay.

1 A. That change was with Jim.

2 Q. Okay.

3 A. Prior to that, they were all liars chasing thieves.

4 (Laughter.)

5 BY DR. WOODS:

6 Q. On both sides?

7 A. On both sides. It didn't matter.

8 Q. Okay.

9 A. From my leadership, anyway.

10 Q. Okay. John had mentioned the -- you know, the blame and
11 train. Again, I'm going to tap into your experience, what's a
12 more ideal path than "that guy did it, we're going to train him,
13 it's going to be fine"?

14 A. A more ideal path is the root cause corrective analysis and
15 digging deeper than finding -- than just pointing to the employee
16 because the employee only knows what they know. And they usually
17 come in and they get trained through what they call their indoc
18 (ph.), right, and then if you get your indoc and then everybody
19 remembers indoc and they never change their mind, even if changes
20 are made, their mind never changes unless they get told to change,
21 so -- so they end up with blame and train. And they use that just
22 to get out of what they're doing, in my opinion. Open and closed,
23 right? The case, just open and close it.

24 Q. How do you suppose that affects the safety culture there at
25 Boeing?

1 A. The safety culture itself?

2 Q. Um-hum.

3 A. It's impacted, I'm sure. It's an impact when you do that,
4 just as when I was a manager and it impacts it when I walk them
5 out and have the state police come in and walk people out in front
6 of the whole crew, make sure it makes an impact. Because when you
7 do it wrong and you stamp stuff off wrong, can you accept that,
8 that's your accountability and your responsibility. They should
9 never do that.

10 Q. That sounded very specific, is that something you
11 experienced?

12 A. Absolutely, I've experienced all that in my lifetime.

13 Q. So next question in stages, prior to five years ago, so we're
14 going to go, like, you know, Star Trek date time stamp, 2019
15 prior --

16 A. Um-hum.

17 Q. -- how would you describe the safety culture at Boeing?

18 A. The safety culture was continuing to drop when they brought
19 in the next generation quality idea of quality engineering running
20 quality.

21 Q. Can you give me some insight as to why that would be?

22 A. Because they take away the inspector. But the FAA spent time
23 telling them we don't care who inspects, we just want it
24 inspected. So which means you don't have to name an inspector,
25 you can have anyone do it. In my translation.

1 Q. And did it seem to you at that time "just anyone" was, in
2 fact, doing it?

3 A. No, they weren't at the time, but it turned into that, as it
4 appears. When they removed the quality inspection plan.

5 Q. Um-hum. The people that were then doing that work, do you
6 feel that they were at the same level of skill as their
7 predecessors?

8 A. No.

9 Q. So then moving forward, 2022 to December of 2023, how would
10 you describe the safety culture at Boeing?

11 A. Improving. With the voluntary SMS. Thanks to Jim Phoenix.
12 I give Jim all the credit.

13 Q. Okay.

14 A. Most.

15 (Laughter.)

16 DR. WOODS: I'm going to have to call this guy.

17 MR. HAGER: Um-hum. Call him back as a consultant, will you?

18 DR. WOODS: Okay, I'll remember that.

19 MR. HAGER: Okay, thanks.

20 BY DR. WOODS:

21 Q. What are some of the benchmarks or hallmarks that you saw
22 that were your -- I guess your gaits for seeing that it was
23 improving?

24 A. Less blame and train in responses.

25 Q. Um-hum. Now post-January 5th of this year, 2024, how would

1 you describe the safety culture at Boeing?

2 A. Improving.

3 Q. Improving over what was happening in the 2020 to 2023 --

4 A. Improving over the improvements that they'd already done,
5 right --

6 Q. Okay.

7 A. -- because now they're actually talking and they had stand-
8 downs and they actually asked the employees --

9 Q. Okay.

10 A. -- what could fix what they have, right --

11 Q. Okay.

12 A. -- because what they have isn't working, as you can see.

13 Q. What would -- again, from your experience, what would be the
14 thing that you would like, if you could, you know, put your finger
15 on the pulse, what would you like to see improved the most, like
16 this is the one thing you need to focus on?

17 A. Quality.

18 Q. It's a very broad term, sir.

19 A. Well, it is because it's everyone's responsibility and
20 everyone makes quality that's put out, not just the inspector.

21 Q. So an aspect, I guess, of where quality is injected in the
22 process.

23 A. Well, it can't be at the very end, as in airworthiness, you
24 know, it needs to be throughout the product, throughout the
25 product line itself. And as they've removed, as they do, because

1 of industry, in our quality standard, the American quality system,
2 right, that says they don't need it anymore as long as someone
3 does it. But like you said, that's two different hats and people
4 have to know which hat they're wearing when they're doing what
5 job. Same as the ODA, right?

6 Q. Who's the best fit for manipulating change to that? Should
7 that be --

8 A. The frontline manager.

9 Q. For who, the oversight or for the industry?

10 A. For the industry, is the frontline manager. The boots on the
11 ground.

12 Q. Back to your team here, and I've heard from repeated people
13 that there's a bit of a hiring spree right now, which -- so what
14 do you -- with the implementation -- I know somebody had asked
15 what do you look for, you said the quality background, things like
16 that, and that's great, of course, from an ASI perspective, but
17 with the introduction of the new rule for SMS, at that new hire,
18 what are you looking for?

19 A. We're still looking for the same for the SMS, it's voluntary
20 and we'll train SMS. That's what the FAA's trying to do now is
21 show us how that's done for manufacturing and building the academy
22 classes and having us go to that, so that hasn't changed for me
23 for hiring right now at the ASI level.

24 Q. Do you think that it takes a certain kind of temperament,
25 personality, or behavior in order to be good at that job?

1 A. Yeah, it does. It's a critical job. And it takes being able
2 to deal with people, not just machinery.

3 Q. So those are some of the things that you look for as a hiring
4 manager?

5 A. During the interview.

6 DR. WOODS: That is all I have for this round, so that
7 concludes -- I think we've been at it for about an hour.

8 MR. CRUZ: A little over an hour.

9 DR. WOODS: A little over an hour, how are we feeling?

10 Breaks?

11 UNIDENTIFIED SPEAKER: I'll take one.

12 DR. WOODS: Looks like -- okay, with that, then, we are going
13 to go off record at 10:50 Pacific time.

14 (Off the record at 10:50 a.m.)

15 (On the record at 10:59 a.m.)

16 DR. WOODS: We are back on the record at 10:59 Pacific time.

17 Pocholo.

18 BY MR. CRUZ:

19 Q. Hey, Mike, just a couple of follow-ups for me.

20 A. Um-hum.

21 Q. BPI 1581 basically documents Boeing's assembly and removal
22 process. Have you seen, based off your ASIs' input, issues with
23 regards to this particular BPI when you're doing audit
24 surveillance with Boeing?

25 A. I haven't this year.

1 Q. Not this year, okay.

2 A. Not this year.

3 Q. But you're saying -- you previously said, I believe, that
4 failure to follow process was a big issue with Boeing.

5 A. Yes.

6 Q. Would you consider then, this particular BPI is part of that
7 process?

8 A. Yes, it is.

9 Q. And based on the information that you provided us, that you
10 don't specifically audit this particular BPI as part of your
11 element in the work program, which element would look over this
12 particular BPI process?

13 A. It would be the manufacturing process, what we call the
14 manufacturing process. Manufacturing and control.

15 Q. So any audits that the ASIs make on those -- on that
16 particular set of elements would cover this process itself and I
17 just wonder, based off of, you know, you haven't seen it this
18 year --

19 A. Correct.

20 Q. -- have you seen it the previous years, work program?

21 A. If we use the Stargate time, yes, because if you go far
22 enough back, then the BPI 1581 is -- what it is today is what,
23 60-some pages, but at one time it was like 10, but that's what
24 it's grown into today because of the automated systems, right,
25 because now we have an automated system, it was a piece of paper,

1 before processes, right, you put down what you're removing, a part
2 number, the nomenclature, the okay to remove was by the quality
3 inspector, the okay to install and then they reinstalled and then
4 retest, there's only like five blocks. But now, with the
5 automated system, that's a lot of clicking and steps on a
6 computer, so it's grown to what it is today. And then they've
7 also removed the quality okay to remove, as far as I understand, I
8 haven't read it in a while, but the okay to remove is totally by
9 production and then quality comes in later on that automated
10 process.

11 Q. I don't know how familiar you are with the change history of
12 the 1581, but obviously it would appear that Boeing has a lot of
13 -- made a lot of changes to this particular document, maybe to
14 make it a lot clearer for people and to be able to gauge this type
15 of issue with regards to the production system. In your opinion
16 -- and obviously, Boeing's also done internal audits with regards
17 to this particular BPI --

18 A. Um-hum.

19 Q. -- and obviously, the FAA has also seen a lot of VDRs from
20 Boeing and you guys have highlighted some LOIs with regards to the
21 BPI.

22 A. Yeah.

23 Q. In your opinion, based on all -- and through the history of
24 this thing, which goes back to 2013, from what Boeing is telling
25 us, what is the reason why Boeing is having so many issues or so

1 many LOIs, VDRs, regarding this particular removal process?

2 A. That would go back to the safety culture, for me, because of
3 the individual employees not writing removals.

4 Q. Is that because of the experience of those individuals or is
5 that because of --

6 A. It could be the experience or the understanding of the BPI
7 itself, I know that on the back now they've listed a table of
8 items that don't need removed, right, like for a functional test
9 or access panel doors, you know, if they're open and closed. If
10 it doesn't come totally off the airplane, they act like it doesn't
11 need to be removed, in my opinion, but that's not what the process
12 is really for.

13 It's a process that if you remove it after it's been accepted
14 through the quality system, if an installation is complete and if
15 you remove it, then there should be a removal. Even if you
16 disturb the process, right, it should be removal.

17 Q. And I know Boeing's done a lot of analysis on this particular
18 process and they've highlighted a lot of root cause analysis, do
19 you think that their process for root cause analysis is adequate
20 enough to make sure that this doesn't happen, you know, throughout
21 its production system?

22 A. I think the root cause analysis was sufficient at the time,
23 but for now it's people, it's the people that are doing those
24 removals, you have to follow the process and write the removal.
25 If you need to disturb a system that's installed, then you need

1 that removal. If the paperwork is complete, it's done.

2 Q. Are your ASIs a little bit more heightened, or do they look
3 for more of these issues with regards to removals during their
4 audits?

5 A. They have, in the past. I haven't asked them to do that,
6 myself --

7 Q. Okay.

8 A. -- because it is part of the normal process of the audit. If
9 there is a removal, they should investigate the removal and make
10 sure it's followed by the process and it was done, but it's hard
11 to look at something that wasn't documented.

12 Q. Sure.

13 A. If there's no removal, they're not looking at it.

14 Q. Sure, sure.

15 A. Yeah.

16 Q. It makes sense, right. Just to be clear, you mentioned that,
17 in your opinion, splitting the PIs' duties into separate, I guess,
18 5-7 or 6-7, Triple Seven, 4-7, is that something the FAA is
19 looking at versus having one person have that or is that -- is
20 that -- did I hear that properly?

21 A. We are looking at it internally at the ICMD level with the PI
22 right now because the PI, like I said, is in South Charleston or
23 North Charleston, actually --

24 Q. Right.

25 A. -- and then he's brought that up a few times to where we're

1 talking about it and it's been done before at other companies, I
2 guess, we're looking at it, to have additional PIs, yes.

3 MR. CRUZ: Okay. I guess that's it, that I got for now.

4 Thank you.

5 DR. WOODS: Okay. Mike.

6 BY MR. RINEY:

7 Q. I have a few follow-up questions here. So was the FAA
8 present at any of the Boeing safety stand-downs?

9 A. Yes.

10 Q. Have you seen any of the recent -- since the Boeing stand-
11 downs, have you been present at -- or seen any of the speak-ups
12 that have been submitted?

13 A. I haven't looked at any of the speak-ups myself, personally,
14 I see the numbers during the -- what I call the QMR meetings,
15 right, they show how many they're working and what -- some of the
16 items that came through that speak-up or stand-down that they had.

17 Q. Okay. You mentioned some of the training concerns from the
18 quality side. Have you seen issues with the -- either the
19 mechanic or the inspector side with their knowledge of what
20 they're -- work they're supposed to be performing?

21 A. I've looked at the audits that's been done by the ASI and
22 yes, some of those do show some of that, yeah. That the training
23 or lack thereof, or that's what the individual said, he had been
24 trained or known what we were showing them, of their own
25 processes.

1 Q. Has Boeing shared what their responses are to that?

2 A. They do when we give them a letter, we get that in the
3 response, that's kind of what the blame and train language is, if
4 we see they're -- they say that they weren't trained or they're
5 being retrained, yeah.

6 Q. Does the FAA accept those responses?

7 A. Sometimes, not always.

8 Q. Since they're repetitive.

9 A. We won't say we always accept that, no, because we have
10 rejected some of that, back for a better root cause analysis than
11 just blame and train from the audit itself --

12 Q. Okay.

13 A. -- with the ASI, yeah.

14 Q. Some of what you had spoken to earlier on the -- what
15 responsibilities the FAA would have with Boeing that you said
16 would never go away, do you believe that Boeing will ever get
17 their delegation back for their certificate?

18 A. Yes, I do. I'd like to have already given it back myself,
19 personally, but, you know, I can't do it.

20 Q. Yeah, you had mentioned the number of units in storage versus
21 the units coming through today, do you feel the quality is
22 improved on the units being produced today versus the units in
23 storage?

24 A. Yes, the ones coming out of the factory show that trend
25 through our airworthiness certification, yes, versus the

1 storage one. Um-hum.

2 MR. RINEY: Okay. I think that's all I have.

3 DR. WOODS: Matt.

4 BY MR. RIGSBY:

5 Q. Mike, you mentioned the ODA and the inspectors, are there any
6 ODA ASIs out on the factory floor?

7 A. ODA ASIs, yeah. They're there for conformity. The ODA does
8 perform request for conformity, they don't just do the
9 airworthiness stuff, they do request for conformity, so they're
10 working certification projects. They're not there to audit the
11 Boeing Company or to do an investigation, that's the ASIs' duties
12 and job responsibilities. Yeah, they're out doing most of the
13 other delegated work, right, the delegated work, yeah.

14 Q. Okay. Are there designees at the Renton facility?

15 A. Yes.

16 Q. Okay.

17 A. There's an ODA office within the Renton facility itself.

18 Q. Okay. Do the ODA -- do the designees recognize the
19 criticality of their job?

20 A. The designees, yes.

21 Q. How about the ASIs?

22 A. Yes, the ASI does, yes. Absolutely.

23 Q. How about the workers on the floor?

24 A. I don't know for sure, I don't see any signs for that, like
25 you said, because -- I see some in Everett that talks about

1 quality is you or they have their, you know, their "Speak Up"
2 signs now in the language somewhere on the floor, but a lot of
3 people would just see that and never read it, and so if they're
4 told, hopefully they're told in their crew meetings or their
5 stand-downs or at least someone will tell them how critical their
6 work is.

7 Q. Okay. Have your ASIs identified any door plug removal
8 paperwork?

9 A. No.

10 Q. Hotline complaints. Do your ASIs work them?

11 A. Yes, we work hotlines.

12 Q. Do you know, by chance, how many hotline complaints you have
13 had since this event?

14 A. Since this event, I think I've got eight in my organization,
15 just here, not in South Carolina, but here in Puget Sound.

16 Q. Sure. Do you think, has that number increased?

17 A. Yes.

18 Q. Okay. On an annual basis, how many of those -- the hotline
19 complaints, I believe, you can see if they -- if they're anonymous
20 or not, right?

21 A. Um-hum.

22 Q. How many are anonymous versus non?

23 A. Half, at least. There's at least half there that are
24 anonymous.

25 Q. Okay. And how often do you have to out-brief those to upper

1 management, the status of them?

2 A. We brief it once a week. And we're now what they call --
3 they have a special process investigator, so AIR 843 is running
4 that show and we're the second investigator to help with the
5 Boeing processes and procedures. But we were all doing just
6 hotlines and now they've broken that out here in the FAA and they
7 got a program where they're calling special process investigators
8 and they're the number one on it and then we're second, and then
9 when they get overloaded, we take it back over, of course. The
10 senior ASI will be the SPI.

11 Q. And ultimately -- so is AIR 843 responsible for that or is
12 the PI responsible for the final outcome?

13 A. The PI signs off on the final outcome. AIR 840 is the one
14 that sends it up to AIR 11, the actual office of the hotline.

15 MR. RIGSBY: Okay. Okay. Okay, I think that's it.

16 DR. WOODS: Nils.

17 BY MR. JOHNSON:

18 Q. A couple follow-ups for me. Do you see a significant
19 difference between the quality of production at Everett versus
20 Renton?

21 A. I see a slower process in Everett versus Renton, but I don't
22 see a significant difference other than they do have different
23 processes, some of -- they'll call it out in some of their
24 procedures at 3-7 only, there will be a 3-7 only process that's
25 used down at the 3-7 line, but other than that, they're identical,

1 the production line.

2 Q. Okay, a follow-on to that. Do you see a difference in
3 personnel training between Everett and Renton?

4 A. In the training itself? I don't really get into their
5 training, I have started looking at that and have our ASIs look at
6 it, but I do see that -- it seems they get put with mentors versus
7 what they do in Everett. Everett, I don't see as many workplace
8 coaches or whatever they're calling them, workplace coaches or
9 subject matter experts that they're assigned with prior to being
10 put actually on the floor, doing the work themselves.

11 Q. Do you feel the training is adequate at Renton? If not, what
12 would you do to improve it?

13 A. I would do the instructing myself, but the -- now, the
14 training is adequate to a point when they come in for orientation.
15 I think the certification process needs to be improved because it
16 seems everybody forgets their birthday and they're always red,
17 right, it's always red in the QMAR, and we're talking about that
18 and, you know, now it's your birthday, I can't make it any better
19 than that, so you won't forget to get your certs done, right.

20 I've always had trouble with that, but they have three months
21 to get their certs done and then one qualification for me or the
22 main point in any QMR from my ASIs or any project manager is no
23 one's working on the airplane that's not certified and it's like
24 FOD, the foreign object better not be on the aircraft, better not
25 be on the product.

1 Q. I'm going to go one step further, so --

2 A. Um-hum.

3 Q. -- we've talked to some folks about the -- previously worked
4 at Renton -- or sorry, previously worked at Everett and they said
5 there were like authorizations to do -- to touch doors, for
6 example, you had to be -- you had to have a qualification or an
7 authorization to actually touch the door, and we go to Renton and
8 we talk to people and they say you don't have to have anything but
9 OJT, it just feels very different to me. Do you view that the
10 same or am I --

11 A. No, it's different because they have a certification, what
12 they call the BSS, Boeing Specification System 7600, so they do --
13 a lot of the door folks up in Everett are door certified, they
14 call it door certified, but it's for the twin aisle, for some
15 reason they decided to go that route, I guess, but down here, they
16 don't, it OJT and the door.

17 Q. Last two.

18 A. It's still a door crew, though, right?

19 Q. Correct.

20 A. They're assigned as just the door crew, yeah.

21 Q. Okay, they give you the number.

22 A. Yeah.

23 Q. BPI 1581 of -- looked at a whole bunch of removals. I will
24 say my opinion is they're lacking a lot of detail around the
25 actual removing and installing of whatever it is they're

1 disturbing --

2 A. Um-hum.

3 Q. -- and have a whole bunch of safeties, I mean, there's like a
4 hundred lines of safety stuff, you know, watch out for this, don't
5 do that, don't fall out of the door, don't let something hit you
6 in the head.

7 A. BHS (ph.), right.

8 Q. But then, all of a sudden you get to the actual removal step
9 and it's like "take it off." I come from a maintenance background
10 and we're always -- we probably have very little of the safety
11 stuff other than probably watch yourself.

12 A. The warnings and cautions, yeah.

13 Q. But we have a lot more in terms of the steps needed to remove
14 and install buy-backs, et cetera, and I think that's -- I see that
15 missing and I want to know what you thought.

16 A. So I know they've improved on that and they can ask the
17 planner, what I call the planner, they now call them manufacturing
18 engineers, right. So the manufacturing engineer can write work
19 instructions to cover any rework that they're doing or any
20 removal, if they're asked to do so, because they have to go get
21 the drawings and in a maintenance field, you've got the documents
22 and the maintenance manuals and all that, and they call out steps.
23 But for here they have to go by the drawings and then a lot of
24 times there's many drawings, as you say, like you said, but for
25 the removal itself, sometimes they'll even put, what is it, PNNA,

1 part number not available, and then once you get the part off
2 you're supposed to put the part numbers in there once you remove
3 it. But some people never go back and do that, either as we
4 found, like you're saying, but if they do (indiscernible), but
5 PNNA. Yeah, there's -- the automated system has done that to us,
6 it seems, I mean at Boeing.

7 It's because of the -- like you said, there's cautions,
8 warnings and notes, and EHS and don't be more than four feet, you
9 know, and fall off a ladder and carefulness versus the actual
10 removal itself, so -- but the removal itself should contain the
11 four -- and the five steps or whatever. The part number, the okay
12 to remove, okay to install, installed and retest if there's any
13 retest, so --

14 Q. Okay. Last one, you mentioned if there's no removal you
15 can't review it, which I completely agree with.

16 A. Yeah.

17 Q. How is the FAA finding that no removals have been written
18 because that has been cited in like previous LOIs?

19 A. Yeah. So we find it through the request for information.
20 Sometimes we'll have a hotline, like you're saying, if a hotline
21 comes in and someone's saying hey, they removed a bunch of the
22 parts over here and no one's doing anything, so we go do a
23 hotline. If we do a request for information, then we'll ask for
24 the documentation because usually quality should be writing up
25 unauthorized removals, at least that's how it was in my day. So

1 if you're walking around the airplane doing surveillance and you
2 see parts removed, someone should ask the question "What's going
3 on here," right, "What's happening?" And if there's no removal --
4 at one time quality felt punished by having the right to removal
5 themselves, right, so therein lies where they moved quality off of
6 the okay to remove and put it on to manufacturing, so
7 manufacturing has the right to removal.

8 But now they write unauthorized removals and that's what you
9 find in most of the documents is we've looked at a hundred and
10 some unauthorized removals and that should be a documented
11 nonconformance on what they call a pick-up, or fix-it ticket is
12 what I call it now, it's a pick-up, but they just write a pick-up
13 and it says unauthorized removal and, you know, senior or quality
14 buy-back or management buy-back required, but they have the right
15 to removal once they find an unauthorized removal.

16 MR. JOHNSON: Thank you, that's all for me.

17 DR. WOODS: John.

18 BY MR. PETRUZZELLI:

19 Q. Yeah. I think you talked about removing inspections off IPs.

20 A. Um-hum.

21 Q. Can you describe for everybody the verification optimization
22 that was going on six, seven, eight years ago now and where that's
23 at today and what --

24 A. Okay. Well, so VO, as it was called, verification
25 optimization, is another part of what I call the next generation

1 quality and they were calling it a verification process and we
2 were telling it to inspection and our orders talked about
3 inspection and tests, you got to meet the inspection and tests.
4 So we would continually talk with them about this process and
5 verification optimization and they used what they called, in their
6 system, an inspection record change request, an IRCR.

7 Quality engineering was using IRCRs and removing inspections
8 as far as in processes and then other process inspections and the
9 only buy-off that a quality inspector was on was the final, the
10 final inspection was still quality because you can't remove
11 quality from the record, so -- in the system itself. And that
12 happened quite often and now there was another LOI and they --
13 well, you know, in the terms of the Beatles, they called them the
14 Fab Four, so it was four parts of that LOI.

15 One was process monitoring, process surveillance,
16 verification optimization and there was one more, but that was
17 part of that LOI, to move that back into a conformance and they
18 now call it a conformance system, so you're conforming product, I
19 guess, I think, instead of doing the inspection. And it's called
20 PRO [REDACTED], conformance system. And that's also what they call BPI,
21 the business process instruction, [REDACTED], which says how they can do
22 that process. And yes, they removed quite a few inspections and
23 some of those inspections have been placed back on to those IPs
24 now, since the LOI and having the conformance system change
25 language, you know, words matter, so --

1 Q. Are they still going -- are they still trying to reinstate a
2 lot of those inspections?

3 A. A lot of those inspections have been reinstated, yes.

4 Q. Okay. And I talked about this many times, stability.

5 A. Um-hum.

6 Q. How would you compare and contrast our stability, company
7 stability, from five years ago versus today?

8 A. That would be a personal opinion, I guess, and in review at
9 what goes on at the company, the PAH for the Boeing Company. So
10 they had a golden handshake, what I call a golden handshake,
11 everybody retired and left and they gave them bonuses and said
12 please go away, so a lot of folks left the company and then they
13 decided that -- we were told in other meetings that too many
14 people left, so they were brought back as consultants or trainers
15 or whatever and they're bringing people back to help in certain
16 areas, like the wings and other areas of the company.

17 So the stability, where it was, at a loss for a little while,
18 and the training was -- lacked, I would say, versus the highly
19 skilled and motivated workforce of the past, but everybody thinks
20 that each time a changeover happened. As I say, when leadership
21 changes, we paint the walls and move the furniture.

22 (Laughter.)

23 BY MR. PETRUZZELLI:

24 Q. True story, actually. When you guys are doing your audits
25 post-January 5th, how -- can you quantify how many failure to

1 follow processes you guys -- you and your team discovered, and
2 quantify it however you like, but --

3 A. So in the outbrief, from the SAI and from all the audits, it
4 was a combined audit and they were calling -- they say there was
5 96 non-compliances and of those 96 they could've been down to 18
6 if they would've followed the process --

7 Q. Wow.

8 A. -- is what I remember. I don't know if that's an exact right
9 number, but that's what I remember. And we briefed that to the
10 Boeing Company on the outbrief. It's probably on the way up
11 somewhere.

12 Q. Are you guys still seeing -- when I say you guys, your team
13 that, for example, is out doing airworthiness and their regular
14 audits, are still seeing whether or not -- were there instances of
15 folks not following policy?

16 A. I haven't seen that, where they're not following policy.

17 Q. Process, sorry. I'm sorry.

18 A. I've seen not following the process, but yes. Still.

19 Q. Is it improving?

20 A. It has improved.

21 Q. Trending in the right direction.

22 A. Trending in the right direction, as we say, yes, because it
23 has improved since then.

24 MR. PETRUZZELLI: I think that's all I'm going to ask, Mike.

25 Thank you.

1 MR. HAGER: Um-hum.

2 DR. WOODS: Dan, you're up.

3 MR. MARCOTTE: Yeah, I think all my follow-ups have been
4 asked. It's kind of nice being at the end of the line sometimes,
5 that's where I like to be.

6 MR. PETRUZELLI: Don't rub it in (indiscernible).

7 BY DR. WOODS:

8 Q. I have just a few more questions to tack on to what some of
9 the others have said. Going back to the changes, and I know in
10 the aftermath of this particular incident, you know, of course,
11 there's scrutiny like on the Boeing Company, there's scrutiny on
12 the FAA, and I know that the FAA Administrator has been reactive
13 to some of that scrutiny, so I guess my question is that from that
14 level, so from that highest-up level that you can possibly get
15 within the FAA, have you seen mandated changes to how you and your
16 team are supposed to do business now and if so, what are some of
17 those changes?

18 A. The only change I've seen was the enhanced oversight --

19 Q. Okay.

20 A. -- that he mandated, right, that he stated that we would do
21 and that's what we've done.

22 Q. Was there like a recipe book that came along with that?

23 A. I wish. No. There's no recipe for enhanced oversight
24 because our oversight is by the order and by the regs and we were
25 doing just fine. But like you said earlier, on the previous

1 question, an enhanced is an indication there was something
2 lacking, so -- yes. That's the only recipe we've seen and then we
3 developed that ourselves and then we briefed that higher up on how
4 we do that. Enhanced oversight.

5 Q. And how was that received?

6 A. Received quite well because no one had the recipe, like you
7 said, so --

8 (Laughter.)

9 MR. HAGER: So of course, anything you could give them would
10 work, right, pretty much. So since we're boots on the ground and
11 I'm boots on the ground oriented to where, you know, they're doing
12 the work, they should know how to do that and they can tell us how
13 to do it.

14 BY DR. WOODS:

15 Q. So to be clear, no recipe, was there a definition of what
16 enhanced should be?

17 A. Well, if I follow the C.F.R.s and the orders, then enhanced
18 oversight just means more audits, to me, and now we're auditing
19 every day, right, we are doing an audit every day. At least being
20 visible and seen, I always wear my FAA vest except for here today,
21 since I came to the regional office center, but if I'm ever at
22 Boeing, you'll see I have my vest on and it says FAA. I try to
23 wear the one that only says it on the back so they don't see me
24 coming, there's one that says it on the front, too.

25 (Laughter.)

1 MR. HAGER: But I try to only wear the one on the back, so
2 they only see me walking away. But yes, I always try to show
3 visibility and we need to maintain that visibility at the company
4 because there's people that can work there 30 years and never know
5 who the FAA is. In the back shop, not at final assembly, right,
6 delivery. On the off shifts, too. I call them odd shifts, is
7 that okay?

8 UNIDENTIFIED SPEAKER: Absolutely.

9 BY DR. WOODS:

10 Q. So what are the key components of an SMS's safety risk
11 assessment prior to changes --

12 A. Um-hum.

13 Q. -- was there an internal FAA safety risk assessment on some
14 of these changes?

15 A. On our changes --

16 Q. Yes.

17 A. -- for the enhanced oversight and audit?

18 Q. Yes.

19 A. No.

20 Q. Okay, I was just curious.

21 A. Yeah. But I am on the safety risk management of the Boeing
22 1581 and that was already going on prior to the incident or the
23 accident.

24 Q. Who's responsible for conducting risk assessments at Boeing?

25 A. At Boeing?

1 Q. Um-hum.

2 A. The safety officer and the quality system.

3 Q. That's a lot of responsibility for a company the size of
4 Boeing.

5 A. Um-hum. Yeah.

6 Q. Do you feel the safety officer and that office are well
7 equipped to (1) be able to detect where assessments might need to
8 take place and (2) handle the actual assessment process?

9 A. Yes. Yes, they are. He's just a figurehead like our
10 president, he's got a whole team below him. Like you said, it's a
11 lot of responsibility and you can't shirk that, but -- yeah.

12 Q. Do you see a point in the future where that technician level,
13 that worker bee level, will be able to conduct and understand,
14 like, on-the-fly risk assessment?

15 A. Yeah, I think they do that today.

16 Q. You do, you feel that that's already been established?

17 A. Yeah.

18 Q. Okay.

19 A. Both in the military and at companies and industry because
20 people on the floor know really how to fix it. They're usually
21 the technicians that do the maintenance, but if you got your good
22 engineering, right, because everything takes an engineer before
23 you ever start to build anything, so if you've got good design and
24 good process, then yeah, they would know if something's wrong.

25 Q. Okay. Do you feel that the tools that are in place currently

1 for identifying something's wrong and getting that information up,
2 are they adequate right now at Boeing?

3 A. No. They're improving.

4 Q. Um-hum.

5 A. Because they only started the "Speak Up" and they've only
6 started a lot of those processes within the last few years.

7 Q. But in your assessment, people are listening?

8 A. Yeah.

9 Q. Because in my experience, people can squawk all they want but
10 if nobody's hearing --

11 A. That's right.

12 Q. -- there's no point. Okay.

13 A. Yeah. But we still go to the seminar.

14 Q. Okay.

15 A. I agree.

16 DR. WOODS: Well, I think that's it for me for my last
17 go-around, although I do -- everybody else is familiar with it, I
18 have some last terminating questions that I always kind of -- I
19 ask everybody who comes in and chats with us, but before I get to
20 those, I want to make sure, it looks like Pocholo has one, anybody
21 else?

22 MR. RINEY: Yeah.

23 DR. WOODS: Oh, okay. So we'll start with you, Pocholo,
24 follow-ups.

25 BY MR. CRUZ:

1 Q. Yeah. Just, I know that your team probably has given you a
2 lot with regards to information with regards to this particular
3 incident. As Nils mentioned before, there is a qualification for
4 door personnel in Everett and I think you've --

5 A. Um-hum.

6 Q. -- assessed that, however, in Renton there isn't one. Do you
7 know whether Boeing is looking to qualify door personnel in
8 Renton, have they said anything to you about any changes with
9 regards to that particular certification?

10 A. They haven't said anything to me --

11 Q. Okay.

12 A. -- in that regard.

13 Q. Okay. And again, I'm sure your team has already talked to
14 you numerous times, in your -- who at the Boeing Company should be
15 able to work on a plug door, which team at Boeing typically would
16 work on the plug door?

17 A. Production, right, the production employee --

18 Q. Okay.

19 A. -- that's assigned to the door crew. The door crew.

20 Q. Okay. Lastly, for me, is I'm sure you've seen the history of
21 this BPI itself through the years 2013 issues since then, why do
22 you think the FAA has not been able to get Boeing to fix the issue
23 of removals going far back to 2013, in your opinion?

24 A. I think the FAA has fixed it in spurts, like you said, back
25 to 2013, it goes in waves. Just like the training or anything

1 else, sometimes it's better, sometimes it's worse, so -- is it
2 permanently fixed? As you can see, no. I don't know if it will
3 be, it's kind of like foreign objects, I don't know if that will
4 be fixed, either, it's like housekeeping, for me, and cleanup.

5 Q. Is the current environment, do you think, or the safety
6 culture in Boeing plays a role in that or --

7 A. Absolutely. They play a role every day, the production and
8 the quality team. Nobody in Mahogany Row, as I call it, ever
9 takes care of that other than like what Sabrina said, if you can
10 squawk it, no one's listening. But if the floor understands the
11 criticality of all of that, then they'll take care of it.

12 Q. And do you think they have the right personnel down on the
13 floor to try to take care of that, like you said?

14 A. Well, the layers of management can be improved upon. As
15 we're building our own empire in the FAA, there's other layers
16 that everybody has to speak to, so yeah, it can be fixed, it's
17 been fixed before and it can be fixed again with the safety
18 culture. But you know, each generation's different, you know.

19 People that never leave home don't think they need a job, so
20 it's hard to hire and keep people employed at times and then have
21 that sustainability because like you said, you spend the money in
22 training and education and it's almost like kids through college
23 and then they quit the last semester. It's like man, I paid for
24 all that, then you quit on me.

25 Q. Yeah.

1 A. And I'm speaking from experience.

2 (Laughter.)

3 MR. HAGER: But yeah, it can be. It can be improved, it's a
4 big company and they used to take the high road, as you say, and I
5 always take the high road when it comes to safety, but in my
6 opinion, it was an engineering company at one time and then it
7 went all over the world getting CEOs, so -- but that's just me.

8 MR. CRUZ: Thank you, Mike. That's it.

9 BY MR. RINEY:

10 Q. I just had a couple follow-ups. So, for the FAA hotline
11 requests for items that people have called in on, have you seen
12 any of those that somebody has reported that they knew who opened
13 or closed the Mid Exit Door Plug?

14 A. No, I haven't seen any of those from a hotline.

15 Q. And then for the ASIs, how do you monitor their performance?

16 A. Their performance, we have what we call the performance
17 management system and then I monitor all their audits and I also
18 approve the audits, the senior approves it and then I close them,
19 usually. And I also talk with them, you know, I call my meeting
20 the whatever meeting because I don't like that labels of what
21 we're going to be talking about, but my meeting is called whatever
22 and I have one this afternoon with the team. So we can talk about
23 anything and everything as long as it's respectful, of course, and
24 then we can share. I try to share, also, the training and the
25 knowledge that I can share with them on anything that they ask me

1 about with the ASI.

2 Q. Have they communicated to you any difficulty with dealing
3 with any of the Boeing individuals?

4 A. No. No, they've had a pretty good rapport, I do believe,
5 with dealing with people.

6 MR. RINEY: That's all I've got, thank you.

7 DR. WOODS: Okay.

8 MR. HAGER: There has been in the past, but not recently.

9 MR. CRUZ: One last thing for me.

10 MR. HAGER: Go ahead.

11 BY MR. CRUZ:

12 Q. Since the incident, have you walked the floor at Boeing?

13 A. Absolutely. I walk the floor usually daily, I try to, if I'm
14 down here. I don't make it down here as often as I would like to,
15 but I do, and I've walked out with my ASIs and shown them other
16 areas that they need to know and one of them was the ODA office,
17 and they've been here and they didn't know where it was. But I
18 have tried to come down and walk them with me on the floor. Yeah.

19 BY DR. WOODS:

20 Q. So I'm going to piggyback off that one, then. What's the
21 vibe lately there on the floor?

22 A. The vibe is a lot better, they appreciate us being here,
23 people come up and say that, and they want to see us there. Yeah.

24 Q. Was there a divergence from being able to do that in the
25 recent past?

1 A. No, there's never been one for me.

2 Q. Okay.

3 A. And I've always told the ASIs you can go out there any time
4 you want, whenever you're here, yeah, because now we're down to
5 what, four days, four days a pay period. Yeah, we're up to four
6 days a pay period, I should say, and then others come in every
7 day, yeah, maybe they don't like being home, I don't know.

8 Q. Um-hum.

9 A. But others come in every day and then the four days is a
10 minimum by the FAA --

11 Q. Okay.

12 A. -- pay period. Some people thought they were locked in and
13 can't go out.

14 Q. Yeah.

15 A. I'll agree with that.

16 Q. Well, I was more talking about that there was a philosophy
17 change, in fact, we called it compliance philosophy change and I
18 know that's more for like the FSDOs in how we engage with -- you
19 know, I'm saying "we" because I used to be FAA.

20 A. Right, right.

21 Q. Yeah, how we engage with a customer and that it changed, it
22 -- you know, some individuals felt a little hamstrung, a little
23 hemmed in by that because now you have to work within this
24 compliance philosophy and that some of those things that they felt
25 were tools that they had were taken away and I'm just wondering,

1 from -- I guess from the production side, was there any sort of
2 that similar experience and have you seen changes thereof?

3 A. So I thought the compliance philosophy enhanced the ASI.

4 Q. Um-hum.

5 A. But it was a philosophy, like you said, and then we were told
6 we weren't philosophers and then we had to change that, right, so
7 it's the compliance enforcement. But no, I think compliance
8 philosophy is a good thing, I mean, as they were putting it out,
9 it's at the ASI level and that's where it should be able to be
10 fixed, but then all of that was changed because now it gets signed
11 at the highest level and the ASI doesn't do any of that.

12 Where it was given to the ASI, right, they gave it to that
13 lowest level, boots on the ground, to work with them and work that
14 process. And a problem, at the lowest level, if it was that
15 simply of a fix and now, according to the document, they say they
16 got 30 days to fix it. My philosophy was you fixed it before I
17 was done with the audit, where it wasn't that simple. But now we
18 follow the process.

19 Q. Okay, so my last two questions, the first one is called --
20 really called the king for a day, so king for a day --

21 A. King for a day.

22 Q. -- I give you a magic wand that you can wave, yeah, and
23 change something, add something, delete something, whatever it is
24 from your experience, if you had infinite resources in that wand,
25 what would you do to make either your ability to provide -- you or

1 your team's ability to provide oversight for Boeing better or to
2 make the Boeing product better or whatever it is, what would you
3 do?

4 A. I would cancel NAFTA, since it's in everything overseas and
5 outside of the companies, the American workforce, that's my king
6 for a day. Because now they're suppliers and partners and the
7 PAHs seem to think that they're not a hundred percent responsible
8 anymore, they think they have partners and suppliers everywhere
9 and they're responsible and they give them the design authority.
10 But they're a hundred percent responsible with that data plate on
11 there.

12 Q. Okay. And then the second one is as a person who has been
13 witness to the growth of Boeing over the years from both sides of
14 the coin, so to speak, you had some time to know that we were
15 coming -- again, by the way, appreciate you carving up the time
16 because I know you and your team are incredibly busy, to talk to
17 us in the aftermath of this accident, you had some time to know we
18 were coming. Given your experience and witness to that growth,
19 what is the one thing you feel we should take away from this, what
20 is the one thing that you feel this investigative team needs to
21 know going forward?

22 A. Failure to follow process is their number one problem at the
23 Boeing Company.

24 Q. Okay.

25 A. And if you could get the Administrator's handbook back

1 instead of it being online because I like to have it in my pocket
2 right here because it tells me everything about us and what we
3 need to do and all of that, so the Administrator's handbook would
4 be nice.

5 Q. That goes back to the previous question, though. That should
6 have been in your magic wand, right?

7 A. My magic wand would be the Administrator's handbook, but the
8 Administrator's handbook is everything we've fed to them so they
9 could put out the handbook from FARs, but -- and it covers all of
10 FAA.

11 DR. WOODS: Okay. With that, anybody else, any last
12 questions?

13 (No response.)

14 DR. WOODS: No. This has been excellent, we appreciate
15 again --

16 MR. HAGER: You're very welcome.

17 DR. WOODS: -- the time because it's helpful for subject
18 matter experts such as yourself to come in and divest your wisdom.
19 So with that, we are going to conclude this interview at 11:45
20 Pacific Time.

21 (Whereupon, at 11:45 a.m., the interview concluded.)
22
23
24
25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9 MAX
IN-FLIGHT STRUCTURE FAILURE
NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Mike Hager

ACCIDENT NO.: DCA24MA063

PLACE: Seattle, Washington

DATE: May 7, 2024

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.

Karen D. Martini
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of: *

*

ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

*

* * * * *

Interview of: BRYAN KILGROE, Manager of AIR-582
Airplane Oversight Section
Federal Aviation Administration

FAA Facility
Des Moines, Washington

Thursday,
April 11, 2024

APPEARANCES:

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National Transportation Safety Board

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Aerospace Engineer and Manufacturing Investigator
National Transportation Safety Board

NILS JOHNSON
Aviation Accident Investigator - Maintenance
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JOHN LOVELL, Investigator in Charge
National Transportation Safety Board

MATTHEW RIGSBY, Office of Accident Investigation
Federal Aviation Administration

MICHAEL RINEY, Onsite Representative
Spirit AeroSystems

JOHN PETRUZZELLI
International Association of Machinists Union (IAM)

DAN MARCOTTE, Air Safety Investigator
Boeing

TROY LEVANEN, Director of Maintenance and Engineer
Safety
Alaska Airlines

BJORN ANDERSON, Captain at Alaska Airlines
Representative for Air Line Pilots Association

REBECCA LIPE, ESQ., Representative for Bryan Kilgroe
FAA, Office of Chief Counsel

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I N T E R V I E W

(1:04 p.m. PT)

1
2
3 DR. WOODS: Good afternoon. It is April 11th, 2024, and the
4 time is 1304 Pacific.

5 My name is Dr. Sabrina Woods. I am a human performance
6 investigator with the National Transportation Safety Board. Along
7 with Pocholo Cruz here to my right, we are co-leading the
8 manufacturing and human performance working group for Accident
9 Investigation Number DCA24MA063 involving Alaska Airlines Flight
10 1282.

11 The NTSB is congressionally mandated with determining
12 probable cause in transportation accidents and significant
13 incidents and with promoting transportation safety.

14 We do that with parties to the investigations. They're the
15 ones that help us and help inform the process. So to be sure that
16 you understand and recognize who's here in the room with you and
17 will be asking you questions, we're going to around the room real
18 quick so that everybody can introduce themselves to you, starting
19 at my right with Pocholo.

20 MR. CRUZ: Hello. I'm Pocholo Cruz. As Sabrina says, I'm
21 the co-chair for this group. I'm an aerospace engineer with a
22 maintenance and structures background.

23 MR. JOHNSON: Nils Johnson, NTSB. I'm an aviation accident
24 investigator, and my specialty is maintenance.

25 MR. RIGSBY: Matt Rigsby with the FAA's Office of Accident

1 Investigations.

2 CAPT ANDERSON: Bjorn Anderson. I'm a captain with Alaska
3 Airlines, here representing the Air Line Pilots Association, and I
4 have an aviation maintenance background for about the last 30
5 years.

6 MR. LEVANEN: I'm Troy Levanen with Alaska Airlines. I'm the
7 director of maintenance and engineering and safety, and I've been
8 with the airlines for about 34 years.

9 MR. RINEY: I'm Mike Riney. I'm Spirit Aero Systems' onsite
10 representative in Washington.

11 MR. LOVELL: John Lovell, NTSB.

12 DR. WOODS: I'm going to jump over here to John.

13 MR. PETRUZZELLI: John Petruzzelli. I'm here on behalf of
14 the International Association of Machinists Union, and I also work
15 at Boeing as a FAA coordinator inspector at North Boeing Field.

16 DR. WOODS: Dan.

17 MR. MARCOTTE: And I'm Dan Marcotte. I'm a Boeing air safety
18 investigator, and I'm based in Southern California.

19 DR. WOODS: So that's it, Bryan. That's everybody that's
20 going to be talking to you today and asking you questions.

21 We're here for you to share your insight as a member of the
22 regulatory and oversight team for the Boeing Commercial Airplane
23 Company. In order to capture that insight, however, we will be
24 using a digital recorder. After the interview, we will send that
25 recording out for transcription, and the parties members will have

1 an opportunity to review the transcription to correct it for any
2 typographical errors. We do not change the content. Once we
3 receive the recertified copy back from the transcriber, it will go
4 forward to be a matter of public record in the docket for this
5 investigation.

6 Each of the group members here will have a chance to ask
7 questions. They will do so one at a time, and there will be an
8 opportunity for them later to ask follow-up questions in what will
9 be a second round of questions. Please answer all the questions
10 to the best of your ability, but recognize that I don't know is a
11 perfectly acceptable answer. Also, if there's something that you
12 don't understand and that needs clarification, please ask for
13 clarity. We will provide it. Also we'll probably do the same if
14 there's an answer that we don't understand.

15 And if at any time you realize you misstated something or you
16 want to go back and re-discuss something that somebody else said,
17 feel free to do so at your discretion.

18 You are entitled to have one representative of your choosing.
19 It looks like you have one representative here with you. I just
20 want to ensure that for the record that the person sitting next to
21 you is the person that you have chosen to be your representative.

22 MR. KILGROE: Yes.

23 DR. WOODS: Okay. With that, counsel, if you would please
24 state for the record, your full name, spelling your last.

25 MS. LIPE: Rebecca Lipe, L-i-p-e, Office of Chief Counsel for

1 the FAA.

2 DR. WOODS: Thank you for that. And thank you for being
3 here. Please recognize that this is an interview and not a
4 deposition. So please refrain from interrupting the process or
5 attempting to answer for your client.

6 With that being said, for both of you, if at any time you
7 would like a break, please do not hesitate to say so, and we'll
8 make that happen. So if for any reason if you want to confer with
9 your counsel, if you just want take a break, just let us know.
10 We'll go off the record, and once you're ready to resume again,
11 we'll start back up. Do you understand that?

12 MR. KILGROE: Yes.

13 DR. WOODS: Okay. With that, if everybody's ready, we going
14 to go ahead and begin. Can we please start with your full name,
15 spelling your last.

16 MR. KILGROE: Bryan Kilgroe, K-i-l-g-r-o-e.

17 DR. WOODS: Okay. Thank you for that, Bryan. And we're
18 going to start actually going to my right here and work our way
19 around the room with Pocholo.

20 INTERVIEW OF BRYAN KILGROE

21 BY MR. CRUZ:

22 Q. Hello, Bryan. Thank you for talking to us today. What is
23 your current position?

24 A. I am the manager of AIR-582B as in Bravo located in
25 Charleston, South Carolina, for the airplane oversight section.

1 Q. Okay.

2 A. So I have responsibility for 787 production in Charleston.

3 Q. Okay. And how long have you been in that position?

4 A. Two years.

5 Q. Okay. And how long have you been with the FAA?

6 A. Thirteen years.

7 Q. Okay. And previous to the FAA -- did you hold any other
8 positions while in the FAA?

9 A. I started as an aviation safety inspector. I've also been a
10 senior aviation safety inspector and ultimately now a manager.

11 Q. Okay. And did you hold any previous positions with the FAA
12 besides those positions that you mentioned?

13 A. No.

14 Q. Okay. And can you briefly describe your professional
15 background for us prior to the FAA?

16 A. I have 11 years aircraft maintenance experience. I'm a
17 licensed aircraft mechanic. I started as a mechanic. I spent 3
18 years in fractional ownership, 6 years in Part 145 repair station,
19 and then the FAA.

20 Q. Okay. And as your duties -- as your current position, what
21 are your current duties and responsibilities?

22 A. Right now, so my responsibilities are the 787 production in
23 Charleston, ensuring that certificate management is completed,
24 monitoring compliance and enforcement activity, administrative,
25 personnel actions, things of that nature, hiring. I think that

1 about sums it up.

2 Q. Okay. And who -- since you work out of Charleston, how many
3 people work for you that look over the 737 production certificate?

4 A. Because I'm also identified as the principal inspector for
5 Boeing, they don't necessarily work for me. They have their own
6 managers in Renton and Everett and supplier control. So my
7 personnel are the ones in Charleston.

8 Q. Your personnel are the ones in Charleston?

9 A. Um-hum.

10 Q. Okay. So, does John Baker work for you?

11 A. He does not.

12 Q. He does not.

13 A. No.

14 Q. Okay. So -- can we stop?

15 DR. WOODS: Sure, we can go off record at 1312 Pacific Time.

16 (Off the record at 1:12 p.m.)

17 (On the record at 1:16 p.m.)

18 DR. WOODS: We are back on the record at 1316 Pacific.

19 BY MR. CRUZ:

20 Q. Okay. Mr. Kilgroe, why do you think you have the knowledge
21 on the 737 production certificate?

22 A. I am currently identified as the Boeing principal inspector.
23 So I maintain awareness of all activities related to Boeing's
24 production certificate, PC 700.

25 Q. Okay. What does the FAA look for when overseeing the

1 production certificate?

2 A. Our certificate management activities are guided by our
3 policy, 8120.23. So we annually conduct a RBRT which is a risk
4 based scoring of each Boeing location that then determines the
5 quantity and frequency of our certificate management activity. So
6 depending on the score, and once that is complete, we build a
7 certificate management plan and then the ASIs go out and execute
8 the certificate management plan and they're conducting the
9 activities per the elements in Appendix D of 8120.23.

10 Q. Okay. Can you describe what the Boeing production
11 organization is like as far as how they operate or who the people
12 are within that organization?

13 A. So just describe?

14 Q. Yeah, describe and tell us who some of those people are that
15 you typically deal with.

16 A. Well, it's a very, you know, it's a big complex organization.
17 My -- the folks I interact most frequently with right now I would
18 say would be Scott Stalker (ph.) who's the GM/VP for the 787
19 program, Caroline McDougal Hilton who's the quality director for
20 the 787 program. I also engage with Boeing's regulatory and
21 quality system oversight also known as RQSO, meet with them weekly
22 and just understand, you know, where things are at with our cases
23 and stuff like that.

24 Q. What about on the 737 side?

25 A. So the 737 side is -- again, everything we do, we go through

1 Boeing's RQSO, the regulatory and quality system oversight. They
2 are our first touch point. And that is where 99 percent of our
3 interaction is. So when we go out to conduct an activity, we
4 engage RQSO. They shadow us as we conduct our activities and as
5 we're collecting information, they're collecting information as
6 well.

7 Q. How would you describe the Boeing quality system?

8 A. It is a very complex system, simply.

9 Q. Is it effective? Is it efficient? Does it need work?

10 A. I feel it to be effective. If the processes and procedures
11 as they're written are followed, I believe it to be effective. I
12 do.

13 Q. Okay. How does Boeing examine trends? Good or bad.

14 A. Good.

15 Q. I mean how do they do it? I mean --

16 A. I don't know. I don't know the how, but they present some of
17 their trend monitoring which we observe and, you know, we see the
18 good and the bad. And for the bad, we understand what projects
19 they have going on in the background to get healthy.

20 Q. Well, do you know what steps they take to fix the trends?

21 A. Boeing follows their corrective and preventative action
22 process which includes in Boeing terminology, their Boeing problem
23 model, BPSM, which is comparative to 5 why, fishbone, root cause
24 analysis, just for comparison.

25 Q. Okay. To your knowledge, what type of LOIs has the FAA

1 initiated with Boeing within the year starting September 2023?

2 A. The only LOI that's been initiated since September 2023 is
3 LOI for the accident airplane.

4 Q. But prior to that, what LOIs were open since September of
5 2023?

6 A. I don't know that details of each one but there are others.

7 Q. Do you know if there were any removal LOIs in there?

8 A. There was not.

9 Q. What would you say is your biggest concern with the Boeing
10 production quality system?

11 A. I think the biggest concern would, just in my opinion, I
12 think resourcing due to the pandemic because of, you know, skill
13 sets lost with, you know, the talent and skills that were lost due
14 to the pandemic with early retirements and production stoppages
15 and all of that thing, all of those activities, that when we began
16 to come out of the pandemic and, you know, production ramping up,
17 you know, I think the, I think the loss of skills would be one of
18 the biggest challenges but I think that's across the board, not
19 just Boeing. I think that's across the spectrum, whether it's
20 automotive, any of it. So they're experiencing the same
21 challenges just as, you know, we, the FAA, same situation.

22 Q. Um-hum. Okay. What is your assessment of travel work coming
23 from Spirit?

24 A. It's been elevated. More recently, it's, you know, it is --
25 has some better controls and I think will get cleaner, but the

1 travel work has been an area of our concern. And, you know, it
2 seems to have ebbs and flows. Right now, it's good, you know, and
3 we'll just continue to monitor it.

4 Q. So prior to the accident, was that an issue, travel work?

5 A. Yeah, without having numbers specifically in front of me, but
6 travel work has been a concern.

7 Q. Okay. So do you know within the factory whether it's a
8 concern from flow day to flow day?

9 A. Yes. And how does that -- how do you know this, and how does
10 it manifest itself from one flow day to the other?

11 A. Elevated removals, work -- I don't know that slowdown is
12 necessarily the word but, you know, movement of the airplane does
13 slow when there's elevated levels of travel work. And
14 additionally the biggest tell is airplanes don't roll out on time,
15 to the flight line, with elevated travel work.

16 Q. So how would you describe the culture of the quality system
17 at the Renton facility?

18 A. I don't know that I can quantify the culture. I think --
19 visually there's -- if you walk the factory, you can see the focus
20 on quality with a lot of the communications and signage and things
21 of that nature.

22 Q. Um-hum.

23 A. So there's effort to highlight the quality system and
24 culture.

25 Q. Um-hum.

1 A. That's about all I can quantify it as, you know.

2 Q. Okay.

3 A. The folks I interact with are focused on quality and, you
4 know.

5 Q. Do you think the employees in the Renton facility are able to
6 speak their mind without any repercussions?

7 A. I want to believe they are given the programs that Boeing has
8 invested a lot of time in, in the last several years. There's the
9 speak up program, et cetera.

10 Q. Do you think that they're empowered to make changes if they
11 see something wrong?

12 A. I do. And I say that given some of the Boeing processes
13 that, you know, are in place to if you see an issue, raise your
14 hand.

15 Q. Okay. To your knowledge, what's the latest safety related
16 issues that has been raised recently?

17 A. I don't necessarily keep track of any of the stuff they raise
18 internally. I don't have visibility of that, you know. My
19 biggest indicator for me in the agency would be the level of
20 hotline and whistleblower complaints.

21 Q. Okay. To your knowledge, what type of results has the FAA
22 gotten in regard to the latest audits from Boeing?

23 A. What kind of results did we get or --

24 Q. Yeah.

25 A. -- what kind of response did we get to those?

1 Q. Both.

2 A. So, you know, the most recent audit had a significant number
3 of findings, and that investigation is still open and Boeing is
4 working through their corrective action plan. It has not been
5 presented yet.

6 MR. CRUZ: Okay. Nils.

7 BY MR. JOHNSON:

8 Q. Hi, Bryan. What does the work program for Renton look like
9 as far as surveillance? Currently, I'm sorry.

10 A. Renton is categorized as category 1 high. So per our policy,
11 8120.23, they will get a minimum of 18 PI audits, and each PI
12 audit, the inspector's required to conduct at least one product
13 audit. So that's the minimum.

14 Q. Okay. And that's what the current program looks like or --

15 A. Yes.

16 Q. Okay. I'm really interested in how the oversight program is
17 generated for the certificate. I understand it very clearly on
18 the airline. I don't understand it on the production side. Can
19 you share with me how it is generated? How do you guys come up
20 with the work package for the surveillance for a production
21 certificate?

22 A. Sure. So each year we conduct our risk assessment, and for
23 Renton, you know, it's always going to be a category 1 high
24 because they're producing in excess of 100 airplanes a year, and
25 so it's just part of the algorithm when we answer all the

1 questions in our tool that gives us the score. And then what the
2 senior ASI and the manager at the location look at is, you know,
3 where is the risk. You know, Renton's, it's big, you know. It's
4 not just the Renton airplane build. It's wings, preflight,
5 Seattle delivery center as well. So they look at where the risk
6 is, and that's where they'll concentrate their activities. So
7 that's the best way to describe it.

8 Q. And that is done in the RBRT system?

9 A. Well, we build the audits, yeah. RBRT is just the score of
10 it.

11 Q. Okay.

12 A. Once we have the score, then we enter the audits, the 18
13 audits for the year and the areas which we'll be looking at during
14 each one of those audits. And then we'll go out and audit
15 elements per our policy in those areas.

16 Q. So do production surveillance people have DCTs, for example?
17 That's probably a term for --

18 A. I don't know what a DCT is.

19 Q. Okay. You'd know if it you did. It's a FSDO term. I'm
20 sorry. What kind of systemic problems has the FAA detected at the
21 Renton factory?

22 A. Failure to follow process, tool control, FOD.

23 Q. Okay. That's already been answered. Do you guys do supplier
24 audits as well or is that a different group?

25 A. That is done by our supplier oversight section.

1 Q. Okay. As far as removals go, have you reviewed removals
2 paperwork for that have been generated for Renton?

3 A. I have reviewed removal records related to the 87, and it's
4 the same process.

5 Q. Okay. How do you feel the 87 removal records are? Complete?
6 Thorough?

7 A. I believe the removal process across the enterprise needs
8 improvement.

9 MR. JOHNSON: Okay. Matt, go ahead.

10 BY MR. RIGSBY:

11 Q. Bryan, so as the principal inspector for Boeing, do you --
12 like the supplier oversight section, the folks here in Renton, do
13 they -- and I don't want to use the word report to you, but they
14 -- do you have regular meetings with them?

15 A. Yes.

16 Q. Okay. How often do those meetings occur?

17 A. Once a week.

18 Q. Do they give you -- what do they do in those meetings?

19 A. So I meet with the manager, and it's actually -- I'll correct
20 it. It's supplier systems section. So anyway, we, as managers,
21 myself in Charleston, the manager for Renton and Everett, and the
22 manager for the suppliers, meet with Brian once a week, and we
23 just discuss, you know, administrative activities as well as where
24 some of the pain points may be within the production oversight
25 activities or certificate management.

1 Q. Okay. What are the production certificate management
2 requirements for Boeing?

3 A. It depends on location. So there's one Boeing certificate
4 which encompasses all of the Boeing BCA manufacturing. We've
5 broken that down by the extension facilities. So we have 23 what
6 we call projects, and each project is risk scored and determines
7 our frequency of our activities at those locations. For example,
8 Renton, Everett, Charleston, all category 1 high, get the, you
9 know, 18 plus audits a year whereas a location like Helena,
10 Montana, which is a fabrication location under PC 700, scores
11 lower. So they may only get a few audits a year. And, you know,
12 they may not get a QSA for 2 or 3 or 4 years. If that makes
13 sense. Because it's not just the main sites. There's Boeing
14 Helena. There's Boeing Salt Lake. There's Portland. There's
15 Auburn, Frederickson, you know. So each one of those locations
16 has its own risk score determining the frequency of our oversight.

17 Q. Do we have inspectors at those facilities?

18 A. We do not. Those audits are supported by the airplane
19 oversight section inspectors, the suppliers system section, ASIs.
20 It's a collective to do the oversight of those locations.

21 Q. Okay. So would that be the -- I guess the -- in words, calls
22 it flow down requirements for supplier audits?

23 A. So the flow down requirements apply to the external suppliers
24 only.

25 Q. Okay.

1 A. And then the subtiers to those, which we would call tier 1,
2 and then tier 2, 3, down. So, for example, if Boeing has a
3 contract with supplier A but supplier A now wants the flow down
4 manufacture of a widget to supplier B. So Boeing flows it down to
5 the tier 1. In the contractual language, they're required to flow
6 it down, so on and so forth.

7 Q. Okay. Where would Spirit fall into that?

8 A. Tier 1.

9 Q. Tier 1. Okay. Do you know, and you may not be able to
10 answer this, but in AIR-580, how's the staffing for inspectors,
11 manufacturing inspectors and ASIs?

12 A. Improving, but it's just been just as challenging for us to
13 hire as industry but we're finally making some progress.

14 Q. Is there a number, like a goal number of inspectors? And
15 then how many we are short?

16 A. I don't know the goal, but I know we're short.

17 Q. Okay.

18 A. But I don't know the top line number.

19 Q. Sure. Okay. Do you also as the PI, do you interact with the
20 designees for the -- under the ODA or is that completely handled
21 by the ODA section?

22 A. No, we do interact with the inspection unit.

23 Q. Okay.

24 A. And every now and again the engineering unit, but most of our
25 interaction is with the inspection unit.

1 Q. Okay. What all's entailed in the manufacturer in getting a
2 production approval?

3 A. So to obtain a production approval, first an applicant needs
4 to have a type certificate. And once they have a type
5 certificate, then they can make application for a production
6 certificate. And then we will follow our guidance and order
7 8120.22 which roadmaps what we need to do to issue that production
8 certificate. And what it comes down to most importantly is the
9 approval of the applicant's quality system. So we approve their
10 quality system, you know. We review it and then if it's
11 acceptable, we approve it. And if it's not, then we send it back
12 for fixing and then ultimately approval. And then we could do
13 what's called a MIDO audit prior to issuing that production
14 certificate. So say it was a new applicant who wants to go to
15 market with an airplane they just received a type certificate for,
16 then their first two or three production units that go through the
17 system, we will do what's called a MIDO audit and follow that
18 through the system and test their quality system to see if it
19 produces a conforming product.

20 Q. Do you at Boeing does -- are the other outside agencies,
21 EASA, other regulatory authorities, do they audit Boeing as well?

22 A. Other regulatory agencies, no. Because of the bilateral
23 agreements, it's left up to us, to conduct the certificate
24 management of Boeing.

25 Q. What about like ISO?

1 A. I don't believe so.

2 Q. Do you know how many -- do the whistleblower complaints that
3 come in, I know they flow down from headquarters, anything with
4 Boeing, does it come to you?

5 A. No. What -- so the hotline and whistleblower complaints go
6 through another section, AIR-843 I believe, and then they are the
7 primary investigators. So the primary investigators come out of
8 that office, and what they get from myself and the other managers
9 is the second investigator. So depending on the location of the
10 complaint, Everett, Renton, Charleston, the fabrication division,
11 a supplier, they'll request a second investigator from the
12 appropriate office. So as it stands now, they come from 843 and
13 they go to Brian, my manager, who you'll interview at some point,
14 and then he'll just send down a -- he'll review it and say, all
15 right, this applies to Charleston, Bryan, assign a second
16 investigator. So at that point, I'll assign a second
17 investigator.

18 Q. Okay. That's it for me.

19 BY CAPT ANDERSON:

20 Q. Hey, Bryan. You mentioned about the change in skill sets,
21 and it's similar industrywide, in a lot of different industries.
22 Have you seen any change Boeing has taken to either change their
23 process or policies to address the change in the skill set?

24 A. I have observed efforts to support the skill set with their
25 -- I can't remember. I'm going to try and recall the name of it.

1 There's Skill Enhancement Center they have where, you know, they
2 can call in folks to come down see their situation and then they
3 can actually go up into like a mock up area and, you know, work a
4 skill whether it's tying wire, tube bending, just some different
5 scenarios there, but I have seen some effort in that. As far as
6 the name they have for it, I want to say Skill Enhancement Center,
7 but please don't -- I'm not sure. But I've seen a location in
8 Charleston.

9 Q. Okay.

10 A. And I know they have it here as well.

11 Q. And have you seen or heard of a rate increase for
12 whistleblower reports in the last 4 months?

13 A. Yes, the reporting is elevated.

14 Q. Okay.

15 A. And it -- yes, it's elevated.

16 Q. Okay. Thank you. That's all.

17 A. Um-hum.

18 DR. WOODS: Troy.

19 BY MR. LEVANEN:

20 Q. Just on that whistleblower, you kind of answered some of the
21 questions but my question was how many whistleblower or hotline
22 complaints or items are submitted? I know that only some of them
23 get delegated to you to delegate out, but did you get a report out
24 on the total, like the total volume that's coming in? Is that
25 something, once a week or --

1 A. It comes out weekly. I do not recall the number, but the
2 previous week, it was in the high 40s.

3 Q. For like one week worth?

4 A. No, currently open.

5 Q. Oh, open. Got it. Okay.

6 A. And I don't know the number as of today.

7 Q. So those get worked all the way through then, right, at the
8 frontline level so to speak with Boeing?

9 A. Well, they get worked -- yeah, they get through -- worked
10 through from us and so it's all FAA. I mean, yeah, we do whatever
11 we need to onsite and interview whomever relevant to the complaint
12 but, you know, it's totally controlled by us.

13 Q. Confidential?

14 A. Yes.

15 Q. And then you might have mentioned it a little bit but -- and
16 I know you talked about the Skill Enhancement Centers and stuff,
17 but what -- do you get much of a perspective of what you think
18 about Boeing's training program and specifically besides what you
19 were talking about, just to help address the inexperienced and the
20 kind of green-on-green?

21 A. I think that -- so the training was one of our findings
22 during the post-accident audit we conducted with special emphasis,
23 or yeah, a special audit item.

24 Q. Okay.

25 A. And training is going to need further enhancement given the

1 experience level of today. I don't know what -- I can't say what
2 that will look like, but it is to need further support.

3 Q. And then back -- just one more question on the LOIs that you
4 mentioned. You said that the last LOI sounds like was from
5 September or would have been one since September. How many --
6 normally how many LOIs are issued to Boeing per year roughly, you
7 know, like systemwide?

8 A. I don't know the number like on average, but it's low, you
9 know. To follow our compliance and enforcement program, you know,
10 we're encouraged to start at the lowest level because, you know,
11 if the entity, the regulated entity is willing and able to work
12 with the FAA towards corrective action, that's what we're
13 encouraged to do. So we start at the lowest level and elevate as
14 needed, unless per our policy it is, you know, complete lack of
15 regard, then it goes directly to LOI, right to the top.

16 Q. Are there ever any LOIs issued for or against or with Spirit?

17 A. No. Because Spirit is a supplier. Boeing is responsible for
18 controlling their supplier, for oversight of their suppliers.

19 Q. Okay.

20 A. So if -- to answer that question, so if we had something that
21 was egregious, we would write the LOI against Boeing.

22 Q. Okay. That makes sense. I believe that's it for me. Thank
23 you.

24 A. Um-hum.

25 DR. WOODS: Mike, you're up.

1 BY MR. RINEY:

2 Q. Just to follow up on that. So have there been LOIs against
3 Boeing for Spirit related items?

4 A. Not that I recall.

5 Q. Okay. There was a discussion on the minimum number of audit
6 activities, the 18 number. Do you recall how many were performed
7 in Renton last year?

8 A. At least 18. That's the minimum. So we have to do that.
9 That's required. I can -- without looking at it specifically, I'm
10 confident it was more, but we did at least 18.

11 Q. Okay. I think most of my questions have already been
12 answered. Thank you.

13 DR. WOODS: Okay. Hopping over to John.

14 BY MR. PETRUZZELLI:

15 Q. You talked about culture at Renton. How often do you visit
16 Renton or how often in the last 3, 4, 5 years have you been out to
17 any of the Renton facilities, whether it's Renton or the delivery
18 center or Moses Lake or Victorville?

19 A. Well, since I've only been the designated PI for 9 months,
20 I've been in the Renton facility 3 times in the last 9 months.

21 Q. And you haven't been to Seattle Delivery Center or --

22 A. And the Seattle Delivery Center.

23 Q. Okay.

24 A. And the wing responsibility center.

25 Q. Okay. Are you part of the review process for that 90 day

1 plan that we're -- that the company's supposed to be putting --

2 A. At this time, I am not.

3 Q. Okay. And do you have any information you can share about
4 the tri-party agreement between the FAA, Boeing and Machinist
5 Union? That's a fairly new thing if you --

6 A. That was I believe executed finally in December.

7 Q. You're right about December.

8 A. So it's too immature at this time for me to comment. I
9 haven't heard any feedback.

10 Q. Do you know who from the FAA is that person?

11 A. Brian Knaup.

12 Q. Thank you. That's all I have.

13 BY MR. MARCOTTE:

14 Q. Your surveillance, your annual program is based on a risk
15 assessment, and I've heard you say that 1 high just based on the
16 number of airplanes produced. What else goes into a risk
17 assessment other than the number of airplanes produced?

18 A. Not having the full list of elements we grade in our risk
19 assessment, what I can recall off the top of my head is airplanes
20 produced, employee turnover, cases in the past year, compliance
21 and enforcement cases in the last year, how much -- how many --
22 how much outsourcing there is for parts or subassemblies. Those
23 are some of the other elements that are in the grading. It's not
24 just based on how much is produced.

25 Q. Right.

1 A. There's several factors.

2 Q. Okay. I'm trying to figure out in general how does Boeing
3 does in the risk assessment other than the 100 airplanes or more
4 produced at Renton. Like does the turnover of employees, does
5 that drive them high or number of issues in the last year that
6 drives it up? You know, I'm just trying to get an overall picture
7 of how Boeing does in the risk assessment if you understand my
8 question.

9 A. I do. I understand it.

10 Q. Yeah.

11 A. So as -- I'll go over again. So each Boeing location that we
12 assess is different.

13 Q. Right. I'm interested in Renton.

14 A. So Renton, Charleston and Everett, because of their building
15 a product, an airplane, and they're building multiples and
16 turnover, outsourcing, delegating inspections and things of that
17 nature, they are going to score high. They could have no
18 compliance and enforcement activity and no turnover and most
19 likely will still score high. And it's because of the production
20 rate.

21 Q. Right.

22 A. So where that comes into play as part of the risk assessment
23 is the safety impact on the NAS. So you're producing airplanes,
24 and because they, you know, an accident is going to impact the NAS
25 incredibly, you know, it's just -- for those three locations,

1 that's why. It's because you're producing the final product
2 whereas your fabrication divisions, it depends on the -- what type
3 of fabrication you're doing. Are you making a bushing or are you
4 making a subassembly, and where does that subassembly or that
5 component go in the build. How many of them are you making? What
6 is our oversight activity experienced in those locations? You
7 know, did we do our certificate management activity and have high
8 levels of findings or no findings? So those are all part of the
9 question.

10 Q. Okay. Thank you.

11 A. Um-hum.

12 DR. WOODS: That's it?

13 MR. MARCOTTE: That's it.

14 BY DR. WOODS:

15 Q. Okay. Bryan, for your day-to-day interactions, how much do
16 you interface with Boeing's FAA oversight authority for their
17 voluntary SMS?

18 A. Not very much at all. I'm aware of SRM activities related to
19 their voluntary SMS, but as far as interacting with any particular
20 leader, I don't.

21 Q. Have you or any members of your team been directly involved
22 with the building of Boeing's voluntary SMS and establishing the
23 milestones that they have to reach?

24 A. I was not.

25 Q. Okay. You used the word was, past tense. Is that something

1 that you foresee that you or members of your immediate team would
2 be involved with in going forward in the future?

3 A. Yes, I do. Once the rule is published and we have the policy
4 to guide us with the oversight of the SMS, then, yes, we will be
5 fully involved. But because it's a voluntary program right now,
6 we don't have any guidance. It's not a requirement at this point.

7 Q. I recognize it's a voluntary program, but Boeing has worked
8 with their FAA counterpart and put out a SMS manual and a policy.
9 So is there any sort of -- and I recognize I am talking to the SMS
10 individuals tomorrow, but I'm just trying to figure out where more
11 the QMS side, the interface is between the two. Is that document
12 anything that you or anyone in your team looks at to see how
13 they're achieving what they've set forth in their voluntary
14 program?

15 A. I think the best way for me to answer that is yes. Because
16 of the voluntary program, when we identify challenges that they're
17 experiencing, we are encouraging them to use their SMS SRM
18 triggers to go to do those SRMs and when really dig into the, you
19 know, where the risk is and the controls to put around those
20 risks. So in that regard, yes, you know, we are engaged, you
21 know. We're encouraging them to use their SMS program and, you
22 know, when they identify their SRMs, they'll be conducting their
23 transparent in asking for FAA, if a FAA person's on those SRMs as
24 essentially observers to just see how they're doing with the
25 process. So we do have that, if that's what your question's

1 around.

2 Q. It is. In fact, you actually segued perfectly into my next
3 question which was how often or does Boeing involve the FAA when
4 they go to conduct their SRMs?

5 A. It's getting better. So we just got a listing of SRM
6 projects less than a week ago, and we're looking at assigning some
7 folks to participate.

8 Q. Is that something that they asked for help for or that you
9 became aware of and you have now said, hey, we would like to help
10 inform this?

11 A. I'm not sure how it came up because I was on leave. I know I
12 just walked into the email when I got back from vacation. So --
13 but, it's a good sign I mean because we identified a few that are
14 getting ready to kick off that we weren't on and we'd like to be.
15 So we now will be.

16 Q. Okay. So as -- I know you talked about the rule and that is
17 forthcoming. But do you see then that bridge between the SMS
18 oversight manager and, you know, the CMO down here and then the
19 position as a principal inspector, do you see you guys are being
20 like being stove piped into what you do to manage the certificate
21 or is it a collaboration? How do you envision that team going
22 forward?

23 A. I envision with the release of the rule and the guidance
24 material that the QMS and SMS oversight is going to be fully
25 integrated. It would be part of our certificate management

1 activities, whether we'll call it certificate management/SMS
2 oversight, I don't know. I don't think that's important but we
3 will, you know, we will take that and it will become part because
4 it is integrated. That's the most important aspect of it, is SMS
5 and QMS, they can't be operating in separate silos. They have to
6 be -- so it'll be.

7 Q. Have you yourself received any training from the FAA on the
8 SMS process?

9 A. I have done the short virtual trainings. I am scheduled
10 currently to go to the in person training in October or not
11 October, June, sorry.

12 Q. Okay.

13 A. I don't know why I was thinking October.

14 Q. Okay. That is all I have in this round.

15 DR. WOODS: We're a little under actually about an hour. How
16 are we doing? It's up to you at this time if you would like to
17 take a break? Anybody else?

18 MS. LIPE: If we could take a break.

19 DR. WOODS: Okay. So with that, we are going to take a
20 break. We are going to go off record at 1400 Pacific Time.

21 (Off the record at 2:00 p.m. PT.)

22 (On the record at 2:19 p.m. PT.)

23 DR. WOODS: Okay. We are back on the record at 1419 Pacific
24 Time. You're up.

25 MR. CRUZ: Okay.

1 BY MR. CRUZ:

2 Q. All right, Bryan. Just a couple more questions from me. I
3 know in the past there's been some LOIs that the FAA put out
4 against Boeing in the last 5 years regarding removal documentation
5 issues, and there's been numerous -- there's some in the 787.
6 There's some on 737. There's some in different parts of the
7 airplane where your -- where the inspectors found issues. Do you
8 know why it keeps recurring that Boeing is having removal
9 documentation issues?

10 A. I don't know. No, I don't know the answer. The process
11 needs to be strengthened, and we currently have a case open for
12 removals that they're working through corrective action -- a
13 corrective action plan. And they're using their SMS system to dig
14 deeper for a more robust process.

15 Q. Yeah. So is it basically adds to the list of -- long list of
16 removal issues, right, LOIs?

17 A. Right.

18 Q. Okay. To your knowledge, is Boeing's SAT a production
19 record?

20 A. No.

21 Q. What would you consider the SAT?

22 A. More or less a help needed type tracking system I think is
23 the best way I can describe it.

24 Q. Has there ever been the case where the FAA uses SAT record as
25 an example of an LOI to prove the FAA's point?

1 A. I don't know. Not to my knowledge, no.

2 Q. Has the FAA ever done an audit of Boeing's 737 door team?

3 A. Not to my -- I don't know without reviewing the records.

4 Q. Do you know if there's a certification needed to be on a door
5 team?

6 A. I don't know.

7 Q. In your position, do you know whether -- do you oversee the
8 Spirit production certificate?

9 A. Spirit does not have a production certificate. Spirit is
10 just a supplier.

11 Q. So who in the FAA would oversee Spirit?

12 A. Again, we don't technically oversee Spirit. We oversee
13 Boeing's quality system flow down to Spirit for the production of
14 the articles that they have contracted with Spirit.

15 Q. Okay. So there's no, there's no FAA oversight whatsoever on
16 Spirit's -- I guess it would be no supplier, right, is what you're
17 saying. Your supplier people would be the ones looking over the
18 Spirit --

19 A. Right.

20 Q. -- production.

21 A. The way production is, suppliers do not have a production
22 approval.

23 Q. Okay.

24 A. So we don't conduct certificate management over suppliers.

25 Q. Okay.

1 A. Our certificate management is of the production approval
2 holder, whether it be Boeing or any other production approval
3 holder, we are -- when we go out and audit that supplier, we are
4 ensuring that Boeing is doing their oversight of their supplier
5 and the supplier is following their contractual and quality system
6 flow down requirements, and then we conduct a product audit that
7 what they're making conforms to the design.

8 Q. Is that -- after the incident, is that why the FAA was at
9 Spirit? What was the FAA's role being a Spirit after the
10 accident?

11 A. Well, we do continuous surveillance at Spirit, and it was
12 just our response to, you know, after the accident we had folks on
13 the ground at Renton and at Spirit to, you know, go have a look.

14 Q. What was the surveillance like for Spirit if you can give
15 us --

16 A. Post-accident or just in general?

17 Q. Both, just to get an idea.

18 A. So post-accident, we just initially wanted to understand what
19 Spirit's role of installation of the MED was --

20 Q. Okay.

21 A. -- in comparison to what Boeing's responsibility for the MED
22 was. You know, who does what. And, you know, so that was the
23 main focus. What does Spirit do? What does Renton do?

24 Q. Okay. And then prior the accident, what was --

25 A. Again, we're in Spirit. We have inspectors in Wichita, and

1 our surveillance is to ensure that they're in compliance with
2 Boeing's quality flow down requirements, and that Boeing is doing
3 proper surveillance of their supplier, to control their supplier.
4 And then they do product audits.

5 Q. Okay. What do you know of the supplier assist process at
6 Boeing?

7 A. As far as -- more specific?

8 Q. As far as -- in this particular case, in this particular
9 issue, they had an edge frame issue, Boeing did. They wrote up,
10 and Spirit was asked to basically fix the issues on the entering.
11 According to Boeing, they asked for supplier assist or Spirit
12 assist to fix the issue instead of Boeing mechanics doing it. So
13 based off of the process that's currently in the Boeing system,
14 they said that they asked Spirit to work the issue as a supplier
15 assist

16 A. Um-hum.

17 Q. What do you know about that system or --

18 A. Yes. Boeing uses that within their quality system. So if
19 they generate a NC for an issue, whether -- whomever the supplier
20 that may be related, they generate the NC, and they coordinate
21 with the supplier to come out and do the work. And the supplier
22 executes the work. And then Boeing inspects it at the end and
23 it's completed. So, it's, you know, it's -- the supplier has
24 their requirements to go out and do the work, and then Boeing,
25 after they're done, inspects that they did the work and buys off

1 on it at the end.

2 Q. In this particular case, is the supplier allowed to gain
3 access -- if the supplier asks to gain access to a job, are they
4 -- is the supplier allowed to open access panels, doors, plugs?

5 A. Without having their vendor assist process in front of me, I
6 would have to look at it. Just off the top of my head, that
7 sounds like the generation of a removal and they would have to
8 engage Boeing for the removal.

9 Q. Okay. I understand that Boeing uses or the FAA uses ODAs in
10 their facility. Is that correct?

11 A. Correct.

12 Q. What is the qualification to be a FAA approved ODA for
13 Boeing?

14 A. Well, to become an ODA, that's defined in our 8100.15 policy
15 to become -- to have an ODA.

16 Q. Do they need to have an A&P license?

17 A. I don't know.

18 MR. CRUZ: All right. That's it for me. Nils.

19 MR. JOHNSON: Thank you.

20 BY MR. JOHNSON:

21 Q. Does FAA -- or excuse me. 2019-2020 you were with the FAA?

22 A. Correct.

23 Q. What were you doing at that time?

24 A. I believe 19-20, I was a senior ASI in Charleston.

25 Q. Okay. But you were over top of Boeing?

1 A. I was just a senior inspector in Charleston at Boeing, yes.

2 Q. Okay. I'll ask you this, assuming that Charleston went
3 through the same thing that Seattle did, there was a reduction in
4 the number of inspectors and a reduction in the number of items
5 being inspected during that timeframe. To your knowledge, was
6 that FAA approved?

7 A. No. The FAA doesn't have any control over, you know, how
8 many inspectors Boeing has or doesn't have. That's not our -- for
9 us to say. What we are responsible for is to ensure that Boeing
10 has the processes and procedures and resources to product a
11 conforming product. So I am aware of what you're speaking of, but
12 as far as did we approve that or is that something we would
13 approve? No, it is not.

14 Q. Okay. Do you believe that those actions had effect on the
15 safety or quality of the airplane that's being produced?

16 A. It potentially could have been impactful, yes.

17 Q. Last one for me. Do you believe that Boeing's FAA approved
18 quality manual accurately reflects the processes being used at the
19 Renton assembly line?

20 A. Yes.

21 MR. JOHNSON: Matt.

22 BY MR. RIGSBY:

23 Q. Okay. Bryan, when this accident occurred, as the principal
24 inspector, what were some of your first actions that you did after
25 hearing about the accident that you recall?

1 A. The first action was to have, you know, I was contacted
2 immediately following the accident, you know, and requested to
3 have inspectors onsite the following day, which I then engaged the
4 senior for Renton and he was onsite that next morning and started
5 collecting information and looking at the MED within the
6 production system. There was an airplane with the MED going
7 through production at the time. So that was helpful. So he went
8 out and started looking at what's all involved. And then -- let
9 me see. It happened I believe on a Friday night. So by Monday
10 morning, I had folks in Spirit to understand their work scope with
11 the MED. So that was the first week, understanding what Spirit
12 does with the MED and understanding what Boeing does with the MED.

13 Q. Okay. When you talked to that senior inspector or senior
14 ASI, who is that?

15 A. Jesse Cantu.

16 Q. Okay. Did Jesse take anybody with him?

17 A. John Baker.

18 Q. Okay. How often are you having communication even as far as
19 the process or the investigation on your side of the house, not
20 necessarily safety, just quality, production investigation going
21 on, how often do you have to report up to senior management and
22 who would report to?

23 A. I would report to Brian, and we meet with Brian weekly.

24 Q. And that's Brian Knaup.

25 A. Knaup.

1 Q. Knaup. All right. That's it. Thank you.

2 CAPT. ANDERSON: I don't have any further questions.

3 DR. WOODS: Troy.

4 BY MR. LEVANEN:

5 Q. Just wanted to clarify my notes. You said that Renton,
6 Everett, Charleston are all risk 1s and they get 18 audits per
7 year. And did you say that Spirit gets 18 audits per year, too,
8 or not?

9 A. No, Spirit I believe is one per month.

10 Q. Okay.

11 A. But that was prior to us having dedicate resources onsite at
12 Spirit. So they're every day now. They're onsite every day.

13 Q. Onsite.

14 A. Onsite.

15 Q. Okay. Got it. Thank you.

16 MR. LEVANEN: And that's it for me.

17 DR. WOODS: Mike.

18 MR. RINEY: I don't have any further questions.

19 DR. WOODS: John.

20 MR. PETRUZZELLI: None for me. Thank you.

21 BY MR. MARCOTTE:

22 Q. Just quickly, how would you describe the relationship between
23 you and the inspectors that help you oversee Boeing's certificate
24 and the people they deal with at Boeing?

25 A. I believe it is a very strong, healthy team. You know,

1 they're doing a lot right now, and I really couldn't be more
2 encouraged by effort from the team as a whole. It's very
3 positive. We communicate, you know. So I'm very satisfied with
4 the strength of our team.

5 Q. Would you say the same last year? The event was in
6 September. So how do you think the relationship was the 6 months
7 prior to September?

8 A. Just talking FAA internal, I believe that the team -- I have
9 no complaints of our team. Our team is strong, healthy. It's
10 growing and, you know, they're extremely busy. And, you know,
11 their morale is very positive. They show up every day to do their
12 best, and they keep their managers informed. So I'm very
13 encouraged with our team.

14 Q. How about your teams relationship, the FAA team with the
15 Boeing, their counterparts at Boeing, the relationship between the
16 two teams?

17 A. I believe it's very healthy. The ASIs and RQSO communicate
18 daily, you know, whether it's because they're out conducting an
19 activity or they're getting status of an open case or whatever it
20 may be, they're very professional and respectful. So I think the
21 two organizations, FAA and Boeing's RQSO interact very well.

22 Q. Have you ever heard, you know, within the last year whether
23 any of the FAA team has been concerned with Boeing being anything
24 less than open, honest and transparent?

25 A. I can't say that I've heard that specifically. I don't

1 recall anybody saying that, no.

2 Q. Okay. Thank you.

3 DR. WOODS: I don't have any more. I have a typical line of
4 questions that is not appropriate at this point. I don't have any
5 more of my usual questions which would end this second round.
6 However, I do have my concluding questions that I always ask
7 everybody we interview, but before I get to that, I want to make
8 sure that everybody's had a chance. It looks like Pocholo has
9 another one.

10 BY MR. CRUZ:

11 Q. Being a principal for Boeing production certificate, which
12 crew at Boeing would be allowed to work on a mid exit door plug?

13 A. Which Boeing crew?

14 Q. Yes.

15 A. That would depend on who the responsibility lies within that
16 flow day. So I don't know if Boeing has a door crew or if it's a
17 flow day crew responsible for the door.

18 Q. Okay. Thank you.

19 A. Um-hum.

20 DR. WOODS: Is that it?

21 (No response.)

22 DR. WOODS: Okay. It looks like everybody's good.

23 BY DR. WOODS:

24 Q. So last two questions I have for you will be a little bit
25 unusual. One is that if there was one thing that you could change

1 or tweak or add or subtract that would make oversight and the
2 Boeing product better, and better means in terms of quality, in
3 terms of production, in terms of safety, whatever you feel better
4 is, what would that be? What would that look like to you?

5 A. I am confident in the steps the Administrator's taking --
6 taken the last few months are going to provide significant long-
7 term benefit to our organization, our branch, for the Boeing
8 oversight. So I think the resources that we are going to be
9 gaining will be impactful, and I think it'll be something that has
10 been missing that we will finally have, that will be impactful.

11 Q. So to clarify by resources, you mean manpower.

12 A. Yes.

13 Q. Okay. So more manpower, you feel that that will be to a
14 better effect?

15 A. Yes.

16 Q. Okay. And then the last question I had is although we might
17 not have actually realized who we were receiving today, we're
18 thankful for you being here. You did have some time to consider
19 that we were coming. We were going to ask you some questions.
20 Was there anything that we did not ask that you thought we would
21 or that you feel we should know to help shed light onto the
22 situation?

23 A. No, I thought your line of questioning was very good.
24 Hopefully it's giving you some insight, but I can't think of
25 anything. I thought you all did well. For no manufacturing

1 experience, I thought the questions were very well.

2 DR. WOODS: Okay. With that, are we good? It looks like
3 head nods all the way. Thank you again for your time in coming
4 out and helping to educate us on this process. We definitely
5 appreciate it. We are concluding this interview at 1441 local.

6 (Whereupon, at 2:41 p.m. Pacific Time, the interview was
7 concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9
MAX IN-FLIGHT STRUCTURE
FAILURE NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Bryan Kilgroe

ACCIDENT NO.: DCA24MA063

PLACE: Des Moines, Washington

DATE: April 11, 2024

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.

Kathryn A. Mirfin
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of: *

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ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

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Interview of: BRIAN KNAUP, Branch Manager of AIR-580 System and Oversight Branch

Federal Aviation Administration

FAA Facility
Des Moines, Washington

Friday,
April 12, 2024

APPEARANCES:

DR. SABRINA WOODS, Human Performance Investigator
National Transportation Safety Board

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Aerospace Engineer and Manufacturing Investigator
National Transportation Safety Board

NILS JOHNSON
Aviation Accident Investigator - Maintenance
National Transportation Safety Board

JOHN LOVELL, Investigator in Charge
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MATTHEW RIGSBY, Office of Accident Investigation
Federal Aviation Administration

MICHAEL RINEY, Onsite Representative
Spirit AeroSystems

JOHN PETRUZZELLI
International Association of Machinists Union (IAM)

DAN MARCOTTE, Air Safety Investigator
Boeing

TROY LEVANEN, Director of Maintenance and Engineer
Safety
Alaska Airlines

REBECCA LIPE, ESQ., Representative for Brian Knaup
FAA, Office of Chief Counsel

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I N T E R V I E W

(10:44 a.m. PT)

1
2
3 DR. WOODS: Good morning. It is April 12th, 2024, and the
4 time is 10:44 Pacific Time.

5 My name is Dr. Sabrina Woods. I am a human performance
6 investigator with the National Transportation Safety Board. Along
7 with Pocholo Cruz here to my right, we are co-leading the
8 manufacturing and human performance working group for Accident
9 Investigation Number DCA24MA063 involving Alaska Airlines Flight
10 1282.

11 The NTSB is congressionally mandated with determining
12 probable cause in transportation accidents and significant
13 incidents and with promoting transportation safety.

14 We cannot do that on our own, however. So we have parties to
15 the investigation that are here to help inform the process. The
16 people that you see here around the room are those parties to this
17 group for this investigation. At this time, I'm going to have
18 them introduce themselves to you so that you know who you're
19 talking to. We're going to start off to my right with Pocholo.

20 MR. CRUZ: I'm Pocholo Cruz. As Sabrina says, I'm co-chair
21 for this group. I'm an aerospace engineer with a structures and
22 maintenance specialty.

23 MR. JOHNSON: Good morning, Brian. Nils Johnson, aviation
24 accident investigator for the NTSB. My specialty is maintenance.

25 MR. RIGSBY: Hey, Brian. You know me. Matt Rigsby with the

1 FAA's Office of Accident Investigations.

2 BY MR. LEVANEN: I'm Troy Levanen. I'm the director of
3 maintenance and engineering and safety for Alaska Airlines, and
4 I've been with the Airline for about 34 years.

5 MR. RINEY: My name is Michael Riney. I'm Spirit Aero
6 Systems' onsite leader in Washington.

7 MR. LOVELL: John Lovell, NTSB.

8 DR. WOODS: Currently missing from the room is John
9 Petruzzelli. He'll be back later, and I'll have him introduce
10 himself to you. However, he is representing the IAM Union there
11 at Boeing.

12 MR. MARCOTTE: And I'm Dan Marcotte. I'm a Boeing air safety
13 investigator from Long Beach.

14 DR. WOODS: So with that, that's it. That's everybody here
15 who's asking you questions.

16 We're here for you to share your insight, your expertise,
17 your experience as a member of the regulatory and oversight team
18 for the Boeing Commercial Airplane Company. To capture that
19 insight, we will be using a digital recorder. After the
20 interview, we will send that recording out for transcription, and
21 the parties members here will have an opportunity to review the
22 transcript to correct it for any typographical errors. We do not
23 change the content. Once we receive the recertified copy back
24 from the transcriber, it will go forward to be a matter of public
25 record in the docket for this investigation.

1 Each of the group members here will have a chance to ask
2 questions. They're going to ask questions one at a time, and
3 there will be an opportunity for them to follow up, however, what
4 will be a second round of questions. Please answer all the
5 questions to the best of your ability. However, recognize that I
6 don't know is a perfectly acceptable answer. If you don't know
7 the answer, just say so, and we'll move on. If at any time you
8 don't understand a question, please ask for clarity, and we will
9 do the same if we don't understand one of your answers.

10 And if you realize at any time that you misstated or that you
11 want to go back and reengage with something that was said earlier,
12 feel free to do so. There's no issues with that.

13 You are entitled to have one representative of your choosing.
14 I see that you've brought somebody in with you. So I just want to
15 make sure for the record that this is somebody that you want to
16 choose -- that you have chosen to be your representative.

17 MR. KNAUP: Yes.

18 DR. WOODS: Okay. Thank you for that. Representative, thank
19 you for being here. Please recognize that this is -- sorry. The
20 representative is legal counsel. Please recognize that this is an
21 interview and not a deposition. Please refrain from interrupting
22 the process or attempting to answer for your client.

23 For the record, if you would please state for the record,
24 your full name and spell your last.

25 MS. LIPE: Rebecca Lipe, L-i-p-e, Office of Chief Counsel for

1 the FAA.

2 DR. WOODS: Thank you for that.

3 If at any time, you or your client, if you guys would like to
4 take a break, just speak up, let us know. We'll make that happen,
5 and I will also try to check in with you from time to time to
6 ensure that you're still doing okay.

7 MR. KNAUP: Great.

8 DR. WOODS: So with that, does anybody have any questions?
9 Do you, sir, have any questions?

10 MR. KNAUP: No questions from me.

11 DR. WOODS: Okay. If you would please for the record, would
12 you state your full name and spell your last.

13 MR. KNAUP: Sure. My name is Brian Knaup, K-n-a-u-p.

14 DR. WOODS: Thank you so much. We're going to start off here
15 to my right here and go around the room that way with Pocholo.

16 INTERVIEW OF BRIAN KNAUP

17 BY MR. CRUZ:

18 Q. Brian, thanks for sitting down and speaking with us. What's
19 your current position with the FAA?

20 A. So my current position is the AIR-580 branch manager. So
21 that is the system operation and oversight branch within the
22 integrated certificate management division.

23 Q. And how long have you been in that position?

24 A. I have been in that position for almost 10 months now. I
25 started in July of 2023.

1 Q. Okay. And how long have you been working for the FAA?

2 A. I started with the FAA in August of 2016. So almost 8 years.

3 Q. Yeah, okay. And prior to your current position, what other
4 positions did you hold with the FAA?

5 A. Oh, with the -- okay. So I was a certification program
6 manager in the Seattle ACO. I was that -- in that role from when
7 I started in August of 2016 until March of '21, 2021. In that
8 role I did certification of general aircraft, general aviation
9 aircraft and helicopters. So I managed companies in the Pacific
10 Northwest. In March of 2021, I became a section manager in the
11 BASOO over managing folks doing certification, mostly systems
12 based certifications. So flight control, mechanical systems,
13 avionics, electrical, and I was in that role until refinement in
14 April 2023, and for 3 months, I was the acting AIR-570 branch
15 manager, certification branch manager, and then in July of 2023, I
16 moved from the certification branch manager in AIR-500 to the --
17 my current position in AIR-580 system operations oversight.

18 Q. Okay. And let's see. Can you briefly describe your
19 professional background before the FAA?

20 A. Sure. So I spent 12 years in the Air Force, active duty and
21 civilian, doing flight tests. So I worked at Edwards Air Force
22 Base for 9 of those 12 years. I worked in the F-22 flight test
23 and other special projects there, and then I spent the last 4
24 years on the KC-46 program doing flight tests. The last 3 of
25 those were in Seattle doing flight tests at Boeing Field on the

1 KC-46. Managed folks there and did flight tests, subsystems,
2 human factors, a number of different disciplines.

3 Q. Okay. And what shift do you work for the FAA currently?

4 A. What shift?

5 Q. Shift.

6 A. There's a first shift.

7 Q. First shift?

8 A. Yeah, 7 to 5 or whenever I can be done.

9 Q. 7 to -- okay. And then on a typical day, could you run us
10 through a typical day for you as a manager?

11 A. Sure. So, there are a lot of meetings. So, I usually have
12 meetings with either section managers to understand what's going
13 on in the section. I'll have meetings with Boeing, GE, Pratt
14 Whitney, depending on what that looks like to understand maybe
15 different projects that are in work or different programs that are
16 going on or different auditing activity that we're doing. And
17 then I'll have internal meetings with either other AIR-500 folks
18 to work on, you know, different things we might be working on
19 whether that's integration or other AIR divisions. I do spend a
20 number -- a lot of time working with AIR-800 who does all of the
21 production oversight of everyone that isn't GE, Pratt Whitney and
22 Boeing, to ensure that we're aligned as we move forward on how AIR
23 is doing production oversight.

24 Q. Okay. What section managers I guess report to you?

25 A. Okay. Yeah. So I have six section managers that report to

1 me. They are currently Jennifer Rasmussen (ph.) was just selected
2 for a detail in the AIR-581 section as a section manager that is
3 effective as of the beginning of this week. And then I have Mike
4 Hager, Julie Moon and Bryan Kilgroe who are section managers in
5 AIR-582 for airplane oversight. Sue Kerekes is the section
6 manager there of AIR-583 which is supplier system oversight and
7 then Margaret Langsted is the section manager for AIR-585 which is
8 the engine and propulsion system section.

9 Q. Okay. And who do you currently -- who's your supervisor?

10 A. My supervisor right now is Dorr Anderson (ph.) who is acting
11 deputy director of AIR-500. Yeah, he's my supervisor.

12 Q. Okay. So, what does the FAA look for when they're overseeing
13 a production certificate at Boeing?

14 A. What are they --

15 Q. Yeah. What do you actually look for when you're overseeing a
16 certificate, the production certificate?

17 A. Well, we ensure that the Boeing is following their quality
18 manual that has been accepted by the FAA. We are ensuring that
19 they meet all of those requirements. So we look at the documents
20 within that manual to ensure that they are meeting that. We have
21 orders that kind of direct how often we should audit them,
22 depending on -- from a risk-based perspective. So we -- while we
23 do those audits, we are auditing their ability to follow their
24 quality manual and all of the documents that are --

25 Q. How does the FAA determine what's going to be audited for

1 Boeing on that production certificate?

2 A. So we have a risk-based methodology that's in the FAA Order
3 8120.23 to define the number of audits that we do in a specific
4 area. From there, we try -- we use a risk-based model to try to
5 ensure that we audit critical areas of the factory or that
6 manufacturing facility wherever that facility is or whatever's
7 being done in that facility I should say.

8 Q. Is there a minimum requirement of how many audits needs to be
9 done a year for let's say the Boeing production facility in
10 Renton?

11 A. Yes, there is. So we use a risk-based methodology --

12 Q. Right.

13 A. -- that's in that order to define that, and that is 18 audits
14 for the Renton factory.

15 Q. At a minimum or --

16 A. At a minimum.

17 Q. At a minimum.

18 A. Right.

19 Q. Okay. Do you yourself do audits or do you let your people
20 do --

21 A. I do not do audits myself.

22 Q. Okay.

23 A. So that's all the ASIs do that.

24 Q. Okay. So based off of the audits that you do, is it you or
25 your ASIs that do the trend analysis themselves with regards to

1 the audits?

2 A. Yeah, so it's not me.

3 Q. Okay.

4 A. Our ASIs, I see the ASIs will look at trends, will also, you
5 know, sometimes their section managers will do that, but it is not
6 -- I don't, I don't do trend analysis.

7 Q. Okay. Do you get feedback from what your ASIs are seeing,
8 good or bad?

9 A. Yes.

10 Q. And as far as the quality system is concerned, is there a
11 specific issue that they keep bringing up to you with regards to
12 their audits?

13 A. So yeah. So we have done, you know, trend analysis, and I
14 see the results of that trend analysis. And, there are areas that
15 we have more findings in around following manufacturing process,
16 tool control, FOD, debris or housekeeping, that -- those are some
17 of the heavy hitters that we saw in the, you know, throughout our
18 auditing of Boeing.

19 Q. Has the FAA seen any issues with regards to removal
20 documentation in the past years?

21 A. I believe there are findings. I don't know specifically if
22 there are, but I believe we have had findings previously around
23 removal paperwork.

24 Q. Okay. Do you deal with any of the LOIs or the VDRs or is the
25 ASIs themselves?

1 A. The ASIs do most -- deal most directly with the VDRs. I am
2 normally aware of VDRs that come in or LOIs but I would not be
3 aware of every one.

4 MR. CRUZ: Okay. Nils.

5 MR. JOHNSON: Thank you.

6 BY MR. JOHNSON:

7 Q. So good morning.

8 A. Hey.

9 Q. How does the FAA generate a risk profile for a production
10 certificate?

11 A. So I am not familiar with the details of how we generate a
12 risk profile, but there is in the order, there are questions that
13 need to be answered for each of the facilities. Our ASIs, our
14 senior ASIs and our section managers, most familiar with those,
15 answer those questions, and then it -- the order provides a risk
16 based on how you answer those questions.

17 Q. A previous interviewee this week said that it was the higher
18 ups. So I was like, okay. So it's below you but above --

19 A. Yeah.

20 Q. -- an individual?

21 A. Yeah. Okay.

22 Q. All right. This is a little -- I think you've partially
23 answered this. How does the FAA generate a work plan for a
24 production certificate? There's 50 areas that you guys need to
25 cover. I'll let you talk. I don't want to talk. I don't know.

1 A. Sure. Okay. So like I said, the way -- each facility has a
2 risk rating, and then that drives the number of audits, and then
3 normally we allow the ASIs that are responsible for doing those
4 audits to decide or choose where they need to audit. Obviously if
5 there are specific areas that we have seen issues with, we'll
6 either return to those areas or we'll look at areas that are
7 similar. Sometimes there are specific places we know we want to
8 audit based on previous findings or other information that we
9 might get, COS issues or certification, questions that may arise
10 come up, but that is -- we start with the number of audits we need
11 to do and then try to find the critical areas within those
12 facilities that we feel like we need to audit throughout the year.

13 Q. Is there -- so does every area, for example, need to be
14 audited at least once in a calendar year or is it --

15 A. Well, there's different ways to split up each of the
16 factories. So it depends on how you define area. We have
17 definitions around what audits need to be done at each of the
18 facilities as we've defined them by a location. Within that
19 facility, there is -- we have the ability to choose within that
20 where we want to go look.

21 Q. I think Pocholo kind of asked this as well. What kind of
22 systemic problems has the FAA detected at the Renton factory?

23 A. Yeah, I think failure to follow process, tool control and FOD
24 were some of the -- the three bigger ones that we've seen.

25 Q. Okay. Have you seen a history of undocumented maintenance?

1 A. I have not personally, no.

2 Q. That one has been asked as well. That's it for round one,
3 Matt.

4 A. Okay.

5 BY MR. RIGSBY:

6 Q. Brian, kind of leaning to what Nils said, with the work
7 programs, how far in advance are those done? Like do you do it
8 for FY23.

9 A. Sure. So we do planning for -- production oversight starts
10 about 6 months before the fiscal year begins. So we are finishing
11 up what -- how many audits in each of the facilities now for FY25.
12 We have a lot of freedom and we have plans for at least some areas
13 within those that we will be looking at within those specific
14 facilities for the audits but we have the ability of flex as we
15 move through the year. So I would say 6 months in advance we know
16 how many in each of the facilities and then from there we work
17 specific plans as much in advance as we can knowing that we can
18 adjust if we need to.

19 Q. So this -- you being in the office 6 months or 9 months --

20 A. Yeah.

21 Q. -- for FY24, were a part of that work -- initial program or
22 was it your predecessor?

23 A. It was really done before I joined in this role, all of the
24 initial planning was done.

25 Q. And who was your predecessor?

1 A. So Jim Phoenix was the AIR-580 branch manager before I took
2 that position. He was also the Boeing CMO or certificate
3 management office manager pre-refinement. So Jim really did all
4 that.

5 Q. Is Jim still around?

6 A. Jim retired --

7 Q. He retired.

8 A. -- at the end of December.

9 Q. Okay. But he doesn't do that in a silo? I mean he does or
10 he doesn't do it in a bubble?

11 A. Correct. Yeah. Right. I mean we follow the same processes
12 today that they followed, you know, before around, you know,
13 ensuring we understand all the issues and trying to make sure we
14 hit the critical areas in each facility.

15 Q. We learned earlier from one of the previous interviews that
16 staffing is an issue but that you are -- there's a high
17 probability that you're getting more ASIs assigned to your office.
18 Is that correct?

19 A. Yes.

20 Q. Okay. Do you know how many?

21 A. I do not know the specific numbers that we would -- will be
22 allowed.

23 Q. Has it already been approved or is it in the process?

24 A. So I would say some increase has been approved, now that we
25 have a budget for this year. I don't think the number is totally

1 finalized, but some increase has been approved.

2 Q. Okay. Hotline and whistleblower reports, do those come --
3 when they come into the FAA, I know they don't come to you
4 directly.

5 A. Correct.

6 Q. Are they filtered to you?

7 A. Yes.

8 Q. Do you distribute them or give them to a team that looks at
9 them all or --

10 A. So today I see every hotline or whistleblower that affects
11 Boeing, GE or Pratt Whitney, and then we in 580 attempt to assign
12 a second investigator. So AIR-800 has primary investigators that
13 do the majority of the investigation but we found a second
14 investigator is part of the process because our second
15 investigators are familiar with those applicants' production
16 systems, and are able to get additional info and follow all the
17 processes to expedite the investigation. So, yes, I see them.

18 Q. What emphasis is put on whistleblower complaints and hotline
19 complaints?

20 A. Very high. It's probably our highest priority when they
21 come.

22 Q. Is that something the Administrator checks on?

23 A. I'm not aware if he does, but I would imagine he does. I
24 don't -- I'm not involved in that.

25 Q. Okay. That's it for me. Thank you.

1 BY MR. LEVANEN:

2 Q. Well, tagging on where -- pick up where Matt left off on the
3 whistleblower and hotline things, I think it was yesterday or
4 somewhere along the line we heard that there might be like 40 plus
5 of them open currently. What does that represent for time of like
6 when those were submitted? Are those like in the last 6 months or
7 year? Is that 5 years worth that are open or what?

8 A. It's not 5 years. We've certainly had a larger influx of
9 hotline and whistleblowers this year. I don't know the exact
10 number off the top of my head because it does change daily. That
11 is about the right number that we've had. That is probably --
12 there is a mandated timeline. We certainly can ask for extensions
13 but that is probably hotline -- I don't want to give you a
14 specific thing, but it's certainly within the last year of stuff.
15 They're not longer than that.

16 Q. Yeah, I understand some are harder to close. We have a
17 similar program and some are easier to close than others.

18 A. Right. Yeah. So we do have to go through AEE and AIR-843
19 manages that part of it. Our job is really to ensure we provide a
20 second investigator and ensure our resources make that a priority
21 when that help is needed for the primary investigator.

22 Q. Okay. Then, just currently, and I know it fluctuates, too,
23 but how many do you think you get per week for those? In fact, I
24 know you said it's increased a lot since the accident.

25 A. Yeah.

1 Q. I mean like maybe you can give me a rough idea how many will
2 we get a week now and how many we got a week before the accident?

3 A. Yeah. I wouldn't know that number unfortunately. So because
4 AIR-843 manages that program, we -- they do a lot of the
5 coordination AEE, and we don't see it until they're ready, that
6 they have a primary investigator and a writer editor assigned and
7 then we assign the second investigator. So, I wouldn't have that
8 level of detail on like a week-to-week basis.

9 Q. AIR-843. Is somebody in AIR-843 one of the people that we
10 are thinking about talking to? I mean --

11 A. They're not. They're not on that org chart that we chatted
12 about before. So, no.

13 Q. Okay. And that takes me over to -- we were talking about the
14 priority but then -- I was going to ask, too, then about the FAA
15 oversight of the staffing as far as -- it sounds like there's
16 going to be an increase. He asked about that. And I think that's
17 excellent, but I was going to ask how well that can affect the
18 actual active working of the whistleblower/hotline complaints when
19 they come in or if that's just going to be separate people working
20 those?

21 A. So new employees won't immediately assigned to that. So
22 active hotline/whistleblowers shouldn't be affected by us hiring
23 new staff. Certainly once our staff are trained and up to speed,
24 it'll be helpful because we'll have more people to spread that
25 work out to, if that makes sense.

1 Q. Um-hum. Sure. Well, and then maybe they can be doing some
2 extra oversight of the resources?

3 A. For sure, yep.

4 Q. And then which takes -- jumps me over a little bit to the ODA
5 interface. I know that's maybe one of the people that works for
6 you. And how effective do you feel that program is? And is
7 strictly -- give me a perspective of if it's just to complement
8 your team or if it helps to fill a role? I don't want to say --
9 use it with crutch anywhere in there but like how -- explain that
10 interface a little bit and how -- what you think of it?

11 A. Okay. Well, the ODA, I guess specific the Boeing ODA, they
12 have -- there's a lot of unit members that are in there. We work
13 to interact with all of them. There's well over 1,000 unit
14 members within the Boeing ODA. We work to interact with all of
15 them. And there is a lot -- there is -- because they have that
16 many members, there's obviously a lot of work that gets delegated
17 to the ODA, and we work to do oversight of them doing that
18 delegated work as well. So I would say -- I think, I think that's
19 it. I mean I think that's where we're at.

20 Q. When you get the additional staff, will that help with the
21 oversight of the ODAs as well? I mean is that kind of part of the
22 plan for that additional staff how it's justified?

23 A. Yeah. So certainly we will use additional staff to assist
24 with ODA oversight as well as production system or quality system
25 oversight. So, yeah, they'll be used for both. All of our folks

1 are -- do some part of both of those functions.

2 Q. And then jumping over to LOIs, we know that there's a LOI for
3 the event, as a result of the event or part of the event. How
4 many, how many LOIs do you -- do you have a rough idea how many
5 LOIs there are issued to Boeing or against Boeing?

6 A. I do not have a specific number of those to Boeing. You
7 know, there are some from our group. There may be others that are
8 out there as well.

9 Q. How about with like the SRMs that the Boeing folks do as part
10 of their SMS? Do any of your team get involved with any of those
11 or, you know --

12 A. Yes, so we do participate on some of the SRMs. I think we
13 have participation on nine of the SRMs that are currently going
14 on. We do get to see the risk register that Boeing has, the SRMs
15 that they are actively working and ones they are planning on. And
16 we try to pick SRMs that we feel are critical, where it makes
17 sense that -- for the FAA to participate in, as we balance our
18 resources with mandated oversight activity as well. So.

19 Q. Yeah. Sounds like us possibly when you get the extra staff,
20 that'll help on that, too.

21 A. For sure, yeah. It's another area where we can get our folks
22 trained on SMS and the Boeing quality system and then use them as
23 participants on those SRMs.

24 Q. I think that's all for me right now. Thank you.

25 A. For sure.

1 DR. WOODS: Mike.

2 BY MR. RINEY:

3 Q. Can you talk about what goes into the ASI training?

4 A. Yes. There is a program of mandated classes for all of our
5 ASIs to ensure that they are competent auditors and they
6 understand all of the internal FAA orders and responsibilities. I
7 am not an expert on ASI training unfortunately, but that is --
8 there is, you know, we have staff that do that part that are
9 experts on that and, you know, we have mandated curriculum that
10 our folks have to go through.

11 Q. Is there a certain timeframe for the shadowing that's
12 required and that type of thing?

13 A. Yeah. So most -- we do have, we do have requirements that
14 you -- need to be met before you can do certain things. We do
15 have on-the-job like training trackers where we ensure that new
16 ASIs go out with senior ASIs and kind of get that -- the ability
17 to do that function, not necessarily approved but we have seniors
18 there to make sure they know what they're doing.

19 Q. Something that we hadn't -- or I at least I hadn't thought
20 about previously about the ODA oversight. Can you tell me what
21 that entails and is there -- and are you aware of any ODAs that
22 have been removed from the program?

23 A. I am not aware of any ODAs that have been removed. Our
24 oversight is dictated by 8100.15B currently which drives a certain
25 minimum requirement of oversight. In addition, ACSAA mandated

1 that all of the Boeing unit members have a specific dedicated FAA
2 advisor. And so AIR-580 along with other parts of AIR, but we
3 provide the majority of the advisors for all of the Boeing unit
4 members. In our oversight, we do -- obviously we do oversight of
5 both the engineering part of the ODA as well as the inspection
6 unit part of the ODA.

7 Q. Do you know for the Renton location the number of ODAs and
8 has that increased or decreased?

9 A. Of unit members do you mean? I do not know the specific
10 number of unit members that are located solely at Renton. I do
11 not.

12 Q. You had mentioned in your daily activity for the Boeing, GE
13 and Pratt Whitney specific. Do you have actual counterparts at
14 Boeing that you deal with frequently or --

15 A. Yes, I do.

16 Q. At what level normally are they?

17 A. So most of the folks that I deal with on a daily basis are
18 vice presidents or senior vice presidents or senior managers in
19 the different areas. So I'll deal with folks that lead the ODA as
20 well as lead the quality system for Boeing.

21 Q. Okay.

22 A. So both of those different leadership chains within Boeing.

23 Q. Okay. Thank you.

24 A. Yep.

25 MR. RINEY: That's all I've got.

1 DR. WOODS: John.

2 BY MR. PETRUZZELLI:

3 Q. You talked about failure to follow processes and auditing are
4 the two big issues.

5 A. Those are the trends that we've seen recently, yeah. Yes.

6 Q. Can you break down at all or more what the failure to follow
7 process is? Was it removals? Was it not certified?

8 A. Sure. I'm not, I'm not able to break down that into more
9 specific detail.

10 Q. Can you in general?

11 A. I can do some, you know, what we've seen is we do audits of
12 installation planning or product audits to see if they're
13 following installation planning. And so we've seen product on
14 failure where one aspect of that installation planning wasn't
15 followed properly, and there's a myriad of reasons probably why
16 and, you know, we've continued to do root cause analysis to
17 understand why that is.

18 Q. All right. You talked about the unit members.

19 A. Yes.

20 Q. Are you speaking of the inspection unit members or the
21 engineering unit members or both?

22 A. Both. So we oversee -- AIR-580 oversees both engineering and
23 inspection unit members.

24 Q. Okay. And last question for me, and I think you're probably
25 the right guy to ask this question. Are you the individual that

1 represents the FAA to the tri-party agreement between --

2 A. Yes.

3 Q. -- the machinist and Boeing?

4 A. I am. I'm the FAA representative on the steering committee.

5 Q. So that kicked out what? December.

6 A. Correct. The agreement was signed in June. There was a
7 bunch of work to be done to make sure we developed the processes
8 for that and that did -- I think they started reviewing speak up
9 reports in late November-ish, correct.

10 Q. Is that group meeting once a month?

11 A. No, they meet like -- the steering committee or the event
12 review committee?

13 Q. The actual tri-party, Mr. Holder, yourself --

14 A. Oh, we have strived to meet once a month and it's mostly been
15 once a month, that we meet, that I meet with John, yeah.

16 Q. Has that helped with an understanding like, from the FAA's
17 perspective, has it given you any insights?

18 A. I learn something new at the steering committee meeting every
19 time I go there. So, yes, I think it's a really great program,
20 accomplishment, and that we're working to get there, that we have
21 an agreement and that we have an ASAP in place. Are we, you know,
22 are we working through some of the process challenges of that,
23 yes, but I think it's vital.

24 Q. And you're the one that represents the FAA on that?

25 A. Yes.

1 Q. Perfect. Thank you.

2 A. That's right.

3 Q. Thank you.

4 DR. WOODS: Dan.

5 BY MR. MARCOTTE:

6 Q. Just a few quick questions.

7 A. Sure.

8 Q. Just really quickly on the unit members. I'm guessing you
9 have probably more engineering unit members than production.

10 A. Correct.

11 Q. So this percent, and I know you don't have numbers, but just
12 to get a feeling on percentage-wise.

13 A. I think it's like 75 percent are engineering unit members, 25
14 percent are inspection unit members. I do not have the specific
15 numbers off the top of my head but I know where to go get them if
16 I need them.

17 Q. That's okay. And I realize you started this job 10 months
18 ago.

19 A. Yeah.

20 Q. So -- and it sounds like your predecessor, it sounds like you
21 had a transition period if he retired in December.

22 A. Correct, yeah.

23 Q. It was great you had an opportunity to work together before
24 he retired.

25 A. That was -- it was a really good advantage, you know. Jim

1 handled the FAA -- the AIR part of the Section 103 Panel and how
2 that was being developed. So that was kind of his main job during
3 that -- the last 6 months, but certainly it was very helpful to
4 have him available to ask lots, lots of questions.

5 Q. So just listening to your titles and your prior experience,
6 it sounds like it was mostly engineering certification and doing
7 flight tests.

8 A. That's correct.

9 Q. So had you had any production oversight or manufacturing
10 experience before you took this job?

11 A. Not specifically, no. So I've been learning a lot --

12 Q. Yeah.

13 A. -- in the last 10 months.

14 Q. And I know you're new to this job, but I'll ask anyway.

15 A. Sure.

16 Q. So, within the FAA, do you have a process or metrics that you
17 evaluate the effectiveness of Boeing's CAPs or corrective action
18 plans?

19 A. So, I wouldn't -- I don't think we have a holistical
20 (verbatim) look at, say all of the corrective actions that are in
21 place and how they're working. We don't look at that
22 holistically, but we certainly investigate and review each of them
23 that come in on the issues that are identified to try to ensure
24 that they are being appropriately implemented and actually solving
25 the problem.

1 Q. Okay. I guess where I'm going, there's one topic that had
2 repeat -- that's repeated itself over the years.

3 A. Yeah. So, we certainly can identify that. Like we have the
4 ability but there isn't I would say -- it's more people based
5 maybe currently where we know people have seen it over and over
6 and then we identify it, and then we say, hey, this is a --

7 Q. Right.

8 A. -- systemic issue.

9 Q. Yeah, so it's not like a trend analysis or anything.

10 A. I mean there's some of that that goes on, right, but it's not
11 -- well, we do trend analysis to ensure that if we do see systemic
12 issues --

13 Q. Yeah.

14 A. -- I mean that is part of what we do, but I don't think it's
15 a mandated by a FAA order process.

16 Q. Okay. And that's, you know, so I'm kind of figuring out the
17 effectiveness on CAPs on a repeating --

18 A. Sure.

19 Q. -- you keep seeing kind of -- you see an improvement in the
20 next corrective action program or is it okay, they're going to do
21 the same thing with a slight change --

22 A. Sure.

23 Q. -- you know, are you going training, training, training?

24 A. Right.

25 Q. But it doesn't seem to be sticking. So.

1 A. Right. We certainly do identify areas where we see solutions
2 that have been tried before that don't work. That is, you know,
3 in a lot of cases based on we have a lot of the same people
4 looking at that stuff.

5 Q. Right.

6 A. So they're able to see that.

7 Q. Okay. I think that's it for now. Thank you.

8 BY DR. WOODS:

9 Q. Brian, in your current role, where do you see or describe for
10 me your interface with FAA's oversight of Boeing's voluntary SMS
11 program?

12 A. So myself and folks in my section, we meet biweekly with
13 Boeing to discuss different activities that are going on within
14 their voluntary SMS. We -- like I said, we participate on some of
15 the SRMs that Boeing has going on, and we also are invited to
16 their CEO reviews or their risks as they rise up the chain. So
17 that's on a biweekly basis as well. So I would say that is -- and
18 they -- I would say I do get briefed on any changes to their
19 voluntary SMS program that they may be implementing. And, I think
20 that answers your question.

21 Q. Who's doing the briefing? Is it your FAA counterpart or
22 Boeing's manager of the voluntary SMS?

23 A. No, Boeing folks. Like Boeing's group that manages their SMS
24 is usually the folks that we briefed by, activities that are going
25 on like new SRMs or the currency of SRMs.

1 Q. So I guess in that answer it was hard for me to determine
2 what your level of involvement is with the FAA side as managing
3 versus the Boeing responsible authority.

4 A. Okay. So those folks work for me. Like they -- like my
5 people are --

6 Q. Yeah.

7 A. -- in those meetings.

8 Q. Okay. Are you in those meetings?

9 A. I am in some of them, as many as I am able to attend.

10 Q. Okay. And are there meetings that you're having with Boeing
11 responsible parties without your ASIs being there?

12 A. If we're talking about not specific SRMs but we're talking
13 about like hierarchical SMS, how their program is, there may be --
14 that would be a meeting that I may go to or me and my section
15 managers would go to where the ASIs themselves wouldn't be in that
16 meeting.

17 Q. Okay. I'm just trying to establish what you're purview to
18 versus what they're purview to.

19 A. Sure.

20 Q. -- and where you connect back to the Boeing side.

21 A. Yeah. Okay.

22 Q. I recognize that some of those might --

23 A. Sure.

24 Q. -- run parallel, but -- what training FAA provided you for
25 SMS?

1 A. So me specifically or --

2 Q. You specifically.

3 A. Okay. So I haven't been to any formal SMS training myself
4 but I -- there is -- like in-person training. But there is on my
5 training around ASAPs and SMS that I have taken through our
6 training system.

7 Q. Okay. Do you foresee a point in the future where that
8 training will be required?

9 A. Yes.

10 Q. And what will be the delivery platform for that training?

11 A. I do not know, but my guess is we are working on sending a
12 lot -- all of our folks to in-person SMS training that is
13 delivered in Oklahoma City. So I imagine I will be there at some
14 point in the near future, too.

15 Q. Okay. I think that is all I have for this go around.

16 DR. WOODS: I think we're only at about 45 minutes or so, 44
17 minutes. How are you feeling? Anybody ready for a break? Are
18 you ready for a break?

19 MR. KNAUP: I could use a -- just because I've been dealing
20 with allergies.

21 DR. WOODS: No worries. Not a problem at all. We're going
22 to go off the record at 11:29 Pacific.

23 (Off the record at 11:29 a.m.)

24 (On the record at 11:35 a.m.)

25 DR. WOODS: We are back on the record at 11:35 Pacific.

1 BY MR. CRUZ:

2 Q. Just a couple more questions for you, Brian.

3 A. Okay.

4 Q. The production audits that -- I know you oversee one of your
5 managers for the production audits of the Spirit. Is that
6 correct?

7 A. Correct, yes.

8 Q. Would you happen to know what audits you're finding from the
9 Spirit side?

10 A. What the findings are?

11 Q. Yeah.

12 A. In like a general sense --

13 Q. In general.

14 A. -- findings at Spirit. So just so we're -- so what we --
15 when we do audits at Spirit, they're supplier control audits.

16 Q. Yeah.

17 A. We are auditing Boeing's ability to manage their suppliers.

18 Q. Sure.

19 A. The systemic findings or the findings that we see, trends are
20 similar to what have seen in Renton where it's either failure to
21 follow process, housekeeping, tool control, stuff like that. It
22 would be I would say the heavy hitters if we were thinking like
23 that.

24 Q. So any issues that you find over there you would let Boeing
25 obviously?

1 A. Correct. Yeah. We -- they're written against Boeing and
2 Boeing is responsible for correcting them obviously working with
3 their supplier.

4 Q. Okay.

5 A. Spirit in this case.

6 Q. How often -- I'm assuming you have meetings with your
7 frontline managers, too, right?

8 A. Yes.

9 Q. And how often does that happen?

10 A. So I meet with my frontline managers every Monday for -- and
11 then on an as needed basis. We have other meetings where we're in
12 meetings together. So we meet as a team every Monday, and we meet
13 for other discussions on an as needed basis and then we are in
14 meetings with our -- with Boeing, GE, Pratt Whitney --

15 Q. Yeah.

16 A. -- often throughout the week.

17 Q. Okay. I think that's all I've got.

18 MR. CRUZ: Nils.

19 MR. JOHNSON: Thank you.

20 BY MR. JOHNSON:

21 Q. I'd like to talk about ODAs for a minute.

22 A. Sure.

23 Q. ODAs are issued against an organization. Is that correct?

24 A. Yeah, they're an organizational delegation, yeah.

25 Q. But they're not -- I mean an individual would be DAR or a

1 DER. Are there individuals within an organization then that are
2 I'll call it knighted, forgive my lack of understanding, but --
3 A. So, yeah. So Boeing has -- for the Boeing ODA, they have
4 folks that are unit members. Those unit members are given
5 authorized functions so they can do certain things on FAA's
6 behalf. They don't function in that role 100 percent of the time.
7 They're not doing FAA delegated work their whole job at Boeing.
8 It is just when some kind of compliance finding or conformity
9 finding needs to be done on the FAA's behalf that they would be
10 acting in that delegated authorized function role. Does that
11 help?

12 Q. So is there a roster then of --

13 A. Yes.

14 Q. -- people who are authorized to act under the ODA?

15 A. Correct. Yeah. And, we approve -- we now, as a part of --
16 due to ACSAA (ph.) legislation, the FAA approves every unit member
17 now that is on that roster.

18 Q. So you basically determine if they're qualified based on
19 their history or whatever --

20 A. Yeah, they give us a -- yeah, basically a set of documents
21 that show their experience and then we review that and decide, you
22 know, based on that, and potentially an interview, whether they
23 are -- we would approve them to act on our behalf.

24 Q. Okay. Thank you, Brian. That's it for me.

25 MR. JOHNSON: Matt.

1 DR. WOODS: Matt.

2 BY MR. RIGSBY:

3 Q. Just a couple, Brian.

4 A. Sure.

5 Q. I think you said you had -- that you weren't performing
6 audits currently with your team. Is that right?

7 A. Personally no, I do not do any audits.

8 Q. In past have you performed audits?

9 A. I have not. My background is not in production. So I did
10 not production audits.

11 Q. Okay. Who is your boss?

12 A. So my -- Dorr Anderson (ph.) is the acting deputy director,
13 and then John Piccola is the director. And it has been announced
14 Suzanne Masterson (ph.) is going to be the deputy director to fill
15 that spot. That doesn't start until the 21st of April.

16 Q. And does Steve Slagle (ph.) work for you?

17 A. No, he does not. He works in AIR-840, and AIR-840 does a lot
18 of the foundational business around oversight for AIR. So we
19 leverage that group for foundational business aspects of
20 production oversight and SMS. So Steve works in that group. It's
21 a similar group that does -- handles hotline/whistleblower kind of
22 management and provides the investigators for that as well.

23 Q. Okay.

24 A. They do lots of other things.

25 Q. Okay. That's it for me.

1 A. Okay.

2 BY MR. LEVANEN:

3 Q. Just a few quick things from me as well.

4 A. Sure.

5 Q. You mentioned that the ODAs require approval by the FAA to be
6 on the list as of now.

7 A. Yes.

8 Q. Like how long has that requirement been in effect?

9 A. Since the ACSAA legislation which was December of 2020 I believe
10 is when that came out.

11 Q. Okay. Thank you. And then one other one, and I don't know
12 how much you can help with it, but just a question I had. I
13 understand that the PI is based in Charleston.

14 A. Correct.

15 Q. From what you understand was the role of the PI for the --
16 like in an oversight role at Boeing, how effective is it being in
17 Charleston I guess? Is it the kind of position that you really
18 don't need to be at the location that you're overseeing? Would it
19 be more effective to have more PIs or what's your thought on that?

20 A. So I think you can be effective at one of the main Boeing
21 facilities as a PI. You don't necessarily have to be in the
22 location. The PI's role has some defined functions in the order
23 around communication. So a lot of comms go through our Boeing PI
24 and then they're distributed, right, to all the folks that need
25 to. You know, we delegate some of those responsibilities to the

1 people in the location when it's something specific for that
2 location, but I think you can certainly be effective in one place
3 especially with that geographically separated location. We
4 obviously have people in each location to help with that.

5 Q. Okay. And that's it for me. Thank you.

6 MR. RINEY: I didn't have any further questions.

7 DR. WOODS: Okay. John.

8 MR. PETRUZZELLI: Nor do I.

9 BY MR. MARCOTTE:

10 Q. On really quick question on unit members.

11 A. Sure.

12 Q. And maybe I'm wrong, but I thought that, you know, so I
13 started when the unit members we had, we still had DERs, DARs and
14 non-unit members.

15 A. Yep.

16 Q. But was there a time when they weren't approved by the FAA?

17 A. Correct. So, before the ACSAA legislation, there was a
18 process that was approved --

19 Q. Right.

20 A. -- by the FAA and then Boeing -- the ODA itself could appoint
21 unit members following that process.

22 Q. Okay. Now, I understand.

23 A. Yeah.

24 Q. So you didn't directly approve them. You still gave this guy
25 a --

1 A. Correct, that's right. And then we would do oversight of
2 that. Some part of ACSAA just said you have to directly approve
3 all the unit members.

4 Q. Thanks for clarifying that.

5 A. Yep. For sure.

6 MR. MARCOTTE: That's it.

7 DR. WOODS: I only have one final question left today that we
8 ask all the people we interview, but before I get to that, I want
9 to make sure that there's nobody else that has questions left in
10 the group. Pocholo.

11 BY MR. CRUZ:

12 Q. I just what to follow up on what Troy was asking concerning
13 the PI.

14 A. Okay.

15 Q. Is there anybody else working as a deputy to the PI?

16 A. We don't have anyone defined as a deputy. So we just have
17 Bryan is designated as the PI. He fills that role of the stuff
18 that is mandated within. We certainly all help each other but we
19 don't have a specific definition, someone as a deputy PI.

20 Q. I don't remember if we asked Bryan this question. How many
21 times does he ever go to the Everett or the Renton plant? Do you
22 know?

23 A. He's been out here once a week since January.

24 Q. Okay.

25 A. Not once a week. A week a month since January. That

1 probably isn't usual but we certainly do have him travel to all of
2 the locations including, you know, Everett or Renton.

3 Q. Do you feel he has a good pulse of what's happening in
4 Everett even though he's living across the country?

5 A. I do because we have people there and there's constant
6 communication across the branch to ensure that we all have a good
7 understanding of what is going on in each of the locations.

8 Q. Okay. All right. Thank you.

9 A. Yep.

10 DR. WOODS: Anyone else?

11 BY DR. WOODS:

12 Q. So my last question, I call it the king for a day question.
13 And if I gave you like a magic wand and you could do anything you
14 needed to do, whatever you wanted to make your role, the role of
15 your ASIs better, more efficient, more productive, what would that
16 one thing be?

17 A. Well, I do think an increase in resources will be helpful.
18 We have a lot of people doing a lot of work, and getting an
19 additional set of eyes to be involved in maybe more of the
20 activities, I think will help us. I think we are working through
21 a lot of things from -- since refinement on how we're going to
22 integrate a bunch of offices that were not necessarily integrated
23 before. So I think we need -- I'd give us more time to figure
24 that out, and then we have -- we are working through IT tool
25 challenges, like I think like many government organizations work

1 through, to try to link all the stuff that we have going on
2 together. And so we're making progress in that regard but
3 speeding that process together will allow our people to
4 communicate better because ultimately we're going to be a
5 geographically diverse group to try to oversee the applicants we
6 have and the massive supply base. And so our ability to
7 communicate among that group is vital to our success. So just
8 getting the right tools in place to make it easier for our folks
9 to do their job and communicate what they find to everyone else is
10 what, you know, we're working on really hard.

11 Q. Okay. You did a lot with that magic wand.

12 A. Yeah, that's what we're trying to do. So.

13 Q. Thank you.

14 A. Yep.

15 Q. That is all I have.

16 DR. WOODS: Everybody else seems to be good. Again --

17 MR. LOVELL: If I may.

18 DR. WOODS: Please.

19 BY MR. LOVELL:

20 Q. What would be an indicator to you at your level that there
21 was an oversight issue? I'm just curious.

22 A. You know, we monitor various metrics from our applicants. So
23 that is an indicator. Certainly significant repeat findings
24 across programs for manufacturing facilities or different
25 production lines. Those are indicators for me. And then just

1 ensuring that our applicants' maintenance is listening to their
2 folks and trying to ensure that what we're hearing is making its
3 way through management and they're address it.

4 Q. And then how would you propose to initially deal with that if
5 one of those indicators manifested itself?

6 A. Well, I mean I would talk to my folks to see if what their
7 idea were to deal with that, and then I would work with my
8 counterparts in those applicants to ensure they understand that we
9 feel like this is an indication of something and ask them to go --
10 how they're going to address that indicator theirselves, make sure
11 that that isn't an issue.

12 Q. Okay.

13 DR. WOODS: Okay. All right. Well, with that, thank you
14 again for your time. We're going to go off record at 11:50
15 Pacific Time.

16 (Whereupon, at 11:50 p.m. Pacific Time, the interview was
17 concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9
MAX IN-FLIGHT STRUCTURE
FAILURE NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Brian Knaup

ACCIDENT NO.: DCA24MA063

PLACE: Des Moines, Washington

DATE: April 12, 2024

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.

Kathryn A. Mirfin
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *
Investigation of: *
*
ALASKA AIRLINES BOEING 737-9 *
MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063
FAILURE NEAR PORTLAND, OREGON *
ON JANUARY 5, 2024 *
*
* * * * *

Interview of: CIBONEY KOIDAHL, Aerospace Engineer
Boeing Oversight Division
Federal Aviation Administration

via videoconference

Tuesday,
May 7, 2024

APPEARANCES:

SABRINA WOODS, Ph.D., Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer Investigator
National Transportation Safety Board

NILS JOHNSON
Aviation Accident Investigator - Maintenance
National Transportation Safety Board

JOHN LOVELL, Investigator in Charge
National Transportation Safety Board

MATT RIGSBY, Accident Investigator
Federal Aviation Administration

TROY LEVANEN, Director of Maintenance
Alaska Airlines

DAN MARCOTTE, Air Safety Investigator
Boeing

JOHN PETRUZZELLI
International Association of Machinists (IAM)

MIKE RINEY, Onsite Representative
Spirit AeroSystems

REBECCA LIPE, Legal Counsel
Federal Aviation Administration
(On behalf of Ms. Koidahl)

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I N T E R V I E W

(8:02 a.m. PT)

1
2
3 DR. WOODS: Good morning. It is May 7th, 2024, and the time
4 is 8:02 Pacific Time. My name is Dr. Sabrina Woods, and I am an
5 aviation human performance investigator with the National
6 Transportation Safety Board. The Board has been congressionally
7 charged with determining probable cause in aviation accidents and
8 significant incidents. We are here today reviewing information
9 pertaining to -- standby one moment, apologies -- pertaining to
10 accident investigation number Delta-Charlie-Alpha-24-Mike-Alpha-
11 063, involving an Alaskan Airlines aircraft.

12 The NTSB investigates with parties that are assigned to the
13 investigation. What you see here in the room on the video is all
14 the parties to the investigation. I'm going to have them go
15 around the room and introduce themselves to you so you have a
16 better understanding as to who you're talking to. And then later
17 on, as we progress, I'll make sure I call out their names so you
18 can have a -- since you're not here in the room, so you have a
19 clear understanding of who's talking to you as we go around in
20 asking questions. So I'm going to start -- we're going to go to
21 my left. I'm actually going to start with Nils first introducing.

22 MR. JOHNSON: Hi. Nils Johnson, aviation accident
23 investigator for the NTSB. My specialty is maintenance.

24 DR. WOODS: Hop over to Troy.

25 MR. LEVANEN: Good morning. I'm Troy Levanen with Alaska

1 Airlines. I'm the director for maintenance and engineering
2 safety, and I've been with the airline about 34 years.

3 DR. WOODS: And John?

4 MR. PETRUZZELLI: John --

5 MR. LOVELL: Hi. John Lovell, NTSB.

6 DR. WOODS: Sorry. Second John.

7 MR. PETRUZZELLI: John Petruzzelli, here on behalf of the
8 International Association of Machinists and Aerospace Workers
9 union.

10 MR. MARCOTTE: Good morning. I'm Dan Marcotte. I'm a Boeing
11 air safety investigator based out of Southern California.

12 MR. CRUZ: Good morning. I'm Pocholo Cruz. I'm the co-chair
13 with Sabrina. I'm an aerospace engineer with specialty in
14 structures and maintenance.

15 MR. RINEY: Good morning. Mike Riney. I'm Spirit's on-site
16 leader for Washington.

17 DR. WOODS: And Matt?

18 MR. RIGSBY: Matt Rigsby, FAA's Office of Accident
19 Investigation. We talked, so --

20 DR. WOODS: So that's it.

21 MS. KOIDAHL: Nice to meet you all.

22 DR. WOODS: That's -- you're good. That's everybody who's
23 going to be talking to you today. I don't know if you can kind of
24 see us in the room. I see the screen and I see how we're laid
25 out, but again, I will try to do my best to as people are talking

1 to recall out their name so you can kind of make us out on the
2 video there.

3 So with that, we're here for you to share your insight as a
4 member of the regulatory and oversight time for the Boeing
5 commercial airplane company. To capture that insight we will be
6 using a digital recorder. After the interview, I'm going to send
7 that recording out for transcription and the party members will
8 have an opportunity to review the transcription to correct it for
9 any typographical errors, things of that sort. We do not change
10 the content. Once we receive the certified copy back from the
11 transcriber, it will go forward to be a matter of public record in
12 the docket for this investigation.

13 Each of these group members here will have a chance to ask
14 questions. We're going to ask questions one at a time so you'll
15 only have to focus on one person at a time. There will be an
16 opportunity for each group member to ask follow-up questions after
17 everybody's had their first initial turn. So we usually do two
18 rounds.

19 Please answer the questions to the best of your ability. If
20 you don't understand a question, just say so. We'll try to
21 clarify. We're going to do the same if we don't understand an
22 answer. If you realize at any time you misstated something and
23 want to go back to correct or add on to something you previously
24 said -- we have to go in order, you do not. You can hop around.
25 So if you remember something that somebody said a couple people

1 ago, feel free to go, hey, I'd like to go back to that. Because
2 we want to capture things as they're fresh in your mind, so feel
3 free to do that.

4 So with that, you always are afforded one representative.
5 The FAA has afforded or has ordered you a representative to be
6 with you today. I just want to make sure that you are aware of
7 that and that you are okay with that? Can I get that verbally?

8 MS. KOIDAHL: Yes. I'm okay with Rebecca being my
9 representative.

10 DR. WOODS: Okay. Perfect.

11 And with that, Rebecca, if you would go on and introduce
12 yourself for the recording?

13 MS. LIPE: Yes. Rebecca Lipe, Office -- oh, excuse me --
14 Office of Chief Counsel for the FAA.

15 DR. WOODS: Perfect. With that, you -- please recognize that
16 this is an interview, not a deposition. Please refrain from
17 interrupting the process or attempting to answer on behalf of your
18 client.

19 Being that, Ciboney, at any time you need a break, just let
20 us know, just say so, and that can be a break for whatever reason,
21 if you just want to step away, if you need to attend to something.
22 And obviously if you want to speak counsel, just let us know.
23 We'll pause the recording and we'll go off recording. We can get
24 that done and you can get what you need to do and then just let us
25 know and we'll go back on whenever you're ready. Are there any

1 questions about that?

2 MS. KOIDAHL: Not at this time. Thank you.

3 DR. WOODS: Okay. Awesome.

4 So with that, is everybody ready to begin?

5 INTERVIEW OF CIBONEY KOIDAHL

6 BY DR. WOODS:

7 Q. Okay. We're going to, we're going to go with the hardest
8 questions first. If you would please, for the record, state your
9 full name and because of the uniqueness of your full name, would
10 you spell it as well?

11 A. Yes, of course. Full name is Ciboney Koidahl. Ciboney as in
12 C-i-b-o-n-e-y; Koidahl, as in K-o-i-d-a-h-l.

13 Q. Excellent. Thank you for that. And could please state what
14 is your title? Like what is your job function for the FAA?

15 A. So my job title is aerospace engineer within AIR-582, the
16 Boeing Oversight Division.

17 Q. Okay. And how long have you worked for the FAA?

18 A. I've been with the FAA since 2020 July, so 4 years.

19 Q. Did you hold any other previous jobs before this one?

20 A. I had an internship in college but no career-specific long-
21 term jobs.

22 Q. Okay. So with that function with what you do as an aerospace
23 engineer in AIR, can you just walk us through a high level
24 overview of what you do on a day-to-day basis?

25 A. Yeah. So it has changed over the course of the 4 years that

1 I've been here, I mean, especially considering the reorganization
2 last April, AIR has altered just a little. So I do mostly
3 production oversight in that I work with engineers from now
4 different companies, but prior to the reorganization was just
5 Boeing, on their MRB dispositions, engineering processes, things
6 like that. Beyond that, I helped with SMS, since that's what my
7 degree was in, is the aerospace and occupational safety from
8 Embry-Riddle. It is an ABET-accredited degree, hence the
9 engineering. And I did SMS integration into AIR has been my day
10 to day. So bringing my ASIs and ASEs up to speed on what SMS is.

11 Q. So with that, so you said that you were primarily working
12 with Boeing but now it sounds like you've transitioned a bit into
13 working with other production companies?

14 A. Yes. So now with the SMS being a rule, since October I have
15 been working with GE, Pratt & Whitney, and Boeing with their SMS.

16 Q. Okay. Was there -- did you have a predecessor that was in
17 place before you took on those roles or were you kind of brought
18 in fresh to build the program on your own?

19 A. So Jim Phoenix was working it prior to me as well as the
20 voluntary system was in place. So it became my involvement in the
21 voluntary for understanding of what was going to happen when the
22 rule came out.

23 Q. Okay. And so I know you said you have a degree in this. Is
24 all of your formal training in SMS outside the FAA or have you
25 been provided training with the FAA?

1 A. I did do the formal class that was sent out, the eLMS
2 training, and I am signed up to do the in-person SMS FAA training.
3 Other than that, it's been on the job and from schooling.

4 Q. Okay. How much involvement did you have in helping Boeing
5 build their voluntary SMS program?

6 A. I was involved in it in that I was asked by Jim Phoenix some
7 SMS questions about like the (indiscernible). I wouldn't say I
8 was an integral part of it that was listed as a voluntary system.
9 So it would have been Steve Slagle's group who would have been
10 doing a lot of the building. I had been on a few SRMs, but it was
11 more just as insight of my knowledge about SMS.

12 Q. Okay. What would you say the transition is -- what are the
13 major differences between that voluntary program and that initial
14 setup with Mr. Slagle's group and what you do now? What are the
15 key differences?

16 A. Well, so now it's a requirement as of April 26th, so we're
17 doing implementation plans and things of that nature. So the
18 rule, it's required now, right? So it's an implementation plan,
19 it's we got to do the DCTs, which are the verification and
20 evaluation now. The voluntary was operating on the Part 5 system
21 item, so the 4 validations and 10 demonstration. DCTs were what
22 they were utilizing, I believe.

23 Q. Okay. I'm familiar, but I'm not sure everybody in the room
24 is familiar with that concept. Can you give me a high level
25 overview of what's a DCT?

1 A. Oh, yeah. It's a Data Collection Tool. The Flight Standards
2 utilize it for SMS for operators.

3 Q. And what is the primary tool that -- I'm actually skipping
4 ahead of my own question. What are the primary products that
5 Boeing presents to the FAA to facilitate that function?

6 A. I'm sorry. I'm not entirely sure what you mean.

7 Q. What are Boeing's assessment tools that they use that help
8 inform the oversight process for SMS?

9 A. So I might be misunderstanding your question, but as far as
10 their internal audit, I couldn't speak to that. That would have
11 been on the voluntary side that would have understood that. I do
12 the biweekly meetings with them to understand their risk register
13 so that they track the SRMs in which they're doing. I'm on that
14 call every other week. And as far as what they do, I believe they
15 use the DCT, but again, I -- I know that they've used the
16 validation DCT; however, I do not know what else they are doing
17 off the top of my head.

18 Q. Okay. No problem. When they're doing their risk assessment,
19 how -- what tool are they using to track that information in? Do
20 you have knowledge of that?

21 A. Are you referring to the bowtie tracking for their SRMs
22 specifically, or are you asking for the tool that they put their
23 risk register in?

24 Q. The tool that they put their risk register in.

25 A. I'm unsure what that is.

1 Q. Okay. You said that you have been involved in an SRM panel
2 or assessment for Boeing? Did you say that? I'm sorry.

3 A. Yes. So -- yeah, safety risk mitigation activity.

4 Q. Can you give me a high level overview of what triggers one of
5 those?

6 A. Yeah. So they follow the four triggers that the old Part 5
7 and new Part 5 requires. So if it's a change in their existing
8 process, a hazard or -- an identified hazard, excuse me, a -- a
9 change to an existing process, a new process, a hazard, and a
10 (indiscernible) insufficient risk control identified.

11 Q. And how often would you say that comes up to where you have
12 been involved?

13 A. So I've only been on two; however, we see the risk register
14 in the biweekly meetings and are sent it, yes. But I've only
15 personally sat on two panels, if you call them panels. It is a
16 group of people that discuss it to their nature of what their job
17 is.

18 Q. How confident are you that your -- that the Boeing staff that
19 are on these panels and otherwise are knowledgeable and capable of
20 running an SRM?

21 A. So as far as understanding, the SMEs that are in the room
22 absolutely. As far as assessing competency in risk communication
23 and management, that's not what I was there to do so I couldn't
24 tell you.

25 Q. Okay. So having the educational background that you do and

1 having seen I guess the operational side of it for a little while,
2 what aspect -- well, let me go back actually. As you stated, it
3 was a voluntary program and now it's moving due to the new rule.
4 Now it's going to be mandated. How poised would you say is Boeing
5 to make that leap, to make the full change to the stipulations in
6 the mandatory program?

7 A. I think that would be on Boeing to send in their
8 implementation plan that has the gaps outlined. Only they can
9 speak to where they're at as far as ready for the rule or not.

10 Q. But as far as oversight, which you help provide, you are part
11 of the team that's responsible for determining if that's
12 sufficient. So as a member of the regulatory authority, I'm
13 asking -- and having that educational background, that foundation
14 that many don't have, I'm asking you -- and this -- if you want to
15 say per my opinion, that's fine. Do you feel that Boeing is
16 poised and ready to take that next step?

17 A. I feel that they have to take that next step since it's now a
18 required rule. In my opinion, I don't begin to know, right? I've
19 only been working on the implementation of it since the rule was
20 announced. (Indiscernible) NPRM has worked with them in that
21 capacity. But in understanding the differences in the rule, there
22 was a lot that changed past (indiscernible). Once the NPRM came
23 out and understanding the comments and the reason the rule was
24 made the way it was, I haven't begun to dissect that enough to
25 understand where each company is. I'll have to go out and work

1 with them now that the rule has been published. I'm sorry I don't
2 have a better answer than that. I'm assessing where they're at
3 against the rule now, not against what they did in the voluntary
4 section.

5 Q. Understood.

6 A. The voluntary was set to help them and I think that it did.

7 Q. Okay. So with that, again, knowing that we're moving forward
8 to something new, poised right now from what you've determined,
9 what part of Boeing's SMS program do you feel is the strongest?

10 A. I think they're very good at running the analysis, the risk
11 analysis. They are really good at setting a bowtie and
12 recognizing once there is an identification.

13 Q. Conversely, what aspect of Boeing's SMS might need a little
14 more work?

15 A. I'd have to see where they're at against the rule to know for
16 sure. Again, they're new in building it. So I would say that
17 they struggle where a lot of companies struggle in, I mean, just
18 implementation, right, just getting it across a company of that
19 size.

20 Q. From what you can see, about what level is that full
21 understanding implementation? Like where is it stopped right now
22 in Boeing? And I agree, by the way, I'm agreeing with you that
23 it's very large to make change in something as large as this
24 company. About where do you feel it has percolated to, what
25 level?

1 A. So I think that depends, right? As we saw with the access
2 panel, there are people that understand how to report certain
3 things, there are people that don't. So I don't know where that
4 level would stop or where it would start.

5 Q. Okay. Let me ask this a different way. Those technicians,
6 mechanic, maintenance individuals on the production line itself,
7 do you feel it's gotten that far?

8 A. I feel that they have knowledge that there is an SMS.
9 Whether they know what that is, I couldn't speak to it. That
10 would have to be the (indiscernible).

11 Q. What are some of the ways --

12 A. Since doing -- oh, I'm sorry. Go on.

13 Q. No, please, go ahead.

14 A. Oh, since doing the SMS oversight, I've been primarily in the
15 SMS team and not as much on the floor. So I wouldn't begin to
16 know if -- what the extent of knowledge is.

17 Q. Do you foresee your role changing as full implementation
18 comes into play to be more direct oversight or do you see foresee
19 your role staying as supporting the team that is going to be built
20 to provide that oversight?

21 A. So I foresee there being a building of understanding of SMS
22 within the FAA in order for oversight to be ingrained in every
23 level of what -- the same way SMS is being implemented across the
24 board at our companies. So if the regulator understands that,
25 it'll be easier oversight. So my role is to ensure that the team

1 understands what that's going to look like. So we are working
2 that from a higher level. I am aware of that, that there will be
3 some altering of what my job's going to look like, I'm sure.

4 Q. And how large is your team?

5 A. So currently 582, I'm not sure of the number because we are
6 hiring. And then I would argue that the entire team working on
7 SMS would be all of 580. They're all working to understand it and
8 get up to a higher level. So I'm not sure of the number there.
9 Again, hiring more people will affect (indiscernible). But I
10 would argue that the entirety of 580 is trying to understand SMS
11 at the moment and -- well, not understand SMS, but understand what
12 oversight of SMS is going to look like now that the rule is out.

13 Q. So, let me reframe the question. I guess what I'm trying to
14 get at is what percentage -- how close do you think you are? Like
15 what percentage is the entire team ready to take on this new
16 challenge?

17 A. I think we're taking it on at 100 percent, right? So we've
18 all done the training in -- well, I can't say all. To my
19 knowledge, everyone that I have worked with has done the eLMS
20 training and members of my team are signed up or have already
21 done -- I say my team -- of 580 have already done the training or
22 are going to do the training at Oklahoma City, as well as have had
23 conversations with myself on SMS or with the voluntary team on
24 what SMS is, where they see it going, how they've been working in
25 the oversight or what their role has been, to see what our role

1 should be when we'll be going forward.

2 Q. I know you --

3 A. So percentage-wise, I'd say 100 percent of us are ready to
4 take it on. As far as knowledge, I don't know who's had what
5 training.

6 Q. You said that you are hiring. Right now do you feel the
7 manpower that you have is sufficient or do you need to acquire a
8 lot more bodies or maybe there's too many people. I don't know.

9 A. That one I don't know. I don't know what the audit looks
10 like. I don't know what -- that's a management question. I'm
11 sorry I don't have a clue how to answer that one.

12 Q. Okay. So being part of this SMS within I'm going to call
13 implementation team to get oversight ready to go, in your role do
14 you feel you are currently well supported to take on the tasks
15 that you have?

16 A. Yes, I do. I feel like I have full management support as
17 well as the backup of the entirety of 580. They just want to
18 learn and understand what's next. I see a lot of engagement. I
19 feel fully supported in this.

20 Q. So at this time is the plan that's in place is it still going
21 to be individual ASIs dedicated to just one production company or
22 is going to be like a big pile and everybody -- how do -- how does
23 that work out? What does that structure look like?

24 A. I don't know what the current plan for the ASI oversight is.

25 Q. Okay. Are the ASIs going to be responsible for SMS oversight

1 or will there be special people who just tackle that?

2 A. I don't know what their plan is for who's going to be
3 responsible for SMS. I do know that there is a goal to have
4 everybody understand SMS and do SMS oversight at their level. So
5 I don't know who will be responsible for that data or any of that
6 nature. I do know that we're training everybody in order to do
7 oversight.

8 Q. Okay. Going back to -- and I know you've moved away from
9 this role, but going back to the time that you did interface with
10 Boeing specifically, what were some of the ways that you saw
11 Boeing implement safety assurance? And I'm going to use quality
12 assurance and safety assurance interchangeably here, just so you
13 know, because I believe they're linked. But what are some of the
14 ways that you saw that in action?

15 A. So I've seen safety assurance has been if you see something,
16 say something, is very distributed to the floor. They do have
17 their positive safety culture team that is thoroughly ingrained in
18 it. Since September, I've been on the event review committee,
19 what is the tri-party group. That's been myself and Jessica
20 Kruger (ph.) as the FAA representatives on that item. So we've
21 seen it in there. Quality assurance and the safety assurance,
22 though linked, are a little bit different in how they're defined,
23 I would argue, just in my knowledge with that. However, they are
24 linked at Boeing. We do see that. If you see something, say
25 something is definitely ingrained.

1 Q. Okay. What about safety promotion? How -- what are some of
2 the things that you saw that Boeing was doing to implement safety
3 promotion?

4 A. So they do have their safety champions in their newsletter
5 that goes out. Again, that's the positive safety culture team
6 that's responsible for doing that. They have their -- what is it
7 called, safety -- I'm forgetting the title of it. It's their
8 safety museum there at the Everett facility that they utilize. At
9 least I have seen it utilized. I've been through it a couple of
10 times and they showcased it -- I don't know the population going
11 through there, but they do have it available. So I see it that
12 way, in those ways.

13 Q. Who's responsible for establishing their policy, their safety
14 policy?

15 A. So it's signed by their accountable executive, by the CEO.
16 It's signed by Calhoun. Establishing it, I believe that a team.

17 Q. Who -- in terms of like your counterpart, who would you say
18 is your counterpart in Boeing?

19 A. So I do work with a myriad of people. So I work with Susan
20 Howard as far as working on data collection tools, which I did in
21 about February through March, I did my review of the validation
22 DCT. So as part of the voluntary, the rule was not out, we were
23 doing an assessment of where they were at with the policies in
24 place. So I worked with Susan Howard and Jody Sikes (ph.) on
25 that. As far as my weekly -- or biweekly review, I work

1 frequently with Paul Wright in understanding the risk register,
2 and his team. So I think it just depends on which facility of SMS
3 that I'm looking and who I work with. Those are the three
4 predominantly that I work with, so --

5 Q. I know you said Jim Phoenix was his name. I believe he
6 retired. So during the time was it just you doing all this?

7 A. So I've been working with Margaret Langstad as well as Steve
8 Slagle's group and -- well, Tom Tiernan's group, which includes
9 Steve Slagle. And Eddie Falkushan has been helping me with it.

10 Q. Okay. But now that you've moved on to more of an internal
11 SMS role, who will be taking over that function?

12 A. So I don't believe it's been assigned yet.

13 Q. Okay. But it's not going to be you, it sounds like?

14 A. I don't know that it's not likely to be me. I don't know
15 that it is. I do know we don't have a formal SMS role at the
16 moment.

17 Q. Okay. Is that something that's talked about at all like in
18 meetings, like hey, this is something we need to look at in the
19 future, we just don't know the outcome yet? Or from your --
20 what's your level of understanding for that?

21 A. That would be management, what their plan is to put it in
22 place. I don't know. It might have come up at a meeting that
23 they are planning to do it. They don't -- I wouldn't know.

24 Q. Okay. Because it just seems like your function, given your
25 background, given -- I mean, you are experienced, but your

1 academic background really provides a solid foundation and it
2 sounds like there might have been a little bit of a gap, a vacuum
3 that you left when you stepped out of that role and stepped into
4 this equally important role. So I'm just trying to figure out
5 who's going to provide that service. Who's providing that service
6 right now?

7 A. So I'm confused by the vacuum. Could you explain what you
8 mean? My role is still SMS. It's just now three companies
9 instead of just Boeing with the implementation. Since the
10 reorganization, we've added GE and Pratt Whitney, but there's not
11 a vacuum. It's still been myself since the rule was implemented.
12 Prior to that it was voluntary, so it was Steve Slagle's group,
13 with my assistance to understand what was next once the rule was
14 going to be implemented.

15 Q. I understand. But now it's mandatory and you have three
16 instead of one. You are still one person and presumably your time
17 that you have, your bandwidth that you have is still the same, but
18 now it's been divided by more pulls on your bandwidth. So that's
19 what I mean by it does leave a little bit of a vacuum because
20 nobody can pay attention to any one -- more than one thing 100
21 percent of the time, right? So that's why I was asking about
22 plussing up numbers, who else is going to be doing -- and I
23 recognize that you might not know those things right now. I'm
24 just trying to figure out if those conversations are happening.

25 A. They may be there above me. At the time I do have support.

1 Like I said Margaret Langstad is the engineer or -- the engineer,
2 excuse me -- the engine manufacturing manager at the moment. So
3 she's been working SMS at that level with my assistance and then
4 Boeing. So that's why I say all three.

5 Q. Okay. And all three of those are also doing GE and Pratt
6 Whitney as well or just you?

7 A. Margaret is working Boeing and GE and Pratt as well. And
8 the, like I said, the ASIs and the ASEs within 580 are also
9 working SMS to the knowledge that they have.

10 Q. Okay.

11 DR. WOODS: Okay. All right. Well, I've been yammering at
12 you for a solid 30 minutes now. I will -- I'm going to right
13 around the room, so if you can kind of see to my right here. So
14 we've going to go to Matt next. And like I said, I'll try to do
15 my best to announce who the people are before they start talking.
16 Thank you.

17 BY MR. RIGSBY:

18 Q. Hi Ciboney, you good? You need water or anything?

19 A. I'm good. Thank you.

20 Q. Okay. Who's your direct supervisor at the FAA?

21 A. My direct supervisor is Mike Hager. He's my manager.

22 Q. Okay. So now that the SMS rule is active and you're doing
23 the integration work, has your job really changed any from you
24 moving from the voluntary program to now the integration program?

25 A. I would argue not very much. But now I have the rule that I

1 know that I'm going to be working to and it's more tailored to the
2 organization.

3 Q. Okay. Does SMS replace QMS?

4 A. No.

5 Q. I guess what's the -- what do you see as the differences
6 between the SMS and the QMS program at Boeing?

7 A. So an SMS is designed inherently -- as a base of
8 understanding what SMS is, it's designed to find hazards and then
9 assess risk within it. A quality system is designed to just that,
10 it's designed to implement quality in your build. So it's going
11 to be a little bit differently inherently and is easier to do that
12 at Boeing.

13 Q. Okay. Is Boeing -- does SMS flow down to the Boeing
14 suppliers?

15 A. There's not a requirement for it to flow down. And the new
16 rule will have interfaces and they may be included in that, but
17 it's not a requirement to flow down, no.

18 Q. Okay. When you -- with being part of 582, the oversight
19 branch, and I believe you said you're on the ERT -- or ERC
20 committee as well, do -- how much interaction do you get with
21 people on the floor and is it just at the Renton facility or do
22 you cover all the facilities?

23 A. So my location is out of Everett, is normally where I work.
24 However, I wouldn't say the ERC interacts with individuals outside
25 of the investigation. We try to stay separate to stay non-biased

1 in the decision making that goes on there. So I wouldn't see
2 interaction there; however, I do occasionally still assist on PI
3 audits, I just from an engineering standpoint, what MRB
4 preventative position, what are you seeing, things of that nature.

5 Q. Okay. What's PII? What is PI, I guess, the acronym?

6 A. Oh, I'm sorry, principal inspection.

7 MR. RIGSBY: Okay. I think I'm done.

8 DR. WOODS: Mike?

9 BY MR. RINEY:

10 Q. Good morning. So now that the rule has taken into effect,
11 what metrics does the FAA capture for Boeing to -- for monitoring?

12 A. So the first thing that's gone out is an implementation plan
13 template. It lists the rule, pretty much it's just goes in order;
14 Part 5 lists it. And then a gap assessment, do they have it and
15 is the completion check and then a date. So is it completed? If
16 not, when will it be completed? That's step one. After that --
17 they have 6 months to do that. After that, it'll be validation --
18 or, excuse me, not validation any more. The data collection tools
19 again. There are now five verification and then five evaluation.
20 So we'll go through it with them and collect that data.

21 Q. Is there a requirement for Boeing when they identify
22 something, the timeframe that they need to report that to the FAA?

23 A. So we do have in the new rule a requirement for employee
24 reports every 6 months. However, how fast they do it, I don't
25 believe so, but I don't know off the top of my head for sure on

1 that. I haven't memorized the rule yet.

2 Q. Has there been any information since the implementation
3 that's been shared as far as findings or --

4 A. Since the rule has just come out --

5 Q. Yes.

6 A. -- on the 26th, we haven't received the -- the reports yet.
7 So not to my knowledge.

8 MR. RINEY: Okay. Thank you. I don't believe I have
9 anything else.

10 DR. WOODS: Pocholo?

11 MR. CRUZ: Yes.

12 BY MR. CRUZ:

13 Q. Thank you for talking to us today. I'd like to go back to
14 part of -- I guess you started -- you said you started in July of
15 2020, correct? And from July of 2020 till about September of last
16 year, you worked in the production line; is that correct, as a
17 ASI?

18 A. ASE. Yes, I was an aerospace engineer. So I did engineering
19 oversight functions within production.

20 Q. Okay. So during that time, just during the specific time
21 where you were working with production or engineering, were there
22 any issues that you saw that was chronic with the production line
23 itself? Did you work at Everett or Renton first, I guess, is the
24 question.

25 A. So I bounced between the facilities in that role. It was

1 wherever the engineering items were at the time. So I did some at
2 Charleston, I did some at Everett, I did some Renton. As far as
3 chronic issues --

4 Q. Yeah.

5 A. -- not that I can recall.

6 Q. Okay.

7 A. It was mostly the fires that were getting put out. So
8 emphasis on COS and we had COS Continued Operational Safety. We
9 would go and look from that matrix. So that's how I did a lot of
10 it for audits that we can see. So it was specific to each item, I
11 was doing.

12 Q. Was there a specific audit or element off of the award
13 program that would look at removals and how it was I guess
14 implemented in engineering or any type of action done from an
15 engineering standpoint?

16 A. I don't know not, not by me.

17 Q. Okay.

18 MR. CRUZ: That's all I got.

19 Dan?

20 BY MR. MARCOTTE:

21 Q. Dan Marcotte from Boeing again. Yeah, I'd like to also go
22 back to the -- before you jumped into the SMS role last year. But
23 it sounds like you had some involvement in the voluntary SMS. I
24 think you said the gentleman who was active in that would ask you
25 questions from time to time. Could you give me --

1 A. Yes.

2 Q. -- what -- could you give us an example or two of what type
3 of issues he was bringing to you to discuss?

4 A. So they were rarely specific issues, more just understanding
5 of SMS as a whole. So it would be the definition of a risk or
6 understanding an interface or how far to SMS an item. I know that
7 sounds kind of funny, but the thought process of which everything
8 could have a hazard to it, right? It depends on how big that is
9 and what the risk is in itself.

10 Q. Okay.

11 A. So we would sound questions like that in the context of,
12 well, how do you do oversight and how much do we require, but
13 there was no actual oversight going on. It was more future state
14 and understanding what SMS was.

15 Q. Okay. So it sounds like, you know, prior to October of last
16 year you really didn't have very much involvement with the Boeing
17 voluntary SMS?

18 A. Not in an oversight capacity. It's about that time that I
19 was on the SRM. I had a bit more bandwidth to be in individual
20 SRMs because they take a lot of time.

21 Q. Right.

22 A. So that was my interaction with the SMS at that time.

23 Q. Okay. I'm sorry if I missed what -- you were on a couple
24 SRMs but at a high level. What was the subject?

25 A. It was the ACE, aircraft certification eligibility and change

1 review.

2 MR. MARCOTTE: Okay. I think that's it for me. Thank you.

3 DR. WOODS: John?

4 BY MR. PETRUZZELLI:

5 Q. Hi Ciboney. Do you in your role review regularly any of the
6 MRB activity that goes on with the company?

7 A. So our regular review, we would do the audits. So we'd go
8 through and, other than if we found it on audit or through, you
9 know, ticketing, I saw something that I had question on, it wasn't
10 coming through me specifically.

11 Q. When those things come up, like you just -- good example, you
12 used ticketing, do you get involved in that and drill down on the
13 root cause?

14 A. We do have our BPSM that occurs that get reported to us.
15 They're not ours, they're Boeing, Boeing problem solving model.
16 They get reported out and have the root causes. Beyond that, my
17 job is to understand the disposition. It was, I guess, still is
18 an engineer. But it's to understand the disposition and if I have
19 any questions for the management, to have them explain it or
20 determine if it was acceptable.

21 Q. Moving on, you talked about being a part of the tri-party
22 agreement. That started, what, January of this year?

23 A. So we began setting it up in September of last year. The MOA
24 was signed last March, the memorandum of understanding was signed
25 last March. And then we began work on it in September.

1 Q. Okay. When did you start meeting regularly?

2 A. In September when we were building it. As far as conducting,
3 it was December, I believe. It might've been January where we had
4 our first report that we reviewed. But we had our regular teams
5 established in September.

6 Q. Okay. Do you guys meet monthly or biweekly or what?

7 A. Currently we have it set on the calendar to meet daily. It
8 depends on what reports come in that meet the memorandum of
9 agreement what we look at.

10 Q. So you're looking at Seek, Speak, and Listen, if I understand
11 correct, right?

12 A. So Seek, Speak, and Listen is a philosophy. We look at Speak
13 Up, which is a report.

14 Q. Right. That's actually what I'm speaking to. So you guys
15 review those -- you guys review specific Speak Ups. How do you
16 determine which ones you're going to look at?

17 A. So we follow the memorandum of agreement. It has defined
18 parts that come to the team, and then we can agree to look at it
19 or not. And normally that falls under, if it's so bold that an
20 ASAP would normally do or if we as the ERC decide that it --
21 there's an event there that it meets the criteria.

22 Q. Can you --

23 A. I don't know all of it off the top of my head.

24 Q. No worries. Can you talk about -- still staying with the
25 tri-party. Can you talk about any of the successes you had and

1 any potential opportunities to get better, what that may or may
2 not look like?

3 A. So if you think -- it's still new, right, and we only started
4 meeting last September. I think there's a lot to still work.
5 Success stories, we've had some that have gone through and --
6 hazard identification, and we've been able to highlight the SMS.
7 I think that that's a really important part of what we're doing.
8 There hasn't been many events that were reported, which is
9 understandable given the nature of it's a new ASAP and the company
10 still has to trust the system.

11 Q. And last question --

12 A. I said the company, I mean the workers to trust
13 (indiscernible).

14 Q. And my last question for this round for me: Can you talk
15 about any other interactions you have with the shop floor
16 mechanics, quality? And when I say shop floor it includes the
17 fields, for example. So --

18 A. Yeah, my interaction currently with them is if I'm out on a
19 Principal Inspection section audit, if I'm doing -- if I'm asked
20 to be on one, or -- actually, that's really all I can think of, is
21 the audits at the moment, if I go out on an audit.

22 MR. PETRUZZELLI: Okay. That's it for me this round.

23 DR. WOODS: Troy?

24 BY MR. LEVANEN:

25 Q. Okay. Yeah, John asked a lot of my questions about the tri-

1 party. I was just trying to see if I had any more to follow up on
2 that because that was interesting. So you said that you kind of
3 review those daily, the reports that come in then, or just as they
4 come in or out. Like what does that look like? Is there like one
5 per day?

6 A. So as they come in, we get to see them. I wouldn't know the
7 average. That would have to be a question for the event review
8 manager, John Davis, who would know the average.

9 Q. But John Davis filters them down to you so you get a chance
10 to see whatever comes in then? Or how does that work?

11 A. Yes. So within the parameters of MOA. It's not like we see
12 every single report that comes in. It's the ones that are -- I
13 believe it's IAM members in Washington state is the current
14 criteria. When they're working in Washington state, it's in
15 Washington state, and then I believe we see that. I would have
16 to, again, have the MOA out to know exactly what the criteria is.
17 But so long as it's within that, we see it, yes.

18 Q. So you mentioned that part of that, that's part of the -- is
19 an ASAP ERC then? So it's an ASAP -- is it an ASAP committee?

20 A. It's designed after ASAP, yes. It's --

21 Q. It's called tri-party?

22 A. Yes.

23 Q. That's (indiscernible). Within that do you have sole-source
24 and non-sole-source reports? Just out of curiosity.

25 A. That's not setup in the MOA as it stands right now.

1 Q. It's not set up?

2 A. No.

3 Q. So it's just reports?

4 A. It doesn't -- yes, it's just reports. Sole-source and non-
5 sole-source is Part A operator-specific term within ASAP and the
6 ERC setup.

7 Q. Got it. Well, that answers that question, because I was
8 going to ask about the non-sole-source reports. Within in that,
9 and this goes -- still stay with the tri-party. On the reports
10 that you review, how many of those do you feel are like would be
11 kind of the equivalent of non-sole-source, basically saying I know
12 if this thing and no one has asked me to report this and I feel
13 like it's important for me to report it? You know, like I know of
14 this process or procedure or person or whatever that is not
15 working, but I want to use this avenue to report it? I know it
16 sounds like it's just been since January, but have you been seeing
17 any of those kind of things come through?

18 A. We have seen a few that I would classify as a non-sole-
19 source. My internship was doing ASAP in ERC and the SMS for an
20 airline. So I did 6 months of that. So knowing what I know from
21 that experience, a good portion of them would have been classified
22 as non-sole source.

23 Q. Were you at Alaska?

24 A. No. I have been ExpressJet. They were United subsidiary.

25 Q. Okay. Got it. Thank you. All right. And then you

1 mentioned that in the -- there's a biweekly review of reports that
2 come in. That's a -- is that -- that's a separate one. What's
3 that one, the biweekly review?

4 A. So we have a biweekly one hour meeting with the Paul Wright
5 SMS team when they show us the risk register. So we have a --
6 it's an informal just, hey, this is what's going on, on our SMS.
7 That was set up with Jim Phoenix in the voluntary program since
8 there wasn't oversight yet of Boeing in their SMS, it was utilized
9 in that forum for us to have visualization of what the SMS is
10 working on.

11 Q. In that biweekly, how -- what kind of frequency did you have
12 in there? Like when they'd come to the biweekly, would they say
13 here's 10 SRMs that we're performing or would it be just one per
14 week or one, a couple, two, whatever, something like that?

15 A. So they just have ongoing items that have been in the SRM
16 what Boeing calls the SRM process. So it was a past report and
17 identify that it needed to be reviewed. So it would have the
18 status of where that item was as well as if FAA, if they would
19 like us to sit in on as the SMEs. That was our function, right,
20 in the SRMs, was to sit on it with the knowledge that we had of
21 either SMS or the item at hand. We were more of a participant and
22 less of a regulator in that sense since it wasn't mandatory.

23 Q. Okay. Yeah. Well, we -- I mean, even with it being
24 mandatory, that's kind of how we do things now. So that's not too
25 much different.

1 When you were doing those SRMs, I know you talked about that
2 you thought Boeing did a nice job of -- on a reactive analysis and
3 then -- in the SRM process for that. Within that biweekly, do you
4 feel like the bulk of those were reactive or was some of them
5 proactive? Did you have any that were proactive for big changes
6 that were coming? I mean, sometimes those can be big SRMs.

7 A. I'm sure there were some, I just can't name an example off
8 the top of my head. But I do recall having underlined a few that
9 were proactive in nature. But SMS, as I'm sure you know, by
10 nature would be almost always reactive. So --

11 Q. It is heavily reactive.

12 A. We would see reactive.

13 Q. And then one of my questions I was going to ask is how much
14 of your time you have been able to spend at Boeing Renton, which
15 you kind of explained that. But so now currently do you mostly
16 work at the Boeing Everett facility?

17 A. So as the ERC meetings do meet in the Everett facility, I
18 tend to be up there more. If I'm asked by an ASI to be somewhere
19 specifically, I'm there. I have been at ticketing in the last
20 couple of months just to have questions that they had there at
21 Renton. So a few days. It's here and there, very minimal.

22 Q. And then one other question I was going to ask is -- somebody
23 had already kind of asked, but with GE, Pratt, and Boeing, and now
24 with pulling you three ways, do you feel like you're spread thin
25 right now? I mean, to me, that would feel like a lot to take on

1 two more manufacturers.

2 A. So while it sounds like a lot, I don't know, you know, like
3 going forward with it being in the voluntary program until, what
4 is it, a week ago, 2 weeks ago. I've been able to have the
5 voluntary team, right, and now I'll have my group. So I'll have
6 AIR-580. I will have the support there. So I still feel I'll
7 have adequate time for all three. I just think it's going to
8 change a bit who I'm working with. Instead of voluntary it'll be
9 more within AIR-580. So since the reorg last April, I've been
10 working with all three, so that's not entirely new.

11 Q. Okay. All right.

12 MR. LEVANEN: All right. I think that's good for me. Thank
13 you.

14 DR. WOODS: Nils?

15 BY MR. JOHNSON:

16 Q. Good morning. In the new rule, can you provide a high level
17 process including key milestones to implement an SMS on a
18 production certificate?

19 A. So key milestones are you going to be your implementation
20 plan, the data collection tools. That's pretty much it as of
21 right now to my knowledge.

22 Q. Is there a compliance date to be fully implemented for a
23 production certificate?

24 A. Thirty-six months from the effective date. So I don't know
25 that off the top of my head. Sorry. The effective date is, I

1 believe, May 28th. So 36 months from then.

2 Q. Okay. And you mentioned --

3 A. May 2027.

4 Q. Sorry. You mentioned DCTs. Where are the DCTs housed?

5 A. Currently I don't know that the new one has been published.

6 Please don't, you know, yell at me if I'm wrong. I don't know.

7 We're rolling out different information at different times, so I'm
8 not entirely sure what's been published. But currently there is a
9 SAS, which, forgive me, I'm forgetting what that stands for. It's
10 Flight Standards tool, is like location in DRS. It's the SAS
11 section in DRS.

12 Q. Okay. I'm very familiar.

13 MR. JOHNSON: Thank you. That's it for me for right now.
14 Thank you.

15 DR. WOODS: All right. Thank you, Nils.

16 With that, Ciboney, how are you doing? Do you need a break?
17 That was the first round. You made it.

18 MS. KOIDAHL: I'm good. Thank you.

19 DR. WOODS: Okay. Is everybody okay to continue or do we
20 need to --

21 UNIDENTIFIED SPEAKER: I need to run to the restroom --

22 DR. WOODS: Okay.

23 UNIDENTIFIED SPEAKER: -- but I can sneak out.

24 DR. WOODS: Well, that's all right. We can go on and pause
25 just for a quick break. So with that, we are going to go off the

1 record at 8:58 Pacific Time.

2 (Off the record at 8:58 a.m.)

3 (On the record at 9:11 a.m.)

4 DR. WOODS: We are back on the record at 9:11 Pacific Time.

5 BY DR. WOODS:

6 Q. I want to follow up a little bit. Troy had asked you about
7 like kind of the division now with the other two production lines
8 and the division of labor. Your average workweek, what would you
9 say your percentage of work is broken in between providing
10 oversight, providing audit for GE/Boeing/Pratt versus building
11 what SMS oversight's going to look like for the FAA?

12 A. So weekly it's mostly building at the moment because we're
13 still in the effective days, right, because the rule's not even
14 effective until the 28th of this month, I believe the 28th. So
15 right now it's almost 100 percent implementing. This week's a
16 little different. I am at Pratt & Whitney working with them on
17 what implementation for them is going to look like. They're
18 trying to get a feel for the rule. Last week was with GE. I have
19 had some meetings with Boeing. So it's a little different right
20 now just because it's so new. But for the most part, it's almost
21 100 percent working within the FAA to understand what that's going
22 to look like with SMS. I haven't been doing many audits.

23 Q. And to reiterate, that change happened, you said, right
24 around -- a couple months ago?

25 A. So last October's the time I stopped doing audits. I am

1 still on our international oversight team, so there is one that I
2 have this year. You apply to be on that team and then we can
3 travel and do international oversight. So that's not necessarily
4 with these three. So the audits are not quite willing to let go
5 of, kind of thing.

6 Q. Understood. Okay.

7 A. But otherwise, I haven't been doing audits, no.

8 Q. And would you say, and I know you're not them, but you said
9 there's two other people predominantly, one for engines, one --
10 that they're doing similar things to you. Would you say it's the
11 same for them or has -- have you seen their workload change?

12 A. I've seen it's similar for sure. We all work very closely
13 together. It's myself and then Margaret Langstad is the two. And
14 then Jessica Kruger helps with the ERC with me. She's the other
15 mentioned name.

16 Q. So for you and Margaret, you would say it's the same, that
17 the week is mostly working on building that SMS oversight program?

18 A. I think she would have to speak to that. She is also a
19 manager so her roles are a little bit greater than mine as it
20 stands.

21 Q. Okay. I guess what I'm trying to determine is that while
22 this important function of this is being facilitated, is anybody,
23 you know, helping to provide SMS input on audits for production
24 lines? I know you said that the ASIs have taken on some of those
25 roles, but up until recently that was not their priority because

1 it wasn't mandated. True?

2 A. True.

3 Q. So I'm just trying to figure out is while we get up to speed,
4 who's minding the shop?

5 A. So I think it's still going to be in the effective range.
6 It's not fully going to be mandated until the end of that range.
7 So we're working with the company as much as we were prior, just
8 now we're adding more people doing that work.

9 Q. Okay.

10 A. So we're getting more ASIs and more ASEs doing the work that
11 I was doing on a regular -- more ASIs and more ASEs on SRMs.
12 However, we had them on SRMs prior. I couldn't give you exact
13 names, but they were on as well.

14 Q. So they have had some experience?

15 A. Yes.

16 Q. Okay.

17 A. Yes. I am not the only one that was on SRMs. They were as
18 well other were as well.

19 Q. My next question is opinion based but it's based on your
20 experiences again coming from an academic foundation. What would
21 you like to see in -- let's say there's an understanding that
22 we're going to hire new people, we're going to hire new people to
23 take on specifically this role, SMS oversight for production
24 companies. In your opinion, what does that ideal candidate look
25 like?

1 A. So in my opinion, it's not one candidate. In my opinion,
2 each person who does the oversight has SMS knowledge enough to
3 understand its working within a company. In my future state,
4 future perfect world, everyone knows what SMS looks like and we
5 don't even have to say the words SMS, it's just ingrained and you
6 see that it's working. So it would be every individual knows SMS
7 to do performance-based oversight to say, oh, there was a
8 change, but before that change is looked at, I'll come to you.
9 It's not anyone specific. I think every ASI or ASE should
10 understand that.

11 Q. Okay.

12 A. It is performance based.

13 Q. And to facilitate that understanding, what do you believe
14 works best?

15 A. As far as training people?

16 Q. Training and education, yes. What do you feel are the best
17 teachers? Is it a CBT or --

18 A. I think it's going to be different for everybody. Everybody
19 learns a little different. So if everyone could learn SMS in
20 their preferred learning format, be that you do a class, be that
21 you do -- buy a textbook and learn it that way. It would just be
22 the understanding and knowledge, however they would have to learn
23 that.

24 Q. Okay. So you don't have any personal preference as to, you
25 know, what helps the most versus, you know --

1 A. So my personal is I very much learn from textbooks. I can
2 open a textbook and retain that information. I know that that is
3 not a lot of people, so it's a little different. I understand
4 that. I do know we have some really good training in our eLMS
5 currently, the one that went out last year, an oversight of what
6 SMS was. It was very helpful. That sparked a lot of questions
7 and people could do learning on their own in a manner, well, what
8 is this, be that they can talk to me and I gave them an
9 understanding that I had or recommended them further places to
10 look that are industry based.

11 Q. And you have not had a chance to audit or take or the course
12 that's provided by TSI at the Monroney Center yet, have you?

13 A. Not yet. That is on my docket for this year.

14 Q. I think I remember that from earlier.

15 A. Yes. It got filled very quickly. So given my background,
16 they said, okay, get you on the list, for sure.

17 DR. WOODS: Okay. Yeah, I think that -- I mean, I have some
18 conclusion questions that I have and I ask everybody, but for this
19 round, I think that's all the follow-up I have. So we're going to
20 keep moving again back to the right, back to Matt.

21 BY MR. RIGSBY:

22 Q. Hey, Ciboney, just real quick. Before you quit doing audits,
23 about how many audits did you participate in?

24 A. Certainly one a quarter, if not more than that. That was my
25 predominant function, was to assess COS and go on audits.

1 Q. Okay. And what was your function on the audit as an ASE --

2 A. So it depended on what the type of audit was. And so for a
3 PI, it was to principal inspection audit. It was to relay
4 information that I had in engineering to the ASIs so that they
5 would have a better knowledge of the full working system, be it
6 pull-up (ph.) procedures that I was aware of, polling (ph.)
7 engineers. For QSA, quality system audits, it would be going
8 through MRB dispositioning and the procedures that they follow for
9 that to make sure that they're following the procedures that we
10 approved, with the FAA.

11 Q. Okay.

12 A. We have approved.

13 Q. Do you work hotline complaints as well, FAA hotline
14 complaints?

15 A. I have only ever been assigned one and it was beyond the
16 purview of our department. It was given to somebody else.

17 Q. Okay. And just for the record, SAS is safety assurance
18 system?

19 A. Yes. Thank you.

20 Q. A FAA tool out there that Flight Standards uses for data
21 collection and recording.

22 A. (No audible answer)

23 MR. RIGSBY: I think that's it.

24 DR. WOODS: All right. Mike, you're up.

25 MR. RINEY: I don't have any further questions. Thank you.

1 DR. WOODS: Thank you.

2 Pocholo.

3 MS. KOIDAHL: Thank you.

4 BY MR. CRUZ:

5 Q. Just a couple for me. It sounds like to me you have quite a
6 bit of experience in SMS. In your opinion, who has equivalent or
7 more experience as you in SMS within the FAA now that the rule is
8 out?

9 A. So there are plenty of people within the FAA, the Flight
10 Standards people, the voluntary SMS people who have been doing
11 practically for a lot longer than I have been. I appreciate that
12 you said that I have a lot of knowledge. I do have the schooling.
13 I'm not going to downplay that. But there is definitely a lot to
14 be learned from practical SMS knowledge.

15 MR. CRUZ: Okay. Thank you. That's it.

16 DR. WOODS: Dan?

17 MR. MARCOTTE: No. I have no questions. Thank you.

18 DR. WOODS: All right. John?

19 MR. PETRUZZELLI: I don't either for me. Thank you.

20 DR. WOODS: Troy?

21 MR. LEVANEN: No further questions from me either. Thank
22 you.

23 DR. WOODS: Nils?

24 MR. JOHNSON: Nothing for me.

25 DR. WOODS: All right. Well, I guess we didn't need that

1 break. Sorry.

2 BY DR. WOODS:

3 Q. I always kind of conclude with two questions, and I modify
4 them depending on who I'm talking to. But the first one you
5 actually kind of alluded to earlier. I was like, she's about to
6 answer my final question. And that is -- I call it the queen for
7 a day question. Magic wand, and you could wave it and you could
8 be like this is what I think, this is what Ciboney thinks that
9 would make this task, this job -- and this specific to oversight
10 of Boeing to include SMS. If you could wave a magic wand and get
11 anything you needed, what would that be?

12 A. Oh. I don't actually know what that would be. I think we
13 have a lot of resources that we're working on utilizing. So I
14 guess that would be better knowledge for me, right, to understand
15 exactly what's coming down the line for me to understand what
16 exactly the company needs, right? And I hate to make this joke,
17 but we're from the FAA; we're here to help. So it would be to
18 understand their SMS and the intent of the rule and to ensure it
19 applies to it. I don't know if that made a lot of sense, but --
20 yeah, queen for a day, I would have a better understanding of what
21 resources other than the rule and the AC and the order, I would
22 have them all memorized, I guess is where I'm getting at.

23 Q. Okay. And then my last question is, you know, you were
24 identified as a SME that we should talk to, and thank you again
25 very much for taking time out of your schedule. I know

1 particularly that you're on the road right now and that's
2 difficult, so we appreciate it, accommodating us. But you had
3 some time to think about that, hey, we want to talk to you. So as
4 a person who has the background that you do and who has been
5 witness to at least some of the growth of Boeing's SMS from that
6 voluntary program to what it is today to what it will be in the
7 future, what's the main takeaway that you would want us to know?
8 Like this is, you know, you're 30,000 foot view of this is what
9 you need to know going forward.

10 A. SMS is a journey. Step one is going to be a reactive by
11 nature when it starts because you don't know what you don't know
12 until you know it, and then you can learn from there. But
13 especially in any company, not just Boeing, but any massive
14 company, you're going to have a big culture shift that needs to
15 occur and that's going to take a lot of time. So that's the thing
16 that I keep trying -- it's a learning curve, right? We're not all
17 used to the terminology. We're not all used to exactly what it
18 is. And it's a journey and voluntary was the first step in this
19 next journey. So, yeah.

20 (Laughter).

21 DR. WOODS: Okay. Well, with that, I appreciate that. I
22 appreciate your perspective.

23 One more time around the room? I'm seeing no, shakes heads.
24 So, again, thank you so much. We appreciate your time.

25 This will conclude this interview at 0924 Pacific Time.

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(Whereupon, at 9:24 a.m., the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the
NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9 MAX
IN-FLIGHT STRUCTURE FAILURE
NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Ciboney Koidahl

ACCIDENT NO.: DCA24MA063

PLACE: via videoconference

DATE: May 7, 2024

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.

Kay Maurer
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of: *

ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

* * * * *

Interview of: TRENT LYLES, Aviation Safety Inspector
 Federal Aviation Administration

Seattle, Washington

Tuesday,
 May 7, 2024

APPEARANCES:

SABRINA WOODS, Ph.D., Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer Investigator
National Transportation Safety Board

NILS JOHNSON, Aviation Accident Maintenance Investigator
National Transportation Safety Board

JOHN LOVELL, Investigator in Charge
National Transportation Safety Board

MATT RIGSBY, Accident Investigator
Federal Aviation Administration

TROY LEVANEN, Director of Maintenance
Alaska Airlines

DAN MARCOTTE, Air Safety Investigator
Boeing

JOHN PETRUZZELLI
International Association of Machinists (IAM)

MIKE RINEY, Onsite Representative
Spirit AeroSystems

REBECCA LIPE, Legal Counsel
Federal Aviation Administration
(On behalf of Mr. Lyles)

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I N T E R V I E W

(12:55 p.m. PT)

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2
3 DR. WOODS: Good afternoon, it is May 7th, 2024 and the time
4 is 12:55 Pacific time. Hello, my name is Dr. Sabrina Woods, I'm a
5 human performance investigator with the National Transportation
6 Safety Board. I am here along with Pocholo Cruz, sitting to your
7 left, and together we are co-chairing the manufacturing and human
8 performance working group for accident investigation number Delta-
9 Charlie-Alpha-24-Mike-Alpha-063 involving Alaska Airlines Flight
10 1282.

11 The NTSB is congressionally mandated with determining
12 probable cause in transportation accidents and significant
13 incidents and with promoting transportation safety. However, we
14 are a small organization, so what we have here, what you see in
15 the room, is we have parties to the investigation that help inform
16 the process.

17 So at this time, so you know -- you'll have a better
18 understanding of who it is you're talking to, I'm going to have
19 each of these parties introduce themselves to you. We're going to
20 start off with Pocholo and then work our way around this way.

21 MR. CRUZ: I'm Pocholo Cruz. As Sabrina said, I'm the
22 co-chair for this group. I'm an aerospace engineer with a
23 structures and maintenance background.

24 DR. WOODS: Over to Mike.

25 MR. RINEY: Good morning. Michael Riney, I'm Spirit

1 Aerosystems' on-site representative here in Washington.

2 DR. WOODS: Matt.

3 MR. RIGSBY: Hey, Trent.

4 MR. LYLES: Hey.

5 MR. RIGSBY: I'm Matt Rigsby, FAA's coordinator for this
6 accident.

7 MR. LYLES: Okay.

8 DR. WOODS: And then off and over to Nils.

9 MR. JOHNSON: Hi, Trent.

10 MR. LYLES: Hey.

11 MR. JOHNSON: Nils Johnson, NTSB, aviation accident
12 investigator and my specialty is maintenance.

13 DR. WOODS: John.

14 MR. LOVELL: John Lovell, NTSB.

15 MR. LYLES: Okay.

16 DR. WOODS: And the other John.

17 MR. PETRUZZELLI: John Petruzzelli, I'm representing the
18 International Association of Machinists and I work at Boeing.

19 MR. MARCOTTE: I'm Dan Marcotte, I'm an air safety
20 investigator from Boeing and I'm stationed down in Southern
21 California.

22 MR. LYLES: Okay.

23 DR. WOODS: Okay. With that, Trent, that's everybody that's
24 going to be asking you questions here in the room, you can see
25 their faces, and I'll try to do my best to call them out, too, as

1 we go around the room to remind you. We're here for you to share
2 your insight as a member of the regulatory and oversight team for
3 the Boeing commercial airplane company. To capture that insight,
4 we will be using a digital recorder.

5 MR. LYLES: Okay.

6 DR. WOODS: After the interview, we will send the
7 transcription -- the recording out for transcription and the party
8 members will have an opportunity to review the transcription to
9 correct it for typographical errors, things of that sort. We do
10 not change the content itself. Once we have the recertified copy
11 back from the transcriber, it will go forward to be a matter of
12 public record in the docket for this investigation.

13 Each person here in the room will have an opportunity to ask
14 questions, we do usually go in two rounds, but each person will be
15 asking questions one at a time, and then the bulk of the questions
16 will be in the first round and then everybody will have an
17 opportunity for follow-up.

18 Please answer all the questions to the best of your
19 recollection, recognize that "I don't know" is a perfectly
20 acceptable answer to a question. If you don't understand a
21 question, just say so and we'll do our best to clarify. And
22 likewise, if we don't understand one of your answers, we might ask
23 you to clarify. If at any time you realize you misstated
24 something or want to correct something or want to go back to
25 something that was previously said, please feel free to do that at

1 your discretion. You are entitled to have one representative of
2 your choosing with you to support you throughout this process, I
3 see that there is somebody here. I want to make sure that, for
4 the record, that the person to your right is the representative
5 that you have chosen.

6 MR. LYLES: It is.

7 DR. WOODS: Okay. And with that, Representative, if you
8 would please introduce yourself for the recording.

9 MS. LIPE: Rebecca Lipe, FAA Office of Chief Counsel.

10 DR. WOODS: Perfect, thank you for that. Being that you are
11 legal counsel, just please recognize that this is an interview,
12 not a deposition, so please refrain from interrupting with the
13 process or attempting to answer on behalf of your client.

14 That being said, if at any time you need a break, just let us
15 know, just say so and we'll make that happen and that can be for,
16 you know, you just need to take a walk, you want to, you know,
17 step out for a moment, if you want to confer with legal counsel,
18 just let us know and so we'll go off record and then once you're
19 ready to resume, we'll go back on the record.

20 MR. LYLES: Okay.

21 DR. WOODS: So with that, do you have any questions at this
22 time?

23 MR. LYLES: I don't. I don't.

24 DR. WOODS: Okay. Is everybody ready to begin?

25 MR. JOHNSON: Yes.

1 DR. WOODS: Okay, we're going to start with the super hard
2 questions.

3 MR. LYLES: Uh-oh.

4 DR. WOODS: If you would please, for the record, state your
5 full name, spell your last.

6 MR. LYLES: Full name is Trent Lyles. Last name is
7 L-y-l-e-s.

8 DR. WOODS: Okay. So Trent, we're actually going to start
9 with Pocholo, again, who's to your left, and then we're going to
10 work our way around the room that way.

11 MR. LYLES: Okay.

12 INTERVIEW OF TRENT LYLES

13 BY MR. CRUZ:

14 Q. So Trent, thank you for stopping in and talking to us.
15 What's your current position with the FAA?

16 A. Currently, I'm an aviation safety inspector for the FAA.

17 Q. Okay. And how long have you been in that position?

18 A. Approximately two years as of this month.

19 Q. Okay, two years.

20 A. Uh-huh.

21 Q. And what's your professional background before coming to the
22 FAA?

23 A. So my professional background before coming to the FAA was I
24 spent -- between a guard and active duty, I spent 34 years in the
25 military, U.S. Army, in aviation and retired in 2019 from that and

1 at that time I was hired into DCMA, which is the contract
2 management agency working on KC-46s and P-8s down in Seattle at
3 the military delivery center, I did that for two years, applied
4 for the FAA and I am currently working with the FAA since then, so
5 I've been working with them for two years.

6 Q. Okay. And as an ASI in your current duties, what is -- what
7 do you do, what's your responsibilities?

8 A. So it's a lot, a lot of stuff. So the first thing, we do
9 airworthiness certificates for the 737 program out of the Seattle
10 delivery center. Do I need to describe what I do or just --

11 Q. Sure.

12 A. Oh, sorry.

13 Q. That's all right.

14 A. Basically, we go in and we sit in on the documentation review
15 for that particular aircraft, ensure that all the documentation is
16 correct. And then, once that's good and squared away, we do a
17 walk-out to the flight line to walk the aircraft, inspect the
18 aircraft.

19 And once the aircraft is inspected and whatever findings we
20 have, we go back to the room, finalize all the paperwork at that
21 time, the airworthiness certificates and a like, all the paperwork
22 associated with that and the findings also, as well, and Boeing,
23 by regulation, has until midnight that day to fix all the findings
24 that we have. If so, if they do that, they fix all the findings
25 that we find from the walk, what happens at that time, it gets

1 ticketed and they have to do that before midnight. If they do
2 not, everything is rescinded and it starts the process all over to
3 the next day.

4 Q. Do you just work in the flight line or do you also work in
5 the factory to do audits?

6 A. I do. I do the factory, as well, which is the other piece of
7 what we do.

8 Q. Okay.

9 A. Yeah. So I work in the factory doing oversight and
10 surveillance audits of the factory. Our surveillance or our
11 oversight is based on our ACAIS system, which tracks risk, it's
12 our risk-based system and it pretty much -- you know, depending on
13 the data, the data is what drives our risk and so if we're seeing
14 -- if the data is telling us that we're seeing more risk in, say,
15 wings, we'll concentrate on wings, whether it's in the factory at
16 a particular flow day, we'll concentrate on that particular area.
17 Sometimes it could be word of mouth or it would be what's
18 happening like with the door plug.

19 Q. Um-hum.

20 A. It depends on what is going on, but it's primarily on risk.

21 Q. Okay. Who develops your work program for the fiscal year?

22 A. Work program. So we have a certificate management plan that
23 is developed every -- I want to say every April, I believe.

24 Q. Okay.

25 A. And that's for the whole year --

1 Q. Okay.

2 A. -- and that's all based on risk, again, key indicators using
3 the risk-based resource tracker which is housed within ACAIS and
4 is all based on -- as we do audits, based on the findings, based
5 on what we are finding, what we're seeing and how many findings
6 are there.

7 So the managers and the senior managers are the ones who are
8 in charge of the management of that system and it is data and what
9 it's telling them. So they are the PI, which is -- oh, man, I'm
10 drawing a blank on the PI, which is principal inspector and his
11 name is -- oh, goodness. He's -- he's one of the individuals
12 within that system that is -- that is in charge of the oversight
13 of the Boeing facility and he's consulted, as well, and manages
14 the risk of that program, as well. Bryan Kilgroe.

15 Q. Okay. And who is your current supervisor?

16 A. My current supervisor. My manager is Michael Hager.

17 Q. Um-hum.

18 A. And then my senior lead, my senior ASI is Jesse Cantu.

19 Q. Okay.

20 A. Yeah.

21 Q. So those gentlemen are the ones that put together your
22 specific work program or the whole group's work program and how is
23 that divvied up? I mean, how does it work?

24 A. So they create -- so right now, I believe, I know that it is
25 a high -- Boeing is a high one risk rating. So within a year

1 you're supposed to have 18 audits, the way it works out based
2 on --

3 Q. Max or min?

4 A. Max, I believe, between 18 and 24, but I believe it's 18 max
5 for this year based on their risk and those are divvied up by the
6 seniors, I don't know what process they use to say okay, hey, you
7 got this, this, and that, but it's -- we're only like four, four
8 ASIs, so 18. And we typically double up on them, so it's however
9 they do it, do that process, I'm unaware, but there is --

10 Q. Okay.

11 A. -- a CM plan and --

12 Q. Okay.

13 A. -- they plug the names in and then if we're too busy based on
14 classes of whatever's going on, they always -- we can always bring
15 outside ASIs in to alternate --

16 Q. Okay, yeah.

17 A. -- as well, so --

18 Q. Currently, what do you see is the biggest challenge about
19 your job?

20 A. The biggest challenge about my job is -- just right now, the
21 shear amount of work at the plant at, you know, the Boeing
22 facility right now because of the -- what we're doing right now is
23 unprecedented, right, so we're doing more audits in there than
24 what we normally would be doing. We're now every day now and
25 that's a -- it's a juggling act, you know, a juggling act, because

1 we got to juggle the ticket portion at the SDC, the ticketing of
2 the aircraft, which is very important because these aircraft are
3 going to be sent to the customer as well as to auditing. And you
4 know, on top of that we have hotlines that we have to do,
5 whistleblower hotlines we have to do.

6 Q. Oh, okay.

7 A. We have VDRs, which are voluntary disclosure, then we have
8 CEA actions that we're working. Training. Like next week I'll --
9 next week I'll be in Denver and I have more training coming up in
10 June and July and September, so -- with the number of individuals
11 that we have, it's just right, with all the things that's going on
12 and us being in the factory and audits now -- used to be like the
13 maximum a week, minimum two days.

14 Now we're doing audits all month long, we're doing month-long
15 audits. So it's just, you know -- you know, in a perfect world, I
16 wish we had more people. The work is cool, it's good, it's honing
17 skills and, you know, it's meant for a good cause, but it's just
18 people, resources, people and resources.

19 Q. So can you run me through a typical day for you, if you have
20 to go to the factory?

21 A. So I have to go tomorrow.

22 Q. Okay.

23 A. Okay, so I made contact. So tomorrow, since I'm -- you know,
24 we're doing month-long audits, so what I did today is I reached
25 out to John Baker. John Baker, right now he's the team lead for

1 the audit, so I reached out to him and asked him where do you want
2 me, because we have three areas within the factory that we -- that
3 we are managing and, you know, final, we got wings, and we got
4 preflight. So he proceeded to tell me that he was going to be at
5 preflight and so I told him I was going to go over to wings.

6 So with that, I sent an e-mail to Carrie Geisler, she's the
7 -- she's the DQMR over at the Renton plant, designated quality
8 maintenance representative over at -- at Renton, and she -- I
9 reached out to her and told her I was coming over, I'm going to go
10 to wings and please inform me if there's a production day because
11 usually on production days nothing's happening, right, and so --
12 and it's kind of hard to find something that's in work so that we
13 can audit an individual.

14 Q. Um-hum.

15 A. And so that's always a challenge and so we had many jobs in
16 the last couple weeks. And so I also told her that I was coming
17 over and I wanted to find something in wings that we can do while
18 I'm there tomorrow. So I have yet to check my e-mail to see if
19 she responded. And so usually when I get in there tomorrow,
20 she'll have a list of jobs that they are working on currently and
21 then I'll pick one from that list based on what we have not done,
22 we have a running list of -- between January and now we've knocked
23 out about a hundred and 10 audits and we want to make sure we do
24 not do -- reduplicate an audit that was already done. So we have
25 to look on that list, based on the list that she gives us, and see

1 which one. And so then my day begins and I go and walk out with
2 her, as well as an RQSO --

3 Q. Um-hum.

4 A. -- and I'll walk out to whatever area we decide on and then I
5 commence my audit with the individual that is performing the job
6 on the IP that I select.

7 Q. Okay.

8 A. Yes.

9 Q. So when you're -- what are your goals during your
10 surveillance and the audit?

11 A. So my goal is to find out if -- to interview the individual
12 to find out if he's capable of performing that IP, performing that
13 process as it's stated in the IP, because we're -- our primary
14 goal is to ensure that the process is working, right? And so if
15 there's something in the process that he is not working or he
16 doesn't understand or if it's -- or along the way he doesn't know
17 how to go about navigating that IP, navigating the D documents,
18 the specs, the drawings, or don't know how to navigate the
19 sequence of that IP order, well, we want to know that, we want to
20 make sure that he sold in his job and that the process is
21 repeatable and is able to give us, you know, the desired -- the
22 desired effect that the -- that the FAA approved from -- you know,
23 from a design perspective.

24 Q. Okay. Have you found individuals that aren't qualified to do
25 specific jobs that they were assigned to, during one audit that

1 you did, perhaps?

2 A. Repeat that again.

3 Q. Have you found any individuals --

4 A. Um-hum.

5 Q. -- that didn't have the qualification, didn't know what was
6 happening or how to do his or her job?

7 A. Of all the audits that I've done to this date, I have not
8 found one person that did not know how to do their job, but I have
9 found individuals that didn't know how to go into the drawing and
10 find certain items. So, for instance, I did an audit a couple
11 weeks ago, when I asked the -- I asked the individual who was
12 doing it, he was phenomenal at his job --

13 Q. Yeah.

14 A. -- I asked him to go and find, in either the D doc or the
15 BAC, which is one of their specs, and then the drawing for wet
16 lubricant, it was -- what was it? Oh, goodness, it was a
17 hydraulic, it was -- I think it was Skydrol.

18 Q. Um-hum.

19 A. I believe. Don't quote me completely, but it was a wet
20 lubricant and he knew where the D docs are, were, and he knew
21 where the drawings were, but for the life of him, he couldn't
22 navigate it to find out where in there it mentioned that that
23 lubricant was -- what type the lubricant was in the drawing for
24 that, for that particular drawing, that spec, he could not find
25 it, so --

1 Q. So what happens at that point?

2 A. So at that point I document at that time, at that point,
3 because it's a training issue, right, and --

4 Q. Sure.

5 A. -- their quality manual states that, you know, they should be
6 -- have the knowledge, skills, and ability and competency to, you
7 know, do their job, right?

8 Q. Um-hum.

9 A. And the manager is responsible --

10 Q. Um-hum.

11 A. -- for it. So I -- you know, so I wrote it down on a -- in
12 the ACAIS, we have an 8100-6 that we use for, right now,
13 nonconformance, right, so I wrote that down, what I found, and
14 then there are references that relate to the finding.

15 Q. Um-hum.

16 A. And so right then and there they had individuals on the spot
17 to school them up, right, to show them -- say hey, okay, this is
18 where this is located. But even before that, what I did is I
19 showed him how to control "f", it was a simple function to control
20 "f", so I showed him on the spot how to do it. After he -- you
21 know, I let him sit there to see if he can --

22 Q. Sure.

23 A. -- do it, yeah, so -- and gave him further instruction on the
24 D docs and the specs and stuff, so -- but then, like I said, I
25 already wrote it down as a finding and wrote it and added it to

1 our findings for the month.

2 Q. Okay.

3 A. Yeah.

4 Q. And then what happens to that after the fact?

5 A. So it gets rolled up into the EIR, so it's going to be part
6 of a bigger compliance action --

7 Q. Okay.

8 A. -- and Boeing's going to have to answer to the audit. The
9 managers are working that piece out with all the stuff because
10 it's been hundreds of findings that we've had and you guys --

11 Q. Yeah.

12 A. I don't know if they've given you the findings from all the
13 hundred and 10, up until this point, audits that we performed and
14 audit findings, but there's a ton and we -- whenever we find
15 anything we're writing it down and, you know, without getting --
16 without any issue, we're writing all that stuff down and going
17 through and putting it in -- putting it in, you know, ACAIS and
18 also it's been -- it's been part of a bigger collective, which is
19 the EIR.

20 Q. Um-hum.

21 A. Yes.

22 Q. So after you do all that, is that typically the end of your
23 day or do you do a debrief or what happens?

24 A. So usually, typically when I find something, I have the DQMR
25 and the RQSO right there with me, right, and so they're taking

1 pictures of everything --

2 Q. Yeah.

3 A. -- documenting.

4 Q. Yeah.

5 A. We're having conversations, you know, as to the validity of
6 the finding.

7 Q. Um-hum.

8 A. And then from there it's agreed upon, yes, the finding, so
9 they know about it. So it's all, you know, about transparency,
10 trust, you know, open it up, you know, hey, this was the finding,
11 you know, you see what we did and what we found and we want
12 pictures, objective evidence --

13 Q. Sure.

14 A. -- to show that hey, this is what we found. So from there,
15 like I said, we document it. From that point, we -- I go back up
16 at the end of the day and I document it on a dash-six and it gets
17 loaded into ACAIS and then it becomes part of the compliance
18 action that we're working on, which isn't -- which is an EIR right
19 now.

20 Q. So they have to answer to that eventually --

21 A. Yes, yes.

22 Q. -- is what you're saying.

23 A. Yes, yes. Yes.

24 Q. As an ASI working -- well, mostly in production is what I'm
25 -- a production line, how would you characterize Boeing's quality

1 system, currently?

2 A. I think the quality system is -- it speaks to what they
3 should be doing. The only thing is, is following, you have to
4 follow what you're -- you know, I think it's -- I think it's
5 pretty decent because it covers everything that they should be
6 doing, like I said, and I haven't found any fault with it yet and
7 every time I go in there, whatever I find I go look in because we
8 have to go to their quality manual to reference the finding, you
9 know, how they relate. Haven't had any issue whatsoever.

10 Again, it's all about personnel finding and following their
11 quality manual, following their procedures, following their
12 process.

13 Q. So typically, you said that the quality people are usually
14 with you when you go down to do your surveillance, is that
15 correct?

16 A. So not the quality -- well, their DQMR and their RQSO. The
17 RQSOs are there, they're the regulatory -- oh, man, regulatory
18 quality oversight --

19 Q. Okay.

20 A. -- individuals that are Boeing, they're Boeing personnel, but
21 they go down with us to document whatever we find and then they
22 add some clarity to what's going on because some of the times when
23 we go down there, we don't -- we don't always know all the jobs,
24 so they add some clarity to what's going on.

25 Q. Got you.

1 A. Okay. And then DQMR, the same thing, she's there also
2 because she's like the -- like the intermediary between the
3 workers on the floor and us. So they're there to fix -- find out
4 -- to see what we found --

5 Q. Um-hum.

6 A. -- right, number one, and to ensure that, you know, we
7 document it and from that point on she wants to be aware --

8 Q. Okay.

9 A. -- she wants to be aware and then from that point on she's
10 working on fixes at that point, you know, how -- you know,
11 sometimes it's an on-the-spot fix, if it's --

12 Q. Sure.

13 A. -- simple enough and it still gets documented, but it's for
14 their awareness. And then, you know, we always had them with us
15 when we go down there because it's, you know, that -- you know,
16 it's -- how can I say -- it's part of the process and they --
17 again, they know their -- all their areas exclusively and so they
18 give us more insight of what's going on because some areas we go
19 into we don't always know --

20 Q. Sure.

21 A. -- all the process of what they're doing --

22 Q. Sure.

23 A. -- and the DQMR, along with the leads and the managers on
24 site, will give us -- we always ask for hey, give us -- give us a
25 rundown on what you guys are doing and how this is supposed to

1 work.

2 Q. Okay.

3 A. And so they add that clarity to what's going on.

4 Q. Are the people that are with you, are they the ones that --
5 that examine the trends or is that another department that does
6 that within Boeing?

7 A. So we -- you're talking about the trends of our findings,
8 where we find --

9 Q. Well, yeah.

10 A. Okay.

11 Q. Yeah, your findings.

12 A. So our findings, our trends --

13 Q. Or Boeing's findings.

14 A. Oh. So Boeing has their own way of doing their trend
15 analysis on their findings because --

16 Q. Okay.

17 A. -- when we write a dash-six it becomes a CEA action or FCA,
18 ICA, which is an informal compliance action or a formal compliance
19 action, so they have to answer to that, they have to create a --
20 they have to answer to that and they have to create a Boeing
21 problem-solving model, BPSM, to that, right?

22 Q. Yeah.

23 A. So it's in their best interest to be with us so they can get
24 ahead on what's going on, what's happening --

25 Q. Okay.

1 A. -- out on the floor.

2 Q. Since you have worked as an ASI for Boeing, have you ever
3 written an LOI against Boeing's process and procedures?

4 A. I have not written an LOI yet.

5 Q. Okay.

6 A. Not against the process or the procedures, but I have written
7 an -- I have written -- I have done some -- I have identified and
8 written up an FCA on a process, a procedure that was -- that was
9 out of sequence, I did that just recently where it's part of the
10 audit that we performed last month, so it's going to be part of
11 that EIR, that compliance action, that enforcement action, that's
12 going to be part of the EIR, so --

13 Q. What is an FCA?

14 A. Formal compliance action.

15 Q. Okay.

16 A. Yeah.

17 Q. In the recent months or prior to the accident of the plug
18 blowing --

19 A. Okay.

20 Q. -- have you seen a lot of travel work issues with regards to
21 the production line?

22 A. I can't answer that because I don't have enough data.

23 Q. Okay.

24 A. Yeah, I know that there is, but I haven't -- firsthand, I
25 haven't -- travel work is in our -- it's not part of what we are

1 tracking.

2 Q. Okay.

3 A. We, as an ASI.

4 Q. Sure.

5 A. But we do know that exists.

6 Q. How would you describe Boeing's culture within the quality
7 system?

8 A. I haven't witnessed it firsthand, but it's just all from what
9 my constituents have seen, you know, that -- you know, it's --
10 it's lacking, right, it needs to be -- they need to be more
11 accountable and they need to be more -- how can I say -- more
12 tuned in to what's going on out there on the floor.

13 Q. Um-hum.

14 A. I think the training piece of it needs to be -- they probably
15 need to go through some sort of refresher, maybe, training. I
16 know that there's been instances where -- and I haven't witnessed
17 it firsthand where they have -- it's from my fellow ASIs where
18 they've seen some quality individuals sign off some stuff that
19 they didn't really go out and physically see.

20 Q. Um-hum.

21 A. I know that that's another issue with the culture right now,
22 but the quality side of the house is -- it needs some help, it
23 needs some work, right?

24 Q. Okay. Does the FAA consider a SAT a production record?

25 A. I consider it. I don't know if the FAA does, but I consider

1 every record that produces any kind of documentation in the
2 record, I don't care what it is. The SAT, shipside action
3 tracker, is a document that identifies an issue with something,
4 right, but it doesn't -- what fixes it is an NCR, nonconformance
5 record, so you put it on the NCR and the shipside tracker is a
6 notification that something's wrong, that there's an issue. Me, I
7 consider anything that produces any kind of documentation a
8 historical or an aircraft record.

9 Q. But by Boeing's policy do you know whether it's a -- a SAT is
10 a production record or not?

11 A. That's a hard question to answer because I just don't know
12 what --

13 Q. Okay.

14 A. I mean, it's in the production facility, they use it in
15 there, so if they don't, then I think it's -- it's not a good
16 thing, I mean, paperwork is key in my world, you know.

17 Q. Okay.

18 A. It always has been.

19 Q. So as an ASI and your surveillance of the Boeing certificate
20 in the past, have you noted any issues with regards to removal
21 records?

22 A. I haven't -- I have not had a removal record issue, I have
23 had ASIs who have had, but I have not.

24 Q. You have not --

25 A. I have not personally had an issue with any removal records

1 whatsoever. And the BPI that manages that thing need to be
2 redone, that's one weird document to manage, to consume. I just
3 think that --

4 Q. Is there an ASI, you said, that manages the --

5 A. No. No, no, no. I'm saying that the document itself, the
6 BPI --

7 Q. Oh, okay.

8 A. -- it needs some more clarity. I just think that thing needs
9 -- it's hard to interpret because, from the world I come from,
10 removing it, any time you remove anything you write it up, they
11 have exceptions to how -- if something is to be removed and there
12 shouldn't be no exceptions to that.

13 Q. Have you ever worked a plug removal during one of your
14 surveillances?

15 A. Never. Didn't even know that thing existed until this thing
16 came up.

17 Q. In your time as an ASI, what's the most recurring issue that
18 you have seen in the factory?

19 A. Oh, okay. Man. So I see a lot of -- foreign object debris
20 is rampant, okay, they're all over the place and that needs to be
21 cleaned up, it needs to be -- it's gotten a little bit better, a
22 little bit better, but since the door plug, because they've been
23 concentrating on a lot in the factory on, you know, honing, you
24 know, training and honing their particular areas and they're
25 having a lot of production days where they've been able to go in

1 and actually do some cleaning, but FOD is a big one. Tools, tool
2 accountability is a huge one. Huge. Calibration tools, huge
3 issue. We've had issues where items have been left on the -- in
4 tool containers not tracked to that, not supposed to be in a tool
5 container that's 30 days overdue and then using them. I had one
6 just recently on that. We've been having issues with hazmat.
7 Inventory, big time, I can't get anyone to tell me how soon an
8 inventory should be -- should be updated.

9 I've got anywhere from three to two years, there's no
10 publication that can tell me when an inventory should be updated.
11 If you go and look into any point-of-use station or any hazmat
12 locker, you can easily find things in there that are not on an
13 inventory list, so it's not constantly kept up to date, so huge.
14 MSRA, always, yeah, MSRA, which is material review segregation
15 area issues where stuff is not tagged or segregated correctly.
16 IPs, there's a lot of IPs that are not written where the
17 technician can follow it.

18 When it's supposed to be in sequence, it's out of sequence,
19 when there are things in there that shouldn't be in there, like
20 this -- a couple weeks ago I found a step that was completely way
21 out of step, it was way in the very end when it should've been at
22 the beginning. So there's some work that needs to happen on that
23 side of the house, definitely. The CMES is their system in which
24 they document everything. A lot of people, I found -- I had a guy
25 come to me when I was out there auditing the individual that had

1 eight years and he didn't even know how to use CMES, how do you --
2 how do you -- how do you be there, how do you work in a facility,
3 in a hangar, for eight years and not know how to use CMES? So
4 that's a huge issue. So I addressed that and one we had about
5 retraining, no matter how long you've been at the company, the
6 retraining piece to the -- written the EP of training when I was
7 working a hotline and it was all about training, as well. And so
8 he assured me training was changing with what's coming and I hope
9 that's -- I hope that to be true.

10 What else? There's so much stuff. Training, training is --
11 training is another issue that needs to get -- they need to get a
12 handle on training the individuals because they were training
13 individuals in foundational training and then I can't recall the
14 next set of training, and in the foundational piece they were
15 showing them how to use CMES, but then they never introduced it
16 again before they left the program and went out to the floor.

17 So from the VP, what he said they were going to do is
18 institute a five-day catchall where CMES and all the other
19 functions will be included at the end to ensure they understand it
20 before they go out the door. So training is a big one, training
21 is a big one. I just think that they need to hone in deeply on
22 how to train the individuals to ensure that when they go out to
23 the floor, they understand what they're doing. Gosh. I can't
24 think of all the other stuff, it's just -- yeah. I think to
25 protect the production piece, it hurts what they try to do because

1 they want to get the aircraft out, right, but then all the other
2 little things, the little things, the little things, to me,
3 because in a microcosm they're bigger. So if you can't do the
4 little stuff and you're working on the -- I mean, FOD, tools,
5 hazmat -- I mean, what makes you think I can trust you to do that,
6 if you can't do this. So it's a lot of that, you know, a lot of
7 that. But I hope, you know -- I hope, you know, I'd like to see
8 them turn around and do the right thing, is to get these guys, you
9 know, the training they need and to get these areas squared away,
10 so that's pretty much it.

11 Q. Okay.

12 A. Yeah.

13 Q. You mentioned that you guys have a list of audits that you
14 guys have done and had findings on some nonconformances, right?

15 A. Um-hum.

16 Q. Is any one of those issues that you guys documented, does it
17 have anything to do with performing part assembly and removals?

18 A. Yes, in that list of 87, 97 findings that he had from the
19 special audit --

20 Q. Yeah.

21 A. -- that we performed, yeah, there's several in there, in that
22 list.

23 Q. Several?

24 A. Yes. More than one. I'd have to say, from my recollection,
25 because I have a copy of it on my computer --

1 Q. Sure.

2 A. -- from my recollection, at least -- from what I've seen,
3 three, maybe four and maybe more that they had removal issues.

4 Q. Okay. Unauthorized removals?

5 A. Yeah, undocumented and unauthorized, yes.

6 Q. Okay. As an ASI, have you ever worked with any of the door
7 crew people?

8 A. Never.

9 Q. Never?

10 A. Never.

11 Q. Okay.

12 A. Uh-uh.

13 Q. Well, let me ask you this, who at Boeing would typically work
14 on a door plug? Which group typically could work a door plug?

15 A. That I couldn't answer you because I don't know what flow day
16 that gets installed in or gets -- would be worked, because from my
17 understanding, the door plug comes already -- already intact,
18 rigged from Spirit.

19 Q. Okay.

20 A. So that's --

21 Q. So if there was out-of-sequence work that a door plug needed
22 to be removed, who would typically -- which team at Boeing would
23 be working that issue?

24 A. I couldn't even answer that question because I don't even
25 know what --

1 Q. Okay.

2 A. -- flow day that would happen in or where that would begin
3 who would do the rework, I have no clue whatsoever.

4 MR. CRUZ: Okay, fair enough. Thank you, that's it for me
5 for now.

6 DR. WOODS: Okay. Mike.

7 BY MR. RINEY:

8 Q. Yeah. Hey, good afternoon, Trent.

9 A. Hey.

10 Q. So in your interactions with the Boeing team --

11 A. Um-hum.

12 Q. -- how accepting of the feedback or the requests for
13 responses are they? Do you get pushback at all or do they like
14 slow roll you on answers or --

15 A. So as I'm doing my audits, the individuals who I'm working
16 with, that I'm doing the audits with, AMTs, aviation maintenance
17 techs --

18 Q. Yeah.

19 A. -- phenomenal, open. When we are in the building, they
20 typically avoid us, they're -- and as I'm interviewing them,
21 they're so scared, I mean, we have to calm them down. I always
22 give them a little brief to calm them down to say hey, man, this
23 is not about you, it's about the process, just do your job normal,
24 you know, that type of thing. So I would have to say, since I've
25 been doing it, I probably ran into one guy who wasn't accepting on

1 it and that was when I was in Auburn doing an audit. Whenever in
2 the factory, these guys are open, transparent, and since the door
3 mishap these guys, their dedication to what -- I mean, their
4 dedication to what they're doing has been exemplary, I mean,
5 they've been open, very open and transparent about any little
6 thing about -- one female who I was auditing in wings, she was
7 telling me about a sequence, we were doing a -- we were doing a
8 fuel, it was a fuel -- oh, goodness -- fuel probe test, functional
9 test, and there was a couple items in there that wasn't -- that
10 was in the eJITT, which is the function, it's the --

11 Q. Yeah.

12 A. Yeah, that she wasn't using and she was like -- and I have a
13 multimeter and I have a noncertified device, timing device, and it
14 gets attached to this eJITT that I don't even use, why are they
15 there, and it confused her, right? And so I said okay, cool,
16 let's -- let me look at this and so we looked at it and found out
17 that it may be something in there that needs to be removed or it's
18 confusing.

19 So I pushed that -- I made a note of that, I wrote that down
20 in my dash-six and we pushed it to the engineers and so they are
21 looking at that and like I said, that happened last month, so I'm
22 waiting on the word, but the recommendation is that this is
23 confusing your techs and they don't know what to do with this and
24 you have this equipment in here that shouldn't be in here because,
25 you know, it's causing confusion. So they're in the midst of

1 reevaluating that so they can get that out of there, as well as
2 another -- there was another step, as well, within that and I'm
3 trying to remember. Gosh. The ground, there was a ground
4 associated, too, it didn't even tell you when you connect the test
5 plug up to the actual -- from the test equipment to the aircraft,
6 it doesn't tell you to put the ground in there, it doesn't tell
7 you to -- and there's a ground, there's a ground for it, but it
8 doesn't tell you when to put the ground on there and that was
9 another issue and we worked that out, too, as well, so that's
10 getting changed as well, so -- so yeah.

11 So they have been -- they have been just wanting change, they
12 want to fix it, they see it, you know, but everyone seems so timid
13 about saying anything. I don't know, I can only surmise why, you
14 know. As I'm in the facility auditing, I don't get any bad press
15 or any bad -- nothing from all the individuals that's actually
16 associated with the task.

17 It's usually the managers or the leads that shuffle their
18 feet a lot or, you know, sometimes, you know -- you know, the
19 other individuals I'm working with that had kind of dragged their
20 feet about giving me stuff I need, you know, they drag their feet,
21 but I'll eventually get it but, you know, I get a sense of a
22 little tap dancing sometimes, you know what I'm saying? But it
23 works itself out and it's -- like again, there's no -- no bad
24 attitude or any of that stuff with the individuals and the tap
25 dancing is negligible, right, I mean we work through it, so yeah.

1 Q. Okay. You mentioned -- in your opinion, do you feel like
2 it's the current planning that mechanics have that leads to a
3 belief that it's a training issue? Or do you believe it is
4 specifically just the mechanic's knowledge of the work?

5 A. So I kind of believe it's both, right, I kind of believe it's
6 the way their IP is written because those things are really not
7 that perfect, right, and it could be out of sequence in some
8 places and then it will confuse the tech. And there's very few
9 cases where I ran into where the technician didn't know what he
10 was doing, okay, and that typically is inexperience because he
11 hadn't been on the job, been doing the job long enough, but that's
12 -- I probably only had maybe one of those way back, right?

13 And so that was identified, you know, they got with the lead
14 and we brought the lead and the manager down and, you know, they
15 worked -- they did the training, his training, his further -- his
16 -- oh, goodness -- his training.

17 They recognized that he needed more training, okay, so -- in
18 the job that he was performing, so -- but like I said, I only had
19 like one of those. Usually when I'm on an audit, these guys are
20 really rock stars, they know what they're doing, it's just the IP
21 that tripped them up. And then if I ask them to go find something
22 in the D doc or a spec, I always -- and I'd say half of the time
23 I'll get, you know, that deer in the headlight, in the headlight,
24 but they act like they don't know how, like they don't know where
25 -- you know, they know where -- they know where the documents are

1 but they don't know how to search it, so --

2 Q. Do you, for your plan, work plan, do you know where you're
3 going to be day to day or does it change pretty often?

4 A. So what drives our plan day to day is the ticketing, the AWC
5 at the SDC, okay, airworthiness certificate --

6 Q. Yeah.

7 A. -- at the SDC. That has high vis, right, and right now with
8 that program and ODA, you know, ODA works with us, we're -- ODA --
9 so we're the primary ticketing individuals for that program, it
10 used to be ODA and so we have to be over there, we have to manage
11 that program, that has to go.

12 Our individuals, weekly, they get their plan for the SDC,
13 everybody will put their name in their calendar, those days in
14 between I find myself over at the factory doing audits. So
15 typically, what happens for me, I usually do it like on Tuesday
16 and a Friday or a Wednesday and a Friday and then those days in
17 between I'm at the factory doing audits. So that's how it usually
18 typically works out.

19 Q. So there's always somebody different?

20 A. Yeah. Yeah, we -- yeah, there's always all of us attached in
21 the factory and SDC in a given week, everyone's doing those two
22 items, as well as the other things that they're doing with the
23 VDRs and their CEA actions and their hotlines, yeah, the plate is
24 full, yes.

25 Q. So do you feel rushed in your job?

1 A. No, I control my day completely, I don't feel rushed in no
2 sense whatsoever. If I get to an area that requires me to go an
3 extra day, right, I'll either -- if I've got SDC that next day,
4 I'll come back to it the following day. But usually it takes me
5 just one day to get through an audit. So an SDC is usually two to
6 three aircraft, typically, and we're usually done by noon, so no
7 rush whatsoever.

8 Q. Since there's multiple individuals at SDC --

9 A. Um-hum.

10 Q. -- how do you guys discuss the findings, because normally if
11 there's repeat-type issues you'll go back to that same area, so
12 how is that discussion?

13 A. So you want to know how we divvy up the areas on the aircraft
14 or how --

15 Q. Are there multiple people on one aircraft?

16 A. Yeah. So typically, in a given day, depending on the number
17 of aircraft, if we get four or more, we normally call in another
18 ASI to support, right, and then from that we're in there --
19 typically, we'll get aircraft at 7:00, between 7:00 and 9:00, they
20 have to present between that time. Anytime outside of 9 o'clock,
21 we'll just -- because by the time we walk the aircraft and do the
22 paperwork it's already really close to the end of our day, right?
23 So yeah, we typically have between three and four ODA individuals
24 that are working with us, as well.

25 Q. Okay.

1 A. Right. So it's about, I would say total, four to five people
2 per aircraft, right, four to five people that would go out, say,
3 for each aircraft and we got to -- we can do as many -- if there's
4 too many ASIs there we can do as many as two, two is always the
5 minimum, and depending on how quick they go or the issue, whatever
6 issues you find or however that flows, we can do as many as we can
7 within that given time frame, it's only -- it's up to the ASI.

8 So yeah, it's as simple as that, I mean, we got help when we
9 go out there with the ODA and, if needed, we always get --
10 everyone has visibility on what's going on at the SDC because of
11 the number of aircraft, when they send a number of aircraft they
12 want us to ticket out at 5 o'clock, at 5:00 a.m. in the morning,
13 everyone's seeing it, and so there's more aircraft and someone who
14 has the bandwidth can break off of what they're doing and come
15 over and can assist, so --

16 MR. RINEY: Okay. Okay, that's all I've got. Thank you.

17 DR. WOODS: Matt.

18 BY MR. RIGSBY:

19 Q. Okay. Trent --

20 A. Yes.

21 Q. -- who's your team lead?

22 A. My team lead is Jesse Cantu.

23 Q. Jesse?

24 A. Yeah, he's our senior ASI.

25 Q. And I know you said that when you work the SDCs, do you -- is

1 there a specific area that you cover?

2 A. On the aircraft?

3 Q. Yes, sir.

4 A. So ASIs, when we go out, depending on how many people, I
5 usually always start at the engines because the engines, you have
6 to start there because if you don't close those up, right, because
7 we got to reconfigure the aircraft to bring the flaps down and the
8 slats down -- not flaps, but the slats down, so with the engine
9 cowlings open you can't extract the -- or what's the word I'm
10 looking for, you can't move the slats down so that we can inspect
11 that area. So it has to be done engines first and I always tackle
12 engines first, always.

13 Q. Okay.

14 A. Yeah.

15 Q. When you do this, the -- you know, I know you guys don't
16 really work shifts, correct?

17 A. No, we just get there -- well, we, in the SD -- well, in the
18 auditing, now that we're doing this extended enhanced auditing, we
19 have a day in there where we do -- a week where we just started
20 doing second shift, we started back in -- was it February? We did
21 one in February, we did one in April and we also got one this
22 month that we're doing on the 20th, starting on the 20th, so
23 that's strictly for auditing, though. But yeah, we just got one
24 shift when it comes to the SDC, we're ticketing.

25 Q. Before this event, did you guys just audit primarily during

1 the day shift?

2 A. We primarily audit during the day shift unless there was an
3 issue that -- whereas the work was being done on the second shift,
4 there has been many instances where we had to go on second shift
5 because that's for the real work or there was an issue on the
6 second shift or something related to a hotline or a VDR, so it
7 just depends on what was happening at that time.

8 Q. Okay. Have you ever had any issues, like when you have to go
9 to your manager or something, say you need to work -- do something
10 on the second shift?

11 A. Never. They are wide open with working outside our normal.
12 They encourage you, you want to go do this, go do it; you want to
13 do that, go ahead, go do it, and you just got to get that okay to
14 do that because if you go on the second shift you're night diff,
15 right? If you are working beyond your time, you get comp time or
16 you get paid for it, so you got to get that okay, that approval
17 for you to go, yes.

18 Q. Do the ASIs have a union?

19 A. Yes.

20 Q. Okay. Who represents the ASIs?

21 A. The union is called PASS, P-A-S-S. I'm not too familiar with
22 it, I know that that's the union and I don't -- I don't know what
23 they do but, I mean, they do something. I couldn't even tell you.

24 Q. Okay, no worries. I think you've already answered a lot of
25 my questions. Types of audits, is there any -- any particular

1 type of audit that you specialize in, like removal and -- has been
2 mentioned once or, you know, specific flow days that you do or are
3 you guys more generalists?

4 A. So the team lead of that audit would give us what he -- what
5 he wants, what areas he thinks are at a higher risk. So I have to
6 get with the team lead to figure out which areas that he thinks is
7 higher risk or, from his data, that is high risk. And so like
8 today, I hit up Mr. Baker and asked him which area do you want me
9 to concentrate on and he was at preflight, and he told me to go to
10 wings, wings is always full of issues because of FOD, number one,
11 and then you get a lot of metal chipping, metal chips in the
12 sealant that's not cured and that's an issue, and then you get --
13 you get a lot of issues, we find a lot of issues over there, so he
14 wanted me to go to wings, so tomorrow I'm going to go to wings.

15 But yeah, he has a -- he has the data, our team lead, based
16 on, you know, the risk and he'll tell us which area that we need
17 to attack and that's what we'll get up, we have to get the DQMR
18 and tell her which area we want to go to, and I'll meet with them
19 at 5 o'clock in the morning and then we'll go through just the
20 opening, open items that are being worked in that area.

21 Q. Do you do supplier audits, as well?

22 A. I have not yet. That's coming. I'm not looking forward to
23 that because I've never done that and I'm like oh, my goodness.

24 Q. Okay.

25 A. And yeah, I have not done that yet.

1 Q. Okay. You mentioned that people come up to you when you're
2 in the plant and the employees feel free to talk to you.

3 A. Yeah.

4 Q. Okay.

5 A. Yes.

6 Q. Do you encourage -- and I believe it's Speak Up --

7 A. I do.

8 Q. -- Boeing Speak Up?

9 A. I do. I do, I do, I do. I advocate for that because it's
10 Boeing's program and we want them to start there. Hotlines, when
11 they go to the hotline, that takes -- that's another -- because
12 the hotlines are top priority that takes us out of the game, all
13 right. So from the hotlines I've done, I've done probably three
14 of them, they are resource heavy.

15 Q. Um-hum.

16 A. I mean, you do basically nothing but the hotline. So yeah,
17 we encourage them to start -- depending on what the issue is, we
18 encourage them to start there first. If they're not -- if they're
19 not comfortable with it because they fear reprisal, we tell them
20 to go ahead and go to the website and do a whistleblower hotline
21 on our site, yeah.

22 Q. Do you feel, are most of the employees receptive to that or
23 are they --

24 A. They're more receptive to going to the FAA site than they are
25 their own Speak Up program and what I've found is a lot of people

1 don't even know about the Speak Up program. So communication is
2 what I found, too, that's another huge issue in the Boeing
3 Company, from the managers down to the guys on the floor, right?
4 For some reason that flow of information, which is critical, is
5 lacking big time, big time. And it was like that at DCMA when I
6 was over there, DCMA is -- the communication piece between the
7 managers and the guys on the floor is anemic.

8 Q. Um-hum.

9 A. Yeah, it's horrible.

10 Q. Okay. Now I'm going to jump to SMS.

11 A. Okay.

12 Q. Have you done the FAA's SMS training program?

13 A. Not yet. I have not. I think there's some coming, I know
14 they talk about it, they got five classes coming and --

15 Q. Okay.

16 A. -- and they're all in OKC. No, not yet.

17 MR. RIGSBY: Okay. Okay, I think I'm done.

18 DR. WOODS: Okay. Over to Nils.

19 BY MR. JOHNSON:

20 Q. Good afternoon again, Trent.

21 A. Hey.

22 Q. I know you covered this briefly, I still don't have a full
23 understanding, how is the work scope plan generated for ACAIS?

24 A. So it's a CM plan that gets -- that is managed by the senior
25 ASI and the manager, so Mike Hager and Cantu. There's another

1 individual involved, he's kind of like a focal, too, as well,
2 named Garrin. Oh, my God, what's his first name? I can't
3 remember his first name, but the last name is Garrin and they
4 manage the CM plan for us for that -- for 2025. And so -- yeah.

5 Q. So I mean like a hundred and 63 elements, is that correct?

6 A. No, there's only 16 quality -- are you talking about quality
7 elements?

8 Q. We were looking at the --

9 MR. CRUZ: No, it's 8120.23 Alpha.

10 MR. LYLES: Okay. Oh.

11 BY MR. JOHNSON:

12 Q. You know, like a hundred and 63 areas?

13 A. Yeah, those are the quality elements. Yes.

14 Q. Are all of those covered in a given year or is it --

15 A. It's all based on risk, yeah.

16 Q. Okay.

17 A. Like, I know the maintenance process is -- the maintenance
18 process is number one, the number one violation is the maintenance
19 process and then you got document control, those are the high --
20 the high hitters right there and we hit -- you know, we get a lot
21 of issues from those two areas.

22 Q. Okay. And the risk profile, that's entered into a system and
23 the system generates what the areas are and based on those areas
24 you guys will then pick out -- I'm going to call them elements,
25 forgive my lack of terminology, elements that are applicable to

1 that?

2 UNIDENTIFIED SPEAKER: Risk.

3 MR. JOHNSON: Risk area.

4 MR. LYLES: So I'm not privy to how the RBT, the risk-based
5 targeting, resource targeting works, but it's in ACAIS and ACAIS
6 is a data-driven system that feeds that -- what's that, RBRT,
7 which is a risk engine within ACAIS. Yeah, I couldn't begin to
8 tell you, I know that it rates it in three levels, high, medium,
9 low and 1, 2, 3. Boeing is a high 1 right now. And based on
10 that, it is -- it kicks out the number of audits that should be
11 happening based on that rating. And that's all controlled by the
12 managers, the senior manager and then -- Garrin Pies is his name.

13 MR. JOHNSON: Okay.

14 MR. LYLES: Yeah.

15 BY MR. JOHNSON:

16 Q. You covered the systemic problems being FOD, tool
17 accountability, tool calibration, hazmat --

18 A. Training, yes.

19 Q. How many FAA inspectors are assigned to Renton for
20 surveillance at this time?

21 A. We got a total of five, five individuals, you got myself,
22 Jonathan, Nelson, Baker -- why am I drawing a blank on this?
23 Nelson, myself, Jonathan, Cantu -- yeah, a total of five ASIs.
24 Hugely on demand. If you ever walked over to that factory, hugely
25 undermanned. So they're working on that, too, as well, they are

1 hiring more and they're doing direct hires on that. And so that's
2 going to help tremendously, tremendously.

3 Q. Okay. What is the FAA doing to ensure the Boeing quality
4 system is working at Boeing?

5 A. So we're making sure that they're following their processes
6 and that everything that they're producing is per design and is
7 safe, is safe for -- safe for flight. We ensure that, you know,
8 they go through a MIDO audit to ensure that their quality system
9 is solid. Without that, we wouldn't have -- make sure they got
10 the design, they got a type design, so they got to go through that
11 process, which they have.

12 We ensure that -- you know, that again, their quality manual
13 is square, which it is. They just need to follow it. Their
14 quality system is approved and squared away, which it is. And
15 that, you know, they're able to pass audits, to get through
16 audits, you know, because we audit them to their quality manual,
17 right? So those are -- those are the things that they need to
18 have to have a viable system, so --

19 Q. You may have answered this. Do you feel that travelled work,
20 out-of-sequence work, causes problems for the assembly line at
21 present?

22 A. There's a lot of heartache about that and I know I hear
23 stories about people having issues because their travel work from
24 Renton goes over to the preflight and somebody has to do it,
25 right? So yes, I do feel that that's an issue, it should be

1 squared away. Those aircraft should not be walking out of there,
2 leaving out of there with hundreds of items open, you know. I
3 don't like to see it, I don't like to hear it, but that's how
4 things are working right now.

5 Q. Do you feel the training is adequate at Renton?

6 A. I don't. I think it needs an overhaul, I think it needs some
7 help, based on what I've seen and heard. I think that if they can
8 do -- if they can tighten up on that training and get the managers
9 more engaged, I think it starts with -- I think that -- I think
10 the managers -- and some leads are the proble, the managers are --
11 they drive the leads, right.

12 But I think -- I don't know about you, but in any job I've
13 ever done, if I've ever seen my manager or my supervisor out on
14 the floor, out there really getting sweaty and dirty with me, you
15 know, I lose respect, right? So I just think that the managers
16 need to be held more accountable, which would drive that
17 dedication all the way down that line and be more in tune to the
18 individuals on the floor and what level of education on the
19 aircraft or training, OJT, whatever, that they have, the trainings
20 they have and, you know, have a bigger stake into that.

21 Q. All right. BPI 1581, which is the process for removals --

22 A. Um-hum.

23 Q. -- do you believe those procedures are adequate?

24 A. I think they're horrible. I think that, coming from the
25 world of the military, right, everything we -- if we remove even

1 the simplest panel, we had somebody come out there and look at it,
2 right, and so -- because the likelihood of somebody leaving
3 something behind that panel and getting complacent and who knows
4 what a person's been doing in the course of 24 hours, anything can
5 happen when they lose, you know, that continuity of what they're
6 doing. I just don't like that. I've been raising anytime you
7 move something off an aircraft, you document it.

8 Q. Last one for this round. Have you discovered any
9 undocumented removals during your surveillance and how did you
10 discover that removal?

11 A. I haven't done -- I haven't found any undocumented removals
12 since I've been here.

13 MR. JOHNSON: All right, thank you.

14 MR. LYLES: Okay.

15 DR. WOODS: Okay. John.

16 MR. JOHNSON: John.

17 BY MR. PETRUZELLI:

18 Q. Trent, Pocholo was asking you about SAT being a production
19 record, is that -- do you guys consider the SAT an authoritative
20 document or is it part of product data definition? Along the
21 lines of REDARS, for example.

22 A. No, I just think it's more of -- I don't -- no, I wouldn't --
23 I would classify it as more of an informational-type thing, not so
24 much as a -- as a quality record. But you know, with me, anything
25 that creates any kind of an output from -- input or output from

1 what we're doing on aircraft should be considered a record.

2 Q. Okay.

3 A. Yeah. No matter how minute it is, I mean, and no matter how
4 much horsepower is behind it, I just think that all documentation
5 should be lumped --

6 Q. Okay.

7 A. -- together.

8 Q. We heard this earlier today, asked a question about a person,
9 but you mentioned -- I think you mentioned when you -- when
10 there's findings, some of the things that comes back, blame and
11 train, have you seen any of that in response to a finding where
12 the company will say the employee made a mistake, we're retraining
13 him?

14 A. I haven't -- not in those kind of words, I mean, if an
15 employee has -- don't know something, you know, it's -- the
16 typical next step is to retrain, right, especially if I do a VDR
17 and there's an issue, an instance, like if I have a VDR and
18 usually what happens is if there's an issue and it is because of
19 training, they would -- they would put down there that they were
20 going to send them through some sort of class or some sort of --
21 what do they call that? Oh, goodness. Where they get together,
22 you know, what do they call that, training, not training, but --
23 oh, God, it escapes me right now. So when they -- oh, goodness.
24 When they get together in a class and they give that topic, they
25 have that topic and they're talking about that topic to a group of

1 individuals -- what is that called? I can't remember. They do a
2 roster of individuals -- safety stand down, safety stand down. So
3 yeah, just training and it's -- in general, you know, it's
4 something like if someone doesn't know anything then these would
5 always say I read the manual, you know, I've heard that, you know,
6 it -- you know, that -- you know, they're going to, you know,
7 continue, you know, they're going to continue with their training
8 or help them do their OJT portion of it.

9 Q. And my last question in this round is you mentioned, a little
10 bit ago, training needed an overhaul, can you go a little bit more
11 into that and give some examples maybe, please?

12 A. Okay. I think to have an individual out there on the floor
13 for eight years that don't know how to CMES, doesn't know how to
14 use CMES, I think warrants some sort of a refresher or recurrent
15 training. I mentioned to the VP of training at the Boeing Company
16 in Renton that -- that they should have something to catch
17 everyone, I mean, no matter if you've been there for 30 years, I'm
18 going to have them all sit in there to provide the training and
19 then you can catch all of them and you don't have to guess who
20 doesn't know, who knows or who doesn't know. I mean, when you
21 think of somebody who's been there working on aircraft and don't
22 know how to use CMES, that literally is crazy to think that or
23 it's appalling because then it's like how did you get into the
24 company and don't know how to use CMES?

25 Q. Right.

1 A. Which is the very -- that's how you guys do your maintenance,
2 that's how everything's documented.

3 Q. Correct. How often have you seen that?

4 A. So I've only seen it that one time, you know, it was -- so I
5 didn't mention it, so it was mentioned to me that -- through one
6 of the -- one of the hotlines I was doing, that there was an
7 individual out there that's been out there for eight years that
8 did not know how to use it, that's how I came about it. I
9 personally didn't witness that, that was from their hotline that I
10 was working that dealt with training, right, so that's how I know
11 about that.

12 And that's what drove the Webex that I had with all the
13 training focals, the workplace coaches and all them, this was like
14 -- I think it was back in February when I was doing that. So I
15 personally did not have -- didn't witness that myself, the CMES,
16 the issue with the eight year that did not know CMES, I personally
17 didn't, it was part of the hotline that I was working.

18 Q. Like when you're doing your audits in the factory, though,
19 when you see -- when you're interacting with a line worker --

20 A. Um-hum.

21 Q. -- do a lot of them struggle with finding a spec, finding a
22 drawing?

23 A. I'll say --

24 Q. Understanding a drawing tree, for example.

25 A. I said half before. I'm going to break it down, I'll say 25

1 percent of them, I'll say out of -- let's say out of -- maybe 30
2 percent. But what I always typically do, I'll find something in
3 the IP and see if they can find it in their drawing.

4 Q. Okay.

5 A. And then I'll always find, I'll always have them -- for a
6 BAC, I'll always pick something out of the drawing and like I
7 said, the last two times -- no, the very last time it was the guy
8 with the -- with the wet lubricant, that I had him going in and
9 finding and he couldn't find it, and then I did it again two
10 audits before that, so yeah, not two times in a row, but I did the
11 audit before, which was last month, and then probably one in --
12 one in February, so -- but I always find something within that IP
13 to see if they know how to go into the spec, into the drawing,
14 just to make sure they know how to use those documents.

15 Because a lot of what we've been finding and a lot of the
16 other -- my ASIs, is that a lot of people don't know how to --
17 don't even know how to use the -- I haven't found it personally,
18 everyone that I've ever talked to knows how to go into -- knows
19 how to find the D docs, but it's searching the D doc that they
20 couldn't find the information that they needed, or the drawings.

21 Q. And you made a comment about the control of evidence (ph.).

22 A. Yeah.

23 Q. That's like the --

24 (Crosstalk)

25 MR. LYLES: It's a basic thing, it blew me away that he did

1 not know that. I was like wow, you kidding me? But yeah, so --

2 BY MR. PETRUZELLI:

3 Q. That's like that's where you get all the --

4 A. Yeah, yeah.

5 Q. -- certification tests we have, you got the spec --
6 (Crosstalk)

7 MR. LYLES: Yeah. Yes, yes.

8 MR. PETRUZELLI: Thank you.

9 MR. LYLES: Yeah.

10 DR. WOODS: Dan.

11 BY MR. MARCOTTE:

12 Q. Yeah. So this year, how many IPs do you think you've
13 audited, witnessed?

14 A. Oh, my goodness. Just in April, from the -- how many audits
15 did I do in April? I did four in April, I did -- oh, man. I
16 would say the number -- if I had to take a guess, between January
17 and now, oh, my goodness, because when we did -- the ASI, I was --
18 we were auditing like crazy. I would have to say about 20, 20 IPs
19 that I audited since, yeah.

20 Q. So out of those 20 --

21 A. Um-hum.

22 Q. -- how many were there that you had findings, documented
23 findings out of those 20?

24 A. So there were probably one or two that I didn't find
25 anything.

1 Q. Um-hum.

2 A. I found stuff in each and every -- the other 18.

3 Q. So I'm not familiar with a manufacturing audit, you know, I'm
4 more engineering and other audits, process --

5 A. Okay.

6 Q. -- audits, so I have findings that are observations, you
7 know, depending on the severity. Do you have something similar
8 where you classify them?

9 A. We do have observations, if we see something that isn't a
10 finding but they can, you know, improve on.

11 Q. Um-hum.

12 A. So we do mention those. I've had audits where I had
13 mentioned, you know, that they need to do this, they need to come
14 a little bit more -- you know, a little better with the processes.

15 Q. Okay.

16 A. Yeah, we do that.

17 Q. So out of the roughly 20 IPs, do you think you had about 18
18 findings?

19 A. More, because just when I did the eJITT for the fuel probe,
20 there were seven on just that one that I found, so some of them
21 could be multiple.

22 Q. Okay.

23 A. Yeah, so the number is good, I did 18, I'll find multiple
24 stuff within --

25 Q. Within each one.

1 A. Yeah, yeah. So the findings could be double the number of --

2 Q. Okay.

3 A. Yeah, tools is insane, FOD is insane and (indiscernible) just
4 the fact you're doing ASIs, I'm doing the ASI.

5 Q. Okay.

6 A. Man, yeah, it's --

7 Q. So, okay. Well, then out of those, your findings, how many
8 do you think were -- did not follow the process?

9 A. So I did one when we did the high -- probably maybe -- maybe
10 four, five where they did not follow the process. Or if it was
11 out of sequence.

12 Q. What do you mean by out of sequence, they didn't do the work
13 steps in order or --

14 A. So I've had audits where the sequence of it, like for
15 instance, on the fuel probe, the grounding, right, it wasn't -- it
16 was out of sequence, it was out of sequence because grounding, it
17 didn't mention to ground the unit, the test unit, before
18 connecting it to the actual probe cannon plug on the aircraft
19 wing, right, so that wasn't even mentioned in there at all. So it
20 was a mis-sequence, it wasn't --

21 Q. Okay.

22 A. -- in the sequence itself.

23 Q. Okay. But the mechanic had followed the work card, because
24 the work card --

25 A. Yeah.

- 1 Q. -- had been improved.
- 2 A. Yes, it could -- yes.
- 3 Q. Because when I heard "did not follow procedure," so I'm
4 thinking the mechanic didn't follow the card.
- 5 A. Yeah, she followed it, but in there we recognized that --
- 6 Q. Okay.
- 7 A. -- it didn't state to put the ground in there --
- 8 Q. Right.
- 9 A. -- to ground the unit.
- 10 Q. Okay.
- 11 A. And then when it did state to put the -- to ground it, to
12 ground the unit, it was -- it wasn't in the proper sequence, it
13 was later on down, it was -- it should've been a couple steps
14 earlier.
- 15 Q. So that one was more of an issue with how the card was
16 written and cycled as opposed to the mechanic not following the
17 process.
- 18 A. Right, it was -- yeah, the sequence of events.
- 19 Q. Okay. So now I'm trying to get -- you know, what drove us to
20 come visit you was we had an accident, right?
- 21 A. Right.
- 22 Q. And the airplane that was in the accident, it went through
23 the build process last September.
- 24 A. Okay.
- 25 Q. So if I asked for the three or four months -- yeah, four

1 months just to have the same type of time period -- the four
2 months before September, how many audits do you think -- how many
3 processes do you think you audited then?

4 A. So we were -- before all this happened, we were on that -- we
5 were on a CM plan, so it would've -- what month would that have
6 been, because we would've been fresh and new into our CM plan
7 because it starts for October. So you said November?

8 Q. June.

9 A. June. June, we would've been wrapping up because --

10 Q. June, July, August, September.

11 Q. Okay. Usually I get one in June and then one in August,
12 because we had 18 and it spread out against four, four ASIs, so
13 divvied amongst us, we would probably get four to five audits
14 during that year and so -- and it starts in October, I probably
15 would've done, during that June to August time frame, maybe one,
16 maybe two.

17 Q. Okay.

18 A. At the most.

19 Q. And for that audit, when you said two, would that be like two
20 IPs or this is in the factory and you looked at a few IPs while
21 you're there?

22 A. So when we -- when we go in and do an audit, it's already
23 known how many days it should take and in that time we'll choose,
24 you know -- so, such as -- I'm trying to give a good example. How
25 many IPs, multiple, I mean, but we would've -- so -- so it just

1 depends on where. So if we were at -- say, for instance, if we
2 were at the factory, right, it just depends on which -- because
3 each area has its own, like the MIT (ph.) kits, okay, that has its
4 own and we found a ton of stuff in there, especially in wings, we
5 found a ton of stuff because of FOD --

6 Q. I'm interested in more like IPs, NCRs, because I'm trying to
7 talk back to "did not follow procedures," the findings, right?

8 A. Okay, yeah. And you want to know how many --

9 Q. Roughly. You know, just --

10 A. Oh, goodness. Yeah, because --

11 Q. How about in any four-month time period, how many?

12 A. How many in a four-month time frame? Well, we would've
13 probably done two to three IPs we had looked at, because we were
14 looking at IPs, at a minimum, at least one a day. So six, six
15 IPs. And it depends on the number of days, too, as well.

16 Q. Yeah.

17 A. Because some of them are two days, some of them are three
18 days, some of them are four days, yeah.

19 Q. So, you know, if you went and looked at six IPs last year --

20 A. Um-hum.

21 Q. -- how many findings of "did not follow procedures" --

22 A. Oh.

23 Q. -- would you find? See, I'm trying to relate here --

24 A. Yeah, I see.

25 Q. -- and touch upon it to maybe how the factory was working

1 when the airplane was produced.

2 A. Okay, I see. I know we were finding -- I would have to say
3 probably one, maybe two at the most, of not following the IP.

4 MR. MARCOTTE: Um-hum. Okay. Okay. So it doesn't sound
5 like that it changed too much, if I looked at six IPs and you had
6 two "did not follow" and then if you looked at 20 IPs this year
7 and you had five that "did not follow," you're probably in the
8 same ballpark. Okay, yeah.

9 MR. LYLES: Okay.

10 MR. MARCOTTE: Thanks for putting up with me.

11 MR. LYLES: No.

12 (Laughter.)

13 BY DR. WOODS:

14 Q. Okay. And a couple tag-on questions and then we'll conclude
15 to try and take a break because we've been well over an hour at
16 this point. When the decision was made in the aftermath,
17 particularly, of this incident to move to, you know, the enhanced
18 audits, would you say that your team of ASIs -- were you guys well
19 equipped to take on that extra load or did you have to make
20 adjustments to what you were already doing to accommodate the
21 additional audit?

22 A. Yeah, it just required us, instead of -- you know, we just
23 had to manage the SDC and -- with the individuals that are not at
24 the SDC, they just had the bandwidth to go over to the factory,
25 yeah, it was -- it was seamless pretty much because we just needed

1 -- we just needed to be in one of the two places, you know. So I
2 mean, it's changed our schedule because, you know, teleworking was
3 involved, right, you just take away the teleworking option, so we
4 were in the factory more and at the SDC more. So at first it was
5 like oh, man, you know -- because, you know, we were teleworking a
6 lot, right, and so we were teleworking at least two to three days
7 a week then, so we just gave up the teleworking piece of it to
8 concentrate more on those two areas. So it really wasn't hard to
9 do, we just had to do it, right? Yeah.

10 Q. And was there any additional guidance besides that, just go
11 forth and conquer more audits or --

12 A. No, no. No, we had -- we've got this thing called the
13 Whatever 21, it's a meeting that Hager put together --

14 Q. Um-hum.

15 A. -- and all that was discussed and then we also got discussion
16 from Jesse, who is our senior --

17 (Noise interference.)

18 MR. LYLES: -- on how this was going to go. It wasn't just
19 go and contact, no, they laid out the plan on how we were going to
20 attack it.

21 BY DR. WOODS:

22 Q. And where did that guidance for them to come, come from?

23 A. Not me. I have no idea.

24 Q. Okay.

25 A. I think Kilgroe was involved because, you know, it's a --

1 he's the PI, so Kilgroe, Cantu, and Hager all got together, along
2 with John Strohm, who's up in Everett, they all got together to
3 work that program to how we were going to do it together, so --

4 Q. I know I just recognized that you said you don't know, but do
5 you think that the data that feeds into the decision is the same
6 data that's for the risk assessments that's feeding into your
7 annual program? Or are they above and beyond the risk assessments
8 that were made that feed into your regular annual program?

9 A. That I couldn't answer, yeah --

10 Q. Okay.

11 A. -- because I don't know if they're taking the data from the
12 ASI versus the data from the enhanced versus data from the CM plan
13 that we're normally used to. I don't know how all that --

14 Q. Okay.

15 A. -- would work.

16 Q. And I know you said that things are busy and that -- how many
17 ASIs that you have to distribute that work. How is that now as
18 compared to a couple months ago? What does your manpower and
19 tools look like, do you feel you have what you need to get the job
20 done?

21 A. Right now, yeah, we're managing it just fine. I just think,
22 you know, to give everyone, you know, that -- you know, that
23 flexibility, I think we -- if we can add two to three more, oh, my
24 goodness, that would -- man, that would be tremendous. But as it
25 is, no one's having any heartache or anything about doing it, it's

1 flowing pretty well, because when we go in we know what we need to
2 do, I mean, we got the tools to do it. It's been as easy as just
3 getting in there and knocking out -- the only real issue is when
4 we go there and Boeing's having a production day, that's kind of
5 frustrating because, you know, we had to fight -- I don't know if
6 you've driven 1-6-7 at 5:00 in the morning, we're fighting to get
7 there and then there's a production day going on, so you got to
8 get creative, right, so yeah, it's -- that's the only real issue
9 that faces us. When we get in there and we're actually doing it,
10 it's pretty seamless, so --

11 Q. So one of the things that's coming down the pipe that's going
12 to be a change going forward, is that there's now been adoption of
13 the new rule for SMS for Part 21, how do you foresee that
14 affecting how you do your job?

15 A. So the SMS, as I understand it, is safety culture, right,
16 it's a safety environment using risk assessment, planning, policy,
17 those things we do -- we did it at DCMA and we do here, risk, we
18 manage -- we're aware of the risk and know how to mitigate it.
19 That's ingrained in both places, here at DCMA and at the FAA, so
20 it was seamless.

21 It's not going to be that hard again, isn't an issue, and
22 going forward won't be an issue with us because, like I said, the
23 risk part is part of what we do anyway, the risk, the safety is
24 already ingrained in us. I mean, we already pretty much are doing
25 it, is we look at risk, we manage risk, we know how to mitigate

1 it, identify it, assess it, you know, so I don't see it being a
2 problem with the FAA.

3 Q. Perhaps not a problem with the FAA, but you're providing
4 oversight for the Boeing Company, so are they one and the same to
5 you? I guess, explain that more, meaning when you say it's not an
6 issue for us, are you saying it's not an issue for you, as an ASI,
7 or it's not an issue for you to provide oversight for a company
8 who should be doing these things?

9 A. Oh, so for us in the FAA and the government, you know, the
10 safety piece is not a problem. Now, for Boeing managing that
11 piece, you know, how they do it, which (indiscernible) that's
12 going to be a long haul because they don't have -- they're not --
13 that's something that they're not -- they don't pretty much
14 understand, it's new territory to them. So that's what I was
15 telling, I was speaking -- speaking on the individuals as ASIs on
16 the safety and how, you know, it's nothing new to us, but to
17 manage it and to oversee Boeing, that's going to be a challenge.
18 Yeah.

19 Q. So back to my question, then, do you feel, going forward,
20 that you have the tools and manpower you need in place to provide
21 oversight for Boeing --

22 A. Okay, I see.

23 Q. -- who's going to have to adopt and fully implement an SMS?

24 A. Oh. So no, because I haven't been through the classes yet
25 and I've got five classes that are coming from -- that I have to

1 go to Oklahoma City to attend. So once I get that and how the --
2 how to evaluate and assess these guys, then I would know a little
3 bit, I can speak more intelligently to that. But right now, like
4 I said, I'm working knowledge to understand all that, but SMS over
5 a facility as big as Boeing --

6 Q. Um-hum.

7 A. -- that's going to be a huge challenge.

8 Q. Um-hum.

9 A. Yeah. Yeah, I misunderstood the question again.

10 Q. That's fine.

11 A. Yeah.

12 Q. Tapping back to the comment you had made about, you know, I
13 believe maybe this group understands it, but the other group is --
14 has a little further to go. Essentially, in all organizations
15 there's like a hierarchy, of course, of people and there's usually
16 four major hierarchies, so I'm going to break each of the
17 hierarchies for Boeing up into categories and I want you to assess
18 them a grade when it comes to understanding what should be done,
19 implementing what should be done, having a good grasp of safety
20 concepts, quality concepts, so here again, you're going to assign
21 a grade. So the top level --

22 A. Okay.

23 Q. -- is top-level management, that's your executive-level
24 management, assign a grade for how well you think that level of
25 Boeing understands and can implement and assess quality and

1 safety.

2 A. On the safety piece I give them a D, and then you want an
3 assessment on the quality side, right?

4 Q. Um-hum.

5 A. Quality side, yeah, I'll have to give them a D, as well. I
6 just think that the culture is not there, I mean, it's -- they're
7 operating under, you know -- how can I say, tribal knowledge-type
8 stuff, whereas it's like "we did it this way, this is how you
9 should do it" mentality and that's not good.

10 Like I said, the training, what we were finding is that a lot
11 of people wasn't -- didn't know how to -- how can I say --
12 reaching into the D documents, so the specs or the drawings, they
13 didn't know how to do that right. A lot of my constituents have
14 given me their reports, I was hearing from them -- hey, we're
15 finding that "this individual that I found first-handed, they
16 didn't know how to manage their documents." So everything that
17 they were taught, it was hey, do it this way, it's OJT and they
18 wasn't being taught how to do it per, you know, how it's supposed
19 to be done through the process, so they were kind of just OJT-ing
20 it. So I'll give them a D in both situations.

21 Q. So to clarify, the first group of people that I gave you --

22 A. Were higher.

23 Q. -- was the high level --

24 A. Higher.

25 Q. -- the top-level like exec suite of Boeing. So to be --

1 A. I would have to be --

2 Q. To be clear, four major groups, you have like your top-level
3 exec tier.

4 A. Okay.

5 Q. Then you have the mid-level management, maybe that's all the
6 people who are the direct lines to that executive level.

7 A. Okay.

8 Q. Then you have your frontline managers.

9 A. Okay.

10 Q. And then you have the worker bees. So those are the four
11 major groups and I was going to walk you through. The first one I
12 had asked about was the executive level.

13 A. The executive level.

14 Q. But it sounds like -- what group were you just describing?

15 A. I was describing the executive level. Yeah, I just think
16 that -- I just think that the communication, because what they're
17 trying to do --

18 Q. Um-hum.

19 A. -- isn't getting down to that lower level.

20 Q. Okay.

21 A. So that's what I was giving you. So I think the
22 communication needs to happen.

23 Q. Okay.

24 A. I just think that that communication all the way down, it
25 just doesn't flow.

1 Q. Um-hum.

2 A. So I would say D in both situations, that's what I went
3 through.

4 Q. So then what about the mid-level managers, these are the
5 direct lines from the exec level.

6 A. I think those guys are lost in the sauce, too, I think that
7 it gets -- it gets -- even gets muddier water with those guys.
8 And then that second level --

9 Q. Yeah.

10 A. -- which should be down with those guys, the same grade, the
11 same grade all the way down. It's horrible, it is horrible how
12 that information, communication, is flowing. It's not flowing.
13 It's stopping somewhere. These guys are not getting what they're
14 supposed to get from these guys, which is first management.

15 Q. Um-hum.

16 A. Second managers, third level or the execs, they put out the
17 policy but it doesn't seem to me, from what I've seen, that it is
18 not getting down to the lowest level, the communication just
19 stops.

20 Q. Okay.

21 A. They'll communicate it, it won't go anywhere. They'll try to
22 -- they'll try to latch on to it at the next level but it doesn't
23 go anywhere, no one's communicating. That's what I found, I found
24 that out over there at DCMA and here, as well, the communication
25 piece is horrendous. And then the execution part, I mean, you got

1 to execute the stuff, if you don't put it out there, I just don't
2 -- I just don't -- it's just not happening and I don't understand
3 where, where that block is happening.

4 Q. Okay.

5 A. Yeah.

6 DR. WOODS: Okay. Well, I mean, you just summed up my next
7 three questions in your response, so --

8 MR. LYLES: Um-hum.

9 DR. WOODS: So with that, that is it for me for this round.
10 We are -- yeah, like I said, we're about an hour and half, so I'm
11 going to go on and take us for a break. We are going to go off
12 record at 14:32 Pacific time.

13 (Off the record at 2:32 p.m.)

14 (On the record at 2:40 p.m.)

15 DR. WOODS: Okay, we are back on record at 14:40 Pacific
16 time.

17 Pocholo.

18 BY MR. CRUZ:

19 Q. So Trent --

20 A. Yes.

21 Q. -- what is -- what is your understanding, as an ASI going
22 through the Boeing factory, of what the supplier assist program is
23 at Boeing?

24 A. Suppler assist?

25 Q. Yeah, have you heard that term?

1 A. I have not.

2 Q. Okay. In your previous discussions or questions or answers
3 that you gave me regarding IPs, you mentioned it was more of a
4 sequencing issue in the IP itself. To your understanding, how is
5 an IP given to a person to work, are they building the IP
6 themselves or does the lead build the IP and then give it to the
7 worker bee to work it? How is the IP built?

8 A. So from my understanding, IPs are built by engineers.

9 Q. Okay.

10 A. Planning engineers.

11 Q. Okay.

12 A. And so when we come on scene, when we get to the area that we
13 want to audit, we'll tell whoever the AMT is, the tech --

14 Q. Um-hum.

15 A. -- that we want to do an audit on this particular IP, we know
16 what IP number it is and we give it to him --

17 Q. Um-hum, um-hum.

18 A. -- and have him pull it up --

19 Q. Okay.

20 A. -- out of CMES.

21 Q. Okay.

22 A. Yeah. And so he'll print it out and then we'll start at the
23 top line --

24 Q. Okay.

25 A. -- the top step, and walk our way through.

1 Q. So it's the engineers that build the IP on behalf of the
2 people that are working it. Do you know whether the engineers
3 that are building the IP have worked that before?

4 A. I can't answer that because --

5 Q. Okay.

6 A. -- I don't know, but --

7 Q. Because if you think that they are out of sequence or
8 sequenced improperly --

9 A. Um-hum.

10 Q. -- then why would an engineer build an out-of-sequenced task
11 for a maintenance person to do or a production person to do?

12 A. I couldn't answer that question and I think I can only
13 speculate that he's -- he doesn't have any firsthand knowledge of
14 it, right, and he's just building it according to whatever
15 template he has --

16 Q. Okay.

17 A. -- available for him.

18 Q. So since you've done audits of these and you found issues
19 with IP sequences being incorrect --

20 A. Um-hum.

21 Q. -- how is it corrected or is it corrected?

22 A. So once we find them, right, and we annotate those on our
23 audit form 8100-6 right, and --

24 Q. Yeah.

25 A. -- so once we do that, we identify the issue, we document the

1 issue --

2 Q. Um-hum.

3 A. -- and then I have a little discussion with the DQMRs and
4 RQSOs that are on site, you know, for their awareness because this
5 is something they're going to have to work at some point, right,
6 and then once they are notified, I notify my senior, which gives
7 me that -- he gives us that final okay, yeah, yeah, it's -- he
8 will find out what finding it is and then we'll -- what we do is
9 decide if it's going to be an informal compliance action or a
10 formal compliance action. So that's the discussion right there,
11 which way we're going to go.

12 So Boeing doesn't know which way we're going to go until I
13 reach out to an ASI, a senior ASI and manager on their concurrence
14 about what we found. And then when they make a decision, because
15 it's an alleged noncompliance at that time, until we figure out
16 which -- if it's an ICA or a FCA. And so from that discussion
17 with the senior ASI, he tells me okay, yeah, let's do it, let's do
18 an ICA, say, for instance, and --

19 Q. Okay.

20 A. -- we'll go and once we put all the information in ACAIS,
21 that sets the finding, we take all that information out of there
22 and put it in CEA --

23 Q. Um-hum.

24 A. -- and it becomes either ICA or FCA.

25 Q. Okay.

- 1 A. And Boeing's on the hook to work it, to correct it.
- 2 Q. Okay.
- 3 A. Yeah.
- 4 Q. In one of those IPs that you found an out-of-sequence task,
5 Boeing has said that they have since corrected it. Have you gone
6 back out and audited that same IP to see if it's been corrected?
- 7 A. So they're in the works of working it. What happens is
8 they're going to have to give us a BPSM, Boeing problem-solving
9 model, and -- not a Boeing -- yeah. And they got to go through
10 their process on how to correct the issue. So they have a BPSM
11 and it states the problem, states their solution, and then once
12 they fix the problem, we have to go and verify, it's got a CAV,
13 corrective action verification. And so once we -- once I go in to
14 verify it and it doesn't exist, then I witness that, that it's
15 okay, it's not there, and then I sign off on it and I close out,
16 close it out.
- 17 Q. Okay. So you told Dan that you found 18, approximately 18
18 IPs that had issues --
- 19 A. Yes.
- 20 Q. -- with regard to sequencing.
- 21 A. Not with regard to sequencing, but 18 findings.
- 22 Q. Eighteen findings.
- 23 A. Um-hum, um-hum.
- 24 Q. Were you the one that wrote it up?
- 25 A. Yes. When we find --

1 Q. Okay.

2 A. -- an issue, we have to -- we are the ones who write it up,
3 yeah.

4 Q. Have you verified whether they've corrected those 18 issues?

5 A. Not yet, because it's part of the EIR, the compliance action.

6 Q. Yeah.

7 A. Management's working on how we're going to tackle that and
8 haven't gotten back to us how we're going to do that, there's some
9 discussion on it, and so each one of those is going to have to be
10 answered, too, so they're trying roll it up in one big one and
11 Boeing's going to have to answer those.

12 Q. Okay. And how many findings were -- a hundred?

13 A. Oh, my goodness. Just in the SAI, there was like 97.

14 Q. Okay.

15 A. Last month I didn't get the rollup but when I did the audits,
16 I was the team lead for like --

17 Q. Um-hum.

18 A. -- two weeks.

19 Q. Um-hum.

20 A. We did -- how many audits did we do, with all the ticketing
21 and all that back and forth. I think we did like six, we did six
22 audits that first half of the week and then the second half, I
23 don't have a day-to-day, but they did about -- probably about
24 eight or -- eight, seven or eight, but it all gets rolled up at
25 the end of the month. But the findings, there was a ton of

1 findings, there was a bunch of findings. We track all that stuff
2 and I can't give you a number, but I know it was at least -- gosh,
3 just on the eJITT one I had, it was seven by itself. Gosh. I'd
4 have to say probably about 15, between 15 and 20 that we found
5 just in that -- from the 1st of April to the 17th of April, when I
6 did those -- when we did that total of six IPs, so --

7 Q. Okay. And just to be clear again, I think you mentioned
8 three or four out of those 97 findings has to do with removals,
9 correct?

10 A. So, from the SAI, from January to February, there were --
11 there were more than that. I know there was more than the number
12 I gave you, but just upwards of that, it was about -- I can
13 remember four, three or four, but I know it was more than that.
14 So we got those, those records for you guys.

15 Q. Do you notify each one of those, for those removals, did you
16 work any of those that you found?

17 A. No, no.

18 Q. Oh, so somebody else did.

19 A. Those were somebody else. We were the team, we were the team
20 of like -- oh, how many came to this, one, two, three teams, four
21 teams. One, two, three, three teams of five, six people, so
22 everybody's finding stuff and yeah, it's -- yeah, a lot of
23 findings, a lot of stuff.

24 Q. Are you familiar with the change history of 1581 BPI?

25 A. Change history, no. No.

1 Q. So since 1581's been in constant revision since 2013, based
2 off of --

3 A. It doesn't surprise me.

4 Q. -- Boeing records, right?

5 A. Yes.

6 Q. I know that Boeing's done internal audits with regards to
7 1581 just from 2018 to 2023 which also involved a lot of VDRs and
8 CMPs and their corrective actions, not just on the 737 line but
9 the rest of the production.

10 A. It doesn't surprise me. I think that manual is a time bomb,
11 I mean, BPI is -- from what I -- when I went through it, I was
12 like oh, my goodness, yeah, it doesn't surprise me.

13 Q. So with your comment with regards to training being an
14 issue --

15 A. Um-hum.

16 Q. -- would you comment on issues with regards to why Boeing
17 hasn't been able to fix a BPI since 2013, the issues with BPI?

18 A. I couldn't comment on why, why it would take them so long. I
19 don't know. And that is your question, why it would take them so
20 long to do that?

21 Q. Why do you think they've been having issues with this
22 particular BPI since 2013? And why haven't -- why haven't they
23 been able to fix it?

24 A. I would have to say that the way it's written, I think it's
25 written -- the way it's written is kind of -- it's hard to -- it's

1 hard to make sense because in order to remove a panel in there,
2 there are certain things that you can and cannot do, and there's
3 an exemption for this and that and they're so confusing, and I've
4 never seen anything like it in my entire life, I mean, it depends
5 on where, if the aircraft is in preflight or if it's in flight or
6 if it's in -- wherever it's at, it just has so many exemptions and
7 the reason why, it's just too much, it's just too much to try to
8 run down.

9 And then it's just not clear to me and it's just -- gosh,
10 it's just a poorly written, poorly written BPI, if you ask me.
11 And I tried to read that thing and it is confusing. So --

12 Q. And typically, if Boeing puts together an action plan to
13 correct a nonconformance BPI --

14 A. Okay, yeah.

15 Q. -- do you know who at Boeing would actually come up with that
16 action plan to fix an issue, to fix a nonconformance?

17 A. I don't know. I know that any time that we have a finding, I
18 know that -- in the Renton factory, they have a person, the DQMR,
19 that actually owns, who actually does the BPIs for us, BPSMs for
20 us, but I couldn't speak to how the manual, how BPIs are fixed. I
21 don't know what entity that would -- that would work that issue.

22 Q. Right. Do you work with the RQSO people?

23 A. There's a ton of RQSOs for Renton and for Everett, yes.

24 Q. Okay.

25 A. Um-hum.

1 Q. And in this particular one, have you seen the documents that
2 RS -- RQSO --

3 A. RQSO.

4 Q. Have you seen any of their documents or reports that they've
5 generated?

6 A. I can't say that I've seen theirs, but I've seen BPSMs from
7 Renton. So I've never seen the RQSO, I never -- because we deal
8 with the RQSOs all the time when we're doing new stuff.

9 Q. Um-hum.

10 A. But I don't know that their -- my goodness, I can't even
11 answer that question because I don't know, because usually from --

12 Q. So the FAA has a copy of this, because this is --

13 A. Okay.

14 Q. -- where I got this from.

15 A. See, the BPSMs that I'm usually seeing is a different format
16 than that and so --

17 Q. Okay.

18 A. Because they got two or three different formats --

19 Q. Um-hum.

20 A. -- of BPSMs and this kind of -- and I know that the RQSOs
21 have some stake in working those --

22 Q. Um-hum.

23 A. -- and so I just don't know how -- how they worked this
24 particular issue with BPIs, BPIs.

25 Q. Okay.

1 A. I just don't, I couldn't even give you a starting point of
2 how they do that. I just know everything that we do in Renton is
3 worked through Carrie Geisler over there, who's the DQMR --

4 Q. Okay.

5 A. -- and we do have some BPSMs that's not that format, that
6 some RQSOs do work for the stuff we find in Renton, but I just
7 don't know how BPIs, I just don't know how that plays in, how
8 that's worked.

9 Q. Okay, so --

10 A. Yeah.

11 Q. -- back to the removals, have you seen -- do you know,
12 obviously, that -- you didn't know the history of this
13 particular --

14 A. I didn't. I have --

15 Q. -- of that particular BPI?

16 A. No, I -- no, I do not know the history of it at all.

17 Q. Okay. Because it's obvious, based off the data we've been
18 given, it's been an issue that's been happening for quite some
19 time.

20 A. I've talked to several ASIs about that BPI 1581 and I don't
21 get any good vibes from it from none of them, everybody's saying
22 it's a mess. And so yeah, it's hard -- it's a hard read, hard to
23 understand, hard to interpret.

24 Q. Okay. I guess one last question I have, does your lead or
25 supervisor -- does your lead, does he work any audit function --

1 A. Yes.

2 Q. -- on -- at the production?

3 A. Yes. Yes, he's very active, yeah.

4 Q. So Mr. Cantu does --

5 A. Cantu.

6 Q. -- audit for one of those hundred and 63 elements that you
7 have?

8 A. Yes, he's actively involved in everything that we do. He's
9 all over it.

10 MR. CRUZ: Okay.

11 DR. WOODS: That's it?

12 MR. CRUZ: Yes. Oh, one last thing.

13 BY MR. CRUZ:

14 Q. Do you know -- 1581, which is the removal audit, where does
15 that fall in one of the elements that you guys do? Since you guys
16 don't track it by the specific BPI, which element, in your hundred
17 and 63, that would work, that would catch 1581?

18 A. I would put that under manufacturing process.

19 Q. Okay.

20 A. Yeah, D.

21 Q. Yeah, D. Right.

22 A. Delta, yeah.

23 Q. Yeah.

24 A. And it will be either a hundred or 99 not following the
25 process.

1 Q. Okay.

2 A. Yeah.

3 Q. And do you know how many times you guys audit the
4 manufacturing and process control elements?

5 A. I couldn't -- I don't, but it's a high-risk one, so --

6 Q. Oh, that's what I was going to ask next, is that a high-risk
7 issue?

8 A. It's definitely high risk, I mean, that's an issue every time
9 we go in there, that is -- the manufacturing piece is always an
10 issue with that.

11 Q. What about training, is training high risk?

12 A. Training is always high risk because if you don't train a
13 person to do their job properly, I mean, you know, you're going to
14 get where we got right now, so training is key in everything.

15 Q. Is that one of the elements in your audit?

16 A. What would that fall under? I can't think where that would
17 fall right now, I was going to say document control, but no. But
18 manufacturing process is, but I think I got to -- I would have to
19 look in there and --

20 Q. Is there an element for training in your production audits?

21 A. No, but there's not an element for training, itself. It
22 would probably fall under "other" or manufacturing processes, I
23 believe. I would have to research in there to give you an answer,
24 but no, there's not an element, a quality element for training.

25 Q. I see you guys have an element for corrective and

1 preventative actions. How often is that audited with regards to
2 any nonconformance issues that are brought up?

3 A. I couldn't tell you that, I have the data on that. Yeah. I
4 couldn't tell you that.

5 Q. You basically said that Boeing is a high risk, like --

6 A. Yeah. And they're both high risk, it's Level 1 high risk,
7 yeah.

8 Q. In the work program, have each one of those elements from A
9 to P been done in one fiscal year?

10 A. Yes, we just did A to P just recently.

11 Q. A to P?

12 A. From A to P.

13 Q. P.

14 A. Doing the SAI.

15 Q. Okay.

16 A. We worked every element in there.

17 Q. Did you pick certain elements in each one of those or all
18 hundred and 63 have been done?

19 A. Not the hundred and 63, but when I say elements, I mean A to
20 -- A to -- A to O, and so the finding dictates which one of a
21 hundred and 63 it would -- it would fall under.

22 Q. Okay.

23 A. Okay, so it's kind of -- to actually -- because you will have
24 multiple fall under one.

25 Q. Sure.

1 A. Yeah, so --

2 Q. Yeah.

3 A. Yeah. Each hundred and 63 or 67 or however many that's in
4 there will not be -- in some cases won't even be touched because
5 multiple fall under -- will fall under, say, for instance, Delta,
6 which is manufacturing processes, which 99 or even 100 is not
7 following the process, right? So then I find in the processes
8 most of them will fall under that one.

9 And so a lot of them will not be touched in that hundred and
10 67-ish area, so -- because some of them are the same systemic
11 issue in many cases. So yeah, it's there -- yeah. Like I said,
12 we touch every element, but as far as the hundred and 67 -- for
13 somebody to have each and every one of those touched, man, it's
14 got to -- there's no way, yeah. It's -- yeah. So --

15 Q. So in the height of the FAA's scrutiny of Boeing's production
16 facility --

17 A. Um-hum.

18 Q. -- wouldn't you think that the FAA would -- would do each one
19 of these elements to ensure the flight --

20 A. We do each element, it's just that how they pertain to each
21 element, okay, so not all of those is an issue that's found that
22 would pertain, so -- so the finding that we find doesn't -- won't
23 reach that particular -- gosh, the actual -- so the code number --

24 Q. Um-hum.

25 A. -- not all of the findings that we have will -- how can I say

1 -- marry up to that code, okay, because we find pretty much the
2 same systemic stuff all the time and so it's usually those same
3 ones and it's -- we don't -- so as we go through and we're doing
4 the elements, it will -- depending on what the finding is, it will
5 fall within one of those descriptions of nonconformances and it's
6 usually pretty much the same ones almost all the time because it's
7 so systemic of the issues that we're finding in --

8 Q. So systemic, you're saying a lot, systemic --

9 A. Repeat.

10 Q. Right.

11 A. Repeat. Um-hum.

12 Q. Okay.

13 A. Um-hum.

14 Q. So why is the FAA not able to fix this, to say "Boeing, this
15 is systemic, why can't you fix it?"

16 A. So anything that we find and is a repeat is systemic and
17 so --

18 Q. Yeah.

19 A. -- that's why everything now has been pushed up on an EIR,
20 because when they don't fix it, if it becomes an ICA or FCA, the
21 next level is EIR.

22 Q. EIR.

23 A. It is enforcement --

24 Q. Oh, okay.

25 A. Yeah. So it moved it to another category, anything repeat

1 automatically gets moved up and that's what we've done, we've
2 elevated it because the ICA, the FCA is not working and if we keep
3 on doing the same things over and over again, so --

4 MR. CRUZ: I think I'm done, thank you. Thank you.

5 Mike.

6 MR. LYLES: Um-hum.

7 MR. CRUZ: Mike's up.

8 BY MR. RINEY:

9 Q. All right. So Trent, can you describe, when you first came
10 on with the FAA, what your training was like?

11 A. When I first came, oh, man, it was intense, a whole year of
12 training on eLMS, I had a ton. I must've went through a hundred
13 classes that I had to get up to speed on and then the resident
14 classes that I had to go to at Oklahoma City, as well, that's
15 probably about -- oh, I would have to say about five or six
16 classes there, which was pretty good, very good stuff, Part 21 and
17 the like.

18 Then a lot of OJT on some of the stuff, like how to do VDRs
19 or -- which also has a training bank, too, as well, you know,
20 there's a lot. Even though you go through the training, nothing
21 is better than actually getting with somebody and walking through
22 it, so --

23 Q. Did you spend specific training on Boeing's QMS, to learn
24 about BPIs, learn about --

25 A. So yeah, what we done is we know which BPIs is working in

1 which area that we're going to audit, and so we reach out to the
2 RQSOs for the ones we don't have, or we go in and get the ones
3 that we need and we download those and we read them.

4 Q. You have access?

5 A. Yeah, we have access to MyBoeingFleet through One PPM, so we
6 go in and we'll talk to the RQSO to say okay, for instance, we're
7 going to the PSD and so we got to say hey -- for what we don't
8 know, like we don't know the area real well, we'll say hey, can
9 you send us -- we want to look at the engines, can you send us
10 whatever BPIs or PROs that we need to --

11 Q. Okay.

12 A. -- get up to speed. And so we'll read the BPIs and PROs,
13 which, you know, helps us through the auditing piece for that, ask
14 some good questions on that and then, you know, come to find out
15 they don't even ready their own BPIs and PROs that well. I mean,
16 if it did, oh, goodness, you know, the tool -- the tool issue
17 wouldn't be such a mess and, you know, the hazmat stuff wouldn't
18 be such a mess and so on and so forth. So it's just reading your
19 own, you know, regulations and BPIs and PROs, command media that
20 you have out there.

21 Q. So for the findings that -- just, for example, this year,
22 that you've identified, how do you characterize them as far as
23 severity? I mean, has there been any, like, significant findings
24 that would lead to Boeing performing a fleet inspection based on
25 them or is there -- are they more --

1 A. So I characterize anything I find in the IP that is out of --
2 that's not in the IP or either out of sequence. It's huge because
3 as you're going through the IP -- not the IP, but the eJITT, so
4 the IP and eJITT. So the eJITT is for functional testing and all
5 that, you know, and the IP -- so as we're going through there and
6 there's stuff missing, that's huge, right, because the process --

7 Q. I mean, so --

8 A. Yeah.

9 Q. -- does the FAA have a specific severity that they --

10 A. They don't and that's -- you know, that's what -- that's one
11 of my -- personally, one of my gripes is, yeah, I think that
12 should be more of a hammer in some situations when we find certain
13 things but, you know, the process is ICA, informal compliance
14 action and formal compliance action, if it -- if those two areas
15 don't do it or they become repeats, then we up it to the next
16 higher level.

17 And so yeah, I just think sometimes, in a sense, that our
18 hands are tied in certain situations because we keep seeing the
19 same things over and -- nothing's -- no immediate action, you
20 know, that type of thing, so --

21 Q. Does Boeing communicate follow-up with you if there's
22 specific inspections that would have to be performed based on the
23 findings? So if there's like -- in Spirit, for example, they
24 would release an NOE to Boeing if there was a quality finding from
25 an audit, that would travel into Boeing's QMS, so if there was --

1 had there been any findings that your team has audited that would
2 lead to --

3 A. A multi-unit or --

4 Q. Yeah.

5 A. -- a statement of something?

6 Q. Yeah.

7 A. Yeah. Gosh, have we found anything that was on the
8 (indiscernible)?

9 Q. And that's kind of where I was getting at, was as far as the
10 severity of the findings.

11 A. Oh, okay.

12 Q. And if Boeing communicates those back to you guys.

13 A. Yeah, any time we find anything and if it becomes a multi-
14 unit or in some sort of escapement, yeah, the communication back
15 and forth is right on, because they have no choice because we are
16 on it. I mean, we're -- we'll be hammering it out, what they're
17 doing, they'll do -- you know, they'll -- if it's
18 multi-unit, they're treated as a multi-unit.

19 If it's an NOE, the supplier gets involved, you know, and
20 they're working with the supplier. And they're always in touch
21 with us as to what's happening, so they never leave us hanging on
22 that part, I will say. Yeah, that's about it on that, yeah.

23 MR. RINEY: Okay. I think that's all I've got, thank you.

24 DR. WOODS: Matt.

25 BY MR. RIGSBY:

1 Q. Okay, just a couple, Trent.

2 A. Okay.

3 Q. What primary level at Boeing of employee are you dealing
4 with? Like, Sabrina mentioned the executive levels, the different
5 levels, but --

6 A. Sure.

7 Q. -- what are your primary folks that you deal with on a daily
8 basis?

9 A. I don't know where a DQMR would fit in there, but Carrie
10 Geisler, Ms. Carrie Geisler, has been in the company about 40
11 years and her level in the company is up there, you know, so I
12 would have to say -- and like -- so I mean, she has a lot of
13 horsepower to get things done and so -- which is great.

14 So when we go in, her ability to make things happen and to
15 get us what we need, I mean, it's immediate. So I think the
16 proper level of individual we're conversing with when we go in --

17 Q. Um-hum.

18 A. -- is appropriate for what we're doing, you know, so --

19 Q. Okay. As an ASI for the FAA, what do you look at as your
20 primary responsibility?

21 A. So auditing is always the big thing, the big -- the big push,
22 right, because they need us in the factory to see what's going on
23 in the factory, okay. We're not their QA, we're not their quality
24 control, we just oversee the things that they're doing, right?
25 And a lot of people confuse that and it can't be overstated that

1 we're not Boeing's quality control. A lot of people think that we
2 are supposed to be there to catch all their stuff and the
3 oversight does help in all that, but we can't be there to see them
4 torque every bolt and that's what their QA is for, or to install
5 this or install that.

6 So I just feel that we get a bad rap in that because they say
7 why didn't the FAA catch that and a lot of people, when they
8 understand what -- the job that we do based on the statutory
9 requirements and regulations, I mean, they understood the job and,
10 you know, they will understand that quality -- I mean, we aren't
11 Boeing's quality control, so --

12 Q. Okay.

13 A. Or quality assurance, for that matter. And anything that's
14 happening out there, I mean, it's -- we're -- you know, we're kind
15 of behind the curves, if you will, because we get the information
16 and then we act, right, and anything that's pending, I mean, you
17 know, how are we to know, how -- you don't know what you don't
18 know, right?

19 Q. Right.

20 A. Yeah, so --

21 MR. RIGSBY: Okay. I think that's it for me.

22 DR. WOODS: Okay.

23 BY MR. CRUZ:

24 Q. So can I add to that? I realize what you just said with
25 regards to the public thinks that you're the QA for Boeing, right,

1 but at the same time you guys -- the FAA does trend analysis,
2 right?

3 A. Um-hum, um-hum.

4 Q. And Boeing's -- the FAA sees LOIs and VDRs, right?

5 A. Um-hum.

6 Q. One example is BPI 1581, right? Big trend, 2013 to 2023,
7 right?

8 A. Um-hum.

9 Q. Where is the FAA?

10 A. That's the thing that I want to -- that is the question that
11 I'd like to have an answer to, too, as well. I mean, I don't
12 know, I don't know why that hasn't fixed that issue or created the
13 right resolution for it, I couldn't begin to answer, but -- I
14 don't know.

15 MR. CRUZ: Fair enough, thank you.

16 MR. LYLES: Yeah.

17 DR. WOODS: Nils?

18 MR. JOHNSON: Nothing further for me.

19 DR. WOODS: Okay. John?

20 BY MR. PETRUZELLI:

21 Q. I just one to follow-up, Trent.

22 A. Um-hum.

23 Q. Of course, take, for example, you find something out in the
24 field that is clearly factory related, from what you're seeing now
25 versus pre-accident, is that getting driven back better to where

1 it comes from in the factory, than it was?

2 A. There's been some improvement on that, yeah, so --

3 Q. Can you talk about that a little bit?

4 A. Yeah, so usually what we find out there on -- at the SDC,
5 when we go to ticket, I was -- when I first started, I was like I
6 wonder if this information has been pushed back to the factory to
7 correct it before it gets to us out here at the SDC and it took me
8 a little while to figure that out and as time went on I noticed
9 that the things I was finding wasn't the same stuff, it was
10 different stuff. So I noticed that, especially on the engine,
11 that the things that I'm finding, they were getting fixed.

12 So things were -- in that aspect, because the SDC runs a
13 totally different ship from the factory, okay, things are
14 communicated and they do move back to the factory to get that
15 corrective action done on it before we see them, if we find them
16 out on there and it's almost immediate. So I don't know who's
17 pushing that. I know the findings, the data that we're finding
18 out there, is part of the -- is part of the push, but yes.

19 Q. Has that change been just post-accident or was it before --

20 A. No, it was before the -- yeah, before the accident.

21 Q. Before the accident?

22 A. Yeah. Because I've been out there doing that for two years
23 and I know it's the trend, I was like dang, because at first when
24 I was first out there that first year, I was like man, I keep
25 finding the same stuff, but it really, over the last -- has really

1 changed.

2 Q. Okay.

3 A. Yeah.

4 MR. PETRUZELLI: That's all I have.

5 MR. LYLES: Um-hum.

6 DR. WOODS: Dan?

7 BY MR. MARCOTTE:

8 Q. Just a couple things. So I'm wondering, after you document a
9 finding, you know, and it's submitted and you put it into the
10 system after you find it, what's your involvement with that
11 finding afterwards?

12 A. After I put it into the system? So we -- from that, again,
13 so what happens is that finding goes into ACAIS and then we take
14 it and put it into either an ICA or an FCA. I have to converse
15 with my senior to see which one, ICA or FCA, right, and once we
16 make that determination, we let Boeing know because everything is
17 managed at that point, at the point of the find.

18 So we communicate back to them and then they take it from
19 there and they go through their process, their BPSM process, and
20 they have to do a corrective action, they have to give us a
21 solution and then they've got to verify it and then once they do
22 their verification, the CAV is sent to us and we verify their
23 verification and if it's all good after we verify, it gets closed
24 out.

25 Q. Okay. So is all the follow-up activity by Boeing, is that

1 communicated directly to you?

2 A. Yeah. So in the BPSM, it's all in there when they submit --
3 I'm sorry, not BPSM but the CAV, the corrective action
4 verification, when they submit that, all the information, the date
5 done, to close this thing out, to correct it and to verify or
6 sustain the gains are in that CAV. And so we read all through
7 that and then we'll go back, double-check, make sure it's good and
8 then if it's good, then boom, yes.

9 Q. Okay. And all that's communicated to you?

10 A. Yes.

11 Q. Okay.

12 A. Yeah.

13 Q. BPI, the 1581 --

14 A. Um-hum.

15 Q. -- you know, I've heard you say it's horrible.

16 A. It is.

17 Q. So what's that mean? You know, that's kind of general, so
18 what do you mean?

19 A. It's confusing, it leads -- as you're reading it, it takes
20 you in many directions, trying to -- and it leads you to think
21 that okay, it's okay to remove this panel, but here's an exception
22 to removing, you don't have to write -- it's okay to remove this
23 panel, but you don't have to write it up, and I'm like this is a
24 panel -- and the reason why this is so huge is because I had -- I
25 didn't have an incident, one of my -- what do you call it -- my

1 coworkers had an incident where there was an engine fan cowling
2 that was opened, right, and they did some work in there and then
3 they closed it, but when they closed it they left a rag in it and
4 it flew. So the rag, no one caught it and no one signed off, no
5 one signed -- no one wrote anything that the cowling was opened,
6 had been opened. And I come from a world in aviation. Any time
7 you open up anything, you have a QA person go look and make sure
8 you didn't leave anything. It's always nice to have two sets of
9 eyes.

10 Q. So did your or the Boeing investigation believe that because
11 someone didn't -- was confused --

12 (Crosstalk)

13 MR. LYLES: So yes, there was a BPSM and there was an
14 investigation and all of that and it's still in work right now.
15 The individual, he's going to be here tomorrow, as a matter of
16 fact, is working that issue right now and I don't -- it hasn't
17 been resolved, they're still working it and so he can speak more
18 to it tomorrow.

19 BY MR. MARCOTTE:

20 Q. Okay. Yeah, because you've been saying it's horrible and
21 confusing and I'm trying to understand --

22 A. Yeah. So it's --

23 Q. -- how they relate that back to someone who didn't write --
24 didn't write a removal tag when one should have been done.

25 A. Yeah, so -- so yeah, it tells you, you don't have to remove

1 -- don't have to write up anything, these panels and stuff, when
2 you remove it and that's contrary to everything that I believe in.
3 When you go to remove a panel, you should write up everything.

4 And so they have too many exemptions and it's hard to keep track
5 of all that stuff. And then they got this flowchart and --

6 Q. So is that going against your personal beliefs?

7 A. In aviation, from where I've been --

8 Q. And the exemptions and it exhibits D on the back --

9 A. D on the back.

10 Q. -- it's kind of specific. Here's the page you want to look
11 at.

12 A. Yeah. So if you read through here, as I was reading through
13 that, there were just too many -- too many exemptions that say
14 that okay, if you remove this panel for -- I don't have my reading
15 glasses with me.

16 Q. Oh, okay. No problem.

17 A. Sorry. For instance, it's -- it's just not clear and when it
18 -- when you think you've got it, then another exemption comes in
19 to say yeah, you don't have to remove it -- initiate document,
20 okay. Yeah, it's just -- it's just so much information and it's
21 just not clear to a point where if you're going to remove a panel,
22 let's write it up. But no, it's an exemption, it's an exemption
23 and every time --

24 Q. So is the issue only with panels, then, removing panels --

25 A. Yes.

1 Q. -- that you think is confusing?

2 A. Yes.

3 Q. Okay.

4 A. Yes, how it's worded.

5 Q. Probably a lot of the rest of the airplane would be clearer?

6 A. From the other BPS, BPIs and PROs that I've read, this one
7 tends to have a lot of branches to it.

8 Q. Um-hum.

9 A. And it just -- it's just -- to me it just seems unclear.

10 Q. Okay.

11 A. And then based on -- based on this gentleman and what he was
12 saying as far as since 2013, that there's been several different
13 VDRs and CPMs written against this, that speaks for itself. I
14 mean --

15 Q. I understand that.

16 A. -- I didn't even know that.

17 Q. I'm just trying to understand your opinion that it's
18 horrible --

19 A. Yeah, I just --

20 Q. -- and that it keeps people from writing removals like, you
21 know, go back to the accident airplane.

22 A. Because it's so many exemptions that I think it confuses
23 people as they continue to read on what panel they can and cannot
24 remove. If you go to remove a panel in any shape or form, it
25 should be written up --

- 1 Q. Okay.
- 2 A. -- and it should state that --
- 3 Q. So again, you think if it wasn't a panel, let's say it's
4 another component, do you think it's --
- 5 A. Okay.
- 6 Q. -- clearer?
- 7 A. Oh.
- 8 Q. It sounds to me like you're a little hung up with an
9 experience with a panel, or opening the cowling --
- 10 A. Yeah, yeah.
- 11 Q. -- as opposed to looking at it as --
- 12 A. Parts are even that much worse because if you remove a part
13 and don't say -- don't document it, I mean, you go out and start,
14 try to start an aircraft and the part's missing, you can tear
15 something up.
- 16 Q. No.
- 17 A. Yeah, yeah. So --
- 18 Q. I agree that that's not a good thing, but --
- 19 A. Yeah.
- 20 Q. -- I'm just trying to understand how -- where the BPI would
21 confuse someone, that they didn't have to document that, refusing
22 that -- removing that part that was there when the airplane was
23 started.
- 24 A. Yeah.
- 25 Q. You know.

1 A. Yeah, it's --

2 Q. So that's what I'm trying to see and if you think the issues
3 were more just panels and cowls or is it pretty clear most of the
4 time, except in some cases?

5 A. I'm going to just say that it is -- the removal process has
6 been good when it comes to components and parts. It's just the
7 panel issue --

8 Q. Okay.

9 A. -- that is the outstanding issue of this, this particular
10 document, and I've seen -- the one instance that I was talking to,
11 for the gentleman that's going to be in tomorrow, that's working
12 in an issue of a removal, he was pulling his hair out trying to
13 understand their process and it just didn't make sense to him.

14 Q. So it's just horrible for panels --

15 (Crosstalk)

16 MR. LYLES: Yes, yes, yes, because of the -- because of the
17 many different instances on what it takes, what constitutes a
18 write-up to remove a panel.

19 MR. MARCOTTE: Okay. All right, thanks for clarifying that.

20 MR. LYLES: Yeah, sorry about that. Yeah, thanks.

21 MR. MARCOTTE: Yeah, no problem. Thank you.

22 MR. LYLES: Yeah, yeah.

23 DR. WOODS: I really don't have too much more, but I do have
24 a few questions that I always kind of conclude with and I have a
25 feeling you're going to be able to really expand on one of them.

1 So before I get to those, I want to make sure that everybody's had
2 the opportunity to ask what they want to ask in the room.

3 MR. JOHNSON: Yes.

4 DR. WOODS: Okay.

5 BY DR. WOODS:

6 Q. So the first of it, I call it, you know, my king for a day
7 question and that is if you had a magic wand and could produce for
8 yourself, you know, whatever you felt you needed, infinite
9 resources, infinite manpower, infinite whatever you need to make
10 your job easier or the product for which you oversee at Boeing,
11 better, what would that be?

12 A. Oh, for us it's more -- you know, more ASIs. You know, the
13 more people for the huge task that we got to oversee over there,
14 it definitely requires more, more manpower on our standpoint, from
15 our standpoint. For Boeing to institute -- you know, do the
16 training piece, train your people, you know, to standard and, you
17 know, get away from the culture in which you're in right now, get
18 away from the tribal knowledge, that, too, as well. Let's see.

19 The quality side of the house needs to -- they need to retool
20 that, too, as well, get that, you know, on a good footing. I hate
21 to, you know, just see them going away from quality for some
22 reason, they just don't have that same, how can I say, the same
23 love for quality that it once had, get back to that. And make
24 your managers accountable and responsible for what's going down
25 from their level, first-level managers down to the floor.

1 Q. Um-hum.

2 A. And yeah, if I can have them change that, that's -- if I had
3 that wand, that's what I would definitely do, and to make
4 communication within the company flow a little bit better, the
5 communication, and at the manager level, documentation because
6 I've dealt with some issues with documentation where they don't
7 document, you know, their issues with people who have been
8 trained.

9 Get those items fixed and slow down production, as well, slow
10 the production down until you can get a -- get that product to a
11 point where it's sound, the process down to where it's sound and
12 then maybe pick up production later because, you know, if
13 production is driving everything, I just think that it inhibits
14 everything else because people are just going to be, yeah,
15 concentrating just on getting that aircraft out the door, you
16 know, so -- and that's about it. I hope.

17 Q. You're doing a lot with that wand, so -- you said going away,
18 you have a sense of going away from quality, so what is it going
19 towards, then, if not quality?

20 A. So just the rumors that I've heard that quality is -- this is
21 a rumor, that the company was trying to go away from having
22 quality be -- that they were trying to make individuals on the
23 floor be the quality, be that quality piece that actual quality
24 should be having, so -- and that's just a rumor and I just don't
25 want that to happen. I think that the company needs a quality

1 element and they provide a very important piece in the pie. And
2 so strengthen your quality piece and go from there, basically.

3 Q. So it sounds like the way you're describing it, instead of
4 quality as a concept, you're talking about the role, the quality
5 role of like a person who's responsible for ensuring --

6 A. Yes. Yes, yes, yes. Just make them -- you know, have them
7 do the job that they were -- that they're supposed to do, they're
8 paid to do. Yeah, they're actually signing stuff off, not pencil
9 whipping, okay, just doing the job they do, that they're supposed
10 to do, and then having the company have more stake in buy-in in
11 what the quality guys are doing, right. So I just think quality
12 has slipped and it needs to be back on that level where, you know,
13 it brings the company back up to producing safe aircraft.

14 MR. CRUZ:

15 Q. Can you give us an example of a quality issue that you
16 encounter?

17 A. Gosh, I can't think right now. Oh, goodness.

18 Q. Have you encountered any quality issues (indiscernible)?

19 A. I haven't. Not me, personally, I haven't, but my other ASIs
20 have personally dealt with some issues that were quality related
21 with the individuals on the floor, such as them signing off stuff
22 that they shouldn't have signed off. What else? Oh, goodness, I
23 can't even think right now. Yeah. Yeah, that's about it.

24 Q. How would you characterize the production personnel at
25 Boeing, as far as their experience is concerned and building

1 aircraft?

2 A. I think, well, in light of all the issues that we're finding,
3 it's waning. When I first came to the company I thought it was
4 awesome, they were building aircraft, but as I saw the little
5 cracks starting to occur with the individuals and the way the
6 production was going, I was like -- with the things that they were
7 doing, what I was seeing, I was like how are they able to -- based
8 on what I was hearing, mostly what I was hearing but not
9 witnessing it firsthand, from the other ASIs, is how are they able
10 to put an aircraft together and do it consistently with the issues
11 that we're having and I'm like how is that possible, I mean, so --
12 yeah, so it's just the cracks that have surfaced and I'm like oh,
13 goodness. So my confidence has waned a little bit in that and so
14 I don't like feeling this way, but I'm like wow. So --

15 Q. Does that make you want to dig deeper?

16 A. Oh, for sure. Oh, for sure. That's -- yes, always, always.
17 Yep. Yep. Yeah, it's always good, that's the motivator right
18 there. Safe aircraft, people doing what they're supposed to be
19 doing, yeah.

20 BY DR. WOODS:

21 Q. So with that, given your experience that you have had and the
22 time that you've spent doing this sort of work, what would be the
23 biggest takeaway you want this team to know and recognize as we go
24 forward in this investigation?

25 A. That I think the company can recover from this. You're

1 talking about the Boeing side or the FAA side? Just --

2 Q. Pertinent to the case, so Boeing.

3 A. Oh, the case. I think they can recover from this, I think
4 that they have the tools, the resources, to go and fix this. They
5 just have to plan it out and then communicate it out and make it
6 happen. Document. On our side, from my standpoint at the FAA, I
7 just -- we just need a little bit more people and we're already in
8 the factory, like -- like, you know, like no tomorrow, so just
9 more people to help manage the other areas and I think Boeing will
10 be back in -- back in the fold, making safe aircraft again.

11 DR. WOODS: Okay. With that, one more time around the room,
12 everybody looks like they're good to go, I see shaking noes of
13 heads. So again, thank you for your time, we know -- as you said,
14 you're very busy and we're taking over your schedule and just let
15 you know that we do appreciate that. With that, we are going to
16 conclude this interview at 15:33 Pacific time.

17 (Whereupon, at 3:33 p.m., the interview concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9 MAX
IN-FLIGHT STRUCTURE FAILURE
NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Trent Lyles

ACCIDENT NO.: DCA24MA063

PLACE: Seattle, Washington

DATE: May 7, 2024

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

David A. Martini
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of: *

ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

* * * * *

Interview of: JAMES M. PHOENIX, Retired Manager
 Boeing Certificate Management Office
 Federal Aviation Administration

via teleconference
 Wednesday,
 June 5, 2024

APPEARANCES:

DR. SABRINA WOODS, Aviation Human Performance
Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer/Investigator
National Transportation Safety Board

NILS JOHNSON, Maintenance Investigator
National Transportation Safety Board

MATT RIGSBY, Accident Investigator
Federal Aviation Administration

TROY LEVANEN, Director, Maintenance and Engineering
Safety
Alaska Air Group

BJORN ANDERSON, Captain
Alaska Airlines
Representing the Air Line Pilots Association

DAN MARCOTTE, Senior Manager, Air Safety Investigations
Boeing Company

JOHN PETRUZZELLI
International Association of Machinists and Aerospace
Workers

MIKE RINEY, Director, Boeing/Renton On-Site Customer
Relations
Spirit AeroSystems

REBECCA LIPE, Esq.
Office of the Chief Counsel
Federal Aviation Administration
Representing Mr. Phoenix

I N D E X

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I N T E R V I E W

(1:08 p.m.)

1
2
3 DR. WOODS: Good afternoon, the date is June 5th, 2024 and
4 the time is 13:08 Eastern time. My name is Dr. Sabrina Woods and
5 I'm a human performance investigator with the National
6 Transportation Safety Board. Along with Pocholo Cruz, I am
7 co-leading the manufacturing and human performance working group
8 for Accident Investigation Number Delta-Charlie-Alpha-2-4-Mike-
9 Alpha-0-6-3 involving Alaska Airlines Flight 1282.

10 The NTSB is congressionally mandated with determining
11 probable cause in transportation accidents and significant
12 incidents, and with promoting transportation safety. Parties to
13 the investigation help us inform that process. What you see here
14 in this virtual room are the different parties to the
15 investigation. So right now, so you have an understanding of who
16 it is you'll be talking to, I'm going to have each of them
17 introduce themselves to you. We're going to start with Pocholo.

18 MR. CRUZ: Hello, Jim, my name is Pocholo Cruz. As Sabrina
19 says, I'm the co-chair for this particular group. I'm an
20 aerospace engineer with specialty in structures and maintenance.

21 MR. PHOENIX: Hi.

22 DR. WOODS: Next up will be Nils.

23 MR. JOHNSON: Good morning, Jim. Nils Johnson, NTSB. I'm an
24 aviation accident investigator, my specialty is maintenance. Nice
25 to meet you.

1 MR. PHOENIX: Thanks, same to you.

2 DR. WOODS: Then Matt.

3 MR. RIGSBY: Hey, Jim. Matt Rigsby with the FAA's Office of
4 Accident Investigation. I am the FAA's coordinator for this
5 accident and work in AVP.

6 MR. PHOENIX: Okay. Thanks, Matt.

7 DR. WOODS: Dan.

8 MR. MARCOTTE: Good morning, Jim. My name is Dan Marcotte,
9 I'm a Boeing air safety investigator and I'm based in Southern
10 California.

11 MR. PHOENIX: Thanks, Dan.

12 DR. WOODS: John.

13 MR. PETRUZZELLI: Hi, Jim. John Petruzzelli, I represent --
14 (Crosstalk)

15 MR. PETRUZZELLI: So I'm representing the International
16 Association of Machinists and Aerospace Workers union. Good to
17 see you again, my friend.

18 MR. PHOENIX: Hey there, John. So John and I have worked
19 together very closely over the past few years.

20 DR. WOODS: I figured as much. Thank you, John.

21 And Mike.

22 MR. RINEY: Yes, good morning, Jim. Mike Riney, I'm Spirit's
23 on-site representative here in Washington.

24 MR. PHOENIX: Hi, Mike.

25 DR. WOODS: Troy.

1 MR. LEVANEN: I'm Troy Levanen, director for maintenance and
2 engineering safety for Alaska Air Group. Good morning, welcome.

3 MR. PHOENIX: Hi, Troy.

4 DR. WOODS: And last but not least, Bjorn.

5 CAPT. ANDERSON: Jim, good morning. Bjorn Anderson, I'm a
6 captain with Alaska Airlines and I'm representing the Air Line
7 Pilots Association, and I have an aviation maintenance background
8 for about the last 30 years.

9 MR. PHOENIX: Okay, thanks, Bjorn.

10 DR. WOODS: Okay. So that's it, that's everybody that's
11 going to be chatting with you, along with myself today. We're all
12 here for you to share your insight as a past member of the
13 regulatory and oversight team for the Boeing commercial airplane
14 company. To capture that insight, we will be using a digital
15 recorder. After this interview I'll send the recording out for
16 transcription and the party members will have an opportunity to
17 review the transcription to correct it for any typographical
18 errors. We do not change the content.

19 Once we receive the recertified copy back from the
20 transcriber, it will go forward to be a matter of public record in
21 the docket for this investigation. Each of these group members
22 will have a chance to ask questions, we'll ask them one at a time
23 so you'll only have to focus on one at a time. There will be an
24 opportunity for each person to ask a second set of questions after
25 the first round, usually we do two rounds with the second being

1 much shorter. Please answer all the questions to the best of your
2 ability. If you don't understand or don't know something, please
3 just say so, we'll either move on or clarify and if at any time
4 you realize, like maybe there's a past question you realize you
5 either misstated something or you remember something later that
6 you would like to add on, you can feel free to go back and forth
7 in the timeline and address a question that was asked before. We
8 will be respectful and go one at a time, but you can kind of move
9 in the timeline wherever you want to ensure that there's clarity.

10 You are entitled, always, in our interviews to have a
11 representative of your choosing. The FAA has afforded you a
12 representative that's here with you on line, I just want to ensure
13 that that someone is the person that you have chosen to be your
14 representative.

15 MR. PHOENIX: It is.

16 DR. WOODS: Okay. And with that --

17 MR. PHOENIX: She is.

18 DR. WOODS: -- please, Rebecca, if you would introduce
19 yourself and state your full name, spelling your last.

20 MS. LIPE: Rebecca Lipe, Lima-India-Papa-Echo, Office of
21 Chief Counsel.

22 DR. WOODS: All right, thank you. Thank you for being here
23 and supporting Jim. Please recognize that this is just simply an
24 interview, it is not a deposition, so please refrain from
25 interrupting the process or attempting to answer on behalf of your

1 client. That being said, for both of you, at any time if you
2 would like a break, please don't hesitate to say so and we'll
3 pause the recording, we'll go off recording, and we'll make that
4 break happen. So for any reason, if you just want to step away or
5 if you want to talk with counsel, Jim, we will afford you that
6 opportunity. So with that, do you have any questions at this
7 time?

8 MR. PHOENIX: No.

9 DR. WOODS: Okay, great, so we're going to begin. I'm going
10 to start off and then move to Pocholo with asking you to state
11 your full name, please, and spell your last.

12 MR. PHOENIX: Is that for me?

13 DR. WOODS: That's for you, Jim, yes, please.

14 MR. PHOENIX: Yeah. My full name is James Mark Phoenix, last
15 name spelled Papa-Hotel-Oscar-Echo-November-India-X-ray.

16 DR. WOODS: Okay, thank you. Is Jim okay to call you?

17 MR. PHOENIX: Yeah, Jim's fine.

18 DR. WOODS: Okay, perfect. All right, then, with that,
19 Pocholo, you're up.

20 INTERVIEW OF JAMES M. PHOENIX

21 BY MR. CRUZ:

22 Q. Hello, Jim, thank you again for speaking with us today.

23 A. Sure.

24 Q. We appreciate your time. As a former, I guess, employee of
25 the FAA, how long were you an employee of the FAA?

1 A. Twenty years.

2 Q. Okay, from when to when?

3 A. From August of 2003 until December 30th of 2023.

4 Q. Okay. And at the time, who was your supervisor?

5 A. I had a number of different supervisors because I moved
6 around quite a bit in the FAA.

7 Q. All right, so from -- let's say from 20 -- let's say from
8 2022 to 2023, who was your supervisor?

9 A. Chris Spangenberg.

10 Q. Okay. In that position that you have from 2022 to 2023, what
11 was your position with the FAA?

12 A. I was the manager of the Boeing Certificate Management
13 Office.

14 Q. Okay. And where were you a manager at, what's the location
15 of the facility?

16 A. In Des Moines, Washington, the regional headquarters there.

17 Q. Okay. And how long were you the manager of that -- of the
18 Boeing certificate?

19 A. From April 2018 until I retired in December of 2023.

20 Q. Okay. And how many people worked for you when you were the
21 -- when you were the manager?

22 A. So in April, when I became the manager, we had 25 employees,
23 about 21 of which were inspectors, and when I left, we actually
24 went through a reorganization from AIR-871 into AIR-500, which
25 changed the numbers quite a bit, but prior to the reorganization,

1 we were sitting around 52 employees so we just about doubled in
2 that four and a half years. And then in April of 2023, we
3 reorganized into AIR-500, I became the branch manager for AIR-580
4 and I had 80 employees at that time that included some 30
5 engineers.

6 Q. Okay. And I guess -- so that's 80 engineers that were
7 working for you, is that correct?

8 A. I know we had about 50 inspectors and 30 engineers, so we
9 also took over responsibility for the BASOO functions at that
10 time, in April of last year.

11 Q. Okay. So that's quite a bit of personnel now, compared to
12 what the current management has, according to the org chart, which
13 was essentially, I believe, maybe five to ten people that report
14 to a Mr. Hager, are you familiar with that particular --

15 A. Well, at the time, when I left, and I haven't really kept up
16 on the organizational changes, at the time Mr. Hager was only
17 responsible for the Puget Sound portion of the organization and I
18 think --

19 Q. I see.

20 A. -- either Everett or Renton or both, but not the engineering
21 functions, so Hager was like 582 and I'm going to -- I'm going to
22 drop into jargon in here pretty quick, right?

23 Q. Sure, sure.

24 A. He was 582 and 582 A, B, and C, and I think Margaret Langsted
25 was 585, we took over responsibility for the oversight of GE/Pratt

1 and somebody else, some other engine company, I don't remember,
2 mostly GE and Pratt, and she was the manager there, so I had
3 something like five or six managers at the end whereas, when I
4 started in 2018, I was the only manager.

5 Q. Okay.

6 A. So we grew quite a bit from 2018 to 2023, early 2023, then
7 the AIR-500 organization came along that the entire organization
8 focused solely on Boeing, GE, and Pratt.

9 Q. Okay. So, I guess, just to understand what it looked like
10 before, did you have the whole Boeing certificate? You had Renton
11 and Everett and you had South Carolina?

12 A. Yes, the production certificate.

13 Q. The production certificate.

14 A. Correct. And all of the suppliers.

15 Q. And the suppliers, too. Okay. And was the principal -- who
16 was the principal engineer at the time? Or principal inspector,
17 I'm sorry.

18 A. I was.

19 Q. Oh, okay. Okay. And who took over for you, then, as the
20 principal inspector, that you know, before you left?

21 A. Bryan Kilgroe.

22 Q. Oh, okay.

23 A. He took over as a principal inspector when we transitioned to
24 AIR-500 because I became the branch manager for 580 with
25 responsibility for Boeing, GE, and Pratt, so I needed a principal

1 inspector for Boeing, so that became Bryan Kilgroe and he's the
2 manager in Charleston.

3 Q. Okay.

4 A. But he was the principal for all of Boeing production
5 certificate.

6 Q. Okay.

7 A. At least he was when I retired, I'm not sure what's changed.

8 Q. Yeah, okay. So when you were the manager, could you explain
9 to us how surveillance or audits are done with regards to the
10 Boeing certificate, specifically the one in Renton?

11 A. In accordance with the FAA Order 8120.22 and .23, so whatever
12 it said that we had to do in that order, we met or exceeded those
13 requirements. So all the audits that are required for a
14 production certificate were accomplished per the schedules in
15 those documents and in the procedures in those documents, and we
16 far exceeded many of the requirements because of the size of
17 Boeing, obviously. And their suppliers.

18 Q. Was there a minimum number of audits that you had to do by
19 the work program for each of the inspectors for that, for the
20 certificate?

21 A. There's a minimum number of audits that we had to do for the
22 facilities.

23 Q. Okay.

24 A. So it depends on what the facility was, what they were
25 manufacturing, whether they were a supplier or not, and what the

1 supplier was providing, and we had a spreadsheet that we used to
2 track all of the required inspections and in addition to all of
3 the inspections that we had scheduled including the vendors that
4 we selected to oversee.

5 Q. So the audits that were done in Renton, specifically, do you
6 recall whether there was a set number of audits that needed to be
7 done specific to the Renton facility?

8 A. Yes, there are and it's outlined in the .23, and I know that
9 we did a lot more than was necessary but, I mean, that's all in
10 the records in ACAIS, if you're familiar with the audit system,
11 ACAIS.

12 Q. Yeah. As far as before you left and before you retired, do
13 you recall what trends that the inspectors were seeing with
14 regards to the Renton facility? What --

15 A. Yeah, I think --

16 (Crosstalk)

17 MR. PHOENIX: Yeah, I think the trends at the Renton facility
18 really hadn't changed much over the years, so -- yeah, it was
19 pretty well known and we tracked it.

20 BY MR. CRUZ:

21 Q. Okay. And do you know specifically what types of issues that
22 the inspectors were finding with regards to the Renton facility?

23 A. Everything. And it wasn't just Renton, I mean, Charleston,
24 Everett, Renton, they all have their idiosyncrasies because of the
25 different models, but I think that generally you could walk into

1 any facility and have findings and typically, you know, the ones
2 that we saw all the time were FOD, tool control, compliance with
3 the instruction, procedures, you know, just all across the board,
4 you name it.

5 Q. Okay. And at the time, you -- how would you characterize the
6 Boeing quality system at the Renton facility when you were the
7 manager?

8 A. It changed quite a bit, it changed significantly, and I think
9 the change that I saw, that I really want to comment about, began
10 before I took over in 2018, there was a -- there was a trend to
11 move away from quality inspections and from quality inspectors and
12 that occurred probably 2015 to 2017, and I attribute that change
13 to a couple of ex-Toyota managers that they brought in to try and
14 build the airplanes the way Toyota builds cars.

15 So there was Walt Odisho, he was production manager; Ernesto
16 Gonzalez-Beltran was the quality assurance vice president, and
17 they had a program of decreasing quality inspections and item
18 inspections and trying to improve the quality of the build, if
19 that makes sense. And it's, you know, it was an admirable thing
20 to try to do, but they were not successful, in my opinion, because
21 we still found a lot of issues, obviously, and we embarked on a
22 significant program to get them to put inspections back in and we
23 did that through compliance actions and legal enforcement cases.
24 And they complied with all of that, but slowly, very slowly did
25 they reintroduce quality inspections and that really didn't change

1 until the Max accidents where it brought a lot of things to light.
2 So you need a lot of leverage to get Boeing to change and then
3 when Boeing changes, it's very slow and it took a long time for
4 them to really understand that their quality system needed to
5 improve. So I did see improvements in the quality system, not
6 just Renton, but also Charleston with the 8-7 build and Everett,
7 as well, and Boeing suffered a lot through that, having to rework
8 a lot of airplanes, parked a lot of airplanes in Moses Lake and
9 Victorville, but you know, there was a lot of improvement that was
10 needed. I'm sure there still is.

11 Q. So basically, you did see some changes after the Max
12 grounding, right, the first time and you saw a lot of process in
13 quality changes that happened at that time?

14 A. Yes, it was constant over the five years that I was there,
15 but it really started to uptick, you know, the improvements,
16 during the Max accident investigations and the subsequent issues
17 that we discovered. We had a couple of legal enforcement cases,
18 I'm going off memory here, that resulted in settlement agreements
19 that required them to do specific actions to improve their quality
20 system.

21 MR. CRUZ: Okay. I guess that's it for me right now. Thank
22 you, Jim.

23 MR. PHOENIX: Okay, you bet.

24 DR. WOODS: Nils.

25 (Pause.)

1 DR. WOODS: You're muted, Nils.

2 MR. JOHNSON: I'm sorry.

3 BY MR. JOHNSON:

4 Q. You retired in December, is that correct?

5 A. Yes.

6 Q. Okay. Before you retired, can you describe how a work
7 program was generated for production certificate? I believe it
8 lives in ACAIS, is that a correct statement?

9 A. Yeah, that's right, in ACAIS. So the production certificate
10 is in ACAIS and that comprises all the different projects, is what
11 they're called, right, and that describes a geographic facility,
12 so Charleston has a project, Everett has one, Renton has one. And
13 then there are many different projects within those, including
14 project numbers assigned to fabrication facilities and anything
15 that's on the production certificate, in the supplement, has a
16 project against it.

17 So we have all these projects in ACAIS and each one has a
18 likelihood and severity rating, the hazard rating, and depending
19 on what that is, it generates how many audits that you do at the
20 facility and that's all controlled in ACAIS. Then we take that
21 and put it in the spreadsheet so that we can control when the
22 audits are going to be done to make sure they all get done in time
23 and any additional audits that we want to add to it and then we
24 load those into ACAIS so they get an ACAIS number, so there's a
25 base number of audits that you do and we add to that quite a bit,

1 so for instance, a reason why we add an audit is a whistleblower
2 investigation. We usually have between three and twelve
3 whistleblowers open at any given time, I think we did 40 or 50 a
4 year. So to do the whistleblower investigation, which requires
5 some confidentiality, we would generate an audit so that we went
6 into the facility that was in question under an audit so that
7 Boeing wouldn't ask us why the heck are you guys here. So that's
8 one of the ways we would increase a number of audits at a facility
9 and we would target that investigation of that audit to whatever
10 the allegation was from the whistleblower.

11 But there were also additional audits generated when we
12 thought that there was a problem that we weren't able to look at
13 and one of our favorite places to go was Spirit, because Spirit
14 generated a lot of concern due to the number of findings and those
15 audits were performed by our colleagues in the Wichita MIDO, so we
16 would generate the audit in our production certificate in our
17 ACAIS and hand off that audit to Wichita and Wichita would take
18 two of their senior ASIs, assign them the audit, and they would go
19 in to Spirit and do their audit investigations.

20 A lot of times the audits were due to follow-ups and every
21 time we had a compliance action or a legal case, we always had to
22 do follow-ups to verify the corrective action was completed, so we
23 would generate an audit to go in and verify that the compliance
24 action and the corrective actions were done and that they were
25 effective. So that had a tendency to generate a large number of

1 audits in ACAIS for a production certificate that didn't need that
2 many audits, if you know what I mean. The minimum number of
3 audits driven by the 8120.23 nowhere near covers the Boeing system
4 with their hundred and 44 thousand employees, whatever they have
5 these days.

6 Q. Great, you answered my second question by answering the
7 first. How are risks that you guys identify, or previously,
8 sorry, that you previously identified, how are those used to steer
9 upcoming audit plans so that you could target the area where most
10 of the risk exists?

11 A. Right, so I don't know if you're familiar with SAS, I was in
12 Flight Standards for, you know, 15 of my 20 years, I was the
13 principal maintenance inspector at Alaska Airlines for eight
14 years, so we used SAS in the flight standard side to help us
15 target our inspections and our investigations that are -- yeah,
16 the inspections.

17 We don't have SAS on the air side of the house, all we have
18 is ACAIS, it's very rudimentary, and to determine risk and
19 likelihood and severity, you go into the 8120.23 and you follow
20 all the questions in there and it gives you a rating and that's
21 how you determine how many audits you do. As far as targeting
22 areas of interest, that was manual. We had a group of inspectors
23 and, you know, we met every single day and we had all hands,
24 everybody on every Tuesday morning, and we talked about what we
25 were seeing and what corrective actions we were seeing, what

1 corrective actions were failing, and we would say you know what,
2 we need to go into Renton or we need to go into Everett or we need
3 to go to Boeing Australia and see what the heck's going on down
4 there because what we're hearing and what we're seeing is not
5 good. So it was very much manual, if you will, it wasn't driven
6 by SAS, but everything that we did was recorded in ACAIS.

7 Q. I came from industry so I'm very familiar with SAS.

8 A. Sure.

9 Q. Do you feel that training for personnel is adequate at
10 Renton?

11 A. I don't know, honestly, because I haven't got any experience
12 with that. The people that I interfaced with at Renton, it seemed
13 like they were well trained. I know that there were a lot of
14 issues there, I know that some of the audits and the compliance
15 actions that we had pointed to a lack of training and when we
16 looked at the BPSMs -- sorry, acronym usage there. Are you guys
17 familiar with BPSMs, the Boeing Problem Solving Model, it's their
18 root cause analysis?

19 Q. Yes.

20 A. So the BPSMs that Boeing would generate and send to us, that
21 was required, a lot of times would identify a lack of training as
22 one of the causal factors, but that wasn't the primary causal
23 factor, the causal factors that we saw was failure to follow
24 processes, so you can train people all day, if they don't follow
25 procedures, it doesn't do you any good. So when we looked at the

1 trends from the BPSMs, you know, the highest, the greatest issue
2 that we saw in the trends was failure to follow process. So
3 training, you can always improve training, but it's all about
4 getting people to do the right thing and that's the culture.

5 Q. Okay. You mentioned what your top findings were at Renton,
6 do you recall what your top findings were at Spirit?

7 A. It's the same across the board, failure to follow process,
8 lack of awareness. I mean, that was by far the number one issue
9 was people not following the IPs, the instruction plan, or the
10 BPIs or the documentation, that was the number one thing with
11 people.

12 Q. All right. What is your opinion on the skill level of the
13 workers at Boeing Renton compared to what you'd seen in the past,
14 you've been around for quite a few years, is the skill level
15 remaining constant or is it degrading or what's going on, from
16 what you've seen?

17 A. Yeah, I think over the five years we saw significant change
18 with, you know, the decrease in experience that walked out the
19 door with all of the retirements and the VLO, which was the
20 voluntary layoffs, and then the layoffs and then, of course, the
21 production shutdown of Renton, it caused a lot of people not to be
22 there anymore and a lot of those people had many, many years of
23 experience and when you bring new people in, they don't have that
24 level of experience, they may have the skill and the knowledge,
25 but not the experience and to me, that's what's important, they

1 have to know what good looks like and when you have 30-, 40-year
2 employees leaving, that's a huge challenge for Boeing. I think
3 that, you know, at one point we were seeing those metrics that
4 showed, you know, the level of skill at Renton, the number of
5 people they had to hire, I think, in 2022 was something like three
6 or six thousand assemblers, so it's just a huge bow wave of
7 inexperience walking in the door. And walking out the door, so --

8 Q. At the same time?

9 A. Right.

10 Q. Curious, have you ever seen an M-E-D plug opened during --
11 any time you were at the Renton facility?

12 A. I don't recall seeing that specifically. I know that, you
13 know, all the 9s and the 900ERs, I think, had plugs, but a lot of
14 -- I spent a lot of time at the Seattle delivery center, I never
15 saw them opened there, so no, I don't recall it specifically.

16 Q. Okay. Last question for this round. BPI 1581, the removal
17 -- the removal procedures --

18 A. One of my favorites.

19 Q. -- have you -- I reviewed a bunch of removals, like something
20 like 60-something of them and I saw a lot of variation, a lot of
21 variation between different removals. Did the FAA identify,
22 during your time there, that that BPI was in need of help, I guess
23 is the best way of saying it?

24 A. Yes.

25 Q. Okay.

1 A. We had problems with 1581 and we required them to revise it
2 something like two years ago, as a result of a number of
3 compliance actions because of the issues around removals, and one
4 of the issues that Boeing created was when they stored all of
5 these airplanes and during the production shutdown, a lot of work
6 didn't get done, a lot of suppliers weren't able to supply parts
7 and even before then, I think, 2019 was significant because they
8 didn't even have enough engines to put on the airplanes they were
9 building at the rate of 42 a month. That causes a lot of
10 removals.

11 So when the airplane moves down the line and out the door and
12 maybe goes over to Moses Lake and when the part finally shows up
13 that they need, they may have to remove other parts to install
14 that part, so you have a huge uptick, I mean in the tens of
15 thousands, of removals that you would not normally see. Boeing
16 was ill prepared to manage that. So they were doing things like
17 changing skins in Moses Lake, you can imagine the number of
18 removals in a skin change, especially if it's in the lower 41, you
19 know, it's just insane.

20 So the other issue that we had with removals were the
21 instructions on reinstalling the parts, so they didn't just pull
22 the old IP back up and say go out and do all of this, they had
23 engineering instructions that said put the stuff back in and then
24 test it and make sure it's all good. I'm paraphrasing there a
25 little bit, but we were really disappointed with the level of

1 instruction of reinstalling parts and components and pieces, did
2 not match the level of fidelity that you had on a production IP,
3 and that was a couple of years ago and there was a lot of issues
4 around removals, undocumented removals was an issue, I think we
5 had a number of compliance actions on that. So if you ask me if
6 I'm surprised, I am not. Unfortunately.

7 MR. JOHNSON: Thank you.

8 That's it for me this round, Sabrina.

9 DR. WOODS: Okay, we're actually moving over to Matt next.

10 MR. RIGSBY: Yeah, I'm just finishing up a quick note.

11 (Pause.)

12 BY MR. RIGSBY:

13 Q. Okay. Jim, the -- you kind of came in or AIR did a
14 reorganization just shortly before you left, can you kind of
15 explain how the MIDOs no longer became the MIDOs and some of the
16 process change and how personnel moved around on that?

17 A. So you're talking about the AIR-500 reorganization?

18 Q. Correct.

19 A. AIR used to, you know, they did the certification and
20 production oversight for all aircraft certification, but the
21 leadership, for a long time, understood that it was very difficult
22 to manage Boeing from an engineering and a production standpoint.
23 So what was happening was you had a tremendous amount of
24 engineering resources in the ACOs that had to spend time managing
25 Boeing, you know, approving Boeing programs, writing ADs, having

1 CARB meetings and the leadership decided okay, well, let's just
2 set up AIR-500, which is all Boeing all the time, and then they
3 had another meeting and said well, let's throw GE and Pratt in
4 there, as well, I think Rolls Royce and some other folks, so that
5 AIR-500 had responsibility for -- I think they termed it the most
6 significant part of the air carrier system, right, so GE, Boeing,
7 Pratt, they're the big guys in the house, we'll ignore Airbus,
8 which we're really good at doing, but -- so AIR-500 broke into
9 basically three parts, there was the aircraft certification part
10 and then the AD writers, the service bulletin and AD folks that
11 certify the ADs and wrote the ADs, and then production oversight,
12 and AIR-580 was production oversight for Boeing/GE.

13 One of the things that -- the other MIDOs, not the Boeing
14 CMO, but the other MIDOs, used to have to do a lot of audits on
15 our behalf, so if there was a major Boeing supplier up in New
16 York, for instance, we wouldn't necessarily send an inspector up
17 there to do that audit, we would hand that off to the New York
18 MIDO and the New York MIDO would assign one of their inspectors to
19 go out and do the audit and then report back to us and we control
20 that entire process.

21 Same with suppliers all around the world. So there was a
22 team of inspectors that traveled around the world to visit
23 suppliers for all of the production certificates held by U.S.
24 companies, including Boeing, so we dominated that significantly
25 because of all of Boeing's suppliers around the world and because

1 of all the work transfer that Boeing has been doing, recently, to
2 foreign companies, foreign countries like India, Australia, Korea,
3 Japan. So there was some major components, you know, wings and
4 center sections and vertical stabilizers, they're being
5 manufactured in countries like Abu Dhabi that we needed to look at
6 and we handed those audits off to that international team.

7 So that was also brought in house, to some extent, into AIR-
8 500, but we weren't staffed to do it, so we told the rest of AIR
9 that they needed to continue to support us for the time being and
10 I think they are still doing that, so -- but we also took into
11 AIR-580 the Boeing certification team from the BASOO, so they got
12 folded into AIR-580, so a lot of the certification work was in 570
13 and some of it came into 580, a lot of the oversight of the
14 engineers came into 580.

15 So there's a big difference in the engineering world between
16 oversight of engineering and certification engineering, so they
17 broke that out, we got certification engineers over here in 570 or
18 520, I can't remember which one, and then the oversight engineers
19 were in 580 because 580 was supposed to be doing all of the
20 oversight of engineering and production certificate, taking on the
21 advent of SMS, which was new.

22 Q. Okay.

23 A. I don't know if any of that made sense.

24 Q. Yeah. Well, it's a quagmire, for sure. So in 2019, I'm told
25 that the CAE tracking system changed, the compliance enforcement

1 action --

2 A. CEA.

3 Q. CEA, sorry, sorry. Can you describe how compliance actions
4 are tracked and -- historically and, you know, the results and how
5 they're followed up?

6 A. So with CEA we started to put all of our compliance actions
7 of all different flavors into that database and prior to that, we
8 didn't have a database of all the compliance actions except for
9 the enforcement investigation system, EIS, for legal cases, so
10 something that was -- you know, got to the level of a legal
11 enforcement case. So CEA, any finding that we had, we would open
12 an item on CEA and it can be an informal compliance action for
13 something that one of the inspectors found is relatively minor in
14 nature and it's fixed very quickly or on the spot.

15 Then there's the formal compliance action for items that are
16 a more significant nature and for formal compliance actions, it
17 may be more significant, so we asked Boeing for a BPSM, so they're
18 required to provide a root cause corrective action document for
19 every formal compliance action.

20 Then we've got the legal enforcement actions, you know,
21 that's when they really make us mad, so -- or it's egregious,
22 safety of flight, that kind of thing, and that calls for the legal
23 enforcement process in FAA Order 2150.3. Then we have the
24 informal voluntary self-disclosures, so Boeing discovers something
25 that's a problem, they disclose it to us, we put it in as an

1 informal and then there's the formal voluntary disclosures which
2 are more significant issues and they're required to provide a BPSM
3 for those, as well. Those all go into CEA, so everything's in CEA
4 and then we pull out of CEA the root causes of all of the issues
5 that they're required to give us a BPSM for. So the reason we do
6 that is because it's Boeing's root cause, it's not us telling them
7 what the root cause is, it's their data.

8 So we put that into a spreadsheet so that we can track and
9 trend what's going on at Boeing from a compliance standpoint, so
10 if we see a lot of violations of the material review board
11 process, we will see a BPSM for that and we'll have a root cause
12 about why and a lot of times a root cause is lack of awareness or
13 inattention to detail or failed to follow process or tool doesn't
14 work or tools missing, that kind of thing.

15 So we load all that into the spreadsheet and it gets scrubbed
16 and put onto a database and that database is managed by one of the
17 AIR IT guys and it comes out as a graphical display and you can
18 drill down into it all you want to see exactly what it is and we
19 -- I kind of picked that up from time at Alaska Airlines when the
20 group over there over under Jim Redder (ph.), at the time,
21 developed a database to show us all of their SMS root cause
22 corrective actions so that they could track and see what the
23 trends are, and it was a very powerful tool because we could look
24 at it and say well, we're finding the same thing and when you have
25 the company finding the same thing as the FAA, that's a very

1 powerful message, so when you go in a meeting with the CEO once a
2 quarter, you can say hey, look, we're all seeing the same thing
3 here, what are you guys doing about it? So we started that with
4 Boeing right around 2018 and with CEA coming in, it made it a lot
5 easier to scrub the data so we could see it.

6 Q. Okay. So is CEA, is it divided out by aircraft model,
7 facility, or is it just one, is it Boeing?

8 A. It's by facility, so obviously you got Renton, Everett,
9 Charleston, and suppliers.

10 Q. Okay.

11 A. So the compliance action numbers are coded based on that.

12 MR. RIGSBY: Okay. Okay, Jim, I think that's it for the
13 first round.

14 MR. PHOENIX: Okay.

15 MR. RIGSBY: Thank you.

16 MR. PHOENIX: Thanks, Matt.

17 DR. WOODS: All righty. Dan.

18 MR. MARCOTTE: Okay. Yeah, yeah, thank you.

19 BY MR. MARCOTTE:

20 Q. You mentioned the Boeing problem solving model a couple times
21 now.

22 A. Right.

23 Q. It also was interesting how you used it as a source of data
24 for your trend analysis over time. Just in general, what did you
25 think of the quality of the BPSMs we gave you guys to review, do

1 you think they were pretty well put together, hit the mark, or did
2 you question them frequently?

3 A. So yeah, it's a great question, you know, the biggest problem
4 with the BPSMs is they took so long, you know, I think that's one
5 of the things that was most shocking about Boeing, coming from the
6 Alaska certificate is, you know, if we had a compliance action, it
7 wouldn't be unusual to get extensions for the BPSM out to six
8 months and in some cases, well over a year. I think our
9 engineering colleagues have even worse problems getting timely
10 BPSMs.

11 But on the production side of the house, the production side
12 BPSMs, I thought, and I think we all believed, were really good
13 quality and we actually tracked that, we tracked the BPSM quality,
14 that was a requirement from a 2015 settlement agreement, that they
15 send us BPSMs and also that we graded quality. I think we were
16 running around 85 percent acceptance rate and I think that the
17 rejection rate would come and go, just depends, but one of the
18 things that we would reject a BPSM for routinely was training.

19 So if we found that, you know, there's a BPSM that, you know,
20 the airplane got out with a part missing or something like that
21 and their root cause said that the individual gets trained as a
22 corrective action, then we object to that because we want to see a
23 process control put in place, you know, we -- there are so many
24 humans involved in the process that you can train one of them but
25 you don't really fix the problem of the quality escape. We want

1 them to go deeper into fixing a problem by changing the process,
2 improving the process, adding a process control, you know, a
3 quality inspection or updating the IP or the instructions, we
4 really object to Boeing blaming the human for making a mistake.
5 Does that makes sense, Dan?

6 Q. Yeah, yeah, yeah. I believe, before, I heard the blame and
7 train was a --

8 A. Yeah.

9 Q. -- common phrase around there.

10 A. It's on the blame and train. It had to be very specific to,
11 you know, blame and train, and I think the biggest problem we saw
12 with that was when we saw multiple failures of a process, you
13 know, one guy makes a mistake, that's fine, then, you know,
14 another maybe makes a mistake, now we're going to be wondering and
15 the third time it happens, like okay, stop. You can't just blame
16 and train all 140,000 employees, you need to change your process
17 to implement a control that catches it.

18 And a really good example, and one of my favorites, is we had
19 an airplane, a Copa-9, get delivered with the wrong -- I think it
20 was the rudder, I don't remember what it was, maybe it was a SMYD,
21 I think, John Petruzzelli can remind me. So the stall management
22 yaw damper was installed on the airplane, it was the wrong dash
23 number, it was the wrong part, it was an uncertified part packaged
24 to the 7 and the 10, and when we got the BPSM, it was really well
25 done because they identified the fact that they installed the

1 wrong dash number because they didn't have the correct one, they
2 bypassed the normal IP system using the shipside action tracker,
3 which was a problem, and the final check, when the last inspector
4 at the Seattle delivery center went out to verify the part
5 numbers, he scanned the part number on the barcode and it came up
6 as an error, which he bypassed.

7 So that's the kind of thing that tells me your process
8 control of scanning the barcode to validate that you've got the
9 right part on the airplane is ineffective because the inspector
10 can bypass it. So, of course, they fixed that by removing the
11 ability to bypass. So that's one of my favorite examples of
12 having a process control and process control failing and Boeing
13 identifying that and fixing it. That's why BPSMs are so
14 interesting to us.

15 Q. Great. Just on another kind of general topic was let's just
16 say in the last two, three years when you were with the FAA, how
17 would you characterize the Boeing/FAA relationship, was it, you
18 know, open and honest or was it adversarial or --

19 A. No, it was excellent. I think, you know, we spent a lot of
20 time in the Boeing facilities, in fact, you know, the folks up at
21 Everett, their office is in the Boeing facility, same with
22 Charleston. We had an office in the Boeing facility in Renton,
23 but we moved out of there when we changed the location of the
24 headquarters, just, you know, 15 minutes to get there, and we --
25 you know, we met with Boeing leadership routinely, weekly, twice

1 weekly, sometimes five times a week, you know, Boeing loves their
2 meetings, and --

3 Q. Oh, yeah.

4 A. -- the working relationship between the inspectors and RQSO,
5 which was the group that's required to interface with us, was
6 really, really good. Any time we wanted to go down on the floor
7 and talk to anybody, we could, there's no problem with that. They
8 would get a little testy if we didn't notify them of an audit, but
9 we didn't care. And I think the highlight of the relationship was
10 our working with the folks at the Seattle delivery center, you
11 know, the QA folks, like John and the IUMs, the inspection unit
12 members, probably the most professional folks that I've ever dealt
13 with in the aviation industry. I mean, they really know how
14 Boeing works. If you want to -- and they're not shy, they will
15 tell you anything you want to know.

16 So I used to spend a lot of time at the Seattle delivery
17 center because we were inspecting all the airplanes and issuing
18 airworthiness certificates, and in conjunction with the IUMs, so
19 the IUMs would work with us, inspect the airplanes, and issue the
20 certificates. They knew more about that process than we did
21 because they knew the Boeing system, which is really complex, I
22 can't -- you can't imagine. John Petruzzelli can tell you how
23 complex it is. And you can get lost in it. And the IUMs have the
24 ability to work their way through that system to find the facts in
25 the system, whether it be the right part, the right drawing, that

1 the process is being applied properly, those are the guys that we
2 relied on to navigate and help us navigate through that incredibly
3 complex system, which is really two systems, you've got the
4 Everett and Renton system and then you've got the 8-7 system,
5 which is completely different, just unbelievable. It's like
6 Alaska Airlines and Virgin Airlines coming together, two complete
7 different airlines with completely different systems that is just
8 -- it's mindboggling, but we're past that now, too.

9 MR. MARCOTTE: Right. All right, well, I think that's it for
10 me this round. Thank you very much, Jim.

11 MR. PHOENIX: Thanks, Dan.

12 DR. WOODS: John.

13 BY MR. PETRUZZELLI:

14 Q. Jim, my question that I want to ask you is about the
15 verification optimization, you know, the removal of quality
16 inspections, so there's a couple questions around that. Sticking
17 just with the 3-7 program, do you have an idea of how many actual
18 inspections were removed out of the roughly, what, 6,000 pieces of
19 paper we have for 3-7?

20 A. Yeah, I think -- yeah, I think -- I don't know off the top of
21 my head -- I'm getting some feedback from you, John. I'm getting
22 some feedback from --

23 (Audio feedback.)

24 MR. PHOENIX: That's better. You still there? Okay. Yeah,
25 so we have those metrics because that VO was the subject of

1 whistleblower cases as well as some compliance actions and a legal
2 enforcement case, so the BPSMs for all that stuff had all kinds of
3 detail on how many inspections were removed, and I think we even
4 heard numbers of like 500 and 900 inspectors depending on, you
5 know, who's reporting. So a lot of inspections were removed, so
6 we required Boeing to give us metrics on how many inspections they
7 were putting back in as a result of an enforcement case and we
8 have those numbers, as well.

9 But it did take them a long time to get a lot of inspections
10 back in, you know, the revisions to the IPs, you know, it took
11 them a year or two years to get that back and I'm not even sure if
12 it's all the way back to where it was before.

13 BY MR. PETRUZZELLI:

14 Q. With that, I'm trying to figure out how to word this, how
15 long did that process take, I mean, to get where they were getting
16 back to putting inspections back and to follow with that, what
17 types of inspections were removed?

18 A. Yeah. You know, I don't know exactly what type, I think what
19 they were doing was taking process inspections out and replacing
20 them with the 9-9-9 note which we didn't think was sufficient. It
21 took an enforcement case to get them to see the path forward, if
22 you will. We were really disappointed in their first response to
23 the enforcement case, so we escalated it and I think that's when
24 Carole Murray came around and said okay, we're listening now, we
25 understand what you're talking about and, at the same time,

1 Walt Odisho and Ernesto Gonzalez-Beltran, they left with their
2 Toyota ideas, so that turned around very slowly, I'm going to say
3 it wasn't until after the Max returned to service that we really
4 started to see some inspections come back in, you know. And I
5 think you're probably read over were some whistleblower cases that
6 we did, as well, and I partnered with John Holden and Dan Swank of
7 IAM to work on getting those inspections back and the inspectors
8 back and to that end, that's why we requested or required from
9 Boeing that they give us metrics on that process.

10 Q. How effective was or is, in your opinion, process monitoring
11 for things like bond and grounds, seal, drilling holes, in fact,
12 specifically on the 3-7 program?

13 A. Right. Well, bond and ground, I don't think that was ever --
14 and at least, while I was there, they never really resulted on any
15 program, I think the 6-7 was a huge problem for bond and ground,
16 they were doing process monitoring, we told them to stop; they
17 were doing process surveillance, we told them to stop doing that.
18 I think they've got -- I think they've got bond and ground issues
19 across the board, all levels, because it's a complex process,
20 really, and it's a process where if you don't have quality control
21 watching it, you're not confident that it was done right because
22 you can't go back and test it, you can't go back and see that they
23 actually, you know, scrubbed the area with the proper solvents,
24 you know, treated it properly, did the test, so it's a complicated
25 process for inexperienced people and that's usually who gets to do

1 bond and ground and it's a problem until -- and you don't know
2 about it until you get screen blinking, you know, so you think
3 about the 3-7 problems, which was really engineering, you know,
4 with the cockpit and the grounding and all that, that was -- that
5 was a big failure on Boeing's part, and bond and ground these
6 days, it's so much more important than it was 30 years ago because
7 of the electronics in the aircraft, you know, so it was a big
8 issue for us, lots of compliance actions, you know, lots of
9 voluntary self-disclosures, lots of BPSMs and bond and ground, it
10 just -- it's kind of like FOD, bond and ground and FOD, I think,
11 were two of the things that Boeing just never could tackle and get
12 fixed.

13 MR. PHOENIX: You pushed one of my buttons, there.

14 MR. PETRUZZELLI: I'm sorry.

15 MR. PHOENIX: That's okay.

16 MR. PETRUZZELLI: You know I'm sorry.

17 Yeah. What else? I think that pretty much covers what I was
18 going to ask. Jim, I'm glad you're enjoying your retirement.

19 Sabrina, I'm going to need to jump off, we got a little issue
20 we're trying to deal with here at the field, so I've asked the
21 questions I wanted and heard a lot of them, so I'm good if you
22 guys want to just continue on without me.

23 MR. PHOENIX: Thanks, John.

24 MR. PETRUZZELLI: Thanks, Jim.

25 DR. WOODS: Understood, thank you.

1 Mike.

2 MR. RINEY: Okay, yes.

3 BY MR. RINEY:

4 Q. Hey, Jim. So just one kind of line of questioning from me,
5 you were involved with the return to service after the Max
6 crashes, and Boeing -- or excuse me, the FAA taking on the
7 certificate process from Boeing.

8 A. Correct.

9 Q. Can you explain, you know, what that process was and how you
10 felt like it was going prior to your retirement?

11 A. Yeah, so we -- we retained, that's the correct word, the
12 function of issuing airworthiness certificates for the 737 and
13 then later, the 787, and to my knowledge, neither of those
14 functions have been released back to the ODA. And the 737, we
15 retained that ticketing function because of the issues with undue
16 pressure and specifically, at Charleston and Renton, and also the
17 quality system, so because of the problems with the quality
18 inspections and the general quality system issues that we saw,
19 that's what the letter said that we sent to the Boeing Company
20 retaining the airworthiness certification function.

21 One of the things that we saw was, you know, sometime in 2020
22 they had 450 737s parked that they were going to eventually have
23 to finish building, rework, do a lot of changing work to pull out
24 of the desert and then deliver to the customers, and when you
25 think about how long that was going to take, we did some quick

1 math and it looked like it was going to take two and a half years,
2 but it's taken a lot longer than that, (1) because of China. But
3 I think at the same time, Spirit had 80-some fuselages up in
4 McConnell (ph.) that they couldn't deliver. So the backlog of
5 airframes and parts, and it's not just the fuselage but engines,
6 as well, caused us great concern that Boeing would, you know, go
7 back to their old ways of just pushing those airplanes through as
8 fast as they could and we wanted to control that to some effect.

9 So we couldn't control their production rate at the time,
10 there was no interest in doing that, but we could control how
11 quickly they ticketed the airplanes. So because they were making
12 us mad and we had some enforcement cases going on with undue
13 pressure, leadership and I got together and we said here's what
14 we're going to do, we're going to retain the function code for
15 ticketing and we will ticket five days a week, eight hours a day
16 and Boeing has to have the airplane ready for us between 7:00 a.m.
17 and 9:00 a.m. or it's just not going to get done that day.

18 And that forced them to make sure that their airplanes were
19 really in good condition because their window of opportunity to
20 get the airworthiness certification issued was very short, as
21 short as six hours. And we then put together a program to inspect
22 each airplane because that's not something that we normally do.
23 We do have a production certificate, that certificate allows you
24 to issue a certificate to the airplane without further showing, so
25 you don't -- the FAA doesn't have to look at the airplane, the IUM

1 can look at the airplane and say that's good, we can issue the
2 certificate. So that forced Boeing to make sure the airplanes
3 were clean and it caused us to have four or five inspectors, along
4 with four or five inspection unit members, inspect every airplane.
5 So we would have between two and eight people inspecting an
6 airplane on the last day before it gets delivered and we requested
7 that they open it up, and we have very detailed procedures for
8 what we want to see and what's open and we got pretty good at it
9 after a while.

10 So I think that we ticketed quite a few airplanes, like a
11 thousand when I left, but it's -- I really didn't want to continue
12 that function because my inspectors are supposed to be doing
13 audits in the factory, not issuing airworthiness certificates, and
14 if Boeing provides us 35 to 50 airplanes a month to issue
15 airworthiness certificates to, you can do the math of how many man
16 hours that is and that's how many man hours that took away from us
17 actually auditing the production process.

18 So for three years, I think it was November of 2020 when we
19 started that, so yeah, for three years I lost a lot of man hours
20 to inspecting airplanes and finding a lot of problems, we had an
21 average of five defects per airplane. Some airplanes had zero,
22 some airplanes had 20, some airplanes, we just said okay, you guys
23 need to fix this, we'll be back in a couple days, so that was a
24 real struggle for us.

25 Q. And prior to your retirement, did it feel like Boeing had

1 improved on that process, that the inspections were finding less
2 significant issues and that, in your opinion, did you feel like
3 Boeing would be able to take -- get that right back to ticket the
4 airplanes?

5 A. We were feeling pretty confident towards the end, you know,
6 after about two and a half years. What we saw was a trend of some
7 months airplanes would be really good, other months, they would
8 struggle, and then we tracked all of the findings, of course, and
9 we had two different categories of airplanes, new airplanes off
10 the line that came right off and went right in, those airplanes at
11 first were not very clean, they had a lot of wiring issues, and
12 the airplanes coming out of the desert were better because they
13 were having a lot more man hours.

14 But really, what was happening was Seattle delivery center
15 was working 24/7 to clean all these airplanes up before they
16 submitted them for ticketing and the factory airplanes got better,
17 the storage airplanes got worse because they'd been sitting there
18 for three years or four years in some cases and the worst thing
19 you can do to an airplane is let it sit, you might as well just,
20 you know, crush it up because after four years, you know, there's
21 a lot of stuff on that airplane that needs to get renewed or
22 replaced or -- it's four years old and they're dirty, you know,
23 they've been sitting in the desert for a long time, so it takes a
24 lot of rework to bring those airplanes up to submittable condition
25 and that was on the Seattle delivery center. So

1 Katie Ringgold was very good at saying okay, that's enough of
2 that, I think about a year ago she said you guys need to do all
3 that rework at the storage facility and when you fly it over here,
4 I don't want to see any more open IPs than I would from a factory
5 airplane. So then we started to see that the storage airplanes,
6 the factory airplanes were looking pretty good and that was, you
7 know, probably the beginning of last year, and the trend just kept
8 getting better.

9 But every once in a while something stupid would happen with
10 the aft pressure bulkhead or dagger fittings and it would just
11 knock them back on their butt, you know, because their quality
12 control system didn't always have those improvements moved back
13 into the supply chain. So you can imagine that when, you know, we
14 got the notice on the aft pressure bulkhead with the mis-drilled
15 holes, the first question is who's inspecting these things
16 because, you know, I've been a sheet metal guy since, you know,
17 the late '70s and when we drilled a hole and filled it, somebody
18 inspected it.

19 So, you know, we were really surprised that that level of
20 inspection was either not done properly or not done. So when you
21 have dagger fittings installed by the Chinese supplier properly,
22 but improperly at Spirit, it really begs the question of what the
23 heck is going on at Spirit. You know, we would get the Korean aft
24 pressure bulkhead and the dagger fittings, you know, Section 48,
25 and it was good, but the ones from Spirit was not, so there is a

1 difference in the level of quality between those suppliers. We
2 didn't understand that, we expected that it would all be the same.

3 MR. RINEY: Yeah. Thank you very much for your time. That's
4 all --

5 (Audio feedback.)

6 DR. WOODS: Okay. Troy, are you ready?

7 MR. LEVANEN: Sure. Hello, again.

8 BY MR. LEVANEN:

9 Q. You know, Jim, you covered almost everything that I had
10 intended to ask, and gave a lot of really good information and
11 shout out to Jim Redder, too, I'm a fan of his, in fact, we had to
12 call him back out of retirement recently to help, I think he's at
13 the Boeing facility today.

14 A. Yeah.

15 Q. Oh, you probably knew that.

16 A. Oh, yeah. I know Jim pretty well, you can imagine.

17 Q. Yeah, that's great. And one of the questions I was going to
18 ask you is just from your perspective, on the staffing of the FAA
19 oversight at Boeing Renton when you last were there or in that
20 capacity, would you, like -- it feels like it was -- it could've
21 used more? And I wanted to get your perspective on like how much
22 -- what it would take to have -- what you would consider the
23 proper amount of staffing or better oversight, you know, as we go
24 forward and, you know, in terms of just kind of looking at it from
25 the 30,000 foot view?

1 A. Yeah, that's a really good subject to bring up, Troy, because
2 I thought about that a lot over the years, you know, when I first
3 took over the Boeing CMO, we didn't have very many people, I think
4 we only had two people in Renton, and we just -- you know, you can
5 just imagine what it's like when you have responsibility to
6 oversee a production certificate with a 140,000 employees, 5,000
7 suppliers, around the world, how can you really do justice to
8 that?

9 So I worked a lot with my leadership to try and get the kind
10 of oversight that we needed, but it's very difficult and almost
11 insurmountable and when there are these hot spots of -- frankly,
12 Spirit was a big problem because I don't think people realize how
13 much Spirit does here, that they did the 3-7 fuselage, but they do
14 all the Section 41s for all the Boeing products including the 8-7.
15 So Spirit is a huge chunk of Boeing's production but Spirit does
16 not hold a certificate, so they have no production certificate.

17 So the only way the FAA gets in to Spirit is through the
18 Boeing PC 700, so it's the Boeing CMO that did the audits and we
19 would hand them on to Wichita, as I explained earlier. So you can
20 imagine two people going in to Spirit 12 times a year, which was
21 the minimum, but we would normally go in at least 18, you just
22 don't have enough oversight to do it. So when the problems creep
23 up, you know, like the dagger fitting and the aft pressure
24 bulkhead and that kind of stuff, lots of meetings, lots of
25 discussions, and it always comes back to well, what do we need to

1 do to increase the oversight and the answer is hire more
2 inspectors. Well, I think I hired all the inspectors from DCMA, I
3 may have asked all of them, they wouldn't even answer the phone
4 anymore, but at some point, if you say let's hire a hundred and 50
5 FAA inspectors and put them into Renton so that they can oversee
6 all of the work there, well, you're not going to be able to
7 oversee all of the work with a 150 inspectors in Renton.

8 You can see a lot more, but it's a drop in the bucket
9 compared to the amount of work that goes on there. So, you know,
10 every airplane has, you know, 1700 IPs, what I didn't want to do
11 was become their quality control system. Really, what our role
12 was, in my view, was to oversee their quality system and their
13 production system, I still don't think we have enough people just
14 to do that.

15 But it's Boeing that's responsible for the quality of the
16 product, just like it's the airline that's responsible for
17 operating the airplane, not the FAA, and you really need good
18 quality people building the airplanes at Boeing and good quality
19 inspectors verifying and validating and testing to make sure that
20 what Boeing is building is in accordance with the documents and
21 safe for its intended flight. And you would need a thousand FAA
22 inspectors if you wanted to oversee everything on behalf of Boeing
23 and I think that's why it kind of rubbed my fur the wrong way a
24 little bit when we ended up ticketing those airplanes for three
25 years, we ended up being Boeing's quality control and that's just

1 not oversight, if you will. We should be doing oversight of them.
2 And I think that something like, you know, when the door plug
3 comes off, to be able to detect that and prevent that as an FAA
4 inspector, you'd have to be there in the middle of the night when
5 the Spirit contractor is doing that work undocumented and I think
6 if you were standing there, you may not even understand that or
7 detect that, so you know, that's just my opinion. Does that make
8 sense, Troy?

9 MR. LEVANEN: Yeah, it actually does, it totally does, and
10 those are good analogies to help put it in perspective for the
11 rest of us with the 144,000 and then 5,000 suppliers and just like
12 you say, 24/7 with a huge operation like that. Okay, I think
13 that's all I have for now, thank you very much.

14 MR. PHOENIX: Oh, just a comment to you, Troy, is one of the
15 things that I initiated probably three years ago at Boeing was an
16 ASAP program and you know the power of that, right? And the FAA
17 does not have guidance for an ASAP program in a production
18 certificate holder. So we just made it up, basically, and we
19 partnered with the IAM, Jon Holden and Dan Swank, to start an ASAP
20 program because we believed it was more effective than Boeing's
21 internal Speak Up because you have the triumvirate, you've got the
22 power of the FAA along with the bargaining unit and the company to
23 agree on a corrective action, whereas with the Speak Up program or
24 the classic employee reporting system, it's the company that says
25 yea or nay, we're going to fix this or we're just going to, you

1 know, do some lip service to it. So to me, you know, being in
2 Flight Standards for so long and working with Alaska's ASAP
3 programs, I think you guys had six of them, you know, I just think
4 they are the most effective way of understanding what is happening
5 in the system, on the flight line, in the cockpit, in the hangar,
6 there's just no better way to get that information.

7 It's better than voluntary self-disclosures because, again,
8 those are filtered through the company and, you know, the company
9 is always trying to put the best face forward to the FAA, but the
10 ASAP program, I think, is critical and it finally kicked off last
11 year, we entered into a tri-party agreement with Boeing and I
12 assigned two inspectors, almost full time, to that ASAP ERC.

13 So I think right now what I don't see from the FAA is clear
14 guidance on how an ASAP program can work effectively in a
15 production certificate holder and I think that's something the FAA
16 needs to step up and revise AC 120-66 or create a new AC to get
17 ASAP programs into not just Boeing, but all PC holders. So, off
18 my soapbox, thank you.

19 MR. LEVANEN: Hey, thanks, thanks for that on the ASAP, that
20 -- yeah, I've been part of ASAP for, you know, 15 years in some
21 capacity or another and at this point just an oversight role and I
22 see the value of it, too, I especially see the value of the
23 sole-source reports, so yeah, thanks for bringing that up and
24 thanks for taking the time with us today.

25 MR. PHOENIX: Yeah, no problem, Troy. Thanks.

1 DR. WOODS: Bjorn, I still got you?

2 CAPT. ANDERSON: Bjorn is still here.

3 BY CAPT. ANDERSON:

4 Q. Hey, Jim. Hey, I have questions about BPSM and when --
5 earlier you said that some of the trends that were identified by
6 Boeing to the BPSM are failure to follow -- or they were
7 identified as training and as it was -- just to clarify, was it as
8 that -- those findings and the risk rating was shared with the
9 FAA, was it the FAA's clarification that it was actually failure
10 to follow process?

11 A. No, we always used the Boeing root cause analysis because we
12 wanted to use their own information against them, if you will. We
13 didn't really use it against them, but we wanted to take away any
14 belief that we came up with the root cause because we can't do
15 that, we're not the company that manages the system. We want to
16 use their data, that way there's no argument, and we just show
17 them their own data and say what are you doing about it.

18 Q. Yeah, that makes sense. And what changes or policies,
19 practices, et cetera, did you see, was addressed related to
20 failure to follow process in your contact with Boeing?

21 A. I think a lot of what we tried to get them to do was install
22 process controls and, you know, that came from my time at the
23 airlines because you know how the airlines work, right, you got
24 16,000 people every day that have to make the right decision the
25 right way, the right time, and whether it be the fueler or the

1 mechanic or the cockpit crew or the flight attendants, they need
2 to make the right decisions many, many times a day, it's critical,
3 lives are at stake, and that's why you have such robust process
4 controls in an airline. In the Boeing Company, they just build
5 airplanes, they don't think about the end effect very much, I
6 mean, I know they do to some extent but it's not so immediate, you
7 know, it's not like, you know, a cockpit crew not setting the
8 flaps properly and they get an immediate effect from that, so
9 that's why process controls are so important.

10 So I tried to get Boeing to understand that when they had
11 failures like humans making mistakes, right, that's a very broad
12 brush of failure to follow process, lack of awareness, fatigue.
13 When you've got human in the loop, you need to have very robust
14 and effective process controls and if you think you do and the
15 process fails or the human fails, you need to go back and look at
16 the process again, that's part of SMS, a huge piece of SMS.

17 And I think Boeing learned from Alaska Airlines how to use
18 fishbone charts and all the other SMS tools to understand that
19 their process may have failures in it and that's what we saw, we
20 saw them bringing SMS activities into the process, doing SRMs,
21 doing SRAs when they had failure and when I left, I was on another
22 soapbox saying listen, you need to move those SMS activities, the
23 SRAs, the SRMs, up front, to the design changes, to the changes to
24 the procedures, to the changes to the IPs because if you don't
25 change, everybody gets good at it but when you introduce change,

1 that's when risk increases and that's when you need to do an SRM
2 to determine whether or not you've created another problem. So,
3 you know, they've only been doing SMS for about two or three
4 years, it takes a long time to mature, but that's what we were
5 expecting to see, that the root cause corrective action and the
6 BPSM generated a safety risk management activity so that they
7 could fully understand the process, understand the failures in the
8 process and implement process control, so they were learning all
9 of this and I think they're still learning it.

10 Q. Um-hum. Yeah, thanks. Another risk-associated question is
11 the experience level and at Boeing, as the experience level
12 continued to decline, what did you see was -- with the contact
13 that you had, what did you observe to see any changes to training
14 or practices to address the declining experience level at Boeing?

15 A. I think they really struggle with that, Bjorn, you know, I
16 think that, you know, they struggle to hire people, first of all,
17 to get them in the door, and then they struggle to, you know, get
18 people trained to have the level of skill necessary to build an
19 airplane, which is a really high level of skill, in my opinion,
20 you know, not just the drilling and filling, but also the
21 management of the systems, you know, the testing, this testing of
22 all of the systems was complex and it was always complicated by
23 out-of-sequence work or different tools or even different builds.
24 You can imagine that the Alaska -9 going down the line is
25 significantly different from the 737-7, which they built 35 of,

1 you know, so it's complicated and it's even more complicated by
2 their work instructions and their need to go to drawings, so you
3 have to be very fluent in the Boeing business process systems, all
4 the documents that control the processes, all the drawings and all
5 of the -- and you have to have the experience and the knowledge to
6 put it all together. So to train somebody up to where they're
7 proficient probably takes years, so they're really faced with that
8 bow wave.

9 And they put a lot of effort into it, they put a lot of
10 resources into it, but honestly, I don't know the solution to
11 having a tremendous amount of experience walk out the door to be
12 replaced by inexperience. So you can imagine, you know, you're in
13 the flight operations organization, right, Bjorn?

14 Q. Yeah, that's correct.

15 A. Yeah, so if you lost 30 percent of your captains, you'd be in
16 trouble.

17 Q. Right.

18 A. So that's basically what you're looking at, at Boeing, maybe
19 more than 30 percent.

20 Q. Wow.

21 A. Over the past four or five years, since the VLO in 2019, I
22 think is when that was.

23 CAPT. ANDERSON: Um-hum. Okay. Thanks, Jim, that's all I
24 have for this round.

25 MR. PHOENIX: Sure.

1 DR. WOODS: Okay, that leaves me.

2 MR. PHOENIX: Okay.

3 BY DR. WOODS:

4 Q. I'm going to take questions in a slightly different direction
5 because, again, I'm human performance and so my focus is on that
6 and you've already kind of, between you, I think, and the latter
7 part of Troy and Bjorn, teed me up nicely. I want to talk about
8 what was your level of involvement in, essentially, constructing
9 Boeing's voluntary SMS program?

10 A. I think I was key in all of that, I was the person who was --
11 I was hired into the Boeing CMO based on my experience with SMS
12 and Flight Standards, and one of the things that the leadership in
13 aircraft cert -- really wanted to see was a robust SMS at Boeing
14 and that was put into a settlement agreement, a 2015 settlement
15 agreement, that Boeing needed to implement SMS by the end of the
16 settlement agreement, which was December of 2020, and four years
17 into that, you know, in 2019, I recall looking at the progress
18 that they had made and decided that it was woefully inadequate.

19 And I had a conversation with Boeing leadership and my
20 leadership and essentially, I just kind of, you know, threw down
21 the gauntlet and said look, if you want to do this, you got to
22 quit messing around and really do SMS. Now, keep in mind at the
23 time, the FAA had draft guidance on what an SMS looks like in a
24 production facility. In an engineering, in aircraft cert, they
25 didn't have even approved guidance, not sure they do yet. So they

1 didn't have very good guidance and what I brought with me was what
2 it looked like at an airline. So it was a bit of a -- it was
3 difficult to explain to Boeing what we expected to see, what I
4 expected to see, and when I met with them in April of 2019 and our
5 leadership, I said listen, you know, you're going to fail this
6 settlement agreement if you don't get a working SMS that we can
7 accept -- and they understood the comment and they went out and
8 hired some expertise, really smart move on their part, they went
9 and hired Al Madar from American Airlines, who is their SMS guru,
10 and he knew, he understood what I was talking about because he
11 came from a very mature SMS environment, and very quickly we all
12 agreed that Boeing was just not doing it.

13 So within six months they poured in this tremendous amount of
14 resources and money and hired some experts and put together an SMS
15 program that would work but by no means was mature, so by December
16 2020 we were able to accept their SMS plan.

17 Q. So were you part of the team that was a part of the
18 acceptance process?

19 A. Yes.

20 Q. So I know you said you had experience coming from Alaska,
21 correct, so you had Part 5 experience in a Part 121 operation, but
22 that's unique to your experience, what about the other people in
23 the organization at the time, were there others that had the same
24 level of experience that you had, on the FAA side, looking at
25 Boeing?

1 A. No. There were some that had participated in or were aware
2 of SMS back in 2012 when there was talk about production
3 certificates but it never made it into Part 5, so nobody in
4 aircraft cert, engineering or production, really paid any
5 attention to it because it wasn't needed or necessary or -- I
6 mean, they had all kinds of other things to do, so --

7 Q. So recognizing the fact that I understand that you retired
8 and that you retired late last year, but that's changed now, so
9 the new rule is in effect and there will be an implementation
10 period, but you still -- the FAA still has an oversight
11 requirement there, so how do you suppose that gap will be bridged
12 in the oversight's ability to regulate and oversight SMS in
13 Boeing?

14 A. Yeah, so great question and I'm going to go off a little bit
15 in a tangent here because there's -- when we talk about oversight,
16 we talk about oversight in aircraft certification service, you're
17 talking about the production certificate and aviation safety
18 inspectors, manufacturing, they go in and do oversight of the
19 manufacturing and the production.

20 Certification engineers in the FAA don't do oversight, in my
21 opinion, they do certification, so the way it works is the
22 engineer is sitting at his desk and here comes a project to
23 certify and they see what the company has done and they're
24 involved to a certain level and the engineer will certify that
25 design or that engineering. With the ODA, with the delegated

1 engineering, the engineering unit members look at the design from
2 the Boeing Company and the engineering unit and the ODA approve it
3 and when you've got engineers in the FAA that used to be in the
4 BASOO, now moved to AIR-580, who would do oversight of the ODA
5 engineers. Okay, so you've got oversight of engineering from the
6 BASO, from the -- just of the ODA, but the regular FAA engineers
7 in the aircraft certification service don't really do oversight,
8 they do certification.

9 Okay, so there's a big difference in understanding oversight
10 in aircraft cert between engineering and production. So we've
11 always done oversight in production, never really did much
12 oversight in engineering unless it's oversight from ODA. Now, if
13 you go read all of the FAA orders and guidance on engineering and
14 production and oversight, you'll see what I'm talking about, that
15 engineers do cert, if you want them to do oversight they're
16 probably going to push back a little bit until you convince them
17 "that's your job."

18 So when you talk about oversight of SMS, well, SMS is the
19 whole bowl of wax, it's the entire production system, it's design,
20 engineering, production, so who's going to do oversight of that?
21 Well, the production guys are good with it, you know, hey, we've
22 been doing oversight all along, we can do some oversight of SMS,
23 we'll go and watch them do a safety risk management activity or
24 we'll watch them do an SRA or we'll watch them do root cause
25 analysis and we'll record that in ACAIS and we did that oversight,

1 what about the engineering SMS? So that is something that's new
2 to the FAA, Boeing, GE, Pratt, all those production facilities.
3 All of those engineering organizations have to understand what SMS
4 means to them and when you think about when do you do an SRM, you
5 do it when you change something, right, that's when you introduce
6 risk and that's required in the whole life cycle of SMS.

7 So when Boeing changes the design of the Triple Seven and
8 creates the Triple Seven-X, the first question the FAA inspector
9 says is show me the SMS, show me the SRM. Well, they don't do
10 SRMs when they change the design of the Triple Seven. They tell
11 you, they tell me, that it's embedded in their engineering
12 processes, that they do design reviews and on and on and on and
13 on, which is all true, but is that SMS and that conversation has
14 been going on for at least two or three years.

15 But again, you're dealing with FAA engineers, FAA engineering
16 management, Boeing engineers, engineering management, and when you
17 start talking about doing SRMs for every change, the man hours
18 start to calculate in their brain and they start to realize not
19 only do they have to do system safety assessments now as a result
20 of the rule and the law, but now these FAA people want us to do
21 SRMs, what is that, why? So that conversation is going on within
22 Boeing between their safety management system department and their
23 engineering folks and it's an interesting conversation to watch,
24 so there's a lot to unpack there, but it's going to take years for
25 Boeing to mature their SMS to where you will see an effect. Right

1 now what people are saying is oh, you had a failure, you got to do
2 an AD, now we got to do some SMS on the AD, which is way too late,
3 in my opinion. So we've been trying for the last couple years to
4 get them to push it up front, when you change the process in
5 production, when you change the manufacturing/engineering
6 procedure, when you change the tooling is when you do the SRM, so
7 that's my SMS soapbox. They're making progress very slowly.

8 Q. In your experience, what's the interface supposed to be like
9 between QMS and SMS?

10 A. QMS is the quality system, SMS is safety management. So the
11 quality system needs to function properly to produce a quality
12 product, the airplane. Safety management systems looks at the
13 risk inherent in the process, so if you change something in that
14 production system, you've introduced risk that the airplane won't
15 be built properly for some reason, whatever. So the SMS is
16 looking at severity and likelihood of the risk in the process and
17 that's why I say it goes back to the beginning.

18 If Boeing was still building, you know, the 707, they'd be
19 really good at it by now, with no changes, zero changes, they know
20 how to do it, they know where all the rivets are. Boeing doesn't
21 do that, they change every single airplane they build. When you
22 think about Southwest Airlines buying 737-8s, they're all the
23 same, but really, they're not. There's a lot of changes through
24 production, so many that a lot of times the airplanes, when they
25 get to the delivery center, have to go through change

1 incorporation, so a change that was made has to be incorporated
2 into this new airplane that's already built before it can be
3 delivered. So because of all of the changes, they have a high
4 level of risk and that's what SMS is supposed to detect. The
5 quality management system just makes sure that it's built
6 according to the blueprints, to the drawings.

7 Q. Up to the day you left, how confident are you that Boeing has
8 the people that they need to understand, perceive, and implement
9 this in place?

10 A. I think they've got the people they need to implement it, but
11 they've got a long road ahead of them in bringing it into their
12 systems. And here's my favorite analogy, do you remember cockpit
13 resource management?

14 Q. Yes.

15 A. CRM, right? A lot of us old folks remember CRM because it
16 was the hot topic. Thirty years ago, CRM was what it was all
17 about, CRM, it was in all the airline training, folks had to teach
18 CRM, they had books on the shelf all about CRM, there was a lot of
19 documents, and what do you hear these days? Nothing. Nobody
20 talks about CRM because it's ingrained into the way the airline
21 works, it's ingrained into the system that the cockpit crews use.
22 You can't imagine being in a modern U.S. airline cockpit without
23 CRM being completely indoctrinated into everything you do, that's
24 the way SMS will be someday. It's just going to be ingrained into
25 -- you won't be talking about those guys over there in the SMS

1 department, it should be the entire enterprise and that's one of
2 the things Boeing has done is they've got an enterprise-wide SMS,
3 so they're trying to make the SMS the same whether it be the
4 Boeing Starliner or the military or commercial airplanes, which
5 makes sense, it needs to be the way they work. Going to take a
6 while.

7 Q. What fundamental aspect of, at the time, Boeing's voluntary
8 SMS do you feel was, I guess, ahead of the others, the most on
9 track at the time you left?

10 A. I think the employee reporting system is pretty good, when
11 they -- they really put some energy into Speak Up and I kind of
12 use that as a springboard for the ASAP program because when you
13 look at the airline SMSs, most of them use ASAP as their reporting
14 system function of their SMS, of their Part 5 SMS. It makes
15 sense, it's very powerful, you get a lot of data from it. Boeing
16 still has an employee reporting system that's not, you know,
17 entirely like an ASAP with the three-legged stool.

18 So I think that, you know, they really put a lot of effort
19 into the reporting system, so that was good. They put a lot of
20 effort into developing safety risk management activities and
21 pushing that down into the business system as much as possible,
22 but the organization is so big and complex that when you ask
23 questions like okay, so is Spirit doing SRMs, you know, you get a
24 blank stare because they're a supplier and there's no requirement
25 for suppliers to do SRMs even though they're supplying

1 significantly huge parts of the airplane, right? And we know they
2 can make mistakes, we've seen it. So those are the kinds of
3 things that still have to be developed, you know, maybe they've
4 been developing the last five months that I haven't been there,
5 but that's why I say it takes a long time because it's a huge
6 organization.

7 Look at how long it took the airlines to get good at SMS and
8 if everybody puts their hand on their heart and -- at the airlines
9 and says yeah, our SMS is good to go, it's mature and this is as
10 good as it's ever going to be, it's just not true, I mean, they
11 continue to grow, and some airlines do SMS better than others and
12 they all know who they are. I did spend six months as a principal
13 maintenance inspector with Southwest Airlines, which was very
14 eye-opening, very different from Alaska Airlines, the culture's
15 very different.

16 Q. So conversely, and you kind of already touched on it, but for
17 clarity's sake, when you left, what fundamental aspect of the SMS
18 gave you pause or even reason for concern prior to leaving?

19 A. Engineering, engineering. I don't think they believe in
20 their hearts that they need SMS. I think -- I like to use the
21 word arrogant in some cases. Engineering has a lot of processes
22 that need improvement, significant. Configuration control is a
23 big issue and that's engineering. I mean, you can talk about
24 people going out and putting their own parts on the airplane,
25 those processes are controlled by engineering processes, and boy,

1 we see a lot of spreadsheets, you know, it's just -- that's always
2 scary, right?

3 Q. Two more questions, really. Would it surprise you that in
4 going to QMS, sorry, the manual, as it stands, that under the
5 section pertaining to escapes, it doesn't mention human error
6 once?

7 A. No, I don't think that would surprise me because when I think
8 about escapes -- I don't even like the word escape because it
9 sounds like, you know, the quality problem got away somehow, well,
10 somebody released it, basically. So, you know, the airplane is
11 supposed to be 100 percent inspected, so there isn't anybody
12 trying to break out of jail, it's somebody failing to do what
13 needs to be done or a process failing, which is basically the same
14 thing.

15 If a process fails, their quality system should detect that
16 and fix it, they've got auditors, they should be auditing all of
17 these issues, you know, even before they become failures. So if
18 their quality system really functions perfectly, unlikely, they
19 should catch these things and fix them and put into place robust
20 fixes that introduce process controls that account for human
21 failures because humans, we love them, but they fail.

22 Q. And then the last question I have for you is, again, having
23 walked out the door a few months back now, how would you define
24 and describe -- let's just stick with the 737 production line --
25 Boeing safety culture?

1 A. Yeah, that's interesting. You know, safety culture is
2 probably not something that's at the front of their mind because
3 when you talk about Boeing safety, they think about falling off
4 the stands, they don't think about producing an airplane that has
5 a defect in it that could somewhere down the road trip up the
6 airline operating it and cause a problem. What I think about
7 culture is the culture to do things right, the culture to follow
8 the processes, and when I talk to people at Renton and at the
9 Seattle delivery center a lot, I describe it like this, culture is
10 defined by your group and your lead at that level, your lead
11 mechanic.

12 So if you are, say, part of the wing/body drilling group and
13 there's eight of you and you're drilling holes in the wing and
14 putting fasteners in, and you have a lead that's basically
15 responsible for your work and the work of your team and you do
16 something like a shortcut or you don't de-burr it and somebody
17 else notices it and doesn't call you out, maybe not even your lead
18 but maybe it's your coworker and he doesn't say wait, that's not
19 how we do things, you got to go back and de-burr that, that's the
20 culture being set right there, live. It's not Stan Deal or Carole
21 Murray, you know, in an all-hands meeting, it's what your lead
22 lets you get away with and if you get away with it, it's just like
23 my Golden Retriever, just got retrained, you know, that quick. So
24 if the culture is in the team, whether it be in the hangar at
25 Alaska, everybody knows what everybody's doing and unless you're

1 really trying to hide it actively and typically, people don't,
2 it's what's tolerated and if the lead or your coworkers won't
3 tolerate that crappy work or that slipshod or, you know, even
4 throwing that stuff on the ground, then that sets the culture and
5 I think that's where -- that's what I've experienced.

6 You know, growing up in the airline business, people expected
7 certain things of me that I expected things of them and if it
8 didn't meet my expectations, I would say something and if I was
9 afraid to say something, now we're setting the culture again.

10 If I see one of my friends, you know, saying something about
11 something he didn't like and then getting, you know, some kind of
12 retaliation, that's setting the culture, that's what concerns me.
13 And how do you know what that is? You got to be there. You got
14 to listen to the whistleblowers.

15 Q. Do you feel it's the FAA's responsibility to be there and to
16 listen to the whistleblowers?

17 A. Yes. I used to be there, I used to go to the Seattle
18 delivery center not just to ticket jets, but to go talk to the
19 IUMs and ask them what the heck's going on, how's it going. And
20 they all knew me and I knew them, and I would work right alongside
21 them inspecting the airplane and then I'd get into conversations
22 with them, just -- and they would talk, right? It's not like I
23 was interrogating them. You just have to have a conversation, you
24 know, we can talk about racing or something like that, but next
25 thing you know, you're talking about the Renton factory and what

1 came over last week and why all the rework is being done, so --
2 and I would ask them, I'd say so what do you think, you think
3 things are getting better and they would say well, what do you
4 mean, getting better, and that would open up the conversation.

5 I'd say well, you know, the airplanes coming over from Moses
6 Lake, you know, we saw that one -- and then the whole conversation
7 goes, the next thing you know, you got three guys standing around.
8 So I think that, to me, is something I learned a long time ago
9 from the FAA guy, he said, you know, Jimmy, you got to get out
10 there and feel the airplane and see what's happening in the real
11 world, you can't just be in your office, so --

12 DR. WOODS: Okay. Well, that is it for me for this round.
13 We have been going well over an hour and 40 minutes, so --

14 MR. PHOENIX: Typical Boeing meeting, in my experience.

15 DR. WOODS: So I am going to offer up a break, who's feeling
16 it, who needs one at this point? Usually the second, by the way,
17 the second round is much shorter, just follow-up questions, so how
18 are we feeling?

19 MS. LIPE: Sabrina, I'd just ask to take a short one because
20 I do have some follow-on meetings --

21 DR. WOODS: Okay.

22 MS. LIPE: -- so if we could take like five minutes.

23 DR. WOODS: Okay.

24 MR. CRUZ: That's fine, I'm good with that.

25 DR. WOODS: Do we need a break?

1 MR. CRUZ: Yeah, let's take five minutes.

2 DR. WOODS: Okay. All right, with that, we'll -- you will be
3 the cue, I'm going to go off record at 14:51 Eastern time.

4 (Off the record at 3:51 p.m.)

5 (On the record at 3:56 p.m.)

6 DR. WOODS: We are going back on record at 15:46 Eastern
7 time. Okay, with that, we're back over to Pocholo.

8 BY MR. CRUZ:

9 Q. Jim, thank you very much, a lot of good information you're
10 providing, so I'm probably going to be skipping around quite a bit
11 and maybe ask you additional more details. When you were a
12 manager, you mentioned a SAT, do you consider SAT a Boeing
13 production record when you were the manager?

14 A. Not officially. A Shiplside Action Tracker is just to try to
15 get some attention to an issue that should already be properly
16 documented in accordance with all the BPIs and BPGs. So I know
17 that we had some issues with, you know, them trying to use SATs to
18 do things and one of the issues with a configuration problem on an
19 airplane resulted from using a SAT to put the wrong part on the
20 airplane, so a lot of issues around that.

21 Q. Okay. Have you ever used or maybe documented a SAT as an
22 example in an LOI or anything like that?

23 A. Probably on a compliance action, but I don't have a specific
24 recollection of any one.

25 Q. Okay. And I'm just trying to understand, there's a couple of

1 acronyms that we heard and I'd like to know what your take is. An
2 EIR.

3 A. Yeah.

4 Q. A CMP and an LOI.

5 A. Right, so an LOI is a letter of investigation that we would
6 issue telling the company that we're going to investigate. That
7 LOI could result in a number of things including a letter of no
8 action or an enforcement investigative report, that's the EIR, and
9 sometimes people say legal enforcement, but in my opinion they're
10 all legal, but what they really mean is a legal enforcement
11 resulting in a civil action or civil penalty. So they're all
12 clearly filled out in 2150.3 and aircraft certs guidance on how
13 you implement each one, so --

14 Q. Okay. And are you familiar with a CMP?

15 A. Compliance action.

16 Q. Okay, is that a Boeing term or is that an FAA term?

17 A. That's FAA slang, really, because a compliance action can be
18 either an informal compliance action, which you call an ICA, or a
19 total compliance action, which we call an FCA, and Flight
20 Standards uses the same tools, but they may use different acronyms
21 or slang for them.

22 Q. So if there's an investigation on Boeing, because Boeing
23 records not necessarily an LOI or an EIR, they report it as a CMP
24 when it becomes a -- some type of action that the FAA is taking,
25 correct?

1 A. Right, right.

2 Q. Okay.

3 A. But they will have -- they track all of them, they track the
4 informals, the formals, compliance actions, VDRs, and what they
5 call LOIs, which are really EIRs.

6 Q. Okay.

7 A. So when we do a legal enforcement action, when we escalate
8 from a compliance action, because things typically start out as a
9 compliance action unless it's really egregious, we would
10 immediately issue an LOI which would result in a legal enforcement
11 action. It becomes an EIR when we enter it into the Enforcement
12 Investigative System, the EIS, which Rebecca knows all about, I'm
13 sure, because she's legal, and that is when they become an EIR,
14 but an LOI doesn't necessarily result in an EIR in every case if
15 we close it with no action.

16 Q. Okay.

17 A. It's pretty rare. We also close them administratively, which
18 is very common. So in other words, it's a legal enforcement
19 action because it's at that level of egregiousness and Boeing does
20 some really great work, fixes the noncompliance, and we're happy
21 with what they've done and that it's going to be okay in the
22 future and we would close up with a letter of correction and
23 that's closing it administratively.

24 Q. Okay. Right. So specific to -- I know you mentioned to Nils
25 that you have very little experience with mid-exit doors. Do you

1 recall, at the time that you were the manager, who at Boeing would
2 typically work the mid-exit door plugs?

3 A. No.

4 Q. Okay.

5 A. No idea.

6 Q. And at the time, were there any issues with regards to
7 traveled work?

8 A. Yes.

9 Q. Can you kind of explain your experiences at the Boeing
10 production line with regards to traveled work?

11 A. Early on, in 2019, the -- they had so many problems with
12 traveled work because for a while they couldn't even get engines,
13 so they were having airplanes going down the production line
14 missing major components like vertical stabilizers, and that was a
15 decision they made because -- not because they didn't have
16 vertical stabilizers, but because they didn't have rudder PCUs,
17 the power control unit, so they wouldn't put the vertical up until
18 they had the rudder power control unit so they could put the
19 rudder on and then put the vertical up.

20 So they didn't want to install rudder and PCU on the vertical
21 when it's installed on the airplane, so these airplanes would go
22 down through Flow Day 6 with no verticals, that's what it was like
23 in 2019 during what we would call crutch and chaos, they couldn't
24 get engines, so they had 50 or 60 airplanes sitting on Renton
25 field that could not be flown to paint or to Boeing field because

1 they didn't have engines, they couldn't get them from CFM. At one
2 point it got so bad, they ran out of space on Renton that they
3 would fly the airplanes to Boeing field, remove the engines, truck
4 them back to Renton and fly the next airplane over, I mean, it was
5 just ridiculous how bad it was.

6 And that was a real issue with 2019 to 2020 and then, of
7 course, with the production shutdown, the suppliers shut down
8 because Boeing couldn't take the parts and at the same time we had
9 COVID come in and the VLO and lots of other things came together
10 for the perfect storm of not being able to get all the parts you
11 need to produce the airplane in the flow day that you needed to
12 put the parts on the airplane.

13 So as a result, tens of thousands of items of traveled work
14 that we could track, we could see airplanes going out the door of
15 the factory with a thousand or two thousand open items and all
16 that rework would get done outside the factory, so it was just --
17 it was really chaotic and it took them a long time to catch up and
18 we had a lot of compliance actions and enforcement cases, a couple
19 of those that reflected the fact that they needed to decrease
20 traveled work case. The DOT OIG last year, when they came in, we
21 talked a lot about the improvements in traveled work and the
22 airplanes were lined up at the door Flow Day 9, ready to go out,
23 with only three or four hundred items on them, that was a huge
24 improvement. Of course, the DOT OIG were like are you kidding,
25 the airplane's not done, but you know, you had to be in that

1 mindset of where they were three years ago, it was just chaos.

2 Q. What about traveled work from Spirit to Boeing?

3 A. Yeah, lots of that. Not just the 3-7, all the Section 41s.
4 You know, the 8-7s would go to Charleston and Everett with
5 traveled work. Wings would come from Mitsubishi in Japan for the
6 Triple Seven with traveled work. Traveled work came from
7 suppliers all the time and along with that sometimes came the
8 notice of escapes from suppliers, which was really a big problem
9 for Boeing.

10 Q. Okay.

11 A. I think you guys are figuring out by now that it's a very
12 complex system.

13 Q. Yeah, I think this whole group, just so you know, obviously,
14 I think the majority of us are more airline operation type work,
15 right, maintenance --

16 A. As am I.

17 Q. Yeah. And learning the Boeing production system is very eye
18 opening, right, and basically had to start from scratch as far as
19 the type of work, the type of documents that they use, so it's --
20 it's definitely eye opening. So you mentioned -- and this BPI is
21 a big issue, obviously, with regards to --

22 A. Fifteen eighty-one.

23 Q. -- 1581.

24 A. Right.

25 Q. Boeing has provided data about a lot of issues with regards

1 to 1581 being revised for the last 10 years.

2 A. Yeah.

3 Q. How they made changes here based off of DDRs and LOIs and
4 CMPs through the past 10 years. Boeing, as you mentioned, has a
5 hard time getting a handle on this particular BPI within the
6 production system. Do you know why Boeing is having such a hard
7 time -- granted, it's complex and there's a lot of moving parts
8 and all that stuff, do you have an opinion on why Boeing can't get
9 a handle on fixing the BPI, not just on the 3-7, because we're
10 seeing -- they provided data that shows all production lines have
11 1581 issues with regards to removals. In your opinion, why are
12 they having so many issue with regards to this BPI?

13 A. So not just production, but storage. So when you have 450
14 airplanes, 450 737s and 150 -- 115 787s in storage for years at a
15 time, all of those airplanes will have removals generated,
16 thousands, tens of thousands of removals, and now you've got
17 people who have never worked in the production system out at Moses
18 Lake and Victorville and San Antonio and on the ramp up at
19 Everett, maybe they're A&P mechanics, ex-airline, maybe they're
20 contractors, wherever they're from, they're not familiar with the
21 Boeing system and they haven't read BPI 1581, or they've read it
22 and they don't understand it, or they've read it and they
23 understand it, but they don't have time or they're under pressure
24 to just take the parts off and put the parts on without properly
25 documenting each removal in accordance with the requirements of

1 BPI 1581. I would say go down to the floor at Renton and
2 interview 30 mechanics at the mechanic level about 1581, you're
3 probably not going to be satisfied with the answers that you get.
4 They may be confused on when they have to write a removal or if
5 they have to write a removal or what a proper removal looks like
6 and then even if the removal gets written, they may not get good
7 instructions to carry out the reinstallation. It's a basic
8 BPI, it's not that complicated to read and understand for you or
9 I, but I don't think people understand the importance of it. And
10 then you add into that not just all the storage airplanes, but all
11 the traveled work and the suppliers and the vendors that, I think,
12 even now can't really supply all the parts, so you know, traveled
13 work creates removals and supplier functionality and ability to
14 provide parts creates traveled work. I think it's something that
15 Boeing's been dealing with for a long, long time.

16 Q. Yeah, I mean, it's obvious, based on the data that we've
17 received from Boeing.

18 A. Sure. I'm sure you've seen some things.

19 Q. Yeah. So do you know -- I know that you've already had
20 discussions with Boeing or the FAA has had discussions regarding
21 this BPI, is there a reason why, in your opinion, the FAA cannot
22 get Boeing to fix this issue once and for all?

23 A. Well, I would say the same thing about FOD or bond and
24 ground, these are problems that it's like world hunger, it's so
25 complex and it's so prevalent within their system that to fix it,

1 I wouldn't pretend to know the solution to fix it --

2 Q. Yeah.

3 A. -- except for getting people to follow their procedures, you
4 know, and that's really hard to do when you have a whole bunch of
5 humans out there.

6 Q. Yeah, because I'm -- based off of discussions with the FAA
7 that we've interviewed, and I know they've done stand-downs since
8 the accident with regards to -- and I'm sure, based off of what
9 you've read that they've basically talked about removals and
10 everything like that, but based off the conversations that we've
11 had with the FAA, even though it's been six months out or five
12 months out, they're still finding issues of removals during their
13 audits. Recent audits, I should say. So --

14 A. So there's two things, Pocholo, I think that when we talk
15 about removals, it's really two pieces. There's the removal --

16 Q. Yeah.

17 A. -- like of the MED, it's the reinstallation, I think, is
18 where the concern is. So if you don't have a removal then all
19 bets are off, you know, you're never going to get it back
20 installed because there's nobody putting it back in and there's
21 nobody inspecting it. But the part that really concerned us was
22 the reinstallation of that part, did the removal get lost, did the
23 removal not be -- was it not documented thoroughly, entirely, or
24 maybe one part was documented but the other three parts that the
25 guy at the takeoff as well did not get documented. And then the

1 reinstallation instructions were a huge concern. We did not like
2 the way they wrote the reinstallation instructions because a lot
3 of times it was simply put the stuff back on, whereas if you're
4 pulling out all of the avionics in the Section 41, you need to run
5 the whole EGT again and they wouldn't do that, they would only run
6 the tests for the parts pulled out, maybe, if they know what you
7 pulled out because these are engineers writing removal
8 instructions in an office someplace, not at Moses Lake.

9 So they're going off of what the documentation said, which
10 may not match what really happened, which may not give you enough
11 instructions, as a mechanic, to complete the reinstallation
12 process and perform the required tests. So you think about
13 pulling out the P91 and what does that affect? Well, it affects
14 everything in the cockpit, you need to run the entire EGIT (ph.)
15 test process to really know that everything is still working okay,
16 but that isn't what we always saw. So there were a lot of
17 concerns about removals, I mean, a lot, yes.

18 Q. Yeah, I mean, from our standpoint, obviously, I'm sure you've
19 seen, the FAA has seen removals not being documented right or like
20 you said, the removals are documented but the reinstallation is
21 still missing a lot of instructions --

22 A. Right.

23 Q. -- that should be there, right?

24 A. Right. Like the dagger fittings, when they had that problem,
25 you know, you had to remove the vertical stabilizer from a

1 completed airplane to replace the dagger fitting, so you had to
2 pull the galleys out, you know, a huge amount of removals just to
3 get to these two dagger fittings, then you had to put it all back
4 in, including the vertical stabilizer and the galleys and the
5 hydraulic system and the flight control system and all of that
6 stuff, it was just -- it was incredible how much work you had to
7 do to 85 airplanes.

8 Q. Um-hum, okay.

9 A. And when you look at the 8-7, the JVT, the joint verification
10 team, have you guys gone and looked and seen what that entails,
11 removing all the production brakes in the fuselage? So you're
12 taking the fuselages back apart, including the nose, the pressure
13 dome, replacing that, Spirit does that, they remove and replace
14 the pressure bulkhead on all the 8-7s and they take all the
15 fasteners out of the body joints, production body joints, 46, 48,
16 47, and check for shimming, re-shim them, reinstall all the
17 fasteners.

18 It's an insane amount of work on an airplane that's built and
19 flown, they fly them from Victorville up to Everett to take them
20 apart. When I went up there and looked at that, I just -- it's
21 just insane, the amount of work, it's crazy. All of that stuff
22 has to come out so you can take the production barrels apart. So
23 you start thinking about 1581 again, just wondering how they do
24 it, you know, it's just -- it's crazy.

25 Q. Okay. Another subject that we're looking into is what do you

1 recall -- what is Boeing's process with regards to supplier assist
2 and warranty work?

3 A. Yeah, so that was on the commercial side more than what we
4 would get involved with. I think there were some interesting
5 things going on in Renton that I ran across where if there was a
6 problem with a certain component on the fuselage, that wasn't
7 Boeing's responsibility and Boeing would call Spirit and say hey,
8 you know, you need to come and fix this problem on the fuselage
9 and, in fact, Boeing does delegate engineering and design
10 responsibility for some components of the aircraft to Spirit, so
11 if they needed MRB support for like Stringer 18, if there was
12 damage to it, they would have to call Spirit to get MRB approval
13 for their fuselage, which was a really interesting contractual
14 relationship.

15 Q. Um-hum.

16 A. But again, that was outside the QMS and outside our purview,
17 but it was really interesting to us that, you know, Boeing
18 delegated their design/engineering responsibility to a supplier
19 that doesn't hold a certificate, so we just looked at it as
20 Boeing, we don't care what's on the side of the truck, whoever's
21 working on that airplane, it falls under their production
22 certificate.

23 Q. Well, you may have answered, I guess, my next question is do
24 you know whether typically the suppliers would be allowed access
25 to -- would they have to get Boeing to open access panels or

1 assemblies that have already been put together or are they allowed
2 to do it themselves?

3 A. I think they're allowed to do it, depending on what it is, it
4 just depends. And I don't really know the strict answer to that
5 question --

6 Q. Okay.

7 A. -- but I suspect in some cases they can. You know, like MHI
8 makes the center section for the Triple Seven, so MHI people would
9 come over and fix problems and I don't know if they had to gain
10 access or not.

11 Q. Okay. You mentioned about the ASAP program and how you put
12 together the three-legged thing, it's better than the Speak Up
13 that Boeing has, what's currently -- where is that situation at
14 with Boeing?

15 A. So we have -- we have a tri-party agreement, which is an
16 agreement between the FAA, the IAM 751 machinists in Washington
17 state, not Charleston, and Boeing on the Event Review Committee
18 and the -- I forget what they call it exactly, but it's a
19 tri-party agreement, so certain reports coming through Speak Up
20 would be reviewed by that ERC, the representatives from the FAA,
21 Boeing, and IAM and they would say this is interesting to us, we
22 want to accept this report into the ERC, whatever it is, and they
23 would look at the report, investigate, and agree on a corrective
24 action as an ERC, just like in an airline ERC.

25 Q. Um-hum.

1 A. But, you know, it's really new and we had to train our folks
2 to what an ASAP was because there just wasn't any experience in
3 the production world of how an ASAP works. Now, if you go to the
4 airlines, you know, very mature, right? They even have
5 non-bargaining unit ASAPs, so you know, like for ground folks and
6 everything, and those work really well and in my opinion, it's the
7 best source of safety data in the airline industry and it's just
8 -- you can't get better information on what's going on out there
9 than from the ASAP.

10 Q. Is there something similar, you said this was just in Renton,
11 is there something similar in South Carolina or any other Boeing
12 facility that --

13 A. No, because South Carolina is nonunion and we didn't have a
14 bargaining unit to work with, but my plan, and it may still be the
15 plan, is to get a non-bargaining unit ASAP program going on down
16 there just like you see in the airline side with ground handlers
17 and those --

18 Q. Yeah.

19 A. -- kinds of things. You know, Alaska has an ASAP program for
20 all of their Part 91 pilots, so I think you can expand it, but
21 again, FAA AIR-600 policy division needs to move forward on
22 getting some clearer guidance for these production certificate
23 holders on how to develop an ASAP as part of their required SMS
24 because that's what the airlines do.

25 Q. Is that already written as far as a guidance is concerned or

1 there's still -- it still needs to be written?

2 A. Still needs to be written. I've talked to people in AIR-600,
3 that's our policy division --

4 Q. Yeah.

5 A. -- that we need ASAP guidance and they say yeah, sure,
6 whatever, you know, and we'll get back to you, because I didn't
7 really have any authority, right, I couldn't send them an LOI and
8 get (indiscernible), you know, but --

9 Q. Yeah.

10 A. But I think that the leadership understands, it's just there
11 are so many big issues going on with FAA policy with all the
12 congressional activity that they're having a hard time writing
13 policy for the engineering side, you know, and certification, that
14 my little problem pales in comparison, so --

15 MR. CRUZ: Understand. All right, Jim, thank you very much
16 for all the information.

17 MR. PHOENIX: Okay. Yeah. You bet, Pocholo.

18 (Pause.)

19 MR. CRUZ: Nils, you're muted again.

20 (Crosstalk)

21 MR. PHOENIX: -- I don't miss that at all.

22 BY MR. JOHNSON:

23 Q. Well, I think I was muting myself on purpose and then I turn
24 the camera on and don't remember to turn the microphone on.

25 Anyway, one follow-up for you. At Everett there are -- it seems

1 like more authorizations or qualifications for people who do
2 skilled jobs, like the door crew, for example, in Everett has a
3 qualification and the door crew in Renton does not.

4 Do you see that as a negative, positive -- I'm just trying to
5 understand how -- it seems like it would work better at Everett,
6 but I don't have a basis for that opinion, so I'm curious what
7 your thoughts are.

8 A. Well, tongue in cheek, I think, Nils, you're seeing a symptom
9 of Boeing, I mean, that is typical Boeing. Everett might as well
10 be in China as far as Renton is concerned. There really are three
11 different ways of working between Renton, Everett, and Charleston,
12 not just the union thing, but Everett is a whole different world,
13 they've always been wide body, they got their own processes and
14 procedures, and if you're talking about 8-7 in -- Everett does a
15 completely different world even from the legacy models in Everett.

16 So you've got many, many different documents depending on the
17 different models, so you have a document for drilling and filling
18 wing skins on the 8-7, which is a completely different BPG or PBI
19 for Renton, so it's just typical Boeing, you never know. And it
20 does cause them problems when sometimes they need people to come
21 from Everett, because there's no work up there for whatever
22 reason, down to Renton to fill in and there are two different
23 cultures clashing.

24 MR. JOHNSON: All right. Well, Jim, thank you so much for
25 your time.

1 MR. PHOENIX: Yeah, you bet, Nils.

2 MR. JOHNSON: Matt, you're up, if you're on. I believe
3 you're on.

4 MR. RIGSBY: Hey. Hey, I'm back on.

5 BY MR. RIGSBY:

6 Q. Thank you, Jim, again for your time.

7 A. Sure.

8 Q. Are you sure you're enjoying your retirement?

9 A. Well, it's not for the faint of heart, it's a tremendous
10 amount of work because all those things you've been putting off,
11 they all come to roost, let me tell you --

12 Q. Okay.

13 A. -- seven days a week.

14 Q. Did you, did somebody -- did the FAA put somebody with you to
15 mentor, you know, to -- that you could mentor and help do a
16 turnover with and if so --

17 A. Yeah.

18 Q. -- who's that person?

19 A. Yeah, my managers, you know, Margaret Langsted, Mike Hager,
20 Bryan Kilgroe, Sue Kerekes, we were in each other's pocket 24/7,
21 you know, they were very professional, very experienced, very
22 knowledgeable about Boeing system, very dynamic, and there just
23 isn't anything that any one of us knew that the others didn't know
24 very quickly.

25 Q. Okay.

1 A. We worked very cohesively. And when I gave the PI role to
2 Brian, when I did the divestments from Boeing, you know, he took
3 it and ran with it and we still communicated every single day,
4 obviously, sometimes I would call him up at 5:30 in the morning on
5 the way down to Boeing field, it would be 8:30 his time and just
6 whatever's happening was happening and we'd get Margaret on the
7 phone or Sue, so yeah, I think it was pretty seamless.

8 Q. Okay. And this is maybe a little bit of an opinion question,
9 but one PI for Boeing, is that sufficient?

10 A. Well, it's kind of like how many inspectors do you need for
11 Boeing?

12 Q. Yeah.

13 A. You know, when you look at the Alaska Airlines team, we had
14 80 people in the CMO and I think, at the time, Alaska had
15 20,000-some employees, so you put that ratio to Boeing and now
16 you're multiple orders of magnitude larger and you become FDA
17 chicken inspectors, you know, inspecting each rivet instead of
18 relying on Boeing system.

19 So I think it's a -- it's a conversation I've had many, many
20 times and I think the one PI means that's the person who Boeing
21 interfaces with at the top, so that's what the PI role at Boeing
22 is. When things aren't going well down below, the PI is where the
23 buck stops and the PI calls Stan Deal, at the time, and says,
24 "Stan, it's got to stop," you know, and you don't even have to say
25 "or else" because my experience with Boeing leadership was all I

1 had to do was call them up and they'd stop whatever it was. It
2 didn't fix all the problems on the floor, but they always gave me
3 the response and then the follow-through that I expected. So I
4 have a lot of respect for Boeing's leadership and I cannot imagine
5 what it's like to head an organization like commercial airplanes,
6 not even the entire Boeing system, it's just got to be insane.

7 MR. RIGSBY: Okay. Okay, I think I'm done. Thank you, Jim.

8 MR. PHOENIX: Thanks, Matt.

9 DR. WOODS: All right, Dan.

10 MR. MARCOTTE: All right, yeah, thank you. Actually, Jim, I
11 don't have anything else for you on the second -- second round,
12 thank you.

13 MR. PHOENIX: Okay. Thanks, Dan.

14 DR. WOODS: Okay, Jim, well, we lost John a little while
15 back, so we're going to skip to -- actually, Mike, did we lose
16 you, as well?

17 MR. RINEY: I had to drop off my computer but I did call back
18 in and I do not have any additional questions, either.

19 DR. WOODS: Okay. Thanks, Mike.

20 Troy?

21 MR. RINEY: Thank you.

22 MR. LEVANEN: Hey, nothing else for me, either, appreciate
23 all the information today, it's been a really good conversation,
24 thank you.

25 DR. WOODS: Yeah.

1 MR. PHOENIX: Okay. Thanks, Troy.

2 DR. WOODS: All right, it looks like me, just concluding.
3 For the most part, you've answered all my questions, as well, but
4 I do have two questions, well, really maybe just one question for
5 you given that you are now retired, but I always ask everybody
6 that we talk to, so make sure if anybody has anything else left,
7 this is your one chance, feel free to interrupt me, but in the
8 interest of time, Jim, again, thank you for having the time to
9 talk to us, we really appreciate it, you've been a wealth of
10 information.

11 BY DR. WOODS:

12 Q. Having said that, you knew -- thank you, Rebecca, for giving
13 me a heads up -- that we wanted to chat with you and you know what
14 we're up against and you know the conversations that we've been
15 having involving this case, what is the one thing that you really
16 want this particular working group to take away from your time and
17 your experience providing oversight and regulatory guidance for
18 Boeing?

19 A. So there's a couple things. First of all, you know, when I
20 worked with the Boeing folks, you know, from the leadership all
21 the way down to the guys on the floor and specifically the IUMs,
22 you know, very professional and I don't think that anybody I
23 interfaced with ever went to work there to do something bad or to
24 make a mistake and I think they're very proud of what they make
25 and I believe that the airlines are very happy with the

1 performance of the airplanes when they're working right, when
2 they're built right, because it's hard to replace, you know, the
3 fuel efficiency of an A321 or a 737 Max with anything that came
4 before it, it's a really important product for our airline system,
5 it's a good airplane.

6 It has had its problems, there's no doubt about that and
7 unfortunately, Boeing has been the cause of some of these
8 problems, but Boeing people are very proud of it and during the
9 past few years, couple of years during all the bad press, I've
10 seen the effect of that on those people working there and it's
11 devastating in some cases. They take it very seriously, they're
12 humans like you and me and I know that my team, when I worked at,
13 you know, the CMO, they took it very seriously.

14 They are consummate professionals and if they weren't, they
15 wouldn't last very long because it's a complex system and they
16 work really hard to understand how it all works and relates, but
17 it's just huge, it's just unimaginably complex. And the second
18 thing I want to say is Marshall Anderson at the DOT OIG came to us
19 over a year ago, opened up an audit of our oversight he came with
20 six or seven people. They had spent a year understanding Boeing
21 and our oversight of it and if anybody has better insight than
22 they do, I don't know who it is, because they're -- they really
23 got into -- they spent a lot of time at Boeing, they interviewed
24 all of the inspectors and engineers of the CMO, they've done a
25 tremendous amount of work to understand what's going on, you need

1 to talk to Marshall, Marshall Anderson. He -- I don't know if
2 he's allowed to, you know, Rebecca's probably rolling over right
3 now, but they know more than I do about the effectiveness of our
4 oversight, so if you have any questions about that, that's what
5 they're doing, they're auditing the effectiveness of our oversight
6 on Boeing's production system. I would certainly at least try to
7 give him a call, see if they're willing to share anything more
8 than what I shared, but -- and I think that's it.

9 DR. WOODS: Okay. Well, again, we appreciate that, thank
10 you. I'm going to give a last chance for anybody, unmute yourself
11 and pop on if you have anything more and seeing none, all right,
12 Jim, we're going to let you get back to your retirement and enjoy,
13 hopefully, the rest of your day. I am going to log out of this
14 recording and go off the official record at 15:31 Eastern time.

15 (Whereupon, at 3:31 p.m., the interview concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9 MAX
IN-FLIGHT STRUCTURE FAILURE
NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of James M. Phoenix

ACCIDENT NO.: DCA24MA063

PLACE: via teleconference

DATE: June 5, 2024

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.

Karen D. Martini
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *
Investigation of: *
*
ALASKA AIRLINES BOEING 737-9 *
MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063
FAILURE NEAR PORTLAND, OREGON *
ON JANUARY 5, 2024 *
*
* * * * *

Interview of: CHARLES PRIOR, FAA Senior ASI, Boeing Supplier
Spirit AeroSystems

via Zoom videoconference

APPEARANCES:

SABRINA WOODS, Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ, Aerospace Engineer Investigator
National Transportation Safety Board

NILS JOHNSON, Maintenance Investigator
National Transportation Safety Board

BJORN ANDERSON, Representative
Air Line Pilots Association

DAN MARCOTTE, Investigator
Boeing Air Safety Investigations, Southern California

JOHN PETRUZZELLI, Representative
International Association of Machinists Union

MIKE RINEY, Onsite Representative
Spirit AeroSystems, Washington

MATT RIGSBY, Accident Investigator, Party Coordinator
FAA Office of Accident Investigation

TROY LEVANEN, Director of Maintenance and Eng Safety
Alaska Airlines

REBECCA LIPE, Representative for Witness
FAA Office of Chief Counsel

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I N T E R V I E W

(12:17 p.m. ET)

1 DR. WOODS: Good afternoon. It is 12:17 Eastern Time. My
2 name is Dr. Sabrina Woods, and I'm a human performance
3 investigator with the National Transportation Safety Board. Along
4 with Pocholo Cruz, I am co-leading the manufacturing and Human
5 Performance Working Group for accident investigation number Delta-
6 Charlie-Alpha-2-4-Mike-Alpha-0-6-3, involving Alaska Airlines
7 Flight 1282.
8

9 The NTSB is Congressionally mandated with determining
10 probable cause in transportation accidents and significant
11 incidents and with promoting transportation safety. We cannot do
12 this on our own, however. What we have here in this virtual
13 meeting are the parties to the investigation that help inform that
14 process.
15

16 So, you have every right to know who it is you're going to be
17 talking today, so at this time, I'm going to have each individual
18 person introduce himself to you with a brief background and, more
19 importantly, who they're representing, so you know who's here in
20 the virtual meeting with us. We're going to start out with
21 Pocholo.

22 MR. CRUZ: Good morning, Chuck. My name is Pocholo Cruz.
23 I'm with the NTSB, and, like Sabrina said, I'm co-chair to this
24 particular group. I'm an aerospace engineer with a structures and
25 maintenance background.

1 DR. WOODS: Okay. Nils?

2 MR. JOHNSON: Good morning. Nils Johnson. I am an aviation
3 accident investigator for the NTSB, and my specialty is
4 maintenance.

5 DR. WOODS: All right. Next up is Bjorn.

6 CAPT ANDERSON: Okay. Good morning, Chuck. I'm
7 Bjorn Anderson. I'm a captain with Alaska Airlines representing
8 the Air Line Pilots Association, and I have an aviation
9 maintenance background for about the last 30 years.

10 DR. WOODS: Okay. Dan?

11 MR. MARCOTTE: Good morning. My name's Dan Marcotte. I'm an
12 air safety investigator for Boeing, and I'm based on Southern
13 California.

14 DR. WOODS: John?

15 MR. PETRUZZELLI: Can you hear me?

16 DR. WOODS: Yeah.

17 MR. PETRUZZELLI: John Petruzzelli. I am representing the
18 International Association of Machinists. And I also work at
19 Boeing as an aviation maintenance technician.

20 DR. WOODS: Okay. Mike Riney?

21 MR. RINEY: Yeah. Good morning, Chuck. My name is
22 Mike Riney. I am with Spirit AeroSystems. I am a representative
23 in Washington at the Boeing facility.

24 DR. WOODS: Thank you. And Matt Rigsby?

25 MR. RIGSBY: Hey, Chuck. Matt Rigsby. We've talked, so -- I

1 work for the FAA Office of Accident Investigation and a party
2 coordinator for the door plug accident.

3 DR. WOODS: And last is Troy.

4 MR. LEVANEN: Okay. Good morning, Chuck. I'm Troy Levanen.
5 I'm the director for maintenance and engineering safety at Alaska,
6 and I've been with the airline for about 34 years.

7 DR. WOODS: Okay, thank you. So, that's it. That's
8 everybody here that's going to be chatting with you today. And
9 again, we appreciate you being here. We're here for you to share
10 your insight as a member of the Regulatory and Oversight Team for
11 the Boeing Commercial Airplane Company.

12 To capture that insight, we will be using a digital recorder.
13 After the interview, we will send that recording out for
14 transcription, and the party members will have an opportunity to
15 review it to correct for any typographical errors. We do not
16 change the content. Once we receive the certified copy back from
17 the transcriber, it will go forward to be a matter of public
18 record in the docket for this investigation.

19 Each of these party members will have a chance to ask
20 questions. We're going to ask them one at a time. And then,
21 there will be a second round, with the opportunity for each person
22 to ask follow-up questions as they see fit. Please answer all the
23 questions your best of your ability, but just recognize that, I
24 don't know, is a perfectly acceptable answer. If you don't know
25 the answer, just say so. We'll move on.

1 If you are unclear or the question is confusing in any way,
2 please ask for clarity, because we're going to do the same with
3 any answer that we may not understand. And if at any time you
4 realize that you want to go back and re-address something, or you
5 misstated something, or want to correct, just please feel free to
6 do so. Although we will go one at a time in an order, you can
7 move back and forth along the timeline as you see fit.

8 As an FAA representative, or representing the FAA, you are
9 entitled to one representative of your choosing. The FAA has
10 provided legal Counsel for that. So, I just need to get on record
11 that you understand that you have a representative here and that
12 she is here in your best interest, and that you accept this
13 representative.

14 MR. PRIOR: Yes, I understand.

15 DR. WOODS: All right. Thank you.

16 With that, Rebecca, if you would please introduce yourself
17 for the recording?

18 MS. LIPE: Rebecca Lipe, FAA Office of Chief Counsel.

19 DR. WOODS: Excellent. Thank you. Thank you for being here.
20 And as Counsel, just please recognize that this is an interview
21 and not a deposition, so please refrain from interrupting the
22 process or attempting to answer on behalf of your client.

23 But with that being said, however, Chuck, if at any time you
24 need a break just to take a walk, go take care of something real
25 quick, or to confer with your legal Counsel, please do not

1 hesitate to say so. We'll pause the recording, we'll go off
2 recording, we'll take the break as long as you need; and then,
3 we'll come back on, we'll start the recording, and we'll resume
4 the process. So, are there any questions about any of that?

5 MR. PRIOR: No questions.

6 DR. WOODS: All right. I'm going to presume that everybody
7 is ready to begin. Please jump in if you are not ready. And with
8 that, I'm going to turn off my camera, and we're going to hand it
9 over, and we're going to start questioning with Pocholo.

10 INTERVIEW OF CHARLES PRIOR

11 BY MR. CRUZ:

12 Q. Good morning, Chuck.

13 A. Good morning.

14 Q. I guess, for the record, could you please state your first
15 name and spell your last, please?

16 A. Yes. My name's Charles Prior. My last name is spelled
17 P-R-I-O-R.

18 Q. Okay. And who do you currently work for?

19 A. I work for AIR-583. That's the supplier systems oversight
20 section.

21 Q. Okay. How long have you been in that position?

22 A. Specifically assigned to AIR-583 since October of '23.

23 Q. Okay. And then, prior to that, who did you work for within
24 the FAA?

25 A. I worked for the Wichita Certificate Management Section,

1 which was the MIDO section at the time; and now, certificate
2 management section. I started in 2014, and just recently switched
3 over to AIR-583.

4 Q. And who is your current supervisor at 583?

5 A. Sue Kerekes, Susan Kerekes.

6 Q. Okay. Can you briefly describe your professional background
7 before getting to the FAA, please?

8 A. Yes. I joined the Air Force in '85. I spent 20 years in the
9 Air Force as an aircraft mechanic. During that time, I received
10 my Airframe and Powerplant certification. I worked for Textron,
11 which was Cessna at the time, briefly as an A and P mechanic,
12 Airframe and Powerplant mechanic. From there, I also worked at a
13 machine shop as a production manager for machining. I worked for
14 Defense Contract Management Agency, working safety of flight
15 closures and installations for the 747s for Boeing Depot
16 maintenance over in Wichita. And then, shortly after that, I
17 joined the FAA.

18 Q. Okay. As an FAA inspector at Spirit, how is your work
19 program put together?

20 A. So, we have an order, 8120.23, that specifies, based on risk
21 and resources, how often we audit for production certificate
22 holders like Boeing. There's normally a minimal amount of
23 supplier control audits that we do, but I believe we do beyond
24 that at Spirit. We currently do one audit a month. It's actually
25 a month-long audit at Spirit. So, in other words, we do 12

1 recorded audits at Spirit each year, supplier control, for Boeing.

2 Q. Is there an automated work program that's been generated
3 based off of risk, or is it your supervisor that develops the work
4 program for you? How does that work?

5 A. So, the supplier control audits are selected by AIR-500.
6 Since they have the piece production approval holder oversight,
7 they assign supplier control audits to each section based on risk.
8 And as the Spirit is on the higher level for what they do, 737,
9 787, triple-7, 67 production, it's been decided AIR-500 wants that
10 many audits done at Spirit. So, that's how it's set up. As far
11 as the work itself, supplier control audits are based on the
12 production side. We do product audits, mainly, on each section,
13 as we're out there.

14 Q. And you also do audits of Spirit suppliers?

15 A. Yes, we do subtier suppliers. That's what we call them. So,
16 we are also handed -- we don't really call them hand-offs. We're
17 just assigned, because we're in 585, we're assigned supplier
18 control audits at various subtier suppliers in Wichita, Kansas,
19 Tulsa, Oklahoma, and also some other areas, Kansas City area,
20 Saint Louis area. So, those are the ones we're normally assigned
21 outside of Spirit.

22 Q. When you're -- okay. And so, how do you know which specific
23 subtier suppliers you're going to? Is that dictated by AIR-500?

24 A. Yes. Just recently, for fiscal year '25, it was requested
25 that we do multiple supplier control audits. The AIR-500 selects

1 which suppliers they want us to go and do oversight of, so
2 we'll -- it's put into a system called Aircraft Certification
3 Audit Information System, ACAIS. That's where it's assigned to
4 the individuals. And then, we map out the monthly schedule, the
5 yearly schedule; and then, we go conduct the audits.

6 Q. Okay. Prior to fiscal year '25, let's say, were there any
7 audits done on Quik Tek, by any chance?

8 A. No, not to my knowledge, that I performed, at least.

9 Q. Okay. So, there may be other ASIs that could perform your
10 job, basically?

11 A. Yes. All the ASIs assigned in Wichita also conduct supplier
12 control audits not specifically for AIR-500 at this time. Before
13 the switchover to AIR-500, our office in Wichita would do handoffs
14 for AIR-500, or the Boeing CMO at the time.

15 Q. Okay. Do you know before September of 2023, were there any
16 audits on Quik Tek?

17 A. Not to my knowledge, no.

18 Q. Okay. Okay, could you please run me through a typical day
19 for you once you have an audit that you need to do when you go
20 into the factory or wherever you need to go specifically, I guess,
21 to Wichita, I guess --

22 A. Yes.

23 Q. -- to Spirit?

24 A. Yes. So, we normally do an in-brief with the companies, both
25 Boeing and Spirit. They attend an in-briefing. We talk about the

1 fact that we're there to do a Boeing supplier control audit, so
2 we're auditing Boeing, their flow-down requirements. In other
3 words, if they have a contract or a purchase order that they flow
4 down to their supplier to meet the requirements of their
5 engineering. So, we do the in-briefing. We usually walk the
6 floor. Spirit is quite a large facility. They also, do they
7 triple-7, 67, 87 41 sections, they do the 737 fuselage, so Plant
8 2. That's the largest facility where they -- the largest amount
9 of production in one area.

10 So, we usually walk the floor, and while we're on the floor,
11 we look at all the other requirements that are for Boeing:
12 handling and storage, housekeeping, FOD checks, all those types of
13 inspections, as we're walking. We call it a GEMBA walk. We call
14 it a floor walk. But all those things are intertwined with the
15 main objective, which is a product audit. So, while we're out
16 there, we select a product audit that we want to accomplish. We
17 normally gather all the data for that product audit, all the
18 drawings, all the requirements.

19 And then, we go back out, we select that product, we
20 interview individuals that actually perform the work for assembly
21 and inspection, the inspectors and the assemblers or mechanics.
22 While we're out there, we ask questions about their work, how they
23 get their data, where they get their data, what tools they use.
24 We do review of certified tools, sealants, you know, sealant
25 dates, and those kinds of things that go along with the audit.

1 Because the product audit itself entails quite a bit of
2 information as far as what the requirements are and how they apply
3 the engineering requirements.

4 Q. So, when you do your audits at Spirit, who's your point of
5 contact at Spirit typically?

6 A. At Spirit, they just recently changed. Tina Leep is now my
7 specific point of contact on a daily basis, so we have what they
8 call escorts, people that stay with us throughout the audit. So,
9 that's my main point of contact right now.

10 Q. And what is her position at Spirit?

11 A. She's part of the global quality team at Spirit.

12 Q. Okay. So, can you describe for me what Spirit's quality
13 system -- what type of quality systems that they have in place?

14 A. So, when we're talking about a quality system, we actually
15 look at Boeing's quality system, which is based on 21.137. Now --

16 Q. Okay.

17 A. -- because of their flow-down requirements, Spirit compliers
18 with AS9100 as a standard for their quality system. So, normally,
19 when they're giving us information, it's based on AS9100 standard.

20 Q. Okay. And what is the 9100 standard, then?

21 A. It's the standard of quality systems. In other words, how
22 you set up your quality system, what areas are important to
23 maintain and address throughout the entire production system. So,
24 AS9100 obviously is very extensive, but it's just another quality
25 standard that they use as their basis. So, speaking specifically

1 of quality systems --

2 Q. Yup.

3 A. -- when we talk about quality systems, we're looking at
4 Boeing's quality system; and then, from there, how Spirit is in
5 compliance with what Boeing flows down to them through their
6 contract.

7 Q. So, is there a specific manual that they have to say, this is
8 how we're going to adhere to Boeing's quality system?

9 A. Yes, there are several procedures and forms of documentation.
10 I don't remember what the POL stands for. It's an acronym they
11 use. But normally, they have procedures that break down each
12 thing. They also follow Boeing's BACs, and those are like [REDACTED]
13 and different BACs that Boeing flows down to them. So,
14 ultimately, they're complying with Boeing's requirement, like I
15 said, AS9100 being one of those quality system standards that they
16 are required to follow or adhere to.

17 Q. Will they also adhere to Boeing's BPI process, do you know?

18 A. I am not certain of that. I would have to know what the
19 acronym is.

20 Q. Okay.

21 A. Boeing process inspection, maybe?

22 Q. Yeah.

23 A. I'm not certain.

24 Q. Yeah. Yeah.

25 A. Yes, I'm almost certain that they are, yes. If it's flowed

1 down through the contract or the subcontract information, purchase
2 order notes, that kind of thing. I don't know specifically,
3 though, how they comply with it. If it's spelled out in the
4 contract, then it would be a definite part of the requirement.

5 Q. Okay. And typically, how does Spirit deal -- how do they
6 examine trends within their production system; do you know?

7 A. No, I don't know.

8 Q. Or do you know whether they do or they don't; do you know?

9 A. I would say, yes, they do. The information that I get comes
10 from Boeing, so if I have a question, I would ask Boeing, how does
11 your supplier do this? How do they accomplish, you know, looking
12 at trends, or how do they react to the supplier evaluation records
13 that you give them based on our noncompliances?

14 Q. Okay. So, I know there's been a lot of talk about travel
15 work when the fuselage leaves Wichita and heads to Boeing. Have
16 you seen quite a bit of that type of issue with the fuselages back
17 around September of 2023?

18 A. I've seen some. I know they've made improvements, and that's
19 based on my being assigned to Boeing and Spirit since 2017. In my
20 first few years, you know, they worked through the process. There
21 were FOD issues and that kind of thing associated with travel
22 work. So, they've slowly tried to improve that. The only thing
23 they haven't been able to control is parts shortages. Those kinds
24 of things seem to drive the travel work more than anything else.
25 When I ask the question, why is there travel work in this place,

1 well, we had a parts shortage. We couldn't install it at this
2 point in time, so we had to wait.

3 So, I don't know if that has been resolved or if it's gotten
4 better as far as parts shortages, but yes, I believe the trend has
5 gone down, just from my observation. I don't see as much of it,
6 and I know they try to control it in specific places where FOD is
7 tightly controlled, because they don't want work travelled into
8 those areas, seal bay (ph.) being the major area. And the end of
9 the line where they go on the rail car, they don't want travel
10 work in that area, if possible.

11 Q. Okay. Just a quick question. Are you the only one that
12 looks at the set that's assigned to the 737 line? I forgot to ask
13 that question.

14 A. No, I'm not --

15 Q. Is there another ASI?

16 A. So, we have one ASI that's specifically assigned to 737.
17 We've divided up the facility. My main assignment is 787 and 767.
18 And the other person is assigned to 737, and triple-7, and --
19 let's see. Triple-7. Well, I've got 67, also. I don't think I
20 mentioned that. But 67, 87, and -- are my main focus, but we have
21 one person that's really assigned to 37, although we cross over
22 quite a bit simply because of what the work requires or what the
23 driving force may be. So, I spend a lot of time on 37, though.

24 Q. Okay. Yeah, because when you said that, it kind of caught me
25 off guard, because, I've probably told Matt, is, we would

1 obviously want to talk to somebody that worked for 737 --

2 A. Yes.

3 Q. -- Boeing --

4 A. Yes, I work the 737 --

5 Q. Okay.

6 A. -- pretty much continuously since January. I've been on 787,
7 because I do -- we all try to get around to the different models
8 as much as we can, but, you know, there are different outside
9 driving forces that will cause us to focus our attention on 737,
10 which has happened in this case since January. So, I've spent, I
11 would say, probably 80 percent of my time on 737 program since
12 then.

13 Q. Okay. Since there's a bunch of you working at Spirit,
14 overseeing Spirit, do you guys get together and talk about the
15 issues that you guys are finding based off of --

16 A. Yes.

17 Q. -- your audits?

18 A. Yes, we do. We have a running list of noncompliances that we
19 find, and it can -- and they vary. So, we're all -- we meet
20 pretty much weekly. It depends on where everyone's at at the
21 time. As you know, we have audits outside of Wichita, outside of
22 Spirit. So, yes, as often as we can, we're all aware of what
23 other ASIs find while they're on site.

24 Q. And do you -- obviously, there's an issue with regard to this
25 particular door plug. Have you seen any issues within Spirit with

1 regards to installing/rigging of the door plug?

2 A. The door plug specifically, no.

3 Q. Okay. You mentioned that with regards to FOD and issues such
4 as that. Do you see any issues with regards to, I guess, mechanic
5 work, and their type of work, and the process that they have as
6 far as their quality of work, whether they're bucking rivets or
7 not? Had you seen any type of issues like that previously?

8 A. So, the way we address any concerns there is, we'll write
9 noncompliances for actions taken by the mechanic or the inspector
10 during that process. So, specifically, if they have a torque
11 wrench that, let's say, out of certification, that would be an
12 instance of a noncompliance, that they're using an uncertified
13 tool, or they're using outdated sealant, or any of those kinds of
14 things while they're doing the work. So, use of the torque
15 wrench, for instance, how they use it. Like, are they calculating
16 their torque based on your offsets and things of that nature? So,
17 if we have issues where they're not meeting a requirement, then
18 we'll write a noncompliance, and I know there have been
19 noncompliances written for those types of instances.

20 Competency is another one that we will write. If someone
21 cannot get to their engineering data, that it'll state in their
22 production order, you know, do this according to engineering data,
23 and it doesn't give them any other information, then we ask them
24 to show us what engineering data they're working from. And so,
25 competency would be written if they cannot get to that information

1 or they can't show us.

2 Q. And so, that basically is around workmanship issues, then,
3 right, with regards --

4 A. Yes.

5 Q. -- to the product, right?

6 A. Yes. And --

7 Q. Okay.

8 A. -- like I said, I can state that there have been
9 noncompliances around those issues.

10 Q. So, recently, the issue of document removals have been --
11 obviously is what we're looking at with regards to this specific
12 incident or accident. Do you see anything like that within the
13 Spirit production system?

14 A. I've only been involved in one instance where there was
15 undocumented work, not necessarily a removal. Someone was
16 installing something that wasn't documented. That's been probably
17 five years ago or so, and that was -- in those instances, it's
18 going to be something that we'll have to just be standing in that
19 place or talking to that specific person at that time, because
20 undocumented means we're not aware of it. So, we would have to
21 talk to an individual while they're working, and we do. We walk
22 the floor, ask people what work they're doing, what they're
23 accomplishing, and then to show us their data for what job they're
24 working, what they're clocked to, basically. So, that would be
25 the only way we would know, other than the one instance where I

1 happened to be standing somewhere where someone was doing work,
2 and when I asked the questions, it wasn't documented. But that's
3 one time since 2017, so --

4 Q. Okay. Has there ever been -- when you write an LOI for
5 something that you have found at Spirit, does that go to Boeing,
6 or does that go to Spirit?

7 A. Goes to Boeing.

8 Q. Okay. And to your knowledge, what's Spirit's record
9 retention policy?

10 A. Their record retention policy is flowed down from Boeing,
11 because they don't have their own specific policies or procedures
12 that the FAA looks at. We have oversight over the production
13 certificate holder, the production approval holder, which is
14 Boeing.

15 Q. Yes.

16 A. So, they flow down those requirements. So, they would be the
17 same as Boeing's. Certain parts are 10-year, 5-year, but most of
18 what they do will be -- they keep those records for all time.

19 Q. Okay. So, prior to the incident, I think you mentioned a
20 little bit about this in brief, but prior to the incident, what
21 type of trends were you seeing with regards to Spirit's production
22 at the factory, big issues or small issues that you were seeing or
23 that were being highlighted by the FAA.

24 A. So, the FAA has written, I don't know the exact number since
25 2017. Since I started out there in 2017, I believe we've written

1 repeat noncompliances for housekeeping FOD on the unit; handling
2 and storage of finished materials, finished product; material
3 review board, cages where they keep parts that are being reviewed
4 for repair or scrap, depending. So, those are the trends that
5 I've seen that we have repeat noncompliances for on product-type
6 noncompliances where the mechanic or someone else has installed
7 something improperly or, you know, done something improperly, not
8 in accordance with the requirement of the engineering.

9 So, those are all documented in our what we call Aircraft
10 Certification Audit Information System, ACAIS, but we also
11 transcribe that data into Compliance Enforcement Action Tracking.
12 So, then, from there, we write the LOI, letter of investigation,
13 to Boeing. So, they receive that letter; and then, they go to
14 their supplier. As we write noncompliances at Spirit, Boeing
15 writes a supplier evaluation record for each and every
16 noncompliance that we write. So, when we write Boeing a
17 noncompliance, they write a SER to Spirit to start the root cause
18 corrective action process.

19 Q. So, I don't know how familiar are you with the issue with
20 regards to the NCR on this particular accident on those edge
21 frames. Were you, or was anybody from the FAA, look at or talk to
22 Spirit about the edge frame issues on this particular accident?

23 A. I did not specifically talk to Spirit about that. The
24 primary for 737 conducted a supplier control audit/product audit
25 specifically related to the plug installation. So, as we reported

1 in our out-briefing in February, we did two separate audits. One
2 was specifically around the door plug. The other was a six-week
3 audit that we conducted with the team shortly after the
4 investigation started.

5 Q. Okay. So, the issues with regards to what was found at
6 Boeing with regards to those edge frames, you guys did not talk to
7 Spirit about that; is that correct?

8 A. That's correct. I did not.

9 Q. Okay. Did the person that was in charge of the 737, did that
10 person talk to anyone at Spirit?

11 A. That, I don't know. I don't know. I don't know if they did
12 specifically about the frame.

13 MR. CRUZ: Yeah. Okay. Thank you, Chuck. That's all I've
14 got for round one.

15 MR. PRIOR: All right. Thank you.

16 MR. CRUZ: Nils?

17 BY MR. JOHNSON:

18 Q. Good, I think it's morning in your world. Good morning for
19 you and afternoon for the rest.

20 A. Yes. Good morning.

21 Q. Some of those, I think you've answered, but I'll -- if it's
22 duplicate, I apologize. Can you describe how a supplier work plan
23 is generated?

24 A. Supplier work plan as far as --

25 Q. What you guys have --

1 A. -- can you clarify?

2 Q. -- in ACAIS for --

3 A. Yes. So, a supplier control audit is based on 8120.23 data,
4 so we are required to do oversight of Boeing suppliers, because of
5 supplier control audit requirements. So, we do product audits, we
6 do other system elements while we're on site. So, we look at
7 every aspect of the Boeing quality system that they flow down to
8 their supplier. So, once again, we call it the flow-down
9 requirements, which is the contract, purchase order notes, and
10 whatever information that Boeing is required, which is basically
11 to meet the engineering requirements and the safe operation
12 requirements of Boeing.

13 Q. Okay. You did mention it was risk based. What database --

14 A. Yes.

15 Q. -- do you guys use for your risk-based assessment of the
16 suppliers?

17 A. So, AIR-500 --

18 Q. What software?

19 A. I don't know of a specific software that does the risk-based
20 -- we call it risk-based resource targeting. So, the FAA ASI is
21 one of the resources, and we target our resources to the highest
22 risk. Since Boeing PC is a level high, they have a set amount, a
23 minimum amount, of audits that are accomplished for the PC side,
24 production certificate side; also, for their suppliers, how many
25 suppliers they're going to flow down to us as far for Boeing --

1 AIR-500 wants us to go out and audit. And so, as of right now,
2 there are 12 audits for Spirit every year, and we basically spend
3 each month in the area, depending on how much time we have outside
4 of other auditing. So, I don't know of a specific database other
5 than the -- I want to call it the CPL, but I'm sorry, I don't know
6 what the acronym means. If I remember it, I'll give you that.
7 Category parts list.

8 Q. Okay. How are the findings from an audit that you perform
9 communicate to the PI and ASIs in charge of the Boeing PC700
10 production certificate?

11 A. So, we write the noncompliances in an Aircraft Certification
12 Audit Information System, in ACAIS. We sent that information up
13 to the principal inspector. Prior to October 2023, they were
14 considered handoff supplier control audits. But now that I'm a
15 part of 500, they just assign those audits to us. So, that
16 information is flowed from ACAIS to the principal inspector, who
17 will review that audit, and they will have a listing of all the
18 noncompliances and all the objective evidence that we gathered
19 during that audit. So, all of our audits are located and
20 documented in ACAIS.

21 Q. Okay, thank you. Have you ever observed an MED plug (ph.)
22 installed or rigged during the fuselage assembly process?

23 A. No, I've never observed installation of a door plug.

24 Q. Then, I can't ask you to describe that process. Are there
25 any specific qualifications or authorizations for a

1 mechanic/assembler in order to perform specific jobs at Spirit?

2 A. Yes. Normally, within their production order, they will list
3 if there are any certifications for sealants or any special
4 certification process items. Those are normally listed in the
5 production order that we read and we review before we start the
6 product audit. So, there are instances where there are
7 certifications that are required.

8 Q. You've answered the repeat finding. I won't ask you that
9 again. Is there -- excuse me. Is there a receiving inspection
10 required for incoming parts from a subtier supplier to Spirit?

11 A. Spirit does have a receiving inspection, and they have
12 multiple suppliers, so they do have some receiving, I'll say it
13 that way, that I'm aware of. Probably depends on -- I haven't
14 asked a specific question as to what they do receiving inspections
15 on, but it's probably based on risk and complexity. So, I know
16 they do some of that before they do an installation, so if they're
17 going to install a cargo door, let's state, they'll do a general
18 inspection as receiving before they install, make sure all the
19 parts are there, everything's in, you know, working condition.

20 Q. All right. Do you believe that the training for personnel is
21 adequate at Spirit Plant 2?

22 A. The only time I would know if it's not adequate is if I'm
23 doing a personal interview with someone. So, during my product
24 audit, if I ask specific questions about the job that they perform
25 every day, and I -- you know, general torquing requirements and

1 those kinds of things. That's the only time that I would know for
2 sure if their training is adequate. I can't really speak to the
3 overall training effectivity.

4 Q. Okay. Do you feel that the skills are adequate for the work
5 being performed by Spirit in Plant 2, the --

6 A. Once again --

7 Q. -- people skills?

8 A. -- I only know -- right. Once again, I only know that from
9 my personal product audits, personal interviews with mechanics or
10 inspectors. There have been noncompliances related to folks not
11 knowing exactly what to do and where to go to get information.
12 Once again, we call that competency. So, there have been
13 documented noncompliances for that.

14 Q. All right. Last one for me for this round. Do you believe
15 that the areas at Spirit that are high risk align with what you
16 have in your ACAIS work plan? In other words, are you auditing
17 the right things?

18 A. So, I believe that we are auditing the right things based on
19 risk, simply because every ASI that I work with have an aviation
20 background, so they know that, you know, we don't necessarily look
21 at a bracket install or something, because there's just a lot
22 going on there: Where you install the wing, where the keel beam
23 is installed, where the horizontal and vertical attachment
24 fittings are installed. Those are the types of things that we
25 look at while we're on the floor. Those are the product audits

1 that we select based on risk to the aircraft. So, I will say, for
2 the ASIs that are involved, that do the auditing, we're aware of
3 what the high-risk areas are.

4 MR. JOHNSON: Thank you, Chuck. Appreciate it.

5 Bjorn, you're up.

6 BY CAPT ANDERSON:

7 Q. Good morning, Chuck. Thanks for your time.

8 A. You're welcome. Good morning.

9 Q. When Spirit is made aware of the audit details, are they
10 aware of the details of the audit prior to the in-briefing?

11 A. Each individual audit is really based on the aviation safety
12 inspector that's doing the in-briefing. So, what areas we want to
13 cover/where we want to go normally isn't known until we're on site
14 that first day of the audit. And then, throughout the month, we
15 go to different areas. And so, they don't get very much of an
16 advance notice about where we're going to be. They just know
17 we're doing a Boeing supplier control audit in their facility.
18 And so, we, like I said before, we walk the floor, we select
19 something that we haven't done in some time or something that's
20 been a trouble area in the past and we want to follow up. So,
21 they're not aware until, not prior to the in-brief, but normally,
22 shortly after.

23 Q. With the audit findings that are with Spirit, what method or
24 timeline is in place to follow up with those audit findings if
25 there's any corrective actions?

1 A. So, for myself, being on site, we will continuously follow up
2 on the general housekeeping type things or handling or storage.
3 So, we don't just go to Plant 2. We go to other areas where they
4 build the 767 or the 787. Because it's all under one quality
5 system, it's all under Spirit's quality requirements from Boeing,
6 so -- but we also have Compliance Enforcement Action Tracking that
7 we send letters to Boeing, letters of investigation. They have so
8 many days to respond to that. And then, also, they start their
9 investigation or looking into the noncompliances that we write.
10 So, it's ongoing as far as follow-ups and review of things that
11 we've written in the past. So, it's really just continuous
12 follow-up.

13 Q. And this is in line with some of the previous questions about
14 the audit findings and how it's stored historical data. Is this
15 accessible from Boeing, and Spirit, and the FAA? Is it a working
16 document that everyone can access?

17 A. Aircraft Certification Audit Information System is where we
18 keep all of our audit data, and I don't know who has access to it
19 other than the FAA.

20 Q. Is that where information is entered for what the results
21 from audit findings would be stored?

22 A. Yes. Audit findings, what product audits we did, what
23 noncompliances we found. And then, again, noncompliances are also
24 transferred or transcribed into Compliance and Enforcement Action
25 Tracking. So, then, that's where the process starts for root

1 cause corrective action for Boeing to give us information back
2 what actions they're taking. So, really, specifically, though,
3 the audit itself is -- the data is uploaded into ACAIS.

4 Q. Okay. Do you know if the findings from audits are shared or
5 communicated with leads and mechanics on the floor at Spirit?

6 A. Normally, when we do find noncompliances, they're aware of
7 the noncompliance before we leave that area. We also do an out-
8 briefing for each supplier control audit, their leadership. And
9 so, I would say, yes, the mechanics are aware of the
10 noncompliance, because we're having those discussions there with
11 them. Spirit escorts and Boeing escorts are with us at all times,
12 so, like I said, we communicate that to them and to their
13 leadership before we close out the audit.

14 Q. And a question related to training. With the audit findings
15 associated with skillset or training, if there's audit findings
16 from there, do you know if Spirit incorporates those audit
17 findings for future training for mechanics?

18 A. I know that Spirit has briefed us for all noncompliances,
19 that they add those to their root cause corrective actions, the
20 best way I can say it. So, they communicate that to Boeing; and
21 then, we discuss with Boeing what their supplier is doing to
22 resolve these issues. We review the root cause corrective actions
23 that Boeing relays to us.

24 Q. Have there been any changes to the audit frequency or process
25 since 1282?

1 A. Yes. Before 1282, we had one audit a month, and we would
2 spend a week out there. And since that time, we've opened up the
3 audit to be onsite as much as possible from the beginning of the
4 month to the end of the month. So, instead of having a one-week
5 audit scheduled, we have a one-month audit scheduled for each
6 month of the year. So, because right now, there are three ASIs
7 assigned, we sometimes are there at the same time; sometimes, one
8 of us will be there. It just depends on the other schedules that
9 we have to keep for other audits. So, we're on site more often
10 than we were before, before 1282.

11 Q. And then, you had one of your examples of travel work
12 associated with FOD or parts shortages. Was this identified in an
13 audit, or is this just a systemic issue that everybody's aware of?

14 A. So, as far as travel work isn't necessarily a concern unless,
15 because of that travel work, they're unable to accomplish the work
16 in accordance with the engineering requirement. So, it may not be
17 specifically related. And those instances, as I stated, I've only
18 had one noncompliance directly related to travel work.

19 CAPT ANDERSON: Thank you. I think that's it for me this
20 round.

21 MR. PRIOR: Okay. Thank you.

22 BY MR. MARCOTTE:

23 Q. Hello, Chuck. This is Dan Marcotte again. I think it's my
24 turn. A lot of my questions, of course, have already been asked,
25 but as you write noncompliances and enter them into the databases,

1 is there any type of trend analysis that takes place to look for
2 systemic issues?

3 A. Yes, there is. I know Boeing tracks all of our
4 noncompliances. They send out data to us, and they have to track
5 those things, obviously, because they have to give an answer back
6 to us for all the compliance actions that we write based on those
7 noncompliances. I couldn't tell you specifically what it is --

8 Q. Yeah.

9 A. -- but they do trend analysis. They do show all their
10 noncompliances. They have a spreadsheet that they do show, at
11 least from the time that I've been there, through today what
12 noncompliances they've received and which ones are repeat.

13 Q. Okay. So, you're not aware of an FAA trend analysis?
14 They're relying on Boeing's word? (Indiscernible) --

15 A. No, I'm not --

16 Q. -- Boeing's word. Okay.

17 A. Yeah, I'm not specifically aware of that, no.

18 Q. Okay. And just to be clear, your audit findings are used in
19 the process of the risk-based annual plan as built?

20 A. So, the risk-based resource targeting plan is actually built
21 because they're a level one high facility based on the RBRT, risk-
22 based resource targeting. So, really, it doesn't drive how often
23 we go audit as far as noncompliances. Noncompliances don't drive
24 how often we audit. They drive what we do follow-ups on and
25 verifications on. So, the oversight of the PC is driven by

1 8120.23 how often we go, but that is also just a minimum. I know
2 that we do more supplier control audits than the minimum at
3 Spirit.

4 Q. All right. So, other than how frequently the audits occur,
5 I'm trying to understand how the previous year's audit
6 findings/noncompliances are used in building a work plan that's
7 flowed down to you. So, do you look at things that weren't
8 working so well in the last year or two and build that into the
9 audit process?

10 A. Yes. Our audits are based on our prior knowledge. In other
11 words, if I know there've been systemic issues for FOD control, or
12 tool control, or housekeeping, you know, those types of things, I
13 will focus on those areas as I'm out on the floor on each and
14 every audit, each and every product audit, that I do. And we do
15 move around the floor, simply because we want to get as much
16 coverage of the highest-risk areas of the fuselage for the 737
17 specifically.

18 MR. MARCOTTE: Okay. All right. Thank you. I think that's
19 it for me this round.

20 MR. PRIOR: Okay. Thank you.

21 DR. WOODS: John, you're next. John?

22 MR. PETRUZZELLI: Hello. Now, can you hear me?

23 DR. WOODS: Yup.

24 MR. PRIOR: Yes, I can hear you.

25 MR. PETRUZZELLI: Okay, thank you. Sorry. I'm having little

1 technical problems here.

2 BY MR. PETRUZZELLI:

3 Q. Going later in the game, a couple of my questions have
4 already been asked, so first one is, when you have findings at
5 Spirit, do you circle back with, say, the FAA ASIs in Washington
6 state and share with them what you found?

7 A. Yes. Normally, that's done through ACAIS. In other words,
8 their review of ACAIS normally give briefings on any significant
9 findings. The majority of what I've found are repeats. So, in
10 other words, product-related noncompliance, as I call them, for
11 specific findings related to the product. Other than that, they
12 will do a review, and if they need any action or have any
13 questions, they call or email.

14 Q. Okay. So, you are communicating that --

15 A. Yes.

16 Q. -- over and above ACAIS? Okay.

17 A. Yes.

18 Q. What are your observations of training and competency of the
19 Spirit workforce?

20 A. So, and all I can do is to speak to my specific product-
21 auditing individuals that I speak to. So, overall, I couldn't
22 speak to that, but individually, I have written on compliances for
23 competency or someone specifically related to not being able to
24 get to their design data information, or, you know, use of a tool
25 incorrectly, and those kinds of things. So, as I stated, there

1 have been noncompliances written for that specific concern.

2 Q. Thank you for that. Last question for this round is, is FOD
3 a significant problem at Spirit?

4 A. I have written FOD, foreign object debris. I know we call it
5 FOD all the time. FO, foreign objects. But I've written that
6 fairly consistently over the last five to six years wherever I
7 follow up, because I continuously follow up on FOD for installs
8 and that type of thing. So, based on my experience and my
9 noncompliances, I would say yes.

10 MR. PETRUZZELLI: Okay. Thank you. That's good for this
11 round.

12 DR. WOODS: Okay, Mike, you're up next.

13 BY MR. RINEY:

14 Q. Hey. Good morning again, Chuck.

15 A. Good morning.

16 Q. Does the FAA in Wichita at the Spirit location perform audit
17 inspections similar to how the FAA performs the inspection for the
18 certificate at the Boeing facility here in Renton?

19 A. Could you clarify that a little bit? Are you saying that, do
20 we --

21 Q. No, not -- I -- so, when you're doing your audits, are you
22 inspecting the product itself?

23 A. Yes, that's part of the audit. The focus of every audit is
24 what we call the product audit. So, we look at assemblies, we
25 look at the manufacturing processes throughout the Spirit

1 facility. So, once again, that's all models. So, our focus is
2 the product audit, so we do door installs, we do horizontal
3 stabilizer attachment fitting installs, different products
4 throughout the process. You know, keel beam installation, that
5 type of thing. So, that's what our focus is. That's the main
6 part of our audit, is the product audit.

7 Q. Can you perform a product audit at the end of the line of the
8 complete fuselage, or is it just --

9 A. Yes.

10 Q. -- a specific -- okay.

11 A. We do all. We can go pretty much anywhere on the line,
12 different assemblies where they're putting the fuselage together.
13 We have done final inspections down at what we call the rail pit
14 or final inspect before it rolls out the door. So, we can do
15 multiple areas. And since there's more than one ASI on site, we
16 can be in different models all at the same time. But every audit
17 that we do will be a product audit.

18 Q. Thank you. You had mentioned that there are three ASIs at
19 the Spirit location?

20 A. Yes, we recently, since 2022 -- I was assigned by myself up
21 to 2022, from 2017 to '22. We had visiting ASIs that would come
22 in to give assistance. We've recently assigned a second ASI in
23 2022, and we just assigned another. I believe he's coming on this
24 week as a permanent ASI at Spirit. And I believe we're also
25 getting ready to hire another or two. So, right now, we're

1 building from, you know, from myself to, I believe there will be
2 five on site by the end of the fiscal year, hopefully.

3 Q. Okay. There was a discussion about the RCCAs that Spirit
4 provides to Boeing as part of the SER responses.

5 A. Yes.

6 Q. What's your feeling on the quality of those RSSAs?

7 A. So, the feedback that I get from Boeing -- and so, the ones
8 that I have personally gone out and done verification, they're
9 thorough, I believe. Obviously, we wouldn't verify unless they
10 were. Because there are repeat noncompliances, it's more
11 difficult to close out the SER and the noncompliance that we write
12 to Boeing. So, for instance, if I write FOD in April, and they're
13 working a SER, and then I write FOD again in May, then Boeing
14 rejects it back. So, the quality of the actual ones that they
15 submit for verification are good.

16 Q. With the incident occurring in January, and Boeing has
17 changed their product acceptance criteria for the fuselages on 37,
18 I believe that began in March, have you seen that new product
19 verification process?

20 A. No, I have not specifically seen that product verification
21 process yet.

22 MR. RINEY: I think that's all I've got for this round.

23 Thank you.

24 MR. PRIOR: Okay. Thank you.

25 DR. WOODS: Okay. Moving on, Matt, you're next.

1 BY MR. RIGSBY:

2 Q. Okay. Hey, Chuck.

3 A. Good morning.

4 Q. How long have you been in Spirit as the only ASI assigned?

5 A. I was assigned to Spirit in late 2017, so speaking to ACAIS,
6 that, I would be fiscal year 2018. So, from that point until
7 2022, I was assigned full-time. Now, we did have other ASIs that
8 would come in and assist in the audits, so those were, you know,
9 one or two, depending on who could lend a hand or who could give
10 us help.

11 Q. Right. But you've been the primary ASI for Spirit --

12 A. Yes.

13 Q. -- from 2017?

14 A. Yes.

15 Q. Okay.

16 A. Yes.

17 Q. Do you perform your audits any differently with the 737 than
18 you do any other product line?

19 A. No, all of the audits that I perform are based on the
20 requirements, so I approach each audit the same way with the same
21 criteria based on the requirements of the engineering. So, the
22 very first question we ask on a product audit is, what engineering
23 are you working from? And so, then, we go from there. And then,
24 we work out where we want to go, what we want to see, based on
25 what they're showing us.

1 Q. Are you considered the lead ASI?

2 A. Yes. Yes, I am.

3 Q. How long have the -- and I understand, not the new person
4 that's to start next week, but before the event, up until say
5 2023, was it just two of you, two ASI's?

6 A. Yes. There were two of us assigned permanently. Now, the
7 other ASI is also considered a lead. As I stated, we tried to
8 divide up Spirit so that we could have better coverage. So, the
9 other ASI's specifically assigned to 37 and triple-7, and I've
10 been assigned 67, 787, just because of the complexity, obviously,
11 there. And then, we work together, though, as you can see, I will
12 work 737, depending on what's happening, because they have the
13 highest move rate, but also because 787 is complex and has a lot
14 of different areas of the facility where they manufacture the 787.
15 I spent a lot of time on 787, not recently, but in the past.

16 Q. Okay. Now, you mentioned a risk-based. You look at areas
17 based on the RBRT?

18 A. Yes.

19 Q. What's an example of what makes a particular manufacturing
20 process risky?

21 A. So, ultimately, if it's failure of that system or that part,
22 that's the risk. So, risk to the aircraft. So, in other words,
23 they call it the Texas Star. I've spent a lot of time in the
24 48th section, the horizontal stabilizer attachment fittings for
25 left and right horizontal stabilizer, spent quite a bit of time

1 there simply because of the complexity of the buildup process just
2 for that unit. And then, all the installation process and all
3 those kinds of things. Keel beam, also high risk. If there's a
4 failure in the keel beam area, it's a main structure of the
5 aircraft. Main structure, those are the kinds of things that I'll
6 spend time on. So, hope that answered the question.

7 Q. Yup. Do you know where the door plug falls in the risk --

8 A. So --

9 Q. -- arena?

10 A. -- there are -- it probably depends on its usage. In other
11 words, if it's a plug, it's more like a panel. In other words, if
12 I had to state it, because it's not a used door. If it's an
13 actual door, like a crew entry door or a galley entry door. So,
14 if I've got five doors, which, I think I've got four, six -- so,
15 I've got the cargo door, fore and aft, entry and galley. So, of
16 those doors, the door plug on my list of risk would be on the
17 bottom of that list. So, I would start with the cargo door. I
18 would definitely look at the crew entry because of the usage, how
19 much it's used; the galley doors because of how they're used,
20 where they're used, how much stuff flows in and out of those
21 doors. But once again, the risk level, if I just put those doors
22 on a list, then the door plug itself would probably be one of the
23 last items I would look at.

24 Q. Okay. So, basically, pre-2023, it was just two of you
25 assigned to Spirit --

1 A. So --

2 Q. -- and the team --

3 A. -- it was --

4 Q. -- formerly known as MIDO.

5 A. Right. The two assigned was actually in 2022, the other
6 permanent person was. So, up to that time, I was assigned to
7 Spirit with, like I said, with assistance from other offices
8 around the country to come in, and help out, and do product
9 audits, and find different areas, because once again, the 737
10 alone, you have integration, you have 48 section, 41 section, the
11 end of the line, seal bay. So, all those, each individual ASI has
12 to make a decision about what they want to see at that point in
13 time, so -- and once again, I didn't even mention the other models
14 of 87, 67 and triple-7. So, yes, on October of 2022, I believe,
15 is when the second ASI was assigned as a lead.

16 Q. Okay. And do you oversee other certificates in the Wichita
17 area?

18 A. Prior to October 2023 is when we went, myself and the other
19 ASI were assigned to AIR-583. I did have other assignments. I
20 had other PCs, and parts manufacture approval holders, and
21 technical standard order approval holders that I had oversight of.

22 Q. Approximately how many?

23 A. I had 12 other assignments, other, and I had two facilities
24 at the other PC prior to 2023.

25 Q. Okay. How about today? How many certificates do you manage?

1 A. I manage, as an ASI assigned to AIR-583, I don't have direct
2 certificate management of the PC700. I have responsibility to
3 complete the supply control audits at Spirit, and other Boeing
4 direct suppliers, and Spirit subtier suppliers.

5 Q. So, predominantly just Boeing --

6 A. Just Boeing oversight, yes.

7 Q. I'm sorry. Okay.

8 A. And, oh, I'm sorry, I've also got General Electric supplier
9 control audits. We have one local GE facility that we do a
10 handoff principal inspector audit, but we've also got GE for
11 fiscal year '25, which is new to us as far as the local ASIs here.
12 We've been assigned General Electric supplier control, also.

13 Q. Okay. Have you had support from your management on, if you
14 raise an issue, do you feel like you're getting support from FAA
15 management?

16 A. Yes. Yes, I do.

17 Q. Have you had to do that in the past with a particular issue?

18 A. Yes, I have.

19 Q. Okay. Are you at liberty to talk about the issue?

20 A. Yes, because it's related specifically to oversight at --

21 Q. Okay.

22 A. -- the facility. It really, it just revolves around, you
23 know, what drives our audits and why we need help. And I didn't
24 mention the fact that we do safety investigations. So, that also
25 drives our auditing, drives what we do, where we focus our effort.

1 So, in other words, if I've got a hotline or a whistleblower that
2 there's an allegation in a specific part of the facility, that
3 will drive where I'm going to go that day or that week, depending.
4 And at the present time, I believe we have 10 open investigations
5 at the facility in Wichita.

6 Q. Okay. And that was my next question.

7 A. Okay.

8 Q. So, and those hotline complaints, have they been, if you can
9 talk about it, directed towards the door plug?

10 A. I don't know of a specific investigation related to the door
11 plug. At least, I'm not involved. Because we have -- myself and
12 the permanent person have been assigned the whistleblower hotline
13 investigations. We also have someone that's coming on board
14 permanently. They've also been assigned some. So, I haven't had
15 any conversations, and to my awareness, there's nothing
16 specifically related to the door plug investigation.

17 Q. Okay. How often do you interact with the other inspectors
18 there in Wichita? Daily, or --

19 A. The ones assigned, at least weekly.

20 Q. Okay. Do you have an office at Spirit?

21 A. Yes, they've provided space for us.

22 Q. Okay.

23 A. They've voluntarily given us a space. We call it an office.
24 It's got a little conference table, and there's a couple of desks
25 in it.

1 Q. Okay.

2 A. Two spaces, actually, for interviews, and investigations, and
3 that kind of thing outside of the normal.

4 Q. And I know this is somewhat of an objective, but do you have
5 free reign at Spirit? Can you go pretty much anywhere you want
6 to?

7 A. Yes, I can. I have a badge that will get me to any secure
8 door other than something that's defense related. Other than
9 that, they've given me access to all their facilities. So,
10 normally, I have escorts, but I've never been denied any space
11 that I wanted to go into.

12 Q. Okay. You mentioned AS9100. Is that like an ISO quality
13 system kind of back when ISO was a flavor of the day?

14 A. I don't know the specifics of ISO other than -- well, I'll
15 speak to AS9100, and the reason why I speak to that is because
16 Boeing requires that of all their suppliers, that each supplier to
17 Boeing must be AS9100 certified. And when we speak about AS9100,
18 it is a quality standard, so Boeing requires that of their
19 suppliers. And because of that, it's what we call auditable, in
20 other words, so we are auditing Boeing. If Spirit fails to do
21 something in their quality system, then that reflects on Boeing's
22 production certificate. So, because Spirit is large, and it seems
23 like they're a stand-alone entity, but as far as the FAA is
24 concerned, they're not a production certificate holder. They're a
25 supplier to a production certificate holder, and we do direct

1 Boeing oversight while we're there. Everything that Spirit does
2 or is required to do is flowed down through the contract and
3 purchase order. And then, AS9100 would be how they say they're
4 going to perform their quality system oversight and their quality
5 system functions.

6 Q. Okay. Just a couple more. If you see a significant safety
7 issue, do you have the ability to stop production?

8 A. Yes, yes. Yes, and I've -- I can't say it was specific to
9 safety, but it was a product-related incident where things were
10 being done incorrectly. So, they were just frozen in time until
11 they resolved the issue. In other words, don't continue to drill
12 holes, don't continue to build this, until we get an answer back
13 as to how you're going to fix this, how you're going to go into
14 the field and fix these issues. So, yes, I would say yes.

15 Q. Okay. And then, when you write compliance action or a
16 hotline complaint resolution, do you write the action against
17 Spirit or against Boeing?

18 A. Everything that we do is written against Boeing. I've
19 written multiple whistleblower hotline reports of investigation
20 prior to the new team that we have on board in the FAA that writes
21 the reports. The third or fourth paragraph of each of those
22 investigations relating to Boeing's supplier, Spirit, will state
23 that Boeing is responsible for any findings and noncompliances
24 found during the conduct of the investigation, because once again,
25 Boeing is the production certificate holder, and they are the ones

1 that we are investigating or we have oversight of.

2 MR. RIGSBY: Okay. Okay. Thanks, Chuck.

3 Troy, I'll turn it over to you.

4 BY MR. LEVANEN:

5 Q. All right. Good morning again. I just have a couple of
6 quick ones. Most of mine were already asked, and you answered
7 most of them. Swimming back to the staffing topic, which I think
8 everyone has asked something about along the way, but the way my
9 question was phrased was, do you think you have enough? And it
10 sounds like you've answered that to say that with just one, or
11 two, or even three, maybe not. But do you think five? Would that
12 be the right number? Would that be a good number, or do you think
13 it would be a little heavy or a little light once you get up and
14 running with five total on the site?

15 A. So, as far as the assignments that we have right now, and
16 we're getting ready to transition into another fiscal year, so we
17 have 17 -- I'm sorry, we have 20 fiscal year '24 audits that we've
18 conducted or we will conduct before the end of the fiscal year.
19 Coming up into FY25, we're going to have 32 audits. And most of
20 the other than Spirit audits will be travel, so that also has its
21 own unique issues and concerns with time spent off site of Spirit.

22 So, overall, if it were just Spirit, five would be pretty
23 ideal at this time, maybe one or two more, just depending. But
24 like I said, I really can't make a good assessment until I know
25 where we fall out as far as assignments and what kind of folks are

1 assigned. In other words, if I get a new person assigned to
2 Spirit, a new ASI will need training, will need familiarization.
3 An ASI that's got experience in the FAA will still need training
4 because the Spirit facility is so large. To be an effective
5 auditor, it does take time to understand the flow-down
6 requirements of the areas of where we audit, and the risk levels,
7 and those kinds of things. So, for now, the answer is, I really
8 don't know if that will be enough. I'm sorry. That's the best I
9 can do.

10 Q. No, that's good. I mean, five definitely sounds better than
11 two or three, so I'm happy --

12 A. Yes.

13 Q. -- about that.

14 A. Yes, yes.

15 Q. You talked a lot about travel work, and most of my questions
16 were answered, and I know travel work has changed since January,
17 obviously, but I was going to ask, do you get to see a list of
18 what work gets traveled with a build like on each one, or do you
19 have the option to as far as like your end of line audits, or does
20 that get sent to you, or do you feel like you have a pretty good
21 overview of what a list of travel work is for a single unit?

22 A. So, during the audit process, that's really the only time I'm
23 going to ask that specific question. If I'm approaching the end
24 of the line, and I see work that seems like it would be unfamiliar
25 to be accomplished there, I'll ask that question. As far as, have

1 they reduced the amount, I don't know that answer, because parts
2 shortages fluctuate, so that's what, my understanding, is what
3 drives most of the travel work. So, no, I don't know specifically
4 a listing of each and every travel work job, but I can get that
5 answer if I need to get that answer.

6 Q. Okay, thank you. And then, two quick ones. You mentioned
7 you have a weekly meeting, and it sounds like with the other ASI
8 or ASIs. Is anybody else in that meeting, or is that just mostly
9 a meeting between the FAA folks?

10 A. So, there are two separate things. One is, the ASI's
11 individually assigned to the audit at that specific time. We have
12 weekly meetings sometimes daily, depending on what kind of
13 findings we're having and that kind of thing. We also have a
14 beginning of the month meeting. We call it the in-brief. We have
15 Boeing, Spirit, and some of my leadership will be at that meeting.
16 We also have an out-briefing at the end of the month, and we have
17 the same individuals. Boeing, Spirit, and FAA leadership will be
18 at that meeting.

19 Q. Oh, good. Okay. And then, last question, in your travels
20 around Spirit, it sounds like you've been there a while and done
21 some good work there, what is your perspective of the experience
22 level maybe currently of the people actually doing the work on the
23 front lines, and then maybe in comparison to what you saw say in
24 2018 or 2017?

25 A. I believe it's remained fairly consistent, because I've been

1 in the different areas. I talk to the same mechanics that I've
2 been talking to since 2017/2018, and I also see new faces in each
3 area. When I say area, I mean different models, different
4 buildings: 767, 787, triple-7, and 37. So, there are mechanics
5 and inspectors that have been there since I've been going out
6 there, but there are also people that come in and out. So, it
7 really just depends on the area, I think, so I really don't know
8 what their level of new individuals on site would be. I just know
9 I see a lot of familiar faces while I'm out there.

10 MR. LEVANEN: Okay. Got it. Thank you.

11 MR. PRIOR: You're welcome.

12 BY DR. WOODS:

13 Q. Okay, I'm up. I just have a couple questions. The others are
14 more focused on, of course, your day-to-day, what you do as an ASI
15 overseeing the Spirit supplier to Boeing, but I want to know more
16 about future stuff that I know that's coming down the pike, and
17 one of which is, the new rule is going to be going into effect a
18 couple of days here now for SMS, Safety Management System. It
19 says it applies to part 21. And I guess, what have you been told
20 about that, about how your role as an ASI may or may not change
21 based on that new rule?

22 A. So, I've received information. So far, high level, as you
23 said, is not going to affect it. It does affect Boeing because
24 they're the production certificate holder. As far as what my role
25 and assignment at Spirit, as to how that will be flowed down to

1 Spirit, if at all, I don't know that answer. I haven't had any
2 in-depth conversations about it, just read 8120.24 that was just
3 issued having to do with Safety Management Systems. Whether
4 that's going to be incorporated into Boeing's quality system in
5 some way or it's going to be -- I know it's stand-alone as SMS is
6 different than quality system, but no, I haven't had any real
7 in-depth conversations about the future role there.

8 Q. What is your personal experience in SMS or in safety risk
9 assessments?

10 A. So, as related to the quality system, obviously, everything
11 we do is about safety, but specifically SMS, very little
12 involvement in oversight or review of SMS.

13 Q. Okay. And going back to -- I guess I'm trying to figure
14 out -- I think I've got a grasp on how your role differs in, let's
15 say, for instance, the ASIs in Washington, and I know John alluded
16 to this question earlier, but -- and you're also under a different
17 division under AIR, correct?

18 A. AIR-500, so we're an AIR-583, and the principal inspectors
19 are in AIR-582.

20 Q. Okay. And so, when it comes to that, I guess, can one of
21 those inspectors from the Washington facility, can they come to
22 Wichita and do your job?

23 A. Yes, and they do. Specifically, we had one six months ago.
24 They tried to familiarize the principal inspectors with the major
25 suppliers. And so, I know they rotate from the Southeast down in

1 South Carolina from the 787 facility. They come up from there.
2 They've also come from the Northwest, and they perform their own
3 product audits and help out on -- well, assist or complete the
4 supplier control audits here at Wichita.

5 Q. And likewise, conversely, could you take a flight to
6 Renton --

7 A. Yes.

8 Q. -- or Seattle and do their job?

9 A. Yes. And I've actually done that, it's been some time ago,
10 up to the Northwest. So, it's probably been, I hate to say,
11 six years, but it's been a while, so -- but yes, I can go to do a
12 principal inspector on it, I can do an assist on air worthiness
13 certification, that kind of thing, as an ASI.

14 Q. Okay. So, given that knowledge, I would -- because I know
15 that those guys are slated for upcoming training for SMS. I know
16 that there has been an ELMS (ph.) course, if you will, like a CBT
17 online --

18 A. Yes.

19 Q. -- situation. Is that something that you've taken, as well?

20 A. I've actually taken the SMS course in Oklahoma City --

21 Q. Okay.

22 A. -- so, because we were trying to prepare for what we -- our
23 knowledge base needs to be aware of what's going on. Although, in
24 Wichita, we don't have direct oversight of the PC, we need to
25 understand what the SMS requirements are and how that's going to

1 apply to Boeing here in Wichita and how they're going to, if at
2 all, flow any of that down to Spirit.

3 Q. Okay, okay. And what's what I was getting at is, is the
4 training the same across the board, and you're going to be, you
5 know, subject to the same experiences as the primaries there?

6 A. Right, so --

7 Q. It sounds like you're actually ahead of the game, because
8 quite a few of them have not been to the physical class that's
9 in --

10 A. Right. Oklahoma.

11 Q. -- OKC, but you have been.

12 A. Yes, yes.

13 Q. Okay. And so, in the past, have you -- I know that Boeing
14 had already implemented a voluntary SMS, and there have been
15 instances where ASI's -- because it's voluntary, it's not a part
16 of the set list of things that you're required to audit, but
17 minimum lists --

18 A. Right.

19 Q. -- that are requirements. And so, I fully appreciate and
20 recognize that. It's, you know, if I can get to it, I can get to
21 it. But there were some ASIs that had conducted more SMS-based
22 observances. Is that --

23 A. Right.

24 Q. -- something that you have done at the supplier level in the
25 past?

1 A. I believe that each audit incorporates almost every aspect of
2 SMS as far as, you know, personnel safety, safety to the product.
3 And one of the major concerns is leadership and their
4 accountability to safety, and that's overall. We specifically
5 look at the product safety, and that's what we're, as ASIs, that's
6 what we do during our audits. But SMS plays a role in everything
7 they do, I think. Even before SMS, you know, was something that
8 was made mandatory, I think, on some level, Boeing and Spirit have
9 at least tried to implement some of those concepts, if you want to
10 call it that, so --

11 Q. I know several different people have asked you about your
12 perceptions as to the experience level and the skill level, even,
13 of the personnel who work there for the Boeing lines at Spirit,
14 but I want to know more about, what is your perception as to, do
15 the technicians there, do they understand or appreciate the
16 criticality of their role, of what that end product is? Do you
17 see that connection being made on a daily basis that, yes, I'm
18 just working this piece of sheet metal; however, this is part of a
19 bigger thing?

20 A. Right. So, as individual ASIs, we're all different in our
21 approach, I think, on some level. You know, while I'm out there,
22 I make the comment and the statement that, you know, what I'm
23 auditing to, what I'm interested in, is where the tools meet the
24 aircraft. The person doing the job, do they know? Do they have
25 the tools and the training that they need to do that job? And we

1 do spend time talking about what Spirit calls quality 360, which
2 is the way that the folks on the floor can raise issues and
3 concerns, and what is their awareness of that quality 360 process?

4 Because those individuals that build the aircraft need to
5 understand, much like you said, the criticality of what they're
6 doing. I believe that they do, the folks that I talk to. There
7 have been instances, as I stated before, that there's some
8 competency concerns, and those are written as noncompliances. But
9 it's about that accountability to the individual, and I believe
10 those that I speak to, they have that sense of, yes, I'm
11 manufacturing an aircraft.

12 Q. And the feedback platform that you just mentioned that Spirit
13 provides, what is your level of interaction with, I guess, the
14 results of that? If people are talking about concerns about
15 quality or about the production, because that's a Spirit product,
16 and not necessarily --

17 A. Right.

18 Q. -- a Boeing product, does that information get back to you
19 some -- so you can be more aware of what to look for?

20 A. So, the way I'm aware of issues and concerns at Spirit
21 normally come from the negative aspect, which is a hotline or a
22 whistleblower. So, that's why we have so many discussions about
23 the feedback. If someone raises a concern, I'm asking Boeing now,
24 Boeing, how does Spirit close that loop for communication?
25 Because a lot of my experience with hotlines and whistleblowers,

1 those things are driven because of communication. Someone raises
2 a concern. They don't get a feedback. And so, they believe
3 there's no other avenue than to contact the FAA So, we're very
4 interested in that process.

5 So, I may not get direct feedback, especially when it has to
6 do with personnel type things, but if it's product-related, I will
7 stay in contact with Boeing on any issues that arise, especially
8 if I'm conducting the investigation. I will go out on the floor,
9 speak to individuals in that area, and do interviews, and collect
10 information. So, I'm normally directly involved, if it's product-
11 related, on the feedback loop.

12 DR. WOODS: I think that's it that I have. I didn't have
13 very many to begin with. We have been going, I think, for about
14 an hour and -- almost an hour and a half now. Is now a good time
15 for a break? Would you like to take a break?

16 MR. PRIOR: I'm fine.

17 DR. WOODS: Okay. How about --

18 MR. PRIOR: Unless someone else --

19 DR. WOODS: Any other protests?

20 MR. RIGSBY: How about a quick five-minute bio break?

21 DR. WOODS: Okay. Will do.

22 MR. PRIOR: Okay?

23 DR. WOODS: I can accommodate that. Okay, then, we are going
24 to go off the record at 1344 Eastern Time.

25 MR. RIGSBY: Thank you.

1 (Off the record at 1:44 p.m. EST)

2 (On the record at 1:51 p.m. EST)

3 DR. WOODS: Okay. We're back on record at 1351 Eastern Time.

4 Pocholo?

5 BY MR. CRUZ:

6 Q. All right. Just a couple more for you, Chuck.

7 A. Okay.

8 Q. I know, since, probably, the incident, or the accident, the
9 FAA has gone and looked at this particular fuselage, 8789, could
10 you please tell us what you guys found during your review of this
11 actual fuselage leaving Wichita?

12 A. I have not done a personal review of that fuselage that I
13 remember. I'm not even certain that we actually did an audit
14 before it left Spirit, unless I went back into the ACAIS report to
15 see what units. And then, again, I wouldn't be for sure, for
16 certain. So, no, I haven't done anything specifically with that
17 fuselage.

18 Q. Okay. So, basically, you don't know whether there was any
19 travel work associated with that fuselage when it left Spirit --

20 A. No.

21 Q. -- is that correct?

22 A. That's correct.

23 Q. Okay. And just to make sure I understand properly, you
24 mentioned that another ASI besides you looked into the edge frame
25 issues with regards to that left-hand door plug; is that correct?

1 A. I know that he did a product audit on that door plug.
2 Specifically, to the frame itself, I don't know for certain if it
3 was part of his product audit, whether he asked questions about it
4 at that time. I'm not certain that he was aware that the door
5 frame itself was part of the process or part of the concern.

6 Q. Okay. Okay. I guess I'll have to talk to Matt to see what
7 we can do to get maybe a statement from him with regards to what
8 he actually looked at and with regards to that particular door
9 plug.

10 A. Okay.

11 Q. Okay.

12 A. Yes.

13 Q. If you had to say, what concerns do you have the most with
14 regards to the Spirit production process? If you had any concern
15 with that with Spirit, what would it be?

16 A. So, based on my auditing, my product audits, and my repeat
17 noncompliances, there are several areas that are repeat
18 noncompliances, so that's where I focus my effort, and those are
19 the things that I audit, too. So, in other words, if there's
20 repeat noncompliances, then --

21 Q. Yeah.

22 A. -- I make that part of the audit and so on. So, there are a
23 few repeatables that we look at, and we continue to look at, we
24 continue to follow up on.

25 Q. Is there a reason why you think those issues keep coming up?

1 Is that because of management, maybe Boeing not being able to find
2 a root cause, or then flow that down to Spirit? What do you think
3 is the main cause of those repeat issues?

4 A. So, as far as why there are repeats, when we get back
5 feedback from Boeing, their root cause corrective action when they
6 go to look at something, all I can really answer to is, the
7 answers that they get aren't effective. In other words, whether
8 it's an accountability, whether it's, you know, someone not
9 understanding what the requirement was, or whether they're just
10 not following the requirement. So, there are several factors, I'm
11 certain, that would continue to cause problems in that area,
12 specifically FOD, let's say.

13 Q. Yup. So, it looks like you send all your information to
14 Boeing. Does Boeing send a team down to Spirit to see what's
15 happening, or how does that process work? If you're saying, hey,
16 I'm finding issues at Spirit --

17 A. Right.

18 Q. -- consistently, you give that to Boeing --

19 A. Yes.

20 Q. -- what does Boeing do with that? Do they send a team down,
21 or --

22 A. Right. So, there've been, since 2017, I mentioned that I
23 started there then, I think we had --

24 Q. Yup.

25 A. -- Boeing had probably five or six full-time Boeing folks at

1 Spirit. I believe they've got upward of 24 now. For any specific
2 problems, they have a special investigation team of their own.
3 So, if there's a major concern, they do a team that will go
4 investigate those kinds of things. But overall, I have one
5 individual that I speak to as a direct contact for me. That
6 person is the one that gives me feedback on the process and where
7 they are in the RCCA, what feedback they're getting, what Boeing's
8 getting back from Spirit.

9 So, I know there are teams onsite at Boeing. I really only
10 have interaction with probably two or three on a daily basis. So,
11 as to what the rest of the Boeing personnel do, I really don't
12 know.

13 Q. Okay. So, coming this fiscal year, do you think FOD is still
14 going to be an issue with you with regards --

15 A. Yes.

16 Q. -- to Spirit?

17 A. Yes.

18 Q. Okay. Oh, one thing I forgot to ask you, the ASI that did
19 the, I guess, surveillance or audit on the plug, what is the
20 person's name?

21 A. It's Derrick Jones (ph.). He did a --

22 Q. Okay.

23 A. -- product audit pretty much immediately after the accident.
24 We were informed that there was a concern. They didn't know what
25 the driving factors were. And so, we just did a product audit, he

1 did --

2 Q. Okay.

3 A. -- on the door installation. We called --

4 Q. Yup.

5 A. -- a product audit, so the door plug installation. And like
6 I said, there are many, many production orders involved in --

7 Q. Yeah.

8 A. -- different assemblies and that type of thing, so what
9 production orders he looked at, what parts of the process he
10 looked at, I don't know all the details. I just know that he did
11 a product audit there.

12 Q. Is that the other person that's a senior or a lead?

13 A. Yes.

14 Q. Ah.

15 A. Yes, he's a senior ASI. He's a manufacturing lead, also.
16 Yes.

17 MR. CRUZ: Okay. Okay. I think that's all I have. Thank
18 you very much, Chuck.

19 MR. PRIOR: Thank you.

20 MR. CRUZ: Yeah.

21 DR. WOODS: All right. Nils, back to you.

22 BY MR. JOHNSON:

23 Q. Chuck, one follow-up question that is following up on what
24 Pocholo and you were just talking about. What are the other areas
25 besides FOD that you're finding that have systemic findings?

1 A. There's handling and storage of finished product, what we
2 call the material review board cages, they call them MRC cages,
3 where they have product that's awaiting a disposition from
4 engineering. So, they're required to control those nonconforming
5 parts. That's another area.

6 The competency that we have concern or issues with or
7 findings with where people either don't know how to get to their
8 data or incorrectly apply something to their job.

9 So, trying to think of the others. I know there's at least
10 four. So, those are the ones that -- oh, housekeeping is another
11 one, and that's just debris under the stairwells, under toolboxes,
12 around the areas. So, general housekeeping.

13 MR. JOHNSON: All right. Thank you. That's it for me.

14 MR. PRIOR: All right. Thank you.

15 DR. WOODS: Bjorn?

16 BY CAPT ANDERSON:

17 Q. One follow-up.

18 A. Sure.

19 Q. With the audits that you have performed, are you limited to
20 the scope of the audit, or are you allowed to branch off from
21 something that you see, and then, just based off of your
22 experience in aviation, to dig a little deeper, if you will?

23 A. No, I'm not limited in any way in my auditing. If I start in
24 one place, I can end up in another, completely other building,
25 looking at other things, and I've done that on different

1 occasions, simply because what I want to see isn't specifically
2 manufactured there. It may be assembled there, but it might be
3 manufactured in another part of the facility. So, I can be in
4 three or four buildings in any one audit or during any one product
5 audit, all the way from material to the end of the line, so --

6 Q. Are you able to make direct suggestions for future audits?

7 A. Yes. I've actually requested more audits, and I have the
8 ability to add audits to the schedule. If I want to go see
9 another supplier, a subtier, that there may be concerns with, I
10 can actually add an audit to the system, and go, and do that
11 audit.

12 Q. Okay. And just one more in line with what Nils had asked.
13 For areas that you're finding nonconforming parts, inability to
14 correctly apply or access data, and then housekeeping, were those
15 findings items that were identified in the audit, or are these
16 additional things that were found while the audit was being
17 performed, just like, if you will, an ancillary finding?

18 A. So, it could be both. During the actual product audit, we
19 may find -- let's say they're going to install a Texas Star, and I
20 do a pre-look to the area they're going to install, and I find FOD
21 in the area, and they're supposed to have cleaned it out and made
22 sure it was FOD-free. That may be an instance where I write FOD.

23 Another instance may be where I'm doing a floor walk, and I
24 want to go look at units that are complete. And that's what we
25 look at. We look at complete units. We look at the job to ensure

1 that they've signed off or completed the FOD check. And then, we
2 go and do an FAA inspection. Or it could just be a floor walk
3 where we find parts on shelves that aren't stored the way they're
4 supposed to be or housekeeping in areas where we're walking
5 through. So, it can be both.

6 CAPT ANDERSON: Okay. Very good. Thank you, Chuck.

7 MR. PRIOR: You're welcome. Thank you.

8 DR. WOODS: Dan?

9 MR. MARCOTTE: Nope, I have no questions for this round.
10 Thank you.

11 MR. PRIOR: Thank you.

12 DR. WOODS: Okay. John?

13 MR. PETRUZZELLI: I just have one follow-up question.

14 BY MR. PETRUZZELLI:

15 Q. Chuck, when you do your audits, and specifically related to
16 repeated findings, do you ever heard the term blame and train?
17 And if so, what does it mean to you?

18 A. I've not heard that term, no.

19 MR. PETRUZZELLI: Okay. Thank you. That's all I had.

20 DR. WOODS: Okay. Easy peasy. Mike?

21 MR. RINEY: No further questions for me, thank you.

22 DR. WOODS: Okay. And then, Matt?

23 BY MR. RIGSBY:

24 Q. Hey, Chuck. Just a couple more.

25 A. Okay.

1 Q. When you're doing a hotline investigation, do you have to
2 announce yourself to Spirit, Boeing, and take them with you when
3 you perform those investigations?

4 A. No, I don't believe I have to do that. I believe, as a
5 courtesy, we allow them to go along with us. It's also going to
6 depend on experience of the ASI. So, in other words, when I first
7 arrived on site, I really didn't know where everything was, so if
8 I wanted to see something, and some of the hotlines and
9 whistleblowers are kind of vague, so if I say -- unless they
10 mention a specific line unit or specific model. So, we do take
11 them along. I believe most of that's just courtesy. I can
12 actually go anywhere in the facility without an escort if I really
13 want to, but generally, as a courtesy, we have them along, because
14 they're going to want to know information, who we talked to, where
15 we were. We always keep the identity of the complainant, you
16 know, to ourselves. But like I said, generally, we do it as a
17 courtesy, but I don't believe it's a requirement to take anyone
18 with me.

19 Q. And do you think that the Spirit employees feel free to talk
20 to you?

21 A. There have been instances where I've felt like they -- and I
22 say feel, but I sensed that they weren't being open and honest.
23 So, I will take them individually into a room. And most of my
24 investigations, I do one-on-ones with the folks I'm interviewing.
25 So, they do have that freedom. If they do hold back, I really

1 don't know it. But I've tried to have conversations in front of
2 other people, but got the sense that I wasn't getting all the
3 information I desired or wanted or that applied. So, I've, over
4 time, learned that, you know, we take people into a specific room,
5 and normally, there are two investigators. We try to have
6 two people for taking notes and just the general sense of, you
7 know, I've got someone there with me. But yes, we try to do it
8 individually.

9 Q. Okay. And can you offer them anonymity?

10 A. I've never made those comments to anyone.

11 Q. Yup.

12 A. No one's ever asked for it. Generally, I think it kind of
13 comes with the territory because it's an investigation, but like I
14 said, I've never stated that they have anonymity.

15 Q. Okay. And then, this one, it'll be somewhat of an objective.
16 Are you the highest-experienced ASI that's working with Spirit of
17 the two to three folks you work with?

18 A. As far as time on site and time in the FAA, yes.

19 MR. RIGSBY: Okay. I think that's it. Thank you, Chuck.

20 MR. PRIOR: Thank you.

21 DR. WOODS: Okay. Unfortunately, Chuck, Troy had to drop
22 off. He had another appointment to attend to. So --

23 MR. PRIOR: Okay.

24 DR. WOODS: -- we don't have any concluding -- he said he
25 didn't have more questions, so we should be fine there. And I

1 don't really have any more questions about like the processes and
2 things pertaining to your experiences in your job. I just have
3 two concluding questions that I always ask everyone, so --

4 MR. PRIOR: Okay.

5 DR. WOODS: But before I get to those two, I want to make
6 sure that everybody has had a chance to speak, if there's anything
7 else from you they want to talk about, before I get to those. You
8 can just unmute yourself and speak up.

9 MR. JOHNSON: I'm good.

10 DR. WOODS: Okay. Seeing none, it looks like nobody has
11 anything else. Okay.

12 BY DR. WOODS:

13 Q. I always ask, again, two concluding questions. One is -- and
14 I think you've actually answered this in roundabout ways
15 throughout the course of the interview, but I call it like the
16 kind for a day question, and that is, if you were king for a day,
17 you had a magic wand that you could waive and fix/change/tweak
18 anything that you felt you needed to to make your job better, what
19 would that be? What would that look like?

20 A. So, really, my approach is kind of basic. I mean, I look at
21 the regulations, and the orders, and the requirements that each
22 and every facility, not just Boeing, but every facility that I
23 audit. I always strive to be a better auditor and learn from my
24 peers and those around me. So, really, I don't know what I could
25 change or do differently. I think the FAA has excellent training.

1 I have excellent peers to work with. And so, I just try to learn
2 as much as I can and apply that information to the audit and to
3 the facility that I'm assigned to. So, don't know that I could or
4 would change anything, really.

5 Q. Okay. And then, the last question is, you've had some time
6 to recognize that we have wanted to talk with you and that, you
7 know, this is all pertaining to an accident investigation.

8 A. Yes.

9 Q. What would be the one thing that you want this team, this
10 group, this particular manufacturing and human performance group,
11 to take away? Like, what is the number one takeaway that you
12 would want us to have as we go forward in the investigative
13 process?

14 A. So, I just want to clarify that we audit Boeing, and the one
15 thing I think I discuss with most people that visit Wichita is the
16 complexity of what Spirit does, the complexity of and the amount
17 of work they do. And so, for the individual ASIs, we have to
18 apply our knowledge of risk and how we do our job, and there's a
19 lot of work to be done as far as where we'd like to go, what we'd
20 like to see, and what we'd like to visit. So, I guess it's just
21 an understanding of what actually happens in Wichita.

22 I know a lot of folks say that, you know, it's a supplier
23 control audit, and I hate to say it sounds like a sideline type of
24 thing. But when you consider what goes on at Spirit is actually,
25 Spirit used to be Boeing in Wichita. And then, at some time, you

1 know, that changed. But the work scope never changed, and so the
2 approach, I believe, and it's something I share with leadership,
3 is, you know, let's really understand what Spirit is about and
4 what they do, and I hope everyone has an opportunity to visit to
5 see what goes on there. So, that's really it, just the scope of
6 Spirit and the work that's completed.

7 DR. WOODS: Okay. All right. Well, thank you. Thank you
8 for that insight, and again, for sharing your experiences, and for
9 having to take time out for today to accomplish the interview.

10 With that, does anybody else have any other additional
11 questions?

12 MR. RIGSBY: Sabrina, I have one. Sorry.

13 DR. WOODS: Go for it, Matt.

14 BY MR. RIGSBY:

15 Q. But -- hey, Chuck, how often does the principal inspector
16 over the production certificate, Brian Kilgroe, does he visit
17 Spirit or you in Wichita?

18 A. Yes, he visits. I probably see him three times, maybe four,
19 especially since 787 concerns.

20 MR. RIGSBY: Okay. Okay. That's it for me.

21 MR. PRIOR: Okay.

22 DR. WOODS: Okay. Anyone else? All right. Hearing none,
23 then, we are going to go off record. We are concluding this
24 interview at 1410 Eastern Time.

25 (Whereupon, at 2:10 p.m., the interview was concluded)

CERTIFICATE

This is to certify that the attached proceeding before the
NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9 MAX
 IN-FLIGHT STRUCTURE FAILURE
 NEAR PORTLAND, OREGON
 ON JANUARY 5, 2024
 Interview of Charles Prior

ACCIDENT NO.: DCA24MA063

PLACE: Wichita, Kansas

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.

Lisa D. Sevarino
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of: *

*

ALASKA AIRLINES BOEING 737-9 *

MAX IN-FLIGHT STRUCTURE * Accident No.: DCA24MA063

FAILURE NEAR PORTLAND, OREGON *

ON JANUARY 5, 2024 *

*

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Interview of: STEVE SLAGLE, Project Manager of AIR-841 Project
Management Section

Federal Aviation Administration

FAA Facility
Des Moines, Washington

Friday,
April 12, 2024

APPEARANCES:

DR. SABRINA WOODS, Human Performance Investigator
National Transportation Safety Board

POCHOLO CRUZ
Aerospace Engineer and Manufacturing Investigator
National Transportation Safety Board

NILS JOHNSON
Aviation Accident Investigator - Maintenance
National Transportation Safety Board

JOHN LOVELL, Investigator in Charge
National Transportation Safety Board

MATTHEW RIGSBY, Office of Accident Investigation
Federal Aviation Administration

MICHAEL RINEY, Onsite Representative
Spirit AeroSystems

JOHN PETRUZZELLI
International Association of Machinists Union (IAM)

DAN MARCOTTE, Air Safety Investigator
Boeing

REBECCA LIPE, ESQ., Representative for Steve Slagle
FAA, Office of Chief Counsel

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I N T E R V I E W

(8:29 a.m. PT)

1
2
3 DR. WOODS: Good morning. It is April 12th, 2024, and the
4 time is 0829 Pacific Time.

5 My name is Dr. Sabrina Woods. I am a human performance
6 investigator with the National Transportation Safety Board. Along
7 with Pocholo Cruz here to my right, I am co-leading the
8 manufacturing and human performance working group for Accident
9 Investigation Number DCA24MA063 involving Alaskan Airlines Flight
10 1282.

11 The NTSB is congressionally mandated with determining
12 probable cause in transportation accidents and significant
13 incidents and with promoting transportation safety.

14 Parties to the investigation are here in the room and they're
15 the ones that help inform this process, and they're the ones who
16 will be talking to you and asking you questions today. So you
17 have a good idea of who's in the room and who's going to be
18 talking to you, we're going to have them introduce themselves, and
19 we're going to start off to my right with Pocholo.

20 MR. CRUZ: Hello. I'm Pocholo Cruz. I'm the co-lead for
21 this group. I'm an aerospace engineer with a structures and
22 maintenance background.

23 MR. JOHNSON: Nils Johnson, NTSB, aviation accident
24 investigator, and my specialty is maintenance.

25 MR. RIGSBY: Hi, Steve. Matt Rigsby with the FAA's Office of

1 Accident Investigation.

2 BY MR. LEVANEN: I'm Troy Levanen with Alaska Airlines. I'm
3 the director for maintenance and engineering safety and I've been
4 with the Airline for about 34 years.

5 MR. RINEY: Good morning. Michael Riney. I'm Spirit Aero
6 Systems' onsite leader here in Washington.

7 MR. LOVELL: John Lovell, NTSB.

8 MR. PETRUZZELLI: I am John Petruzzelli. I'm here
9 representing the Machinists Union, and I also work at Boeing as a
10 FAA coordinator and AMTI inspector at North Boeing Field. I've
11 been there about 20 years.

12 MR. MARCOTTE: And I'm Dan Marcotte. I'm a Boeing air safety
13 investigator, and I'm based in Southern California.

14 DR. WOODS: So that's it. That's everybody that will be
15 asking questions as we go through the process.

16 We're here for you to share your insight as a member of the
17 regulatory and oversight team for the Boeing Commercial Airplane
18 Company. To capture that insight, we will be using a digital
19 recorder. After the interview, we will send that recording out
20 for transcription, and the parties members here will have an
21 opportunity to review it and correct it for any typographical
22 errors. We do not change the content. Once we receive the
23 recertified copy back from the transcriber, it will go forward to
24 be a matter of public record in the docket for this investigation.

25 Each of the group members will have a chance to ask their

1 questions. They will ask questions one at a time. There will be
2 an opportunity for each group member to ask follow-up questions,
3 in what will be a second round once we've had the first round.
4 Please answer all the questions to the best of your ability.
5 Recognize that I don't know is a perfectly acceptable answer. If
6 you don't understand a question, please ask for clarity. We will
7 do the same if we don't understand your answer.

8 And if you realize that you misstated something or want to go
9 back and address something, feel free to do so at your discretion.

10 You are entitled to have one representative of your choosing.
11 I see that you've brought somebody in the room with you. I just
12 want to get for the record that the person that is with you is
13 somebody that you have chosen to be your representative.

14 MR. SLAGLE: Yes.

15 DR. WOODS: Thank you for that. And would you please --
16 representative, thank you for being here. Would you please for
17 the record state your full name and spell your last?

18 MS. LIPE: Rebecca Lipe, L-i-p-e, Office of Chief Counsel for
19 the FAA.

20 DR. WOODS: Thank you. Please recognize that this is an
21 interview and not a deposition. So please refrain from
22 interrupting the process or attempting to answer on behalf of your
23 client.

24 With that being said, for both of you, if at any time you
25 would like a break, please don't hesitate to say so. We'll pause

1 the recording. I will also try to check in with you from time to
2 time to make sure that you're good to go and want to continue.

3 With that, is everybody ready?

4 (No response.)

5 DR. WOODS: Okay. We're going to begin. If you would please
6 for the record, state your full name and spell your last.

7 MR. SLAGLE: Steven Slagle, S-l-a-g-l-e.

8 DR. WOODS: And what is your go by? Do you -- what would you
9 like us to call you?

10 MR. SLAGLE: Steve.

11 DR. WOODS: Okay. With that, thank you, Steve. We're going
12 to start off to my right here with Pocholo.

13 INTERVIEW OF STEVE SLAGLE

14 BY MR. CRUZ:

15 Q. Good morning. Thank you for talking to us today. Steve,
16 what's your position and title for the FAA?

17 A. I am current a program manager in the AIR-841 project
18 management section.

19 Q. And how long have you been in that position?

20 A. Three years.

21 Q. Three years. Okay. And how long have you been with the FAA?

22 A. About a month short of 24 years.

23 Q. Okay. Prior to your current positions, what other positions
24 did you hold with the FAA?

25 A. I started out as an aviation safety inspector in what was

1 then the Boeing CMO, certificate management office. From there --
2 I spent a couple of years there. I then moved to the Seattle
3 manufacturing inspection district office or MIDO, spent several
4 years there as an aviation safety inspector overseeing other
5 manufacturers in our region, not Boeing. From there I moved to
6 the transport standard staff. I was in a safety management group
7 and supported several national teams around safety management.
8 From there, I moved to be the aircraft certification specialist in
9 the Seattle MIDO, and that position interacts with the ACO,
10 aircraft certification office, and manufacturing. So it's like
11 manufacturing liaison to the engineering organizations. From
12 there, I moved back to a senior ASI role in the Seattle MIDO, and
13 from there I transitioned to the MIO supporting voluntary SMS and
14 then the new 840 organization was started, and that's where I got
15 pulled in as a program manager.

16 Q. Okay. And what shift do you typically work?

17 A. First.

18 Q. Okay. And what time is first shift?

19 A. I work from 6 to 2:30.

20 Q. 6 to 2:30. Okay. And what days do you work?

21 A. Monday through Friday.

22 Q. Okay. So in your current job, run me through a typical day
23 for you. When you come in at 6.

24 A. Yep. Since COVID, I work remotely. So my day starts
25 promptly at 6 a.m. from the home office, and my day is filled with

1 meetings and other telephone calls with other folks, usually
2 around SMS. I do travel quite a bit to various companies around
3 the country. So I don't know, I'd take a guess at 12 plus trips a
4 year, almost a week long, probably 4 day trips. But my day
5 basically surrounds any sort of activity with the SMS, voluntary
6 SMS program. Currently we've been working the development of an
7 order for SMS. We work on work instructions for our internal,
8 like the orders internal but the work instructions being internal
9 to help our people do different portions of the implementation
10 phases of SMS, working on different items for internal training
11 for our folks to help them understand when the companies implement
12 SMS and what they're going to do. So a typical day is a lot of
13 meetings, a lot of teams calls, yeah.

14 Q. Okay. Are you local here in the area?

15 A. Yes.

16 Q. Okay. And are you familiar with the Boeing quality
17 management system?

18 A. My familiarity isn't as detailed as it once was because I
19 haven't worked directly with Boeing for 20 years in the quality
20 side of things.

21 Q. Okay.

22 A. Yeah, I know what it is, but if you ask me to go reference
23 some things, I couldn't.

24 Q. Okay. Do you deal -- do you talk to Boeing's quality or SMS
25 people here locally?

1 A. I deal with SMS people.

2 Q. Okay.

3 A. And -- yeah, not -- there's an overlap. Some people do both,
4 but my main focus would be with the SMS people.

5 Q. Okay. Can you describe the -- I know it's voluntary. Can
6 you describe Boeing's current SMS organization and their policies?

7 A. Can you say more?

8 Q. I guess what type of interaction do you have with Boeing's
9 SMS program currently?

10 A. Okay. My interaction with Boeing is at the higher level to
11 help Boeing understand the voluntary program.

12 Q. Okay.

13 A. Some of the tools that we utilize, they've had questions. So
14 we help them with that, but I'm not, I'm not interacting with
15 Boeing day-to-day like a shop floor level of the SMS.

16 Q. Okay.

17 A. It's the voluntary program.

18 Q. Okay. All right.

19 MR. CRUZ: Nils.

20 BY MR. JOHNSON:

21 Q. Have you reviewed the Boeing SMS program?

22 A. Yes. When they initially had their manual, I had gone
23 through that, and that was 3 1/2 years ago probably. And then
24 when Boeing moved to -- from just a BCA, Boeing Commercial
25 Airplanes, SMS to a corporate or enterprise SMS, they redid their

1 manual, and they have a corporate level of that manual, and then
2 they have lower level supplemental manuals for each, like defense
3 and space and commercial. So, yeah, I've looked at those when
4 they came up, but that was a while ago.

5 Q. Do they -- I can't remember. Is the voluntary program still
6 FAA approved?

7 A. No.

8 Q. I thought there was a letter that they got at the end that
9 said they met it at least.

10 A. Voluntary program we accept.

11 Q. Okay.

12 A. So we accepted their voluntary program which was based on a
13 previous voluntary program that we had in work. So that was, that
14 was our acceptance of their voluntary program, yes.

15 Q. Okay. Most everything I had prepared was about Boeing and
16 Renton real time. So I think I'm good for now.

17 MR. JOHNSON: Matt.

18 BY MR. RIGSBY:

19 Q. Okay. Steve, is SMS required for manufacturers yet?

20 A. No.

21 Q. The voluntary SMS program at Boeing, is there anything in
22 there that addresses suppliers?

23 A. I don't know.

24 Q. Okay.

25 A. What I will say is the voluntary program that we have in

1 place is based on the current Part 5. The current Part 5, there's
2 no requirement for the manufacturers to drive SMS down on their
3 suppliers.

4 Q. Okay.

5 A. The voluntary program is just -- it's just that. It's
6 voluntary. It's their program. It's the Boeing program. If
7 Boeing elects to drive SMS wherever they want beyond what we're
8 looking at accepting in the Part 5 requirements, Boeing can do
9 that.

10 Q. Okay. How many FAA personnel are assigned to the Boeing SMS?
11 Is it like a team or --

12 A. I don't know.

13 Q. You don't. Okay. Ultimately what will require Boeing to
14 move from the voluntary program to a full program of SMS?

15 A. When the revised Part 5 comes out, that's going to include
16 Boeing. I mean that TCPC whole product manufacturer. So when
17 that comes out, that's going to be the regulatory requirement for
18 them to have a SMS.

19 Q. Does having a SMS replaced QMS?

20 A. Absolutely not.

21 MR. RIGSBY: Okay. I'm done.

22 BY MR. LEVANEN:

23 Q. Matt asked a lot of the questions I was going to ask. But
24 when do you think the revised Part 5 will come out? I mean is
25 that something like coming the week after next or a couple years?

1 A. I often say between January 1st and December 31st of 2024. I
2 have no idea.

3 Q. But maybe hopefully this year, huh?

4 A. Yes. Things are working and that's, you know, yes.

5 Q. Okay. I think that's all for me. Thank you.

6 DR. WOODS: Mike.

7 BY MR. RINEY:

8 Q. Good morning, Steve.

9 A. Good morning.

10 Q. So once the Part 5 does become a requirement, how long does
11 Boeing have to then institute it?

12 A. What's ex parte. I mean I don't think I can answer that
13 question.

14 Q. Okay. Has Boeing shared any like how complete they are? Is
15 there anything where they show how prepared they are to institute
16 it?

17 A. Boeing has an accepted SMS under the voluntary program, that
18 that acceptance says that they have the processes and procedures
19 in place, and we've seen that they've executed those processes and
20 procedures, not completely, not fully mature, but they've done it.
21 That's why they got accepted. When the new rule comes out, if
22 you've read the NPRM, the NPRM says they have to submit an
23 implementation plan by a certain date. Boeing is ready to submit
24 an implementation plan. It's not a difficult task.

25 Q. Okay. Through the different Boeing programs for the

1 employees such as speak up, are you familiar with that program?

2 A. Yes.

3 Q. Are there any safety items that get communicated to your team
4 for --

5 A. I'm familiar with the process of speak up. I am not familiar
6 with the details of the individual issues that are brought up.

7 Q. Okay. So your team's not involved in any kind of review of
8 the Boeing actions related to some of them?

9 A. No, I deal with the voluntary program.

10 Q. Okay. I think that's all I have.

11 A. All right.

12 Q. Thank you.

13 BY MR. PETRUZZELLI:

14 Q. So the voluntary program accepted, the only question I have
15 on that, is it graded in any way, shape or form as being a dynamic
16 document that you might want to consider this or is it just -- it
17 is what it is and you've accepted it at face value?

18 A. The original voluntary program under which Boeing was
19 accepted, there's -- there was an assessment that takes place for
20 compliance. That's the first step.

21 Q. Okay.

22 A. And then there's a performance acceptance. So the first step
23 is, do you have the processes and procedures in place. The second
24 step is are you following those processes and procedures? Give us
25 some examples of that work. It was based on Part 5 but I would

1 say subjective to the people that were doing it. So when the
2 initial work was going on with Boeing in that voluntary program,
3 there were people interacting with Boeing and so everybody was
4 kind of learning at the same time. So when it came to that
5 assessment, the assessment was pretty darn simple because we had
6 been working with Boeing and understood what was going on. It
7 wasn't like you walk in cold and do the assessment. It's -- we
8 had an understanding of what was going on already. But there's
9 not a -- it was more subjective based on Part 5.

10 Q. Thank you. That helps.

11 MR. PETRUZZELLI: Dan.

12 BY MR. MARCOTTE:

13 Q. So I understand, the phase 1, phase 2 type of thing where you
14 make sure we have, you know, we have a documented process that
15 we're going to follow and then we demonstrate it. Where in the
16 process do they get the acceptance letter? Is it after phase 2 is
17 complete where you've seen that we have processes and we can
18 follow them or --

19 A. That voluntary process, when the company meets the
20 requirements that were set up, requirements using small "r"
21 requirements --

22 Q. Yeah.

23 A. -- there was a letter issued to the company saying that you
24 met the requirements for the voluntary program. And, the program
25 said, you know, 6 months plus or minus a few, we would do the

1 performance evaluation. Once the performance evaluation was
2 completed satisfactorily, I think it was a letter or -- I think it
3 was an email actually that went to Boeing that said you're
4 original letter still stands. You're in good standing. So there
5 wasn't like first letter saying you meet compliance and the second
6 letter you met the performance evaluation. It was -- the first
7 letter says you meet the requirements of Part 5, and the second
8 email I think it was said you're still good.

9 Q. Okay. So last year, let's just take, you know, so we're
10 really interested in the airplane, event airplane was -- where you
11 issued occurred and the manufacturing was likely in September. So
12 in September of last year, where was Boeing in that process?

13 A. In September of last year, Boeing had an accepted SMS.

14 Q. Okay.

15 A. And I believe their new SMS manual had been issued, and they
16 were working as a corporate or enterprise level SMS.

17 Q. Okay. After they get the email saying, you know, you've met
18 the requirements and you've demonstrated seeing how it's a
19 voluntary system, what's the FAA's role in oversight? You know,
20 do you stay engaged with Boeing throughout the time or you've got
21 a system, you look pretty good but it's not a requirement, so
22 you're on your own, you know, go do good stuff.

23 A. The original voluntary program didn't address specifically
24 oversight. There's a lot of historical reasons leading up to
25 that, but the involvement of the folks in the Boeing CMO, there

1 were several people that were very involved with Boeing. FAA
2 management level folks that were interacting with Boeing daily and
3 bringing up -- I would say they referenced chapter and verse from
4 the Boeing quality -- or the SMS manual. And things would be seen
5 or possibly going to occur, and I know that our folks would bring
6 things up like, hey, you know, what's your safety management
7 system say about that? And just kind of reinforcing that which I
8 would consider oversight. We also participated -- we, FAA,
9 participated in safety risk management activities at Boeing, many
10 safety management -- safety risk management activities at Boeing.
11 And another thing that we did is we were -- we had access to or
12 attended the BCA CEO Stan Deal's weekly meeting with his
13 executives where the safety management -- Boeing's safety
14 management team would bring issues up, all the measures and
15 metrics and KPIs and SPIs were reviewed, the heavy hitters.

16 Q. Right.

17 A. And so it's all -- all that activity I would call our
18 oversight of not only the Boeing Company but oversight of the
19 safety management activity that was taking place.

20 Q. Thank you.

21 DR. WOODS: Okay.

22 MR. MARCOTTE: Um-hum.

23 BY DR. WOODS:

24 Q. Okay. Steve, I'm going to go a little bit more back to --
25 because I have the program guidance here, and so I had just

1 annotated some questions based on the voluntary program guidance
2 to kind of figure out what you know about these steps and where
3 you're interjected into these steps. But to first establish,
4 would you be considered part of the national team or the field
5 team?

6 A. At that time, in that process, I was part of the national
7 team.

8 Q. All right. So are you considered field now?

9 A. Different -- we're playing a different sport now.

10 Q. Okay.

11 A. There's a different voluntary program in place today than
12 that program back then. So we actually have -- that was a group
13 of people that were brought together from across AIR to support a
14 national level team to try to get the companies involved with SMS.
15 And the thought was if we could get the big companies, we would
16 create this bow wave, and pull in the smaller companies. And we
17 were trying to push safety management when there wasn't really a
18 rule in work. So we were trying -- it's voluntary. We were
19 trying to get the companies to voluntarily implement SMS because
20 it was good for them, it was good for overall safety. And then
21 our program today is different. We have more of an office around
22 that activity. We've matured. So at that time, yep, I was part
23 of the national team, and I think that old guidance talked about
24 national team lead, NTL. So from that national team, we had
25 national team leads which were us on those program or on that

1 team, and then we were assigned different companies. So the
2 national team lead pulled resources from the field. So we were
3 pulling engineers from the ACO -- or ASIs from what was the CMO at
4 the time to try to get this learning to take place on our side,
5 and then also to support Boeing as they were implementing SMS.

6 Q. So prior to assuming these positions, did you have -- were
7 you provided training on not just SMS but how to be part of the
8 SMS oversight process?

9 A. Let's see. There was a team back in 2010, the MSMS,
10 manufacturers safety management team, and that group was trying to
11 develop and understand what SMS would look in a design and
12 manufacturer. And that team got ICAO training. We went to the
13 ICAO SMS training. I'm trying to remember what other trainings
14 there were. I know that there was some later through TSI in
15 Oklahoma City. Training on how to perform oversight of a SMS
16 didn't exist. You know, we interacted with the international side
17 of things with the SMICG, safety management international
18 collaboration group, and they were doing a lot of work and study I
19 think back from the '90s. So there's been a lot of activity but
20 for our own training for us on these teams to, you know, try to
21 initialize this stuff, nothing really but the ICAO training,
22 reading Dr. Reason's (ph.) book, learn all about 1880 train
23 wrecks.

24 Q. So some of the things that were a part of the past program
25 that has now admittedly involved some of the things that had to be

1 submitted -- like system descriptions and their safety policy
2 letters and all this stuff. Does that still exist then or has it
3 gone by the wayside? Has it been retained and archived somewhere
4 of what existed before when Boeing first initiated their voluntary
5 program?

6 A. I don't know about all of it.

7 Q. And if it were to be retained, who does the retaining?

8 A. I don't know. Possibly in the CMO.

9 Q. Okay. So again at that time, again recognizing that things
10 have evolved, presumably there was some sort of initiation phase,
11 right, where Boeing says I'm on board. This is what I'm going to
12 present. There was a commencement, if you will. Were you part of
13 that commencement process or did you come in later?

14 A. No, I was there with Boeing from -- that program -- it's been
15 so long, but I think they submitted a package or we did a kickoff.
16 We did some sort of kickoff and explained what was required and
17 then they submitted a package and we look at the package and say,
18 yeah, that looks good, and then you progress on from there, if I
19 remember correctly from that old guidance.

20 Q. Yeah. So again reading from the old guidance, it says
21 develop an agreed upon framework that outlined how the company
22 will reach compliance assessment. You also talked -- I forgot who
23 asked you. I think you already gave us a lot of information on
24 that compliance assessment process. Then it talks about, you
25 know, implementing that, the timeline meaning the schedule, and so

1 do you remember anything about what that timeline looked like
2 because I imagine -- I would expect for a company as large as
3 Boeing that 3 years later that the timeline probably hasn't been
4 met yet, but I don't know. So do you remember anything about what
5 it was and --

6 A. What was the 3 years later?

7 Q. Three years out from that point for the second iteration of
8 the voluntary safety management program. Like 3 -- it was like 3
9 1/2, 2019 I believe. I'm sorry. Not 2019. 2021 I believe.

10 A. 20 -- I'm lost.

11 Q. So by the --

12 A. Are you talking about the old voluntary program?

13 Q. No. There was a new one for BCA. Well, I guess you tell me
14 then because --

15 A. I don't know what you're asking.

16 Q. Maybe I have incorrect information. I have --

17 A. Boeing got accepted in December of 2020 under the old
18 voluntary program. That was their acceptance.

19 Q. Okay.

20 A. In July of '21 was their performance.

21 Q. Okay. Then those are the two dates I'm mixing up. Apologies
22 for that. So then 2020, we're still saying -- it's 2024 now, in
23 April.

24 A. Yeah.

25 Q. That's 3 1/2-ish years, correct? So I guess what I'm saying

1 is timelines, milestones, implementation, are you a part of the
2 team that is following that progression, monitoring that
3 progression? Or, were you just for the initial commencement and
4 then somebody else maybe at the CMO level is now providing that
5 direct oversight for how it's still going?

6 A. Yes. On the last part.

7 Q. Okay.

8 A. So we were involved as the voluntary team to help Boeing
9 understand what they were supposed to be doing. And then they
10 went through their process to get to that point of acceptance in
11 December of 2020, compliance. We find that you comply. We
12 haven't really looked at anything, and then the -- July of '21,
13 because we've been working with them, like the people from the FAA
14 assigned to the Boeing certificate, they were looking at stuff.
15 It's not just me. So we're guidance for the voluntary program,
16 but it's the boots on the ground that are the ones that are really
17 looking, right. We're more like guidance for those folks.

18 So since the acceptance of their SMS, Boeing has matured
19 greatly. They've gone back. They've improved processes. They've
20 reviewed things. They found things that didn't work and they made
21 them better. Does it permeate 100 percent of the company
22 everywhere, every person? No. And I don't think Boeing says that
23 it does, but the program personnel that I work with, I've seen,
24 I've seen changes. I've seen people move, grow. I've seen it
25 grow and permeate more of the company? Is it 100 percent of the

1 company, again, no. They went from BCA to corporate. So you can
2 go to the other areas of Boeing and see the basic principles and
3 tenets of SMS being applied.

4 So today, the people that are -- have their finger on the SMS
5 activity at Boeing are in the CM -- whatever that title is,
6 formerly known as the CMO, AIR-500.

7 Q. AOR is what I learned yesterday, aircraft oversight section.
8 Do those guys come to you for additional guidance if they need it?

9 A. Yes.

10 Q. Is there a standing set time that you all meet and just chat
11 about how it's going or is it just kind of ad hoc?

12 A. It's ad hoc.

13 Q. Okay.

14 A. There's a small pool in the AIR I would say that we all kind
15 of attend the same meetings from all these different activities
16 that are taking place from the creation of the order to the work
17 instructions to how we're going to do oversight in the future, and
18 so there's a lot of interaction with this group of us. So the
19 people that I deal with at the AIR-500, AOS, or whatever you
20 called it, we interact with those people regularly.

21 Q. Did they have the same level of training that you do in SMS?

22 A. Some more and some less. I mean there's an engineer with a
23 degree in safety management from Embry-Riddle, and that's kind of
24 their main POC in 500.

25 Q. Who's your counterpart? Like who is your equivalent at

1 Boeing?

2 A. I'm not sure if they have anybody that high level. I'm
3 kidding. I'm not supposed to joke around, right.

4 Q. You're fine.

5 A. That's -- there's people I interact with but my equivalent at
6 Boeing, it's not a one-for-one match. It doesn't work like that.
7 I interact with the SMS vice presidents, but I am not an executive
8 on the FAA side, and I deal with directors and I deal with, you
9 know, senior managers.

10 Q. Do they come to you routinely if they have questions? Do you
11 feel that that line of communication is fairly open?

12 A. Absolutely. Yep.

13 Q. And I guess how would you describe that working relation
14 amongst you? Is it amicable? Is it like I guess a meeting of
15 contemporaries or do you feel like sometimes you're pulling teeth
16 to get information?

17 A. No, no.

18 Q. Just describe the environment.

19 A. I can ask any question I want. I can get almost any
20 information I want. They call me. I call them. We started a
21 designing manufacturer's focus group 2 years ago, and Boeing
22 people attend that along with all the other manufacturers almost
23 in the world are invited to attend that. So it's a -- with the
24 people I deal with in SMS, it's absolutely -- I couldn't ask for a
25 better relationship.

1 Q. Okay.

2 A. They call me. I call them. They ask questions, you know.

3 It's set up for mutual learning I would say.

4 Q. Were you a -- for the compliance assessments, were you a part
5 of the teams that did the evaluations?

6 A. Yes.

7 Q. I guess what other functions under FAA were also a part of
8 that team? I'm assuming it wasn't just you.

9 A. There was the performance assessment. We had engineers from
10 the BASOO asking questions and, you know, doing their part. We
11 had ASIs that participated and asked questions. I remember one of
12 the guys we had was -- he managed -- he was involved with SMS at
13 United I want to say but he ran their ASAP program. So he was --
14 he had a lot of knowledge on SMS from United, and then when we did
15 the performance evaluation, he did a portion of the questions that
16 we were seeking answers for. So it wasn't just me.

17 Q. So I recognize this was a little bit ago, but do you remember
18 if there was anything out of that assessment that was initially
19 rated as unsatisfactory and then had to be readdressed to meet
20 compliance?

21 A. No, but when we worked with Boeing leading up to that, we
22 gave them course corrections along the way. This doesn't seem
23 like it quite fits right. Can you connect the dots for me and
24 show me, and when those didn't connect, Boeing corrected. They
25 made adjustments. When we got to the performance evaluation, we

1 kind of knew what we were getting. It was already, you know,
2 those major fails weren't existing, but we did make some like
3 recommendations to make things better. Like if you did this, it
4 seems like it would make sense, and they implemented those and
5 they agreed. It was like, oh, yeah, we didn't think about that.

6 So it -- the thing you have to remember about the voluntary
7 program then, it wasn't, it wasn't a hard cast in stone process.
8 It was more of a let's -- this is what we need. This is the
9 existing Part 5. Let's get you to meet the requirements of Part
10 5, in a voluntary way, and let us help you and let us learn, too,
11 because there's a lot of learning that took place on the FAA side,
12 and we're still learning today trying to define what does
13 oversight look like for a company that has a SMS. We still have
14 oversight for QMS. We still have oversight for all the regulatory
15 things we have to do. Now, when you add, you know, ultimately add
16 Part 5, how are we going to do oversight to continue the safety
17 journey without squashing on it. So it's a challenge.

18 Q. I know someone asked earlier and I don't think -- I think I
19 know what they were trying to get to. When it comes to -- we know
20 the new rule's coming. It's coming. At this point, given your
21 experience, what you know, do you feel under the voluntary program
22 that Boeing is in a good place, postured, well suited to make that
23 leap to whatever the new rule will finally contain?

24 A. Yes.

25 Q. Or do you think there will be growing pains?

1 A. You never truly achieve perfect 100 percent SMS. So they are
2 where they're at today because of everybody's efforts to get
3 there. Whether it's sufficient or insufficient, that's where
4 they're at which is much better than they were in 2020 and better
5 than they were in 2021 or 22. So they're continuously growing and
6 getting better. Are they perfect? Absolutely not. There's no
7 SMS in the world that is absolutely perfect. And even the ones
8 that are the most perfect are continuously growing and getting
9 better. So is Boeing positioned for the rule to come out? Yes.

10 Q. So again, this is kind of based off your experience in
11 oversight, what you've seen. You know, we know there's the four
12 pillars of SMS that make up the program as a whole. Out of that,
13 what would you say at this point -- out of those four pillars what
14 is Boeing doing the best? There's always room for improvement,
15 but this thing they've really gotten down pat.

16 A. I think I would say if I could only choose one, I would say
17 they're pretty good at their safety risk management processes.

18 Q. Can you give me an example?

19 A. The safety risk management assessments that they do, where
20 they bring all the right -- that needs to be on camera. The
21 safety risk management activities that they do, when they bring
22 all of the right people into the room and they have the
23 conversation and identify, you know, analyze the problem and work
24 through identification of hazards and mitigating those risks, they
25 do a good job in that process.

1 Q. Okay. And I want to balance my questions out. So what
2 pillar definitely needs the most work?

3 A. Yeah, I don't know. I mean they all need work and I don't
4 really -- I need to more closely in touch with them to make that,
5 but on the SRM part, I've seen that.

6 Q. Yeah. Well, to phrase it a different way, if you had a
7 magical pot of infinite resources, technology, you know, manpower,
8 and you could only dump it on one pillar and allocated it to one
9 pillar, which pillar would you choose at this point?

10 A. Safety assurance.

11 Q. What are some things you foresee would be a good addition to
12 their safety assurance plan?

13 A. So, the reason I say safety assurance, and I'll probably say
14 that for any company you want to deal with. Safety assurance is
15 where all your data would be brought in and analyzed and you're
16 identifying effectiveness of your risk controls. So if you
17 identify you have a risk, and ineffective risk control and
18 promotion, then you're going to go work promotion. If you have
19 something, you know, where SRM process isn't working, safety
20 assurance is where you can review the data. So policy, getting
21 the word out, explaining things to the employees. Once you have
22 -- you get your data and you identify it, I'd say it's safety
23 assurance. And a lot of people will trigger automatically the
24 SRM. You have the Ph.D. You tell me.

25 Q. You've got the experience at Boeing and you tell me. That's

1 an excellent segue into my next question. In your opinion and
2 experience, how do you feel the relationship between QMS and SMS,
3 what should that look like?

4 A. SMS is above QMS. SMS is an overarching management system
5 for the entire company or system description, and the quality
6 management system is under that overarching umbrella -- because
7 SMS will touch everything, design, manufacturing, quality,
8 continuing operational safety and beyond if the company wishes it
9 to. But quality is under that. It's not the other way around.

10 Q. I'm backtracking a bit because I forgot to ask. I had it in
11 my brain and then it fell out. The continuing performance
12 evaluations, that's the -- CMO, they're the ones doing that?

13 A. They are doing forms of oversight. It's not -- there's
14 nothing formal. So they're the ones -- the oversight that gets
15 done is done by AIR-500 CMO.

16 Q. Okay. I think that is all I have on this round. I do have a
17 couple that I'll save for later.

18 DR. WOODS: We're only been going for about 40 minutes, but
19 anybody interested in take a break or would you like to continue?
20 It's up to you?

21 Okay. We're taking a break. We are going to go off record
22 at 0919 Pacific Time.

23 (Off the record at 9:19 a.m. PT.)

24 (On the record at 9:32 a.m. PT.)

25 DR. WOODS: Okay. We are back on the record at 0932 Pacific

1 Time. Pocholo.

2 BY MR. CRUZ:

3 Q. I just have one follow up, and I'm not too familiar with SMS.
4 I'm going to say that right out first, but you said it's up to
5 Boeing to drive SMS on the suppliers in their SMS. If they do
6 that, what is the role of the FAA when they do the oversight? Is
7 there any role that the FAA plays for the suppliers if they say
8 they drive it to them?

9 A. Our oversight will be of the Boeing Company.

10 Q. Okay.

11 A. Boeing is required post-new rule --

12 Q. Right.

13 A. -- Boeing will be required to have an SMS and our oversight
14 of Boeing and their SMS. It will be Boeing's responsibility to
15 deal with their suppliers.

16 Q. So it's essentially it's the same for like a production
17 certificate, right?

18 A. Yeah. QMS, Boeing drives the requirements down on their
19 suppliers --

20 Q. Yeah.

21 A. -- usually contractually. So if they put something in the
22 contract that says you've got to have SMS or you've got to have
23 these three elements of SMS, that's a contractual agreement. Now,
24 we do have Boeing suppliers that will have mandatory SMSs. So
25 we're going to see both ends of that, but just a routine supplier,

1 our oversight is at the Boeing Company.

2 Q. Is there a SMS system required for 145 repair stations and
3 all that?

4 A. I don't believe the NPRM addresses 145.

5 Q. How about Part 135 operations?

6 A. 135 operations are in the NPRM.

7 Q. All right. So nothing on repair stations. Okay. Thank you.
8 That's all I've got.

9 BY MR. JOHNSON:

10 Q. One follow up for me. You described there have been a
11 morphing from the original -- the SMS has morphed from what it was
12 originally under the Part 5 rule that was implemented for the
13 voluntary program. Can you describe what the major changes are
14 that have morphed? What's different about today versus what was
15 originally on paper when Part 5 came out?

16 A. Okay. Part 5 hasn't changed. I just want to be in your
17 question. Boeing has matured in its implementation of SMS. So
18 the involvement of more senior people, the broadening of SMS
19 across the company has increased. The -- one of the things I
20 spoke about before was the Boeing Commercial Airplanes CEO, former
21 CEO, had a weekly meeting to talk about SMS issues, hazards that
22 had been identified, risks that they had mitigated and they were
23 following and tracking on their risk register. We, FAA, were
24 participants or attendees to that meeting. That never happened
25 years ago. So the maturation of the principles and tenets of SMS

1 you can see. Has it completely covered everything? No, but it's
2 growing and those levels of management involved I would say are
3 different than they were, you know, 4 years ago.

4 Q. So it's not the requirement of the guidance that's changed.

5 A. No.

6 Q. It's the way that Boeing's executing --

7 A. Correct.

8 Q. -- the SMS that's changed.

9 A. Correct.

10 Q. Thank you.

11 MR. JOHNSON: Matt.

12 BY MR. RIGSBY:

13 Q. Just a couple. I believe you mentioned the training that
14 you're developing for Part 21. Is that for both inspectors and
15 for the, for lack of a better term, the manufacturers?

16 A. We're developing training for Part 5, not Part 21.

17 Q. Okay. Okay.

18 A. And the training we are developing is for our internal AIR
19 personnel which includes engineering and manufacturing people and,
20 you know, others on the periphery but it's our training that we're
21 doing is to help our people understand service provider SMS, Part
22 5, not internal state safety program. So we're not teaching
23 people this is SMS in general. This is how we interact with the
24 company and this is you need to know about SMS. So it's -- we're
25 not, we're not specifically developing training for industry.

1 There's tons of stuff out there that already exists. It's
2 internal.

3 Q. Okay.

4 A. Part 5.

5 Q. Okay. And then I think Sabrina asked the question about how
6 -- well, basically safety promotion, how well the VSMS been
7 working through the company, and you mentioned not everybody knows
8 about it. At what level does that stop, do you think, if you can
9 even say?

10 A. One of the things that we've been working on is -- and I
11 think Boeing also, if we take a super technical subject and drive
12 it home, we did it years ago with total quality management, Boeing
13 called it world class competitiveness, and you drive these things
14 down by title. When you change gears like we did, world class
15 competitiveness, and now we're talking 5S, everybody thinks world
16 class competitiveness is dead because now we're talking 5S. So
17 what is it? Is it WCC or is it 5S? They all work together.

18 So one of the things that we've talked about SMS is drive the
19 principles and tenets of safety management systems down but we
20 don't need to use the word SMS because it's going to confuse
21 people. It's the practice of what you're doing, how you do work
22 every day. That's important, not the title. So when you go to --
23 when you talk to people, and I'm sure you've interviewed Boeing
24 people, if you talk to the shop floor, and you say, hey, tell me
25 what you know about SMS. You're probably going to get a blank

1 stare. You've got to ask the right question. What if you do if
2 you see something? Do you have an avenue to report an issue? Oh,
3 absolutely. I use speak up. But if you say what's your role in
4 the safety management system, there's a language difference there.
5 So if you talk about promotion and, you know, is there a weakness
6 in the promotion that Boeing's doing because you ask people on the
7 shop floor about SMS and they don't know, I think you're asking
8 the wrong question.

9 From what I've seen, I've seen some of the Boeing training
10 CBTs or videos, to set a new acronym for you. It's really good.
11 Is it retained? Probably just like our training. Some people
12 retain it. Some people don't. It's multiple hits that brings the
13 target down. So you've got to keep hitting them, and if you keep
14 hitting them with the principles and tenets and what you should be
15 doing, versus the titles, I think it's a win. So I would say
16 their promotion's good. I think they've learned a lot in their
17 promotion. They talked about some of the training that they did
18 and it was pretty technical at first, and they learned that it
19 didn't stick. So they've even started to shift.

20 So I think all the four components of SMS need continuous
21 energy around them, but is promotion poor? I don't think so.
22 Could it be better? Yes.

23 Q. Okay.

24 A. Long way around to your answer.

25 Q. No, no, I mean that's kind of where my mind was going. They

1 don't expect to turn every line worker on the floor into a SMS
2 expert. No.

3 DR. WOODS: Troy?

4 MR. LEVANEN: I don't think I have any additional questions
5 at this time.

6 DR. WOODS: Okay. Mike.

7 BY MR. RINEY:

8 Q. I think you answered most of my questions. I did wonder was
9 there -- after the incident, was there any changes that you saw
10 from the Boeing team?

11 A. I don't have any -- I didn't see anything. I'm not there
12 every day. So --

13 Q. In the -- you mentioned the weekly discussions that we're
14 having -- that were held with the previous BCA CEO. Was this
15 topic or was the incident aircraft a topic?

16 A. Yeah, I don't attend that any more. It's more the Boeing --
17 the people assigned to the oversight of Boeing that attend that.

18 Q. Okay.

19 A. So I don't know.

20 Q. Do you get feedback from the individuals from the FAA that
21 are inspecting in Boeing facilities for items that they may
22 identify?

23 A. I would say we have conversations with -- I have
24 conversations with some of the people, and they give me feedback
25 on, hey, I'm working through this. Does this make sense? Does

1 this seem like it meets the requirement? But like to your
2 question, have I seen any changes in Boeing's activity around SMS
3 or the way they're implementing SMS? No, I haven't seen -- I
4 haven't gotten anything on that.

5 Q. Okay. That's all I have. Thank you.

6 DR. WOODS: John.

7 BY MR. PETRUZZELLI:

8 Q. Just one question. Are you -- do you attend or are you a
9 part of the tri-party agreement between the company and OCS (ph.)
10 and the FAA for Washington State employees?

11 A. Are you talking about like the ASAP?

12 Q. No, it's fairly new. I think it was formalized finally in
13 December, the tri-party agreement between the Boeing Company and
14 Machinists Union and the FAA. Their charter was to go meet
15 regularly and review selected --

16 A. It sounds like the ASAP like program.

17 Q. See, speak and listen.

18 A. No, I don't participate in that.

19 Q. Okay. Thank you. That's all I had.

20 DR. WOODS: Dan.

21 MR. MARCOTTE: I supposed going last, all the questions get
22 asked before it gets to me. So nothing else.

23 BY DR. WOODS:

24 Q. Just a couple extra questions and that is, how do you -- as a
25 person who has been trained in SMS and who is a person who helps

1 facilitate SMS progress in companies, how do you explain what
2 safety culture is?

3 A. I don't know.

4 Q. Do you explain or have an opinion on what you believe safety
5 culture is or should be?

6 A. No.

7 Q. Okay. Then that negates the rest of my questions with Boeing
8 and helping them to understand what safety culture should be.
9 Yep, so that's pretty much all I have.

10 DR. WOODS: With that, are there any last ditch efforts?

11 (No response.)

12 DR. WOODS: No, seeing none around the room. Okay. With
13 that, thank you again for your time. We appreciate you carving
14 time out to come talk with us.

15 We are going to go off record at 9:46 Pacific time.

16 (Whereupon, at 9:46 a.m. Pacific Time, the interview was
17 concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ALASKA AIRLINES BOEING 737-9
MAX IN-FLIGHT STRUCTURE
FAILURE NEAR PORTLAND, OREGON
ON JANUARY 5, 2024
Interview of Steve Slagle

ACCIDENT NO.: DCA24MA063

PLACE: Des Moines, Washington

DATE: April 12, 2024

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.

Kathryn A. Mirfin
Transcriber