

CEN23MA034

**OPERATIONAL FACTORS/HUMAN PERFORMANCE**

Attachment 2

Air Boss and Observer Air Boss Summaries and Transcripts

November 22, 2023

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UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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FATAL COLLISION AT WINGS OVER  
DALLAS AIRSHOW AT THE DALLAS  
EXECUTIVE AIRPORT IN DALLAS, TEXAS  
ON NOVEMBER 12, 2022

Accident No.: CEN23MA034

\* \* \* \* \*

Interview of: RUSSELL ROYCE, Air Boss

Wings Over Dallas Airshow

Offices of Cunningham Swaim  
Dallas, Texas

APPEARANCES:

SHAWN ETCHER, Operational Factors Investigator  
National Transportation Safety Board

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

MATTHEW RIGSBY, Air Safety Investigator  
Federal Aviation Administration

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Cunningham Swaim, LLP  
(On behalf of Mr. Royce)

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I N T E R V I E W

(2:04 p.m. CT)

1  
2  
3 MR. ETCHER: And we are on the record at 1404 Central Time.  
4 Good afternoon. My name is Shawn Etcher. I am an operational  
5 factors investigator with the NTSB. All that means is I look at  
6 kind of everything forward of the cockpit door and how it  
7 interacts with it. So that's why you're here, to help educate me  
8 on the event that occurred last November down at Dallas Executive  
9 since you, I understand, were the air boss, and we'll get into all  
10 that specifics in a little bit. I just want to learn anything  
11 I -- everything I can about this. And I know your expertise as an  
12 air boss will help me understand your role, what you look for --  
13 you know, I always tell people let me be the fly on your shoulder.  
14 I want to see, touch, taste, feel -- maybe not taste, but see  
15 everything else. All righty?

16 Thankfully, I don't have to be all knowledgeable. I have  
17 people to help me, and one of those is a fantastic person, Sabina.  
18 I'll have her introduce herself here as well. And we also have  
19 group members as well, which I'll have Matt introduce himself here  
20 in just a little bit as well.

21 But as we get started, I will have Sabrina introduce herself.

22 DR. WOODS: Hey, Dr. Sabrina Woods. I'm also with the NTSB.  
23 I'm a human performance investigator, so I'm complementary to what  
24 Shawn does. My job is a little bit different though, so I'll be  
25 looking at a lot of those things like how people interact with

1 other people, how people interact with the environment, and by  
2 environment that's like training, SOPs, things of that -- the  
3 process itself, and then also, not particularly in this case, but  
4 I usually do look at like how people interact with the actual  
5 aircraft. So, again, ops and I usually work hand in hand for  
6 these sort of things to kind of get a better understanding of just  
7 everything airshow and what happened here.

8 MR. ETCHER: Thank you.

9 And we have a gentleman from the FAA and I'll have Matt  
10 introduce himself. Matt?

11 MR. RIGSBY: Hey, how you doing? This is my second time  
12 around. I was there with Jim the first time. This is Matt Rigsby  
13 with the FAA's Office of Accident Investigation. I'm out of --  
14 well, my office is in D.C., but based here in Dallas-Fort Worth  
15 area. We're purely for the safety side of the investigation.

16 MR. ETCHER: Great. Thanks, Matt.

17 So those are the three of us that'll be talking with you  
18 today. Is there anybody that you do not want here talking with  
19 you?

20 MR. ROYCE: No, sir. Thank you.

21 MR. ETCHER: You bet.

22 So as you can see, we are using a digital recorder. We will  
23 be recording this interview. We will send that recording off to a  
24 transcription service. They will transcribe it for us. The  
25 transcript itself will become publicly available, but the audio

1 will not. And once we get the transcript back, we will correct  
2 any typographical errors that they may have made, but we will not  
3 change content or context. And then, but as we talked before we  
4 turned on the recording, and I just want to make sure I have your  
5 understanding that you would like a copy of that so you can make  
6 any addendums as you wish?

7 MR. ROYCE: Yes, sir.

8 MR. ETCHER: All righty. We will make sure that you get a  
9 copy of the transcript once we get it recertified after we get any  
10 typographical errors.

11 MR. DENNY: And you're going to send that to me?

12 MR. ETCHER: I will send that to you, yes.

13 MR. DENNY: Thank you.

14 MR. ETCHER: As part of our regulations you are welcome to  
15 have a representative of your choice. Do you wish to have a  
16 representative here with us?

17 MR. ROYCE: Yes.

18 MR. ETCHER: And who would that be?

19 MR. ROYCE: Mr. David Denny.

20 MR. ETCHER: Mr. Denny, would you introduce yourself for the  
21 recording?

22 MR. DENNY: My name is David Denny. I'm an attorney with  
23 Cunningham Swaim. This is actually taking place in our office.  
24 And I represent Mr. Royce.

25 MR. ETCHER: Thank you very much.



1           Just a few ground rules before we start, if you will. During  
2 this interview, I think a lot of things in my brain but it doesn't  
3 always connect with my mouth. So if something comes up that you  
4 don't quite understand what I'm asking for, ask for clarification.  
5 Okay. It's a two-way street here. If you tell me something I  
6 don't understand, I'm going to ask for clarification as well.

7           MR. ROYCE: Yes, sir.

8           MR. ETCHER: And one of the most important things I always  
9 tell people, if you don't know an answer, "I don't know" works  
10 perfect. So don't think you -- it's not a check ride, it's  
11 nothing like that. You don't have to have an answer. If you  
12 don't know, "I don't know" works well.

13           If you need a break of any kind or if you need to confer with  
14 counsel at any point, just say so. We're happy to pause, take  
15 that break and it's not a problem at all. I just want to make  
16 sure you are aware of that.

17           MR. ROYCE: Yes.

18           MR. DENNY: And Captain Etcher, if I could --

19           MR. ETCHER: Please call me Shawn.

20           MR. DENNY: Shawn, okay.

21           MR. ETCHER: Captain will make me feel old.

22           MR. DENNY: Okay. Well, that might make me feel old, too.  
23 It happens as you get, unfortunately, as you get older.

24           If you could just make sure you don't respond until he's  
25 actually done? With a transcript, speaking over, you know,

1 between the two --

2 MR. ROYCE: Oh, I understand.

3 MR. DENNY: You do understand?

4 MR. ROYCE: Yes, sir. Yes, sir.

5 MR. ETCHER: And just for the transcript, I just want make  
6 sure, Mr. Denny, you were telling your client not to respond --

7 MR. DENNY: Yes. You do whatever you want. I always tell  
8 him, (indiscernible) to him.

9 MR. ETCHER: Thanks.

10 So before we actually get started, do you have any questions  
11 for us?

12 MR. ROYCE: No, sir.

13 MR. ETCHER: All righty. And please, sir is also -- makes me  
14 feel old, so Shawn is okay.

15 INTERVIEW OF RUSSELL ROYCE

16 BY MR. ETCHER:

17 Q. For the recording, can you please state your full name and  
18 spell your last?

19 A. My name is Russell Royce, and it's R-o-y-c-e.

20 Q. Thank you. Do you want me to call you Mr. Royce, Russell --

21 A. Russell's fine.

22 Q. -- sir?

23 A. Russell's fine.

24 Q. All right. I just want to make sure.

25 A. Thank you for asking.

1 Q. And I know we're here talking about the airshow that occurred  
2 last November when there was a mishap. What was your role in that  
3 airshow?

4 A. I was the air boss for the airshow.

5 Q. So I don't -- I understand kind of what an air boss is, but  
6 I'd like to know in your words what does an air boss do? What is  
7 your roles and responsibilities in an airshow?

8 A. The air boss generally acts as the primary coordinator for  
9 the flying activities and generally runs the morning briefing for  
10 each day of the event.

11 Q. Okay. And we'll get into a little bit more of that here in  
12 just a little bit. How long have you been air boss?

13 A. I have air-bossing for 20 years.

14 Q. Okay. And for the record, do you have to have an FAA  
15 certificate to be an air boss? An FAA physical certificate.

16 A. No. The air boss is not a certificated position, but you do  
17 have to have a letter of authorization now. And that's a newer --  
18 that's 4 years old. So prior to 2019, you did not.

19 Q. Okay. And we'll get into that letter of authorization as we  
20 get a little bit further --

21 A. Yes, sir.

22 Q. -- into it, if you will. Right now I just want to kind of  
23 get an idea of your experience and everything. So do you hold any  
24 FAA certificates like pilot, air traffic controller, mechanic, any  
25 of those?

1 A. I have a CTO, a certified tower operator license. I have a  
2 private pilot's license with several endorsements -- high  
3 performance, high altitude, tailwheel, complex endorsements on  
4 that PPL.

5 Q. Wow. Nice. And ballpark, how many flight hours do you have?

6 A. 1800, ballpark.

7 Q. All righty. And you said you had CTO certificate.

8 A. Yes.

9 Q. Where were you a control tower operator at?

10 A. Fort Worth Meacham.

11 Q. Okay. And how long were you there?

12 A. 2008 and '9.

13 Q. Okay. All righty. Since you have a private pilot  
14 certificate, do you have a medical certificate as well?

15 A. Not currently.

16 Q. Okay. Do you have to have a medical certificate at all to be  
17 an air boss?

18 A. Not to my knowledge.

19 Q. Okay. And you said not currently and you kind of paused. Is  
20 there --

21 A. Oh, I was just thinking about how to answer it. Like my  
22 medical certificate is not current.

23 Q. Okay.

24 A. So it expired, right?

25 Q. Okay.

1 A. Yeah.

2 Q. Did it expire or was there an issue? And I don't need to  
3 know health issues if there was that.

4 A. No, it expired. Like it was good for 5 years and then it  
5 expired.

6 Q. Okay.

7 A. Right. Yeah.

8 Q. I just want to make sure we had that clear on the recording.

9 A. Well, you know how sometimes some things expire but you --  
10 right, because like your pilot's license doesn't expire, but it's  
11 not current.

12 Q. Right.

13 A. So that was kind of the pause. I'm like, well, no, I don't  
14 have one because it expires, it doesn't pause. It's not a  
15 currency issue, right? It expires. So that's what the pause was.

16 Q. Perfect. I just wanted to make sure.

17 A. No, it's okay. Yeah.

18 Q. All righty. So let's kind of start talking a little bit  
19 about being an air boss. Help me -- I want to be that fly on your  
20 shoulder. If I come to you today and say, so I really want to be  
21 an air boss --

22 A. Why? (Laughter) No. Yeah, I mean --

23 Q. I want you to kind of walk me through what it would take for  
24 me to become an air boss. And I don't know if I have to have  
25 certificates or anything, but, you know, I'm just --

1 A. Yeah.

2 Q. -- I'd say I'm a young me, but that's a total lie. But just  
3 kind of walk me through.

4 A. Yeah. So, I mean, generally speaking you're going to start  
5 off lots of observation time, right? Like stand behind me and  
6 just see what it entails, right? And then traditionally people --  
7 you'll start off like observing and then we'll get into some of  
8 like the theory stuff, right, like what do you think you would do  
9 in this situation? And then what a lot of people do is they'll  
10 start walking through like, hey, you -- you know, here are the  
11 acts, you go build a schedule. And then we'll -- you know, well,  
12 why did you put it in this order? What are the things you're  
13 thinking here? And you start looking for those conflicts, you  
14 know, like you have the jumpers jumping twice 15 minutes apart.  
15 That's not going to work, right, things like that.

16 And then you'll start -- most guys will start putting you on  
17 the radio where it's like, hey, you got the last three acts. This  
18 is a layup, it's an up/down, no conflict, no specialty thinking,  
19 they're clear takeoff, clear landing. You'll work through that  
20 and you'll just kind of continuously build on that until you kind  
21 of get to the point where someone is probably more comfortable  
22 being like, I'm going to let Shawn run the airshow, I'm going to  
23 stand behind him and try not to say anything unless I absolutely  
24 have to, right?

25 So like that on-the-job training type stuff, right? And then

1 at some point when it's appropriate you can request a letter of  
2 authorization. And there are different levels of letter of  
3 authorization you can apply kind of depending on what you want to  
4 do. And if you're going for the highest level of letter of  
5 authorization, you will be evaluated at an airshow. And that will  
6 be very much like you're the guy, I'm going to stand back here and  
7 say absolutely nothing, and you will be graded. And then  
8 you'll -- and then you may end up with a letter of authorization  
9 if you pass the evaluation.

10 So that's the general process and that is a multi-year  
11 process. Some people take, you know, 6, 7, 8 years. Some people  
12 can do it in 4. But that's the process, generally speaking.

13 Q. So let's go back just a little bit, kind of walk me through  
14 because I'm inquisitive. If I'm going to do something, I want to  
15 make sure I do it right.

16 A. Yes, sir.

17 Q. So I come to you and -- but you mentioned a term, and let me  
18 get that term first. Layup, up/down? Did I hear that --

19 A. Oh, yeah. Sorry. That's just a pejorative. Like there are  
20 some acts that are very self-contained, right? So you might have  
21 a guy who has like an MX2 and he has a very set routine, so your  
22 interaction with that guy is going to be clear to taxi, clear to  
23 takeoff, clear to land, right? And like he's got a fully  
24 packaged -- so I say, well, that's kind of layup for anybody  
25 because you have to say three things to interact with this act,

1 right? But then there are acts that get more complex or more  
2 complicated because there are more moving parts, right, and there  
3 are more requirements to fulfill for those acts.

4 Q. Okay. And so that's a layup?

5 A. Oh, I was just -- that's an off-the-cuff term. That's not a  
6 technical term. Yeah, that's just me talking.

7 Q. Okay. I think layup and I think basketball.

8 A. Oh, yeah, yeah. Sorry.

9 Q. So I just wanted -- I want to make sure I'm talking the same  
10 thing you're talking because --

11 A. It's going to be easy.

12 Q. Okay.

13 A. Yeah.

14 Q. All right. I come to you and you're like this is -- you gave  
15 me that, how to do it.

16 A. Yeah.

17 Q. Is that something you can teach me or do I need to go  
18 somewhere to get -- like is there a specialized I want to say  
19 trainer?

20 A. No. No.

21 Q. No, you can teach me, or no, there's no specialized --

22 A. I'm sorry. Yes, I can teach you. No, there is not like a  
23 school to go to. There's not a person, there's not one  
24 individual. Actually, most people would go to multiple air  
25 bosses, right, and learn skills from multiple people. Most people



1 would probably do that, yeah.

2       So like if Shawn came to me and said I'm really interested in  
3 an air boss. I'd say, great, let's go to some airshows together  
4 so you can see what it looks like. And then let's say you are  
5 really going to pursue it and maybe you start working with me a  
6 little bit, and at some point I'm going to be like, hey, you  
7 should go see this guy and see how he does it, what you do and  
8 don't like; go see this guy, see what you do and don't like there,  
9 and things like that.

10 Q.   Okay. So I come to you, I go to a few airshows with you.  
11 I'm like, wow, this is great, this is what I want to do. At what  
12 point -- I guess there's no easy way to say it. At what point do  
13 I start my formal training and what does that look like? Is it  
14 just, oh, I went to three airshows or four or whatever and I  
15 really want to do it, and you're like, all right, well, you've  
16 started seeing how it's done? Or is there any kind of book work,  
17 ground school, anything like that to get me moving so you're not  
18 doing all OJT? Because, forgive me, I can only imagine how busy  
19 an air boss could be.

20 A.   No, there's no formal training. It's all informal.

21 Q.   Okay. So, and this may have you go back a long time, but --  
22 since you've been doing this for 20 years. Can you think back  
23 when you started? How long did it take from the time you started  
24 and said I want to be an air boss until -- and I think you said  
25 there was no letter of authorization at that point --

1 A. Right.

2 Q. -- but until you were blessed or whatever the phrase would be  
3 to do your own airshow?

4 A. Well, I'm definitely a unique circumstance because my father  
5 is an air boss as well, so I grew up going to airshows. I grew  
6 up -- my dad was the president of the CAF, and then we were  
7 president Lone Star Flight Museum and Texas Aviation Hall of Fame.  
8 So I grew up going to airshows on the warbirds, flying all of --  
9 like that's what I did during my summers, was go to airshows with  
10 dad.

11 When I was about 14 is when I first started talking on the  
12 radio, and it was very much like, hey, you know, it's these three  
13 acts. And, of course, what you know now as an adult is like, you  
14 know, after the briefing, dad went to, you know, John, Tim, and  
15 Bob, and said, hey, I'm going to let Russell talk on the radio,  
16 right? Like, of course as a 14-year-old kid, right, you're just  
17 taking on all this responsibility not knowing there's a lot of  
18 backend talk that's been done, right? And then -- so I started  
19 talking on the radio when I was 14 and then by the time I was 17,  
20 I was running sequences of Wings Over Houston. That's a very long  
21 show, so it gives you an opportunity to break it up, right? And  
22 then -- and so when I was 18 is when I did my first airshow by  
23 myself in San Antonio. And then you're always learning because  
24 you're always trying to develop a skill, right? Because if you  
25 don't use it, you'll lose it. And the environment changes and the

1 people change and the rules change, so it's continuous learning.

2       So I wouldn't say I was ever really blessed, but it becomes  
3 much like with an aviator, right? You know, when they first start  
4 to fly they're afraid to land the plane, but at some point --  
5 they're not necessarily blessed, but it's like, hey, it's Clint  
6 and he can land the airplane safely, right? So similar to that  
7 process.

8 Q.   So I know you said you were a unique situation starting back  
9 at age 14.

10 A.   Yeah.

11 Q.   But just like pilots, there comes a point when you feel  
12 comfortable --

13 A.   Yes.

14 Q.   -- doing solo flight or whatever. When did you become -- I'm  
15 going to use the term in air quotes, "comfortable" with setting up  
16 a show, running it as an air boss? Am I getting those phrases  
17 correct?

18 A.   Yes, sir.

19 Q.   Okay. So at what point did you become comfortable?

20 A.   Well, I would say that I was comfortable when I was like 16,  
21 but some of that just comes from ignorance, right, because you  
22 don't know what you don't know. So I was comfortable when I was  
23 probably 16, 17. So very early on I was very comfortable. But I  
24 had had lots of observation, right? Like that's the uniqueness of  
25 my experience is I had these observations growing up, right? So

1 like if you came to me today was like I want to be an air boss,  
2 I'm like, well, we just got to get you some observations so that  
3 you start thinking that way, right? So that's where part of the  
4 uniqueness comes up. And then you get in situations where -- it's  
5 just like a post-flight briefing, right? It's like this is what I  
6 liked, this is what I didn't like, this is what I could have done  
7 better; oh, I really -- that interchange didn't work well, and  
8 things like that. So I was comfortable very early on, but I think  
9 I got there so quickly because I understood that you're always  
10 learning, you're always trying to get better.

11 Q. Okay. All righty. That helps. I'm just trying to make sure  
12 I have kind of clear understanding as to how yours was different.

13 So I'm watching you, I'm observing, you're observing me and  
14 everything. Then you tell me I need to go with somebody else. Is  
15 there a way you choose who I should go with to learn more --

16 A. No.

17 Q. -- observations?

18 A. No, and the reason is because one of the critical skills of  
19 an air boss is the ability to anticipate something. So in your  
20 development, in theory, would reach a point where you're  
21 comfortable, then it's like, well, let's go observe someone else  
22 because are you able to assess the situation, anticipate what  
23 needs to be done, and then go, well, I would solve this problem  
24 this way, but this guy solved it this way; ooh, I didn't know I  
25 could do that. And then go, well, why did he do it that way,

1 right? Because maybe they did it that way because there was some  
2 unforeseen thing that you hadn't considered. And so that's how  
3 you kind of flex that muscle and learn that skill. And so that is  
4 probably the biggest driver to where we want to get a developing  
5 air boss is where you're anticipating things that are going to  
6 come up instead of reacting to what is happening.

7 Q. Okay. So let's talk about you just a second then. You grew  
8 up in a unique situation.

9 A. I did.

10 Q. Your dad is an air boss. I assume he did some of your early-  
11 on observations or did he do all of your --

12 A. Development.

13 Q. -- development?

14 A. Yeah. Almost -- well, dad did all my what I would call, if  
15 you are going to call it training. That went -- most of that went  
16 through dad, but I had observed other people. Yeah.

17 Q. Okay. Just helping me kind of see the big picture.

18 A. Yeah.

19 Q. So thank you so much. So I've done my training, but part of  
20 being an air boss is controlling traffic, I guess, or controlling  
21 the show, right? Am I kind of wrong?

22 A. I would not say you're incorrect. I'm not sure where  
23 you're -- those are very broad terms, so I'm just waiting for you  
24 to narrow it down.

25 Q. Yeah. I think in broad terms.

1 A. Yeah, yeah.

2 Q. I'm just trying to figure out if I'm in the right part of the  
3 ball field here.

4 A. Yeah. Well, I wouldn't use the term controlling traffic.

5 Q. What would you use? So I use the right term. I hate using  
6 wrong terms.

7 A. Well, no, I mean, because controlling traffic says that  
8 you're an air traffic controller. You're not an air traffic  
9 controller. So -- and there are implications that come with being  
10 an air traffic controller versus an air boss versus controlling  
11 traffic, right?

12 Q. Um-hum.

13 A. Yeah.

14 Q. Okay. So I'm under your tutelage.

15 A. Oh, no.

16 Q. Yeah, scary, right? But you tell me, hey, you know what  
17 what? You're doing -- and it'll take me years and years to get to  
18 this point, but you're doing okay enough, I want you to be an air  
19 boss even if it's just on paper, you're checking me out. What do  
20 you do for an airshow? You know Wings Over Dallas is coming up  
21 in, I don't know, how long. How much notice do you get for an  
22 airshow? Six months, a month?

23 A. Well, it varies. Well, Wings Over Dallas is an annual event,  
24 so, right, it's always coming up. And like Wings Over Houston is  
25 an annual event, and things like that, and some airshows are like

1 semiannual events. So they're -- you kind of know. And it's a  
2 relationships business, right? So -- but to answer the question I  
3 think that you're kind of trying to ask is like I don't -- things  
4 start happening about 4 months out but you start getting excited  
5 about 30 days out.

6 Q. Okay.

7 A. Yeah. Because it's -- you know, we got to transition from in  
8 theory to practicality.

9 Q. Okay. During that 4 months/30 days, whatever you want to put  
10 it in, I assume -- and again, when I assume things, I'm always  
11 wrong, so please absolutely correct me. I assume somebody tells  
12 you here's our -- I'm going to call it choreography, the aerial  
13 acts. Is that something the air boss does or is that somebody  
14 does it and then provides it to you or me as an air boss? Does  
15 that make sense?

16 A. Yeah, it makes sense. Traditionally you will get a list of  
17 performers who are participating, participants. And then  
18 sometimes the customer will say -- because you don't know what  
19 deals they've made with people, right, so like there are  
20 performers who contractually say I must perform within 1 hour of  
21 the Thunderbirds or Blue Angels if you have those people, right?  
22 And I won't necessarily know that because I don't get the  
23 contract. So then I would look to the producer to say, hey, Shawn  
24 has to fly within an hour, right? So there are things like that  
25 because they might have contractual obligations that I don't know.

1 That's pretty specific.

2 In a more broad sense, where you're at, is yes, I will  
3 traditionally get a list of participants and then we will start  
4 working a schedule. And so it might look something like, hey,  
5 here's kind of what I'm thinking; what do you think? And then you  
6 send it back to the producer or the client and they go, ooh, I  
7 don't like this; I want this guy to go first, blah, blah, blah,  
8 blah, blah. And so -- and then there will be back and forth.  
9 And, of course, that is always changing because people add, people  
10 subtract, airplanes break, things happen.

11 And then you used the term choreography and I think that's a  
12 loose term because not all acts are choreographed and not all acts  
13 have a routine, and so those are considerations in scheduling as  
14 well. And some acts go twice and -- but they go twice and -- but  
15 they don't necessarily have two routines nor do they fly the  
16 routine twice that they do have. So it's highly variable.

17 Q. Okay.

18 A. Yeah.

19 Q. So I'm trying to -- to me, I think, man, there's -- you're  
20 juggling all sorts of balls especially if it's the last 30 days.  
21 How do you as an air boss -- I know you have experience, me not  
22 being experienced, as a baby -- I don't want to call it baby air  
23 boss, but somebody under your tutelage. How do I put all that  
24 together in such a short period of time? I assume you're the one  
25 that says act one is this, act -- to act whatever.



1 A. Sure. Yeah.

2 Q. Act one is this, act two is that, act three is bombers, act  
3 four is -- how do you put all that together in time and space? Or  
4 do you do it on the fly? Bad term, I know, but how do you put all  
5 those in a show to come off efficiently?

6 A. Yeah. So you're going to run into a lot of generalities,  
7 right? Like generally the Thunderbirds and Blue Angels are going  
8 to go last, right? That's a pretty good generalization. And per  
9 their support manuals, generally they're going to fly no later  
10 than 3:30. Usually they want to fly around 2:30, and that's in  
11 the support manual, right? And so you go, okay, well, you know, I  
12 know I have this at 2:30. Okay, well, how much act -- how much  
13 airshow do I have? Well, I have 2 hours worth of airshow. Okay.  
14 Well, we're starting at 12:30. Do we want to start at 12:30? And  
15 things like that.

16 And then you get into things like, hey, I know this guy's a  
17 pre-packaged routine and I know it's 15 minutes long and I know he  
18 starts on the ground. So now I have a ground act that -- a 15-  
19 minute ground act. Okay. Well -- and it's like an aerobatic act,  
20 right? And so I'll put him here and then behind him I might put  
21 like a high-performance flip-flop act that starts in the air,  
22 right? And so -- and you get into -- and so you'll get into  
23 situations where -- like you don't want to put, necessarily want  
24 to put an air start act right after the Air Force heritage flight  
25 because, per their support manual, there should be no movement

1 while they're airborne. So how am I going to get this air act off  
2 in the air and up to his starting position, right? And so you  
3 have those type of things to consider, and that's what I talk  
4 about like it's got to fit a little bit. And sometimes you just  
5 get stuck. Like, hey, we're going to have to let them land and  
6 taxi in, we're going to take you off, and the narrator's going to  
7 have to talk for 4 minutes while you climb. And you just get  
8 stuck.

9 And then you think of things -- then you have to think about  
10 things like if I'm going to have a parachute team, especially like  
11 the Golden Knights or anything, parachuting in, well, you know, if  
12 they're stepping out of the airplane and I have a propeller  
13 airplane taxing right through where they're going to land, that's  
14 not going to work. So how are we going to deconflict that, right?

15 And so you think about -- I think about things like that, and  
16 then you run into other considerations with airspace, because like  
17 your jets, right, you generally want at least 10,000 feet because  
18 if a jet has a problem, he's going to go straight up, right?  
19 Because he can, he can perform like that. So when can I get  
20 10,000 feet? Especially if you're in a place maybe like we are at  
21 Redbird where you're under Class B airspace. So, you know,  
22 when -- because when I go up, I impede air traffic, so can I  
23 minimize that, can I not minimize that? And things like that.

24 So, because like I do one airshow where we are right on the  
25 arrival route for DFW. So when I put my cylinder of airspace up,

1 I impact their arrival route, right? So now they got to do one  
2 short. So I want to keep that impact minimal, so I run my jets  
3 all back to back because I have (indiscernible) and now I'm done,  
4 I'm out of your way, right? So those are considerations, too.

5 So it's difficult to explain how you put this really complex  
6 things together because the follow-on question is like, well, I  
7 don't know, what's the impetus here, like what's -- what are we  
8 trying to accomplish besides just putting on a great show?

9 Q. Okay. So when you're developing this lineup of participants  
10 does the producer, do they give you a timeframe like airshow  
11 starts at 1 o'clock, finishes at 3:30, period, end of discussion?  
12 Or is it more loose like, well, you have the time from 11 to 4,  
13 you know? Kind of tell me what kind of timeframe do you get to  
14 deal with when you're developing these?

15 A. Yeah. I would agree most producers will say something like I  
16 want to start flying at 11 and I want to end at 5. Now that's 6  
17 hours of flying, great. You have 3 hours of airshow. How do you  
18 want to do that, right? That's a common -- that is a common issue  
19 because they don't necessarily know, right, how long this is  
20 together.

21 I would not agree with something like we start here, we end  
22 here, that's it, because then you -- like that's too inflexible,  
23 right? So we don't want to get -- we don't want -- because you  
24 have to consider like what happens when it's raining up until your  
25 start time and now you're going to start 30 minutes late? You

1 have no wiggle room, right? You have all these people that showed  
2 up. We can still fly the airshow as briefed, we just need to move  
3 all the times, add 30 minutes, right? So, yeah, if you're a  
4 producer and said that to me, I would caution against that, right?

5 And so you tend to look at it like a window, like we're going  
6 to fly generally from 11 to 2. And that conversation, that's the  
7 conversation you're having 3 months out, right? But then as you  
8 narrow the scope and you approach the show, it's like, hey, we got  
9 a 10-day weather forecast, it looks like it's probably going to  
10 rain, let's think about that. And then now we're 72 hours out,  
11 it's definitely going to rain, right, or it's not going to rain or  
12 things like that. Yeah.

13 Q. Okay. Okay.

14 A. So it's always moving.

15 Q. So when in the grand scheme of an airshow do you say here's  
16 how we're doing it, here's the lineup, here's the final -- is  
17 there ever a point where you say here's the final lineup, the  
18 choreographed -- I use that term loosely, so my apologies --  
19 here's what we're doing for the airshow?

20 A. We should walk out of the briefing with a plan. So when you  
21 are done with the briefing, we should all walk out with a plan.  
22 And that plan will probably change, but we should all walk out  
23 with a plan. So the answer that is closest to your question is  
24 right after the briefing is when we would be closest to that  
25 point, but I would not say we ever get to that point.

1 Q. Okay. So, and please do not let me add words to your mouth  
2 at all, I just want to make sure I understand it. You develop the  
3 lineup and do you send that out to all your participants or do you  
4 talk about it at the briefing and is that the first time you show  
5 your participants that?

6 A. My style -- that's a style issue. My style is the -- I pass  
7 out the schedule about halfway through the briefing. That's the  
8 first time most people will see my version of the schedule.

9 Q. Okay. So if they don't have a preset -- I don't know what  
10 the word was, I think skit -- sorry. It's probably the wrong  
11 word.

12 A. Say routine.

13 Q. Routine. Thank you. It was a big word, so that's why it  
14 took me a minute. So if they don't have a preset routine, you  
15 know, I'm going to go out and start on the ground and do all this,  
16 a fly-by or whatever, the participants don't know what they're  
17 expected until they come out at the airshow? Is that when they see  
18 what your plan is? Is that when they first realize, ooh, I'm  
19 third in line to do this and I'm going to fly across the runway  
20 five times or something? Does that make sense, what I'm asking?

21 A. What you're asking is making sense, but you're actually  
22 asking about three questions in one. So yes, that is generally  
23 when the participants will know the sequence with which they are  
24 going to fly, who they follow, and generally the times that they  
25 will fly. For acts that do not have a routine, that is also

1 generally where we will brief the routine and how it's going to  
2 go. And that is also where some other decisions that may impact  
3 the overall event can be made as well.

4 Q. Okay. Let my brain chew on that for a little bit. We'll go  
5 on to another round. Because that -- it's percolating. It's  
6 starting to come on. I'm down here. All right.

7 So let's take you back -- take me back to 30 days prior.

8 A. Of Wings Over Houston -- or Wings Over Dallas?

9 Q. Of any event.

10 A. Oh, any event.

11 Q. Let's talk about what --

12 A. Any event. Okay.

13 Q. That's fine. We can do Wings Over Dallas.

14 A. Wings Over Dallas.

15 Q. Was that -- thirty days prior, I assume that you shut the  
16 airport down. You NOTAM the airport closed during an airshow. Do  
17 you do that? Do you file the NOTAM for that? How does that all  
18 work?

19 A. I don't have the authority to file a NOTAM.

20 Q. Okay.

21 A. Yeah. So, the only people that can NOTAM an airport closed  
22 is the airport management and I don't know if they NOTAM the  
23 airport closed nor would I look for that because I have a TFR.

24 Q. Okay. All right. Do you file the TFR or --

25 A. I file the TFR. A TFR is generally filed 45 days in advance

- 1 of an event.
- 2 Q. Okay. So for the Wings Over Dallas you filed a TFR --
- 3 A. Correct.
- 4 Q. -- about 45 days prior?
- 5 A. Correct.
- 6 Q. Early October/late September-ish?
- 7 A. Correct.
- 8 Q. Okay.
- 9 A. Yeah.
- 10 Q. All right. Sorry. I just -- I'm trying to piece a timeline
- 11 together. And you file that with the FAA FSDO, with air
- 12 traffic --- how do you file?
- 13 A. TFRs is an air -- TFRs fall on the ATO side, Air Traffic
- 14 Organization. So TFRs are filed through a office in -- on the ATO
- 15 side, and for the central United States -- there's three TFR
- 16 offices. In the central United States it's in Forth Worth. It's
- 17 at Alliance Airport. And then there's one in Atlanta and I think
- 18 the other one's in Seattle. I always have to look it up. But
- 19 there's an advisory circular for TFRs and there's a list and they
- 20 have all the contacts. Yeah.
- 21 Q. All righty.
- 22 A. And you send it in to an email.
- 23 Q. Oh, okay. So you don't even have to go in, in person or --
- 24 A. No.
- 25 Q. -- talk to anybody? It's all email?

1 A. It's, you know, 9-dash, dash, dash, dash, dash, dash, and  
2 it's in the email, yeah. It's in -- you know, it's saved in my  
3 email. But it's a general inbox, yes.

4 Q. All right. Have you ever had issues filing a TFR?

5 A. Oh, yeah. All the time.

6 Q. What kind of issues? I mean, just to help me understand?

7 A. The general process with a TFR is you say, hey, as the  
8 proponent of an event, I'm -- as the proponent of an event, I am  
9 requesting a temporary flight restriction. Anybody can request a  
10 temporary flight restriction. And then there's a big document  
11 that says how and why -- not how, but why, like what criteria must  
12 be met to be able to qualify, right? And then, because remember  
13 all TFRs run through the same office, including the ones for like  
14 firefighting and the ones for the president and the ones -- for  
15 things like that, right? And for the football games and baseball  
16 games. So we fall under the aviation event criteria. And so you  
17 have to provide the TFR request plus a schedule, plus the  
18 qualifying events. You send all that in.

19 Then what will generally happen is -- and this happens in the  
20 background. So I -- some of this is what I assume happened, but  
21 it's a very educated guess, right? So then they go to the air  
22 traffic organizations that are impacted by the TFR. And so,  
23 sometimes that can be multiple organizations because the airspace  
24 on the air traffic side is divided up differently than say like on  
25 the map, right? And so they all get an opinion. They get say



1 something, like this is a problem, we don't like this, and then  
2 there have been occasions in my career where they come back and go  
3 like, I have a problem with this.

4       And like one really good example is for years and years and  
5 years at my Laredo airshow I would ask for 17,000 feet. Well,  
6 finally -- I think her name's Debbie at Houston Center goes can  
7 you live with 14,000 feet? Because their airspace changes at  
8 14,000 feet. So if I keep it below that, it makes her life  
9 easier. And I'm like, yeah, no problem. So we just live with 14,  
10 no big deal. Because I only need 18,000 feet for one act, and  
11 that's the F-16, right? And you can tag them up and do a point  
12 out and coordinate that, right?

13       So you apply, comment, and then you will receive an email  
14 that says -- and you usually get this -- I mean the TFR office in  
15 Fort Worth is amazing. So I get it like -- 10 days later usually  
16 I'm getting here's the proposed NOTAM for a TFR. And so everybody  
17 comments with like a concurrence, like, yeah, looks good to me.  
18 Or you go, hey, I think we transposed these numbers or the  
19 coordinates are wrong. That happens. And -- or the times are  
20 wrong because everything's UTC so you had to do the math. And  
21 then once they have concurrence you'll see that usually 7 days in  
22 advance.

23       And then 72 hours in advance you want to call flight service  
24 and say is there a NOTAM for this TFR? You want to make sure they  
25 have it, right? And there's usually a pointer NOTAM to the NOTAM

1 and now you know that -- and then you check your ForeFlight to  
2 make sure it's over there.

3 Q. Okay.

4 A. That's the general process. Yeah.

5 Q. Okay. So Wings Over Dallas --

6 A. Yes.

7 Q. -- since we're talking about that then, did you have any  
8 issues getting a TFR for that?

9 A. This year? No.

10 Q. Okay. In years past, I assume?

11 A. Yeah. So initially, right, so the first time we requested I  
12 think 8,000 feet. And Dallas Approach was like no, like if I'm  
13 north flow, you're on my arrival corridor and now -- and I got to  
14 stop my jets real high and now I can't get them down. Or if we're  
15 south flow, you're on my departure corridor because they have a  
16 merge point for Love and DFW that comes right along Redbird and to  
17 deconflict that, they run all the other traffic right here. So  
18 they really want that tunnel.

19 So dealing with the staff specialist at D10 -- D10 is Dallas-  
20 Fort Worth TRACON. So that's D10. Dealing with the staff  
21 specialist at D10, you know, you have a phone call, what's the  
22 problem? Well, this is how you're impacting. Oh, I didn't know  
23 that. Well, what can you do? Well, I can do 3 miles at 3,000  
24 feet. Okay. Well, that's not going to work for me. How do I --  
25 well, what do you need? There is a point where I have to have

1 4,000 feet. Okay. We'll swap those guys, we'll do a point out --  
2 tower-to-tower point out and we'll work that real time. Perfect.  
3 And then that's how we ended up with the TFR that we have, and  
4 then we just rinsed and repeated that.

5 Q. Okay. So for Wings Over Dallas, do you remember what your  
6 ceiling height was? Was it 4,000 then?

7 A. 3,000.

8 Q. It was 3,000?

9 A. So it goes to the base of the Class B airspace.

10 Q. Okay. All righty. Okay. I'll let that percolate for just a  
11 little bit. So the second round might be long, but not as long as  
12 the first.

13 A. That's okay.

14 Q. So for the Wings Over Dallas event, I know there's an FAA  
15 person that's in charge -- not in charge. That's the wrong word.

16 A. No, that's their title.

17 Q. Inspector in charge, right?

18 A. Yes.

19 Q. Okay. So did you ever interact with that person during that  
20 45 days, that 30 days prior to the event?

21 A. Yes.

22 Q. How long? Ballpark.

23 A. Oh, once a week.

24 MR. DENNY: And you're talking about specifically for Wings  
25 Over Dallas, right?

1 MR. ETCHER: Wings Over Dallas, yes.

2 MR. ROYCE: Yeah. Inside of 30 days, once a week.

3 BY MR. ETCHER:

4 Q. Okay. And is that just -- what are you dealing with there?  
5 Just the final touches, the -- help me kind of understand your  
6 interaction with the FAA then.

7 A. Generally my interaction with that person is getting them the  
8 answers to questions that haven't been provided by the producer.  
9 So they will ask the producer a question, not get a response or  
10 get an incomplete response. And there are occasions where they  
11 will call me and say, hey, I need this but I'm kind of being told  
12 this. And then sometimes I'll have like this critical piece of  
13 information that they may not know that marries everything  
14 together, right? Because I'm privy to conversations that are had  
15 amongst the production team that just don't disseminate down to  
16 the FAA regulatory team, right? And so there's this gap of  
17 knowledge. And so sometimes I can fill that and then sometimes I  
18 go, oh, well, you need to talk to Dr. Woods, right? Like that's  
19 who you need to go talk to, here's her number.

20 So that is generally how that relationship works for me with  
21 Wings Over Dallas mainly because on the regulatory side it's a lot  
22 of rinse and repeat. They already have my LOA. We've worked  
23 together on other airshows. We have a built relationship and  
24 things like that, so --

25 Q. And you bring up LOA. A question popped into my head, so

1 apologies for jumping to that. We talked about it a little bit.  
2 But you -- an LOA was just required 2019; is that what you told  
3 me?

4 A. Yes.

5 Q. The year it was issued in 2019, your first one?

6 A. Oh, I mean, I would want to fact check the date, but I  
7 believe it was January 1st, 2019. I'm pretty sure.

8 Q. Okay. And it's good for how long?

9 A. Three years.

10 Q. Three years. So 2022 --

11 A. So it would be 2020 then, because mine expired after Wings  
12 Over Dallas.

13 Q. Wings Over Dallas was November --

14 A. '23. So it was 2020. Oh, it's '23 now. Yeah, so it's '19.

15 Q. Okay.

16 A. Yes.

17 Q. So it expired at the end of last year?

18 A. Yes.

19 Q. So it expires at the end of a calendar year? Is it --

20 A. Yes.

21 Q. Okay. So it's --

22 A. Well, it's in there, the date that it expires, which happens  
23 to be December 31st.

24 Q. Okay. Thank you for that clarification. And is that just --  
25 how do you get a letter of authorization? Is it just you got

1 sign-offs by people that observed you? Did the FAA have to  
2 observe you? Do you just fill out paperwork? How did you get  
3 your LOA?

4 A. The way that I got my LOA is that I had to put together like  
5 this list of experience, like airshows that I've done, and then I  
6 had to get some letters of recommendation, and then I had to fill  
7 out an application. And then you turn all of that in to ICAS,  
8 International Council of Air Shows, ICAS. And then you pay \$1,000  
9 and they assign an observer, an evaluator to you. And then you  
10 schedule that evaluator at an event. And this was -- this  
11 would've all been in 2018, right? And that evaluator comes to the  
12 event, observes and evaluates you, and then they will fill out a  
13 grading sheet. They will turn that in and then ICAS will write a  
14 letter of recommendation to the FAA with a package, and then the  
15 FAA will either approve or deny your letter of authorization.

16 Q. Okay. So ICAS gives you your check ride and fills out your  
17 paperwork? I'm probably putting --

18 A. That's fair. That's fair. Yes.

19 Q. Okay. And it's not really a check ride, it's just an  
20 observation, I assume?

21 A. I'm -- well, I mean, I think a check ride is a fair  
22 relationship.

23 Q. But the LOA is actually -- they recommend you for an LOA, but  
24 the LOA is issued by the FAA; is that correct?

25 A. Yes.

1 Q. Okay. And to get ICAS to do this, do you have to be a member  
2 of ICAS or can any, say, any air boss use ICAS to do that or do  
3 you have to be a member? Kind of help me understand that.

4 A. You do not have to be a member.

5 Q. Okay.

6 A. ICAS manages the program. Yeah, membership is not required.

7 Q. Okay. And just for the record, are you a member of ICAS or  
8 are you not?

9 A. Our company is a member of ICAS.

10 Q. Okay. All right. Perfect. One last question, and I know  
11 you're getting tired of looking at me and talking to me, and  
12 Sabrina asks really, really good questions. I'm more varied. One  
13 last question and then I'll pass it to her.

14 You had said earlier that your father was CAF president at  
15 one point?

16 A. Yes.

17 Q. Is that right? So are you a CAF member then because he was  
18 part of it?

19 A. No.

20 Q. Okay. So you have no -- this sounds weird -- no affiliation  
21 with CAF?

22 A. Correct.

23 MR. ETCHER: Okay. All right. Before I pass it to Sabrina,  
24 though -- I promised you I would -- do you need a break or  
25 anything? Does anybody -- I have one head over there nodding, so

1 we will take a -- we'll go on break at 1450 and be back soon.

2 (Off the record at 2:50 p.m.)

3 (On the record at 2:57 p.m.)

4 MR. ETCHER: All right. Back on the record at 1457. And as  
5 I told you, I'm going to pass it off to Sabrina and I will let her  
6 ask the really, really good questions.

7 DR. WOODS: Yeah. Thank you for that.

8 BY DR. WOODS:

9 Q. So I do have a couple like cleanup questions, because what  
10 happens a lot is like I hear what he asks and then you'll say  
11 something, so then you'll be like, why are we going all the way  
12 back to that? That's how this process works, so you just have to  
13 kind of forgive the process.

14 But earlier when you were talking about training in like, for  
15 instance, if Shawn came off the street and said, hey, this is  
16 something I want to do, you talked about demonstrating the  
17 critical skills to be an air boss. To you, what are some of those  
18 critical skills?

19 A. I would say like critical skills are you have to be able to  
20 think three-dimensionally. Not everybody can do that. You have  
21 to be able to anticipate some -- you have to have an ability to  
22 anticipate things. Not everybody always does. And then there's a  
23 skill, and I'm not sure of the term for it, but you have to have  
24 the ability to think both in a big picture and in a small picture  
25 way, and some people have a difficult time making that transition.



1 So those are generally the skills that I think are critical. And  
2 then obviously you have to be able to talk on a radio. Not  
3 everybody can do that. And you got to be able to speak aviation.  
4 Not everybody can do that. So those -- I would call those more  
5 like prerequisites, right? But the skills are more along the how  
6 your brain processes information.

7 Q. And going back to the ABRP, and you said at this time for you  
8 it's ICAS, correct? That is who essentially you submitted your  
9 letters of recommendation and all that to -- air boss  
10 recommendation program. Sorry.

11 A. Um-hum.

12 Q. Are there other ABRP programs out there other than ICAS?

13 A. Not that I'm aware of.

14 Q. Okay. And so, I did read through what the requirement  
15 established as of 2019. And I know there's different levels of  
16 air boss. What level are you?

17 A. Multi-venue, recognized air boss multi-venue.

18 Q. And so going forward, back to Shawn coming in off the street  
19 and wanting to do this sort of thing, about how long would you say  
20 it takes from start to finish to become the level that you're at?

21 A. A guy like Shawn, because he was an airline pilot, it would  
22 probably take 3 to 4 years. An air traffic controller, I could  
23 probably get that down to 2. You have different problems to solve  
24 with both subsets of people.

25 Q. So let's talk about that a little bit. What is the -- what

1 would be the pros and cons of each?

2 A. Both a pro and a con is both of those organizations come from  
3 highly proceduralized positions, which can be good because you can  
4 think of things procedurally, right? But it can be bad because  
5 then you can maybe only think of things procedurally. Then pilots  
6 tend to want to fly the airplanes for people, which is sometimes  
7 good, sometimes bad. And then air traffic controllers tend to  
8 default to I've spent 20 years and the picture looks like this, so  
9 I'm going to make it look like this. So they tend to be less  
10 creative with how they solve problems because they've only seen  
11 one solution for 20 years.

12 Q. You said earlier something that's interesting about how it's  
13 always learning, it's always coming into new situations and  
14 learning and expanding your understanding. Is there any sort of  
15 formalized recurrent training required to be an air boss?

16 A. No.

17 Q. So once somebody achieves that level that you have, that  
18 multi-venue --

19 A. Recognized air boss.

20 Q. -- recognized air boss level, is that it? Is there nothing  
21 else prescribed that that individual ever has to do again to  
22 maintain that level?

23 A. There's no training requirement. You do have to renew -- you  
24 have to renew your LOA every 3 years. And there's a renewal  
25 process.

1 Q. So in that renewal process is there -- is it the same as the  
2 initial process in terms of letters of recommendations and I have  
3 to have worked so many -- I have to be observed?

4 A. It depends. Generally you need letters of recommendation and  
5 you need to have -- depending on your level, you need to have met  
6 a certain minimum experience requirement. So you'd have to work a  
7 certain number of shows. Specific to each level, I don't have off  
8 the top of my head. I would go to the book for that. But that is  
9 the generalized process. But there's no observation requirement.

10 Q. So, I guess, under this program, and if you don't know the  
11 answer, you don't know the answer, can a person go backwards? Can  
12 they -- well, two questions. Can a person go backwards, like all  
13 of a sudden now they're no longer at that highest level? Do they  
14 start over back at zero? How does that process work?

15 A. I would -- I do not know if you can go like down a level,  
16 we'll say, right? I would assume you would just have to apply for  
17 that level, but since you met the criteria for the higher level,  
18 you would assume you would meet the criteria for the lower level.  
19 So I think that's how you would go backwards.

20 And then what was -- I forgot the second question. I'm  
21 sorry.

22 Q. Let's say you don't meet the I've worked this many airshows  
23 in this amount of time, do you start back over at zero and have to  
24 completely reapply?

25 A. I think that if you fail to meet the minimum experience

1 requirement, then I think that you would have to reapply like it  
2 was -- you were applying for the first time, which would probably  
3 require observation.

4 Q. And I understand that that's -- I recognize you're not ICAS,  
5 so --

6 A. Yeah. That's a definitely get in the book question. That's  
7 a good one. Yeah.

8 Q. So going back to -- can you walk me through how does -- how  
9 do you get contacted that says, hey, Mr. Royce, I want you to be  
10 the air boss for my airshow? How does that process work?

11 A. Pretty much like that. You get a phone call out of the blue.

12 Q. Okay. So is there -- at no point do you go solicit for like,  
13 hey, I hear you have an airshow coming up, I would like to be your  
14 air boss?

15 A. Yes, that as well. But not so much cold calling. It is  
16 generally a referral, right? They know someone who is an airshow  
17 guy or they know someone who knows someone who's airshow guy. And  
18 then they will generally call you. The referral -- the soliciting  
19 side generally happens more ICAS convention in December where we  
20 have our booth and people come by, like, hey, you looking for an  
21 air boss, right? And sometimes they already have one and  
22 sometimes they're like we're not even sure we're having an  
23 airshow. And so that's more of a meet and greet, feel it out  
24 thing. But it's a pretty highly referral business.

25 Q. So going back to your relationship with Commemorative Air

1 Force. I know it's a little bit different than maybe another  
2 person, another air boss out there because of the fact that you  
3 kind of grew up with the organization. So taking over the helm as  
4 an air boss for Commemorative Air Force, definitively, can you say  
5 about what year that happened?

6 A. I don't agree with the way you asked the question.

7 Q. Okay.

8 A. So what you said that I would kind of disagree with is, is  
9 you said that I'm the air boss for the Commemorative Air Force and  
10 that's not accurate. I am not the air boss for the Commemorative  
11 Air Force because there are Commemorative Air Force airshows that  
12 are run by other people and there are airshows that the  
13 Commemorative Air Force participates in run by other people and  
14 other airshows produce. So that I would not say is accurate.

15 I think the -- and correct me if I'm wrong, but my  
16 relationship specific to the Wings Over Dallas airshow started 7  
17 years ago when they first put the airshow on. But that's not  
18 organizationally wide. It's specific to that airshow. Yeah.

19 Q. I understand. You are correct. It was a poor use of an  
20 article.

21 A. Sorry.

22 Q. I should have said an air boss instead of "the."

23 A. Thank you. Sorry. I just didn't want to answer -- yeah.

24 Q. Oh, no. Thank you for correcting that. So but that is  
25 actually a good -- you got to where I wanted to --

1 A. Yeah.

2 Q. -- which was when did you become an air boss for the Wings of  
3 Dallas? And then at that point, given the fact that ICAS wasn't  
4 in place, given the fact that all of this ABRP program, letters of  
5 recommendation and observations started after the fact, how did  
6 you step into the role?

7 A. Well, I was asked. So like -- so when the Commemorative Air  
8 Force moved their headquarters from Midland to Dallas, I was doing  
9 the Midland airshow. So I had run the headquarters airshow  
10 before, but then it moved here. And then they have to put an  
11 airshow on and then they go, hey, like we have problems because of  
12 our location because of approach and all that. And so then it  
13 just -- I think it was kind of always -- the relationship was  
14 already there with the people, so it just moved locations.

15 Q. Earlier you mentioned with some of the performers that they  
16 have something you called support manuals. How far in advance do  
17 you get these manuals prior to an airshow taking place and who is  
18 providing them to you?

19 A. I never get the air -- I never get them provided. They're  
20 not provided. You go and seek them out. So like the  
21 Thunderbirds' manual is on the Thunderbirds' website, the Blue  
22 Angels' manuals -- and then I generally as a practice read through  
23 all of them in January, but not all of them are out in January,  
24 sometimes they're out in February. And the reason for that is --  
25 well, I should say I believe the reason for that is they do

1 Heritage Flight Conference in February and that's where the Air  
2 Force single-ship demos get certified generally, and so they tend  
3 to not release the updated support manual until after that, right,  
4 because they can change all the names and numbers and stuff. So,  
5 but I tend to read those in January/February because you peruse  
6 through them and find all the little changes and -- you know,  
7 because it's such a small industry, you generally know about the  
8 changes coming, but it's like, well, what did they say exactly,  
9 right? Because they don't write them, someone else writes them.  
10 So I try and read them once a year.

11 Q. So January, with the exception of some of these, you're  
12 preparing for a show that's in November. Again, earlier you said  
13 that that back and forth between you and the producers, you don't  
14 always know who you're going to have. So how do you know which  
15 support manuals to go read?

16 A. Well, I tend to just read them all. Because, you know, a  
17 support manual is 180 pages, but there's probably only -- you  
18 know, the change sheet is probably 3 or 4 pages. Because like,  
19 you know, the spacing of the jets don't change. What they did for  
20 the Blue Angels when they went to the new jet, which is bigger,  
21 but -- like, you know, the nosewheels are so far apart and all  
22 that. It's pretty standardized, so what you're looking for is  
23 just -- because, you know, one of the roles, kind of the  
24 subsequent role that you fulfill as an air boss is you kind of  
25 want to help the producer, who may not know, through like, hey,

1 don't forget you have to fill this checklist out for them and  
2 things like that, right? And so you're -- I read through it once  
3 a year just kind of going, hey, what did they change, right? A  
4 lot of it's updated names, phone numbers.

5       And then when the Blue Angels redid theirs with the new jet,  
6 you read through it because it's like, hey, what's changed with  
7 the new jet? And then -- little things like that, and then like  
8 in the Air Force single-ship demo manual the FAA approved the A-10  
9 to fly as a Category 2 airplane. So there was a change there,  
10 right?

11       So I just read them all. And then -- and of course you want  
12 to download the current year version on the computer so you always  
13 have it, right, and you put it in the cloud, wherever that is.  
14 And that way when something comes up, you can just pull it down  
15 real quick and go, oh, yeah, they need, you know, 50 pounds of  
16 whatever or 10,000 gallons of fuel or whatever it is. Because  
17 that way I don't have to memorize the numbers referenced.

18 Q.   Are you ever prepping for more than one show at a time as an  
19 air boss?

20 A.   Yes.

21 Q.   What's your max, this is how many I can keep in my periphery  
22 at a time?

23 A.   I mean, I don't -- I mean, there is obviously a number that's  
24 a max. I don't think I've gotten there. I don't know what it  
25 would be. I think the limiting factor there is like, you know,



1 weekends away from home, right? Because, you know, you're leaving  
2 on Wednesday/Thursday, you're taking off of work, you're coming  
3 back Sunday or Monday and then you got to go to work, and that's a  
4 lot. That's taxing physically and logistically. But the  
5 producer's team, the production team is doing most of the heavy  
6 lifting. You're more of a guide. Yeah.

7       So, and to expound on that just a little bit. I mean, you  
8 know, I'm 9 months out for an airshow, I'll get a call once a  
9 month, hey, we just had our airshow meeting and here are the  
10 questions that came out of it. Oh, A, B, C, do this, this, this.  
11 But then as you get closer, it'll be like we're talking once a  
12 week, right? And then as you get closer, like the week of the  
13 airshow, you're getting a call every day. So, this just came up,  
14 this just came up, what do I do here, this guy said that, so --  
15 yeah. So it's not that difficult per se to keep track of  
16 multiples because you're just -- you're at different stages of the  
17 development cycle.

18 Q.    So specifically for Commemorative Air Force and Wings Over  
19 Dallas, at what point are you now physically a part of these  
20 meetings? At what point out before the airshow?

21       MR. DENNY: You talking about the past one?

22       DR. WOODS: Yes.

23       MR. ROYCE: Which meetings? Like the briefing, I run the  
24 briefing, and that's the morning briefing. But like planning  
25 meetings, I don't participate in.

1 BY DR. WOODS:

2 Q. Okay.

3 A. Yeah.

4 Q. And so you're a liaison -- to confirm, and for the record,  
5 you're a liaison to what's going on in those planning meetings  
6 with whom?

7 A. There's multiple, but like Gena Linebarger was airshow  
8 producer, you all have heard her name, David Oliver, Jim Lasche.  
9 These are the three people that I would probably interface with  
10 the most.

11 Q. They are -- and I'm paraphrasing because I'm trying to  
12 understand it. So they're the ones that are feeding you  
13 information as to what they're planning for their airshow?

14 A. Yes.

15 Q. So if you have questions or concerns, who would be your belly  
16 button to push to voice those?

17 A. Depends on the question or concern. Generally I would run  
18 things -- for Wings Over Dallas, I would generally run things  
19 through Gena Linebarger.

20 Q. And have you had to do that in the past?

21 A. Um-hum.

22 Q. Can you give an example?

23 A. Oh. Oh, you're looking for -- like one year we did a big  
24 B-25 thing. Hey, Gena, have we confirmed the number of B-25s yet,  
25 right? And then we did a big C-47 thing. Can you confirm the

1 number of C-47s? What about the jump teams? And then -- and  
2 things like that. So it's always a relationship, you know, hey, I  
3 believe you hold information that for some reason I need now and I  
4 don't have it, and sometimes I hold information that you need now  
5 and I don't have it -- or you don't have it, I have it. So it's  
6 just that type of relationship.

7 Q. That's a great operational example, but let's talk like, for  
8 instance, interpersonal. What if you are having difficulties with  
9 a performer, individual performer's behavior? Maybe they're not  
10 showing up when they should or maybe they're, you know, expressing  
11 displeasure or whatever. What would be your avenue for feedback  
12 and recourse for that situation?

13 A. I would go to the performer directly. That's me. It's not a  
14 producer issue.

15 Q. Okay.

16 A. Yeah. That's a performer issue.

17 Q. What if the person's like "pff" and walks off?

18 A. Yeah. So if I was in a situation where we had a performer  
19 maybe not acting appropriately and it's not a safety of flight  
20 issue and they kind of blew me off, I mean, that's when you reach  
21 out like to the community, right? Because someone -- so I'm  
22 trying to answer the question generally, but the solution is very  
23 specific, right? Because like if they're in the warbird  
24 community, someone put them in that warbird, so we can probably  
25 connect to someone that has influence over them if they were not

1 receiving the criticism well, right? So, you know, we tried  
2 direct, let's try indirect. And if they're in the flip-flop  
3 community, same thing. If they're in the sky dive community, we  
4 could -- there are avenues to go, okay, who does this guy like and  
5 respect? Let's go talk to him because maybe there's something I  
6 don't know, tell him the situation and see if he can broach the  
7 subject because I got blown off. I mean, I don't even -- yeah, I  
8 don't -- that's how I would generally handle that. But that is  
9 not -- I wouldn't go to Gena for an issue like that at Wings Over  
10 Dallas.

11 Q. So we just learned that something that's unique to  
12 Commemorative Air Force, that their aircraft and their pilots are  
13 Commemorative Air Force aircraft and pilots. So in that  
14 situation, to which Gena is contracted and to which you would be  
15 contracted, they are -- let's say if it's in the warbird  
16 community, they are the people who are over these pilots that you  
17 might be having these problems with. Would that answer change at  
18 all?

19 A. It depends on the problem. It really depends on the problem,  
20 right? Because obviously you can start breaking it down to like,  
21 well, are they a fighter guy, are they a bomber guy, what role do  
22 they play, what role -- are they a lead, are they a wingman, are  
23 they -- right? So kind of back to the original question. So I  
24 have an issue with a participant and, you know, definitely going  
25 to try and handle that directly. Can't handle it, kind of get of

1 blown off, well, let's go to someone who probably fulfills a  
2 mentor role for that person, right? Say, hey, this is the issue  
3 I'm having. But if it's a safety of flight issue, that's  
4 different. But if this is just like, hey, I kind of -- like this  
5 guy's just kind of, you know, talking during the briefing and  
6 just, you know, being loud or whatever, like that's, hey, man,  
7 you're kind of being rude and -- well, I don't care. Okay. Hey,  
8 you know, hey, Shawn, can you tell that guy he's kind of being  
9 rude and please ask him not to talk during the briefing or  
10 whatever, right? But safety of flight issues would be handled  
11 differently because safety of flight, I have the -- I can pull the  
12 plug on that and then we can sort it out later if it arises to  
13 that occasion.

14 Q. And what are some of the tools in your arsenal to handle that  
15 safety of flight situation?

16 A. Well, always want to try to handle it directly, right? Then  
17 if you have like a safety of flight issue -- so I was at an  
18 airshow and a guy was not sick, but didn't look great. So I'm  
19 like what's up? Well, I kind of -- I feel fine. Well, but you  
20 don't look fine. Yeah, but I feel fine. But you don't look fine.  
21 Why don't we put someone else in the airplane with you? Because  
22 he was flying a jet that day. Oh, come on, man. Hey, man -- you  
23 feel fine so it's fine, but you don't look fine so we got to do  
24 something. Well, I don't like it, but, you know, that's a good  
25 point. So that's kind of how we resolve that issue, right?

1 Because you have a difference, I mean, you look -- you don't look  
2 fine but you feel fine. And so I had that experience that I was  
3 kind of on the edge of, where I wasn't necessarily the decision  
4 maker but I was in the team.

5 And so, because that starts -- like that specific  
6 circumstance I may not say it's a safety of flight issue, but now  
7 we're getting -- you would not argue that we're at least getting  
8 close, right? So -- and then, I mean, if you're going to walk all  
9 the way to like what's your final -- like the guy walks out to the  
10 airplane, gets in the airplane, you've told him not to fly,  
11 everybody else told him not to fly, and he's going to fly anyway,  
12 I cannot issue a clearance and now it's a violation. And then you  
13 can get the FAA to step in, right? And now you're putting your  
14 ticket at risk and if you're an airline pilot you're putting your  
15 job at risk. I can't imagine that that would happen, but like you  
16 have multiple layers to get to like the extremes.

17 Q. So would you say then, as an air boss, you do feel empowered  
18 to handle that, to handle those all the way from interpersonal  
19 snippets to --

20 A. Yes.

21 Q. -- safety of flight issues?

22 A. Yes. There is a point in which you have the ultimate  
23 authority.

24 Q. Going back to the pre-brief. So it sounds like although you  
25 have an idea of what aircraft are going to be at your disposal

1 prior to the pre-brief, you are not actually engaging with the  
2 performers themselves until that briefing; is that correct?

3 A. Usually. That's not entirely correct. There are  
4 circumstances where you will engage with people beforehand, but  
5 that's not always true. Just that's very situational. Yeah.

6 Q. And so what situations would you have any sort of  
7 conversations with them or work with them prior to?

8 A. Yeah. If I'm working with a guy that I've never worked with  
9 before, I'd probably call him and go like, hey, tell me about your  
10 routine. You know, are you air start, ground start? Like, you  
11 know, what do you expect from me? Here's what I expect from you.  
12 What do you like; what don't you like? So I want to get that  
13 information and so it's usually around that. And then most of the  
14 time when I'm talking to pilots beforehand, hey, man, when you  
15 getting in? Are you going to practice on Friday? You know, and  
16 things like that. Are you trying to go home Sunday? Things like  
17 that.

18 Q. For this past Wings Over Dallas airshow, is there a  
19 percentage you can give me? Did you know all the performers? Had  
20 you worked with them before or was there anyone new?

21 A. So I'd split that into two things, right, because you have  
22 airplanes and pilots, right? And so then you can start to  
23 percolate on that a little bit because you get pilots you know  
24 flying airplanes that they're new to or that that combination is  
25 new. There were some guys there that I didn't really know, but

1 for the most part I would say I had experience with all the  
2 individual aircraft and I had experience with all the individual  
3 pilot PICs. To the best -- like I'm going to throw like to the  
4 best of my knowledge on there, right?

5 Q. I'm jumping ahead in my questions a bit.

6 A. That's fine.

7 Q. I know we're going to get specifically to the day of the  
8 accident and walk through that, but because I'm on the subject  
9 now, did you know and had you previously had the opportunity to  
10 work with the crew for the B-17 and the P-63 pilots?

11 A. Yes.

12 Q. In those respective aircraft?

13 A. Yes.

14 Q. Okay. So going back to the pre-brief. About how far in  
15 advance does that happen prior to airshow start, whenever that is?

16 A. The briefing, generally we try to start the briefing 2, 2½  
17 hours before the first aircraft is to take off, general rule of  
18 thumb.

19 Q. And what all -- do you take up that whole time? What all are  
20 you covering in the time that you're afforded?

21 A. Oh. So big items -- you cover many things, a lot of them are  
22 small. But we're going to cover the airport, the airspace, the  
23 emergency stuff, the schedule, the sequence -- schedule sequence,  
24 rules, rules of the road, rules of engagement type stuff, diverts.  
25 We do a time hack, we do a roll call, and then just general



1 housekeeping. There's a list. I would have to pull it up.

2 There's a list of all the items you have to cover, but those are  
3 the bigger ones.

4 Q. Where does that list exist?

5 A. In 8900.

6 Q. And who's required to be present at those briefings? Is it  
7 like a cast of thousands or who's there?

8 A. Everybody that's participating. So you want -- all the  
9 central personnel must attend, and that's defined. And then you  
10 want everybody participating, so that's where you get into like  
11 your support folks, right? Like the guy driving the fuel truck  
12 should be there, right, because you might have to sort out a  
13 fueling issue, right? And then of course it's nice to be like,  
14 hey, this is Jim Bob, he's the fuel guy; if you need gas, look for  
15 Jim Bob. So, but essential personnel and all participants need to  
16 attend the briefing.

17 Q. Okay. Who makes sure that happens? Who's responsible for  
18 that?

19 A. I would say -- I don't think that's answered in the book, but  
20 I would have to go look. I would say that ultimately it's the  
21 responsibility of the IIC. But that's like regulatory. I mean,  
22 if you're going to participate in the show, it's your  
23 responsibility to make sure you attend, right? Because if you  
24 don't attend and I get to you and it's like, hey, where's Shawn?  
25 Oh, he's not here. Well, Shawn can't fly, he didn't attend the

1 briefing. So -- and then we have a sign-in sheet.

2 Q. And for a matter of record, to what organization does the IIC  
3 belong?

4 A. Flight Standards, FAA Flight Standards.

5 Q. FAA? And I know that during the process at some point that  
6 cards are presented. Who is responsible for taking those?

7 A. The pilot has the responsibility to demonstrate his  
8 credentials to the IIC.

9 Q. So is there any involvement that you have in that process at  
10 all?

11 A. With like SAC cards or FAST cards? No.

12 Q. So what happens if one of those essential personnel, either a  
13 performer or the pyrotechnics person or a fuel person, what  
14 happens if they are not in attendance at the briefing?

15 A. There is not a requirement to attend the briefing; there is a  
16 requirement to be briefed. So there are situations where someone  
17 will not attend the briefing, be briefed, and still be allowed to  
18 fly. If you do not -- if you are not briefed, you can't fly. So  
19 if a pilot isn't at the briefing -- there are situations,  
20 especially if you got a guy like let's say he's going from like  
21 Houston to Midland, there's a big storm in the middle, and he's  
22 going to be an hour late. You can brief him on the side,  
23 especially if he's like a self-contained act. Obviously  
24 situationally, too.

25 And then, but like -- you used the example pyrotechnics. I

1 do not expect the entire pyrotechnics teams to be in the briefing.  
2 I do expect the shooter in charge to be there. In theory, if you  
3 got into an extreme where a shooter in charge was not in the  
4 briefing, then we would not have pyrotechnics that day because a  
5 shooter in charge was not there. So it's be briefed or don't  
6 participate.

7 Now a fuel truck guy's an essential personnel. If the fuel  
8 truck guy doesn't make it to the briefing, I'm not going to shut  
9 down the whole airshow because of a fuel truck. So there's some  
10 pragmatism that takes place as well.

11 Q. So it sounds like, by your last words of I'm not going to be  
12 the one, it sounds like then the gatekeeper for that process is,  
13 in this case, you or the air boss or whomever the air boss is that  
14 day?

15 A. I would say the gatekeeper -- the gatekeeper is the IIC. I  
16 want to, as a courtesy to the customer, help make sure that we go  
17 through the process so that we can deliver the requirements so  
18 that we don't have a problem.

19 DR. WOODS: I think, before we get into the actual events in  
20 the next round, that's all I have.

21 Thank you, Shawn.

22 MR. ETCHER: You doing okay? Anybody need a break? You all  
23 good?

24 MR. ROYCE: I'm good right now. Yeah.

25 MR. ETCHER: All right. Hey, Matt, are you there?

1 MR. RIGSBY: I am.

2 MR. ETCHER: Do you have any questions, sir?

3 MR. RIGSBY: Just a couple. Just trying to refresh my  
4 memory.

5 BY MR. RIGSBY:

6 Q. Are the briefs required every day of the show?

7 A. Yes. Brief -- you are required to be briefed each day.

8 Q. And as I recall, Friday, the day before, there was weather  
9 prevented the show; is that correct?

10 A. Yes. On the Friday before, we briefed but did not fly.

11 Q. And I think you may have answered this, but it's just a  
12 little hard to hear. Were all the pilots set to do the show at  
13 the brief meet?

14 A. No.

15 Q. Do you recall who wasn't?

16 A. Len Root did not attend the entirety of the briefing.

17 Q. Do you recall where the FAA IIC was there during the airshow?

18 A. Well, they move around.

19 Q. Right. Okay.

20 A. So I -- to answer your question, no, I don't know where he  
21 was at all times.

22 MR. RIGSBY: Okay. All right. That's about it for me.

23 MR. ROYCE: Thanks, Matt.

24 MR. RIGSBY: Thanks.

25 MR. ETCHER: Thanks, Matt.

1 All right. You made it through round one. I said round two  
2 is usually quicker, but I used the phrase usually, so we'll take  
3 that as it comes. How's that?

4 MR. ROYCE: Yeah.

5 MR. ETCHER: Are you guys doing okay before I start round  
6 two?

7 MR. DENNY: Yeah, I'm good.

8 MR. ROYCE: I'll probably have to hit the head here in a  
9 little bit, but it'll be fine. Yeah, I'll just raise my hand.

10 MR. ETCHER: Just say so anytime.

11 MR. ROYCE: Yeah.

12 MR. ETCHER: No worries. You don't have to raise your hand.  
13 Just use it, because I'm not going to hold you here. I'm not that  
14 mean.

15 BY MR. ETCHER:

16 Q. So, and you helped me understand a lot about air boss, so  
17 thank you for that. I know you're probably thinking, man, this  
18 guy really doesn't know anything and you'd be right.

19 A. No.

20 Q. You really filled in some blanks, so I do appreciate that.

21 Now let's start getting into the airshow itself, the day of.  
22 I know it's been -- math is not my strong suit, but let's say 8  
23 months ago, give or take. And so, things -- remember, you can  
24 always use "I don't know." That's okay. But kind of walk me  
25 through your day in the life on that day. What -- when did your

1 day start to kind of walk me through it. I want to be that fly on  
2 your shoulder. I see you have a question?

3 A. So you're talking Saturday?

4 Q. Is Saturday the day of the event? Yeah. Yes.

5 A. Okay. So you just want me to take --

6 Q. Let me be your -- fly on your shoulder. I want to see, hear  
7 whatever. Kind of walk me through, because that probably will  
8 answer a lot of my questions.

9 A. Oh, okay.

10 Q. And it's nice so I can kind of put it in context with how you  
11 recall it.

12 A. Woke up in the morning 6-ish, and got in the car, went and  
13 picked Sam up from the hotel. Went to -- I think we went to  
14 Chick-fil-A and got breakfast. Drove down to the airport, got  
15 there 7:30-ish -- 8 o'clock brief, 7:30 there sounds about right.  
16 Set everything up and then you just, you know, handshakes and  
17 hugs, right? And then we started the briefing at 8. We briefed  
18 and then I want to say we started flying at 11:30, but I would  
19 have to look at the schedule. I don't remember off the top of my  
20 head. I would have to look at my schedule.

21 And then -- because I remember like we hung out in the  
22 hangar, Sam and I did, and we're just talking about like how the  
23 day's going to go and going through some of the stuff on the  
24 schedule, because he was observing. We grabbed hamburgers from  
25 the guys cooking lunch for the volunteers, and then we walked out

1 to the stand. I walk out instead of riding out. That's kind of a  
2 thing I do. And then got up there, got everything set up with the  
3 radio. I think I did radio checks with everybody. I would have  
4 to double check that. And then just started going to work. And  
5 then just started running the airshow all the way up until the  
6 accident.

7 Q. Okay.

8 A. Do you want to stop there or do you want me to go --

9 Q. If you want to continue, continue please.

10 A. Well, and then we had the accident, went through all that,  
11 hung out, got to the point where I was kind of told I could leave.  
12 Went home and -- dropped Sam off at the airport and went home.  
13 That was kind of like the broad brush of my day.

14 Q. Okay. So we'll kind of backup a little bit and kind of start  
15 walking through it for me. And just for the record, Sam, was he  
16 your miniboss? No, that's not the right word.

17 A. That is the correct term, but he was not fulfilling that  
18 role. He was an observer.

19 Q. Observing you or just getting his observations --

20 A. He was observing me. Sam has a recognized air boss multi-  
21 venue LOA already.

22 Q. Okay. All righty. So we'll start at the airport. You got  
23 to the airport 7:30-ish, grips and grins, hugs and kisses, all  
24 that fun. And you did the briefing at 8, give or take, and I  
25 know.

1 A. Yeah.

2 Q. I'm not chiseling all the times --

3 A. No, I think it was on time, at 8. Yeah.

4 Q. All right. Kind of walk me through a briefing. Do you hand  
5 out everything there? Do you -- kind of tell me about the  
6 briefing.

7 Q. I have a slide show that I brief off of. I don't know if you  
8 all have a copy of it with you, but I have a slide show that I  
9 brief from. I go through that slide show. It's somewhat  
10 scripted, right, plug-and-play development information for this  
11 location and show. And so the general -- generally, roll call.  
12 After roll call we introduce senior leadership. Then we tend to  
13 introduce people that fulfill roles. So like here's your fuel  
14 guy, here's your ball guy, here's this guy, right? So everybody  
15 has phone numbers and names.

16 Then we go through usually the waiver if there's any  
17 nonstandard items to cover. And then we usually go through  
18 weather. And then we usually -- I tend to do airspace, airport is  
19 my -- here's our airspace, here's our airport. Then we go through  
20 emergency procedures. And then that's usually where we'll break  
21 up -- I break up my briefing. Because once we get through that,  
22 we got to go roundtable questions at that point if there are any.  
23 Then we'll do -- pass out the sequence and then we'll go through  
24 the sequence. And we go through the sequence and iron it out.

25 After that, we do some cleanup housekeeping items like, hey,



1 this is where the thing is tonight or this is where your  
2 obligation is tonight. And then usually the kind of last slide is  
3 like, hey, briefing tomorrow is, you know, in this room at this  
4 time. And so that is the general briefing sequence. And I  
5 believe we followed that pretty closely.

6 Q. Okay. And I realize it was 8 plus months ago, give or take,  
7 so you probably don't remember to exact detail, about how long is  
8 a typical briefing or that briefing?

9 A. We plan an hour for the briefing unless it's a really big  
10 show. And I think we're at 45 minutes for -- I we're at under 45  
11 minutes for the total briefing, and then I think I was at under an  
12 hour -- 45 minutes to an hour with all the subsequent briefings  
13 and things like that. Because there are things that have to be --  
14 so like one really typical example is we have an airshow where  
15 jumpers are going to jump out of the airplane and the airplane's  
16 going to circle them. They have to cross-brief. So you get them  
17 to cross-brief, make sure it's done, and so you have to wait  
18 around for that stuff.

19 Q. So you're doing the briefing. I think -- correct me if I'm  
20 wrong, but you said one of the pilots, one of the accident pilots  
21 wasn't at the briefing or, I'm sorry, might have showed up late?

22 A. Did not attend the entirety of the briefing.

23 Q. That was your phrase. It was a long one, so I was trying to  
24 shorten it up. So I'm confused. Why did he get to fly then, or  
25 does he just have to attend parts of the briefing?

1 A. Because he's part of a crew.

2 Q. Okay.

3 A. And so the SIC took the continuation of the briefing.

4 Q. Okay.

5 A. So if you're part of a team -- so, for example, the  
6 Thunderbirds do not attend the briefing. They send a  
7 representative. So if you're part of a team you can send a  
8 representative.

9 Q. Okay. Thank you for that. I just wanted to make sure I had  
10 correct understanding. All right.

11 So you do the briefing, everything's -- were there questions?  
12 Were there concerns during the briefing? Did anybody raise any  
13 concerns?

14 A. There were questions asked, there always are. People ask for  
15 clarification. Maybe they didn't hear something or they wrote it  
16 down wrong, right? I don't remember, I don't remember like --  
17 there's nothing that sticks out to me. To me it was a very  
18 standard briefing and the questions are typical. I mean, there's  
19 always questions. I believe that they were very much like people  
20 clarifying their own notes. Yeah.

21 Q. No concerns?

22 A. Not that I -- I don't remember any concerns. No one brought  
23 anything up.

24 Q. Okay.

25 A. Yeah.

1 Q. Did the FAA participate in your briefing?

2 A. I mean, yes, they're there. They have a role to fill. I  
3 think -- I don't think Stephen (ph.) -- Stephen was the IIC. I  
4 think one of his training guys said something, but it was very  
5 much like -- yeah -- no, they did say something. They were like  
6 we need to see this guy, this guy, this guy. Because they had a  
7 list of participants, but -- and they're like, hey, we haven't  
8 seen these airplanes or people, and that's because that list  
9 hadn't been updated and those airplanes and people weren't  
10 participating. And then they wanted to see a couple other people  
11 who they had already seen but not marked off their list, because I  
12 remember that. I don't remember the people, but I remember like,  
13 hey, he's not here, that airplane's not here, and you -- I know  
14 you talked to this guy.

15 Q. Okay.

16 A. Yeah. So they -- yes, they speak and they participate, but  
17 they don't necessarily run the briefing.

18 Q. So while we're still right here in the briefing, I believe  
19 Sabrina might have asked a question about the SAC cards, and you  
20 say they have to present them to the FAA, the IIC or whoever. You  
21 don't have to see them or you do have to see them?

22 A. I'm not required to see them.

23 Q. Well, what is your typical, you as a -- what do you want?  
24 What do you expect? Do you expect to see them or do you not worry  
25 about that?

1 A. No.

2 Q. You don't expect to see them?

3 A. Nope. Nope. Make sure you see the FAA and that they get an  
4 opportunity to inspect your credentials, is kind of my pre-canned  
5 phrase. The pilots can send it in early. So a good producer will  
6 say -- let's say 30 days out, will send an email to the people  
7 they've hired and say, can you -- you know, cc'd on this email is  
8 the IIC; can you please respond to them with your pilot's license,  
9 your airworthiness certificate, your stuff? Yeah. And some do,  
10 some don't.

11 Q. Okay. And probably -- and you many not know this answer, but  
12 did Gena, the producer, did she do that, or do you know?

13 A. I don't remember. I don't know.

14 Q. And that's okay. "I don't know" works perfectly every time.

15 A. I would -- I feel confident enough to say the CAF probably  
16 had a big push early on delivering documents because they do this  
17 so often. So I would probably, today, make the assumption that  
18 that probably happened, but I don't factually know that that  
19 happened. I wasn't involved in that.

20 Q. Okay. So part of your briefing is going through the airshow  
21 itself, right, you brief everybody here's what we're going to do.  
22 Do you give hard spots that people are supposed to fly? Like you  
23 fly over the runway; you're at the 500 foot line; you're at the  
24 1,000; or, you know, fighters, do not go below this altitude  
25 period; bombers, you're restricted to -- do you set any hard

1 altitudes during the briefing at all?

2 A. It's situational. Traditionally no. What you have described  
3 is not something that I would traditionally do and not an avenue  
4 that we would traditionally go down.

5 Q. Is that your technique or is that what you see other air  
6 bosses doing as well?

7 A. I would say I don't think that is just a technique of mine.  
8 I think that's standard, but -- because I don't want a bias issue,  
9 right? I don't think your question really applies, but I don't  
10 know what else you're going to ask me.

11 Q. Do you think I'm going to ask more questions?

12 A. I do.

13 Q. Oh, okay.

14 A. So that's why I don't want a bias issue, because, you know,  
15 you have a job to do.

16 Q. Well, we all do, so it's okay. Do you assign hard  
17 altitudes -- and that's a wrong phrase, I know, but do you assign  
18 altitudes to any of the aircraft in order to deconflict if there's  
19 a confliction? Do you guys -- is that something that's done by  
20 air bosses at all?

21 A. Yes. There would be instances where you would assign an  
22 altitude. Traditionally those circumstances do not come up, so it  
23 is not something that I would consider commonplace.

24 Q. Okay. And just for my education -- I'm here to be  
25 educated -- is there a reason you guys don't use altitudes? I

1 mean, that seems like -- ATC uses altitudes to keep VFR from IFR  
2 and IFR from IFR. Is there a reason that you can think of? Your  
3 opinion.

4 A. Sure. So that's actually really kind of a somewhat  
5 complicated question. So there -- per the book, the 8900, there  
6 are different hard decks for particular criteria. There are  
7 different hard decks for different locations as well. And so you  
8 could get in a circumstance where you start assigning altitudes,  
9 you run out of altitudes because I have a ceiling, right? And  
10 then there are other ways to separate traffic and deconflict  
11 traffic besides altitude. So altitude isn't always the best or  
12 first way to separate aircraft.

13 And so, also, if you assign a restriction, you must relieve  
14 the restriction. And so that's kind of like part of the equation  
15 people forget, right? Like you can add it, but then you have to  
16 subtract it. And some of that, adding and relieving restrictions,  
17 is already broached in the 8900. So when you assign, you -- when  
18 like you assign an altitude, you moved away from all that, right?  
19 So you lose flexibility.

20 Q. Okay. So you said there's other ways to deconflict. What  
21 other ways -- kind of help me understand how you can deconflict.

22 A. Yeah. Lateral deconfliction, timing deconfliction, visual  
23 deconfliction; altitude is a deconfliction. Those tend to be the  
24 big four.

25 Q. Which ones do you -- is it your habit to use? Do you have

1 one that you like better?

2 A. Yeah. So visual is the rule of the road, right? I do a lot  
3 of assignment of responsibility, so you're first or second type  
4 stuff. Lateral is very good as well, so assignment of lines,  
5 right?

6 Q. Okay.

7 A. Yeah. And then timing is always one as well, right? Like,  
8 hey -- like what's really commonplace in airshows is you'll have a  
9 guy landing, right, and he's quarter mile final and you tell the  
10 flip-flop guy next things like, hey, you got the box in 30  
11 seconds. Because in 30 seconds he'll be coming off the runway,  
12 right, so you put a timing deconfliction there.

13 Q. Okay.

14 A. So -- what's it called? It's not procedural but it's you're  
15 first or second. That's another way to deconflict. It's not  
16 procedural. There's a term for it, but like order of -- order,  
17 right?

18 Q. Okay. So you talked about the lines. I'm assuming you're  
19 talking about the 500 foot and 1,000 foot lines; is that correct?

20 A. Um-hum.

21 Q. Okay. So do you talk about your expectations in the briefing  
22 such as, if I assign -- if you assigned me as a pilot flying  
23 whatever, your choice, a line, I'm going to assign -- you know,  
24 you, line up on the 500 foot line or whatever is.

25 A. Um-hum.

1 Q. Is there a point you expect me to be lined up on the 500 foot  
2 line?

3 A. Yes. It changes with the situation, right? So like I don't  
4 want to say no, because then it's a free for all, but you don't  
5 want to say yes in the sense of like, you know, this  
6 latitude/longitude you're on the line because the situation may  
7 not call for that. So if I assigned you like, Shawn, you're on  
8 the 500 foot line and the first time you got to the 500 foot line  
9 was past -- like you've already flown past the crowd, like  
10 something hasn't gone correctly, right? So it's very difficult to  
11 can that into a very specific point because it's one of the many  
12 variables going on.

13 Q. Okay. So, and I just want to make sure I'm drawing a picture  
14 brain -- I like pictures in my head. So there's not an  
15 expectation of yours that my -- let's just take Wings Over Dallas.  
16 There's not an expectation of you that, okay, by the McDonald's  
17 golden arches there, you've got to be lined up with 1,000 foot; is  
18 there anything -- or the 1,000 foot line or anything like that?

19 A. That is not something that was briefed and that would not be  
20 my expectation.

21 Q. Okay. Do you brief your expectations?

22 A. I do brief expectations that I have. Those tend to be broad,  
23 very broad. Yeah.

24 Q. Do you remember what your expectations were at Wings Over  
25 Dallas?



1 A. Yeah. Don't go into the Class B airspace. That was a big  
2 expectation. We briefed a lot of where we -- we do a lot of where  
3 I expect you to be and where I expect you to not be, right?  
4 Because the ride aircraft are going to the red-roofed church so  
5 performing aircraft should not be over the red-roofed church, and  
6 things like that.

7 Q. Okay. So let's kind of -- well, before we step out of the  
8 briefing, when you give a briefing and people are taking notes on  
9 their sequence or where they fall in the lineup and everything, is  
10 that something you printed off or is that something they got their  
11 kneeboard with notepad and they're scribbling their own notes?

12 A. Yeah. I will write a briefing. I will write a sequence in a  
13 like usually a Word document. And then, like in this  
14 circumstance, Gena printed them out for me and brought them to the  
15 briefing. I think we had to go make more copies. I don't  
16 remember. And so -- I think David Oliver went and got more copies  
17 for us. And so I hand that to them. Like that's what we pass  
18 out, right? So like we go into the briefing, we get to kind of  
19 this break point where it's like, hey, we're about to go into the  
20 sequence so let's pass out the sequence. That gives everybody a  
21 chance to stand up and shake out their legs. And then like, hey,  
22 we're about to get into the sequence, right? And then they'll  
23 have that, so they tend to write their notes on their sequence.  
24 Yeah. It's provided, yeah.

25 Q. Do you still have a copy of that sequence, by chance?

- 1 A. I do.
- 2 Q. May I officially request a copy of that?
- 3 A. Do you not have one?
- 4 Q. We haven't found it yet. We probably do somewhere, but we've
- 5 looked, we've scoured --
- 6 A. Yeah. I mean, I can get you want I emailed her.
- 7 Q. Okay.
- 8 A. For sure.
- 9 MR. DENNY: Send it to me and I'll do it.
- 10 MR. ROYCE: Okay. Oh, right. Yeah.
- 11 MR. ETCHER: I'm asking officially --
- 12 MR. ROYCE: Yeah.
- 13 MR. DENNY: Yeah, essentially asking me.
- 14 MR. ROYCE: Yeah. That makes a lot of sense, yeah.
- 15 MR. ETCHER: Perfect.
- 16 BY MR. ETCHER:
- 17 Q. All righty. So you briefed, let's go out to the airshow.
- 18 You walk out. You don't ride the golf cart. You walk to your
- 19 post, your trailer. Is it a trailer? Whatever, whatever you're
- 20 on top of. I assume you're higher than everybody else?
- 21 A. Yes, sir.
- 22 Q. But not in the control tower.
- 23 A. Correct.
- 24 Q. Who's up on that platform with you?
- 25 A. Here it was Sam.

- 1 Q. At Wings Over Dallas. Yeah, here. Sorry.
- 2 A. Here it was Sam.
- 3 Q. Okay.
- 4 A. Yeah.
- 5 Q. He's the only one?
- 6 A. Yeah, that's all there's room for. It was airstairs, not  
7 very big.
- 8 Q. Okay.
- 9 A. Yeah.
- 10 Q. So it's just the two of you up on these things. How do you  
11 communicate with the air traffic control tower?
- 12 A. Through the radio.
- 13 Q. There's nobody there beside you, I assume, from air traffic,  
14 anywhere on that --
- 15 A. No.
- 16 Q. So it's only strictly by radio?
- 17 A. Um-hum.
- 18 Q. Okay. And the FAA not there at all?
- 19 A. Not on the airstairs with me.
- 20 Q. Right. That you're aware of.
- 21 A. Well, let me clarify for you. So some airshows have like  
22 a -- like there's a guy that brings a trailer in. There'll be  
23 like eight of us up there. Like the narrator will be up there,  
24 I'll be up there, the FAA may come up there, the fire guy might be  
25 up there. But here we don't have that, so we have the airstairs,

1 which gets me airborne, up in the air. There's only enough room  
2 really for two and I'm a big guy. And then we have a control  
3 point kind of down next to us, right? So as I'm -- to give you  
4 the visual, as I'm up on these airstairs looking forward, down and  
5 to my left is the narrator. So I can like yell, I can holler at  
6 him. And right behind him is the sound guy, so I can holler at  
7 him. And then people will meander down here. Like the FAA came  
8 by and waved at me and the camera guy came by and waved at me, and  
9 things like that, so -- yeah.

10 Q. So, and I know this -- you're not an air traffic controller  
11 here. I know you were, you have a CTO, but you're not at the  
12 airshow. You're the air boss. But like in most control  
13 facilities there's no personal equipment, you know, no electronic  
14 devices up there. Do you guys have that as a policy for air  
15 bosses and --

16 A. No. I use my cell phone during the airshow the whole time.

17 Q. Okay. How do you use your cell phone the whole time?

18 A. I text people stuff. I can text timing updates. So for --  
19 to give you an example, I was working an airshow and this airshow  
20 had airliners arrive during the show, which you never know what  
21 you're going to get with an airliner. They might be late. They  
22 might shoot the approach really slow. And so as the show went on,  
23 I was getting further and further behind the scheduled times,  
24 right, but we go in sequence. And so I would text the A-10 pilot,  
25 hey, I'm 20 minutes behind. Because once he starts his sequence

1 of starting -- like once he starts the jet, he can't turn it off,  
2 right? So I'm like, hey, he's going to step to the jet in 5  
3 minutes, I need to tell him now I'm 20 minutes behind so the jet  
4 doesn't run for 20 minutes to start his 20-minute cycle, right?  
5 So I use that. That's how I use it.

6 And so the -- like the production team, the marshalers or the  
7 oil guys or whomever will sometimes -- there are occasions where  
8 they'll text me like, hey, this airplane broke. So now I know  
9 that I've either lost that act or I've lost that airplane for some  
10 sequence, right? And so, you know, they don't need to call me on  
11 the radio because they texted me and that act's not for an hour.  
12 And then I can text them back, okay, go find Shawn, tell him he's  
13 moving up 10 minutes, and then go find Dr. Woods, tell her she's  
14 moving up 10 minutes. And I can do things like that and it's off  
15 radio so that we're not distracting those pilots. Yeah.

16 Q. Okay.

17 A. And then I can tell the narrator and tell the sound guy and  
18 message the schedule like that.

19 Q. So I'm trying to be that fly on your shoulder and I'm sitting  
20 here thinking my head would be on a swivel moving around trying to  
21 do all this stuff. How do you manage, you personally, how do you  
22 manage texting on the cell phone, directing people, you know,  
23 engine start --

24 A. Yep.

25 Q. -- you know, the box is yours, use the 1,000 foot line,

1 whatever. I mean, it sounds like you're juggling 14 clanging  
2 bowling pins at once.

3 A. Well, it sounds that way. It's not, right? So that's a  
4 skill. So it sounds that way -- well, you know, so, as you know,  
5 you know, aviate, navigate, communicate, right? So if you got a  
6 problem, communication is up there high on the list for you,  
7 right? So kind of the same thing, it's like, well, you know,  
8 taking care of the aircraft in the air is always going to be the  
9 first priority, right, and down and down and down. So if I miss  
10 the text, I mean, I miss the text, right? If it gets really  
11 urgent, they'll come up on the radio and call me, right?

12 So, right, so you use your phone, get a text, and maybe it's  
13 a low level thing but I never respond or anything. Well,  
14 eventually someone like Marty might come up and be like, hey, did  
15 you know that the B-17 broke? Oh, no; thank you, right? So  
16 there's a prioritization level there.

17 Also, it seems that it's constant and ongoing and it's really  
18 not, because -- though it seems that way. Because it really does,  
19 like an outsider looking in, it seems that way, but it's not.  
20 Because during the transitions is where you're going to have a lot  
21 of your control instruction stuff, right? You're good to takeoff,  
22 you're good to land, you're next. But there's a lot in an airshow  
23 where it's like, well, this guy's flying, he's got the box and  
24 he's there for 9 minutes. Well, okay, well, I'm going to text  
25 Marty back, okay, yeah, I got it, and I'm going to send this over

1 here, and I'm looking -- I'm constantly looking ahead, right,  
2 because it's like, hey, I'm 20 minutes behind now, that guy's  
3 about to step to the jet, I can solve this now.

4       And then like at the airshow where there are airliners,  
5 right, it's I'm checking my phone going, okay, well, my 12:50  
6 arrival just took off out of Dallas, I know I'm going to see him  
7 in 48 minutes, so I know he's 10 minutes behind. Well, that puts  
8 him here, that's not good. So now I need to go tell those guys to  
9 plan on starting 5 minutes late because this airliner's going to  
10 delay their start of their routine.

11       And so you can use your phone in that way. But kind of to  
12 your point, like in the middle of a really dynamic thing, I'm not  
13 looking at my phone.

14 Q.    Okay.

15 A.    Yeah.

16 Q.    I just wanted to make sure I had it --

17 A.    Yes. Yeah.

18 Q.    -- and that helps a ton. Because I'm sitting here  
19 (indiscernible) bowling pins, but --

20 A.    No. No. You'll see me standing around picking my nose a  
21 lot. (Laughter)

22 Q.    Okay, let's talk about the day of the event. Okay. Well, I  
23 appreciate that.

24       Now the day of the accident. Do you remember what the  
25 weather was like? Sunny, cloudy, windy?

1 Q. Mostly clear and the winds were like 3 -- 0,0,3,3,0, almost  
2 right down the runway. Not quite right down the runway, I  
3 remember that, because there -- it was an off-crowd push. So we  
4 tend -- you as a pilot tend to get the winds, but in an airshow,  
5 especially with tumblers, the flip-flop guys, you have an off-  
6 crowd push. So they know if they're on the 500 foot line pulling  
7 to vertical, they're not going to be pushed over the crowd,  
8 they're going to be pushed off of it.

9 Q. You knew my next question was what is an off-crowd push, so I  
10 appreciate that.

11 Was the sun -- considering you're up on airstairs, I'm  
12 guessing there's no canopy over you, there's nothing, it's just  
13 you out in the middle of everything. Was the sun in your eyes?  
14 Do you remember where the sun was? Did that help, hurt, hinder?

15 A. I mean, it was 1 o'clock so it would've been overhead.

16 Q. Okay.

17 A. I mean, it's November so it's not like high-high, but it's  
18 not in your eyes.

19 Q. Okay. So you're up there on an airstairs. I'm going to  
20 assume -- assuming usually gets me in trouble first -- you have no  
21 radar scope, you have nothing. It's you, your miniboss, headset,  
22 radios, something.

23 A. So -- correct. I don't have radar, I don't have a scope at  
24 all, and I didn't have a miniboss because Sam was solely an  
25 observer. And then, yes, it's me and a radio and a cell phone and



- 1 a hoody. It gets cold.
- 2 Q. It seems odd thinking today, but yes.
- 3 A. Yeah. It's 100 degrees today.
- 4 Q. Right. It wasn't then?
- 5 A. Yeah.
- 6 Q. Okay. So I'm trying to visualize. You have bombers, you  
7 have fighters, you have biplanes, all that. How do you -- and  
8 they're all pretty close proximity to you. How do you keep  
9 situational awareness? How do you know, ooh, I got a bomber  
10 coming in from this side, I got like fighters coming up from  
11 behind me, I've got a Stearman coming in, you know, off my left?  
12 How do you keep that visual three-dimensional in space, if you  
13 will, picture in your mind?
- 14 A. I mean, I would just -- experience, I guess. That is very  
15 natural to me, but I also grew up in this environment. So I think  
16 that is just something that kind of comes naturally to me, yeah,  
17 building that three-dimensional space.
- 18 Q. All right. So the airshow's getting ready to start. Is  
19 this -- would you call this a big airshow, a small airshow, a  
20 normal? What kind of --
- 21 A. I would consider this a small show, yes.
- 22 Q. And the reason it's small is not that many airplanes, not  
23 that many airplanes up at once? Why is it called small?
- 24 A. Not that many participants.
- 25 Q. Okay. All righty. So you're getting ready to start the

1 airshow. Did you start on time? Did you guys have to start late?

2 Do you remember?

3 A. I want to say we started on time, but I don't -- so the -- I  
4 remember starting on time. What I don't remember is if that time  
5 is what was originally written down. Yeah.

6 Q. You had no feeling that you were running behind then; is  
7 that --

8 A. Oh, no. No. Correct. Yeah.

9 Q. Got it. That might have been a better word for it.

10 A. Yeah, that's okay. That's okay.

11 Q. My apologies. How do you take control? I mean, air traffic  
12 control is controlling the airport --

13 A. Correct.

14 Q. -- until you assume the position.

15 A. Correct. So I -- here at Dallas, I will come up and say  
16 usually something to the effects of like, hey, tower, I'm on  
17 frequency; I'll be ready to take it soon, or 5 minutes or  
18 whatever. Because they have airplanes that they're controlling,  
19 right? And so what eventually happens is we'll have some kind of  
20 conversation where it'll be like, hey, send everybody to me; once  
21 this airplane lands, I'll take everything after that, right?  
22 Because I've been listening to the radio, listening to -- like I  
23 tune up to the tower frequency because I can listen to two  
24 frequencies. So I'll turn the tower and the ground on so I'm  
25 listening, right? And then I can kind of, at the appropriate

1 time, hop in and say, okay -- I know that he just taxied this guy,  
2 so I'll write that down. And I know that this guy's already  
3 called, I write that down. I go, okay, this is a good spot. Hey,  
4 tower, I'm ready to take it; why don't you tell the guy on the  
5 ground to contact me for departure and you land the Stearman, I'll  
6 land the C-45. And so then you kind of take that point. Yeah.

7 And then once we're in agreement -- because I don't remember  
8 how we did it that day, but like he might come back and be like,  
9 no, let me land everything or take it now or whatever. So we will  
10 say like, hey, air boss has the airspace, air boss has the  
11 airport, and then I would want that response from them to have  
12 that positive handoff. And then I would usually ask them to tell  
13 approach. Because the TFR activates on its own.

14 Q. Okay.

15 A. Yeah.

16 Q. Okay. So you take control, air traffic control says it's  
17 all -- the airport's yours, it's all yours, have fun, whatever  
18 they say.

19 A. Yeah.

20 Q. Do you then immediately go into, Group 1, start your engines,  
21 and the sequence starts? How does that -- or do you let  
22 everything kind of -- I don't want to say settle out because  
23 you've been listening in, but does everything kind of have to  
24 settle out first?

25 A. I would say everything has to settle out first, right? But

1 we don't do engine start and things like that, right? So it is  
2 very -- so, right, how do you manage all this stuff was something  
3 you asked me earlier. Well, one of the things is, okay, Shawn,  
4 you're going to fly first, at 11. My expectation is that you're  
5 rolling down the runway at 11. So now you got to figure out how  
6 long's it going to take you to taxi, how long's it going to take  
7 you to warm up, run up, get in that cockpit, use the -- all that,  
8 right? Because I don't know for you and I don't know for your  
9 aircraft. So my expectation is that Shawn is ready to hear the  
10 words "clear for takeoff" at 11, because we talked about that in  
11 the briefing. I want you rolling down the runway at 11. But, of  
12 course, it might be you're an air start, so I might say you're  
13 taking off at 11 but your box time is 11:05, right, things like  
14 that. So maybe we had that conversation.

15 So then I would go, okay, well, Shawn's flying let's say a  
16 P-51. Well, I wouldn't expect you to call me at 11:45 [sic] to  
17 taxi. That's too early for a P-51 because you'll get hot. But if  
18 you're flying like a Corsair with an R-2800, maybe you call me at  
19 11:45 because you've got all that oil that has to warm up, right,  
20 and you might want to taxi then. So obviously, if it's 11:58 --  
21 or if it's 10:58 and I haven't talked to you, I might be reaching  
22 out to the marshalers to go find out where you are.

23 So that's some of the managing, is your takeoff time is this,  
24 do not talk to me about pushback and can I start my engines and  
25 all that, just let me know you're ready to go. And then, of

1 course, you get some stylistic differences because you can tell  
2 some people that and they're still going to call you five times,  
3 right? Like it's just going to happen.

4 So, but that's where something like, hey, this is what we  
5 briefed, this is the expectations, you get there or -- I've had  
6 people call me going like, hey, the airplane's not starting. All  
7 right. Cool. Let me know if you're scratched for the day or if  
8 you just need a different slot. Hey, marshalers, go find this  
9 guy, tell him to get in the airplane right now.

10 Q. Okay.

11 A. Because we're going to miss our start time. That's already  
12 done.

13 Q. Okay.

14 A. Yeah.

15 Q. Okay. So the airshow's going. So let's kind of accelerate  
16 through the airshow a little bit to just before the event  
17 occurred. You had the bombers up, the fighters up. They were all  
18 doing their magic. And we did listen to the recording and I'm  
19 sure you might have as well. I don't know. You were there so you  
20 probably don't have to listen to it. But it seemed like, from my  
21 ears, shortly before the event there was a Stearman that you said  
22 bring it to the numbers, down on the deck, bring it to the numbers  
23 or something.

24 A. Put it on the numbers.

25 Q. Thank you. I'm trying to remember exactly the words, but

1 something to that effect. Was the Stearman part of the show?

2 A. Yes.

3 Q. What part was -- did they have to do with aerobatics, flybys?  
4 What were they doing?

5 A. Well, they're a show participant, which qualifies you as part  
6 of the show, and they were doing a ride.

7 Q. A paid ride or just they were going up to ride around and  
8 show off their Stearman?

9 A. I don't know all that. I just know that they were doing a  
10 ride. So I don't know if it's a maintenance flight, I don't know  
11 if it's a paid ride, I don't know any of that. I just know that  
12 it was doing kind of like its own thing, right? Yeah.

13 Q. So was that -- it appears that right as the airplanes were  
14 intercepting each other in flight, the Stearman was coming in to  
15 land on the runway, was the 1,000 foot line -- or 500 foot line or  
16 whatever. Is that normal to have plane's landing on runways with  
17 aerial activities going on overhead?

18 A. That's not commonplace, no.

19 Q. Can you kind of recall back to then how did this happen? How  
20 did that Stearman get into this position, from your recollection?

21 A. Well, that whole -- airplanes going out during kind of the  
22 airshow, so you kind of have like the airshow and then these other  
23 airplanes thing. It's pretty unique to the CAF. It's kind of  
24 something that they do. And so that's why we kind of brief the  
25 ins and outs, limits for the show, limits for the ride airplanes.

1 We call them ride airplanes. And so -- because they go out, and  
2 they're not necessarily on a ride, but they're -- you don't  
3 know -- I don't know why they're leaving. I just know that they  
4 are. And then we have an avenue for them to leave and an avenue  
5 for them to come back.

6 Q. Okay. Can you -- if the Stearman would've said, you know,  
7 hey, I want to come in and land, could you have said, no, go to  
8 this point and burn circles in the sky?

9 A. Yes.

10 Q. Okay. So you being the air boss, since you're kind of in  
11 control of that space now, you telling him to drop it to the deck,  
12 come and take it to the numbers, you're accepting him into the  
13 airspace. And so would that -- can that add a level of complexity  
14 with everything else going on overhead, the bombers flying their  
15 paths, the fighters providing top cover, whatever?

16 A. I don't know if I would agree with the term accepting him  
17 into the airspace, but I take your point on that. And that's  
18 okay. I do not think it impacts the complexity of the event  
19 because there's a flow, right? And so I don't think it adds or  
20 subtracts. I think it's an individual thing.

21 Q. Individual for you? Individual for the performer? You say  
22 it's an individual thing. What --

23 A. It's its own thing, right? So like I -- so maybe we're  
24 mixing terms, right, but like does it add to the complexity?  
25 Well, no, I don't think it adds to anything. It's its own thing.

1 Q. Okay.

2 A. Yeah.

3 Q. All right. Before an airshow was there any discussion about  
4 these planes coming in, in your briefing?

5 A. Yes. Yes.

6 Q. Was there any concern on your part of these planes coming in,  
7 leaving --

8 A. No.

9 Q. You say that very quickly like, yeah, nope, that's normal,  
10 I'm used to that or -- but it seems like it's not the normal.  
11 It's the normal CAF, maybe.

12 A. Yes, I would agree, it's not commonplace. Not all air bosses  
13 have the skillset to accommodate that request. And it had been --  
14 we had done it many times before and many of the pilots that are  
15 flying those airplanes are also participating in the show. Many  
16 of the aircraft that are doing those things are also participating  
17 in the show. So while it seems very out of the norm, it is normal  
18 for us.

19 Q. Okay.

20 A. Yeah. And it's -- like that's the CAF's thing. That's what  
21 they want. That's what they asked for. Yeah. And the tower,  
22 too. Because originally it started off with the tower and then it  
23 was very modest to like, hey, can you just do this? Yes, I have  
24 the capability to do that.

25 Q. So I want your opinion on this.



1 A. Uh-oh.

2 Q. I know. I'm giving you free latitude to give me your  
3 opinion. The Stearman coming in, did that distract you at all  
4 from the bombers and the fighters overhead?

5 A. No.

6 Q. Not at all?

7 A. Not at all.

8 Q. Was he easy to see coming in?

9 A. Well, a Stearman's never easy to see.

10 Q. Well, that's why I'm asking.

11 A. I will tell you that once I see him, he is easy to see.  
12 Finding him the first time is not always the easiest, but once I  
13 see him, it is rare for me to not be able to go back and find him  
14 again as I'm looking around. But the Stearman -- yeah, so he was  
15 easy to see and he was handled, wrapped up.

16 Q. Okay. In my perception, about a minute prior to the  
17 accident, everything before that point seemed to be -- I'm going  
18 to say -- I don't want use the term normal case because I don't  
19 know what normal is. Everything kind of just seems, you know,  
20 going.

21 A. Yep.

22 Q. You know, nothing really -- didn't sound like your blood  
23 pressure was getting phased or anything. What about -- and I'm  
24 using broad terms here, about a minute longer it seemed like the  
25 radio congestion increased. It seemed like there might have

1 been -- I'm going to call it confusion on the part of one of the  
2 pilots. It kind of seemed like you were giving a lot more  
3 dialogue, direction.

4 A. Um-hum.

5 Q. Kind of walk me through that.

6 A. Sure. Yes, that is -- yes. Well, did you listen to the tape  
7 in real time or did you listen to it spliced? Do you know?

8 Q. Real time.

9 A. With the pauses?

10 Q. Um-hum.

11 A. Okay. Not the timestamps?

12 Q. It was whatever was given to me by the controller. Yes, it  
13 was the real -- they said it was real time. I'm not sure what  
14 you're talking about, the splices and the timestamps.

15 A. So, to my knowledge, when air traffic records a frequency it  
16 doesn't record dead air, which is why you get all the timestamps.  
17 So you can listen to -- like if a position has an hour long -- I'm  
18 on position for an hour but I only say five things, the recording  
19 will be 2 minutes long but it encompasses an hour. But there is a  
20 way to get it where you listen to it real time so those five  
21 things are every 15 minutes or whatever it is.

22 DR. WOODS: Can I interject?

23 MR. ROYCE: Yes.

24 DR. WOODS: It's actually the other way around. So it's  
25 recorded in real time and then what they can do is activate skip

1 silence.

2 MR. ROYCE: Yes.

3 DR. WOODS: And skip silence is what will take out those  
4 silent pieces.

5 MR. ROYCE: Correct. Yes.

6 DR. WOODS: The original recording is real time.

7 MR. ROYCE: Okay. So you all have a version that's with all  
8 the gaps, okay.

9 So, yes, there was some -- I mean, gunfighter, right, so we  
10 start -- you've asked a lot of things. Why the change in pace?  
11 Well, we're entering a transition, right? We're going from one  
12 formation to two formations and we're getting ready to run the  
13 B-29 now, right?

14 BY MR. ETCHER:

15 Q. Um-hum.

16 A. Yeah. Because you've talked to be about the Stearman  
17 landing, but Zero-Hotel-Victor also landed.

18 Q. Correct.

19 A. Yeah. So, which I think is a T-34, but I'd have to go check.  
20 So, and like I said, right, like they get wrapped up and it's  
21 done. So the pace increases because we're entering a transitional  
22 period, right, so we got a lot of things that are about -- that  
23 are -- we have a lot of things queued up that we're going to start  
24 executing. And then Jeff asked for clarification, a gunfighter  
25 pilot, Jeff Linebaugh, asked for clarification. So now we're

1 having to repeat, which is fine, right? And I would call it  
2 normal because that's the relationship you have and that's  
3 standard, if you don't get it, you say something, right? If you  
4 don't like it, you say something.

5 Q. Okay. So the increase in the cadence is -- and I'll use the  
6 term normal. Is that out of the -- is that abnormal when --

7 A. No. So like you heard -- if you've listened to the entirety  
8 of the tape, I would say there's an increase in cadence when I say  
9 to the B-17, right turn right now, right? That's an increase in  
10 cadence there because he's missing his turning point. So for the  
11 cadence to increase, decrease, change syntax and rhythm and  
12 articulation is very standard in my role.

13 Q. And is all that communication on the frequency is that how it  
14 happens?

15 A. So there's -- like if you listen to the frequency, right,  
16 like as a non-airshow person, you're like, man, this is different,  
17 right? And then even as a pilot, you're like this is non-standard,  
18 and it is because it's an airshow, it's not standard. So, as I  
19 have listened to the recording, and I have not -- I've only  
20 listened to the silence-omitted version -- there is a lot of my, I  
21 guess you would call it personality in there, right? There's a  
22 rhythm to airshows and which is one of the reasons we stand  
23 outside because you can feel the rhythm. And setting that tempo  
24 and that rhythm, that pace, I would argue would increase safety  
25 because it's like, hey, I expect something to happen right now

1 because of the rhythm of what's going on, right? So you hear a  
2 little bit of that in my personality that comes through on the  
3 radio. So I would call it very normal.

4 Q. Okay. Now just before the accident, somewhere you keyed up  
5 and -- I know -- I tried -- I thought I had the quote written down  
6 here but I don't. But you had said something to the effect of,  
7 all right, let's try this; hey, guys, nice job; great job; that  
8 worked, or something. And forgive me, I don't remember the  
9 context. But was that something you have to do on the fly or is  
10 that part of the sequence? Do you remember?

11 A. I don't remember saying let's try this, so I would definitely  
12 want to reference --

13 Q. And I might be paraphrasing that.

14 A. Yeah, yeah. Right. So I kind of would want more specifics.  
15 Like do you remember when you're talking about?

16 Q. It was about 2 to 3 minutes before, I believe, the event.

17 A. Before the impact? Okay.

18 Q. Yeah. And there was something -- it's just the way it was  
19 worded and my head kind of jumbled it.

20 A. As an airline pilot that probably is true. Yeah, yeah.

21 Q. And so I just wanted to clarify. To me it sounds like is he  
22 doing something, is he doing something on the fly?

23 MR. DENNY: I know what you're talking about but I don't want  
24 to interject.

25 MR. ETCHER: You can probably clarify it better though,

1 because I don't have my direct quote.

2 MR. DENNY: I mean, when you said that should work.

3 BY MR. ETCHER:

4 Q. That's the phrase, that should work.

5 A. Well, I didn't say that about -- I said -- I didn't say that  
6 like 2 to 3 minutes beforehand, I don't think. I think it was  
7 probably like 4 seconds before the impact.

8 Q. And it could be. I wasn't sure if it was right in that  
9 sequence. I didn't want to put it there.

10 A. Yeah. So saying that should work, that's a -- that's  
11 probably a thought fulfilling phrase. Like I wouldn't take that  
12 as directive. I don't think that's a direction, right? That's  
13 not like saying clear to land, which is a directive, right?

14 Q. Okay.

15 A. I think that would -- like that, to me, and from the portion  
16 of the tape that David's talking about, like that's like, okay,  
17 we're on tempo, that should work, here we go. Because, right,  
18 because what's difficult for some people to wrap their head around  
19 is we look at this mishap very much in terms of like here are the  
20 sequence of events, but I was done with that sequence of events  
21 because I have to be ahead. So I'm on to the next sequence of  
22 events, right? So that should work, I'm moving on. Because I'm  
23 going to the next thing which is coming up, right, because I have  
24 to be a couple of steps ahead because I have all these things  
25 queued up. And so that phrase that you've asked about

1 specifically sounds to me to be very much like, okay, moving on,  
2 not directive or not -- I mean, I guess you could maybe call it  
3 superlative.

4 Q. And like I said, it was just something that rang weird in my  
5 head so I just wanted to ask.

6 A. I would -- if I could be so bold, I would say that if you  
7 talk to many of the pilots that have flown warbird shows with me,  
8 I think that they would say, yeah, that's pretty typical for  
9 Russell. Specific to Russell.

10 Q. So at that point you were the next step, you were ahead of --  
11 you're working the next thing that's going to happen.

12 A. Correct.

13 Q. What was that supposed to be?

14 A. Fighters up and to the right, which is the last thing I say  
15 before the impact. So fighters are going to go up to the right.  
16 They're going to 90 out, 270 back. And the bombers are going to  
17 left 90 out and they're probably going to go into a racetrack  
18 because I'm going to take the B-29 off.

19 Q. Okay. So the fighters are going to cross the path of the  
20 bombers?

21 A. No. They're going the other way.

22 Q. So they were on the inside, so they would do --

23 A. So they're going down the runway, the edge of the runway.  
24 They're going to pitch up and go to the right. The bombers, which  
25 would be on their left, are going to go to the left so they go

1 away from each other. The fighters are going to have to 90 back  
2 around. So -- and this is -- and we haven't touched on this yet,  
3 but like -- so this is like, well, how do you not know exactly  
4 what they're going to do? Well, because I don't know how long the  
5 B-29's going to take, right?

6 Q. Um-hum.

7 A. Because he still has to get out on the runway and get the  
8 engine spooled up and get going down the runway. And, well, why  
9 does that matter? Well, because where he is in 2 minutes matters  
10 because they're coming back in 2 minutes. So can they come back?  
11 Do I have to put them in a hold? Do I have to take them to go  
12 left because the B-29's going to go right, right? I know where  
13 the B-29's going to go because we briefed that. We know how  
14 that's going to work. But I don't know how the bombers and  
15 fighters exactly are going to interact with that. So that's what  
16 I mean by we're ahead and that's kind of what we're building  
17 towards. But we didn't arrive to the decision points. So to say  
18 what was going to happen versus what were the options is probably  
19 more appropriate. Because you don't know when they're getting on  
20 the runway and just pop an engine. Now you got a whole different  
21 problem. Yeah.

22 Q. Okay. All right. And thank you for the clarification on the  
23 phrase. I'm learning all sorts of new terms today.

24 A. Oh, no.

25 Q. Like "knock it off" --



1 A. Yeah.

2 Q. -- I mean, I've always told my kids that, but, you know, it  
3 never occurred at an airshow. Are there any other phrases that --  
4 because I heard a few, like walk it up.

5 A. Yeah.

6 Q. What is that? Help me understand what that -- I understand  
7 the knock it off now, what's the "walk it up" phrase?

8 A. So you have the bombers in a string, okay? You have the  
9 fighters on top of them. Well, the fighters being much faster  
10 than the bombers have to S turn, correct? Are you with -- I'm  
11 sorry, are you with me?

12 Q. Okay. Yeah, I'm with you.

13 A. So they have to S turn back and forth because they're flying  
14 further, right, but they don't have the privilege to be able to  
15 like make these big, huge S's like -- you know, like in World War  
16 II they would go like a mile or two, and then a mile or two.  
17 Well, we don't have that here, right? So they're S-ing back and  
18 forth. Well, it's difficult -- you know, if I said you stay right  
19 on top of him, you either have to fly really, really slow, which  
20 is not where you want to be for your airplane, or you have to S  
21 back and forth. So I said walk it up because it's like, hey,  
22 you're -- you know, you're kind of back here and I'd like you to  
23 walk it up to here, you know, so you can -- how you're going to do  
24 that, I mean, you can flatten your S's out, you can push up the  
25 power. It's up to you. But so that's kind of that term, like

- 1 walk up to the lead. Yeah.
- 2 Q. Okay.
- 3 A. Are you --
- 4 Q. I got that one now. So --
- 5 A. Okay.
- 6 Q. I'm sorry, go ahead.
- 7 A. Are you a formation guy?
- 8 Q. No.
- 9 A. Okay. So I don't think -- we didn't say saddled, I don't
- 10 think. And saddled means like I'm established, in position.
- 11 Q. Okay. And these are well-known phrases?
- 12 A. Somewhat well-known phrases. I mean, if I have a warbird guy
- 13 that maybe I haven't flown with and -- like, to give an example,
- 14 if I have -- I've flown with absolutely everybody, we've all done
- 15 this 100 times, except for this one guy. He might come to the bar
- 16 or the debrief later and say, hey, why did you say that, right,
- 17 because he just doesn't have that institutional knowledge.
- 18 Q. Okay. Okay. And when you say knock it off, do you -- is
- 19 that part of your briefing?
- 20 A. Yes.
- 21 Q. You say knock it off. And what do you tell the pilots? You
- 22 go here, you go there? Is there an expectation? Is it pre-
- 23 briefed where airplane X goes, airplane Y goes?
- 24 A. Yeah.
- 25 Q. Okay. And everybody just knows it via your briefing?

1 A. Yes.

2 Q. And is it on your briefing sheet that you provide to them or  
3 is it just something you verbalize?

4 A. Yes. It's both, yes. Yeah. Because it changes each week to  
5 where you are, right? So like knock it off is a hot term. We use  
6 knock it off because you're probably not going to say anything  
7 else that could be confused for knock it off, right? And then we  
8 brief, like here are the "knock it off" procedures. This is what  
9 we expect you to -- absent an instruction, this is what you are to  
10 do if we have knock it off, we have cleared the area, and then we  
11 have fly through.

12 Q. Okay. All righty. The last two sets of questions I have and  
13 then we can break and I'll click over here to Sabrina. I think  
14 Sabrina had asked something and -- you know, you were talking  
15 about how you have to take off work on Wednesdays to go do  
16 airshows and then all weekend it takes time from your family, and  
17 then Monday you got to go back at your job. Is being an air boss,  
18 is that not your primary job? Is there --

19 A. No.

20 Q. Okay.

21 A. No. Yeah.

22 Q. It's just something you do -- I don't want to say on the side  
23 because it sounds like a little bit more than on the side.

24 A. It's on the side. That's fair. That's a very fair -- that's  
25 a fair phrase.

1 Q. Okay.

2 A. Yeah.

3 Q. Okay. So I'm nosey. I got to ask. How do you manage a job,  
4 manage all an air boss does, setting everything up? Kind of help  
5 me understand how you can do that. Maybe I'm lazy, because that  
6 just seems like a lot of stuff going on.

7 A. It seems like it, it's not, right? So I have a lot of things  
8 pre-packaged, right? Sometimes you just sit down Sunday night and  
9 knock it out. Because like once I know I have the airshow coming,  
10 right -- let's say you tell me a year in advance. Well, I can  
11 build a TFR request a year in advance. I just -- there are going  
12 to be some gaps in it, right? Because I know the location, I know  
13 the altitudes, I generally know the times, right? Maybe you have  
14 to massage that right at the end, because I don't necessarily have  
15 a schedule yet, right? So you can do a lot of pre-work kind of  
16 wherever you want. So like it's not uncommon to be at one airshow  
17 and I'm pre-building stuff like at the hotel at 8 o'clock at night  
18 for another airshow in 9 months.

19 So you can pre-build a lot of stuff and then -- right? So  
20 like I'm more like a guide. So I'm tasking someone else, you need  
21 to go do this thing. Some things I have to do, right, because  
22 they just -- especially like here. Like if you're dealing with a  
23 military base, right, like those guys have a lot going on so  
24 sometimes I'll do this but I need you to do this. Because I don't  
25 have the knowledge -- I don't have the local knowledge that they

1 have, right? I don't know who all the players are. So some  
2 things I can build for you, other things need your touch. And  
3 then like it's common for me to like deliver a waiver application  
4 and then say like, you need to sign this and turn it in, right?  
5 Or you need to put your address on there, sign it, and turn it in,  
6 because I don't have that. But I have the FARs that need to be  
7 waived and times and things like that.

8       So, yeah, it -- and you have usually a pretty long runup with  
9 that regulatory stuff. I also think that, by what you're  
10 saying -- it seems like this big, daunting task, but, right, I  
11 grew up in it, so -- your options are fairly limited. They seem  
12 more than they really are. They're fairly limited on what you can  
13 and can't do, and I know most of the people you can and can't  
14 hire. So it's not necessarily as overwhelming as it could seem,  
15 especially when you've done it for so long.

16       So -- and then my regular job is like -- I'm very fortunate  
17 to have a boss who supports me and basically lets me come and go  
18 as I please, and I can work from home and I can work on the road,  
19 and it's somewhat project oriented so you can always be working,  
20 you know, and so it makes it easy to compartmentalize.

21 Q.    Okay.

22 A.    Yeah.

23 Q.    All righty. Just prior to -- think back to Wings Over  
24 Dallas. Prior to that, what was the last airshow you worked? Was  
25 it --

- 1 A. McConnell Air Force Base.
- 2 Q. Ballpark timeframe?
- 3 A. September, last weekend in September.
- 4 Q. Okay. So 6 weeks, give or take?
- 5 A. Yeah.
- 6 Q. I mean, that's (indiscernible) --
- 7 A. That's about right. Yeah.
- 8 Q. Okay.
- 9 A. Yeah. I probably did it there. Yeah, I want to say it
- 10 was -- well, it was -- oh, man, I would have to look. It's either
- 11 McConnell or Midland because they were both in September.
- 12 Midland's September 11th, I know that. I'm pretty sure McConnell
- 13 was the last weekend in September.
- 14 Q. Okay. Oh, so you -- in September you worked two airshows?
- 15 A. (No audible answer)
- 16 Q. Okay. And the very last question I have, I promise, you said
- 17 Sam was not your miniboss, he was there to observe you.
- 18 A. Um-hum.
- 19 Q. Is that part of your renewal process?
- 20 A. No.
- 21 Q. He was just there to -- so why was he there to observe you
- 22 then?
- 23 A. To get some observation with warbird stuff, right? So
- 24 warbirds are pretty unique. I grew up in the warbird community
- 25 because of my dad and Sam just didn't have the reps and the

1 touches with warbirds. So he came in to just kind of see how the  
2 warbird thing goes and, you know, it's an opportunity to touch and  
3 feel the airplanes and all that stuff, so that he can start  
4 building on that because there's some nuances in warbirds.

5 Q. So I lied. My apologies. I have one more.

6 A. That's okay.

7 MR. DENNY: Nobody ever has just one more question.

8 MR. ROYCE: That's okay.

9 MR. ETCHER: I usually try to do, but I fail. I fail and  
10 always have another question.

11 MR. ROYCE: Take your time. Take your time.

12 BY MR. ETCHER:

13 Q. So you got your letter of authorization in 2019. It was set  
14 to expired December 31st of 2022.

15 A. Correct.

16 Q. So it's -- am I to understand the renewal process is if you  
17 have so many airshows you've done it just -- I don't want to say  
18 it just gets renewed, but you don't have to have a check ride, you  
19 don't have somebody come -- a line check, somebody come out and  
20 observe you?

21 A. No.

22 Q. It's just I've done all this, here's the proof I have it, and  
23 it's just a paperwork process?

24 A. It's a requisite amount of experience and a requisite number  
25 of letters of recommendation from people that have fulfilled --

1 that have certain credentials. So there's qualifying credentials,  
2 right? That's it.

3 MR. ETCHER: Okay. I told you that was my last one, so I  
4 will hold true to --

5 MR. ROYCE: No, keep going. I'm fine.

6 MR. ETCHER: But before I pass it to Sabrina, do you guys  
7 need a break?

8 MR. ROYCE: I do. I need to hit the head.

9 MR. ETCHER: Okay. Let's take a pause. We'll go off the  
10 record at -- it's 4:36 already. My apologies.

11 (Off the record at 4:36 p.m.)

12 (On the record at 4:50 p.m.)

13 MR. ETCHER: All right. Back on the record 1650, and just of  
14 note, the FAA had a prior engagement and had to step off. But  
15 you've answered a ton of question from me, so I do appreciate it.  
16 I'm going to click over her to Sabrina and she can take it away.

17 BY DR. WOODS:

18 Q. Yeah. A couple of, again, going off all the great  
19 information you've already given, I have some minor holes I would  
20 like to fill in. About what time do you step out to the stand  
21 prior to the show starting?

22 A. Generally 25 minutes. About 25 minutes.

23 Q. And then you -- I know you said a lot of what don't have with  
24 you, but like what are you tools? Like what is everything you  
25 have up there on your person to do the job when you step up there?



1 I know you said --

2 A. I have my clipboard and my schedule, a pen, my phone, and the  
3 radio.

4 Q. I just wanted to make sure because sometimes you said like if  
5 you had re-sequence and then you said, you know, writing things  
6 down. So I'm just wondering like what do you have in your arsenal  
7 to help that happen.

8 And then to confirm, Sam was up there with you -- I know you  
9 said he was there for observational purposes to get some  
10 experience with warbirds. That's not something, it sounds like,  
11 he's had experience with although he is also a recognized air  
12 boss. But was he -- at any point was he actually fulfilling the  
13 role of an air boss at all? Did he ever talk to aircraft?

14 A. No. That is why I keep saying an observer.

15 Q. Yeah.

16 A. Because a miniboss is a role that he can fulfill and he was  
17 not fulfilling that role. So that's why I keep making that  
18 clarification. Because he had no obligations that day, yeah.

19 Q. So he's just literally just staying quiet watching what's  
20 going on?

21 A. Asking questions, we're talking about what's going on and  
22 why, and things like that. Yeah.

23 Q. Okay. And thank you for that confirmation, because I do  
24 believe on some of the material that we have he is listed as a  
25 miniboss. And I honestly did not know there was a distinction for

1 you, but now I do.

2 A. Yes. So miniboss is a defined term. And then like if you  
3 look at like the briefing and stuff, I list him as a miniboss and  
4 that is like a courtesy to -- you know, this isn't for the --  
5 right, because it's a relationship business. So this isn't just  
6 some guy. You know, it's Sam, but for the purposes of this, he  
7 was not fulfilling the role of a miniboss.

8 Q. So going back to you're now stepping out to the stand,  
9 performers are going to their respective aircraft. At that time,  
10 like I'm stepping to my P-51, do I know what line I am to maintain  
11 for the next however long this airshow is?

12 A. No.

13 Q. When will I know what line I am to maintain?

14 A. During the sequence. There's a second part to that though.  
15 You have a restriction, which is the 500 foot line. So you know  
16 where you at least have to be, but the line assignment can change  
17 and will likely change. And that is common for us.

18 Q. When you say us, who do you mean?

19 A. The warbird community, warbird-heavy airshows, the things --  
20 you know, all the airshows I've done in the past with the CAF, you  
21 know, there and at other locations and things like that.

22 Q. I know Shawn brought it up and talked a lot about  
23 deconfliction and how you prefer to do and some of the tools that  
24 you have available to you to ensure physics is in play. And I  
25 have read through the 8900, and it seems to me a lot of that

1 information is very much limited to altitude for field performers,  
2 altitude for formation performers, and distance away from crowds,  
3 distance --

4 A. Yes.

5 Q. -- away from shows, you know --

6 A. Design issues.

7 Q. Exactly.

8 A. Yes.

9 Q. It doesn't really address how people are to actually operate  
10 within the box.

11 A. Okay.

12 Q. So who provides -- who would you say is responsible for  
13 filling that gap?

14 A. Be more -- which gap?

15 Q. The gap of where people are supposed to be within the airshow  
16 box -- and I don't mean in reference to the audience, the crowd --  
17 in reference to each other.

18 A. Well, that's a, that's a -- it depends, right? It depends on  
19 many factors. I mean -- it depends on many factors, one of which  
20 is what is the agreement, what's the contract, right? For  
21 example, my very first airshow I flew in, I flew in a train air  
22 parade. So we have all these airplanes going in circles and  
23 they're -- I'm at the bottom level and there's three levels above  
24 me. We're all going in circles. So the contract I had with my  
25 flight lead was you fly your altitude and you fly your pattern, we

1 will all move around you, you never move for someone. Because I'm  
2 a brand new guy, right, and they're the experienced guys. So  
3 that's a contract. So now we know where the obligation is, right?  
4 I have the obligation to be where I'm supposed to be and he has  
5 the obligation to see and avoid me. So to your question, I would  
6 say that's not enough information because there's too many  
7 variables and I don't know what the obligations are.

8 Now sometimes I set the obligations, sometimes the pilots set  
9 the obligations and inform me, and sometimes the obligation comes  
10 from standard practices with formation training, sometimes the  
11 obligations come from the FARs, Part 91, because we are a Part 91  
12 operation, and then sometimes obligations come from just  
13 position --- because I'm in front of you, I shall go first.

14 Q. Prior to the accident, the setup involving the bomber group  
15 and the fighter group, for lack of a better word --

16 A. Yes.

17 Q. -- were move the pursuit aircraft together and the bomber  
18 aircraft together.

19 A. Yes, ma'am.

20 Q. What was the intent? What was -- if everything happened and  
21 it was perfect world and this accident didn't happen, what were  
22 you expecting to get out of that part of the performance?

23 A. Sure. So the bomber -- right, so the fighters were assigned  
24 to the bombers, right? So we don't have two formations, we have  
25 one formation, right, because fighters on top of the bombers and

1 walk it up to the B-17. Everybody was to 90 out together, right?  
2 So we're going to make that right turn, go to 90 degrees. The  
3 bombers were going to 270 back around to the 1,000 foot line, the  
4 fighters were going to break into trail -- so not together, but  
5 into trail, and continue a 270 ending up on the -- initially I  
6 said 500 foot line and then I changed it to the outside edge of  
7 the runway, and they were going to come through. And then the  
8 bombers were going to come through on the 1,000 foot line, the  
9 fighters were going to just outrun them, just -- right? Because  
10 you're break -- so the breaking into trail is important, right,  
11 because now I can throttle up, right, and I can accelerate and I  
12 can use the (indiscernible), right? Because the P-51s are flying  
13 very much on the back side of where they want to -- of their  
14 performance capabilities.

15 So everybody 270's around onto this lateral deconfliction of  
16 the two lines. Then the fighters are going to go up and to the  
17 right and most likely come back around -- or 270 back around and  
18 probably run right back down the runway as the B-29 was starting  
19 its takeoff roll, right? And they can see the B-29 so you have  
20 this optics of the fighters just flying through really, really  
21 fast as the B-29's taking off, right? So the crowd eye follows  
22 the fighters to the B-29 taking off, right? And the bombers were  
23 most likely -- though the decision had not been made because we  
24 had not reached the deciding point in space, would probably have  
25 made another racetrack back around. Because the B-29 was going to

1 take off and make a big right 270 back behind the crowd. The rule  
2 is when you go over the crowd you have to be 1,000 feet AGL. So  
3 he has this 270 and climb to 1,000 feet. I actually think I had  
4 him going to 2,000 feet because we were going to talk about long  
5 range bombing. So I was actually putting the B-29 at the top of  
6 the TFR. And it -- the B-29's actually a pretty fast airplane. A  
7 lot of people don't know that for how big it is, but it has a lot  
8 of horsepower. So he's going to climb all the way up and then now  
9 he was going to enter above us, you know, at this high altitude --  
10 it's at 3,000 feet, but high altitude bomber as these guys were  
11 zipping back through. And so that was kind of where we were  
12 going.

13         So, right, so like -- yeah, it actually worked, done with  
14 that sequence, it's developed and executing. So I'm moving on to  
15 the next step of the sequences, which is getting the B-29 in the  
16 air. Did that answer -- I hope I answered your question.

17 Q. It does. How do you ensure -- because this is a group, this  
18 is not -- this is many individuals who are working together. Real  
19 time, how do you ensure group comprehension?

20 A. What are you -- explain that to me.

21 Q. So you artfully just explained everything in your head of how  
22 you see this unfolding. However, there's something called delayed  
23 control, operational control. And air traffic controllers, they  
24 are delayed control. They don't actually control the aircraft.  
25 They have to tell an individual who is then physically controlling

1 the aircraft what it is they want. So there's a delay there, in  
2 comprehension and in control.

3 A. Correct.

4 Q. Because the air traffic controller knows what they're going  
5 to say. The pilot might have an idea what the air traffic  
6 controllers about to say --

7 A. But hasn't gotten it yet, yeah.

8 Q. -- but it still hasn't -- it hasn't happened yet. So in this  
9 system you have to have group comprehension as to what's coming  
10 next. So how do you ensure that if you are executing what you  
11 want them to do as you want them to do it?

12 A. Oh, that's a really -- okay, I understand. That's a really  
13 good question. Thank you for asking. No one's ever asked me  
14 that.

15 So the problem with listening to just the tape is you don't  
16 know when I'm saying it, right? So I think -- I don't know this,  
17 but I imagine that like the common person listens to the tape and  
18 hears B-17 left 90, right 270, and thinks the B-17's like way over  
19 there. Well, traditionally that instruction is given as he's  
20 coming -- like he's halfway through this 270, right, so he's not  
21 even through his pass. And I don't know if I -- I don't remember  
22 offhand if I say it on the tape, but sometimes I'll say -- what's  
23 really common for me to say, like after this pass, left 90, right  
24 270, right? Or at the conclusion of this pass, once you're  
25 through show center, right? So like -- because the idea is you're

1 at show center going that way, this is how I want you to get back  
2 to show center. And before you get to show center, I should tell  
3 you how to get back to show center. And so that's part of the  
4 answer.

5 You know, and then there is a -- so I understand about what  
6 you're saying about like with controllers, the delayed instruction  
7 confirmation, right? So -- and which is why, right, like  
8 compliance is acknowledgment, right? So -- because if it wasn't,  
9 the radio would never stop. And so there's that compliance is  
10 acknowledgment, right, and it's acknowledgment of everything. And  
11 so there's that factor, right? So that's just -- I will call that  
12 trust. I trust these guys because we've done this together in  
13 this environment in these airplanes a hundred times.

14 And then on top of that, more specifically is I think the --  
15 okay, so the accident happened when -- so if I'm the crowd, the  
16 airplanes are going from right to left, turning away from the  
17 crowd and then going to come back to left to right. Well, when we  
18 were going right and turning away from the crowd to go right to  
19 left, so the pass before, I say something like -- I'd have to  
20 listen to quote it, but it's something like, hey, fighters, in a  
21 second I'm going to break you all out from the bombers. So that's  
22 the queueing of now that the B-29 has taxied out and it's getting  
23 ready to go, which we talked about in the briefing because they're  
24 going to be their own guide, we're going to go from one formation  
25 to two formations, that's coming up. We're not 100 percent sure



1 exactly how we're going to do that yet because we don't have  
2 enough information to make that decision yet.

3       So I would -- to answer your original question in a really  
4 simplified term, I would say that's a trust factor but coupled  
5 with compliance is acknowledgment. Otherwise, the radio  
6 transmissions would be 8 minutes, I mean, with all the  
7 disclosures, right?

8 Q.   So to summarize what I think I know, it sounds like you are  
9 lead turning the command that you want; in other words, as you  
10 said, you have warbirds coming out of a 270 before they were going  
11 to go into -- so you are lead turning this is what I want you to  
12 do next, and then once they do it, that is your acknowledgment  
13 that they in fact recognized, understood, and heard what you said  
14 and are going to comply?

15 A.   That is partially correct. Yes, I -- at high level I agree  
16 with what you said. As we get more specific, I don't like the  
17 term lead turn because that -- to me there's an insinuation that  
18 this has never been discussed and, right, this is the fulfillment  
19 of the briefing, right? So, because it was briefed that this --  
20 we would get to these points to make these decisions to separate.  
21 Like it was not a surprise to anybody that we were going to go  
22 from one large formation to two formations and that the B-29 would  
23 be a third independent group, even though it's one aircraft,  
24 right? So that's that.

25       And then, yeah, so -- right, so I think on the tape I ask the

1 B-17 if they see the fighters and I ask the fighters if they see  
2 the B-17. The obligation is still fighters on top of the bombers,  
3 right? That contract never goes away until you're completely  
4 separated. And then this is what I want you to do, fan break  
5 left, get in trail, come through 500 foot line. Well, that was  
6 all complied with. That's execution, right? That's not  
7 directive. So this is what actually happened. Obviously, if they  
8 don't understand -- just like in airline, right, just like in an  
9 airline, if you don't understand you say something or if you can't  
10 comply, right? Because sometimes in air traffic it's like, you  
11 know, intercept the localizer and the guy blows through it. Hey,  
12 what are you doing? Well, I was drinking my coffee. Or I'm  
13 working an issue. Okay. Well, that's the first time you as a  
14 controller knows he's working an issue because he's head down,  
15 right? Yeah. So I would maybe supplement what you said back to  
16 me with some of that. Sorry.

17 Q. So it's not a surprise due to the pre-brief that like one  
18 becomes two, two becomes three. But would you say it might not be  
19 as known how they're going to do that and at what time during the  
20 airshow?

21 A. Specifically no, broadly yes. So broadly they know, right?  
22 Because we knew once the B-29 was ready to take off that we were  
23 going to separate into groups. Well, that's approaching. How  
24 exactly we're going to do that, we don't -- in the briefing we  
25 don't have all the answers.

1           So, to couple that -- like in the briefing, right, the  
2 forecast is that we're going use runway 3-1, okay, because that's  
3 what the forecast says, but we still brief a 1-3 show. Now maybe  
4 we brief it quickly and maybe we don't go in depth with it,  
5 because you never know if the winds are going to change halfway  
6 through the show or whatever. So you have to say, hey, you know,  
7 forecast 3-1, we're going to go in depth through 3-1, but if we're  
8 on a 1-3 flow -- because at that location a 1-3 flow changes  
9 things because of the B-29's wingspan. So it changes how we taxi.

10 Q.   I'm going to go back to -- I know Shawn asked you about the  
11 Stearman and you said that it didn't -- you don't feel it added to  
12 complexity. But would you say -- or I guess how would you say it  
13 affected your workload?

14 A.   I mean --

15 Q.   Or the T -- was it a T-46? T-30 --

16 A.   T-34, Zero-Hotel-Victor.

17 Q.   Okay.

18 A.   Yeah. You would have to say obviously it increases your  
19 workload because there's more to do. But I would -- one of the  
20 reasons that I would say it doesn't add to complexity is because  
21 it's a known quantity, right? We have an avenue out, we have an  
22 avenue in, we have markers, we have callouts, we have where you're  
23 supposed to be, and we have outs at every single one of those  
24 places. So if you're going down the tube appropriately, what's  
25 the complexity? I mean, it's happening as it should, everything

1 looks normal. So that's why I don't -- of course, it increases  
2 your workload because you have more things to do.

3 But to the point that Shawn made earlier, if it's I can't  
4 handle you right now, hold at the intersection, call me back in 3  
5 minutes. I have that option. So -- which we have done before.  
6 Because there are acts that do not want the ins and outs during  
7 the routine. Tora is one of those. And so when those guys like,  
8 right, they'll leave right before Tora. Tora's 25 minutes long.  
9 And they'll show up early and they'll be like, hey, I'm ready to  
10 come back in. Hold at the intersection, you got another 7 minutes  
11 before they're done. So that's -- that is normal here for this  
12 operation.

13 Q. And I know you -- and I would expect Shawn to be more focused  
14 on complexity because that's an operational factor, but a human  
15 performance factor is workload. And so I would also then go to  
16 ask if you agree that it would have an affect your workload, how  
17 would you say it affected your situational awareness?

18 A. I don't think it affected my situational awareness at all.

19 Q. Okay.

20 A. It didn't diminish my situational awareness. So, yeah, I  
21 don't think it affected it at all.

22 Q. Okay. Moving back to the performers themselves. Getting  
23 back to that question I had asked earlier, did you know the B-17  
24 crew, did you know the P-63 pilot, and you said that, yes, you had  
25 worked with those individuals prior to. Had you ever had any

1 concerns about their performances prior to the Wings Over Dallas  
2 incident?

3 A. No.

4 Q. If you did have concerns over performances or that of any of  
5 the performers in terms of -- I know we talked a little bit about  
6 like, hey, you're looking a little ill, possibly not --

7 A. You're looking rough today.

8 Q. But what about actual operational skills, maneuvering? Like,  
9 hey, you keep dropping the nose at a key point and whatever it is,  
10 is that something you would still take up directly with the  
11 performer or --

12 A. Yeah.

13 Q. -- is there another avenue?

14 A. So if I have especially a compliance issue -- so a compliance  
15 issue, right, like, hey, man, you flew the wrong line every single  
16 time, what's the problem? Do you not know where the lines are?  
17 Blah, blah, blah, blah, blah. So I'm going to go direct. I'm  
18 going to go direct to the person and then, if you get the "pff" I  
19 know what I'm doing, that's -- we have an issue with that, right?  
20 So because what happens is, is like -- especially rehearsal day,  
21 right? Like rehearsal, because especially for the guys that do  
22 this every weekend, it's like, hey, man, you hit -- you know, you  
23 were 300 feet inside the line every single time today, why? Oh,  
24 well, I didn't know. Okay. Well, let's work that out, right?

25 So I am very comfortable going direct to the responsible

1 person saying this is the deficiency that I see and it needs to be  
2 corrected. Do you need my help in correcting that? Do you agree  
3 that's a deficiency, right? Because you first want to get the  
4 buy-in that they at least agree there's a deficiency, right? So  
5 that's like compliance issues. And then I know that I have the  
6 ultimate trump card on compliance issues because I can always --  
7 either myself, through the producer or through the FAA because I  
8 as the air boss would have the influence with the FAA, go this --  
9 I don't feel like this guy can comply, I'm not letting him fly.  
10 And there's nothing wrong with that. We can sort it out later.  
11 So that's extremely rare, right, compliance issues.

12 But then if you have what I would call, more to the point,  
13 like performance issues, right, that's probably more commonplace  
14 because it's -- so you'll get in situations where I'll say like,  
15 hey, I want you to come and do this and they come and do that.  
16 And then -- but it's inconsequential, right? It's  
17 inconsequential. So then later you go, hey, when I said I want  
18 you to, you know, do this, I saw you do that, what's the problem  
19 here? Like am I using -- and half the time it's nomenclature,  
20 right? Well, I -- I mean, when you said turn left, I thought you  
21 meant do a right 270. That's turning left. I'm like, oh, okay,  
22 well, you got going the right direction, but -- right? I mean,  
23 that's a silly example, but it's an example.

24 So that's a performance issue. So, yeah, I'm very  
25 comfortable going to anybody going, hey, this is what I

1 anticipated and asked for, this is what I got, somewhere there's a  
2 breakdown. Is the breakdown I'm saying it wrong? Is the  
3 breakdown that you're hearing it wrong? Am I using the wrong  
4 lingo or do you not know what I mean?

5 Duster turn is an old crop duster term. And I've talked to  
6 some of the older people about like you keep saying duster turn,  
7 most of the people here aren't 80 so maybe we should say 90/270,  
8 right? And that's nomenclature. I don't really know what you  
9 mean when you say duster turn. Well, then why, since this is the  
10 third time we've done this and you never asked?

11 So, yeah, those conversations are really commonplace.  
12 Because the airshow world is a completely different environment.  
13 It's its own thing and it takes some mentorship to get into it at  
14 any position. Yeah.

15 Q. That's actually a perfect segue for my next question.

16 A. Fantastic.

17 Q. Do you get involved in any sort of like mentoring, cross-  
18 talk, mentoring groups, because it seems there is quite a bit of  
19 this that feel like it's tribal knowledge. And so who is your  
20 tribe? How often do you tap into your tribe?

21 A. So Craig was part of my tribe. If I had a question about  
22 Tora, because Craig participated in Tora, I would call Craig. Len  
23 was part of my tribe. If I had an issue with a CAF bomber pilot,  
24 which I don't really, I'd call him. He's really -- he was really,  
25 really influential at CAF. You know, and they were both airline

1 captains, so I would -- if I had a, you know, airline question,  
2 I'd call Len or Craig, right? And then -- so they're part of the  
3 tribe. And then obviously my dad's part of the tribe.

4 But I'm -- I like to consider myself a little unique. I  
5 don't necessarily know if I am, but I think I am in the fact that  
6 like I -- if I'm seeking an answer, I'm going to call whomever it  
7 is. An example is I got into an FAA unit and I had a disagreement  
8 on the interpretation of a rule. So through the network -- and it  
9 had to do with parachute stuff. So through the network I found  
10 like the guy at the FAA that knows all things parachutes. And I  
11 just called, said can you settle this for us?

12 So, yes, there's a lot of tribal knowledge, but the tribe's  
13 not always the answer. It's a resource, right? And so I don't  
14 disagree with you, I think a lot of the knowledge is tribal. I  
15 think that because of the nuance that is involved in airshows,  
16 some of it can only be taught through that on-the-job mentorship.  
17 Air traffic control is very similar in that, right, because air  
18 traffic control you learn a set of rules and you learn a set of  
19 compliance data, but the heart of sequencing, you don't learn that  
20 in a schoolhouse. You learn the skills to develop that in the  
21 schoolhouse, which is why like, your trainer is such an  
22 influential person on your career in that respect.

23 So there's lots of tribal knowledge. The tribe is the  
24 community. But if you're seeking an answer, especially on a  
25 safety issue, all bets are off. You go to whomever the



1 appropriate person is to solve the problem.

2 Q. Prior to this Wings Over Dallas performance, had you ever  
3 been witness to or air boss to or part of any other significant  
4 incident or accident in your career?

5 A. I've never been involved in any capacity with a fatal  
6 accident. I've had many what qualifies emergencies. And I've had  
7 some -- several things that kind of make you sit up, right? But  
8 nothing fatal and nothing nearly this significant.

9 Q. Is there an avenue for air bosses out there, maybe the ones  
10 who did not have your unique upbringing, to -- kind of back to  
11 that benchmarking and cross-talking and discussions of, hey, this  
12 happened here, I'm getting the word out so that it doesn't happen  
13 to you. Is there a process for that in the air boss community?

14 A. Formally no. Informally I would say that is something that  
15 ICAS tries to accomplish at the convention every year. Because we  
16 have a closed door, like you must be a letter of authorization  
17 holder air boss to be in this room to talk about these things. We  
18 don't want performers, we don't want producers, we want just the  
19 air bosses to be at -- but as you can imagine, it's all Type A  
20 personalities that, you know, are infallible and it's difficult.  
21 And the nature of the beast is, you know, so much computation is  
22 done real time sometimes it's hard to break down all the  
23 variables. Yeah.

24 So there's -- I think there's an attempt industry-wide to do  
25 that. I don't think, I don't think it's quite where it should be,

1 obviously. And I think that -- one thing that I try and do that's  
2 a little different, and this is what I was trying to accomplish  
3 with Sam, is, hey, you know, this was the setup, this was the  
4 result, let's talk about how the result deviated from what we  
5 wanted, because that happens always, right? And let's talk about  
6 how the result deviated from what we wanted, let's talk about  
7 maybe how the setup deviated from what we wanted, let's talk about  
8 what our options were, and then let's talk about like what would  
9 we do if we had different levels of issues at different points  
10 through this execution, right?

11       Because for me, I think that is -- what's the term for it?  
12 Like that is what is very unique to my upbringing in air bossing  
13 is I had the opportunity for years to go to an airshow, fly on the  
14 airplanes in an airshow and get that perspective, then stand  
15 behind my dad and then, you know, at 6 o'clock at night on the way  
16 home, do you remember when this guy was here and this guy was here  
17 and they went like this? Why didn't we do that? Or why didn't we  
18 do this other thing? Or why did it happen that way? And so, that  
19 is what I try to do because I learned the most from that type of  
20 calculus and thought process. But I don't think that is expounded  
21 very well industry wide.

22 Q.   So that brings a good point is, in your working with  
23 Commemorative Air Force, for instance, is there a post-brief  
24 situation where you're having those moments where you break down,  
25 all right, this is what went right and what could be better?

1 A. Yes. Yeah. So yes, there are -- there is not necessarily a  
2 standing order for a debrief, right? There have been situations  
3 with both the Commemorative Air Force and not the Commemorative  
4 Air Force where once you're kind of through the sequence -- like I  
5 have had experiences where the plan's not working, everybody's out  
6 of position, we're going to get real slow, non-maneuvering,  
7 everybody's in the corner in the hold type thing. An example of  
8 that is I was air bossing when we had an incident where a static  
9 line jumper went into the crowd at Wings Over Houston and broke  
10 many bones. Well, so now I have this situation and like very  
11 quickly you have to go sterile, right? Like you're in that  
12 corner, you're in that corner, you're in the other corner. Don't  
13 talk to me because I'm busy. But you have to get everybody to  
14 their spot so that you can leave them there and we're  
15 deconflicted.

16 And so I have also instances where you'll be flying around, I  
17 asked for this, I got that. Maybe it was inside the margin of  
18 comfort for somebody. When you're done and people are taxiing  
19 back in, it would look something like, hey, fighter flight lead,  
20 you know, hey, Shawn, let's debrief 6 o'clock at this place. Hey,  
21 bomber lead, let's debrief, you and your whole group, 6 o'clock  
22 this place. So I've had the experience -- and then of course I  
23 was much younger so it was terrifying, right? But where you go in  
24 the room and you go, this was the plan, that's not what we did.  
25 What happened? And then you get everybody to say their piece.

1 And unfortunately in those types of -- like that self-policing  
2 situation, a lot of times you learn, oh, maybe I didn't do that as  
3 well as I thought. And then, of course, they go, well, maybe we  
4 didn't do that as well as we thought.

5       So that I think is something -- I don't necessarily think  
6 it's unique to our community, but I do think it's something our  
7 community does very well, is when we rise to that occasion where  
8 maybe things didn't go great, we are able to get in a room, sort  
9 it out, and all walk out friends going, it's going to be better  
10 next time, for sure. Because I've had those conversations and  
11 they are not fun, but they work. I mean, the fighter pilot  
12 community is like that, too.

13 Q. In those that you've experienced, is it just between you and  
14 the performers or, I guess, what role does the producer then play  
15 in that post-brief?

16 A. A traditional producer I probably would not have them  
17 involved there because mainly, right, because they're paying  
18 people. So, right, you don't want to call someone out in front of  
19 the guy cutting checks because then it looks like maybe, you know,  
20 I won't hire that guy again. So it's like maybe you don't need to  
21 be there. But like a producer like Gena, she might be in the  
22 room. But she's just kind of a -- she's not a traditional  
23 producer, right, because she does her role in the bomb stuff and  
24 she has interpersonal relationships with these people. But like  
25 if we're like, hey, Shawn's the producer and we all think Shawn's

1 a nice guy but we don't really know him, he would not be in the  
2 room for that. It gives them the opportunity to save face, too,  
3 right? Like I can yell and scream at you and we can sort it out  
4 and when we walk outside, you know, we got to hold hands and be  
5 friends.

6 Q. So you have had some time, I mean, it's been 9-ish months.  
7 It was a very tightknit community, very close. I do recognize and  
8 I do appreciate that. And this is a very difficult event you've  
9 had some time since to distance from. Has there been any sort of  
10 self-reflection? Is there anything -- tomorrow if you had to go  
11 the job again, go up to your airstairs, is there anything you  
12 would do differently?

13 A. Oh, of course. Of course, right? Like especially when you  
14 know the outcome, you'd always do things differently. So, yeah, I  
15 mean, there's -- I mean, right, we can sit here and say, yeah, we  
16 just wouldn't fly, problem solved, right, because you don't want  
17 to -- but when you know the outcome it's very easy to say that.

18 I think there are some things that I would probably process  
19 differently. You know, this event has definitely like -- when you  
20 get into the why you do things and you have an event like this, it  
21 tends to -- I think it tends to go, okay, well, it's really  
22 reenforced why we do certain things, right? But then you start  
23 learning, hey, my logic here was flawed or what I was taught was  
24 flawed or there was an assumption here that we thought was a rule  
25 but it's an assumption, right? You learn things like that.

1 I think this event, of course, I would do -- knowing the  
2 outcome, I would definitely do things differently, for sure. I  
3 don't know exactly what that is as a hard and fast rule, right?  
4 So I'm trying to separate the two. I don't think I'm doing it  
5 very well, but -- because like once you know the outcome you're  
6 biased to the input, right? Does that make sense?

7 Q. (No audible response).

8 A. Okay. So that's been a lot of self-reflection. I've been  
9 working on that for a while. So -- because there's a whole  
10 execution side that's not really addressed with me, with me,  
11 because I'm not flying the airplane. I can't fly the airplane.  
12 There is a myriad of decisions that are made by a pilot that I  
13 can't make. They have a whole unique perspective that's way  
14 different than me because I'm over here looking this way with just  
15 this information and I rely on them for a whole different set of  
16 information and, absent some input, everything looks right. So  
17 I'm not exactly sure what rule I would put in place, but I know if  
18 you could rewind me back to November 12th, I'd do a lot of things  
19 differently.

20 Q. And I'm not sure it has to be a formulated rule, but I guess  
21 with your approach, with your style, with your manner, at this  
22 point do you think you would change anything?

23 A. That's a really big question.

24 Q. That's what I do.

25 A. And you're good at it. I have a hard time answering that

1 without thinking specifically to the accident, so -- what would I  
2 do differently? I would -- I don't know. I don't really know how  
3 to answer that right now. Sorry. It's -- I don't know how to  
4 answer that without giving you like 30 minutes of this is why we  
5 arrive to this conclusion to make this decision, asterisk,  
6 considering all these other things. So that's why it's a  
7 challenging question. There's a lot of variables going on, right?  
8 And there's -- and like I already said, there's the execution  
9 side. Well, you know, how do you know when the execution's wrong,  
10 right? Because it can be very late in the process, can be very  
11 early in the process, and that's a pilot issue, so -- I don't --  
12 that's a really challenging question.

13 DR. WOODS: Okay. All right. With that, I think --

14 MR. ROYCE: Do you want to jump in on that, Shawn?

15 MR. ETCHER: No thanks.

16 DR. WOODS: I'll leave the other wild card questions to you.

17 MR. ETCHER: Oh. Okay.

18 BY MR. ETCHER:

19 Q. All righty. I have one question. She had asked -- and I'll  
20 ask her if she has any other alibis. When Sabrina had asked --

21 A. What's an -- you said an alibi?

22 DR. WOODS: Alibis. That's what we call when we say we're  
23 done and then we're really not done.

24 MR. ROYCE: Oh.

25 MR. DENNY: I was lost, too. I was lost, too.

1 MR. ETCHER: It's an internal joke --

2 MR. DENNY: I love it. I love it. We'll just call you Matt  
3 for right now.

4 MR. ROYCE: Yeah, it's Matt's turn. You're taking Matt's --  
5 Matt yielded his time to you. There we go.

6 BY MR. ETCHER:

7 Q. But when Sabrina asked have you been involved in any  
8 accidents as an air boss and you said no fatal accidents.

9 A. Correct.

10 Q. Have you been involved in any accidents? Accidents can be  
11 bent metal --

12 A. Yeah.

13 Q. -- wingtip touches, all that kind of stuff. Have you been  
14 involved with any of those when you were air boss?

15 A. Um-hum.

16 Q. And --

17 A. I've been involved with two with Craig.

18 Q. How so?

19 A. Craig -- this is going to be on the record, so I got to get  
20 the story straight. So we're in Titusville, Florida and Craig --  
21 it's probably 2014. I'm not 100 percent sure on the year.

22 Craig -- and so Tora takes off and does their routine and they  
23 have pyrotechnics. And they're landing and Craig, at the end,  
24 because he's working on -- when you first get an aerobatic card  
25 you start up higher and you have to walk your way down. He's



1 trying to walk down so he's always trying to do some aerobatics so  
2 he can say, hey, I got my 10, right? He's doing some aerobatics.

3 Well, the field has caught on fire and -- so all the grass is  
4 burning and it makes its way over to the pyrotechnic field and  
5 they just start going off. And as Craig gets done, he's like,  
6 hey, the gear won't come down. I was like, well, that's exciting.  
7 So we start working that issue: Well, have you tried this, have  
8 you tried that? And then I call, get on the cell phone and I call  
9 Mike Burke, who's Tora lead at the time, and I was like, hey,  
10 Craig has a gear issue, please come up here so that we can work it  
11 out. Oh, yeah, he tried this, he tried that.

12 Well, in the meantime, the fire, which is raging out of  
13 control, has gotten to the 18-wheeler full of fireworks, which are  
14 now just going off. And the winds are right down the runway  
15 that's right -- so it's me at the crowd line, the runway,  
16 fireworks, and the wind's going right down the runway. So if  
17 we're going to belly an airplane in, it's going to be on that  
18 runway. And so the fireworks just keep going off.

19 So Mike and Craig are over here on this radio, you know,  
20 flipping buttons and switches and pulling stuff to get the gear to  
21 come down, and I'm over here trying to coordinate with like the  
22 fire department, and the fireworks guys are like, how much stuff  
23 is left? Like what can we do to like get it to go faster, you  
24 know, and all that. Because I'm like I know the clock's ticking  
25 because Craig, because of his position in Tora flies with the

1 least amount of fuel. And so I'm like, we have a lot of -- we  
2 don't have a lot of time.

3       So we finally get the gear swung, but it's not green. So  
4 he's going to come down the runway with fireworks going off in the  
5 background and skip it off the runway to see if he gets a green  
6 light, because we get a hard line. But the tailwheel still  
7 doesn't come down. So I get another -- so there's a T-6 there  
8 that -- a T-6 school that gives rides during the show. Well, he's  
9 taxiing in. I'm like, I need you to drop your passenger off, turn  
10 back around and go back out. So I tag him up with Craig. I'm  
11 like your speed and altitude, right, so make sure he doesn't get  
12 too low or too slow.

13       And then so I bring that guy in and land him. Craig's out of  
14 gas, we got to land. So I have to pull the fire trucks. I'm like  
15 I need you to stop fighting this fire and go get ready for this  
16 because we don't know if the gear's going to fold up, but we know  
17 the tailwheel's not down. So on that T-6 the tail will be  
18 dragging.

19       So here he comes and he lands, and he's got to leave the  
20 power on, and he brings the airplane like -- and what a great  
21 picture -- right show center, firework -- 18-wheeler behind him,  
22 fireworks going off. The airplane stood up, right? He's got all  
23 this power and it stood up, and just sets it down. And so that  
24 was kind of an emergency, right?

25       And then I was at Midland one time and the B-29 was coming

1 back with one of the engines feathered. When the B-29 first got  
2 out of its restoration it had a lot of engine issues so they -- it  
3 wasn't uncommon to feather them. And then I had a C-45 come in  
4 with an elevator flutter, right, because it's trim tab broke, and  
5 then I got an airliner on like a 6-mile final, and the P-51 calls  
6 me and says he has a chip light, which is a big deal in P-51s. So  
7 I'm like, all runways good to land. I tell the tower guys to get  
8 ready to send the airliner around. They're unhappy about that.  
9 So it gets pretty exciting.

10 And then at McConnell Air Force Base like 6 weeks before,  
11 Tora caught the field on fire and Craig was at the absolute bare  
12 minimum on gas. And so that was somewhat emergent. But then I  
13 got the fire department to knock it down enough that we could land  
14 on the runway and get through. Because it was -- smoke was right  
15 down the runway so you couldn't see anything, right? So that was  
16 interesting.

17 So, yeah, that's a couple incidences. I've had a lot of  
18 like -- I had a guy flat tire, like landed, P-51 tire goes flat.  
19 And of course it happens right when you're at your least  
20 controllable, right? Of course. And then had an engine quit on a  
21 guy. I had a guy hit a car on the -- part of his act. Like he  
22 goes down the runway, the car goes down the runway, and he's  
23 supposed to go by him and pop up. And as he's going by him, the  
24 wingtip hits the car. So that was exciting.

25 So, yeah, I've had lots of incidences, emergencies, but it's

1 like you just get that tunnel vision like this is the only thing  
2 that matters, right? And then the parachute guy that went into  
3 the crowd, right, and he got hurt. That's -- the interesting part  
4 about that story is, so I kind of put everybody in their corners  
5 because we had like 40-plus airplanes in the air. So we put  
6 everybody, all the flights, into their corners. And everybody's  
7 kind of starting like, hey, you put me over here but I think you  
8 forgot about me, those radio calls. Like, hey, what's going on?  
9 And I get on the radio and I was like, tower to air boss. They're  
10 like, go ahead. I was like I need you to call the fire  
11 department, I need an ambulance show center right now. And  
12 everybody got real quiet, right, because it got real serious.  
13 That guy was hurt. We life-flighted that guy out of there.

14       And then I had lots of what I would call like an emergency or  
15 an incident because jumpers will land and like break a leg, right,  
16 and they'll get life-flighted out. So, yeah. So that kind of fun  
17 stuff. And then guys run into each other on the ground or a wing  
18 hits a fence.

19       On the tape, did you hear early in the tape I make a comment  
20 to Len about knocking over a speaker? Because he's knocked a  
21 speaker over before. But that kind of stuff.

22 Q.    Okay.

23 A.    Yeah.

24 Q.    Well, that helps.

25       MR. ETCHER: Any alibis for you?

1 DR. WOODS: Nothing.

2 MR. ETCHER: Okay.

3 BY MR. ETCHER:

4 Q. Last two questions, if you will. I promise. I know we've  
5 asked you a ton of questions today and you've given me a lot of  
6 information, so again, I can't thank you enough. Sabrina's smart,  
7 so she asks great questions. But I'm always fearful that asking  
8 all these questions and there's one that you're like, man, if he  
9 would just ask about this it might help them. Is there anything  
10 like that you think we should have asked that we didn't?

11 A. Not really, off the top of my head. Yeah.

12 Q. Well, and if you --

13 A. -- don't have more information --

14 Q. But if you do come up with anything, by all means --

15 A. Yeah.

16 Q. -- don't hesitate. You can always reach out to us, but you  
17 can also -- I'm sure your counsel would appreciate it if you  
18 reached out through him.

19 The last thing is, if you could make any changes out there,  
20 and maybe it's not even air boss stuff, whatever, is there  
21 anything you can think of that needs change that you see?

22 A. Yeah. An issue that I have with TFRs, and this is an air  
23 traffic thing, is you can -- the TFR office will say you can only  
24 get a TFR if you have civilian aircraft over 200 miles per hour  
25 doing aerobatics, if you have a jet team, so like a single-ship

1 demo with a (indiscernible), or if you have a military parachute  
2 team. That is not good, and there's many reasons. But if -- and  
3 I have tried for years to get this to change. Because you want a  
4 TFR because, one, you want the TFR to show up on ForeFlight.  
5 Because a regulatory black hole is -- if I'm running an airshow --  
6 let's say I'm running Wings Over Dallas without a TFR and a guy  
7 calls up and wants to come in and land. How can I tell him no?  
8 There's -- it's a regulatory gap.

9       So if you all would have some influence on getting the air  
10 traffic organization, like an aerial event needs a TFR because it  
11 needs to be on the map because, yeah, maybe this guy's not doing  
12 aerobatics, but he's going 300 miles per hour, and you want him to  
13 look for the 172 that's coming in that may or may not have called  
14 on the radio, right? Because on a -- I know, I'm sorry.

15 Q. Uh-uh.

16 A. This is like my pet peeve stuff. On the regulations side,  
17 right, we say, well, you're required to have -- well, Russell,  
18 you're required to have two-way radio communication with a Class D  
19 tower. That's not true for all airplanes because there are  
20 airplanes that are exceptions to that rule, especially if they  
21 don't have an electronic -- electrical system and a radio. And  
22 that's why we have a light gun. So I've been trying to for years  
23 to get the ATO to at least consider that maybe their scope is too  
24 narrow and that you ought to be able, allowed to get a TFR just  
25 for traffic. So that's one thing that I think they should change.

1 I think that -- oh, I'm going to get in so -- I'll get in a  
2 lot of trouble for saying this, but that's okay. I think that the  
3 8900 is a decent document. I think we have lost why some of the  
4 things are in there. But that's, as you pointed out, the 8900  
5 tends to be on the design side, right, not the execution side.  
6 But the execution side is covered by the FARs, right? So but we  
7 waive the FARs. But they're trying to standardize the language  
8 for the waiving the FAR and it's effectively writing new rules.  
9 And so my complaint for years, and this is where I'll get in  
10 trouble, is, I'll go, so we have a rule and we're asking to waive  
11 and deviate from that rule by rewriting a new rule. Well, that  
12 doesn't make any sense. We're just trading one for the other. So  
13 I think some of that is that institutional knowledge that gets  
14 lost to tribalism, as you pointed out.

15 So those are like design, compliance, execution issues that I  
16 run into because if you're -- like, right, because there are --  
17 performers and aviators are like I'm going to do what I do and if  
18 they're going to violate me, that's fine, because I haven't been  
19 violated yet, right? And that's -- some people get to that  
20 attitude because they've tried to do it the right way and no one  
21 would listen. I don't think that's a safety of flight issue, but  
22 I think that is a self-reflection issue.

23 And then, so those -- like that's a little in the weeds for  
24 what we're talking about, but, yeah, I think some of those things,  
25 it's like -- with airshows it's like this great thing and we can

1 do it really, really well. It's hard to do things well when  
2 you're looking over your shoulder the whole time because we don't  
3 quite understand why we're doing what we're doing. And that's how  
4 you end up with a lot of your tribes, because I'm this philosophy,  
5 you're that philosophy, and on and on and on. Yeah.

6 Yeah, but if you can help me with that TFR thing, that'd be  
7 great.

8 Q. I'm going to (indiscernible).

9 MR. ETCHER: All right. Well, with that, let's close --

10 MR. ROYCE: Well, let's --

11 MR. ETCHER: Oh, go ahead. No, please.

12 MR. ROYCE: Let's go off the record for a second and I'm  
13 going to talk to you. No? We're done? Okay. I'm sorry. I  
14 misunderstood.

15 MR. DENNY: They want to finish. If you want to go.

16 MR. ROYCE: I'm sorry. Oh, no, I misunderstood.

17 MR. ETCHER: Now we can call this interview concluded --

18 MR. ROYCE: Yes.

19 MR. ETCHER: -- at 1745, if that works for you all?

20 (Whereupon, at 5:45 p.m. CT, the interview was concluded.)

21

22

23

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25



## CERTIFICATE

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


IN THE MATTER OF: FATAL COLLISION AT WINGS OVER  
DALLAS AIRSHOW AT THE DALLAS  
EXECUTIVE AIRPORT IN DALLAS,  
TEXAS ON NOVEMBER 22, 2022

Interview of Russell Royce

ACCIDENT NO.: CEN23MA034

PLACE: Dallas, Texas

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

**Interviewee:** Russell Royce

**Representative:** David Denny, esq.

**Date/Time:** November 16, 2022 / 1330L

**Location:** Dallas Executive Airport

**Present:** Matthew Rigsby (FAA)

**Investigator:** James VanDerKamp

**During the interview Russell Royce stated the following:**

He has been working as an airshow Air Boss for at least 20 years. He is 39 years old.

To become an Air Boss, you go through an apprenticeship program. There's a rule book (meaning FAA 8900.1 volume 3, chapter 6) and you need to have recommendations and an observed letter and an LOA (Letter of Authorization from the FAA). It might take several seasons, generally 2 years. The season is March to November.

His Letter of Authorization was issued November 27, 2019, and expires December 31, 2022, it's a 3-year cycle. The renewal process includes meeting various qualification standards and getting a letter of recommendation from an ACE (Aerobatic Competency Evaluator). Pilots must meet SAC (Statement of Aerobatic Competency) criteria. ICAS (International Council of Air Shows) makes a recommendation to the FAA to issue the LOA. It requires multiple observations and a "check ride".

He stated that he has done 16 airshows this year and over 300 in his career. He said that Sam, the Mini Boss was standing next to him during the show.

He stated that his last show was McConnel AFB the weekend of 24-25 September.

During the show he only communicates with pilots and ground crew, someone else does the announcements to the spectators. In the WOD (Wings Over Dallas) that was Steve Buss.

He stated that he attended the morning pre-brief, and that emergency response people were there but he did not attend any of the emergency tabletop exercises.

He stated that the WOD airshow was scheduled for 3 days, Friday through Sunday. Friday's events were cancelled due to weather (rain and low ceilings). Saturday was VMC (visual meteorological conditions).

There were 25-30 airplanes and 50-60 pilots in the airshow.

He conducted briefings at 0800 each morning with everyone in one room. He would brief things such as, the layout, the airspace, the plan of the day, "If-thens", deconfliction, and fueling. This brief was attended by everyone relevant to the running of the show: pilots, ground staff, fuelers, tower personnel, the FAA, and the Fire Department. He tried to keep the briefs to under an hour.

After the general briefing, sub-groups would hold their own briefing, such as fighters briefing within their flight and bombers briefing their flight.

He stated that all pilots needed to be briefed but not necessarily attend the briefing. He qualified that by stating that someone in the airplane had to attend but not all. He said that the rules say it's a requirement, he requires it, and he thinks it's a good practice.

When asked if he briefed with complementing elements within the same act (such as fighters briefing together with bombers) or ensure that they brief together, he said "It's a requirement to be briefed."

He stated that he briefed that ride flights would only be allowed to take off and land between acts.

When asked how he performed Risk Assessment, he answered, "Informally." He said the FAA has a Risk Assessment tool online, but he doesn't use it and that it's specific for aviation events.

When asked who's responsible for the separation of aircraft during the show, he replied, "Everybody".

When asked how he assisted in aircraft separation, he said that he "assisted from the perspective of the crowd". He stated that he rarely assigns specific altitudes because "I don't want pilots looking inside at their altimeters, they should be looking outside, besides, there is no minimum altitude for an airshow."

There are the 500 and 1000-foot lines for lateral separation. "The Cat-3 show line is 500 feet from the primary spectator area and must be able to

identify the line while flying. The Cat-2 show line is a minimum on 800 feet, traditionally 1000 feet, but can be reduced to 800 feet. The Cat-1 line is 1500 feet and can be reduced to 1200 feet.

When asked about vertical separation, he said "there are no minimums; I rarely assign altitudes, in an airshow it can degrade safety to assign altitudes... speeds... headings..."

He stated that the minimum altitude over secondary spectators is 500 feet and 1000 feet over the primary section.

When asked when he expects airplanes to line up on their run-in lines, he said that there's not necessarily an expectation of when to intercept the run-in line, the lead has to consider his wingmen in trail, he's more concerned with crowd perspective. As to the accident event, he expected the bombers to be at least 200 feet and on the 1000-foot line, and the fighters... "almost identical answer, but down the 500-foot line... expecting the pilot to know his minimums... surface and above."

When asked if sections/elements are to cross flight paths, how he ensures separation, he stated, "I can't, it's up to the pilots, the flight leads, and individual pilots. I don't put constraints on them."

He stated that the CAF (Commemorative Air Force) prepares the initial schedule for an airshow and that he did not have an input. Before the show, he types out the final order of events and the CAF prints it out.

He stated that there aren't any forms of electronic assistance to track or separate aircraft.

When asked the primary responsibility of the Air Boss he replied, "book answer... overall safety of the event". He is also a pace-keeper, and adjusts the schedule based on aircraft maintenance.

He coordinated the positive handoff of responsibility with the tower between 1045 and 1100. He believes that he had communications with the tower and had the capability to contact them, but he had no reason to call them.

He has a CTO, (Certified Tower Operator) certificate.

His primary employment is with an auto-body collision center.

He does not know where the airshow IIC (FFA Investigator in Charge) was during the airshow. He didn't know if he was close, nor would he expect him to be. He does not know if he saw the accident.

The Mini Boss was standing next to him, but he had no responsibility, he had an observation roll only.

He has done this same show with the same pilots multiple times this year, including Craig and Len in a show in July.

He is sure Craig was at the brief that day because, "I made a tasteless joke about him"

The accident pilots came up and asked for clarification after the brief, but he doesn't remember what it was about.

He stated that he doesn't remember if the show was on schedule, but, "I don't remember feeling like it was off schedule." The only issue in that act was that the B-29 was having trouble getting started and was still sitting at the hold short when the accident occurred.

He said that during the airshow, everybody was on the same frequency, the pilots, marshallers, fuelers, and all ground personnel.

When asked about the Stearman that landed a second before the accident, he said that was normal, and that there was no emergency or fuel consideration. When pressed about his earlier statement regarding briefing that ride flights would only take off and land between flights, he said "No, I didn't say that". When asked why he let him come in, he said that he knew it wouldn't be a problem.

When asked if there were recognized minimums, he replied, "Variable, based on the pilot's experience, the airplane, the environment is too fluid. I would never give a minimum separation. I would never say something like that."

He said that he saw the number 3 fighter in the formation prior to the collision. When asked if he appeared to be where he should be, he replied, "Not a valid question. Too subjective."

When asked if during that segment were there any unbriefed adjustments, he said, "Yes, it's the only way to do it. It's the safer way to do it. If you don't have real time data, it's unsafe."

When asked if passenger ride flights were allowed during the show while acts were going on, he stated, "Passenger rides do not necessarily increase risk any more than a plane in the normal landing pattern coming in over a plane that's landing straight-in."

When asked if it was common for pax rides to take place in the middle of acts, he said, "No, not common place."

When asked, he confirmed that one of the accident pilots did not attend the entirety of the brief but added that he had departed early and had cleared it with him saying that the pilot of the B24 could take the brief and pass on any changes.

He stated that he attended a brief between the bombers and the fighters and the general brief, but Len was missing.

He stated that all pilots are required to be briefed not attend the briefing.

He described the accident event saying: that the bombers made a right 90 then started a left 270 at around 500 feet while the fighters rendezvoused as top cover above them at about 1000 feet. Over the radio, he told the accident bomber to flatten out his turn a bit and then directed the fighters to swoop in ahead of the bombers and line up on the 500-foot line and told the bombers to run in on the 1000-foot line. He did not assign an altitude constraint for either the fighters or the bombers.

When asked how he intended to ensure separation as the fighters crossed the flight path of the bombers to get on the 500-foot line as you directed, he said, "They shouldn't have been there. We do it all the time... it's never a problem. I never saw the P-63 roll in."

He said his focus was not on any one aircraft but on the entirety of the

flight. During the rendezvous, he gave directions to the flight to pull off

after their run.

When Jeff, the lead fighter asked for clarification saying, "I'm not sure what you want me to do," he responded by telling them to get into echelon.

The Responsible Person for the airshow was Gina Linebarger. It's a customer/vendor roll. The CAF hired him.

After the accident, he called to "Roll the trucks!" and gave instructions to the aircraft airborne to go there designated holding positions and

check their fuel. Eventually they all diverted to Lancaster, a nearby airport. He did not have a collective plan, but rather each individual aircraft commander made his own plan and diverted as the situation demanded. Lancaster was the obvious choice, but it wasn't his decision to make. He remembers saying, "No need to respond but check your fuel state."

He eventually turned control back over to the tower but doesn't remember when. He assumes it was "20-ish minutes"

He remembers yelling to Steve Buss to "Get David Oliver up here!" and gave it back to the tower. He called David to pass the responsibility to get those planes back. David took that responsibility.

He called Taylor because he hadn't seen Lori (Craig's wife) and needed someone to go to Lori.

He went to the command center and helped sort out whether there were 4 or 5 men aboard the B-17.

He said he "probably should have turned the fighters in and had them fan break down the runway."

When asked if that evolution was briefed, he said, "Not to that level... not exactly how we were going to execute."

When asked if on previous occasions, he always had the fighters cross in front of the bombers, he said, "No... the performance characteristics need to be considered. Putting in restrictions such as an altitude assignment is not the solution."

When asked who we should talk to for more information, he said, "My dad." He continued, saying "Not ICAS, they're just a bunch of lobbyists. They're managers not Air Bosses." And suggested we talk to someone from the Redding warbird show.

When asked he had anything else to add, he said, "It is not fair to say that adding a restriction increases safety."

**Interview concluded at 1727L**

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

\* \* \* \* \*

Investigation of: \*

\*

FATAL COLLISION AT WINGS OVER \*

DALLAS AIR SHOW AT THE DALLAS \* Accident No.: CEN23MA034

EXECUTIVE AIRPORT IN DALLAS, TEXAS \*

ON NOVEMBER 12, 2022 \*

\*

\* \* \* \* \*

Interview of: DANIEL SAMUEL CRAIG HUFFSTETLER, Air Boss Observer

Wings Over Dallas Air Show

via Zoom videoconference

Thursday,  
September 14, 2023



## APPEARANCES:

SABRINA WOODS, Aviation Human Performance Investigator  
National Transportation Safety Board

SHAWN ETCHER, Aviation Operational Factors Investigator  
National Transportation Safety Board

JASON AGUILERA, Investigator-in-Charge  
National Transportation Safety Board

BOB HEATH, Director of Operations  
Commemorative Air Force

ROSS CUNNINGHAM, Esq.  
Cunningham Swaim, LLP  
Representing Mr. Huffstetler

I N D E X

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I N T E R V I E W

(10:11 a.m.)

1  
2  
3 MS. WOODS: It is 10:11 on September 14th, 2023 and we are  
4 conducting this interview via Zoom. I want to thank you so much  
5 for taking your time out as a witness and as a subject matter  
6 expert to talk with us. My name is Sabrina Woods, I'm an aviation  
7 human performance investigator with the National Transportation  
8 Safety Board.

9 The Board has been congressionally charged with determining  
10 probable cause in aviation accidents and incidents, but we can't  
11 do that, not any one person can do that by themselves, so we  
12 usually have parties in the investigation and subject matter  
13 experts helping out with the investigation. With me is some of  
14 those individuals, I'm going to go around and kind of have them  
15 introduce themselves.

16 First up, Shawn, would you like to introduce yourself?

17 MR. ETCHER: Good morning, Sam, my name is Shawn Etcher, I'm  
18 an operational factors investigator with the NTSB. All that means  
19 is I look at everything kind of forward of the cockpit door and  
20 how it interacts with it. So I want to thank you again for coming  
21 in to educate me today and I look forward to learning everything I  
22 possibly can, so thanks again.

23 MS. WOODS: Thank you, Shawn.

24 Next up is Jason, would you like to introduce yourself?  
25 You're muted, Jason.

1 (Pause.)

2 MR. AGUILERA: How about now?

3 MS. WOODS: Perfect.

4 MR. AGUILERA: Okay. I'm Jason Aguilera, I'm an air safety  
5 investigator and the investigator in charge for the accident.

6 MS. WOODS: Thank you, Jason.

7 And then we have parties in the investigation, again, that  
8 come in, those are subject matter experts from the outside that  
9 come in and help us with that and with us, representing  
10 Commemorative Air Force, is Bob, would you like to introduce  
11 yourself?

12 MR. HEATH: Sure, good morning. My name is Bob Heath, I'm  
13 Director of Operations for the Commemorative Air Force.

14 MS. WOODS: So at this time, unless somebody else pops on to  
15 the meeting, that's all the people that might be asking you  
16 questions and people might just be observing, so that's the group  
17 that's with you today as a witness to the Wings Over Dallas midair  
18 collision that occurred November 12th of 2022, you have a wealth  
19 of information that can possibly help us advance the case.

20 While conversations like this are routine for us, we're  
21 investigators, we fully recognize that it's not routine for you,  
22 so please take the time you need to answer a question, recognize  
23 that "I don't know" is a perfectly acceptable answer to a  
24 question. If you don't know, you don't know, just let us know  
25 that and we'll move on.

1           Ask for clarification. If we ask a question that you're like  
2 oh, I don't quite understand what you mean by that, please ask for  
3 clarification because we're going to do the same if we don't  
4 understand one of your answers. We typically take two rounds; the  
5 second one, hopefully, is typically shorter than the first round,  
6 but given that, if you need a break at any time, don't hesitate to  
7 ask, just say hey, I need a break, and we'll do so. I will also  
8 do my best to check in on -- with you -- check in with you on  
9 occasion to make sure that you're still doing well.

10           This interview is being recorded, that is to ensure that what  
11 you have to say is documented perfectly. It also alleviates any  
12 unintentional bias that we, as investigators, might put down by  
13 writing notes. The recording will be sent to a professional  
14 transcriber, only the transcription goes forward to the docket.  
15 Are there any questions about that?

16           MR. HUFFSTETLER: No.

17           MS. WOODS: Excellent, thank you. So for the record, if you  
18 would please state your full name and spell your last.

19           MR. HUFFSTETLER: Daniel Samuel Craig Huffstetler,  
20 Huffstetler is spelled H-u-f-f-s-t-e-t-l-e-r.

21           MS. WOODS: Okay. And as your go-by, what may I call you?

22           MR. HUFFSTETLER: Sam.

23           MS. WOODS: Okay, Sam, thank you. You are allowed one person  
24 with you during the interview process. I see that you do have  
25 somebody with you here on the line, but for the record, do you

1 have somebody that you would like to be that one person?

2 MR. HUFFSTETLER: Yeah, Ross Cunningham, who is on the call  
3 now.

4 MS. WOODS: Okay, thank you.

5 And would you please, Mr. Cunningham, if you would state your  
6 full name and spell your last for the record.

7 MR. CUNNINGHAM: Sure, Michael Ross Cunningham, last name,  
8 C-u-n-n-i-n-g-h-a-m.

9 MS. WOODS: Thank you for that. And then just please note  
10 that at any time your interviewee can seek your counsel, just  
11 please refrain from asking or answering questions on his behalf,  
12 just kind of say hey, can we step to the side and we'll make that  
13 happen, no problem.

14 MR. CUNNINGHAM: Absolutely.

15 INTERVIEW OF DANIEL SAMUEL CRAIG HUFFSTETLER

16 BY MS. WOODS:

17 Q. So to start off, all the -- the super hard questions, Sam,  
18 can you give us just a high-level overview of your work history,  
19 specifically focusing in on like FAA certificates and ratings?

20 A. I spent 20 years in the Air Force flying fighters and then  
21 moved on after retirement to JetBlue and flew for JetBlue, so I  
22 have a -- I'm sorry, ATP and a CFI, CFII for a single engine and  
23 multi-engine land aircraft. I was a check airman at JetBlue for 7  
24 years and I currently hold a recognized air boss multi-venue  
25 letter of authorization from the FAA for air boss duties.

1 Q. So that's actually a great transition into -- can you give me  
2 a high-level overview of your air boss training and history, being  
3 that that is probably different from your regular aviation  
4 history?

5 A. I spent about the last 4 years going through the process of  
6 shadowing and training to become an air boss, a full-up recognized  
7 air boss, and the air boss, recognized air boss program is  
8 orchestrated by the International Council of Air Shows, ICAS, for  
9 an acronym, and they prescribe all of the detailed training  
10 required to become an air boss, but the majority of the training  
11 to become an air boss is done through OJT.

12 So you'd have to attend a large number of shows and control  
13 those shows in order to be prepared to take your certification  
14 event, which is typically a 2- or 3-day event with you working as  
15 an air boss at a large event and actively evaluated as an air boss  
16 by one of the, I think, five or six dedicated evaluators that have  
17 been selected by ICAS. Only then do they recommend your letter of  
18 authorization issued by the FAA. So ICAS does the certification  
19 requirements, essentially, and relays that accomplishment to the  
20 FAA, who then issues the LOA, letter of authorization.

21 Q. So to be clear, a -- what is the highest level of air boss  
22 you can be?

23 A. Recognized air boss - multi-venue. So a recognized air boss  
24 can control any type of air show, be it a small or large show. It  
25 involves -- it can involve military demonstration teams, either

1 single ship or multi-ship, such as the Blue Angels or the  
2 Thunderbirds, or the Golden Knights, and you are allowed to work  
3 as a recognized air boss - multi-venue at any air show within the  
4 U.S. or Canada that wishes to hire you.

5 Q. So presumably being that you have to work up to this  
6 recognized level, how long would you say that you've been a  
7 recognized air boss?

8 A. I became a recognized air boss in May of '22.

9 Q. Okay. And in that time, how many air shows have you air  
10 bossed?

11 A. Are you saying since that time or in the process?

12 Q. Since you've become -- actually, let's go backwards. Since  
13 you started air bossing, about how many shows do you think you've  
14 air bossed?

15 A. Since the very beginning, probably 25. When I say 25, I mean  
16 -- I'm thinking I'm conflating show days versus the actual events.  
17 Are you asking how many show days or how many events?

18 Q. What does ICAS require as an event that counts towards  
19 training?

20 A. ICAS requires a certain number of show days, meaning if I  
21 were to go to the Oceana Air Show and control for 3 days, I would  
22 get 3 days of credit. If I -- and as part of that training  
23 process, you have to do at least, I think, four or five different  
24 venues in the process. You can't work the same one over and over  
25 again. So to answer your question of how many different venues



1 I've worked in, I would say since I started this training until  
2 right now, I have probably worked at 15 or 20 different air shows.

3 Q. Okay.

4 A. Worked eight shows -- I'm sorry, I worked six shows thus far  
5 this year and I have two more to go.

6 Q. And so once you achieved that recognized level with these, I  
7 guess, more dynamic acts, for lack of a better term, about how  
8 many of your entirety of all the air shows you've worked have been  
9 as a recognized air boss?

10 A. I wouldn't say I've done many large-scale shows as a  
11 recognized air boss, probably two large air shows with multiple  
12 aircraft. The other shows I've done have been relatively small in  
13 scale, but I've done -- I take that back. I probably have done  
14 four since I became a recognized air boss, I wasn't counting what  
15 I did last year.

16 Q. Okay. So as a recognized air boss or as an air boss in  
17 general, what do you view your roles and responsibilities are?

18 A. A recognized air boss, or the air boss in general, is in  
19 charge with the overall operation of the air show and you have the  
20 responsibility, starting chronologically, with assisting the  
21 producer in developing the regulatory compliance aspect of the  
22 process, so you have to come up with, quite often, the waiver  
23 package, the parachute certificate of authorization request,  
24 frequency requests, TFR request, NOTAM application, and then as  
25 you approach the show, the air boss typically, along with the

1 producer, orchestrates a flow for the show that meets the  
2 producer's requirements and then you develop the schedule as you  
3 get close to the show and brief the participants in the morning,  
4 every morning of the show, and then you actively, as the air boss,  
5 will be on the radio orchestrating the flow of the show to make  
6 sure that you are running a safe operation.

7 Q. So my next question is a little different, a little more  
8 nuanced, what makes for a good air boss?

9 A. I would say a good air boss is able to -- and I hate to say  
10 the word multi-task, because I think multi-tasking is a falsity,  
11 the human brain doesn't multi-task very well, but you wind up  
12 dealing with a huge number of disparate pieces of information and  
13 you process it effectively to make sure that the show runs in an  
14 effective manner.

15 So you have to think, inevitably, you have to think at least  
16 three to four acts ahead of whatever you're working at the time to  
17 make sure you maintain control of the taxi, departure, airborne  
18 flow, and the recovery flow, as well.

19 Q. So that will be the technical side of what makes for a good  
20 air boss, what about the social side or the interpersonal side,  
21 what kind of mannerisms or personality or behavior types make for  
22 a good air boss?

23 A. I believe one of the highest desired traits that you have as  
24 a good air boss is the ability to make a decision and enforce it.  
25 You have to be in charge of the situation and make sure that

1 people are following your guidance, and sometimes you come up with  
2 suboptimal solutions in terms of taxi flow or who's taking off  
3 when and so forth, you just have to make sure that you do it in  
4 the best way possible. And the air boss who is not strong willed  
5 but has the ability to make and stick with decisions, in other  
6 words, is decisive, is probably the best trait that I see in good  
7 air bosses.

8 Q. You mentioned ICAS earlier and the role that they play in,  
9 essentially, the air boss recognition program. Are you a member  
10 of ICAS?

11 A. I am.

12 Q. Okay. How long have you been a member?

13 A. Four years.

14 Q. Is that about the same time that the formal air boss  
15 recognition program came on board?

16 A. Yes, it came on board just about the time I was beginning  
17 training, but I decided to join ICAS as a young air boss in  
18 training simply because it is the -- first of all, it's the  
19 governing body for all of one's application through the process to  
20 become an air boss and second, as a business perspective, I  
21 believe the air boss world is largely, in obtaining jobs, is  
22 largely predicated on the ability to network and I wanted to  
23 maintain that network.

24 Q. You hinted at it, but -- with the involvement of ICAS,  
25 essentially, as maintaining the regulations and maintaining the

1 documentation for air bosses, but what else does ICAS do, what is  
2 their role in air bosses and air shows?

3 A. ICAS runs a very effective operation in trying to promote the  
4 air show industry in general and ICAS is there to support, not  
5 only performers, but air bosses and support people, such as  
6 vendors or sound systems, narrators and so forth, and they act as  
7 an overarching facilitator, I think, in terms of making sure that  
8 we are unified in our efforts to provide a good air show  
9 environment.

10 Q. You talked a little bit earlier about the -- coming on board  
11 about the same time the ABRP came on and that you were in training  
12 and since then, now you're fully recognized, is there any sort of  
13 recurrent training that air bosses have to go through that ICAS  
14 provides?

15 A. Yes. To maintain your letter of authorization, every 3 years  
16 you must work a certain number of shows and you must have a letter  
17 of recommendation from a certain number of either performers or  
18 other air bosses and you must also attend at least once, in the  
19 3-year period, the Air Boss 201 course that is offered by ICAS at  
20 the convention. So it acts as a leveling ability to meet with  
21 your peers and hear from the leaders within the air boss community  
22 any changes that have taken place.

23 Q. And who tracks that, is it up to the individual or is ICAS  
24 tracking it on behalf of all the air bosses out there? How do you  
25 know -- how do they know that you've hit all your targets?

1 A. ICAS will receive -- let me back up. When I approach my  
2 recertification date, I submit my recertification package to ICAS,  
3 that recertification package will include the dates and locations  
4 of the shows that I have worked in the previous 3 years, the  
5 letters of recommendation from select individuals, as well as what  
6 year I attended Air Boss 201. And they do track that attendance,  
7 so they know that if I say I did it last year, they can look back  
8 to last year's documentation and verify that I did so.

9 Q. You said the letters of recommendation for, I guess, your  
10 recertification can be from performers or other air bosses or are  
11 those just anyone you pick, like "hey, buddy, can you write me an  
12 L-O-R" or do they have to be specific individuals?

13 A. It's very specific and it's very -- very particular in terms  
14 of who can write letters of recommendation. Of course, other air  
15 bosses who are recognized air bosses can write that letter of  
16 recommendation, but that's typically, as far as I know, not the  
17 norm because you don't work with a lot of other air bosses at most  
18 shows.

19 If you choose to obtain a letter of recommendation from a  
20 performer, that performer has to have a surface level waiver,  
21 meaning their statement, their card, allows them to operate all  
22 the way down to the surface and they have to be -- not only have a  
23 surface waiver, but they have to be a CFI, a certificated flight  
24 instructor, as well. And I've been told that that is in place in  
25 order to provide a level of evaluation from someone practiced in

1 the community to instruct.

2 Q. So air bossing, how do you go about getting contracted to be  
3 an air boss for any particular show? Take one of the shows in the  
4 past that you've done, how did you get from hey, there's this show  
5 to now I'm air bossing the show, kind of walk us through that.

6 A. I would say that most of the jobs that are out there are  
7 obtained by networking, the people that know your name and they  
8 know your capability and they come to you. Very few shows that  
9 I'm aware of actually get signed up during the convention, our  
10 December ICAS convention. So how I had found shows is either  
11 through an established air boss contacting me, asking me to go  
12 work a show that they could not cover, or I've had a couple of  
13 shows where I just knew people who were having an air show and  
14 they thought they would get along well with me and they asked me  
15 to be the boss.

16 Q. It sounds like a lot of -- or in your experience, a lot of  
17 word of mouth.

18 A. Absolutely.

19 Q. There's no -- I guess in my head, I picture there's like a  
20 big -- a website that's like Air Bosses "R" Us and, you know,  
21 people could go there and shop, but I guess that does not exist.

22 A. Well, many of us do have our own websites, but there's not a  
23 central repository of that information. ICAS does have a function  
24 within the website that potential clients can go and search out  
25 air bosses and their contact information.

1 Q. So somebody calls you up and says hey, I would like to do --  
2 you to do this show, about how far in advance do you start  
3 prepping or do you feel is necessary to start prepping for a show?

4 A. Generally, you want to start prepping about 4 to 5 months  
5 ahead of time to gather information, and the waiver application,  
6 which is usually the most difficult paperwork regulatory item to  
7 obtain, takes at least 3 months to go through the system with  
8 multiple revisions to placate our FSDO friends.

9 Q. So that's the long preparation. Now you're getting closer to  
10 the time, can you give us an overview of what do you specifically  
11 do to prepare, let's say 1 month out, 1 week out, 1 day out?

12 A. All right. One month out, generally speaking, we do not have  
13 the waiver or the parachute authorization in hand at that point,  
14 so we're verifying with the Flight Standards District Office, the  
15 FSDO, what they need in making sure that they are content with the  
16 application.

17 And I'm also gathering information from the air show producer  
18 with regards to the performers to make sure I have exactly who  
19 will be there and to obtain the correct documentation for the  
20 aircraft and their pilots to be able to forward either to the FAA  
21 or the crash and fire rescue folks that are responsible for  
22 responding to an emergency. One week prior to an air show,  
23 generally, the waiver is in hand and so at that point, I'm  
24 finalizing any details with the producer to make sure that we  
25 haven't had fallout in terms of participants or additional people

1 who wish to participate and, at that point, it is still possible  
2 to send their information to the FAA to make sure that they are  
3 capable of legally flying, participating in the air show. And a  
4 day out, you are finalizing the air show schedule, you're taking a  
5 look at the weather and looking at potential weather fall-back  
6 plans should it not be cooperative, and you are on site looking  
7 at, or discussing, rather, the entire air show process with your  
8 crash and fire and law enforcement folks, and you're discussing it  
9 with the air traffic control people, if any, at that particular  
10 airfield to make sure that we all understand our distinct roles  
11 and responsibilities.

12 Q. For all of that, especially the documentation and the  
13 information going back and forth, who would you say is ultimately  
14 responsible between the air boss and the producer?

15 A. For the regulatory compliance part, the waiver, and the  
16 parachute application?

17 Q. Yes.

18 A. It depends entirely on who is willing to do the work. In  
19 most cases, it's the air boss.

20 Q. Who should be ultimately responsible for the regulatory  
21 process of producing an air show?

22 A. I think it doesn't really matter. As long as the regulatory  
23 part is complied with, I'm happy to do it. And the producer, if  
24 skilled in the process, I'm completely happy with him doing that  
25 work, as well.



1 Q. So it's not written down anywhere that this is this person's  
2 responsibility, these things over here are that person's  
3 responsibility?

4 A. Correct.

5 Q. So that would literally change from venue to venue you go to?

6 A. Absolutely, sure. And that's anticipated, it's just part of  
7 the role.

8 Q. You walked us up to the day before, what post-air show  
9 actions, if any, do you take part in?

10 A. In most shows, post-air show, I will work with or meet with  
11 the producer to go over things that went well and things that we  
12 needed to improve upon in hopes that the following year or 2 years  
13 later when we have another show, we can fix those and have a more  
14 efficient show the next time. Sometimes that is a written  
15 document, sometimes, most often, it is simply a conversation.

16 Q. That's with the producer. Do you have those kind of  
17 conversations with the performers at all?

18 A. Generally not. If, however, a performer has an issue with  
19 how I had done something, they will quite often come up to me  
20 later that day or prior to the briefing the next day and let me  
21 know what they're thinking and it provides great feedback, as it  
22 should.

23 Q. Can you give us an overview of how you, as an air boss,  
24 conduct a pre-brief and what materials you use and what goes into  
25 that pre-brief?

1 A. When you say a pre-brief, are you talking about the air show  
2 briefing?

3 Q. Yes, "the morning of" now.

4 A. All right. I spend the week prior to the show fine tuning my  
5 briefing, and most of the briefings that I have attended, not only  
6 my own, but of all the other air bosses in the industry, have very  
7 similar briefings and they're run very similarly, and you will  
8 cover, of course, the required items that are in the 8900.1  
9 section that pertains to air shows because they do delineate  
10 certain items that must be discussed during every briefing.

11 You also will, of course, show the airspace, you will show a  
12 visual graphic of the actual aerobatic box and all of the details,  
13 the myriad of details that need to be explained in that, and then  
14 you go over a lot of administrative details such as who owns the  
15 area outside of the crowd line, what kind of coordination it takes  
16 to get out there and move around, who's allowed to be in the  
17 aerobatic box, and just all kinds of other details that are safety  
18 related, such as how you knock off or terminate a flight. And  
19 then, of course, you go through the schedule, as well.

20 Q. So that was a great overview of what you brief, but is --  
21 what kind of materials do you use, is it just like a PowerPoint  
22 presentation or are there any handouts that you use?

23 A. It is, always will be, almost always will be a PowerPoint  
24 presentation with the ability to display to everybody in the room  
25 exactly what the layout is supposed to be and all of the rules and

1 administrative issues, and you will have a handout that discusses  
2 the schedule. Sometimes you have a handout in complicated  
3 airspace of diverts and frequencies to be used in case of a  
4 divert, but in most cases it's just a schedule.

5 Q. In your experience, what's the purpose of the pre-brief, what  
6 goals are you trying to meet during that time?

7 A. The pre-brief, or the briefing, is a way of gathering  
8 everybody who is concerned with the air show and making sure that  
9 all those people are on the same page with respect to the rules  
10 and the safety roles that they will -- or the actual jobs they'll  
11 do in their safety role and the safety functionality of the  
12 environment.

13 The briefing is not just for performers. I find the briefing  
14 to be well -- a good briefing to be well targeted towards ground  
15 personnel because they are the ones who don't fly air shows every  
16 weekend, they are the ones that you need to show and tell what  
17 their responsibilities and capabilities are during that air show.

18 Q. Is it compulsory for those people to be there, the ground  
19 people that you're talking about, is it mandatory?

20 A. It is mandatory for people who are directly affecting the air  
21 show to be there. I expect my crash and fire rescue and law  
22 enforcement representatives to be at the briefing. I expect my  
23 ground operations people who move airplanes or refuel them or add  
24 smoke oil or cater to the pilots' needs or just support people  
25 catering to the pilots, the performers, I expect them to be there,

1 as well.

2 Q. So what tools do you have in your arsenal if they're not  
3 there? What if somebody doesn't show up that you feel should be  
4 there?

5 A. I will, basically, go direct to the producer and ask him to  
6 get those people there. And if they can't get there, then I'm  
7 going to have to get them to my location and I'm going to have to  
8 give them another briefing.

9 Q. And ultimately, you're the one who's responsible for ensuring  
10 these people are briefed or is that the producer's, whose  
11 responsibility is that?

12 A. It's the air boss's responsibility.

13 Q. So you have to go find them if they don't appear?

14 A. Well, in -- I have not had too many cases where people who  
15 are -- who need to be there haven't shown up. So fortunately, the  
16 producers are almost always, inevitably, in the briefing and  
17 they're able to get on the phone and get whatever that individual  
18 is back into that briefing room to make sure we all stay on the  
19 same page.

20 Q. Out of these individuals, who's ultimately responsible for --  
21 layman's terms here, because I'm not in the world, who's  
22 responsible for the choreography of the show, like what a  
23 performer does and when and where?

24 A. Well, the air boss is responsible for the orchestration of  
25 getting the performer into the airspace, off the ground, into the

1 airspace and ready for their performance. Once their performance  
2 takes place, in most cases, for single performers, they're  
3 responsible for their own actions within the box. And when it  
4 comes to the larger-scale formations, like we're talking about  
5 there, the warbirds, there are -- the air boss is responsible for  
6 directing them either via the briefing or active control during  
7 that actual event.

8 Q. When does what's going to go on in the box, that  
9 choreography, when does that typically get decided?

10 A. Well -- are you specifically asking about large-scale warbird  
11 flights?

12 Q. I'm asking about any act that is not a -- like a preapproved  
13 maneuvers package that doesn't already have their rote set of  
14 things that they do.

15 A. All right, now --

16 Q. So yes, warbirds fall under that category, but I'm sure  
17 there's a bunch of other singles that would also fall into that  
18 category, so any act that doesn't have their own preapproved  
19 maneuvers package that they do the same thing every single time.  
20 And the reason I'm making the distinction is because like, for  
21 instance, I know that "Tora, Tora, Tora," which is warbirds, is  
22 also a maneuvers package and I'm not talking about them.

23 A. Okay. So to be specific, though, you're suggesting that  
24 everybody who is out there has a maneuvers package and that's not  
25 the case.

1 Q. No, that's -- I specifically said that I'm not talking about  
2 the people who have a maneuvers package, like, for instance,  
3 "Tora, Tora, Tora," --

4 A. Yeah.

5 Q. -- who would also be warbirds, so that's why I don't want to  
6 say just warbirds, I'm talking about any single ship that isn't a  
7 part of a formation or an act, when do they know what their  
8 choreography is going to be?

9 A. You have certain performers who may go out and fly single  
10 ship, Rob Holland, who knows exactly how his act flows, he does  
11 the same act every air show, the very same way, and he doesn't  
12 have a maneuvers package. So as the air boss, I don't tell Rob  
13 how to fly, he knows that when he's cleared into the airspace, he  
14 will fly his show the way he knows to fly it.

15 If I have a multi-ship formation up there or even just a  
16 couple of airplanes up there that are not trained performers in  
17 that they're just warbirds flying around in an orbit, the decision  
18 on how they're going to fly and how they're going to operate  
19 within the airspace once it starts is either decided in the  
20 briefing, if they are given rote altitudes and orbits, or they are  
21 decided by the air boss while those aircraft are flying in an  
22 effort to maximize the entertainment value because you are  
23 providing entertainment to people. But you can't dismiss the  
24 latent understanding of some of the warbirds of how they have been  
25 flying shows and their understanding of how shows are generally

1 organized maneuver-wise, over the span of the last 30 years.

2 Q. So then tell me, educate me, what are some of the latent  
3 understandings of how warbirds are performed over the last however  
4 many years that performers would appreciate that maybe somebody  
5 such as myself would not?

6 A. Well, now you're getting into an element of the air show  
7 industry that I was trying to learn, so I am still rather young in  
8 this experience, too, so I can't provide you a ton of details  
9 about this. I do know warbirds, generally, in front of the crowd  
10 are either going to be doing a racetrack pattern or they're going  
11 to be doing what we call a dog bone, which is a pass followed by a  
12 90-degree turn to the left, for example, followed by a 270-degree  
13 turn back in the opposite direction, to reverse the course of the  
14 aircraft as it passes by the crowd or the stream of aircraft.

15 That is an understood, expected maneuver by warbirds that  
16 I've seen because there are only a certain -- excuse me, there are  
17 only a certain number of variations that can take place out there  
18 for aircraft maneuvering and that's a very commonly seen one and  
19 so I would say that's one other illustration of the innate  
20 maneuvering that is understood by the warbird pilots, that they  
21 anticipate that that may well happen.

22 Q. Okay. Actually, that was a great point that you made. Prior  
23 to Wings Over Dallas last year, had you -- had you worked with  
24 warbirds before? As an air boss, I know you've seen them before.

25 A. I have. I worked with warbirds at the Midland show last year

1 and we had a large-scale trainer flight, which is -- they're  
2 warbirds, but they're slower warbirds, and they are an interesting  
3 group to control because you have three separate flights of  
4 various airplanes following each other around and they -- they're  
5 actively controlled by you, even though they're de-conflicted  
6 laterally and vertically because of their relative inexperience in  
7 the air show industry.

8 Q. When you made the decision to -- I guess, let me back that  
9 up. What was your role at Wings Over Dallas?

10 A. I was an observer.

11 Q. Okay. And I was going to label you that, but I wanted to  
12 make sure I had the right label.

13 A. I went as an observer. Russell had -- Russell Royce had  
14 several times mentioned to me that he wanted me to come to Dallas  
15 to see how he worked Dallas because it was a -- it was a demanding  
16 show.

17 Q. So you -- I guess, how far in advance did you know you were  
18 going to be observing Wings Over Dallas?

19 A. Oh, I knew easily a month or two ahead of time.

20 Q. Okay. Did you do anything to prepare as -- what do you do to  
21 prepare as an observer?

22 A. I simply looked at the airport layout and tried to envision  
23 what the aerobatic box would look like and the routes, but I had  
24 -- I had virtually no preparation for that because again, I was  
25 going there to learn.



1 Q. Did you get to get involved with any of the regulatory  
2 process from a -- from that training point of view, because I  
3 would imagine a largely warbird waiver would probably look  
4 different from other venues?

5 A. I did not get involved in that.

6 Q. Okay. And to be clear, this was something that you wanted to  
7 undertake or is it something that was required of you from some  
8 sort of ICAS requirement?

9 A. I wanted to do it in order to broaden my understanding of how  
10 that -- or how Russell and his dad work their shows.

11 Q. Okay. And were you -- did you have to provide any  
12 compensation to be there?

13 A. Say that in another way, I'm not sure what you mean.

14 Q. Did you have to pay to be there? Because I know, for  
15 instance, to get your -- to go through -- to get your LOA through  
16 the recognition program, I know that there's a certain amount of  
17 money that has to be paid to, I think, take the test and go  
18 through the process. Did you have to pay out at all in order for  
19 the opportunity to observe at Wings Over Dallas?

20 A. No, I just had to pay for a rental car -- actually, just a  
21 room.

22 Q. Okay.

23 A. And I was able to fly down to Dallas on my airline  
24 privileges, so it does cost me to go to the shows.

25 Q. But I meant specifically for the training opportunity, did

1 you have to pay, like Mr. Royce, for instance, for his time to  
2 allow you to OJT?

3 A. No.

4 Q. And were you compensated at all for your time there?

5 A. No.

6 Q. Are you a member of Commemorative Air Force?

7 A. I'm not.

8 Q. Are you a member of any other warbirds? I know there's like  
9 Professional Warbirds Association of something or other, are you a  
10 member of any other warbird community?

11 A. I am a member of the Red Star Pilots Association and I do  
12 that to maintain my ability to maintain my formation flying  
13 credentials.

14 Q. Great segue into my next question, is have you ever been a  
15 performer at an air show?

16 A. No.

17 Q. Okay. What were the performers told about your function at  
18 Wings Over Dallas, were they even told, were you introduced at all  
19 or --

20 A. Russell, on one of his slides, had me down or it had his name  
21 at the top and had me down as a mini-boss, which was surprising to  
22 me because, again, I was just there as an observer and Russell  
23 said this is Sam Huffstetler, he's a new air boss and he's just  
24 going to be here watching today.

25 Q. And for the record, to clarify, what is the difference

1 between your role as an observer and a mini-boss?

2 A. Well, my role as an observer is just to watch and learn, and  
3 mini-boss is going to perform the duties as assigned by the  
4 regular air boss.

5 Q. And to be clear, there were no duties that were assigned to  
6 you that day during Wings Over Dallas?

7 A. No.

8 Q. And you did not partake or talk to aircraft at all during  
9 that time?

10 A. No.

11 Q. Prior to Wings Over Dallas, had you ever worked with  
12 Mr. Royce before?

13 A. Oh, yes, many times.

14 Q. Oh, okay. So he was familiar to you before you went out to  
15 observe warbirds in Wings Over Dallas?

16 A. Yes.

17 Q. Had you ever worked with him as co-air bosses or as a mini-  
18 boss or vice versa before?

19 A. Yes. I did several of my training days with Russell Royce at  
20 other air shows.

21 Q. But not with warbirds?

22 A. Well, actually, there were warbirds at Midland when I did  
23 Midland the first time and there warbirds at Chennault where I  
24 worked with Russell earlier last year, so there were opportunities  
25 to see some warbird participation, but nothing of the scale which

1 they have at Dallas.

2 Q. Would you consider Mr. Royce as one of your trainers, then?

3 A. Yes.

4 Q. Has he ever provided one of these LORs for you?

5 A. No.

6 Q. Are those people mutually exclusive or are the trainers, the  
7 LORs or -- how does that work, typically?

8 A. They are not mutually exclusive, you simply get letters of  
9 recommendation from whomever that you're willing to get at the  
10 moment and I just simply was able to obtain LORs from other  
11 individuals rather than getting one from Russell.

12 Q. Understood, okay. So I guess working with Mr. Royce in the  
13 past, what were your observations? What made his -- his  
14 performance a desirable one for you to train from? That did not  
15 come out well, sorry.

16 A. Are you talking about what made him a desirable person to  
17 work with?

18 Q. To train -- yeah, to be your trainer.

19 A. Russell Royce was very helpful in trying to get training days  
20 scheduled, he was absolutely willing, more than willing, to allow  
21 me to come to air shows at which he was controlling and either  
22 watch or actually work those shows with him supervising me and he  
23 provided a lot of feedback, tremendous amount of feedback, for all  
24 of the air shows that I performed during my training. We sat down  
25 one day, one afternoon, and he gave me an hour and a half debrief

1 on what I had done at the show that day and no one had ever  
2 supplied that before. So I found him to be very helpful in terms  
3 of overall effectiveness in training.

4 Q. Have you had other trainers besides Mr. Royce?

5 A. Yes.

6 Q. Were there any key differences in those training experiences  
7 that stood out to you?

8 A. Every air boss has their own personality, of course, and  
9 their own way of training someone. Some wait and just let you  
10 make all the mistakes, others will interject ideas as you're  
11 running the show, and some are perhaps a little more volatile than  
12 others, but in all respects, the training was very effective  
13 because, since you could see how several different air bosses did  
14 their jobs, you got a very balanced view of the role and the  
15 capabilities of each individual.

16 Q. So as a trainee, what were your observations, and this is  
17 prior to Wings Over Dallas, what were your observations of  
18 Mr. Royce's performance as an air boss?

19 A. Okay, just to make sure I understand, you're saying as a  
20 trainee, what were my observations of Mr. Royce at Dallas?

21 Q. This is prior to Wings Over Dallas, so all the other times  
22 that you've worked with him prior to Wings Over Dallas of last  
23 year, what were your observations of him as an air boss, not as  
24 your trainer?

25 A. I believed him, and I still believe, that Russell Royce is

1 one of the better air bosses I've ever worked with in terms of  
2 overall capabilities, capacity to track aircraft and come up with  
3 a plan that works for the air show. I think he's extraordinarily  
4 capable.

5 Q. As compared to what? And I don't need names, I just need  
6 examples of as compared to what might be less desirable.

7 A. Less desirable would be someone who I worked with in the  
8 process who lost track of a vehicle on the runway and then the air  
9 boss subsequently cleared someone to land with that vehicle on the  
10 runway, that's happened a couple of different times with other air  
11 bosses; that didn't happen with Russell Royce.

12 So you see minor variations, minor discrepancies with other  
13 air bosses and while I believe no one is perfect, by and large,  
14 the other air bosses I've worked with have been pretty doggone  
15 capable.

16 MS. WOODS: I do have more along that line of questioning,  
17 but we have been going for about 45 minutes now and I'm going to  
18 let other people have a chance to talk because I'm sure you're  
19 sick of talking to me, but before I hand it off to Shawn, do you  
20 need a break, how are you feeling right now, are you still good?

21 MR. HUFFSTETLER: I'm good.

22 MS. WOODS: Does anybody else need a break? Speak now or  
23 forever hold.

24 (No response.)

25 MS. WOODS: No? Okay. All right, with that, then, I'm going

1 to shush for a bit and hand it over to Shawn.

2 MR. ETCHER: Thanks, Sabrina.

3 BY MR. ETCHER:

4 Q. Sam, thank you so much for the education you've given me so  
5 far, my brain is -- I'm probably going to have to take Advil  
6 afterwards because my brain's going to hurt with all the  
7 information you've been giving, so I do appreciate that.

8 Thankfully for you, Sabrina asked a lot of questions I had,  
9 but I'd like to fill in, if I could, just some of the gray areas  
10 or holes I have just so I have a better understanding of it. Like  
11 I said, I don't know a lot about air shows, so I'm hoping you can  
12 educate me and bring your brilliance to it so I can have a better  
13 understanding of it.

14 The first question, though, I always like to ask is, you  
15 know, as pilots, you know, we knew at a young age or most of us do  
16 at a young age, "oh, I want to fly," you know, it's kind of in  
17 your blood, but why did you decide to become an air boss? Just  
18 for my interest.

19 A. I had been associated with the Langley Air Force Base show  
20 for 20 years, I was the producer when I was active duty,  
21 essentially, air show director, and we hired Wayne Boggs, who is a  
22 well-known air boss, and Wayne subsequently returned to Langley  
23 for all of our yearly air shows after that point, and we developed  
24 a friendship and I enjoyed hanging around with Wayne at even other  
25 air shows, just watching him do his work, and one day he turned to

1 me and said why don't you do this and I said okay, I'll try that,  
2 so that's how I got into it.

3 Q. Okay. It was just curiosity on my part, so I appreciate you  
4 indulging me there just a little bit. Now, I know you said you  
5 were a pilot, ATP and all that. Considering those certificates  
6 that you have, does that give you any, I'll call it credit towards  
7 the number of show days you have to do every year or for your  
8 initial training or does that help you at all? Just kind of help  
9 me understand.

10 A. It helps in a general way of understanding what you can  
11 expect out of aircraft, but it does not help in terms of overall  
12 training or qualification or the ability to get your LOA. And in  
13 some cases, it is actually a detraction because the communications  
14 that we use as air bosses is very similar to what air traffic  
15 control will use and as pilots, we're used to knowing what we say  
16 in response to air traffic control.

17 But when it comes to air traffic control, air traffic control  
18 terminology, we have to really think that through before you wind  
19 up saying it, so that required a level of study on my part to get  
20 up to speed.

21 Q. Okay. And just for the record, were you ever an air traffic  
22 controller?

23 A. No.

24 Q. Okay. Have you worked with air bosses that have been air  
25 traffic controllers?



1 A. Oh, yes.

2 Q. Have they educated you, maybe, on how the transition for them  
3 from an air traffic controller to an air boss was or nobody's ever  
4 really said anything?

5 A. No one's really ever said anything about it. However, I do  
6 find that former air traffic controllers generally make pretty  
7 good air bosses.

8 Q. Okay. Perfect. I appreciate that perspective, it helps me a  
9 little bit. I apologize if some of my questions are a little bit  
10 jumpy around, if you will, you know, I'm trying to fill in my  
11 holes from Sabrina's line of questions here. I do know you -- and  
12 please, never let me misstate something because I'm learning terms  
13 all the time, but I believe you said you're an air boss with a  
14 multi-venue rating? Is it a rating, is it a waiver? I apologize.

15 A. It is part of your letter of authorization. So there are  
16 essentially three basic levels of air boss: there is basic air  
17 boss at the lowest level; standard air boss is an intermediate  
18 position in which you can work almost any show, however, you  
19 cannot work military acts in that show; and then recognized air  
20 boss is the highest level in which you can work any show with any  
21 performer.

22 As an added point to that recognized air boss, you can either  
23 be a multi-venue or single-venue recognized air boss. So you will  
24 see some people who will work only one show a year at, I'll just  
25 say Reno or I'll -- Salt Lake or whatever, and that's their show

1 that they do every year and sometimes they have military  
2 participation, so they become recognized air bosses single-venue,  
3 which means they can only work at a recognized air boss level at  
4 that particular show. But subtleties are everything, that  
5 recognized air boss can also work a standard air show, standard  
6 air boss requirement show anywhere else. A recognized air boss  
7 multi-venue, which is what I have, can work any show, anywhere.

8 Q. Okay. Perfect. That really helped fill in some areas in my  
9 head that were questioning, so I appreciate that. Now, I know you  
10 said there was something about, you know, multi-venue but may not  
11 be able to work military aircraft, is there a special training  
12 function you have to do to work military aircraft?

13 A. Can you be more specific on what type of military aircraft?

14 Q. And maybe that's where my confusion is. What kind of  
15 military -- like, for instance, Wings Over Dallas, those were, and  
16 I use past tense, military aircraft at one day, now they're -- I'm  
17 going to call them museum pieces. Would that be considered a  
18 military aircraft by --

19 A. No.

20 Q. -- air boss standards? So is a military aircraft, I'll use  
21 the phrase "current and operable" military aircraft, the ones that  
22 are currently in our military fleet, is that what you guys call a  
23 military aircraft?

24 A. Yes.

25 Q. Okay. And again, I apologize for re-asking this, I just want

1 to make sure I have it clear in my head. The warbirds, the  
2 fighter planes at Wings Over Dallas, although World War II  
3 military aircraft, are not considered military aircraft for an air  
4 boss?

5 A. Correct.

6 Q. Okay. And I think that's where I always kept getting  
7 confused, because to me they are military but, granted, they were  
8 military from another generation, so I do appreciate that. So to  
9 work a military aircraft event, let's call it the Blue Angels,  
10 the, you know, B-2 bomber flyovers, whatever you would be, do you  
11 have to have a special signoff to do that?

12 A. You have to have a recognized air boss letter of  
13 authorization to work almost all military acts and again, there  
14 are subtleties. In order to work, if you want to work the Blue  
15 Angels or Thunderbirds or an F-22 single ship demo, you have to  
16 have a recognized air boss certification.

17 If there was simply a KC-135 doing straight passes right down  
18 the line, you could do that with a standard air boss certificate,  
19 but those are relatively rare. If you want to deal with warbirds,  
20 as was happening in Dallas, there would be no specific additional  
21 accreditation required.

22 Q. Okay. Great, that -- you have no idea how much that filled  
23 in the big hole in my brain, so I thank you. All right. I know  
24 you've had the opportunity to work with the Wings Over Dallas air  
25 boss on previous occasions, as well as others. Are there any air

1 bosses -- I know you kind of mentioned there was that you wouldn't  
2 want to work with, but are there any others, is there anything in  
3 your brain that if somebody you've never worked with, let's say  
4 you went out to watch them, is there anything that would trigger  
5 you like, yeah, I don't want to work with this person anymore?  
6 With their style, with their presentations. I'm just trying to  
7 understand what would make you go "no, I'm not going to work with  
8 them ever again."

9 A. The ability to maintain a professional standing and  
10 professional reputation among the other air bosses within our  
11 small group is important. So if I had heard that so-and-so was  
12 not a very good air boss, I would be hesitant to go to work with  
13 them.

14 Q. Okay. Can I -- forgive me and please, correct me. Can I  
15 assume the air boss -- I mean, aviation itself seems big but, you  
16 know, it's really not a big thing. Can I assume the air boss  
17 community is also kind of a small tight-knit group, you all know  
18 each other kind of thing, or is it large enough that you may not  
19 know everybody?

20 A. It is sufficiently large and our exposure to each other is  
21 sufficiently small, but I don't know everybody.

22 Q. Okay.

23 A. However, the total aggregate number of air bosses within the  
24 U.S. that are recognized air bosses is probably only 40 or 50.

25 Q. Okay. Perfect. I wasn't sure what the number would be, so

1 -- and I realize that's, you know, not -- you know, that's your  
2 estimation and that's great, I appreciate it, it gives me an idea  
3 there. All right. So let's -- if you will, can we kind of go  
4 back to the day of Wings Over Dallas, kind of want to walk through  
5 that, if you will. First of all, did you have any interaction at  
6 all that day with the FAA inspector in charge or -- I forget what  
7 his title technically was. Did you have any interaction with  
8 them?

9 A. None that I remember. However, they did attend the briefing.

10 Q. Okay. And so talking about that briefing, if you will, I  
11 know B-17s, all those bomber planes, they have multi pilots on  
12 board. Do all the pilots have to attend the briefing or can a  
13 pilot sit in the right seat, attend it, and then brief the rest of  
14 his crew, do you know?

15 A. Yes, the latter is correct. You only have to have one pilot  
16 member of a crew to attend the briefing.

17 Q. Okay. And I want to ask for your opinion here, so you know,  
18 I'll give you latitude, if you will, but in your opinion, is that  
19 a good thing to have or would it be better to have all pilots  
20 involved in the air show at the briefing?

21 A. I think it is a reasonable -- a reasonable procedure to allow  
22 one member to be there. Case in point, the Thunderbirds and Blue  
23 Angels will send one pilot representative to the briefing because  
24 the other members of the team are busy doing other things, so to  
25 bring all of them there for the briefing would be, at the end,

1 counterproductive for their mission.

2 Q. Okay. That makes sense, I appreciate that. All right. I  
3 wrote down some notes here as Sabrina was going through, to make  
4 sure I kind of filled in some blanks in my brain. You had said  
5 something when Sabrina asked you a question and forgive me, I'm  
6 not direct quoting you, I scribbled it down as a paraphrase, but  
7 you said something about Wings Over Dallas, I think, maybe even  
8 the air boss might've told you, Wings Over Dallas is more of a  
9 demanding show?

10 A. Yes.

11 Q. What do you mean by that?

12 A. It was challenging in terms of the number of aircraft that  
13 were flying and the fact that rides were ongoing and would be  
14 arriving to the field during the show or at least arriving in  
15 between acts, if you will, during the show.

16 Q. Okay. Is that normal for rides to arrive between acts?

17 A. There is -- there are, rather, a certain number of shows that  
18 have rides ongoing throughout the show. I wouldn't say that there  
19 are a lot of shows that have that.

20 Q. And by rides, I just want to make sure I have it clear in my  
21 head, are these, I'll call it paying passenger fun flights or is  
22 -- are there other kinds of rides that you're aware of or do you  
23 know?

24 A. They would be rides that would be sold by an organization to  
25 get people airborne, such as flying in the Ford Trimotor, if you

1 will, at Oshkosh, and they go out and fly and then they come back  
2 in and land and they don't interrupt the show, you bring them in,  
3 in between the acts so as not to cause any conflict.

4 Q. In other air shows you've done, I assume you have seen that  
5 done, the rides done before, as well, right? I'm not talking just  
6 about Wings Over Dallas here, I'm talking about other shows you've  
7 done where rides come in and -- come and go between acts, have you  
8 seen that done at other air shows?

9 A. Yes.

10 Q. Okay. Have you ever seen a ride come in during a flyby, a  
11 flyover, an act? And again, I'm not talking about Wings Over  
12 Dallas here, I'm talking about other air shows.

13 A. If the act -- I needed to amplify my previous answer. If the  
14 act is basically a straight and level flyby, then there's no  
15 de-confliction issue and there's no distraction issue typically  
16 involved in recovering a ride aircraft. So as long as the  
17 participants are briefed on -- that that is an option, then  
18 generally it is not a problem, recovering those aircraft or  
19 launching them, either.

20 Q. Okay. So you use the term "as long as the participants are  
21 briefed," for Wings Over Dallas, was that ever briefed, that you  
22 can recall?

23 A. I believe so, yes.

24 Q. Okay. Now, I'm sure you -- you were there, so I'm sure you  
25 saw it all and everything, but I'm sure you've heard, as well,

1 that there was a Stearman that landed on the runway right below  
2 the airplanes, is that -- and I hate using the phrase normal, but  
3 is that something that's done kind of consistently through the air  
4 boss world of landing an airplane on a runway that's the 500-foot  
5 or the thousand-foot line of aerial acts?

6 A. I don't know that my level of experience can give you a good  
7 answer to that question.

8 Q. Okay.

9 A. I just don't know the answer.

10 Q. And "I don't know" works perfect, so yeah, that's all good.  
11 This isn't a check ride, you're just educating me, so I appreciate  
12 that. Now, that Stearman did happen there at Wings Over Dallas.  
13 In your experience and your opinion, I know you were an observer,  
14 but did that surprise you that an airplane came in and landed on  
15 the runway with an aerial act going overhead? Just your  
16 viewpoint.

17 A. Not that aerial act, no, I did not -- I did not see that as  
18 being an unusual event or an unsafe thing, I didn't see that.

19 Q. Okay, great. So let's go to Wings Over Dallas, I know you're  
20 an observer, but were you on -- forgive me, the phrase, the stand,  
21 the platform, wherever the air boss is, were you there with  
22 Mr. Royce?

23 A. Yes.

24 Q. And forgive me, I don't know if it was a stand or whatever,  
25 but where you were, what equipment did you or Mr. Royce have?



1 A. Mr. Royce had his own regular base station radio with an  
2 associated antenna that he was using along with his headset, and I  
3 was standing beside him on the stand with a handheld aviation  
4 transceiver hooked up to my headset.

5 Q. Okay. All righty. As an observer, as you were -- we'll talk  
6 about that for the moment and I might get into another area in  
7 just a second, but as an observer, did you and the air boss -- I'm  
8 going to use our pilot term, CRM, did you guys have any crew  
9 resource management between each other like, did he ask hey, Sam,  
10 if you see something, speak up, say something or was it kind of  
11 no, you're an observer, you sit there, you watch? Just kind of  
12 help me understand that dynamic between you two.

13 A. I don't think we discussed that. I was there watching, he  
14 understood I was there watching, and he was -- essentially, he was  
15 the only air boss working the show and I was just sitting there  
16 watching, so I don't think we had any discussion of CRM at that  
17 point.

18 Q. Okay. Were you able, I assume because you're in close  
19 proximity, if you would've seen somebody taxiing out on the wrong  
20 taxiway or some other issue that maybe Russell might not have seen  
21 out of the corner of his eye or whatever, were you in a position  
22 that you could've pointed it out to him?

23 A. Yes.

24 Q. Okay. Did you have to do that at all that day?

25 A. No.

1 Q. Okay. All righty. Now, I know you guys aren't air traffic  
2 controllers, you're not in a control tower, but I know in most  
3 facilities personal electronic devices like phones, iPads,  
4 whatever, aren't allowed. Do you guys have phones, iPads,  
5 anything like that that you guys use or have on your person during  
6 an air show as you're air bossing? Is that a term, air bossing?  
7 I hope so.

8 A. I have a phone, my cell phone with me, and sometimes we'll  
9 have an iPad there hooked up to ForeFlight or a Sentry to bring in  
10 ADS-B information if you have aircraft coming in from outside. We  
11 did not have that iPad or -- I didn't have an iPad nor did Russell  
12 that day. So the only thing we had were phones, but we weren't  
13 actively using those.

14 Q. Okay. Is that just nothing came in to actively use them or  
15 is that kind of a whether written or unwritten policy that now  
16 keep your phone in your pocket type of thing?

17 A. There is no policy regarding cell phone use.

18 Q. Okay. I know you explained to Sabrina that you had worked  
19 other air shows with Mr. Royce. Considering those air shows and  
20 Wings Over Dallas, up to the point of the event, obviously, was  
21 there anything -- what was different about those or were their  
22 complexities similar? I know, landscape's always different, but  
23 complexity-wise, was there any difference?

24 A. The Dallas show was more complex in terms of that warbird  
25 procession that was flying at the time of the accident. However,

1 with regard to that air show and all of the previous air shows I  
2 have been exposed to, everything was completely normal, there --  
3 it was not an unusual event, everything was very regulated or --  
4 no, everything was very normal up to that point.

5 Q. Okay, all right. From your experience, your perspective,  
6 maybe even your training, whichever, during an air show is there  
7 anybody, I'm going to use the term "responsible" because it's lack  
8 of a better word, for controlling the flow, see and avoid, that  
9 kind of -- you know, avoiding conflicts, is there anybody that's,  
10 I'll use the terms in quotes, "responsible" for that?

11 A. Well, the pilot in command of any aircraft is responsible for  
12 maintaining separation from other aircraft and that is an  
13 inviolate policy that has to be followed.

14 Q. Okay. And you, as a pilot, know that, you know, when you're  
15 in a bank, when you're pitching up, pitching down, whatever, your  
16 visibility from a cockpit can be a little bit more limited,  
17 perhaps. How is that separation de-confliction maintained, you  
18 know, pilots, I'm sure, trying to keep a mental picture of what's  
19 going on in an air show, but how is that separation maintained? I  
20 mean, I assume you, as an air boss, are watching or maybe you're  
21 busy doing other tasks, kind of help me understand that.

22 A. Well, again, having experienced this in a very tactical  
23 environment during my fighter time, flying in the Air Force, we  
24 were all maneuvering to a great extent under high G's, high-stress  
25 environments, and even though you had a belly exposed to somebody

1 out there, that didn't obviate the requirement for you to maintain  
2 an understanding of where the other aircraft were. So again, I  
3 don't put this on anybody in terms of aircraft separation under  
4 normal circumstances, and this was a normal circumstance, I think  
5 that it is a pilot-in-command's responsibility to maintain  
6 separation from someone you've acknowledged you are going to  
7 separate from.

8 Q. Okay. As an air boss, if you see something that gives you  
9 pause, gives you concern, is there a way to de-conflict those  
10 aircraft?

11 A. Yes, absolutely.

12 Q. How would you, as an air boss, de-conflict?

13 A. Well, if the danger is imminent, then I'll be directive, as  
14 an air boss, to try to gain separation between the two aircraft,  
15 if you see that that's happening, and if the danger or if the  
16 collision or danger is not imminent, then I'll try to talk  
17 someone's eyes onto the other person, that "you have traffic at  
18 right 2 o'clock low, maintain visual separation advisement in  
19 sight," for example.

20 Q. Okay. That's a great example, thank you. I'm going to  
21 guess, by the way you said that, you've had to do that before or  
22 have you never had to de-conflict?

23 A. I have to do that every show.

24 Q. Every show, okay. Is de-confliction typically a faster -- a  
25 faster airplane versus a slow airplane, to similar airplanes, all

1 over the -- it could be anything, I'm just kind of --

2 A. When I say I do it every show, I'm doing it from all types of  
3 aircraft de-conflicting from other types of aircraft and sometimes  
4 the de-confliction takes place 2 miles away, that you have traffic  
5 at your left, nine high, 2 miles at 3,000 feet climbing and I just  
6 want to make sure they get their eyes on each other if I perceive  
7 there's a conflict.

8 Q. Okay. How do you -- what is your technique, as an air boss,  
9 to keep that mental picture of your airspace? You know, I  
10 understand sometimes there may only be one airplane up or maybe  
11 two, but sometimes there's obviously more than that. What is your  
12 technique, as an air boss, to keep that mental picture going?

13 A. Well, you have to observe the flight as it's developing in  
14 terms of aircraft positions and you have to watch those positions.  
15 And you also are trusting that your pilots are doing what you  
16 asked them to do after you've given those instructions. But  
17 you're always watching and you're always listening.

18 Q. Okay. My last question here, and then I'm going to let my  
19 brain absorb a little bit, plus you've got to be getting sick and  
20 tired of talking to me, anyway, but my last question is at the  
21 Wings Over Dallas air show was there any needs that you were  
22 observing that Mr. Royce had to de-conflict traffic?

23 A. No. Up until the collision, the moment of collision,  
24 everything seemed to be going very normally at that show, so there  
25 was not a cue to tell us that there was a collision imminent,

1 there was just no cue.

2 Q. Okay. And I get there was no cue for that, but I just want  
3 to make sure, prior to that, there was no time during any part of  
4 the Wings Over Dallas that you observed Mr. Royce having to  
5 de-conflict anybody at all, correct? I just want to make sure I  
6 have that clear.

7 A. Well, when it comes to de-confliction, it can be as innocuous  
8 as an example I gave you a few minutes ago where you have an  
9 aircraft 3 miles away climbing through your altitude. Maybe  
10 that's excessive, maybe 1 mile away. So to that extent, because  
11 there are any number of de-conflictions possible, scenarios  
12 possible, the answer to your question is I don't remember if he  
13 had other de-confliction opportunities at the show.

14 MR. ETCHER: Okay. And that's okay, I know it's been a while  
15 and "I don't know" always works, so I do appreciate that. Like I  
16 said, you got to be tired of talking to me, I want to give  
17 everybody else a chance because they'll all have a lot smarter  
18 questions than I will, so I appreciate it so far and I'll turn it  
19 back over to Sabrina.

20 MS. WOODS: Okay. Thank you, Shawn.

21 Jason, did you have any questions at this time for  
22 Mr. Huffstetler?

23 MR. AGUILERA: No, not right now.

24 MS. WOODS: Okay. Thank you for that.

25 And how about you, Bob? He's here and he's gone.

1 MR. HEATH: Here we go.

2 MS. WOODS: You're muted, Bob.

3 MR. HEATH: Yeah, I'm trying to -- as soon as I started  
4 talking, it moved my position here, so sorry about that. Thanks,  
5 thanks for the opportunity to -- just a couple of questions.

6 BY MR. HEATH:

7 Q. Are you familiar with FAA Order 8900?

8 A. I'm very familiar with 8900 Volume -- chapter 6.

9 Q. So you know what I'm talking about when I say FAA Order 8900.  
10 In that FAA order, which really is directions for aviation safety  
11 inspectors for the FAA but it's referred to a lot of times for the  
12 rest of us, there are several levels of maneuvering specified in  
13 8900 in maneuvering in wayward airspace and it requires special  
14 qualifications, you know, a FAST card for formation and having  
15 maneuvering cards, aerobatic competencies, that sort of thing.  
16 What are air boss responsibilities for enforcing those provisions,  
17 if there is any air boss responsibilities?

18 A. Well, your requirement is to know whether your performer is  
19 legal and capable of flying the demonstration that he is tasked to  
20 go fly, or she. So if a performer doesn't have a SAC card, I  
21 expect them that they would be limited to flying, operating under  
22 the dynamic or other maneuvering categories, limitations.

23 Q. Okay. So during the course of the air show, if you were to  
24 give somebody an instruction to do something that did not meet the  
25 qualifications that they possessed, how would that be handled?

1 A. I would expect them not to comply, but I also am not really  
2 sure what you're asking. Could you rephrase your question in a  
3 different way?

4 Q. Okay. Let me ask you this particular question and we'll get  
5 back to that. I won't take too long with this because I know  
6 we're all busy. Did you hear the air boss instructions that were  
7 given to the bomber stream?

8 A. Yes.

9 Q. And do you recall what they were?

10 A. The bomber stream, when flying from air show right to left,  
11 were instructed to do a right 90/left 270 reposition to return to  
12 the flyby pattern and the bombers were told essentially --  
13 disregard. That's what I remember, right 90/left 270.

14 Q. Do you recall any line that they were told to go to?

15 A. Only in the aftermath, when I re-listened to the audio did I  
16 hear that the bombers were going to the thousand-foot line. I did  
17 not hear that at the time.

18 Q. Okay, that's good. So same question for the fighter  
19 formation, do you recall the air boss instructions to the fighter  
20 formation?

21 A. Yes, the air boss told the fighters to rejoin and then to  
22 peel off or break out left and rejoin in front of the bomber  
23 stream.

24 Q. Okay. And do you recall the line they were told to fly to?

25 A. Again, I did not actively hear the line at the moment, it was



1 only in retrospect did I hear that Mr. Royce cleared them to the  
2 500 line, I believe.

3 Q. Okay. So you mentioned the fighters were told to peel off,  
4 separate, and this is where there's things that I've learned in  
5 looking at this, but is there a special qualification required to  
6 separate a formation inside wayward airspace? Is that part of  
7 your -- if you're a -- let's say if your regular 4-ship FAST  
8 qualified pilot, can you separate -- are there any requirements  
9 for separating the formation --

10 (Cross-talk.)

11 MR. HUFFSTETLER: The only time -- the only time you're  
12 supposed to separate aircraft that are not -- that do not have  
13 either SAC cards or dynamic maneuvering cards is when they're  
14 breaking -- I'm sorry, when they are preparing to land. They're  
15 not supposed to separate. I believed, at the time, that all three  
16 of the fighter aircraft had SAC cards.

17 BY MR. HEATH:

18 Q. Okay. So you don't know if it would be a SAC card that was  
19 required or a dynamic maneuvering card for that?

20 A. I do know. It would either be a SAC card or a dynamic  
21 maneuvering card required to separate in the airspace prior to  
22 breaking out to land.

23 Q. Okay. So -- okay. So you think that a SAC card is  
24 sufficient to do that maneuver?

25 A. Absolutely.

1 MR. HEATH: Okay. I think that's all my questions, thank  
2 you. I appreciate it.

3 MS. WOODS: Okay, thank you, Bob.

4 How are you doing so far, Sam, do you need a break yet, are  
5 you -- how are you feeling?

6 MR. HUFFSTETLER: I could use a 5-minute break.

7 MS. WOODS: Let's do it. With that, I am going to pause the  
8 recording, we are going off recording at 11:37 Eastern.

9 (Off the record at 11:37 a.m.)

10 (On the record at 11:42 a.m.)

11 MS. WOODS: Okay, we're back on the record at 11:42 Eastern.

12 BY MS. WOODS:

13 Q. So Sam, I'm going to move into directly talking about the day  
14 of and the events, and I know that what you were witness to was a  
15 pretty traumatic thing, so if at any time you need a pause and --  
16 just let me know. And take your time because, again, I know that  
17 it's hard to have to recall these things, especially in such a  
18 tight-knit community such as, you know, the air show world. So  
19 right before we get to the actual events that took place in Wings  
20 Over Dallas last year, can you tell me, at the time, you still  
21 held your current FAA LOA as an air boss, correct?

22 A. Yes.

23 Q. And has it since expired or lapsed or anything like that?

24 A. No.

25 Q. Okay. I want to talk about trust for just a second and that

1 is in that community, that trust between the air boss and the  
2 performers, in your opinion, what does the air boss trust and  
3 expect from his or her performers?

4 A. The air boss expects the performers to pay attention in the  
5 briefing to understand what is being asked of them. You expect  
6 your performers and participants to ask questions if they have any  
7 doubts about what's to happen, and you expect them to fly their  
8 airplanes in a predictable and professional manner during the  
9 course of their performances. And you also expect them to speak  
10 up if they see something amiss.

11 Q. So I'm going to flip the script a little bit, and I know you  
12 have not been -- we established you've not been an air show  
13 performer, but what do you presume a performer trusts and expects  
14 out of his or her air boss?

15 A. Speaking as someone who has read survey results from  
16 performers about air bosses, performers expect their air bosses to  
17 be decisive, to be ahead of the game, to understand what's going  
18 to happen so as to avoid conflicts down the road. And they expect  
19 air bosses to be standard, they want us to be the same as other  
20 people they've worked with so there is a level of commonality that  
21 is essentially demanded by performers, that is essentially  
22 enforced not only by the culture of air bosses, but the  
23 requirements within the 8900 that are set out to determine how we  
24 do our jobs.

25 Q. Did you attend the Wings Over Dallas pre-brief that morning?

1 A. When you say pre-brief, are you talking about the briefing?

2 Q. When I say pre, I mean before the show, because I'm also --

3 A. Okay.

4 Q. -- going to ask about the post-brief later, so yes, the  
5 briefing before the show, were you able to attend that?

6 A. Yes.

7 Q. Can you walk us through what you experienced during that  
8 pre-brief?

9 A. That briefing was, in my experience, completely average,  
10 completely normal, so when I say average, I mean that it went  
11 according to the script, according to the slides. Any questions  
12 that were posed were answered. I did not see people or hear  
13 people leaving that briefing with any questions or concerns or  
14 complaints.

15 Q. How would you rate performer behavior during that briefing?

16 A. I would rate it as good, I did not see anything that I  
17 remember that was out of the ordinary.

18 Q. How would you rate air boss behavior during that briefing?

19 A. The same. Again, it was a normal, professional briefing in  
20 every respect.

21 Q. Okay. So after the briefing has concluded, presumably  
22 there's some time before the air show starts, what did you do  
23 next? Walk us through that interim period before you're getting  
24 ready to actually observe the air show now.

25 A. Immediately following the briefing there are inevitable

1 stragglers that will come up and ask the air boss a couple of  
2 questions at the end, just to make sure everything is clear, and I  
3 know that happened but I don't remember exactly who it was that  
4 came up and asked a question. And after that, you -- excuse me --  
5 will generally try to go find a place to sit down and rest because  
6 you're going to be up standing for the next 3 hours, as soon as  
7 the show starts, and then there is the inevitable quest for food  
8 prior to the show.

9 Q. Quest after my own heart. For the people that came up, I  
10 know you said you don't remember the people, do you remember what  
11 types of questions were asked?

12 A. No.

13 Q. No problem. So you got the interim time, you're fed, you're  
14 coffee-ed, you've relaxed, now it's pre-imminent show time, what  
15 happened next that day?

16 A. We went out to the control point, which is where the stand  
17 was located and the radio for Mr. Royce to do the control, so we  
18 went up on the stand, came up on frequency and started listening  
19 and then predictably, a certain number of aircraft called for taxi  
20 to be able to get out to the runway to begin their show.

21 Q. And for the stand, are you the only ones up there or is there  
22 a cast of thousands or can you describe the stand for me a little  
23 bit?

24 A. It was a rather small set of stairs with a small and narrow  
25 spot at the top to stand. There was only room for two people up

1 there, so Mr. Royce and I were alone up there.

2 Q. So presumably, there's a bunch of other individuals you would  
3 have to coordinate with, too. How did that coordination go if  
4 they weren't up there on the stand with you?

5 A. Well, the fire and rescue, either incident commander or  
6 member of their unified command, is required to be close by and I  
7 don't remember exactly where that individual was but generally, we  
8 have them close to the bottom of the stand, that way you can get  
9 in touch with them as needed. And then the narrator, who we often  
10 work with to make sure that the show flows for entertainment  
11 value, was located about 50 feet away at a table lower than we  
12 were and so it was difficult to do any kind of coordination with  
13 them.

14 Q. Forgive me, because I have this picture of you just like  
15 yelling down, is that pretty much how it goes or if you had to  
16 contact that person, like hey or --

17 A. Most narrators will listen to the air boss frequency so they  
18 know what you're asking the performers to do, what the sequence is  
19 going to be or if there's a delay. So many narrators are simply  
20 listening in their ear to me talk or Mr. Royce and adjusting their  
21 narration accordingly. Sometimes, if you're close to each other,  
22 you wave at each other and give them a timing signal, but that's  
23 really all you have to do.

24 Q. Were you ever left alone on that little narrow platform while  
25 the show was going on?

1 A. I was left alone on that platform while the show was ongoing,  
2 but no aircraft were flying.

3 Q. Explain that to me. What are the people watching if there's  
4 no aircraft?

5 A. There was a moment or a place in the show where we didn't  
6 have anybody airborne and Mr. Royce went down to use the porta  
7 potty and I just stayed up there at the top.

8 Q. Okay. So that's a natural, that's a normal lull in the  
9 aerial acts, I guess?

10 A. It varies from show to show. There are -- I would say 50  
11 percent of the time there will be a time during the show,  
12 thankfully, that there's a break that you can run down and use the  
13 porta potty.

14 Q. Okay, understood. So you've climbed up onto your little  
15 ledge and the show is starting, so if you can recall, this is in  
16 your own words, walk me through from the first taxi out of an  
17 aircraft up to, you know, just after the collision occurred.

18 A. I do not remember the show sequence very well in terms of who  
19 flew first and so forth.

20 Q. Um-hum.

21 A. So I know we had a series of demonstrations prior to the  
22 warbird flight and so I -- I simply don't remember what happened  
23 prior to the actual warbird formation which the impact happened,  
24 so I'm not going to be able to walk you through that.

25 Q. That's fine.

1 A. What would you like to know about that warbird flight?

2 Q. So then let's start at the warbird flight. So are they in --  
3 are they operating in the same time and airspace as any of the  
4 other acts that are not warbirds?

5 A. If they're airborne, if they are airborne while other acts  
6 are flying, then they are held at a de-confliction point and orbit  
7 away from the airport while the performer finishes their act. I  
8 don't remember if that was the case in this case. I do remember  
9 we launched the bombers, I believe we launched the bombers first  
10 and then we launched the fighters. And then during that  
11 formation, I believe we taxied a large airplane, it might've been  
12 a B-29, down to the end of the runway in preparation for takeoff,  
13 but that aircraft didn't launch.

14 So during the course of the warbird demonstration that led up  
15 to the impact, we had, of course, the B-17 followed by a B-24  
16 relatively co-altitude, followed by a couple of other smaller  
17 bomber type aircraft, and then the three fighters were, for the  
18 most part, flying midstream above the bomber formation, leading up  
19 to the actual incident.

20 Q. Above the bomber formation on the same line?

21 A. I could not tell what line they were on, but as they passed  
22 by from crowd left to right, everyone appeared to be relatively  
23 close. When you're standing on the air boss stand at the control  
24 point, it's difficult to ascertain exactly if they're on the 500  
25 or thousand-foot line straight away from you, so I can't address



1 that one.

2 Q. I made an assumption I shouldn't have, so I'm going to  
3 clarify now, were you on the headset, were you able to listen in  
4 to the frequency?

5 A. Yes.

6 Q. So listening in, what was your understanding of what the  
7 intention for that bomber parade, how it was supposed to go?

8 A. Are you talking about the phase in which the accident  
9 happened?

10 Q. Yes. Or right prior.

11 A. Okay. So the flow of that scenario was that the entire  
12 aircraft package consisted of the B-17 leading, B-24 following  
13 that B-17 at co-altitude, roughly, and then two other smaller  
14 bomber type aircraft following the B-24, I believe it was two, it  
15 might've been three.

16 And above that bomber stream were the three fighters, the  
17 three fighters were in trail, and they were passing from left,  
18 crowd left to crowd right. Mr. Royce directed them to do a 90  
19 left/270 right, so now they have repositioned and now they're  
20 making a pass from crowd right to crowd left in the same  
21 formation.

22 Q. I hate to interrupt you, I try not to, but when you use an  
23 ambiguous "they" there, do you mean they, the whole group, they,  
24 just the fighters, or they, just the bombers?

25 A. The entire formation remained in the same formation position-

1 wise as I described earlier.

2 Q. Okay.

3 A. So they did a flyby from left to right, the entire formation  
4 repositioned, using a 90 left/270 right and now flew back by the  
5 crowd from crowd right to crowd left in the same formation they  
6 had been before. Mr. Royce then directed them to do a 90 right,  
7 subsequently to do a 270 left, for the bomber formation to  
8 reposition and now do another pass from crowd left to crowd right.  
9 Mr. Royce, when the aircraft were passing -- let me back up a  
10 little bit.

11 As the aircraft transitioned from crowd right to crowd left  
12 and they did the 90-degree turn, Mr. Royce is telling the fighters  
13 that he wants them to rejoin and what he's going to do with them,  
14 and the fighter lead questioned Mr. Royce as to what he wanted to  
15 happen, so there was a question there about what Mr. Royce wanted  
16 to happen.

17 So Mr. Royce then explained it again in a slightly different  
18 way that he wanted the fighters to rejoin together and then break  
19 out separately -- I shouldn't use the term break out, separate  
20 into singles, and now as the fighters are beginning their 270-  
21 degree turn back to cross from the crowd left to crowd  
22 right --

23 (Cell phone ringtone.)

24 MR. HUFFSTETLER: Sorry. As the fighters were going to be  
25 crossing from crowd left to crowd right they would then pick up a

1 position in front of the bomber stream. And the fighters  
2 acknowledged that and then executed that. So the bombers are in  
3 the left-hand turn now and the fighters are now pulling or  
4 pitching out of their 3-ship formation and now coming in as  
5 singles for their pass from crowd left to crowd right and they  
6 were moving to a position in front of the bombers.

7 BY MS. WOODS:

8 Q. When you said the fighters acknowledge, is that each? There  
9 are three fighters in that fighter group, does each individual  
10 fighter pilot acknowledge or how does that work?

11 A. You presume that the lead aircraft is acknowledging for the  
12 entire flight.

13 Q. What did you hear?

14 A. I heard the lead acknowledge for the entire flight.

15 Q. Is that usually how it's done?

16 A. Yes.

17 Q. Okay. So taking you a little bit out of that scenario, just  
18 for a moment, and I'm tapping on your resources as having been a  
19 fighter pilot, when you're in a lead position such as that, such  
20 as the group of three fighters that was at Wings Over Dallas, what  
21 is the lead pilot's responsibility?

22 A. The lead pilot's responsibility is to take your formation in  
23 the appropriate formation position to wherever the mission  
24 requires or in this case, where the air boss tells you to fly.

25 Q. So if you're not the lead, you're in trail, what is your --

1 how does your responsibility shift?

2 A. Any aircraft that's not in the lead of a formation has the  
3 primary job of following the person in front of you if you're in  
4 trail or in some type of trailing formation, or if you're in a  
5 formation, then your job is to fly that position within that  
6 formation to the best of your ability.

7 Q. So going back now to the accident sequence, the fighter group  
8 acknowledged, with some clarification, and the intent was to pull  
9 them forward and bring them so that they were in front of the  
10 bomber group. But if I recall when I asked you earlier, you don't  
11 remember on what line that all this was to take place.

12 A. Correct.

13 Q. Do you remember at what altitude was all this supposed to  
14 take place?

15 A. As far as I remember, there was no altitude mentioned. The  
16 fighters had vertical separation already from the bombers, but I  
17 don't recall any other altitude, de-confliction, or changes called  
18 on the radio.

19 Q. Okay. So that -- this whole sequence, and I know we've  
20 talked a little bit about this before, but just to clarify, so  
21 this whole sequence, was this something all of the crew on the  
22 B-17 and subsequent bomber crews and the fighter group, was this  
23 something that they knew they were going to do when they stepped  
24 to their aircraft?

25 A. I do not know or I do not think that that reposition was

1 explicitly discussed. However, it has been my observation in the  
2 short time that I've been trying to work with warbirds that the  
3 warbird community expects maneuvering requirements that take place  
4 during the show, under certain shows -- at certain shows.

5 Q. So would you say, then, while they might not have been aware,  
6 it might've been something that they were familiar with from  
7 previous experience?

8 A. I would say that's accurate.

9 Q. Okay. And I recognize you don't have as much experience with  
10 the warbird community, but I have no experience with the warbird  
11 community, so you're still doing better than I. Okay, so that  
12 instruction is given. Do you feel, at that time -- and I  
13 recognize you're on a narrow platform, you're not in, you know,  
14 the cockpit of any one of these aircraft, do you feel that there  
15 was a shared mental model, that it was understood what was about  
16 to happen amongst the bomber group and the fighter group?

17 A. I do not have any doubt that there was a shared mental model.  
18 It appeared that everyone was following the plan, once understood,  
19 and I did not see any conflict.

20 Q. Okay. So now, again, the instruction's been given and let me  
21 restart your tape, what -- then what did you witness?

22 A. The bombers continued in their left-hand turn to perform  
23 their flyby from crowd left to crowd right in the trail formation  
24 I previously described. The fighters pitched out one by one, and  
25 the two P-51s entered a left bank and began a descent to pass by

1 the crowd line from left to right, and I saw the first two P-51s  
2 ascribe a left-hand turn arc, headed in our direction. And I saw  
3 the P-63 flying outside of that turn radius. So in other words,  
4 if you were to define a turn radius at any given G for the P-51s,  
5 they were matched and they were flying on the same line inbound.  
6 However, the P-63 performed, perhaps, a lower G turn but, in any  
7 case, their turn radius was larger and they floated outside of the  
8 turn radius of the two P-51s.

9 And I watched that P-63 continue his left-hand turn to pass  
10 in front of the bombers all the way to impact. Mr. Royce did make  
11 a comment for the B -- I'm sorry -- yeah, B-17 to call the  
12 fighters in sight and even at the time, I did not hear a positive  
13 call, a positive comment from them. I heard a radio call, I'm not  
14 sure what it said.

15 Q. From the crew?

16 A. From the B-17, yes.

17 Q. About the timing of that, when that call asking if they had  
18 traffic in sight to the P-63's contact with the B-17, do you know  
19 -- can you give a rough estimate about how long that was in  
20 between?

21 A. No. I have no idea.

22 Q. Okay. In your -- and granted, I know you're at a lower  
23 altitude and looking more or less direct on, but from your  
24 vantage, if the P-63 had managed to tighten up that turn,  
25 essentially, do think that there would've been a miss?

1 A. Yes.

2 Q. They would've missed each other?

3 A. Yes.

4 Q. And again, I'm -- from your vantage point of where you were.

5 A. Yes, I do.

6 Q. Okay.

7 A. Because he floated the turn, meaning he didn't have the same

8 turn radius as the other P-51s, which took him ultimately closer

9 to the B-20 -- B-17.

10 Q. So again stepping back out for a second and tapping on your  
11 experience as a fighter pilot, I'm sure when you were going  
12 through your training there were times where you -- in ship flight  
13 lead after FLUG, flight lead upgrade training, and so if you were  
14 a person who was in trail in a 3- or 4-ship flight, going back to  
15 expectations again, what would your expectation be for following  
16 the person in front of you?

17 A. I would generally attempt to follow in the same flight path  
18 as the aircraft in front of me because I know the flight lead had  
19 selected that line, that turn line, so as to achieve the goal of,  
20 in this case, arriving at a position in front of the B-17 stream  
21 or the bomber stream.

22 Q. Have you ever, in your past history flying, have you ever  
23 been with a similar aircraft, like for instance, I don't know what  
24 type of fighter pilot, F-16s, F-15s, F-18s, whatever, but let's  
25 say you're an F-16 pilot but you're flying with F-15 pilots,

1 there's a performance difference there, have you ever been in that  
2 situation?

3 A. Yes.

4 Q. Have you ever had to compensate at all due to those  
5 performance differences in that situation?

6 A. I don't recall the situation where there was a mental  
7 recollection of having to compensate for that because most of the  
8 high-performance aircraft I flew were capable of similar speeds  
9 and G loading and G onset rates and so forth, and the visibility  
10 was about the same, too, so I -- I don't know that I've  
11 experienced a huge difference in performance with other aircraft.

12 I have flown with some older type fighters that we were able  
13 to take advantage of during maneuvering because of our aircraft's  
14 superior power-to-weight ratio or maneuvering capability.

15 Q. Okay. And this is more my curiosity in tapping on your  
16 experience as a fighter pilot to kind of get your subject matter  
17 expertise there. Okay, so again, pushing start again on the play  
18 by play, the collision has happened, then what happened? For you.

19 A. The collision happened and it was immediately apparent as the  
20 B-17 pivoted and pitched nose down that we'd had a major  
21 collision. So at -- almost immediately after that impact,  
22 Mr. Royce called "knock it off," three times and then called for  
23 the fire trucks to start rolling, he made a couple of those calls,  
24 and then he began to de-conflict the other aircraft that were  
25 still airborne from the accident site, telling them where he



1 wanted them to go.

2 Q. And at this point, what were you doing?

3 A. I am watching.

4 Q. Were you able to lend assistance at all to him, was there  
5 anything that he -- that you just saw maybe he could use help with  
6 and helped out with that?

7 A. Over the course of the next few minutes, I offered a couple  
8 of suggestions here and there for things to do, such as  
9 determining at what point he might want to try to divert aircraft  
10 because it was obvious at that point we weren't going to land  
11 anybody at that airport.

12 He had already thought about that and I just offered a couple  
13 of what seemed to be obvious interjections for him to think about,  
14 but he had a very good control of the aftermath in a highly  
15 charged emotional atmosphere. For us, not -- he was totally good,  
16 but we were all agitated, of course.

17 Q. And to be clear, and I'm sorry for asking, but did you  
18 actually see the P-63 make contact with the B-17?

19 A. Yes.

20 Q. Okay. Or was it -- yeah. What time did you guys come back  
21 down off -- I'm assuming you just didn't stay up there on the air  
22 stairs or platform or whatever you were on, what time did you guys  
23 come back down?

24 A. I have no idea. We stayed up there until we started getting  
25 confirmation that the aircraft that had been airborne, remaining

1 airborne, had landed at their diversion destinations.

2 Q. Okay.

3 A. As best we could. But once there were no aircraft left on  
4 his frequency, only at that time did we come down the stairs.

5 Q. And what follow-on activities, if any, did you partake in?

6 A. We went over and spoke with the narrators briefly and then  
7 over the next course of an hour or two, wound up meeting with the  
8 Wings Over Dallas producer and the leaders of that group just to  
9 discuss the accident.

10 Q. Was that like a formal debrief, is there any sort of formal  
11 after-actions, like checklists or anything that you guys took part  
12 of?

13 A. No.

14 Q. You specifically took part of?

15 A. No, the narrator has a script that he runs or she runs in the  
16 event of a major accident, the narrator did that to advise the  
17 crowd what they needed to do, but there is no checklist once the  
18 airfield has been turned over to the incident commander, which is  
19 the fire department, for response to that, to the crash.

20 So once Mr. Royce determined that he was not going to land  
21 airplanes at that airport and had to divert them, he no longer had  
22 a role to play and there was no other formal process after that to  
23 run through.

24 Q. So when you met with Commemorative Air Force staff and the  
25 producer, who was contracted through Commemorative Air Force, and

1 about the accident, I guess, then what did you -- what did you  
2 talk about?

3 A. Really? We talked about the accident. I don't think there  
4 was any discussion as to how it happened, only that it had  
5 happened.

6 Q. I guess what I'm looking for is, and based off other -- so  
7 you flew for JetBlue, correct?

8 A. Right.

9 Q. I'm almost positive, although I've never worked directly with  
10 JetBlue, that they have some sort of emergency, after emergency  
11 action plan that they put in place and that includes like -- you  
12 know, like locking down training records, you know, getting  
13 witness statements and things like that, I guess that's more of  
14 what I'm looking for is what was discussed as to who was going to  
15 do what next, was there any of that that took part in that  
16 debrief?

17 A. There was --

18 Q. I mean about the accident, specifically.

19 A. There was no real discussion of that. I think someone  
20 mentioned that we needed to jot down a -- basically, a reminder of  
21 what we had done that day and what we remember so as to help jog  
22 our memories. But other than that, there was no official after  
23 action discussion in the aftermath of the accident.

24 Q. Okay. Prior to this event, had you worked with any of those  
25 performers before?

1 A. Yes, I had.

2 Q. So, I guess, describe those previous experiences, did  
3 anything stand out about any one of them?

4 A. Oh, the P-63 driver, Craig Hutain, I considered a friend. He  
5 spent all of Friday, I shouldn't say, he spent 45 minutes Friday,  
6 when we couldn't fly because of weather, sitting on the wing root  
7 of the P-63 while I sat in the cockpit of the P-63 and he was just  
8 describing everything to me.

9 I had worked with Craig on many other Tora flight events in  
10 which he flew in and was the solo act for aerobatics, and I had  
11 worked with the B-17 crew at a couple of other shows, also with  
12 Tora, and in fact, I had worked with the B-17 crew 2 weeks prior  
13 at the Wings Over Houston show. I didn't know them very well.

14 Q. But in your opinion, I guess, what is your opinion of them as  
15 performers?

16 A. I'm sorry, would you give me that question again?

17 Q. What is your opinion of them as performers?

18 A. Oh, I thought everyone was completely professional, I had  
19 high regards for everybody involved in that entire demonstration.

20 Q. Prior to the Wings Over Dallas accident, had you ever been  
21 witness to or been air boss to a significant incident or accident  
22 during an air show?

23 A. Yes.

24 Q. Can you -- again, no names necessary, but can you give me an  
25 overview of what happened?

1 A. I was an observer at the Stuart air show about 4 years ago,  
2 Stuart, Florida, and we had a low cloud deck that was beginning to  
3 break up and we allowed a performer to fly a standard  
4 demonstration in an OV-1 Mohawk, an old Army observation type  
5 aircraft, and at the end of his act, he flew by a crowd right to  
6 left, pulled up and wound up flying through a hole in the broken  
7 layer that was developing from the overcast and wound up rolling  
8 about a 120 to a 130 degrees to return back down and he just held  
9 that all the way down, he held it for 270 degrees of turn and hit  
10 the -- hit the overrun at about 45 degrees (indiscernible).

11 Q. But at that time you were not directly involved, correct?  
12 You said you were observing.

13 A. Likewise, at the Stuart show, I was on the stand, the larger  
14 deck, with the air boss who was controlling, just observing and  
15 listening.

16 Q. Okay. I think the last question I have, and again, the  
17 second round is usually quicker, the last question I have, then,  
18 is how would you define air show culture? And so let me frame  
19 that a little bit. We talk about safety culture a lot, we talk  
20 about safety culture of different organizations and what goes into  
21 building a safety culture. So with that in mind, how would you  
22 define air show culture?

23 A. With regards to safety, if you will?

24 Q. Yes.

25 A. There's an old saying that says that you can't not have a

1 culture, you're going to have a culture, and you better develop it  
2 on purpose or it just evolves into something that you may not  
3 like. I would say that in every respect, the air show safety  
4 culture is very strongly identifiable and followed. The  
5 performers, of course, had a vested interest in saving -- saving  
6 their skin, no one wants to get in trouble. Especially that close  
7 to the ground.

8 And in every respect, every air boss I've ever worked with  
9 absolutely values, treasures, their performers, every air boss I  
10 know, including Mr. Royce, wanted to protect his performers in  
11 every way possible because they kind of belong to us. And I would  
12 say that the safety culture is very strong.

13 Q. Okay. So last question, part two. Carving out -- and I  
14 recognize you don't have as much experience, carving out just the  
15 warbirds out of that air show culture because they are a unique  
16 entity unto themselves, same level as the rest of the air show  
17 world or is there any differences?

18 A. I didn't -- again, I'm new to the large warbird scale, so my  
19 observation is perhaps not as valid as some others, but I -- what  
20 I've seen is warbirds and regular performers alike pay equal  
21 attention to what they're doing in the briefing, they are all  
22 dedicated and professional in what they're trying to achieve and I  
23 have seen nobody -- well, I have seen very, very few people taking  
24 safety shortcuts. I've never seen anybody in the warbird arena  
25 taking those shortcuts.

1 MS. WOODS: Okay, thank you for that. So with that, that is  
2 it, I think. I have a couple questions, the follow-up clean-up  
3 questions I'll give at the end, but before we get to that, Shawn,  
4 back over to you, sir.

5 MR. ETCHER: Thank you very much.

6 BY MR. ETCHER:

7 Q. Sam, I appreciate it, so far today you have -- the amount of  
8 information you've given me is fantastic, so I can't thank you  
9 enough. I have just a few questions or a few subjects, if you  
10 will, I'd like to cover so it definitely will not take as long as  
11 it did before, so I appreciate you hanging in there with me. The  
12 day of Wings Over Dallas, how was the weather for you? I know  
13 you've done air boss before, was weather an issue, were there  
14 clouds, was the sun in your eyes, hotter than the blue blazes of  
15 glory? Kind of help me understand how the weather was to you.

16 A. I don't remember the specific weather, but I do remember that  
17 it was a relatively nice day. Friday had been rainy and overcast  
18 and we were not able to fly, so Saturday was a much nicer day and  
19 I don't believe weather to have been a factor in any aspect of the  
20 performances.

21 Q. Okay, perfect. And it wasn't -- sitting on the stand, the  
22 sun wasn't smacking you in the face or anything, making it  
23 challenging to see anything, I just want to make sure that's  
24 correct, is it?

25 A. I don't recall having any challenges seeing the aircraft.

1 Q. Perfect, all righty. I know earlier in my questions, the  
2 last round, we talked about, you know, what do you guys have up  
3 there on the stand with you and you talked about your radio and  
4 all that. From what you can recall, were there any frequency  
5 issues that day, you know, people stepping on each other, blocked  
6 transmissions, somebody with a stuck mike, anything like that?

7 A. Nothing that I remember.

8 Q. Okay, perfect. And one other question on the radio. Does  
9 all the performers, air boss, ARF, everybody, stay on the same  
10 frequency and communicate on that or are you aware of like maybe  
11 performers talking on air-to-air frequency with each other? Do  
12 you know, do you have any idea?

13 A. In general, most people stay on the air boss frequency. In a  
14 large formation, everybody stays on the air boss frequency. It is  
15 possible for performers to want to use a discrete frequency,  
16 especially if they have to talk to each other for a multi-ship  
17 formation, or performers don't want to listen to what the air boss  
18 is saying while the performer is concentrating on their act. At  
19 Wings Over Dallas, during the warbird part of this, it was my  
20 understanding that all of the flying participants were on the air  
21 boss frequency.

22 Q. Okay. If a participant was going to be, I'll call it off-  
23 frequency because they're performing, they don't want to be  
24 distracted or on an air-to-air discrete frequency or whatever, is  
25 that something brought up in the morning briefing or is -- you



1 know, how is that communicated to the air boss to know hey, you  
2 know, that whatever airplane is not going to be monitoring me  
3 during his performance or is that ever brought up?

4 A. It is brought up in the briefing and I would venture to say,  
5 I've seen Russell brief that very element in the past and he --  
6 when he briefs that in his briefing, he goes down a list of issues  
7 that have to be covered and that's one of them.

8 Q. Okay, excellent. With Ms. Sabrina, you talked about there  
9 was a lull in the Wings Over Dallas and Mr. Royce went down the  
10 stairs to use the -- we'll call it the gentlemen's room for a  
11 moment. About when was that lull, you know, was it early on, was  
12 it just before the event, a period of time before the event? Just  
13 kind of help me understand when that lull is.

14 A. I don't remember exactly. It happened a little before the  
15 warbird section, clearly, but I just don't remember exactly. I  
16 did not get a copy of the schedule for posterity, so I don't  
17 remember where it happened.

18 Q. That's okay, I -- I didn't realize there was a lull, so I  
19 just -- I just wanted to kind of have an idea of when that was,  
20 but I'll look into that later, so I appreciate that. Let's talk  
21 just a little bit again about that morning briefing. How detailed  
22 is it, typically? And by detailed, I mean does the air boss say  
23 okay, during this flyover, these three planes, I'm going to have  
24 you join the 500-foot line at this altitude, you're going to fly  
25 out, come back in, is it that detailed or is it here's the

1 sequence, you know, the -- "Tora, Tora", you're going to go at  
2 this time; Stearman, you're going to go at this time, you know,  
3 kind of help me understand how detailed the -- I don't want to  
4 call it a script because I understand "Tora, Tora" has a script,  
5 but how detailed is the sequence given?

6 A. Well, the sequence is gone through on the regular schedule as  
7 to what act performs when. I sense that you're more interested in  
8 the script that happens, for example, during the warbirds as to  
9 what changes might take place within the warbird formation, is  
10 that correct?

11 Q. That's where I was going to lead into, so absolutely. Let's  
12 talk about that.

13 A. Okay. On that day, Russell basically briefed that the  
14 aircraft would be in a given formation, and I don't remember  
15 exactly what he said, but I -- so I'm not even going to speculate  
16 there, but he did not give specific instructions, to my  
17 recollection, as to repositioning certain elements of the  
18 formation such as the fighters.

19 He did spend a lot of time in that briefing discussing the  
20 final over-flight that was going to take place that day, of how  
21 all of the aircraft were going to converge behind the crowd at  
22 over a thousand feet and fly over the crowd in a de-conflicted  
23 formation to end the show. So he spent a considerable amount of  
24 time orchestrating that.

25 Q. Okay, great. In your experience as an air boss, how detailed

1 do you give the briefing? Is it similar to what Mr. Royce did, do  
2 you -- do you do less detail, more detail, different detail? Just  
3 kind of help me understand. I'm trying to get a baseline on what  
4 air bosses do.

5 A. With the exception of warbird maneuvering, warbird actions,  
6 his briefing is pretty much exactly like my version and our  
7 briefings are pretty much like everybody else's briefings. Even  
8 though everyone has their own style, the briefing contents and  
9 flow is generally the same for all air bosses out there. It was a  
10 surprising discovery to me that even though the slides may look a  
11 little different, everything is briefed about the same.

12 Q. Okay.

13 A. With regard to warbirds, again, I don't have enough exposure  
14 to tell you what's normal and what's not. I wish I did.

15 Q. No, and that's okay, I was more talking about just air shows  
16 in general, so -- and I appreciate that because that is kind of,  
17 just like it was to you, a little shocking to me how similar you  
18 guys would be, so I appreciate that.

19 If, during an air show, heaven forbid, but let's say for a  
20 moment I was flying as one of your performers and you're my air  
21 boss and during my flyby, whatever, you had me do something later  
22 on that I thought "man, I don't know if I really like that" or  
23 even during the show "man, no way, I'm not doing that," how is it,  
24 as a performer, I can basically -- I'm being crude here, but how  
25 can I basically tell you "no"?

1 A. Well, the performer always has the ability to challenge or  
2 reject the air boss's instruction if the performer deems that it's  
3 unsafe to do so, and the performer can do that real time while  
4 airborne and say no, I can't do that, and I've had that happen  
5 before. Or a performer can come back and basically not fully  
6 comply with your instructions because of the safety implication  
7 and then come back in and debrief you later.

8 But one thing I have found is that performers always debrief  
9 you, one way or the other, if you screw up, they're going to let  
10 you know. And that's good. I mean, it's part of the process.

11 Q. Absolutely, that's great. I appreciate that. You used a  
12 phrase earlier, when Sabrina was talking about the actual event  
13 itself and what happened after, that Mr. Royce used a phrase  
14 "knock it off" three times, is that -- is that a known phrase, is  
15 that like some secret decoder ring phrase for pilots to break out  
16 and do something different?

17 A. That is a standard briefing phrase, yes.

18 Q. Okay. Is that phrase only one that can be used by the air  
19 boss? In other words, if I'm a performer, can I say "knock it  
20 off"?

21 A. Yes, you can. As a performer, or as I brief it, anybody  
22 who's on the frequency, if they see something unsafe developing  
23 that needs to be stopped, anybody can come on frequency and call  
24 "knock it off."

25 Q. Okay. Okay, great. Let's go into a moment of when you are

1 an air boss, you're the air boss of a show, no warbirds, nothing  
2 like that, how do you take -- is it take over, take control, from  
3 air traffic control, is there a typical procedure, typical timing,  
4 how do you guys do that?

5 A. If there is an air traffic control facility operation at the  
6 field you're working, you essentially do a verbal transfer of  
7 control and that -- on the -- you're on the air boss frequency  
8 and, for example, a tower will monitor your air boss frequency  
9 because there are several things you have to coordinate with tower  
10 during a show, so they'll be listening.

11 And so you simply call them and say the boss is ready for the  
12 field and they'll say we have no traffic, you have the field. And  
13 the airspace. And that is the official turnover of the airspace  
14 and the grounds.

15 Q. Okay. And just for clarification, and it's really because I  
16 don't even know, either, is the air show frequency different than  
17 the tower frequency?

18 A. Quite often, yes.

19 Q. Okay. Is that a good thing or a bad thing? In your opinion.

20 A. It's a good thing, absolutely. Because if someone, for  
21 example, wants to wander into the airspace and -- they're going to  
22 call the tower. So one of the things -- as a technique, but this  
23 is a pretty much understood technique, you generally don't use the  
24 tower frequency for your air boss frequency or CTAF frequency for  
25 that same thing, there are just a few exceptions.

1 Q. Okay, great. See, I'm learning things the whole time, so I  
2 appreciate this. Go ahead, I'm sorry.

3 A. It's just a technique, though.

4 Q. Yeah.

5 A. There's no rule on that.

6 Q. Okay. All righty. When you are an air boss, how do you call  
7 out traffic, do you use their registration number, do you use  
8 their aircraft type, aircraft caller? How do you, as an air boss,  
9 do that, because you might have multiple airplanes up at the same  
10 time.

11 A. If you have multiple airplanes up and you haven't decided  
12 what call signs to use, then you have to go with something that's  
13 easy and the easiest thing in a warbird environment is to use the  
14 aircraft type. So if you have one B-17, it's going be either B-17  
15 or, in this case, you call the aircraft the name of the -- the  
16 name, the nose art of the aircraft in a warbird case. So if it's  
17 just a T-6 with no nose art, it will be "first T-6, turn left, you  
18 have traffic at right 1 o'clock, 500 feet high," that kind of  
19 thing.

20 Q. Okay.

21 A. So to answer your question, it varies.

22 Q. Okay. Do you have a particular technique you like to use  
23 when you're -- and I understand, warbirds aren't your specialty at  
24 this point or they weren't at that point, but in an air show do  
25 you have a technique you like best?

1 A. I like to use either the team name, such as Extreme Flight or  
2 Cub or Rob Holland, I'll use a first name --

3 Q. Okay.

4 A. -- you know, "Rob, you're cleared to land," because we're  
5 familiar with each other and we understand that these first names  
6 are fairly easy to understand. And I would venture that there are  
7 rarely ever any miscommunications as to who thinks they're being  
8 spoken to. Outside of the warbird thing. And the warbird flights  
9 I have maneuvered, I've used aircraft types, Navion L-17, blue  
10 T-6, that seems to work very well.

11 Q. Great. Prior to Wings Over Dallas, what air show had you  
12 worked or observed prior to that?

13 A. I was most recently at the Wings Over Houston air show 2  
14 weeks prior to Dallas.

15 Q. Okay. So Wings Over Houston, that also had warbirds,  
16 correct?

17 A. It did.

18 Q. Okay. So with that Wings Over Houston, generally speaking,  
19 for a moment, were there similarities between Wings Over Houston  
20 and Wings Over Dallas? Differences? Kind of help me walk through  
21 that. Obviously, you don't have to worry about talking about  
22 Wings Over Dallas had an accident, we know that, but just the  
23 differences between air show airspace, challenges, different air  
24 boss techniques, things like that.

25 A. It was a different air boss at the Wings Over Houston show

1 and, if I recall correctly, it was a little bit more fighter  
2 centric rather than bomber centric, we did have bombers there, in  
3 the Wings Over Houston show, but not as many. And those were the  
4 only real differences I remember from those shows.

5 Q. Okay. Do you typically, at air shows, have a similar ceiling  
6 height, like you can go up to 6,000 feet or 2,000 feet or whatever  
7 the airspace ceiling is or does it vary?

8 A. It does vary, and it varies with regard to the type of  
9 aircraft you have performing, as well as air traffic control  
10 restrictions. They may not be able to give you as high as you  
11 want in some cases. I think Dallas was restricted in height, but  
12 I don't remember specifically, but I do know at some shows you'll  
13 have an airspace that goes up to 15,000 feet for both the waiver  
14 and the TFR, and other shows you may only go to 4 or 5,000 feet.

15 Q. Okay. Perfect. I have just two more questions and then you  
16 are all done with me and again, I thank you a lot. When you are  
17 an air boss at an air show and you have dissimilar aircraft, you  
18 know, faster versus slower, whatever the case might be, in your  
19 real time or planning purposes, how do you accommodate the  
20 different speeds? You know, if you have a faster one and a slower  
21 one at the same time, do you deal with them via altitudes,  
22 different line spaces? Kind of help me understand how you do it.

23 A. The way I do it is that I prefer an altitude or lateral  
24 de-confliction. Altitude is easiest, that way you never have  
25 those aircraft with a speed differential at the same -- at the



1 same altitude. However, there are cases where you could have a  
2 fast aircraft laterally separated from another aircraft and have  
3 them descend down passing the crowd for -- again, for the air show  
4 part of it, the show part of it.

5 Q. Okay. And in an air show, I understand, like Wings Over  
6 Dallas, you had two lines, a 500-footer and a thousand foot  
7 line --

8 A. Yes.

9 Q. -- distance from the crowd line or whatever, however that's  
10 based. As a performer, what would be your expectation for me, if  
11 you told me I want you on the 500-foot line, when would you expect  
12 me to be on that line, 2 miles out, right over the runway  
13 threshold, center line of the airport? Just kind of help me  
14 understand what your expectation is.

15 A. I would expect a performer to be on that line roughly as they  
16 enter the aerobatic box and the aerobatic box is a geographic area  
17 depicted in the briefing with very precise location geographically  
18 in front of the crowd, so that's when I would expect them to be in  
19 the box.

20 Q. Okay.

21 A. Sorry, that's when I would expect them to be on that  
22 particular line.

23 Q. Okay, perfect. That's what I was going to try to ask, just  
24 to make sure. Okay. I lied, I said I only had two, I have one  
25 more question, so my apologies, but I promise this will be my

1 last. After the event at Wings Over Dallas and you guys finally  
2 came down the stairs, I know you said there was a debrief with you  
3 guys and the air show facilitators and all of that, was there ever  
4 a debrief between you and Mr. Royce about what happened? Did you  
5 guys ever talk -- because I know you told me early or told us  
6 early on that he observed you and he gave you a nice long  
7 debriefing afterwards, like an hour and a half, I think you said,  
8 so did you guys have anything like that with Wings Over Dallas to  
9 discuss?

10 A. You know, we discussed the crash having occurred and both of  
11 us were absolutely dismayed that it had happened and as I recall,  
12 we didn't get into the how's that had happened. You know, I --  
13 that's what I remember.

14 MR. ETCHER: Okay. I promised you that was my last question,  
15 so I'll hold true to my word this time, but I do appreciate it  
16 again and I will turn it back over to Sabrina. Thanks.

17 MR. HUFFSTETLER: Thank you.

18 MS. WOODS: Okay, Jason, did you have anything that you would  
19 like to ask at this time?

20 MR. AGUILERA: No, not at this time.

21 MS. WOODS: Okay. Thank you for that.

22 And Bob, do you have anything that you would like to ask?

23 BY MR. HEATH:

24 Q. Yes, I appreciate all your words so far, Sam, you've been  
25 very helpful. I'd like to clarify just one thing. You mentioned

1 the expectations, and the expectation that a trailing aircraft  
2 would follow exactly the flight path of the aircraft in front of  
3 them. Can there be some problems associated with doing that?

4 A. You're asking if there are problems with a pilot following  
5 air boss instructions?

6 Q. No, following the aircraft -- following exactly the flight  
7 path of the aircraft in front of him.

8 A. Oh, there are any number of reasons why a pilot might not be  
9 able to follow the aircraft right in front of him.

10 Q. But do you remember -- you're a FAST qualified pilot, do you  
11 remember what the formation and safety team, formation guidance is  
12 for following in trail formation, the pilot's described and what  
13 the -- what the limitations are?

14 A. I'm not going to be able to throw those limitations in trail.  
15 Generally, I think in trail, something like extended trail or --  
16 I'm sorry, you're talking about regular trail, I don't remember  
17 what the distance is out there or --

18 Q. I'm not worried about distance so much, I'm more worried  
19 about following directly behind, I mean, it can be -- I mean, we  
20 found turbulence can be a problem, so okay, that's fine. If you  
21 don't remember, that's good enough.

22 A. No, I can't give you a maneuvering cone for trail.

23 MR. HEATH: Okay, all right. Thank you. That's all I have,  
24 thank you.

25 BY MS. WOODS:

1 Q. Okay. Well, then, with that, you've made it. You've made it  
2 to the end. I do have kind of our -- what I call the wildcard  
3 question that we always ask and that is, you were part of the  
4 initial, I know, investigation for this accident and then you had  
5 some time when I called you and asked to speak with us again,  
6 you've had time to think about things, obviously.

7 So I guess what I would like to know, is there anything that  
8 you kind of prepped for and anticipated that we would ask you that  
9 we haven't asked? Because sometimes we have it where people are  
10 like man, if they would just ask this one thing, I think this will  
11 probably clear it up for them, but -- so that's what I'm looking  
12 for, is there anything that you thought we were going to ask and  
13 we just haven't gotten to it yet?

14 A. No. I'd say in the past 2 hours and 46 minutes, we've  
15 covered a lot of the ground, so I don't have anything else that I  
16 would offer up that I had thought of.

17 MS. WOODS: Okay, all right. And I do appreciate that time  
18 we did go over, but I would like to say that it's shocking that we  
19 went over it, but quite frankly, when Shawn and I get together we  
20 go over a lot, so I apologize, because I know your time is  
21 valuable, but you have been -- like, the information that you have  
22 passed on has been immeasurable, so we really appreciate it.  
23 Again, every time we talk to somebody they fill in a different  
24 perspective and a little piece of this, this air show world that  
25 we can't possibly learn everything that you -- you've been doing

1 it for while, we're trying to catch up, so we do appreciate your  
2 insight and your experiences.

3 With that, I'm going to do one last round. Bring your camera  
4 up and turn your mike off if you have any alibi questions. I'm  
5 also looking at you, Shawn.

6 MR. ETCHER: I've got nothing, my brain's absorbing all of it  
7 so far, so I do appreciate it, thanks again.

8 MS. WOODS: Okay. Well, with that, if there's -- nobody has  
9 any questions left, we are going to go off recording at 12:47 p.m.  
10 Eastern.

11 (Whereupon, at 12:47 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:            FATAL COLLISION AT WINGS OVER  
   DALLAS AIR SHOW AT THE DALLAS  
   EXECUTIVE AIRPORT IN DALLAS,  
   TEXAS ON NOVEMBER 12, 2022  
   Interview of Daniel Samuel Craig  
   Huffstetler

ACCIDENT NO.:                CEN23MA034

PLACE:                        via Zoom videoconference

DATE:                         September 14, 2023

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



---

Karen D. Martini  
Transcriber

**Interviewee:** Daniel "Sam" Craig Hufstetler

**Representative:** None

**Date/Time:** November 17, 2022 /1002L

**Location:** Dallas Executive Airport phone interview

**Present:** Stephen Simpson (FAA), Jim Lasche (CAF), Bob Heath (CAF)

**Investigator:** James VanDerKamp

During the interview Daniel "Sam" Craig Hufstetler stated the following:

He was the Mini-Boss for the Wings Over Dallas (WOD) airshow. He was shadowing Russel to learn more about how he runs airshows and was acting basically as an extra set of eyes and monitoring the communications.

He did not provide input during the show. He had no official duties and only pointed out aircraft throughout the show that Russel was looking for, otherwise he had no direct impact on the show. He did not communicate on the radios. He monitored them but did not transmit.

He was there simply to shadow Russell.

He witnessed the accident, when the sequence began, the fighters and bomber train as they moved crowd right to left over crowd center from a right 90 into a left 270, then to pass crowd left to right.

Russell gave further direction for the left 270 for the fighter pull down from echelon and to get in front of the bomber string.

Sam saw two P-51s take the lines inside of the bombers. Then he saw the P-63 move outside of the P-51 arcs. He was watching the P-63 to see what line it would be on and then saw the impact.

All aircraft were supposed to be on the 1,000-foot line.

After the collision Russell called the knock-it-off to deconflict the remaining aircraft and then got crash/fire rolling right away.

After a while, Russell made the call to divert aircraft since the runway would not be available. He asked aircraft where they wanted to divert. Sam was then asked by Russell to start making phone calls to his dad, (Ralph Royce), and to Russell's wife.

After accident Sam stated he discussed with Russell about moving the B-29 from the hold short to parking. Sam maintained a lookout for where aircraft were located. They stepped off the stand only after all aircraft in the air had diverted and other aircraft had moved to parking. He has not spoken to Russell since.

He does not know what time they secured or when Russell turned the field back over to ATC.

He did not debrief with anyone.

When asked about the briefing, Sam stated that he attended the briefing both Friday and Saturday and knew that there was a briefing for the Warbird package but could not recall if all the bombers and fighters were there.

He was not involved with the planning of the airshow.

He has observed four other Air Bosses in the past and was at the Wings Over Houston airshow. When asked if he had seen any close calls there, he stated he had not seen any.

When asked if he had heard any pilots mention anything, Sam stated that he had heard a pilot mention to Ralph at the Wings Over Houston show that there was a convergence.

Sam stated again that it seemed that the P-63 had done a wider turn than that of the P-51.

He does not remember if there would be passenger rides going during the show. He does remember the Air Boss telling the fighters to get ahead of the bombers.

He is already a qualified Air Boss but wanted to learn more about working with War Birds. He worked Midland with Russell a couple of time.

When asked about working with other Air Bosses Sam stated he worked with George Cline at Sun-n-Fun and Oshkosh. George would brief the War Birds to be in a set pattern and also assigned specific altitudes.

**Interview concluded at 1054L.**