

CEN23MA034

**OPERATIONAL FACTORS/HUMAN PERFORMANCE**

Attachment 3

ICAS Personnel Transcript

November 22, 2023

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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

Accident No.: CEN23MA034

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Interview of: DAN HOLLOWELL,  
Vice President of Safety and Operations  
International Council of Air Shows

via videoconference

APPEARANCES:

SHAWN ETCHER, Aviation Operational Factors Investigator  
National Transportation Safety Board

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

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I N T E R V I E W

(9:07 a.m.)

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2  
3 MR. ETCHER: All right, well, good morning, my name is  
4 Shawn Etcher, I'm an operational factors investigator with the  
5 NTSB. All that means is I kind of look at everything forward of a  
6 cockpit door and how it interacts with the pilot. I appreciate  
7 you coming on today to educate me on ICAS and everything about it  
8 from an air boss/air show perspective, as well, because that's  
9 going to help me understand the events at Wings Over Dallas a  
10 little better and I do appreciate that.

11 I'm lucky to have a good group member with me, a co-group  
12 member, I should say, Sabrina Woods. I will have her introduce  
13 herself and her role.

14 Sabrina.

15 DR. WOODS: Hi, Dan. Dr. Sabrina Woods, I'm the human  
16 performance investigator associated with the accident that took  
17 place over Wings Over Dallas last year, and I know we've talked  
18 before. This is a good chance to talk again and get some of the  
19 finer details; you have great information on how ICAS works and  
20 also kind of how a person goes from being just a somebody to being  
21 an air boss and working in that capacity, so we appreciate you  
22 being here again.

23 MR. ETCHER: We had invited Matt Rigsby with the FAA, but he  
24 was lucky enough to -- or unlucky enough to be over in a foreign  
25 country with me, but he is just now getting home today, so I don't

1 think he's going to join us, but I do appreciate you working with  
2 us and our crazy schedules to do this.

3 Any time anybody talks with us they have a right to a  
4 representative to accompany them. I see you're here by yourself,  
5 do you wish to have a rep at all?

6 MR. HOLLOWELL: I do not.

7 MR. ETCHER: Okay. But if you're in the -- this time, if you  
8 need to talk to somebody, just let us know, we're more than happy  
9 to accommodate anything we need. I always have just a few little  
10 rules, and I say rules kind of vaguely. As you can see, we're  
11 being recorded and I want to make sure and go on the record that  
12 you're okay with us recording this interview.

13 We're going to send it out to be transcribed by a  
14 transcriptionist, we'll review that transcript when it comes back,  
15 we'll correct any typo errors, but then they'll recertify it. I  
16 will send you that recertified transcript so you can make sure  
17 there's nothing you want to add to it, you know, as an addendum,  
18 but that transcript itself and any addendums you give us will be  
19 part of a public docket when this accident nears completion. Are  
20 you okay with us recording and having it transcribed?

21 MR. HOLLOWELL: Yes, I'm okay with that.

22 MR. ETCHER: Great, thank you. If you need a break during  
23 this education you're going to give me, don't hesitate, just say  
24 so. You are doing me a huge favor by educating me and I  
25 appreciate it and we will accommodate anything we can. I know

1 you've already given some of my colleagues a great education, I  
2 wish I was there, a part of it, so you didn't have to redo this,  
3 but I appreciate you're willing to help with that. I have  
4 sometimes a tendency to think something in my brain and then my  
5 brain and my mouth aren't connected and it comes out totally  
6 weird, so if I ask a question or something and you don't  
7 understand it, it's okay, just tell me and I'll try and clarify it  
8 because it's a two-way street; you tell me something I don't  
9 understand, I'm going to ask a little bit more, just -- because I  
10 want to have a good thorough understanding, if that's all right  
11 with you.

12 MR. HOLLOWELL: Great.

13 MR. ETCHER: All righty. Well, we'll start this off, it is  
14 9:10 local time, Central time, I should say.

15 INTERVIEW OF DAN HOLLOWELL

16 BY MR. ETCHER:

17 Q. We'll start this off with can you just kind of give us your  
18 title at ICAS and what your duties are?

19 A. Yes, my name is Dan Hollowell, H-o-l-l-o-w-e-l-l, and I'm the  
20 Vice President of Safety and Operations for the International  
21 Council of Air Shows, which is a nonprofit industry organization  
22 that was formed back in the '60s to provide a medium for event  
23 organizers or service providers and air show performers to come  
24 together and to improve the industry through a myriad of avenues.  
25 So I've been with the International Council of Air Shows since

1 2008, I joined shortly -- shortly after -- in the summer of 2008  
2 as a graduate of Purdue University where I received my  
3 multi-engine commercial and instrument certificates, and I work  
4 primarily with -- anything safety and operations within the air  
5 show industry is my principal focus. Among those duties is the  
6 administration of the air boss program, which is a relatively new  
7 program, and it was based off of another program that I manage,  
8 which is the aerobatic competency and evaluation program, which is  
9 a program that certifies air show pilots to fly aerobatics at air  
10 shows, and that program has been in place for about 30 years now,  
11 so that predates me, but I administer both programs for ICAS.

12 Q. That sounds a little busy.

13 A. It's job security.

14 Q. Well, that probably is. You said you -- that the air boss  
15 program itself has -- I don't want to put words in your mouth --  
16 recently been added, however you worded it, when did it actually  
17 begin?

18 A. It had been a program that the industry had been looking  
19 toward for probably 30 years. Prior to my arrival at ICAS there  
20 had been many attempts to standardize and certify air bosses, but  
21 the official program did not receive accreditation or -- there's  
22 probably a technical term that I could give you for acceptance by  
23 the FAA -- until 2018 and that program was then subsequently  
24 formalized, beginning in 2019. So in 2019 the FAA made it a  
25 requirement, as a condition of receiving the waiver to perform



1 aerobatics at an air show, that you must have an air boss  
2 associated with that event that has gone through the program that  
3 we administer. So 2018 was the formal acceptance and  
4 implementation began in 2019.

5 Q. Okay, great. And I apologize, I keep saying ICAS, would you  
6 rather me call it that or International Council of Air Shows?

7 A. It's one and the same to me.

8 Q. Okay.

9 A. ICAS is fewer syllables for my brain, so that's just --  
10 that's what I go with.

11 Q. No, that's great because less syllables works for my brain,  
12 as well, especially this early in the morning, so I just, I felt  
13 bad when I started using that, I just wanted to make sure that was  
14 okay.

15 I know you said ICAS itself is a nonprofit organization, is  
16 it a membership required organization, is it a voluntary  
17 membership? Kind of help me understand how this all works with  
18 air bosses.

19 A. Yeah, it's -- so the IRS has several different codings for  
20 nonprofits, we're a 501(c)(6), which is -- there's 501(c)(3), as  
21 well, which is strictly charity and fundraising, we are more --  
22 we're a nonprofit. And you do not need to be a member of ICAS, it  
23 is not required in any capacity, it's a voluntary thing that  
24 people would join ICAS to increase their education and networking  
25 opportunities within the industry and hopefully, to improve the

1 quality of the air shows that they -- that they either work or  
2 work for. And you do not need to be a member of ICAS to hold any  
3 of the certifications that we offer, specifically, the air boss  
4 program or the statement of aerobatic competency, or the SAC,  
5 S-A-C, card which is what all air show performers have. So it's  
6 not a requirement that you be a member of ICAS, but I would argue  
7 that it certainly helps one develop better practices and to be  
8 more professional.

9 Q. Okay. A ballpark, how many members do you have as part of  
10 it?

11 A. I would say we have about 800 members and we are a member  
12 organization. Organizations, themselves, are members of ICAS, not  
13 necessarily the individual. So, for example, if the NTSB was a  
14 member, which I don't believe they are, of ICAS, Sabrina and Shawn  
15 would be members of the NTSB's organization within ICAS.

16 So the Chicago Air and Water Air Show is a member of ICAS and  
17 it's got multiple individuals that are members of that  
18 organization, so there's only one membership, but there can be  
19 multiple people involved with a specific membership and they can  
20 be members of multiple organizations within ICAS.

21 Q. Okay. You must be looking at my sheet, because I was going  
22 to ask, you know, can, you know, a membership be an organization  
23 that has sub-members, if you will, so --

24 A. It is.

25 Q. -- I appreciate you giving me that info. So let's kind of --

1 and as a rule, I'm going to have to go slow so my brain can absorb  
2 as much as I can, but kind of walk me through, from an ICAS  
3 standpoint, what it takes -- if I walked up to you and said I want  
4 to be a member of ICAS and I want to be an air boss, what do I --  
5 from your guys' perspective, what is it I need to do? Or is there  
6 any pre-requirements, prerequisites?

7 A. Yes. So we have a manual that dictates what our program is.  
8 Now, the manual itself is a program that we developed and worked  
9 through the draft process and it does not, by itself, hold much  
10 legal weight. The FAA has a -- has, in their guidance, which is  
11 8900.1 and there's -- there's thousands of pages of that document  
12 that I could give -- if you want to give me a second, I can give  
13 the volume and chapter and section that empowers this, but in that  
14 policy they say that any recognized industry organization can  
15 establish a program to train, certify, evaluate air bosses to meet  
16 this requirement that was just introduced in 2019.

17 And we are one industry organization that submitted and had  
18 our air boss program manual approved by the FAA as an acceptable  
19 means of compliance for that policy. I believe very firmly, and I  
20 wouldn't say categorically, because I don't know if there's anyone  
21 else that submitted, but we are the only recognized industry  
22 organization that has submitted and had a manual accepted. So in  
23 that program that's been accepted by the FAA, there are -- it's  
24 not unlike getting a private pilot certificate in which you need  
25 to document training, you need to take a written test, you need to

1 have a ground evaluation with an examiner or an evaluator, we call  
2 them air boss evaluators in this program, and that's like getting  
3 -- flying for a DPE to get your private pilot ticket. And so you  
4 take the written test, you provide your experience and, depending  
5 on what level of air boss you are looking to become, there are  
6 certain prerequisites that need to be -- need to be given. So  
7 there are essentially three different tiers of air boss.

8       The entry level air boss authorization that we give or that  
9 we participate in is the basic air boss and that has very limited  
10 roles that the air boss -- or that the air boss can do during an  
11 air show. You can't -- it's not -- you're not going to be an air  
12 boss at Oshkosh with a basic air boss letter of authorization,  
13 it's meant mostly for balloon festivals and smaller event's that  
14 don't have a very complex operation. The second level above that  
15 is called a standard air boss, and that level opens you up to a  
16 lot more opportunities and a little bit more complexity.

17       But it prohibits you -- it basically lets you do any air show  
18 that does not have a military demonstration team, whether that's  
19 the Blue Angels, the Thunderbirds, one of the single ship  
20 demonstration teams, the F-16 demo team, et cetera. So you can do  
21 -- you can do any air show as long as there's not one of those,  
22 one of those teams, and there's a couple other stipulations in  
23 there. Then the highest level or the most permissive letter of  
24 authorization is a recognized air boss and in that there's a  
25 couple of subcategories; there's "recognized air boss single

1 venue," which means you can only do recognized complex air shows  
2 at one specific venue, or "recognized air boss multi-venue," which  
3 allows you to do complex air shows at any venue. So all that is  
4 to say, if you are -- if you're going to be doing the air boss  
5 role at an air show and the Blue Angels are there or a single ship  
6 demonstration team is there, you need to be a recognized air boss.  
7 And again, as you work up from that -- basic, standard, to  
8 recognized -- the prerequisites increase.

9       You need to have more letters of recommendation, you need to  
10 have a more in-depth interview with the evaluator, and there's a  
11 little bit more. So I can talk to the specifics of each of those,  
12 if you'd like, but all of that is documented in our air boss  
13 program menu, which I believe -- I believe it's somewhere in the  
14 halls of the NTSB, but I can send you a copy directly, if that  
15 would be beneficial.

16 Q. No, I do have a copy of that, I was -- that's why -- it gave  
17 me a little bit of a taste of what you all do, but that's why I  
18 wanted this conversation, just to -- you know, sometimes hearing  
19 it is better than reading it, for me, so I appreciate that. Real  
20 quick, before you -- and you may be going on in just a second, but  
21 you said a standard air boss can do air shows that don't have, I'm  
22 paraphrasing, a military aspect to it. Are you talking current  
23 military or -- because like Wings Over Dallas was World War II  
24 warbirds, so they would've been former military, kind of help me  
25 clarify that, would you?

1 A. Absolutely. A standard air boss would be able to operate or  
2 act as air boss, my apologies to the transcriptionist, but I'm  
3 sure there's a technical term that -- that I'm not -- that's not  
4 coming to my mind, that you can act as the air boss, a standard  
5 air boss can act as an air boss for an air show that has old World  
6 War II assets. The complex only comes in place or only becomes a  
7 factor when the -- or when the air show has current military  
8 assets, a DoD-sanctioned military demonstration team.

9 So it's the F-22 demonstration team, the F-35 demonstration  
10 team, F-16 demonstration team, there's an F-18 demonstration team,  
11 and of course, the Blue Angels, Snowbirds, and the Thunderbirds.  
12 And for the record, there are a couple other caveats that make an  
13 air show complex which would then require a recognized air boss.

14 Q. Okay, so you know about the Wings Over Dallas event, is -- I  
15 assume, to a certain extent?

16 A. I've heard -- yes, I do.

17 Q. Yeah. But from your definition, is the Wings Over Dallas air  
18 show event, is that what you guys would call a complex where it  
19 requires a recognized air boss or is that something that could've  
20 required just a standard? Just trying to get an understanding.

21 A. I would need to see -- they have -- I would want to see who  
22 all was performing there. Based on my -- I don't recall there  
23 being elements of a complex air show at that air show, so it would  
24 not necessarily have needed to have been, but I could be wrong  
25 because I believe they've taken all that information off the

1 website, to not shine a bad publicity light on themselves. So if  
2 you'd like, I can take 30 seconds to try to check the calendar to  
3 see who all they had performing there, or unless you have that  
4 information. I would say I don't know off the top of my head.

5 Q. And "I don't know" works fine, I just wasn't sure if you're  
6 like "oh, yeah, that one would've been complex because they had  
7 blah," and it's okay, "I don't know" works, no worries. If we  
8 have questions, we can definitely e-mail you just to fine-tune  
9 that, if we need to know that. And again, I apologize, if you  
10 were getting ready to continue on with what it takes for me to be  
11 an air boss, you know, so I'll let you -- if you had more to  
12 continue, I'll let you continue, or if you --

13 A. Yeah. I would say procedurally, no matter which one of those  
14 three levels you're going for, the first step is to take a written  
15 exam that you have to score, I believe it's 75 percent or greater  
16 on a -- it's a multiple choice exam, to make sure that you  
17 understand aviation terminology, air show policy or, more  
18 specifically, where to go to get the information that you need to  
19 act as an air boss at an air show. That's the first step.

20 Then you have to document any experience that you have.  
21 Again, for the basic or the entry level there is minimal  
22 experience that's required because it's somebody out in a field  
23 with one -- a handheld radio watching one air show performer fly  
24 at a car show versus the standard, which then requires that you  
25 have subsequent and lesser experience just to make sure that

1 you're familiar with the environment and different avenues. So  
2 you take the test, you document your experience, and then you  
3 would then sit down with an evaluator to go through a written --  
4 or a ground evaluation, and we have -- the ground evaluation is to  
5 ensure that the applicant has a thorough understanding of air  
6 shows and then to also engage their situational awareness on how  
7 they would react to certain squawks, I guess, in the air show  
8 environment to say, you know, if things don't go exactly how you  
9 planned, what do you do.

10 And the goal is to have the evaluator challenge that a little  
11 bit to see what the applicant's response would be. Pending that  
12 ground evaluation being successful, then there would be a  
13 practical evaluation for -- only for the recognized level, so the  
14 standard and the basic do not require a practical evaluation in  
15 which an air boss would stand on -- sit on the stand or stand on  
16 the air boss stand and monitor the applicant as they conduct air  
17 boss operations at an air show to make sure that they're doing  
18 things correctly, that they -- that there's no safety concern  
19 based on their actions.

20 And then pending a successful practical evaluation, then the  
21 air boss evaluator would then submit in their full package, from  
22 the test to the ground evaluation to the practical evaluation  
23 results in to us at ICAS. We then do a review of that to make  
24 sure it's all factually accurate, that there was an air show at  
25 Las Cruces, New Mexico on that day and that the applicant did



1 score greater than 75 on the written exam and pending all of that  
2 information, we then submit a recommendation to the FAA  
3 recommending that they issue a letter of authorization to that air  
4 boss so that that air boss can go on and act as an air boss in the  
5 future.

6 Q. So the FAA issues the LOA -- well, that's a lot of acronyms  
7 right in a row, isn't it?

8 A. It's the government, it's --

9 Q. Oh, it is. And it's aviation, so you take the two of those  
10 together and it's just double the pleasure there. So the FAA  
11 actually issues the LOA to an applicant that you guys recommend;  
12 you guys don't, is that correct?

13 A. That's correct, yes. And 30 years ago, when we developed the  
14 statement of the SAC program for air show pilots, it was the idea  
15 that it's better that the FAA issue than a private organization,  
16 for liability reasons, for authority, et cetera, so they developed  
17 a program that would acknowledge our program both for the air boss  
18 and for the aerobatic competency program. So the air boss program  
19 was based on the work that we did for the statement of aerobatic  
20 competency program.

21 Q. And this may be out of your wheelhouse, I don't know, and  
22 it's okay if it is, tell me so. The FAA, I'll use the phrase  
23 "gave you guys the bossing" to do the training and put applicants  
24 forward, did they actually have to come in and -- do they  
25 currently come in and provide oversight to see what you guys do,

1 and how often do they provide that oversight?

2 A. I believe their policy says once every year that they do an  
3 audit, or maybe once every 5 years, I'm not sure what their policy  
4 says. I know they do an audit of our paperwork in both programs,  
5 we have an audit scheduled in October, I believe, for the air boss  
6 program, and we routinely get audits for the statement of  
7 aerobatic competency, which obviously does a lot -- there's a lot  
8 more volume with the statement of aerobatic competency program,  
9 there's probably 350 air show pilots versus 60 or 70 air bosses  
10 and the renewal rate for SAC cards is once every year versus once  
11 every 3 years for air bosses.

12 So there's a lot more paperwork, it's all digital paperwork  
13 now, but there used to be a lot more paperwork, and the FAA would  
14 come out to the office back when we were all working just outside  
15 the D.C. -- but now we can -- they can do the audit process  
16 digitally and check the paperwork on -- in our database.

17 Q. Okay. So I'm going to kind of go backwards a little bit, if  
18 you don't mind, with what you've told me already. Yeah, we talked  
19 about FAA and oversight, but when you come -- I've applied to be  
20 an air boss, let's say, and we're going through the process, and  
21 at the end you verify that what I told you was correct, that I  
22 didn't make up an air show anywhere or anything like that and that  
23 I passed the test, have you ever had an applicant not make it  
24 through that screening process of you guys, like hmm, they made  
25 something up or their testing wasn't so good?

1 A. We have. We have had applicants that have taken a test and  
2 scored less than 75 percent and generally, what I do is I refund  
3 their money, it's like a \$95 fee for taking a test, and they move  
4 on to a different venue. I would say we probably had three of  
5 those applicants so far out of the -- and I'll ballpark, 70 that  
6 we've done so far and that's just the written exam. On the rest,  
7 no, we've not had anybody misrepresent themselves.

8 I mean, because it's a -- at the end of the day we treat it  
9 as a federal form and we say that it's effectively committing  
10 perjury to the FAA by saying that you did something that you  
11 didn't do because at the end of the day, we're submitting the  
12 application package to the FAA, so we've not had any issues with  
13 that.

14 Q. Okay. So of those individuals that didn't pass the test, are  
15 they -- is it a "once and you're out," if you fail it once, then  
16 you're gone, or kind of help me understand that.

17 A. Yeah, so they're -- without having the document in front of  
18 me to the exact spot, I believe there is a dormition period in  
19 which they have to go back and do other training in order to come  
20 back and reapply and retake the test. I think it's a 1-year  
21 period, but I would -- I would have to pause to go find that in  
22 the manual.

23 Q. And that's okay, though. It's in the manual somewhere, so  
24 I'll -- I can dig that and hopefully -- I probably read it and it  
25 didn't click, so now that I know what to look for, I appreciate

1 that. So we'll go back just a little bit more. You talked about  
2 an applicant, me, let's say, if I was the applicant getting  
3 certified, can I just immediately come to a multi-venue  
4 certification or is it kind of like pilots where you start as a  
5 private, then you work your way up, kind of help me understand.

6 A. It is exactly like that and it's -- you would not be able to  
7 come directly into the recognized multi-venue without prior  
8 experience, you know, maybe if you had experience as an air boss  
9 prior to the implementation of this program in 2019, that that  
10 would be able to potentially qualify you for, you know, time  
11 served, really, then you wouldn't be able to just come straight  
12 into the recognized.

13 You need to have, I think it's 15 show days of experience at  
14 multiple different venues in order to be considered. So when this  
15 program was developed back in 2018 or '19, we understood that we  
16 -- it's kind of like the landing wheels on an airplane, that you'd  
17 be going from stopped to a hundred and 30 miles an hour instantly  
18 and because there was no program in '18 and there was a program in  
19 '19 and how would we serve the air shows that were already planned  
20 if there was not a process by which we would allow people to fill  
21 the role that they had been filling for, in some cases, decades at  
22 air shows. So everyone got an exam, a practical exam, and applied  
23 for things and went through the process, and as long as they had  
24 their prerequisites that are required for the level that they were  
25 looking for, they were being given that without having officially

1 served as a recognized multi-venue air boss when that term didn't  
2 exist 6 months prior.

3 Q. Okay.

4 A. So I'm sorry, to answer your question, no. You, Shawn, would  
5 not be able to be the air boss at Oshkosh this time next year  
6 without having --

7 Q. And that's good on so many levels. Okay.

8 A. Yes.

9 Q. I assumed, but I know what happens when I assume, I'm always  
10 wrong, so I figured if I don't ask, I'll never know for sure. But  
11 I know you also said that if I was trying to get to be a multi-  
12 venue or anything like that, that I would have an evaluator, I  
13 think was the word you called it, oversee me, watch me, evaluate  
14 me, I guess would be the best word. Do you have a select few  
15 people that do the evaluation, what's that requirement? Kind of  
16 help me walk through that.

17 A. So we have, I believe it's seven evaluators currently, it  
18 might be six, but anyhow. And they are people that had been air  
19 bossing for multiple decades, that had done a variety of shows  
20 prior to the implementation of this program, they're effectively  
21 the most experienced air bosses that we had in the industry, that  
22 we appointed as the evaluators when this program began.

23 Q. Okay. And to be an evaluator, like to be a flight  
24 instructor, do you have to go through training, you have to learn  
25 how to do it and all that, is there a process for the evaluators

1 to do that or is it just based on their decades and decades of  
2 experience?

3 A. Yeah, at the beginning of this program, way back 4 years ago,  
4 there was not -- there was not training for them, it was generally  
5 accepted that they were -- like we do with the aerobatic  
6 evaluations, that if you've seen enough of them, you know -- if  
7 you've seen enough air shows or you've seen enough aerobatics like  
8 the aerobatic evaluators, you know what's bad and you know what's  
9 acceptable.

10 So there's an innate sense of understanding of quality versus  
11 safety that occurs with the evaluators, but there is not a  
12 specific set of requirements that -- or training for the  
13 evaluators, they're given -- you know, they have the manual and  
14 they have, in that manual, the guidelines that they have to  
15 operate under in order to successfully complete an evaluation, and  
16 that's -- if they do not do those things, then just like a CFI  
17 that doesn't follow the PTS correctly, there are remedial actions  
18 that would be taken.

19 Q. Okay, all right, that helps. Back to me trying to be an air  
20 boss here, if I had -- my best buddy was an evaluator, can they be  
21 an evaluator for me or is there any requirement that no, family  
22 and friends kind of need to stay at arm's length?

23 A. Yes. I'm sorry, the answer to your question was not yes, I  
24 was saying yes, there is a -- we have a strict code of ethics and  
25 a conflict of interest clause within the manual that says that you

1 can't evaluate people that are family or I think it's close  
2 business associates or -- there is a very strong conflict of  
3 interest clause in the manual and I can -- I know it's there, but  
4 it's -- the language says that even a perceived conflict of  
5 interest should be avoided, so -- and then I, Dan, as the vice  
6 president of safety and operations, am the final arbiter and my  
7 instruction is to err on the side of no in the event that someone  
8 asks for a potential conflict of interest.

9 Q. I know you used the word avoided but not prohibited, so it's  
10 -- I understand ethics are ethics and they're only as good as the  
11 person's ethics.

12 A. It's prohibited. Yeah, it's prohibited.

13 Q. Okay, okay.

14 A. I'm sorry. It is firmly prohibited. I must have said avoid  
15 to -- I think it said avoid, that the instruction is that you  
16 should avoid even the perception --

17 Q. Okay.

18 A. -- of a conflict of interest.

19 Q. Okay. And you might've come across that way and it didn't  
20 click in my brain, so my apologies, but I'm glad for the  
21 clarification. Okay. Now, I know you also said that -- I'm still  
22 going backwards here a little bit, that there's a test that I have  
23 to score a 75 on, I think you said multiple choice, it's not an  
24 essay or anything like that, kind of like a -- I'm going to call  
25 it the standard FAA type test, I assume?

1 A. It is.

2 Q. Okay.

3 A. But it's not.

4 Q. But your guys' test, right, it's not an FAA test.

5 A. That's correct, yes, sir.

6 Q. Okay. How many questions is that test, approximately?

7 A. I think -- so it's probably -- I think there are about a  
8 hundred and 10 questions in the test, but there are multiple --  
9 one of the safeguards we put in from just having the answer key  
10 out there was to -- I think there's seven or eight topics, you  
11 know, phraseology, FAA policy, air show operations, and in those  
12 categories there are a select -- we'll say there's 10 questions in  
13 each category and the algorithm for the test only pulls seven from  
14 each of those so that the seven that you get might be different  
15 than the seven that Sabrina gets so that you can't say hey,  
16 Sabrina, the answer to number 15 is A because her 15 might be  
17 different, it's -- I've taken enough Scantron tests in my younger  
18 days to know that that's an effective way to curb any potential  
19 conflicts.

20 Q. And there'd be no financial reason why I wouldn't let Sabrina  
21 have -- no, just kidding.

22 (Laughter.)

23 MR. HOLLOWELL: It's conflict of interest, Shawn.

24 BY MR. ETCHER:

25 Q. Yeah, that's why I said there's no financial reason. No.



1 Okay. And I know it's probably a test that's out there, but is  
2 there any way we could get a sample of what that test would be  
3 like?

4 A. Absolutely.

5 Q. Okay. And if you need to stamp it, whatever, feel free, but  
6 just so we can kind of understand how it's laid out, the  
7 questions. I can visualize it, taking pilot tests for way too  
8 many times in my career, but, you know, things have changed, also,  
9 since those eras.

10 A. You got it.

11 Q. Thank you. Now, we've kind of gotten through how to become  
12 an air boss. In my brain, a little bit, I may have more questions  
13 later but you definitely filled in a bunch of huge blanks. Let's  
14 start talking a little bit about air shows, if you will. Now, do  
15 you guys, as ICAS, oversee air shows at all or is it just you guys  
16 are kind of the performers and the air bosses, it's all you guys  
17 look at and you don't even look at specific air shows?

18 A. So there's a lot in that question.

19 Q. There was, so take it piece by piece, you can break it down,  
20 whatever you need.

21 A. So we are not involved directly with any air show. We have  
22 many -- many of our members are air shows or people that put on  
23 air shows, so for example, EAA Oshkosh is a member, SUN 'n FUN is  
24 a member, Chicago Air and Water is a member, and in that regard,  
25 we have a vested interest in the success of our members, and one

1 of the ways that we do that is we advocate for safety and we  
2 advocate for best practices and we advocate for a myriad of rising  
3 tide results (indiscernible), and that's our principle role within  
4 -- or as an industry organization, is to foster a successful  
5 industry so that everybody's better in it and one of those -- one  
6 of the aspects that we feel is critical is safety, which is what I  
7 do.

8       So we don't have anything to do with the specifics of any  
9 individual air show; we do work with air shows to ensure that they  
10 know how to properly request all of the information that they need  
11 from the FAA, the DoD, to request the Blue Angels and to get  
12 support and all sorts of different aspects.

13       So we try to provide multiple avenues to increase the success  
14 of any individual air show, but we do not have any direct ties to  
15 the operations of any air show. I feel like I half-answered half  
16 of your question.

17 Q. No, you actually filled in a lot of that question. And  
18 there's a little -- there's a few, maybe not, but we can go  
19 through those as I'm walking through this, that way it will be  
20 easier on my brain later, how's that? And hopefully --

21 A. That would be great.

22 Q. -- we'll cover it, as well. So you have a vested interest in  
23 your members in doing their air shows and everything. I know  
24 there's always, I'm going to call it checks and balances to keep  
25 things safe, you know, I assume part of the vested interest for

1 your members is safety of an air show. I know you guys had like a  
2 -- you know, like a statement in your manual about safety first  
3 and all that, but if I was at an air show, is there -- but I saw  
4 something, whether I was a performer, an air boss, anybody, I  
5 don't know, is there a way, if I saw something that I felt man,  
6 that was kind of unsafe or to me, yeah, that looked kind of cool  
7 but very dangerous, is there any means for me to voice that to you  
8 guys or to whomever, who would I go voice that to?

9 A. There are multiple means that you'd go to do that. We have a  
10 confidential reporting system, it's called ICARUS, it's the ICAS -  
11 - it's a bad, bad -- it barely fits, but it's a confidential  
12 reporting system. And in that, it's an anonymous system that if  
13 you, Shawn, as a member of ICAS, see something at an air show and  
14 you say boy, that's crazy or I don't understand that, you can  
15 submit an ICARUS report and it's an online form that you fill out,  
16 just like a NASA form that pilots can fill -- or it was the NASA  
17 form back when I was a full-time pilot.

18 I'm not sure if Leidos took it over or not, but it goes to a  
19 third party that we don't see and that third party scrubs it of  
20 any identifying information, and then that's sent to us to make a  
21 safety analysis on and to say where there's -- it just creates  
22 data points so that we can monitor trends or to take specific  
23 action if there is a safety issue specific to a certain event.  
24 That's the first. The second is we have an open reporting system  
25 where air show pilots or performers or anyone can call me and

1 manifest or declare that they saw something that they thought is  
2 unsafe and then I have a prescribed policy that I have to follow  
3 to do an investigation to see what was done, what -- figure out  
4 what happened. And what, if anything, was the safety concern and  
5 then what, if anything, we need to do as an industry to correct  
6 that concern and that's a more direct system and in that system  
7 there's a lot more direct involvement between ICAS staff and the  
8 person that raised the issue and the person responsible for the  
9 issue.

10       You know, if there was an air show pilot that flew over the  
11 crowd when they're not allowed to, then I deal pretty directly  
12 with all those parties that are involved. So yes, there are --  
13 there's two options, the public option and the confidential  
14 option.

15 Q.    Okay. And I'm sure you can probably guess my next question  
16 is how do people know that these options exist? Is it published,  
17 is it -- do your members, do they have a card that says hey, if  
18 you got a problem, call me or how does that get out there?

19 A.    So we do -- we have several bimonthly communication venues to  
20 our members, we send e-mails where we update them about things  
21 that are going on within the industry as a whole or within safety  
22 and operations in general, and one of the -- one of the takeaways  
23 that I had in, roughly, December of last year was that there -- a  
24 lot of our members were unaware that the ICARUS system existed,  
25 which I went through our communications over the last decade and a

1 half, and I'd send it out, we, ICAS, had sent out notification  
2 about hey, if you have any issues, go here to fill out a  
3 confidential report, we did that like 20-something times over the  
4 last decade and a half and people were still unaware that it  
5 existed, which I'm sure the communications department at the NTSB  
6 would understand the frustration that occurs when you tell  
7 somebody something 20 times and they still don't know it.

8 But the other is -- the non-confidential option is part of  
9 the ICAS pilot/staff handbook that I operate under and that's  
10 something that the -- our leadership, both the president of ICAS  
11 and the board of directors, have implemented to ensure that that's  
12 happened so the membership is aware, both from the direction from  
13 its board of directors, as well as having seen the results of the  
14 direct investigations that I've conducted over the last 15 years,  
15 so there's -- there's wide knowledge that if you do something  
16 wrong, you get a call from Dan.

17 Q. Okay. So if you could, could you give me kind of a ballpark,  
18 if you will, in the last -- you choose the selection of time,  
19 year, 5 years, whatever, how many ICARUS reports have you gotten  
20 or -- and/or phone calls on safety events?

21 A. So if I could diverge for a quick story, when we did this,  
22 when we started the safety program in 2008, the chairman of our  
23 safety committee was actually -- he said that we -- his  
24 organization had just gone through a similar effort to increase  
25 safety management, to adopt policies of SMS within the

1 organization. Obviously, as a volunteer organization, we are not  
2 Delta, we cannot fire pilots that don't adhere to the tenets of  
3 SMS, so we had to kind of adopt tenets as opposed to whole --  
4 whole cloth SMS. So he said well, if you develop a confidential  
5 reporting system, that would be great, but what's going to end up  
6 happening is that everyone's just going to call you directly,  
7 which is the exact -- which is what happened in his organization,  
8 and he said if you tell people that you are interested in hearing  
9 about the issues, they want to tell you about them anyway, so all  
10 that to say we've probably gotten -- to answer your question now,  
11 specifically, we've gotten maybe 10 ICARUS reports in the last 15  
12 years and phone calls in the last 2 years, I've probably taken 60.

13 So it illustrates his point, that we take -- you know,  
14 sometimes it's a nonissue, someone says hey, I -- the crosswind  
15 was bad and I grounded my airplane on taxi, which is a concern,  
16 but it's not a major concern for as many tailwheel operations as  
17 there are, and that would count as one of those 60, but it would  
18 not result in significant action from ICAS toward anybody.

19 Q. Okay. So let's talk about the ICARUS reports for just a  
20 moment. I know you said you got about 10 reports in the last 15  
21 years, give or take, and I assume ICARUS is available to all  
22 members and nonmembers or is it just to members?

23 A. It's known to all members and it is not publicized to  
24 nonmembers. How do I -- I believe it would be flooded if we  
25 opened it up to the general public with a myriad of issues. We

1 see plenty of concerns every time the Blue Angels are in Seattle,  
2 that they think that the world is at an end and that the F-18s are  
3 flying ground cover and we just don't have the bandwidth to  
4 support that.

5 Q. Valid, I get that. Yeah. It would not help you guys. But  
6 like, if I was an air boss but I wasn't an ICAS member, is there a  
7 mechanism for me to access ICARUS if I'm like oh my word, this  
8 group of pilots --

9 A. Absolutely.

10 Q. -- did something, how would I know that?

11 A. It's expected that your evaluator would encourage you to make  
12 yourself available in all of those avenues. It's in one of the  
13 multiple choice questions, I believe, in the exam. It's an open  
14 book exam, so it says what is an ICRUS report or something like  
15 that, which would require the person to familiarize themselves  
16 with that.

17 And there would be just a general -- I think there is enough  
18 understanding -- well, not as much as I would like, but there is  
19 wide acknowledgement that we have a confidential program. But at  
20 the end of the day, they would -- if an air boss saw something,  
21 that was not a member, they would still call us to inform us and  
22 we've had it happen multiple times.

23 Q. Okay. All righty. And just my last little branch of  
24 questions here, I'll have more, but you've got to be getting tired  
25 of talking to me, and Sabrina really asks the good questions, and

1 then I can sit back and just absorb her knowledge and yours at the  
2 same time. Of those 10 reports, can you give me kind of a  
3 ballpark of what they were -- safety concerns they were bringing  
4 up and how you guys -- how it was addressed? I know it's  
5 confidential, so please don't break that confidentiality.

6 A. Yeah.

7 Q. Just kind of help us understand.

8 A. Well, the good news is when they get to me they are no longer  
9 -- the third party scrubs them of information that -- identifying  
10 information, so it's, you know, people that had mechanical issues  
11 on their airplane during a flight, it's people that -- there were  
12 pilots that saw another pilot executing maneuvers lower than they  
13 thought they should and it's mostly -- most of the submissions I  
14 would characterize as performer-based concerns as opposed to --  
15 performer-to-performer concerns as opposed to air boss squawks or  
16 squawks about an air boss.

17 Q. Okay. But how do you address those concerns? It's  
18 confidential, so you can't go back to me and say Shawn, here's  
19 what we did to fix your concern, how do you guys address that?

20 A. We do it through education, primarily, and so if we get a  
21 report that most air show pilots -- yeah, most air show pilots  
22 have to fly aerobatics 500 feet away from any spectator, there's a  
23 500-foot crowd line that is arbitrarily set, in some cases, away  
24 from the crowd and they can fly no closer than that. So if we get  
25 a report that a pilot flew at 450 feet or 400 feet, we would put



1 out an education piece on why we have a 500-foot line, what the  
2 importance is, why we -- you know, the spectator safety is why  
3 there is a 500-foot line and we'd go into the details of  
4 highlighting the importance of that so that more people would be  
5 aware and looking for any issues like that in the future, but it's  
6 -- it would be strictly through education.

7 Q. Okay.

8 A. Through our educational -- it's not periodicals, but e-mail,  
9 newsletters and whatnot that we do.

10 MR. ETCHER: All right, perfect. I know we've been going  
11 just about an hour, do you need a break or anything, you doing  
12 okay?

13 MR. HOLLOWELL: I'm doing great.

14 MR. ETCHER: All right. I'm going to let Sabrina ask  
15 questions and that way it gives me a chance to go through my list  
16 because I know you filled in a lot of my blanks, but there's  
17 probably a question or two in here. And I didn't tell you early  
18 on, we usually do two rounds because Sabrina asks really smart  
19 questions but then sometimes I have to ask follow-on questions to  
20 dumb it down to my level, so we do two rounds just to kind of  
21 catch all that up. But I'm going to let Sabrina take over and ask  
22 away. And thank you so much, so far. My brain's got to absorb it  
23 all, so hopefully, it will.

24 MR. HOLLOWELL: Good.

25 BY DR. WOODS:

1 Q. Yeah, this has been great so far, thank you again for some of  
2 the repetition because there's things that you've been talking  
3 about, I'm like oh, yeah, I remember that, but again, like I  
4 didn't really write stuff down very well, so it's great that we're  
5 capturing it. I'm going to bounce around a bit because there were  
6 questions that Shawn had brought up that kind of -- you know, I  
7 thought of follow-on questions.

8 So the first is going all the way back to ICAS puts out this  
9 -- the ABRP, I know in the state that is now, it's fairly new, but  
10 then you have that manual that goes with that. So what is the  
11 expectation for your members, are -- in order to be members, are  
12 they allowed to add additional things onto what that manual  
13 already dictates?

14 A. If I understand your correction -- your correction, I'm  
15 sorry. Maybe I do need some water. If I understand your question  
16 correctly, then no, they are not. The manual is the manual and  
17 the rules that it contains are the rules. They can make  
18 amendments, proposed amendments to change the manual and there's a  
19 policy that we -- or a subsection of the manual, I believe, that  
20 says what it takes to make changes to the manual, but under the  
21 current manual, we operate strictly from what is in the manual and  
22 not adding or subtracting anything from it unless it's specified  
23 that it's an optional component of the manual.

24 Q. Okay, so I'm assuming then if they can't add to it, like for  
25 instance, you know, I'm Organization X, Air Show Organization X,

1 and I am an ICAS member and I have this manual and I can't produce  
2 a -- like a GOM, for a lack of a better word, just for  
3 Organization X that says in addition to what that manual says,  
4 we're going to do all these other things.

5 A. You can absolutely do that to -- you know, if Oshkosh wanted  
6 to, say, in addition to what's in the air boss, the ICAS air boss  
7 manual, we want our air bosses to have a non-compete or any other  
8 number of things, that would be something that they can do but  
9 that we would have no part in approving or allowing because it's  
10 outside of the scope of what's in our manual.

11 So if Oshkosh, for example, again, wanted to go to the FAA  
12 and say the ICAS manual is okay, we've got another manual that we  
13 would like you to consider and they wanted to operate and do the  
14 program themselves and they wanted to take our manual and add five  
15 chapters to it on additional operations, they could do that.

16 It would require the FAA's approval as a recognized industry  
17 organization, but again, I'm 98 percent confident that there are  
18 no other organizations that have even submitted an -- or a program  
19 to the FAA.

20 Q. If that were to happen, do they have to come back through  
21 ICAS first before they would go to the FAA or are you involved in  
22 that?

23 A. No. Yeah, so it would be -- I'd probably get in trouble  
24 trying to make analogies, but if Delta -- if Delta has a flight  
25 operations manual for how their pilots are, United does not need

1 the same exact thing. They may need to get approval from Flight  
2 Standards to have a code of conduct for their pilots, but each --  
3 Delta doesn't have the -- are unconcerned with what United does.  
4 So if another organization were to submit an air boss manual,  
5 honestly, I think it would be great because it would allow us to  
6 kind of expand our minds a little bit, but no, there would be  
7 nothing that would require ICAS's involvement, it's strictly with  
8 the FAA to say this meets the components of what we require and we  
9 find it acceptable.

10 I would beg and plead to be a part of that so that we can  
11 absorb all of the potential changes into our own program that we,  
12 for one reason or other, don't have.

13 Q. So how often does your program/manual come up for review?

14 A. It's ever changing. It can come -- it can be up for review  
15 at any time. I believe the -- it requires amendments to be  
16 proposed and then there's a specific process by which it has to go  
17 through to get those amendments adopted into the manual.

18 And we're currently working through a revision on it now,  
19 it's a pretty laborious and lengthy process because you have to  
20 get input from so many different elements, and they consider that  
21 input and it's volunteer-driven, not -- it's not a -- it's not as  
22 simple as a 121 operation. So to answer your question, I'm sorry,  
23 once in the -- since it's been implemented in 2018 and '19, we are  
24 currently undergoing our first revision of the program, just  
25 because we've only really had one full cycle, the air boss letter

1 of authorization is good for 3 years, so we just came up for -- or  
2 the people that were the first through the door just went through  
3 the renewal process, so we've not really had a full -- we just  
4 completed our first full cycle of the program in December of last  
5 year, so we've learned a lot and there's a lot that we want to  
6 correct, but it's an intensive process.

7 Q. So when this full revision happens or if there's addendums  
8 that have been approved and added on, how does that information  
9 get pushed out to your members?

10 A. So the first step would be -- so again, the process is in our  
11 manual, so if I misspeak it is not out of malice, it's out of  
12 being on the spot and -- anyhow. So the proposed amendments, we  
13 -- the air boss committee will say okay, let's -- we've got this  
14 amendment, we want to change this, and they'll make that change  
15 and then put it out to the membership through our -- through our  
16 educational e-mail blast and say hey, we're updating this.

17 And we send it to our membership via e-mail and say these are  
18 the proposed changes, what do you think, let us know, and you've  
19 got a hundred and 20 days or 90 days to respond, then we take  
20 those considerations and it's like proposed rulemaking, it's --  
21 you get feedback, you absorb it, you digest it, put it back in,  
22 send it back out for a reduced amount of time, and then once  
23 everyone is comfortable with it, then it goes to our board of  
24 directors for approval and then eventually to the FAA for  
25 acceptance.

1           So eventually everybody's sick of seeing all of the proposed  
2 changes and it eventually goes to the FAA for approval. And we  
3 communicate with the FAA pretty frequently to let them know what  
4 the changes are and they can give us feedback if they have any on  
5 effectiveness of changes or anything that they would like to tweak  
6 in the program.

7 Q.    Okay. So for that many -- I'm going to call it NPRM session  
8 that you have to go through when you solicit that feedback, is  
9 there a percentage of your members that have to respond or if  
10 there is --

11 A.    There is not.

12 Q.    -- a time, it's on them, you missed your window?

13 A.    Yes. But there is recourse, you know, if you miss the chance  
14 to respond, we can still work, you can still say hey, this -- I  
15 didn't have -- there are allowances to add, you know, you can just  
16 add another amendment.

17           And if it's not -- if it's I think it should be three instead  
18 of two, there's not as much back and forth that needs to occur,  
19 and the timeline can be shrunk, if that's the -- if it's a small  
20 detail or whatnot, then we can make it happen a little bit  
21 quicker. But at the same time, it's kind of like a proposed  
22 rulemaking, if you miss your window on the main, on the main  
23 attack, then you should've been paying attention during the main  
24 attack.

25 Q.    Understood. You said earlier that ICAS recommends air bosses

1 for the FAA to then approve the LOA. Do you have that same level  
2 of input on the removal of an LOA, if you were --

3 A. We do.

4 Q. -- hearing from the field that hey --

5 A. We do.

6 Q. -- somebody's not performing -- okay. Can you give me like a  
7 high level -- what does that look like, what happens there?

8 A. So if there's an air -- the FAA policy and our manual both  
9 say that if there is an incident or an accident at an air show  
10 that we conduct, overview, which is what I -- when we talked about  
11 the confidential report versus the actual investigation that I do,  
12 I -- it's a mechanical decision as soon as there's an accident or  
13 an incident at an air show that I do a higher-level investigation,  
14 a more in-depth investigation into the accident.

15 And if it's found, during the course of that, that the air  
16 boss was deficient in some way, then it is both within the ICAS  
17 policy and the FAA policy to require some sort of remedial action  
18 be taken on that air boss. Whether it's additional training or  
19 rescission of the LOA in its entirety or requiring a completely  
20 new reevaluation, there's a wide gambit of -- gamut of options  
21 available based on the severity of the issue identified.

22 Q. That relationship that you -- that ICAS has with the FAA, I  
23 guess, how would you describe the nature of that relationship, are  
24 you -- because in my head, I'm picturing it like you guys are kind  
25 of the DPE of air bosses for the FAA, but I'm not sure that's

1 accurate, so how would you describe that relationship?

2 A. I would describe it -- I would say it's -- it's -- honestly,  
3 I'm not sure how I would describe it. You know, we take their  
4 input when we -- when we're looking for information and I think,  
5 you know, to make changes or to better the industry, and they take  
6 some input from us when they're updating their rules and policies  
7 based on data that we can provide them.

8 I think that the people at the -- it's AFS-800 in the FAA, we  
9 meet with them once a quarter, maybe, and they -- you know, we  
10 work well together, I'd say, but it's certainly a -- it's as good  
11 of a relationship as anyone has with the FAA.

12 He said with sarcasm, for the transcript.

13 (Laughter.)

14 BY DR. WOODS:

15 Q. So then let me rephrase, when you put out information, when  
16 you engage with the members of ICAS, do you feel like you were  
17 doing so with the authority of the FAA behind you?

18 A. Yes. In regard to the programs that we administer, with the  
19 ACE program and with the air boss program. I feel that the FAA  
20 does -- relies on the subject matter experts that we have in the  
21 industry to provide them with objective feedback on issues that,  
22 frankly, the FAA does not -- does not have the same level of  
23 familiarity as they would with the 121 operations. It's not a  
24 standard role of aviation that any member of the FAA would be  
25 familiar with, it's a pretty niche area that, while complicated,



1 is not something that most aviators are familiar with.

2 Q. Okay. Thank you for that. Going back to communication with  
3 the members, I know you said that there's, you know, a bimonthly  
4 newsletter, what other forms of communication to teach and educate  
5 and just share experiences does ICAS have?

6 A. The biggest venue for that is our annual convention that we  
7 hold generally at the end of the season for the last -- as long as  
8 I've been here, it's the -- we go to whichever convention center  
9 hosts us, but it's been Las Vegas for the last 15 years, at least,  
10 they used to go to Dallas or whatnot and getting a hotel and hold  
11 education sessions and social networking opportunities to, you  
12 know, meet each other, and we have an exhibit hall in which  
13 performers will exhibit their wares and the air shows can walk  
14 around, talk to them and hire air shows for the upcoming year.

15 But at that venue we probably -- at the convention we offer  
16 anywhere between 75 and a hundred and 30 education -- various  
17 types of education sessions for our members covering a very  
18 diverse quantity of or array of education topics, whether it's how  
19 to park cars appropriately at air shows versus how to, you know,  
20 have an air show at an Air Force open house, how to -- how to be  
21 an air boss, how to -- you know, just a wide array of subject  
22 matter that encompass an air show.

23 Q. Who's usually responsible for providing those presentations,  
24 are you pulling from industry at all or is it just ICAS has to  
25 absorb all of that?

1 A. So it is a responsibility of ICAS staff, including myself and  
2 the other full-time employees of ICAS, to develop that education  
3 slate. The topics that are covered are delivered and presented,  
4 in most cases, by industry professionals that have been -- you  
5 know, if someone has been putting on an air show in Columbus, Ohio  
6 for 20 years they have a pretty good idea on how to satisfy X need  
7 and we will invite them to come to the convention.

8 They're going to be at the convention, anyhow, but we --  
9 we'll give them 50 minutes to talk about how -- how air shows can  
10 go about satisfying X most effectively and that's, again, as  
11 diverse as the -- the membership. You know, it can be air boss  
12 topics, it can be air show pilot topics and air show mechanic  
13 topics, it's a -- it's a very, very diverse membership, it's not  
14 -- it's not the typical association that has only one, one  
15 profession in its membership, it's a very -- it's an industry, so  
16 it's much more horizontal than vertical.

17 Q. So what informs what you're going to talk about at that  
18 convention or that conference, sorry, how are you picking and  
19 choosing your topics, what helps to inform that throughout the  
20 year?

21 A. A myriad of things. We have -- you know, we'll take issues  
22 that have been raised to us directly or confidentially or  
23 indirectly, we'll -- you know, the collective experience of the  
24 ICAS staff is -- its 45 years of air show, experience within the  
25 air show industry, so we have a pretty good understanding of what

1 issues are the hot button issues of the day to -- that the  
2 membership needs. We also do use surveys to see what kind of  
3 issues people are having at air shows across the country, whether  
4 it's performer issues or organizer issues or air boss issues, and  
5 we use that data to help guide our lineup, so to speak, of  
6 education sessions.

7 Q. I've read through the manual but I might have missed it  
8 because it was more of a skim, really. Is there anything in the  
9 manual that dictates -- I know there's a lot there on how to  
10 become an air boss, these are the processes you have to walk  
11 through, but there's a lot in there that you're being trained by  
12 an individual, you're being evaluated by an individual.

13 What I didn't see on my read was how you actually conduct an  
14 air show. So (1), I guess, correct me if I'm wrong, and if that's  
15 in there, then I apologize, and (2), if it isn't in there, then  
16 who provides that information?

17 A. There is information within the FAA's policy on what the role  
18 of an air boss is and that is how you -- that's the basis by which  
19 we expect our air bosses to operate. Again, I think it's Volume  
20 3, Chapter 6, Section 1 of 8900.1, that talks about the role of an  
21 air boss and that is -- that's the part that we go back to.

22 Q. Okay, I'll have to read through that a bit again, but I have  
23 read key portions of the 8900 and again, it seems like the role of  
24 an air boss, you know, is to conduct a safe air show, this, that,  
25 and the other, but what I have found that's missing is the "this

1 is how you do it," you do it by having these aircraft, dissimilar  
2 or otherwise, this, that, and the other, that's the part where I  
3 can't seem to find that information. Does that information exist?

4 A. I'm not sure if it does and the reason that -- it may, but  
5 the -- no two air shows are similar and so a lot of what we --  
6 what the role of an air boss is, is to take subjective information  
7 and to implement it into a -- into a real-time action. So the air  
8 show in Leesburg, Virginia is -- is very different than the air  
9 show at SUN 'n FUN for a myriad of factors and there could be bad  
10 weather one day, you know, so there's just so many different  
11 variables that the -- if you get into the mechanics of how it can  
12 deteriorate from the artistic creativity or safety experience of  
13 an air boss to say okay, this is happening, I need to modify it by  
14 doing something else.

15 So no, I don't believe there is, but I'd have to check, but  
16 if there's not, it's due to the vast array of possibilities from  
17 one air show to the next and from one day to the next at an air  
18 show.

19 Q. What about the pre-brief that happens prior to every air  
20 show, is there anything that you're aware of that essentially  
21 tells an individual this is how a pre-brief should be conducted  
22 and these are the components that should be covered in the  
23 pre-brief?

24 A. That is definitely in both 8900.1 and I believe we have a  
25 checklist and -- on our website that says the FAA requires that

1 you talk about 42 different items in the briefing and again, some  
2 air bosses can just go -- it's not 42, but if they go 1 through 42  
3 it will take them 15 minutes to read through the items or some  
4 have, you know, a PowerPoint. The presentation technique is  
5 variable for how that information is given to those that are  
6 performing, but the FAA is there on site to ensure that those --  
7 those bits of information are covered and delivered to the  
8 performing pilots.

9 Q. And you said that you think it's in that same chapter and  
10 volume of the 8900?

11 A. Yes, ma'am. And if you'd like, I can try to pull it up,  
12 unless you're --

13 Q. I have a copy of it, I'll go --

14 A. Okay.

15 Q. -- diving for it.

16 A. Yeah.

17 Q. Thank you for that. And if you do, in your interim, like,  
18 find and can shoot an e-mail, it would be appreciated, but --

19 A. That, just for your SA and reference, I'm certain that that  
20 is in Volume 3, Chapter 6, Section 1. Which is only a hundred and  
21 32 pages, so --

22 DR. WOODS: Yeah. All right, thank you for that. I think  
23 that's all I have right now.

24 Shawn, I'll punt it back to you.

25 MR. ETCHER: All righty, thanks much.

1 Are you doing okay, Dan? Second round is quicker.

2 MR. HOLLOWELL: Yeah. I'm just going to go fill up my water,  
3 if that's all right. For you, it's --

4 MR. ETCHER: Absolutely, let me put us on pause real quick.

5 (Off the record 10:28 a.m.)

6 (On the record 10:33 a.m.)

7 MR. ETCHER: Back on the record at 10:33 Central time.

8 Dan, thank you so much again for everything you've given us  
9 so far. I have a few questions, just kind of follow up, some I  
10 realized I didn't ask in the first round and some were added as --  
11 you mentioned something to Sabrina I just need a little  
12 clarification on some of that, maybe.

13 BY MR. ETCHER:

14 Q. The first thing, and I totally forgot to ask in my round was  
15 to be an air boss does ICAS require me, if I was going for an air  
16 boss, to be any kind of certificate, like FAA pilot's certificate,  
17 controller, anything?

18 A. Negative.

19 Q. Okay. So anybody could, I don't want to say walk in off the  
20 street and become an air boss, but in theory, after they go  
21 through the whole process, they don't really have any needs to  
22 have FAA certs?

23 A. FAA certs, no. There are aspects of aviation that are  
24 expected, you know, that would be covered in the written exam that  
25 would presume that you have familiarity with aviation terminology

1 and air show terminology and policy and practices, but there is  
2 not a specific FAA certification that is required, whether it's  
3 ATC or a pilot's license or whatnot that are required to be an air  
4 boss.

5 Q. Okay. In your experience, in your role, have you seen those  
6 being beneficial, you know, like oh, controllers come through, it  
7 makes it a lot easier for them or pilots, it's a lot easier for  
8 them or yeah, they're just like anybody else coming in off the  
9 street, it's kind of an equal playing field?

10 A. I would say if I had -- as a purely subjective analysis,  
11 which is worth as much as you're currently paying for it, I would  
12 say that I think the pilots have a better understanding of -- they  
13 more seamlessly transition into an air boss just due to the  
14 spatial awareness that you get as a pilot, that understanding of  
15 where aircraft are in the air in relation to you, I think that  
16 that -- I've seen that helpful to some air bosses, but I wouldn't  
17 say that that's quantifiable in any way.

18 Q. Okay, all right. It was just more curiosity, so I appreciate  
19 that. I know Sabrina talked about your air boss recognition  
20 program or the ABRP, I believe. Sorry, more acronyms, I'm sure  
21 the transcriptionists just love us for that. But I do remember  
22 seeing there was a quote in there, something to the effect that an  
23 air boss must be able to prepare and present a quality daily air  
24 show safety briefing. So I might define quality a lot different  
25 than Sabrina, who's a perfectionist, versus you, who is almost a

1 perfectionist, so how do you define a quality presentation?

2 A. I would say a quality presentation is a presentation that  
3 meets the requirements within the FAA order that is conditional to  
4 receiving the waiver from the FARs that allow the air show to  
5 occur. So that list of, I think I guessed, the 42 items that I  
6 was talking to Sabrina about just a minute ago, a hundred percent  
7 completion would be a quality briefing.

8 Q. Okay.

9 A. And a 99 percent completion would be a "not quality"  
10 briefing.

11 Q. Okay.

12 A. Deficient, it would be a deficient briefing.

13 Q. Okay. No, and that's why I asked because I -- I just want to  
14 make sure I understand what a quality briefing is, so that's  
15 great, thank you. But what checks are in place to make sure that  
16 that has occurred? I know you said the FAA is at the briefing, is  
17 that the only checks or is there other checks like you guys have  
18 in place to help with that?

19 A. We do not have a check specifically to the -- to the air boss  
20 briefing, that is something that is -- it's a requirement of the  
21 FAA inspector that is there, it is a condition to waive the FARs  
22 that are being waived so that the aviation event can occur, so it  
23 is very strictly the FAA inspector's role to ensure that the  
24 briefing is adequate and thorough and meets the requirements of  
25 the waiver. So, because it is such a hard set rule within the FAA



1 guidance, it is not something that we -- we have anything to do  
2 with. We do provide training opportunities so that people that  
3 are looking, you know, at our convention or online or through our  
4 e-mail education information on what is required in a safe -- or  
5 in a complete briefing, what the FAA says is required, what you --  
6 how to deliver it in an effective or more retainable way, but on  
7 the substance of the matter, we do not have any input because it  
8 is a hard, hard FAA item.

9 Q. Okay. Have you ever heard of a briefing being, I'll use your  
10 phrase, "deficient", hitting that -- only that 99 percent?

11 A. Yes. Yes, I have.

12 Q. Okay. And I know it's an FAA --

13 A. Prior to our adoption of this program.

14 Q. Okay.

15 A. So before I -- before I had recourse to provide corrective  
16 action, I had heard of it and that -- that would just involve  
17 unenforceable conversations from me to the air boss.

18 Q. Okay.

19 A. But now, because this is a -- now, like Sabrina was saying,  
20 now that we have the weight of the FAA behind us, there -- those  
21 conversations take on a different meaning.

22 Q. Okay. In your experience, has there been a presentation  
23 medium that's -- or technique that's been better than others? I  
24 know you said some use PowerPoints, I don't know, maybe some  
25 produce pamphlets or, you know, whatever. Is there one that works

1 better, worse, are they all kind of eh, just kind of depends?

2 A. I would probably be the wrong person to answer the better  
3 aspect, I would defer to air show pilots to see what they would  
4 determine would be the best. I would say that technology has  
5 certainly improved things, that between -- you know, when I first  
6 came to ICAS, they were still -- there were still the overhead  
7 projectors, not the LCD projectors, but the one that had the light  
8 and the mirror on top, then they would just put the transparencies  
9 on top of the airport chart and they would draw with wet erase  
10 markers on the transparency.

11 So PowerPoint has certainly been an improvement on the clear  
12 communication of that information, it's a lot easier to see things  
13 with Google Earth and whatnot so that you can understand what  
14 certain markers are from an aerial standpoint. So I would say  
15 that, again, I defer to the "best" to people that routinely rely  
16 on that information, but I would certainly say that PowerPoint and  
17 the various improvements in technology have helped deliver that  
18 information.

19 Q. Okay. No, and I appreciate that, yeah, we can definitely  
20 have some pilots answer it for us, I just wasn't sure if you guys  
21 have gotten feedback, everybody's like oh, yes, the overhead  
22 projector with the wet eraser's the best way ever or, you know, I  
23 just wasn't sure, so --

24 A. I would say categorically, I've never heard anyone say that  
25 until now.

1 Q. I know I wouldn't, but I can't believe I just did, so yeah.

2 All right.

3 A. It's how I learned calculus, so that's --

4 (Laughter.)

5 BY MR. ETCHER:

6 Q. Thank goodness times have changed. Perfect. How scripted  
7 does ICAS, or do you guys even request air shows to be scripted  
8 from air bosses' point of view, like do you guys have any guidance  
9 to air bosses to say, you know, you need to lay out, you know,  
10 Group A, you're going to come across at this point and you're  
11 going to do this?

12 Do you guys have any guidance to air bosses or is it just  
13 kind of they produce their own show and they can adjust on the fly  
14 and make things up on the fly, do you guys have any guidance on  
15 that?

16 A. We did not.

17 Q. Okay, that's past tense. Do you now, then, I guess?

18 A. We do, yeah. So in our internal review of the accident in  
19 Dallas, we said that we needed to include more information in our  
20 education. We offer a training course for upcoming air bosses,  
21 which is Air Boss 201, which is a prerequisite for both the  
22 standard and the recognized multi-venue or single venue air  
23 bosses, it's a 6-hour training course that talks to that, and we  
24 said we needed to -- the safety -- or the ICAS safety committee  
25 asked that they include language in there to ensure that air

1 bosses understood that the -- that the show should be able to  
2 proceed safely from one act to the next if there was a catastrophe  
3 on the -- if the air boss fell off the stand or the microphone  
4 stopped working, that the expectation is that the show would be  
5 able to proceed to its conclusion without the intervention of the  
6 air -- not the show, that the act would be able to continue to its  
7 conclusion without the air boss launching the next act.

8 Q. Okay. Perfect, that helps. During an air show, I mean --  
9 and forgive me if I'm misrepresenting this in my own brain, so  
10 that's why I'm here, hoping you'll clarify things. During an air  
11 show you have planes flying at, you know, maybe lower altitude  
12 across a runway in front of the audience and whatnot, is it  
13 something that ICAS looks at, at all, landing paying-passenger fun  
14 rides, I'll call them that, I don't know what -- if there's a  
15 technical term, during an act?

16 Is there any prohibition from you guys, is there any guidance  
17 to air bosses of hey, maybe you don't want to do that? I'm just  
18 kind of getting a better understanding.

19 A. If I can re-sum your question to make sure I understand it  
20 correctly and correct me if I'm wrong, the -- you're saying during  
21 an air show performance, can an air boss land aircraft that is  
22 carrying passengers that are not participants of the air show?

23 Q. And I'll be more specific, carrying passengers that went out  
24 on a paid fun ride. I'm not talking about an airliner coming in  
25 or anything, I know there's whole procedures for that, but you

1 know, like in Dallas, they had a steerman that came in and landed  
2 as the airplane accident occurred. But is that -- do you guys  
3 have any guidance for that, any prohibitions or anything along  
4 that line?

5 A. I believe that there are prohibitions that would be with the  
6 FAA. I believe that -- I'm not sure with how many specifics line  
7 up with the Wings Over Dallas incident, I know there were steerman  
8 landing on two, three or whatnot, but the -- with aerobatic  
9 airplanes, aircraft that are flying aerobatics in the box, there  
10 is -- that is not allowed.

11 So if Rob Holland or the Blue Angels, or the Blue Angels are  
12 a better example because they have TFR in effect, but if Rob  
13 Holland is flying at Oshkosh in the aerobatic box, they could not  
14 land a Ford Trimotor in the aerobatic box while Rob Holland is  
15 performing, that is a hard rule.

16 I don't know how that relates to the Wings Over Dallas, I'm  
17 not sure if they were flying aerobatics with the P-51s flying  
18 whatever it is, zigzags over the top of the bombers -- or the  
19 fighters, I'm sorry, flying over the top of the bombers, if they  
20 were technically aerobatic or not, but in the air show world, that  
21 is not permissible.

22 Q. If not -- and sorry for repeating something here, maybe, but  
23 it's not permissible during an aerobatic performance, but it --  
24 help me understand if it's not an aerobatic, like a low approach,  
25 you know, photo opportunity type flight, is that okay to do then?

1 A. So there are different rules that govern non-aerobatic  
2 flights and honestly, I'm -- I'm not currently -- I don't memorize  
3 them, like I wish I did before you asked that question, but --

4 Q. It's not a check ride, it's okay.

5 A. No. I'd be --

6 Q. I'm just trying to be --

7 A. So if an aircraft -- if, during an air show, an aircraft is  
8 doing non-aerobatic maneuvers, there are different FAA rules that  
9 are in place that regulate what they can do, what their bank angle  
10 is, what can happen, you know, because like at Oshkosh, when they  
11 fly 900 T-6's over the air show, there's all sorts of different  
12 things.

13 When they're doing straight and level and there's mitigating  
14 factors that they take into consideration, I'm not certain if, you  
15 know, if someone has a passenger on board if they can't break out  
16 of formation and land, I'm not certain on that, and that would be  
17 -- unless the aircraft were flying in aerobatic attitudes, then  
18 that -- I'm not clear how the steerman would relate to FAA policy  
19 during -- you know, landing during an air show.

20 Q. Okay, no worries. And my apologies, it's not a check ride.  
21 I wasn't sure ICAS had any hard-set prohibition, you know,  
22 "therefore thou shalt not land during any performance," or if you  
23 guys had any guidance along that line.

24 A. We don't have anything hard set and we don't have any  
25 guidance on it. I would say that it probably would be uncommon to

1 do that.

2 Q. Okay, all right. The air boss at the Wings Over Dallas  
3 event, since you guys do the LOAs, did you guys, I assume, do his,  
4 as well? Do you recall?

5 A. A hundred percent, yeah, I think -- I think we're still the  
6 only recognized industry organization the FAA has and we were the  
7 organization that recommended to the FAA that Russell get his  
8 evaluation, or his letter of authorization.

9 Q. And I know you walked us through the process of how you do  
10 that. During that process did you guys note any deficiencies in  
11 his training, anything that -- maybe made a note that hmm, we need  
12 to look at something a little further?

13 A. No, sir.

14 Q. Okay, perfect. I just wanted to make sure I didn't have that  
15 little open door there that I couldn't close. I just have a few  
16 last questions and then you'll be done with me and Sabrina can  
17 have any follow-ons, if she has any. I believe, during one of  
18 Sabrina's questions, you -- or maybe it was even one of mine, I  
19 don't remember, you had said that all your pilots are volunteer,  
20 you can't really fire somebody because they're all volunteers, we  
21 were talking about safety and things like that.

22 So if you can't fire somebody, how can you enforce safety?  
23 And I'm not saying firing is associated with enforcement and  
24 safety, but how can you help pilots, help air bosses stay in check  
25 and all that?

1 A. So that specific statement I think I was making in reference  
2 to the industry, as a whole, adopting the tenets of a safety  
3 management system, so we couldn't say that you must confidentially  
4 report any issue that you have, we couldn't make all sorts of  
5 mandates that a professional company or a public company would be  
6 able to make of its employees because it's a volunteer membership.

7 So as it relates to how we enforce things, it's a little bit  
8 different because we can make recommendations to the FAA and have  
9 both for air show performers and for air bosses, that their letter  
10 of authorization or their statement of aerobatic competency card  
11 be revoked or rescinded based on some sort of event that occurred  
12 that they were involved with and that's -- that's how we can most  
13 effectively effectuate safety.

14 Q. This is a really bad question, so forgive me, but have you  
15 ever had to do that?

16 A. Multiple times.

17 Q. Okay.

18 A. Since I've been administering the aerobatic competency  
19 program, I'd say we've done it 15 times, where an air show  
20 performer made some violation of some sort that required them to  
21 be reevaluated or have their statement of aerobatic competency  
22 card revoked, whole cloth. So it's -- again, with the air boss  
23 program, it's a much newer program, but the -- we have done it  
24 once.

25 Q. Okay. And when you do that, how is that, for lack of a



1 better phrase, welcomed by the FAA, do they like uh, you know, is  
2 it troublesome to do that, is it -- are they like oh --

3 A. I'd say that they trust that we have a lot of subject matter  
4 experts in the organization and that if we are alerting them that  
5 there's a safety issue that they do not flinch in adopting and  
6 accepting that, that concern, and I've -- again, I've got more  
7 experience holding people's statement of aerobatic competency card  
8 for safety violations, but I've never had pushback in the  
9 slightest.

10 Q. Okay, all right.

11 A. From the FAA.

12 Q. Okay. Do you guys have any guidance to air bosses on how  
13 they can deconflict during an air show, other airplanes, do you  
14 guys give guidance to that or is that something you just expect  
15 the air bosses to know every possible avenue they have for  
16 deconfliction?

17 A. I would say that no, we do not have guidance --

18 Q. Okay.

19 A. -- on that.

20 Q. I just wanted to make sure, perfect. The last question I  
21 have, and then I told you you'd be done with me, since the event  
22 that occurred at Wings Over Dallas, I know that's been 9 months  
23 ago, something like that. Sorry, math is -- math and my not  
24 enough coffee just don't go together for me. So since the Wings  
25 Over Dallas event, have you guys had any uptick on ICRUS reports

1 or phone calls coming in or has it been kind of the same as it was  
2 prior to Wings Over Dallas?

3 A. I would say we've had an uptick.

4 Q. Okay.

5 A. More direct reporting as opposed to confidential because they  
6 know that there's an expectation that that's a more documented  
7 process and that action must be taken when I receive a concern as  
8 opposed to informing a database to increase education on a certain  
9 topic.

10 Q. So if they pick up a phone and call you, how do you document  
11 that or is there a way for you to document it for statistics, for  
12 safety, for us, you know, how do you document that?

13 A. It's all detailed in my -- or in the policy that I'm --  
14 that's conditional of my employment, so I have a strict policy  
15 that I have to follow and communication that I get to my boss and  
16 to his -- or to the chairman of the board of directors and to the  
17 FAA, as required, and we do that any time that we have an incident  
18 or an accident that meets a certain threshold.

19 MR. ETCHER: Okay, perfect. You literally have answered  
20 every question I could come up with, so -- and you've helped me  
21 enormously, I had huge holes in my understanding and although I'm  
22 not going to say they're complete yet because my brain's still  
23 absorbing everything, you've definitely filled in a ton, so I  
24 thank you for that, but let me pass it over to Sabrina to see if  
25 she has any further questions.

1 BY DR. WOODS:

2 Q. Just one, because you mentioned it in the last -- AB-201 --

3 A. I could've gotten out of it, is what you're saying, if I  
4 didn't keep my mouth going.

5 Q. It's the teacher in me. AB-201, is that online, in  
6 residence, how does that work?

7 A. It is, up until -- it's online, to answer your question  
8 directly. I'd be more than happy to give you a copy. We are in  
9 the process of developing this year's program, it will be  
10 available next week, it's a virtual program.

11 We used to do it live, in person, in Las Vegas, but due to  
12 time constraints of the instructors and staff, it was something  
13 that we decided to do virtually because -- a myriad of reasons,  
14 but I'd be more than happy to share that course with anybody at  
15 the safety board.

16 Q. Yes, I would definitely like to get a copy of that. And  
17 then, is it asynchronous or is it like September 1st through the  
18 12th there will be this course online, take it at this time?

19 A. Yeah, it is -- the way we have it set up for this year, you  
20 know, it used to be 6 hours in Las -- in a hotel room in Las Vegas  
21 during our convention, but now it is 6 hours that you can take at  
22 your leisure, it's a little bit more like the -- the driver safety  
23 courses that people that are worse drivers than me have to take if  
24 they run too many red lights and they have to sit there and click  
25 through the test and make sure that they absorb all the

1 information before they can go forward. So it's a broad course,  
2 but there's a component that you have to actually sit through that  
3 entire course to receive a completion.

4 Q. And so once everyone is done with that, where does the --  
5 where does the information for completion rates and presumably  
6 success rates, where's that housed, does that information come to  
7 you or --

8 A. It's in our database, yes.

9 Q. So you could do an archival look-back and see what your  
10 completion rates look like, that sort of thing?

11 A. Yes, ma'am.

12 Q. Okay. And then the only other -- this is just my weird  
13 curiosity, is there an AB-101?

14 A. There is.

15 Q. Okay.

16 A. And that is -- that is -- I'm sorry, not AB, it's actually  
17 Air Shows 101, which is --

18 Q. Oh, okay.

19 A. -- which is the basics of how to put on an air show and I'm  
20 sorry, we're gearing up for our convention here, so my mind is --  
21 tends to focus strictly on ensuring that that event goes off well,  
22 so part of that is the education sessions and Air Shows 101 is one  
23 that I am responsible for ensuring. There is not an Air Boss 101,  
24 no, there is just -- for some reason the naming conventions, my  
25 apologies to all college people that have ever taken a 100 or 200

1 level course, it is -- we have Air Shows 101 and Air Boss 201 and  
2 that was just how they named it.

3 Q. Okay. And how long is the Air Shows 101, then?

4 A. It's about 8 hours and it is -- we still do that in-person in  
5 Las Vegas. Part of the -- we get about a hundred and 50 to 200  
6 people in that course versus 20 to 30 in Air Boss 201. The nature  
7 of air shows is that there are a lot of new people coming to learn  
8 how to put on an air show, especially within the military open  
9 houses because they rotate through so quickly and frequently that  
10 they -- they were flying fighter jets in Korea and all of a  
11 sudden, their wing commander, they just got reassigned, too, says  
12 "You're in charge of the open house this year," and they say, "How  
13 do I do that?"

14 Q. I'm a victim of one of those, I never got to take your class,  
15 I feel cheated.

16 A. Hey, you're more than welcome.

17 DR. WOODS: Okay. That's all I have.

18 Thank you, Shawn.

19 Thank you again, Dan.

20 MR. HOLLOWELL: Thank you, Dr. Woods.

21 MR. ETCHER: Thanks, Sabrina.

22 BY MR. ETCHER:

23 Q. I know we've asked you a ton of questions and you've given us  
24 more answers than I could ever have dreamt of, so I appreciate it,  
25 but I'm always afraid that, because of my lack of knowledge,

1 there's a question I didn't answer, or ask, that might help -- you  
2 know, you guys might think man, that might help them some. Can  
3 you think of any like that, that -- you know, if we would've asked  
4 it, it might've helped me just because I didn't know?

5 A. Yeah, it's something that has been on my mind for the last 10  
6 months, really since the accident. Investigations aside and  
7 whatnot, as a pilot myself, the first instinct that I had was why  
8 did that plane hit the other plane, did he not know that he was  
9 there, did he not get the right information, but at the end of the  
10 day, the pilot in command is the pilot in command of both  
11 aircraft, of all aircraft, that when you start the magnetos, that  
12 you are accepting responsibility for what happens in the air.

13 And I know that there is -- I know that there's a lot of  
14 questions about this accident and I also, I think that having --  
15 having the NTSB looking at this to get a thorough understanding of  
16 what caused that, that there's a lot of appropriate questions  
17 being asked.

18 But I think that it's hard to dissect the rationale of people  
19 that do not survive an accident, but I also think that that's an  
20 important aspect to review, especially as someone who works with  
21 so many air show performers that, you know, if the plan was  
22 flawed, if the sequence of events was flawed, which I'd say it  
23 was, what caused all of the pilots to accept a deficient plan and  
24 -- because I think that's the most relevant, one of the most  
25 relevant things to learn from this so that we can effectuate

1 change at other air shows so that we don't have an issue like this  
2 happen again because, you know, I want to empower performers to  
3 stand up and say wait, what are we doing here and why are we doing  
4 it, I want there to be a good challenge to those questions and to  
5 understand that when they fly at an air show it's their  
6 responsibility to not just keep their airplane safe, but to  
7 understand the responsibility and to be able to throw the safety  
8 flag if there is a -- there's an issue.

9       So I would -- I would just say that my focus, really, for the  
10 last 10 months, you know, the other -- the periphery stuff, we can  
11 figure out what people were -- what the technical information and  
12 the briefing was, what the air boss said on the radio and all that  
13 stuff, but I -- I kind of want to figure out or help us understand  
14 or to -- I want the industry to better understand why those pilots  
15 took off, took off in the airplane if they thought that the  
16 briefing was inadequate.

17       Or if they didn't know that the briefing was inadequate, if  
18 they -- if they took to the sky saying, "I think that's a good  
19 briefing," or "I think this plan is an acceptable plan," I want to  
20 be able to understand that so that we can not have that occur  
21 again.

22 Q.   And I think that's our goal. Obviously, I always say I'd  
23 love nothing more than to do myself out of a job. And this is one  
24 of those aspects that, you know, I know the Agency itself has put  
25 a lot of resources into looking at everything because, like you

1 said, those that lost their lives, we can't ask them, you know,  
2 what were you doing, so we need to look at everything else that we  
3 can and, you know, the IIC has definitely got a lot of people at  
4 this Agency involved to look at -- we're hoping, at every possible  
5 aspect, just to make it clear so moving forward this will never  
6 happen again. And, you know, the problem always is, just like  
7 anybody, we're all human and we may not know something that we  
8 don't know, so it's kind of hard for us to look down, you know,  
9 look behind the curtain at something if we don't even know that  
10 curtain exists.

11 And so that's why we're trying everything we can, that's why  
12 we're interviewing people like you and the pilots and other air  
13 bosses and the air boss involved in the event, you know, just to  
14 get all the factual information we can so then we can kind of  
15 start looking, piece by piece, puzzle piece by puzzle piece,  
16 putting it all together.

17 Will it be a complete picture? It will be better, I would  
18 never say complete because we can't talk to the pilots that were  
19 involved, but you know, aside from that, the goal is to whatever  
20 happens, whatever we find that comes out of this, that going  
21 forward, industry, like yourselves, and pilots out there will  
22 learn from it to learn to -- you're empowered, raise your hand and  
23 say hold on, no. And so, you know -- and I'm glad you're in your  
24 position that you are to get that word out, as well, I think that  
25 will -- I think going forward, I hope, going forward, that well,



1 this won't happen again. But again, we've got humans involved and  
2 I know my human abilities and Sabrina knows my human abilities  
3 and, you know, she knows that's a bad thing, so -- at least for  
4 me, everybody else is better, I'm sure. But yeah, so that's why  
5 we appreciate talking with you to understand because I don't want  
6 to leave one little area that I have gray area in, I want to try  
7 and close up every hole we can so we have a better picture, it's  
8 just, you know, the 10,000-piece puzzle together, this may be six  
9 of those 10,000 pieces, but you got to have them to get that  
10 picture.

11 A. Absolutely.

12 Q. Anything else?

13 A. I have nothing else, no.

14 MR. ETCHER: Okay. Well, let me call this interview  
15 concluded at 11:10 Central time and I will stop the recording.

16 (Whereupon, at 11:10 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 Dan Hollowell

ACCIDENT NO.:                CEN23MA034

PLACE:                         via videoconference

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