UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

Interview of: CORY CUMMINS

Director of Flight Safety

Air Methods

Air Methods Corporation Greenwood Village, Colorado

Wednesday, February 14, 2018

APPEARANCES:

MICHAEL J. HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

CHRIS BRADY, Associate General Counsel Air Methods Corporation (On behalf of Mr. Cummins)

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1	<u>INTERVIEW</u>
2	(1:22 p.m.)
3	MR. HODGES: Okay. We are recording.
4	All right. Today is Wednesday, February 14, 2018. We are at
5	Air Methods Corporation in Greenwood Village, Colorado. We are
6	doing the ERA17MA316 interviews. It is 1322 local. I'm Mike
7	Hodges, with the NTSB, Operations Group Chairman.
8	MR. BANNING: Brice Banning, NTSB.
9	MR. CUMMINS: Cory Cummins, Director of Flight Safety for Air
10	Methods.
11	MR. BRAZY: Doug Brazy, NTSB.
12	MR. BRADY: Chris Brady, Associate General Counsel with Air
13	Methods as a representative of Mr. Cummins.
14	MR. HODGES: And does anybody have any objections to
15	recording this interview?
16	MR. BANNING: No.
17	MR. BRAZY: No.
18	MR. CUMMINS: No, sir.
19	MR. BRADY: No.
20	MR. HODGES: Okay. Today we're going to be interviewing
21	Mr. Cory Cummins, who is the Director of Flight Safety.
22	INTERVIEW OF CORY CUMMINS
23	BY MR. HODGES:
24	Q. So, Cory, how long have you worked for Air Methods for?
25	A. Almost 8 years total.

- 1 Q. And then what did you do prior to Air Methods?
- 2 A. I was an air medical pilot for PHI for a couple of years and
- 3 | a law enforcement pilot for a couple of years and a middle school
- 4 | teacher for a couple of years.
- 5 Q. Okay. Cool.
- 6 A. And then, Navy career.
- 7 Q. Did you fly in the Navy or --
- 8 A. Helicopter pilot, yeah.
- 9 Q. And then can you kind of explain your aviation background
- 10 with the hours and certificates and ratings you have?
- 11 A. I have a commercial rating, instrument, helicopter and fixed
- 12 wing multi-engine and single-engine land and instrument rating.
- 13 I've got upwards of 5,000 hours of flight time, mostly
- 14 helicopters.
- 15 Q. And then I'm assuming you started off as like a line pilot
- 16 here and then kind of worked your way up; is that correct?
- 17 A. Well, I actually started off as a lead pilot.
- 18 Q. A lead pilot. Okay.
- 19 A. But, yeah, I was brought into a contract that Air Methods
- 20 took over from PHI, so I carried on.
- 21 Q. Okay. So I guess what bases have you been based out of since
- 22 you've worked here for Air Methods?
- 23 A. I started at Evergreen, Alabama base. It's now Greenville,
- 24 Alabama. Then I moved to DeFuniak Springs, Florida, which
- 25 | moved -- that base moved to Crestview, Florida, and did the

- 1 | majority of my time there. And then did a short period at
- 2 Pensacola, Florida and Baptist Life Flight before taking this
- 3 role.
- 4 Q. And now you're just full-time based out of your headquarters
- 5 in Greenwood?
- 6 A. Right.
- 7 Q. And then can you kind of explain to me kind of what your
- 8 day-to-day duties are as a director of flight safety?
- 9 A. It's never the same day twice. But it's generally monitoring
- 10 reports that come in, accident -- not accident -- incident reports
- or occurrence reports that we get, and also any accidents or
- 12 incidents. I'm kind of the point person for the safety department
- 13 with regards to aviation. I also have, in the past year or two,
- 14 kind of managed other issues, ground safety issues and -- not so
- 15 much like motor vehicle accidents and things like that, but mostly
- 16 anything around the aviation maintenance issues and anything
- 17 involving safety.
- 18 Q. And then what makes and models of helicopters are you
- 19 | qualified to fly here at Air Methods?
- 20 A. I'm not currently qualified for any. I'm working on a
- 21 requaling in the Bell 407. I have flown the EC135, the EC130 B4,
- 22 | and the AS350 B2 aircraft in Air Methods.
- 23 Q. And then when did you officially become the director of
- 24 safety here?
- 25 A. January of 2016.

- 1 Q. And then outside of your director of flight safety duties, do
- 2 you have any other duties or jobs here that you do fulfill?
- 3 A. No. They all pretty much evolve into or revolve into the
- 4 | flight safety. I monitor our anonymous tip line in cases that are
- 5 categorized as safety incidents, but it -- it falls under the
- 6 safety realm, so --
- 7 Q. And then do you have any part-time employment anywhere else?
- 8 Like do you fly on the side anywhere or --
- 9 A. No, sir.
- 10 Q. Do you have an assistant director of safety, flight safety,
- 11 | below you or is it --
- 12 A. No.
- 13 Q. It's just you?
- 14 A. Just me.
- 15 Q. And then I guess kind of how the flight safety department is
- 16 structured, it's just you and then who do you report to with your
- 17 | chain of command?
- 18 A. I report directly to the vice president of safety and risk
- 19 management, Cory Theriot.
- 20 Q. Okay.
- 21 A. I have a Flight Operations Quality Assurance, FOQA, manager,
- 22 | that now -- we're in the process of a restructure of the safety
- 23 department. We're consolidating a lot of the risk parts of the
- 24 company into our safety department. So now I have a FOQA manager
- 25 | that reports to me. And I recently -- or I did have our six

- 1 | regional safety directors throughout the country would report to
- 2 me, but they've been moved under -- well, right now they're
- 3 directly under the vice president. So I'm strictly focusing on
- 4 | flight safety.
- 5 Q. Okay. And then with Cory's position, does he have a direct
- 6 | line to the CEO then himself? He reports directly to him?
- 7 A. Yes. He's direct to Aaron Todd.
- 8 Q. Okay.
- 9 A. Oh, I'm sorry. And I also have the tourism directors of
- 10 | safety, Blue Hawaiian and Sundance, now report to me. That's a
- 11 | new change.
- 12 Q. Now you've been here for a while. You've worked for a while
- 13 in the industry. And kind of based off previous jobs and your
- 14 long time here, like how would you describe the safety culture
- 15 here at this organization?
- 16 A. Very high, very high.
- 17 Q. And then can you kind of explain to me how the structure of
- 18 your SMS program is set up here overall, with --
- 19 A. It's -- over the years, we enrolled in the FAA Pilot Project,
- 20 and we actually achieved Level 4, the highest level at the time.
- 21 And then since I've been here, we've been in the process of
- 22 | transitioning to the, what they call the voluntary program or some
- 23 people call it Part 5. But it's the SMS voluntary program.
- So we are in the process of revamping our SMS policies and
- 25 procedures to align with, not only the FAA's SMS, but the ICAO

- 1 Annex 6 system. My boss is very -- he helped design that, so he's
- 2 very familiar with that. We're trying to achieve the -- take the
- 3 | highest level and achieve that. So it's -- and it's a work in
- 4 | progress, but that's what we've got going on right now. So --
- 5 Q. And then from your position and perspective, like what are
- 6 some of the top hazards you think that Air Methods faces?
- 7 A. From what I have seen, we've had primarily -- or not
- 8 primarily, but a large number of weather-related incidents,
- 9 including wind events and then most recently IIMC type events. We
- 10 have occurrences of misses on walkarounds and pre-flights,
- 11 | cowlings, fasteners, fuel caps. And that is the same for the
- 12 tourism a little bit, not quite as much. But so, you know, kind
- 13 of those little things that cause minor damage but could result in
- 14 an accident. And actually, our most recent one was classified as
- 15 | an accident.
- 16 So those are probably the two big ones right now. We haven't
- 17 | had a whole bunch of like mechanical type issues that have
- 18 resulted in any kind of damages or accidents. Yeah, that's
- 19 primarily it, I quess.
- 20 Q. And then since you've worked here, have you ever experienced
- 21 yourself or seen others experience pressure from company
- 22 management to have the helicopter and the air crew operating in
- 23 less than optimum conditions?
- 24 A. I'm aware. I see reports of it happen. It's not very
- 25 frequently. But occasionally it's reported that a pilot was asked

- 1 | why they turned down a flight for weather or sometimes, you know,
- 2 | the maintenance folks, they feel pressured to get the aircraft
- 3 | back in service. It's not frequent, but it does get reported
- 4 sometimes.
- 5 Q. And then when you get those reports in from pilots or
- 6 mechanics, how do you, I guess, process that on your side?
- 7 A. Generally it's assigned to the region that it occurs in. So
- 8 I would either contact my regional safety director and have them
- 9 get the background on it, run it to ground, basically. And if it
- 10 is valid, then we will coach or counsel or discipline, as
- 11 necessary.
- We had one recently in a region, and it was two clinicians
- 13 that said they were feeling pressured to move to another base to
- 14 fill a vacancy overnight and they didn't feel safe doing it, so
- 15 they didn't, which was good. So I elevated that one to my boss
- 16 and to our clinical director of risk to address. And they jumped
- 17 right on it to coach that area manager and make sure that they
- 18 understood that when a crewperson says no, no is no.
- 19 And it's a cultural thing. There's areas that really get it
- 20 and there's areas that, in the past, maybe have not focused on
- 21 | that so much. We have -- we've acquired these different companies
- 22 and there's vastly different cultures that sometimes come with
- 23 them. And so it's a long process to get everybody aligned with
- 24 the Air Methods culture. And most of them are very grateful for
- 25 the level of concern and safety that we provide, from what I hear.

Sometimes they're saying that because they're talking to the safety director, but oftentimes it's they're pleased that they can get the parts they need when they need them. There's no question about how much it costs and when there are questions about taking a flight, if they say no, then that's it. So --

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- Q. And kind of what we were talking about before, but do you feel that if any sort of mechanic or pilot, if they did find an issue, that they would feel comfortable bringing it up to you or a base manager? That they wouldn't -- there would be no fear of, I guess, repercussions for bringing up a safety issue to you or somebody else here?
- A. I think there's always probably that potential. But I think most -- from what I've experienced in my line days and from what I hear, generally they'll take it to their supervisor. There's rarely a case where somebody feels intimidated by their supervisor, that they don't want to report something.

But we have these other avenues where they can report, so we'll find out about it. And I think that's generally well-communicated, that if you don't feel comfortable about filling out what we call an AMOR report or an occurrence report, you can submit an anonymous alert line report and it will be handled in the same manner.

So I -- again, I've been away from it for a couple of years, but I still think that there's a general feeling that we always expect them to take the safe route and to feel comfortable in

- 1 doing that.
- 2 Q. And then if there's an incident or an accident of some sort
- 3 that happens at one of the bases, do you, as the safety
- 4 department, have your own internal review process for that event
- 5 that you guys kind of go through your process and look for
- 6 improvements and things of that nature?
- 7 A. Yes. We have a root-cause analysis format. And we're
- 8 actually overhauling it because the format that we were using was
- 9 kind of cumbersome. So we're overhauling the format and the
- 10 process.
- 11 The big thing we're doing with this SMS, moving into the
- 12 voluntary program, is increasing the loop closure piece of it. So
- 13 | we're trying to get all these reports, the occurrence reports, and
- 14 also the investigations, the root-cause analysis investigations,
- 15 into the system where we can track the recommended actions to
- 16 closure. And it's going to be very helpful for us to identify
- 17 trends and things more closely through events that have happened,
- 18 plus then hopefully get to be more predictive about what might
- 19 happen. So it's an ongoing process, but we're making huge
- 20 strides, I think.
- 21 Q. Is there a separate, formal Aviation Safety Council here at
- 22 | Air Methods?
- 23 A. We have -- and the new system is similar but different names
- 24 of the old system. We have a tiered approach, where issues that
- 25 come up in the past were brought to a -- what we called the System

Accountability Roundtable, SART. And then above that is a council that the CEO, or Todd, chairs called the SORT. So there was obvious confusion there about the different meetings. But generally, the issues were addressed at the SART, and then if there was any need for funding or attention or companywide action, it would elevate to the SORT for that level of action.

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We are doing something similar in our new process, except for now we're starting the meeting or the hazard identification down at the base level. So the base will have their safety meeting. It will go to their area, that will address all safety issues that they can't solve, to the area. Then to the region, and anything that the region can't take care of themselves or anything that looks like it's a system problem companywide or needs our attention, gets elevated to what used to be the SART, is now the corporate — let me make sure I get this right — Corporate Safety Committee. And then, again, if issues that require funding or companywide attention or industrywide attention even, get elevated to the Corporate Safety Council, which again, is Aaron Todd as the chairperson.

So similar process, but it is a -- there are several steps.

And one of the things we're focusing on is being able to do a risk assessment on all of these events and handle the high-risk events as priority. And this system should help us to do that, address it more efficiently and not miss things.

Q. And then are all the pilots here required to utilize a formal

- 1 | flight risk assessment tool for every flight they conduct?
- 2 A. Yes. Now only certain ones, the helicopter air ambulance
- 3 operations are required to be approved by the OCC, that you'll see
- 4 tomorrow. And we also require public relations flights to do the
- 5 same thing.
- But they always, for every flight, they have to fill out a
- 7 risk assessment. It's a -- we use an iPad format. So it's
- 8 electronically captured. And then, except for the HAA flights,
- 9 they can self-approve certain flights. Actually, I was told
- 10 | yesterday, and I wasn't aware of this, but we've pretty much
- 11 | included all of the flights as an OCC approval, except for like
- 12 repositioning flights, pilot solo, ferry flights. And then the
- 13 maintenance flights, they can self-approve, but they still have to
- 14 get a special flight release to do a maintenance flight, and so
- 15 OCC's already aware of those.
- 16 Q. What about training flights?
- 17 A. Training flights is the other one that can be self-approved
- 18 at this time. Yeah.
- 19 Q. So it's like -- can pilots do single pilot IFR training by
- 20 themselves here?
- 21 A. I believe so. Don't quote me on that, but I think they can.
- 22 | Most of the training gets done with -- especially in the IFR
- 23 programs, with a check airman, because they have basically double
- 24 | the training. They have to come out and do two check rides every
- 25 year.

- 1 Q. Sure.
- 2 A. But I believe they can go out and do approaches and things
- 3 like that.
- 4 Q. Okay. And then when you hire new pilots on board or new
- 5 mechanics, for example, they all physically come here then and do
- 6 like the indoctrination or initial hire training. And do you
- 7 | teach courses on a safety course or how is the safety program, I
- 8 guess, communicated to these new folks?
- 9 A. Yes. We have three -- aviation safety has basically three
- 10 touchpoints. The first day, with everybody -- the clinicians, the
- 11 mechanics, and the pilots, all get an SMS brief about the
- 12 importance of reporting hazards and things like that, high level.
- 13 And then midweek, the pilots and maintainers get an ASAP and an
- 14 MSAP brief on that program.
- 15 And then at the end of the week, I give the pilots a 5-year
- 16 accident history of events that we've experienced as a company.
- 17 And it's more than just the reported accidents, any -- the
- 18 incidents that seem to be reoccurring, we emphasize those and the
- 19 importance of walkarounds, the importance of not pushing weather.
- 20 And there's some -- I use some videos. I use the -- actually,
- 21 | your video of the Frisco accident. And it's a real eye-opener for
- 22 them to see, visually, how that played out. And then we go
- 23 through and give the findings and pretty much stick to the script
- 24 of the NTSB report. But I think it's a very helpful -- and it's a
- 25 dialogue thing. Because a lot of these pilots are coming from

- 1 other companies that may have seen one of these accidents or may
- 2 | have been in a program that was involved. And so, it's a good
- 3 dialogue to share their experiences.
- 4 Q. Yeah. Definitely.
- 5 A. But I think they walk away with a little bit of a more humble
- 6 attitude before they go get in the simulator or something.
- 7 Q. And then with sharing safety-related information across your
- 8 various locations, I mean, for example, if you got a report of a
- 9 safety issue down in Florida with pre-flight or maintenance or
- 10 whatever and this is something that you wanted to share with
- 11 everybody to make sure the guys in California get it and Idaho and
- 12 you name it, how do you transmit that safety information to your
- 13 huge audience scattered across the U.S.?
- 14 A. Various ways. If it's something that we believe is a
- 15 companywide possibility for exposure, a weather issue or whatever,
- 16 we have a weekly newsletter, a company newsletter, that I always
- 17 | have an occurrence report in, an AMOR report as an AMOR of the
- 18 week. We also, if we have a campaign going, which we currently
- 19 have a campaign on walkarounds and pre-flights and things like
- 20 that, we put in a -- we've been putting in videos of best
- 21 practices and things like that.
- 22 If there's something of an urgent nature that we need to get
- 23 out to the entire population, we have quality alert notices, which
- 24 is -- it's kind of adopted from the maintenance realm, if they
- 25 | identify something that needs to be addressed right away with a

maintenance procedure or a product or whatever. But we can use those for safety purposes. We have Air Methods bulletins, again, for if there's confusion about a policy or a requirement or whatever, we can put those out.

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And then we have a quarterly safety publication called Safety Connect that consolidates many different topics. It's generally based on a theme but can be all different types of topics that we've identified that need public attention. And those are disseminated to the base both electronically and in magazine format. So they're there and Aaron Todd considers them required reading. And most people, I think, take that seriously.

- Q. And then with your position, do you do audits of different departments or bases or --
 - A. I don't personally. I have, just to be proficient at it.

 But we do have several audit processes. And again, part of this revamp of our SMS, we're consolidating those to allow more people to have touchpoints at the base level, I guess.

But there are different -- you know, we have our -- our medical has the CAMTS audit and then we have a safety audit that every base gets every year. We have fuel quality audits that get done every quarter. We have CARF requirements that we audit to. And then we have -- various states have like workers' comp audits and things like that. So a lot of that is on the regional safety directors to make sure they get done. And they don't always do them. I mean, they'll assign them to the discipline that it

- 1 belongs to.
- 2 Q. Sure.
- 3 A. And then, of course, the clinicians have their own CAMTS
- 4 auditing process that they go to the base and they audit more than
- 5 just clinical stuff. They look at fuel systems. They look at
- 6 maintenance and all that. And so, there's a lot of touchpoints
- 7 | there that cross over.
- 8 Q. And then do you travel to any of the bases to meet and greet
- 9 and talk to people and go over stuff?
- 10 A. Yeah. As often as I can. It's one of my priorities and my
- 11 boss's too. He's kind of a geographic bachelor. So every
- 12 | weekend, he's generally traveling to a base to go meet people and
- 13 find out what their concerns are. But, yeah, we try to, even if
- 14 we're off on another visit to a conference or whatever, we try to
- 15 | hit the bases in the region as much as we can and just take a
- 16 pulse.
- 17 \mathbb{Q} . I know you mentioned before that you have a -- basically a
- 18 FOQA program manager now and that person's underneath you. Kind
- 19 of asking about that, do all your -- does your entire helicopter
- 20 | fleet, you guys have FDM devices on board?
- 21 A. No.
- 22 Q. No?
- 23 A. For our FOQA program, we have a small number of aircraft that
- 24 | have the Appareo Vision 1000 units. And you probably know the
- 25 history of those. They're not great for what we need them to do,

- 1 | but they are another portion of our program. We're in the process
- 2 of transitioning to a full-blown FDM program, partly because of
- 3 | the rule that's coming into effect that we already meet the rule,
- 4 | but to capture more information. So we're installing a Honeywell
- 5 tracker device that will eventually be in all our aircraft and be
- 6 able to capture far more parameters than we're capturing with the
- 7 Appareo device.
- 8 Some of our other aircraft, like -- Doug's familiar with --
- 9 have other devices on board. They aren't currently incorporated
- 10 into the FOQA process. But, for example, the Bell 407s, with the
- 11 | Garmin 1000 system in it, we are just now beginning to capture
- 12 that data. We have a vendor called Truth Data that does our FOQA
- 13 data capturing and analysis. And they are just now getting Garmin
- 14 data, which is also a very robust source of data for us to -- for
- 15 our FOQA program and FDM.
- 16 Q. Do any of your helicopters have crashworthy FDR boxes
- 17 installed?
- 18 A. Not that I'm aware of.
- 19 Q. Okay. And then you kind of mentioned before, with you
- 20 | collecting all this data and having a FOQA program, that I guess
- 21 | the intent is to just have all of that data going to one point of
- 22 | contact and that person does the analysis and shares the results,
- 23 or how do you guys have that structured?
- 24 A. The data goes into, right now, to our vendor that processes
- 25 | it, makes it legible. And then if there's any flights that they

- 1 | see that maybe need further attention, they can do the simulations
- 2 and build the simulations on. But our FOQA team meets monthly to
- 3 go over flights for the previous month, and that includes our
- 4 union gatekeepers and the FAA and then our FOQA manager that
- 5 | analyzes the events for the month. And if there's issues that
- 6 arise, they can -- the union gatekeepers would go out and if
- 7 | there's a need to find out more information or to make a pilot
- 8 contact and say we need to understand what happened here, it would
- 9 be them that does that.
- 10 Q. Okay. Great. When did your FOQA program manager start?
- 11 When was that?
- 12 A. Well, we've had a FOQA program since, I want to say 2014.
- 13 And we actually lost our FOQA manager for a while and then hired
- 14 another one at the beginning of last year. She has just gone on
- 15 | military orders for a year, so we're currently without. I'm
- 16 filling in. And actually, our vendor, Truth Data, is still
- 17 | capturing the data and presenting it. So we're kind of in a
- 18 transition where I'm in the process of hiring a new FOQA manager.
- 19 Q. You mentioned before about your satellite tracking program.
- 20 You said you guys use Honeywell for that; is that correct?
- 21 A. There's -- Outerlink is one of the systems, and Honeywell
- 22 SkyTrack.
- 23 Q. SkyTrack?
- 24 A. Yeah. Chris, Bryan or Raj could probably give you better --
- 25 | we have about two different systems that provide the satellite

- 1 tracking information, but they're similar.
- 2 Q. Do you know how often the time intervals are set for dropping
- 3 data points on flights or --
- 4 A. Into the OCC?
- 5 Q. Yeah.
- 6 A. I believe it's 1 minute.
- 7 Q. For both systems?
- 8 A. I'm told it captures it at a higher rate, but the pings that
- 9 get sent are 1-minute intervals.
- 10 Q. Did you ever have any interactions at all with the accident
- 11 pilot?
- 12 A. No.
- 13 Q. No? Okay. And then since the accident occurred, has there
- 14 been any changes here at the organization?
- 15 A. Yes. We've made some changes in the maintenance procedures
- 16 as a result of the findings, the preliminary findings. We're
- 17 | increase -- or decreasing the interval on an inspection. And we
- 18 have actually set up in our SMS system a format to record those
- 19 results of those checks, flow checks. And it has built in
- 20 | triggers. So if it falls below a certain level, I guess it would
- 21 be, it will trigger and then we can analyze it better, surveil it.
- 22 We -- that's primarily the -- so far, based on this accident, that
- 23 we've addressed publicly or throughout the company.
- 24 Q. Has there been any operational changes at all or -- outside
- 25 of maintenance?

- 1 A. Not that I can pinpoint right to that, as a result of that
- 2 accident, no.
- 3 Q. And then since the accident occurred, has there -- has it --
- 4 have you changed anything as a person, how you do your duties as
- 5 the director of flight safety here?
- 6 A. I mean, I brief the accident and I brief, like I said, pretty
- 7 much straight off of the preliminary report. So I don't delve
- 8 into the speculation of some of the other things that we've seen.
- 9 But, you know, I put it out there and I think it's important. You
- 10 know, they -- I have an overhead photograph from a news site that
- I use to display the results of the accident and then I overlay
- 12 | the results -- or the preliminary findings. But I don't do my job
- 13 differently.
- 14 Q. Sure.
- 15 A. I don't have much interaction with EC145 pilots going through
- 16 training because they don't train here. But the check airmen that
- 17 do are aware of some of things that we're looking at from the
- 18 | accident, and I believe they emphasize things a little more
- 19 importantly to make sure that you know what you're doing when you
- 20 | have an emergency and things like that.
- 21 Q. Okay. I know that you said before you've worked here for a
- 22 long time. How would rate the overall employee morale here at
- 23 | this organization?
- 24 A. Pretty good. I mean, there's good and bad everywhere. But
- 25 for the most part, people that come here from other companies are

- 1 glad that they chose Air Methods. There are issues at the various
- 2 bases of staffing and things that cause frustrations, but I don't
- 3 | think that's any different than any company. I think, for the
- 4 most part, the morale, based on how Air Methods treats their
- 5 people and provides what they need to get their -- to do their job
- 6 properly is pretty good.
- 7 Q. Okay. And then from a safety perspective, do you feel that
- 8 | the company has adequate personnel and equipment to do their
- 9 mission, whether it's maintenance guys or pilots or management, in
- 10 general?
- 11 A. Generally, we have had challenges in recent times with
- 12 clinical staffing. But they identified it and they've changed
- 13 some procedures for on-call and hiring and pay and things like
- 14 that, that I think are filling the gap a lot better. It is kind
- 15 of a transitory business where people like to -- they see an
- 16 opening and they like to go.
- 17 Q. Sure.
- 18 A. And there's certain areas of the country that nobody wants to
- 19 | qo to. Bu, we incentivize it and I think it -- we don't short-
- 20 staff our craft, our aircraft, at any time. We always go with a
- 21 | full crew and we don't extend our working hours or anything like
- 22 | that. We're very conscious of that.
- 23 Especially on the maintenance side, they have a lot of on-
- 24 call periods as mechanics because they have to be available at all
- 25 hours when they're the sole mechanic at the base. But they aren't

- 1 | ever asked to extend past their working hours, or if they've just
- 2 gone home, not to be called back in. We'll get somebody else and
- 3 | that kind of thing. They manage that -- the regional maintenance
- 4 directors and the regional maintenance managers manage that very
- 5 closely, I think.
- 6 Q. And just so I understand, with the safety training, that the
- 7 | various bases you have throughout the country, with the various
- 8 hospitals that you guys work in conjunction with, like Duke Life
- 9 Flight, for example, the flight medics on board, they are supplied
- 10 by Duke Life Flight, correct? They are not supplied by Air
- 11 Methods?
- 12 A. Correct.
- 13 Q. I guess safety training for them, do you guys provide that to
- 14 | them or do they receive that separately from Duke Life Flight, for
- 15 example?
- 16 A. Kind of both. They have -- each hospital program has their
- 17 | requirements for their training. And generally, it's mostly
- 18 primarily clinical training, but they also expect a certain amount
- 19 of aviation safety training. But we also have our standards, and
- 20 | we expect even a hospital clinician to comply with our standards
- 21 as far as proper equipment and proper training, proper
- 22 | qualifications for like night vision goggles and egress training
- 23 and things like that.
- So, whatever the higher standard is, they're going to get
- 25 both of. And generally with the hospital programs, they're --

- 1 | tend to be pretty strict on making sure their people are well
- 2 trained and qualified.
- 3 Q. Now are all these flight medics -- is it just flight medics
- 4 or is it flight nurses or a combination of both, or --
- 5 A. A combination, yeah. Some programs fly with two nurses.
- 6 Some will fly -- most fly with a nurse and a medic. Some fly with
- 7 | -- like the specialty programs will fly with a nurse and a
- 8 respiratory therapist for a pediatric or something. So it's
- 9 various combinations.
- But they're all considered flight crew members. Not in FAA
- 11 terms, but in our terms, they're flight crew members. They're
- 12 part of a flight crew. So being a nurse or a medic is what you do
- 13 when your patient's on board. All the rest of the time, you're a
- 14 flight crew member and expected to act accordingly.
- 15 \mathbb{Q} . And they can assist a pilot with calling out obstacles and
- 16 things of that nature.
- 17 A. Exactly. In the FAA's eyes, the only time they're really
- 18 | considered a crew member is when they have their night vision
- 19 goggles on, oddly. Because that was something that they have to
- 20 make sure that they're trained to do. And they're only required
- 21 to have one of them, one of the two, on goggles, but we require
- 22 three whenever possible. Occasionally, we can't when one set of
- 23 goggles goes in for inspection or whatever. But the minimum is
- 24 two, to be a fully trained night vision goggle crew. But that is
- 25 my understanding, in the FAA's eyes is a crew member at that

- 1 point. Other than that, we're -- they're a flight crew but they
- 2 | are expected to assist with checklists and verifications,
- 3 cowlings, doors, FOD, clearances especially, and then traffic
- 4 avoidance.
- 5 Q. And they receive CRM training from you also?
- 6 A. Yes. Yeah. We have a -- just revamped our computer-based
- 7 CRM training, and one of the goals that we're moving towards is to
- 8 enhance that with a field-based, hands-on type of, like a roadshow
- 9 type of thing.
- 10 Q. I figured I asked this just because you come from a Navy
- 11 background. Do you guys have like a formal life support program
- 12 here where -- that they're required to use a certain type of
- 13 | flight helmets and type of clothing articles and -- you know, with
- 14 regards to flame retardancy and things of that nature?
- 15 A. It's not as formalized as in the military. We do provide all
- 16 of the helmets, the flight helmets, again, primarily, because of
- 17 | the requirement for the night vision goggles. Flight suits are
- 18 generally program purchases because these hospital programs want
- 19 their colors, so to speak.
- 20 O. Sure.
- 21 A. But our guidance to them is -- and I'm fairly certain that
- 22 the standard that all hospital programs use is Nomex flight suit.
- 23 There's variations beyond that on the types of gear that
- 24 | they're -- optional gear that they're issued. And that is largely
- 25 geographical, cold weather gear, coats. We all -- all of our

- 1 aircraft are required to have a survival kit. And again, they may
- 2 be varied by region as to what's in them.
- 3 0. Sure.
- 4 A. And we expect them to vary them by season. But they all have
- 5 to have one. They all have to be familiar with what's in there
- 6 and make sure that everything's not expired and all that. So it's
- 7 | not as formal as it probably could be, but it's -- and we just
- 8 went with a new helmet vendor because of the quality of the
- 9 helmets we felt need to be upgraded.
- 10 Q. What vendor do you guys use?
- 11 A. It's Paraclete.
- 12 Q. Paraclete.
- 13 A. It's a Gentex knockoff or clone, I should say. But it seems
- 14 to be a little better helmet. And the customer support is -- so
- 15 | far, we've seen much better as far as issues that arise.
- 16 Q. Okay.
- 17 A. The pilots all receive an Air Methods flight suit. That is
- 18 part of their indoc -- or two of them, I quess, and a leather
- 19 jacket. But the flight suits for the pilots are standardized.
- 20 Now they can wear the program flight suit if that's what the
- 21 program requests, as long as it is the same quality as the one we
- 22 issue.
- 23 Q. And they're required to wear, I guess, like cotton
- 24 undergarments and Nomex boots too, Nomex gloves and everything, I
- 25 assume?

- 1 A. They're not required to wear gloves, but yeah, cotton
- 2 | undergarments is recommended. Again, it's not mandated. We don't
- 3 check on that. But we train on that and show the consequences and
- 4 things like that. But generally when they go fly, they want to be
- 5 in the best stuff anyways.
- 6 Q. Sure..
- 7 A. And there are crews that have gloves and some programs
- 8 purchase gloves and Nomex jackets and things like that.
- 9 Q. Do you do any training at all with the operational control
- 10 | specialist? Do you go over safety program structures and accident
- 11 | analysis with like the operational control specialist?
- 12 A. I haven't personally, partly because the director, Chris
- 13 Bryant, is -- he's got an aviation safety background and he
- 14 does -- I know he trains them a lot in that kind of thing. I have
- 15 worked with him on enhancing our procedures for like the
- 16 notifications and things like that with our emergency response
- 17 | plan and stuff, but I haven't had the opportunity to sit down with
- 18 him and conduct training.
- 19 Now our flight controllers at AirCom in Nebraska -- not
- 20 dispatchers because they're not dispatchers, but that coordinate
- 21 | the flights and assign them to the crews and things, I have worked
- 22 | with them and done drills with them and gone out and inspected and
- 23 things like that to kind of enhance their abilities to be another
- 24 crew member. Because we do consider them a crew member. So --
- MR. HODGES: That's all I have.

- 1 Do you have any questions, Brice?
- 2 MR. BANNING: I don't.
- 3 MR. HODGES: Doug, do you have any questions?
- 4 BY MR. BRAZY:
- 5 Q. I have three. The first is, we've been at this for a little
- 6 while. Do you want a 5-minute break?
- 7 A. No. I'm fine.
- 8 Q. Second is, can I get you a coffee or a water?
- 9 A. No. I'm good.
- 10 Q. The third is, can you tell me a little bit more about the --
- 11 based on my former life, tell me a little bit more about the FDM
- 12 program and the -- not all ships have a recorder in them, or they
- do all? Don't worry about the reg just yet --
- 14 A. Yeah. No, I --
- 15 \mathbb{Q} . -- but do they all have a recorder in them?
- 16 A. They all have a tracker in them now.
- 17 Q. Sends the GPS data home so that OCC can watch where they're
- 18 | qoing. Okay. Some subset have either an Appareo or a North
- 19 Flight or some other kind of thing?
- 20 A. Correct.
- 21 Q. But not 100 percent fleet coverage?
- 22 A. No.
- 23 Q. Of the ones that you have out there that record data, are all
- 24 | those in the FOQA program?
- 25 A. No.

- 1 Q. Okay.
- 2 A. As of now or as of currently, and partly because of the Duke
- 3 | accident, we haven't incorporated all VDRs in.
- 4 Q. Understood.
- 5 A. But we obviously are interested in doing that at some point
- 6 because we are -- the EC145 seems to be a popular item and most of
- 7 them come with a Metro interior with that installed, so why not
- 8 utilize it? We have not incorporated that into our FOQA program
- 9 yet.
- 10 We are -- all the Bell, the new Bell 407GX and GXP aircraft,
- 11 have the Garmin 1000 system, as well as some of the Agusta
- 12 products have the Garmin 1000. And we are now just getting the
- 13 procedures down to be able to download the data or grab it off the
- 14 card. And just right now, the mechanic can -- he grabs the data
- off of the ECU or whatever, off the engine. We're working with
- 16 Rolls Royce and we're working with Bell to get it right. Because
- 17 there's an SD card in the system and you can just pull it and
- 18 download it. Our mechanics have not yet been trained to do that,
- 19 but it should be a fairly simple thing to do.
- 20 We have captured data off of certain aircraft that we've
- 21 given to Truth Data to analyze, and they're just now building the
- 22 parameters and protocols, because you have to specify what you
- 23 | want to see before they can tell you what you're seeing.
- 24 Q. Exactly.
- 25 A. So that's in work right now. And I haven't seen any flights

- 1 | from that yet because it's so new. But it's exciting because we
- 2 | have -- I don't know how many, probably 40-ish of those systems
- 3 out there.
- 4 Q. Okay.
- 5 A. So that's another 40 units that we can gather data off of.
- 6 Again, they're not crashworthy, but they are a source of data.
- 7 And I'm super-excited about the next level is the trackers, the
- 8 Honeywell Tracker IIIs because that will be, at some point, piped
- 9 off the aircraft near real-time and captured in OCC or captured
- 10 somewhere. We haven't decided where and how and all because
- 11 | there's -- primarily, there's upwards of 2- to 300 parameters that
- 12 you can pipe off. We have to decide what we want to see, how
- 13 often, and where does it go.
- Obviously, our maintenance control, which is the parallel to
- 15 | the operational control, will want to see that real-time data.
- 16 We'll want to see it and our operational control will want to see
- 17 | it for alerts for things -- you know, low fuel lights, engine chip
- 18 lights, or whatever, things like that. And then, of course, the
- 19 FOQA program will want to get that data to analyze flights and see
- 20 how we're performing on flights.
- 21 O. Excellent.
- 22 A. But it's -- we're installing the units. I don't know how
- 23 many we've installed, but they're starting to be out there. And
- 24 | we're just beginning to establish the parameters and things like
- 25 that. So it's an exciting time.

- 1 Q. Are you gunning for 100 percent fleet involvement in a
- 2 FDM/FOQA program?
- 3 A. I would love it.
- 4 Q. Tell me a little bit about how a ship gets chosen to be put
- 5 | into the program or not. Is it -- we don't have 100 percent
- 6 | coverage. We'd like to have 100 percent coverage. I know that
- 7 you can't do everything all at once. But tell me how does an
- 8 aircraft get its data -- how is the decision made of whether or
- 9 | not it's going to participate in the existing FDM?
- 10 A. Right now, it's primarily logistically because the STCs for
- 11 the Appareo units, that we have 100-and-some units of, and again,
- 12 probably less than one-third are installed. They are -- the STCs
- 13 are for the AS350s because of the interior.
- 14 Q. Sure.
- 15 A. And the EC130 B4s. Now the newer EC130s that we get come
- 16 | factory-installed with -- or many of them do, with the Appareo
- 17 units. And our tour operators, they have some of those and they
- 18 also have another system that they're utilizing called
- 19 Spidertracks. And they're just now getting on board with that
- 20 because, you know, it is -- everybody's enthusiastic about the
- 21 program. Of course, it costs money, but they see the value in it.
- 22 | So Blue Hawaiian and Sundance are incorporating Spidertracks
- 23 because it works better for them with the -- they have better
- 24 cellular coverage than they do satellite coverage or vice versa.
- 25 O. Understood.

- 1 A. So it's more or less of what fits in the aircraft and what
- 2 | can be installed. And as far as which aircraft get them, it's
- 3 | they get installed when there's heavy maintenance going on or
- 4 whatever.
- 5 Q. Okay.
- 6 A. If an aircraft doesn't have one, then we schedule it to be
- 7 installed, send them the kit, teach them how to do it, and then
- 8 they install it. And again, with the Appareos, we've had a lot of
- 9 challenges with the calibration and the units getting bumped and
- 10 things like that. So our FOQA manager, she, before she left,
- 11 spent a lot of time doing the troubleshooting of why are these
- 12 parameters not right or why is this one reading 15 degrees, and
- 13 things like that. So there's a lot of that. And we're -- since
- 14 | we have so many of these on the shelf units, we're kind of going
- 15 | to, well, if it's not working, let's not spend a lot of time
- 16 troubleshooting it; let's swap it out for another unit and see if
- 17 | that solves the problem and then we'll move on. Because we want
- 18 to march ahead with a system that's more capable and more -- give
- 19 us better data.
- 20 Q. That's great. My interest in this area is from my former
- 21 life working in the flight data recorder laboratory, where we
- 22 discovered a lot of times, especially with STC units on older
- 23 airplanes, flight recorders were dead weight. They were installed
- 24 and they weren't checked. They were checked annually, but unless
- 25 there was a reason to go look at it, they were by and large

- ignored. Newer airplanes came on that were depending on systems
 that would do some self-checking, and if something broke, the
- 3 | airplane was going to tell you about it.
- 4 And in the Duke helicopter, we had one on there that was
- 5 | inspected less than a year before and we're struggling to get
- 6 information out of it, and it's disappointing. Had that been in
- 7 your FDM program, whenever the problem was developed, whatever the
- 8 data cycle is to get information off the helicopter, it probably
- 9 would've been caught and fixed as necessary.
- 10 A. Yeah. Hopefully.
- 11 Q. But the data didn't work and it's -- I feel your pain and I
- 12 understand the struggle and it's really big; it's a really big
- 13 undertaking. Now that you get to pick up for the manager on
- 14 military leave, it's another hassle.
- 15 That's all the questions I have that I can think of. You
- 16 answered every other one. Thank you.
- 17 MR. CUMMINS: Okay.
- 18 MR. BRAZY: Do you have any questions for us?
- MR. CUMMINS: Is there anything you can share by way of
- 20 updates that -- I know Jason has -- I saw the pictures on the fuel
- 21 | valves, but I wasn't able to decipher them.
- MR. HODGES: We can go ahead and stop recording and -- we'll
- 23 conclude the recording.
- MR. CUMMINS: Okay.
- 25 MR. HODGES: And we can talk about that stuff.

1	MR. CUMMINS: Sure.
2	MR. HODGES: So go ahead and stop recording then.
3	(Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Cory Cummins

ACCIDENT NO.: ERA17MA316

PLACE: Greenwood Village, Colorado

DATE: February 14, 2018

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.

Skylar Grace Savarin

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

* Accident No.: ERA17MA316 * IN HERTFORD, NORTH CAROLINA, ON SEPTEMBER 8, 2017

Interview of: RAJ HELWEG, Chief Pilot

Air Methods

Air Methods Corporation Greenwood Village, Colorado

Wednesday, February 14, 2018

APPEARANCES:

MICHAEL J. HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

CHRIS BRADY, Associate General Counsel Air Methods Corporation (On behalf of Mr. Helweg)

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1	<u>INTERVIEW</u>
2	(2:36 p.m.)
3	MR. HODGES: All right. We are recording. Today is
4	Wednesday, February 14, 2018. We are at Air Methods Corporation
5	in Greenwood Village, Colorado. We are doing the ERA17MA316
6	interviews. It is 1436 local time. I'm Mike Hodges, with the
7	NTSB, Operations Group Chairman.
8	MR. BANNING: Brice Banning, NTSB.
9	MR. HELWEG: Raj Helweg, chief pilot for Air Methods.
10	MR. BRAZY: Doug Brazy, NTSB.
11	MR. BRADY: Chris Brady, Associate General Counsel for Air
12	Methods as a representative of Mr. Helweg.
13	MR. HODGES: And does anybody have any objections to
14	recording this interview?
15	MR. BANNING: No.
16	MR. BRAZY: No, sir.
17	MR. HELWEG: No, sir.
18	MR. BRADY: No.
19	MR. HODGES: Okay. Today we're going to be interviewing Raj
20	Helweg. He's the chief pilot.
21	INTERVIEW OF RAJ HELWEG
22	BY MR. HODGES:
23	Q. Now, Raj, how long have you worked for Air Methods for?
24	A. I've been here since July of 2011.
25	Q. And then what did you do prior to Air Methods?

- 1 A. I was -- I worked for Omniflight Helicopters. I was working
- 2 | for Omniflight as a check airman when Omniflight was acquired by
- 3 Air Methods.
- 4 Q. And then can you explain your aviation background, with
- 5 certificates and approximate hours?
- 6 A. I am a commercial instrument-rated helicopter pilot, right
- 7 | around 5,000 hours. I also have a single-engine land airplane
- 8 | with an instrument airplane that's never used.
- 9 Q. And then when you officially started over here at Air
- 10 Methods, you were a check airman and you just kind of progressed
- 11 | up to chief pilot. Is that correct?
- 12 A. Yeah. I actually came, was brought over to Air Methods as a
- 13 check airman.
- 14 Q. Okay.
- 15 A. And quickly became a -- what at the time was called an area
- 16 aviation manager, which is now referred to as a regional aviation
- 17 manager. And then I was promoted to a regional aviation director
- 18 over what was then Region 3, and then brought into the corporate
- 19 mix as chief pilot from that position.
- 20 Q. And then you're just based out of here, in Greenwood Village,
- 21 correct?
- 22 A. That's correct.
- 23 Q. And then what are your day-to-day duties as chief pilot?
- 24 A. Well, I support the director of operations in certificate
- 25 | compliance, all things pilot. So I'm part of 119 group, and I

- 1 | work on that team with the director of maintenance and the
- 2 director of operations. Everything compliance when it comes to
- 3 the training, the tracking, and the in-flight compliance of the
- 4 pilots with the General Operations Manual.
- 5 Q. And then what helicopters are you qualified to fly here at
- 6 Air Methods?
- 7 A. I'm currently qualified in the Bell 407.
- 8 Q. 407. All right.
- 9 A. Last year I was qualified in the AS350.
- 10 Q. And then when did you officially become the chief pilot here?
- 11 A. It's been -- this will be my fourth year. So there was an
- 12 interim period. So when the date became official, I'm not really
- 13 sure, but I came over in May of 2014.
- 14 Q. Okay. And then do you have any additional duties or
- 15 positions you do here outside of being chief pilot?
- 16 A. Well, that's a loaded question. So a chief pilot position is
- 17 | pilot discipline. I'm the company's representative to the Local
- 18 | 109, which is our pilots union. So, and then I interface with HR
- 19 and the pilots union regarding payroll and whatnot. So, you know,
- 20 a lot of those things that come along with being the liaison to
- 21 | the pilots.
- 22 I have a training department. I have four assistant chief
- 23 pilots that report directly to me. And we have a cadre of 55
- 24 check airmen that report through them, to me. We also have a
- 25 records department that reports directly to me and a couple of

- 1 aviation training coordinators that deal with the logistics of
- 2 getting all the pilots through training that report to me as well.
- 3 Q. And then do you work part-time or fly any part-time for
- 4 anybody else outside of Air Methods?
- 5 A. No, sir.
- 6 Q. And then is there an assistant chief pilot position directly
- 7 below you?
- 8 A. Four of them.
- 9 Q. Four of them. Great. And those four are basically four
- 10 different regions; is that correct?
- 11 A. No. They're actually divided up by airframe. So our
- 12 operations side or the regional aviation directors that report to
- 13 the director of operations, they're broken up via region. But,
- 14 you know, we have a lot of airframes that cross over regional
- 15 | boundaries. So the training department and the assistant chief
- 16 pilots are the subject matter experts over airframes that fall
- 17 directly under their jurisdiction, and those are divided up based
- 18 on how many aircraft are in that airframe, et cetera -- how many
- 19 | aircraft Air Methods operates within that airframe.
- 20 Q. And just kind of going -- like an overview of the company
- 21 here, can you kind of describe just the HAA mission that you guys
- 22 perform? Just kind of a just general overview of --
- 23 A. We're an on-demand air carrier that transports patients based
- 24 on calls from local agencies, hospitals, customers, et cetera,
- 25 from one facility or a scene to a higher level of care.

- 1 Q. You mentioned before about the four different airframes, but
- 2 | which ones are those?
- 3 A. Well, there are four different assistant chief pilots. So we
- 4 operate with variants of airframes. I believe it's over 25
- 5 different variants at this point, including the different
- 6 airframes. The majority of our aircraft are the EC135, the Bell
- 7 407, the AS350, and the EC130. That makes up about 80 percent of
- 8 our training. We have those simulators here.
- 9 So we have two assistant chief pilots, one that oversees the
- 10 EC135 and the Bell 407 simulator program here and one that
- 11 oversees the AS350 and the EC130 simulator program here. Each one
- 12 of them have 12 check airmen that report to them. I have one
- 13 assistant chief pilot that oversees the entire Agusta fleet and
- 14 then our fixed-wing program, which consists of the Pilatus base
- 15 and also the King Air 200s, as we spoke about earlier. And then,
- 16 I have a fourth assistant chief pilot that oversees the 145
- 17 | simulator program down in Shreveport and also all the other one-
- 18 off twins and onesies, twosies out there that we don't have the
- 19 platforms to have simulator or the volume to have simulators for,
- 20 | so we do a decentralized training model.
- 21 Q. And just roughly, how many pilots do you guys have total?
- 22 | Just a rough amount. I know that it probably changes, but --
- 23 A. About 1300.
- 24 Q. 1300 total. All right. And then I know you kind of
- 25 mentioned before about that there are regional aviation directors.

- 1 A. Yeah.
- 2 Q. And there's also regional aviation managers below them.
- 3 A. Correct.
- 4 Q. And then that goes to base supervisors; is that correct,
- 5 below that?
- A. No. That'd be the pilots directly below the regional
- 7 aviation manager.
- 8 I think it's probably a good idea that you understand our
- 9 structure. Our structure is set up in a way that we have -- that
- 10 each line employee has a subject matter expert line of -- chain of
- 11 command, and also has an administrative chain of command.
- 12 And so, what you're talking about in terms of the director of
- operations, the regional aviation director, and the regional
- 14 aviation manager, is going to be the operational subject matter
- 15 expert chain of command that the pilot needs to report through
- 16 when they have anything aviation-oriented that they need to deal
- 17 | with. Anything that has to do with payroll, sick calls, vacation,
- 18 staffing at the base, et cetera, behavioral issues, all that goes
- 19 up through the area manager to the regional director or -- yeah,
- 20 to the regional director, to the regional vice president.
- 21 So they kind of -- there's a split chain there. And that's
- 22 | all designed, as you know, for A006 operational control.
- 23 Q. Now we talked with Cory before about how Air Methods has
- 24 grown. You have different bases throughout the country and
- 25 | there's different partners you guys work with, like Duke, for

example.

- 2 A. Uh-huh.
- 3 Q. From your position as chief pilot, how do you guys conduct
- 4 standardization and dissemination of information to make sure that
- 5 the guys in Florida hear the same thing, for the most part, as the
- 6 guys in California and vice versa. How do you guys, I guess,
- 7 | convey that message out to all these different entities out there
- 8 underneath you?
- 9 A. Well, two ways, really. So we have a way to touch our pilots
- 10 every day, which is through a program called the 4-1-1, which is a
- 11 tracking program for all things flight-related. And when a pilot
- 12 logs in on that every day, we can give them a message that they're
- 13 required to read based on that day. Okay? So every day I can
- 14 touch anybody who's going to be there with a memo of some sort
- 15 that is a need-to-know.
- 16 Our regional aviation directors are the ones that represent
- 17 | the director of operations and myself out on an operational level,
- 18 on a status. So they can have an influence and send out email
- 19 blasts to their pilots through their regional aviation managers.
- 20 For bigger picture items, general cultural issues -- you
- 21 know, the great thing about the training department is is that we
- 22 touch every single one of our pilots at least one time a year, and
- 23 | we're probably the only discipline that actually does that. So we
- 24 can make enhancements to our training program and whatnot to make
- 25 | sure that we're seeing -- as we see trends through whatever

- 1 direction they come from or from whatever avenue they come from,
- 2 we can actually make those changes in the training department and
- 3 train accordingly.
- 4 That's done with -- you know, we have a weekly meeting with
- 5 the regional aviation directors. We have a weekly meeting with
- 6 | the assistant chief pilots. So, there's -- and those are carved
- 7 in stone.
- 8 Q. Do you know roughly when Jason took over as DO here?
- 9 A. Jason, I believe it was December.
- 10 O. Of '17?
- 11 A. Yeah. I mean, there was a kind of an interim period when he
- 12 took that. But I believe it was November/December time frame.
- 13 Q. And who was the DO before Jason?
- 14 A. A guy by the name of Bernie Reynolds, who was a regional
- 15 aviation director out of the Northeast, was the interim DO after
- 16 Dennis McCall, who I believe was here -- he left the position in
- 17 July, I believe.
- 18 Q. Okay. So Dennis left the position and Bernie took over.
- 19 A. Yeah.
- 20 O. And then Jason --
- 21 A. Bernie was interim, and then Jason got the position
- 22 permanent.
- 23 Q. Okay. I'm just kind of switching gears to operational
- 24 control. Can you explain how the operational control process is
- 25 | conducted, specifically with how flights are prepared, released,

and then concluded?

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- A. We have a two-tier operational control system as kind of written out in our General Operations Manual. And so basically there's the line-oriented tier and then there's the management-oriented tier.
- So our Operational Control Center monitors all flights that happen for Air Methods, and they monitor a flight that's built from the communications center. And then they keep track of it from that point. They don't necessarily track every movement of the flight, but they monitor what's happening for management.
- 11 You know, operational control is the ability to initiate the 12 en route phase and to terminate a flight. And, as you know, we're 13 reliant on our pilots to initiate those flights because nobody can 14 actually force them into the air. So that's where the second tier 15 comes in, and they have authority to go ahead and initiate a 16 flight based on a flight request from a communications center. 17 And then our eyes and ears as to what's going on out in the field 18 from an operational control standpoint, comes through our 19 Operational Control Center.
- 20 Q. Okay.
- A. Which you'll see tomorrow. And I think that would be the
 best -- I could just spend the whole afternoon describing it to
 you, but if you can just kind of see how it works, I think it will
 qive you a better idea of how that works.
- 25 Q. Okay. And then here, with your training program for all

- 1 | these different individuals in the chain of command, do you guys
- 2 | have an operational control training program that kind of explains
- 3 | what operational control is and what everyone's responsibilities
- 4 are in that chain and --
- 5 A. We do that -- you mean as far as a structured program? I
- 6 | mean, we have a pilot training program. We review operational
- 7 control in the General Operations Manual section. Pilots have to
- 8 go through an annual computer-based training program that deals
- 9 with the General Operations Manual and operational control is
- 10 included into that. And then we give an entire class in the 4-1-1
- 11 on -- on the 4-1-1. The OCC gives a class to all of our new hires
- 12 as well as part of that. I think as we walked through there, I
- 13 told you about our indoctrination program. So we give a pretty
- 14 comprehensive briefing during that.
- 15 Q. And this program also, too, kind of goes over like the two-
- 16 tier system that you talked about?
- 17 A. Yeah.
- 18 Q. And operational control room failures and all that stuff so
- 19 people are familiar with that?
- 20 A. Yeah.
- 21 Q. And then, as you know under 119, it requires persons who
- 22 | exercise operational control be qualified through training,
- 23 experience, and expertise. How exactly is that accomplished here
- 24 at Air Methods?
- 25 A. Can you repeat the question?

- 1 Q. So, with 119.69, it requires persons who exercise operational
- 2 | control to be qualified through training, expertise, and
- 3 experience. How exactly do you guys, I guess, accomplish that
- 4 | with the training, experience and expertise aspect?
- 5 A. Well, as the chief pilot, the way I do that is I maintain
- 6 currency and qualification in an aircraft on an annual basis, just
- 7 like a line pilot does. So I go through the same recurrent
- 8 training that they go through and the same flight training that
- 9 they go through. And if it's -- if I change an aircraft, it's a
- 10 transition training for me. So I go through the same process that
- 11 | the line pilots do.
- 12 Q. And that's the same thing with Jason too? I assume he does
- 13 similar training as you that -- for currency also?
- 14 A. At this point, Jason is current right now, I believe. But I
- 15 | don't believe the director of operations is required by rule like
- 16 the chief pilot is.
- 17 Q. Okay.
- 18 A. But, we would have to verify that.
- 19 Q. Okay. Of course. And then with 135.77, for the required
- 20 | list of operational control delegates, where do you guys keep this
- 21 list, physically maintain it, at Air Methods?
- 22 A. In A006 of our operations specifications.
- 23 Q. And we kind of touched base with Cory before about this, but
- 24 I guess the business model between a hospital and Air Methods.
- 25 Like, for example, with Duke Life Flight, you guys -- my

1 understanding is you guys provide the pilots, you provide the

2 | helicopter, and Duke Life Flight provides flight medics or flight

3 | nurses, and you guys have a contract or agreement in place to

basically facilitate the whole operation. Can you kind of explain

5 how that relationship works between you guys and like a hospital,

6 | for example, like with Duke Life Flight?

7 A. Yeah. Air Methods operates under three models: a community-

8 | based model; and what's called an ADM, which is an alternative

9 delivery method; and an HBS model.

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A community-based model is where we maintain the liability for all aspects of the operation and the business unit. So the crew members are ours. They're Air Methods employees. The pilots are Air Methods employees. The mechanics are Air Methods employees. We own or lease the aircraft and we keep them on our certificate. We deal with all of the logistics out in the field.

The HBS model is just like you described, where we basically provide a service to somebody that wants to hire us for that service. And we provide an aircraft maintenance or -- generally the certificate, the maintenance and the pilots. And depending on who owns the aircraft, there's some nuance there in terms of how that relationship is. And we're a vendor and a customer, for the most part.

As of recently, within the last 5 years, they've developed an alternative delivery method where it becomes more -- sometimes these HBS programs become more of a partnership with Air Methods

- 1 | so that there's a shared investment in the business as well and
- 2 | we're just not doing a fee-for-service or it's not a vendor-client
- 3 relationship.
- 4 Q. Okay. And just to confirm, with these various business
- 5 models with these hospitals and such, the hospitals don't exercise
- 6 any form of operational control with the flights then, correct?
- 7 That's solely upon you guys then?
- 8 A. That's correct.
- 9 Q. Okay. And then with the Duke Life Flight relationship, how
- 10 long ago did you guys start, I guess, working with Duke Life
- 11 | Flight with Air Methods?
- 12 A. I don't know.
- 13 Q. Okay. It's probably been several years, I would think?
- 14 A. Yes.
- 15 Q. Okay. How many pilots are assigned to Duke Life Flight?
- 16 A. Off the top of my head, I don't know. I don't know the exact
- 17 | number. But it would be depending on how many bases they have,
- 18 | which I think is four.
- 19 O. Four.
- 20 A. And then multiply that times four. So probably somewhere in
- 21 the 16 range.
- 22 Q. And then I guess what make and model of helicopters do they
- 23 | fly outside of the BK117 series?
- 24 A. That's a good question. I don't know off the top of my head
- 25 what they actually fly specifically, but -- I believe they have a

- 1 | fixed-wing program, but I don't know what they're flying
- 2 | specifically right now. You said outside of the 145 -- or the
- 3 BK117s, right?
- 4 Q. Correct.
- 5 A. Yeah. Right now, I don't know.
- 6 Q. Okay.
- 7 A. I know that some of their -- one of their backups is a 135.
- 8 But other than that, I don't know.
- 9 Q. And by backup you mean if the BK's out for maintenance or
- 10 something like that?
- 11 A. Yeah.
- 12 Q. You guys can bring a 135 and the pilots can fly that one
- 13 around?
- 14 A. Yes.
- 15 Q. Kind of going back to before with the relationship between
- 16 you guys and the other hospitals -- this is a just a hypothetical
- 17 example. If you have a call that comes in for a patient transfer
- 18 from Point A to Point B, and within that state or two you've got
- 19 various -- you know, Life Flight here and this group here, and
- 20 | they're all under the umbrella. How is the decision made to send
- 21 pilots and aircrew or aircraft in this location to get that, as
- 22 opposed to other locations? Like is there like a top down, I
- 23 guess, process on deciding who's going to get what, with who's
- 24 closest and --
- 25 A. Well, it's not a -- there's no simple answer to that,

- unfortunately. So there are certain hospitals that have
 relationships with certain -- with local EMS personnel. There are
 -- you know, in CBS models, we have relationships, for instance,
 first responder-type of relationships with other hospitals. And
 part of those agreements are if we can't get there or we're not
 within a certain duration, then we'll call a competitor.
 - So it's not as easy as just saying that there's one way to make the decision, because the relationships are so different throughout the organization. And I can give you an example. We may have a contract with Indian Health Services, for instance.

 And we may be flying -- it may take us an hour and a half to go pick up a patient if there's a call to the Air Methods communication center to pick that patient up. There may be a competitor's aircraft that's closer to them; however, if we're in a certain distance proximity to them, we will go on that flight. If we can't make it in that proximity, then we'll actually send the competitor.

So there's no real answer to your question other than it's complicated and it's kind of determined at the local level through relationships and EMS agency policy and whatnot in terms of closest aircraft available, that type of thing.

- Q. You mean -- by competitors, you mean like external, outside of Air Methods. Is that what you're talking about?
- 24 A. Yeah.

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25 Q. Like Metro Aviation, for example?

- 1 A. Yeah. PHI or Metro or somebody of that degree. Yeah.
- 2 Q. Sure. But if there are other -- like, for example, at Duke
- 3 | Life Flight, I know Duke has the two bases there in North
- 4 Carolina.
- 5 A. Right.
- 6 Q. I know there's some bases of other entities that are in with
- 7 you guys in Virginia.
- 8 A. Right.
- 9 Q. And I guess, distance-wise, maybe the guys in Virginia are
- 10 closer to a pickup point than the guys in North Carolina or vice
- 11 versa. And I guess my question was, just for the Air Methods
- groups, how is that decision made? Is that the same thing before
- 13 with it's based on the hospital contracts or relationships or --
- 14 A. Yeah, I think so. And the way that you can think about it
- 15 | is, we have this centralized Operational Control Center. We also
- 16 have a major communications center that deals with a lot of our
- 17 | flight requests, all of our flight requests on the CBS side of the
- 18 house. And also, we outsource that as a service to our HBS
- 19 partners as well. Some of our HBS partners have their own
- 20 communications center that actually flight follow.
- 21 So, for instance, depending on the call that comes into the
- 22 Duke office or to whatever company's office that is or whatever
- 23 com center that is will determine what aircraft goes. So it's not
- 24 always our decision. Well, let me back up. It's always our
- decision, but the flight request can come from either our AirCom,

- 1 which is our major communications center in Omaha, or it can be
- 2 one of our customer's communication center from there. Which is
- 3 why the Operational Control Center is a separate entity in and of
- 4 | itself and it's not just housed at our major communications hub.
- 5 Q. Okay.
- 6 A. Does that help?
- 7 Q. Yeah. So when a call comes in like that and, you know, if
- 8 he's a line pilot out in Kentucky or whatever, he's going to get
- 9 that request from that hospital; he's going to fill out his risk
- 10 assessment package and he's going to send that whole package up to
- 11 your OCC here at Centennial.
- 12 A. Correct.
- 13 Q. And you guys review the whole thing and --
- 14 A. You got it. And then they're going to send him a response.
- 15 Q. Okay.
- 16 A. And then he's going to know he's good to go, which takes care
- 17 of the pre-flight risk analysis rule. And then he's going to
- 18 exercise the operational control to lift that aircraft off the
- 19 ground with concurrence from the Operational Control Center. And
- 20 then we're aware that it happened.
- 21 So that's how our -- that's how the HBS customer com center
- 22 does not have operational control over the aircraft. All they can
- 23 do is request that that aircraft goes. And then once that request
- 24 happens, it comes the onus of the pilot to exercise that
- 25 operational control for a departure, once that concurrence is made

- 1 | with the Operational Control Center.
- 2 Q. Okay. So then when the pilot's doing his homework to process
- 3 this request, he's filling out his risk assessment package, he
- 4 also consults with the flight medics and flight nurses he's going
- 5 | to be working with during that whole assessment, I guess?
- 6 A. Yes.
- 7 Q. Okay. And then both the flight medics and the flight nurses,
- 8 they're considered full aircrew members then at all times?
- 9 A. What do you mean by full aircrew members?
- 10 Q. They have responsibilities and duties in flight, calling out
- 11 obstacles, giving -- you know, opening and closing doors.
- 12 A. So, yes. Yes, providing they're trained. So we have
- 13 thousands of crew members out there that have to be trained in
- 14 order to perform the functions of a medical crew member on that
- 15 | aircraft, which includes utilization of NVGs, briefing of
- 16 passengers, walkarounds, et cetera, and there's a few more bullet
- 17 points there. Once they're trained, they can perform the
- 18 | functions. But once that -- once they're trained and they
- 19 maintain currency -- excuse me -- they can perform those
- 20 | functions. If they're not trained, then basically they're
- 21 passengers on board that aircraft.
- 22 And we have a process from the pilot records that will let
- 23 the operational control manager or regional aviation director know
- 24 to let the pilots know that -- which crew members are trained and
- 25 which ones aren't so they know whether or not they have a trained

- 1 crew member on board the aircraft.
- 2 Q. So they can have either/or then, depending on the person's
- 3 experience?
- 4 A. I'd like to tell you that all of them are trained, but I know
- 5 there are some out there that aren't, and they're aware of who
- 6 those people are and they have to follow -- they have to give them
- 7 | the appropriate briefing in order for them to be able to fly on
- 8 board that aircraft with them.
- 9 Q. Sure. Okay.
- 10 A. Just like you had to get when you came here from Alaska,
- 11 | right? They had to give you your briefing, right?
- 12 Q. Yeah. And then if the DO is not available, he's out on
- 13 vacation, for example, then the next person that goes to for
- 14 exercising operational control is it's delegated on to you then,
- 15 | correct?
- 16 A. Yes.
- 17 Q. Okay. And then with regards to this Operational Control
- 18 Center and doing the risk assessment packages, how are duty times
- 19 and rest times incorporated into that for all the aircrew members?
- 20 A. It's part of the question. It's part of the Q&A on the risk
- 21 analysis, the PFRA. And tomorrow, when we get you into the OCC,
- 22 | we'll have them sit down and you can actually fill out a PFRA.
- 23 And I probably should've just brought an iPad in here. But you
- 24 can fill out a PFRA as if you were a pilot and submit it and see
- 25 how that exchange happens and what items are on that.

- 1 Q. Okay. And then with selecting a helicopter being dispatched
- 2 and ensuring that it has the required minimum equipment on board,
- 3 is that done through your maintenance, Operational Control Center,
- 4 or how is that structured with ensuring that it's got the required
- 5 | equipment on board?
- 6 A. So in terms of it having the required equipment on board, I
- 7 | mean, I believe that it's assumed that it has the required -- if
- 8 | it's -- if the aircraft is released and it's ready to go, it has
- 9 the required equipment on board, pending any particular medical
- 10 equipment that it may not have to perform the medical side of the
- 11 mission. But as far as the aviation operation portion of it, it
- 12 has -- it will have everything it needs to have, to be operational
- 13 on our certificate, on board the aircraft. Does that answer your
- 14 | question?
- 15 Q. Yeah.
- 16 A. Okay.
- 17 Q. And then kind of shifting gears with the accident pilot. Did
- 18 you personally know the accident pilot?
- 19 A. I did not.
- 20 O. You did not know him. Okay. Do you know which makes and
- 21 models he was qualified to fly here at the company?
- 22 A. What I know right now is that he was qualified in the 145.
- 23 Q. 145. And then to your knowledge, did he have any previous
- 24 violations or incidents or accidents at all?
- 25 A. No.

- 1 Q. And then with new-hire pilots here, what are your guys'
- 2 standards for employment as a new pilot? So if you had an
- 3 applicant off the street and they want to work here as an HAA
- 4 | pilot, what are you guys looking for in flight times,
- 5 certificates?
- 6 A. We're looking for a commercial helicopter rated, instrument
- 7 | rated, minimum of 2,000 hours' time; 500 hours, at least, in
- 8 turbine, if not more. We exceed the 135.243 requirements for
- 9 pilots off the street.
- 10 Q. Can you give like me an overview of the simulator training
- 11 program you guys utilize for the helicopters you have here?
- 12 A. Sure. I wouldn't say it's in its infancy because we've had
- 13 the EC135 simulator up and running for about 2 years now. And
- 14 | what that encompasses is, it's a classroom ground school, which
- 15 for recurrent training is a minimum of 4 hours, but usually runs
- 16 around 6 to 8 hours.
- 17 And then we have, for the VFR guys, they do a 2-hour training
- 18 | flight and then a check ride in the aircraft -- in the simulator
- 19 as the aircraft, for the 293 portion of it, and then they do the
- 20 route check in the actual aircraft, which is the 299 or the route
- 21 | check portion of it. And then our IFR guys do their 297 rides
- 22 | upon a semi-annual basis -- biennial basis. Sorry
- 23 Q. I know we kind of talked about this before, but -- so pilots
- 24 | are qualified on multiple makes and models. Is there a limitation
- 25 on that?

- 1 A. Two.
- 2 Q. Just two at any given time?
- 3 A. With the exception of our check airmen who we'll allow to do
- 4 more than two models. But that's a different classification of
- 5 pilot.
- 6 Q. Sure. And then with your position, do you travel through the
- 7 different bases and give check rides or surprise checks or visits?
- 8 Do you do tours with your position?
- 9 A. I do. But I don't give on-the-spot check rides. What my
- 10 visits to the bases are generally more Q&A, kind of quality
- 11 | control type of visits, where I'll start with generalized
- 12 questions to find out people's levels of knowledge so that I can
- 13 figure out direction of the training department and what we need
- 14 to focus on.
- 15 Q. Okay. And then are the pilots here, are they required to
- 16 attend factory training for the makes and models they fly here?
- 17 A. No.
- 18 Q. Is it common for you guys to send them out to Airbus or Bell
- 19 or whomever?
- 20 A. No. Only our check airmen.
- 21 Q. Only check airmen. Okay. And then prior to every flight
- 22 | with doing your preflight planning, do you guys have a separate
- 23 process for dealing with the performance planning values or
- 24 determining DAA and all those other values? Do you guys have a
- 25 process or a sheet you use to capture all of those things for the

- 1 | flight or how is that done?
- 2 A. We don't. We don't have a process for that. They're
- 3 | required to do the appropriate performance planning and maintain
- 4 | certain performance margins through the General Operations Manual,
- 5 so the pilot's kind of required to have that. And then the piece
- 6 that we have is for the compliance of weight and balance, would be
- 7 | the one that they needed to do. But otherwise, no, we don't.
- 8 Q. Okay.
- 9 A. But we do require them, in order to accept a flight, to
- 10 maintain a certain performance margin, in-ground and out-of-
- 11 ground, a hover performance.
- 12 Q. And then for the various makes and models of helicopters that
- 13 you fly, do you guys use any dual pilot cockpits at all or is it
- 14 all single pilot?
- 15 A. We have one operation here in Denver in a King Air program
- 16 that utilizes a second pilot, but it's not an SIC. It's a dual
- 17 | PIC pilot, and that was a customer request. But we don't run any
- 18 dual pilot platforms.
- 19 Q. Okay. Now kind of going into continuing with the training
- 20 program, can you kind of give me just an overview of the specific
- 21 | training program for BK117 series here? How that's done, the
- 22 | various locations, and how it's structured?
- 23 A. Are you -- well, I think I'd like to be more specific in
- 24 terms of what airframe, because the BK117 encompasses the 145. So
- 25 are you speaking specifically to the 145, the C2, or what

1 | airframe?

- 2 Q. Well, I guess the accident model.
- 3 A. Okay.
- 4 Q. I understand. I know you have simulators off-site in
- 5 Louisiana and stuff like that.
- 6 A. Right. Right. So, well, what we do is we have -- we either
- 7 have a new hire or we have a recurrent training that is done down
- 8 in the simulator program for the EC145, which is the BK117 series
- 9 aircraft. It's just the most modern version of that. They're not
- 10 currently making the legacy BK117s anymore, get into specifics
- 11 about which variance they are, but we'll just talk about the 145.
- Down there they do the -- they do their ground school down in
- 13 Shreveport. And like I said, it's either a full multi-day ground
- 14 school for an initial new hire or it's an abbreviated ground
- 15 school for a recurrent training guy. After that, they'll go into
- 16 the simulator. The simulator for an initial new hire usually will
- 17 last between 12 to 14 hours. For a recurrent guy, it can last up
- 18 to about 5 hours, depending on what they need practice on and what
- 19 training they need prior to that.
- That's followed by a check ride. And that check ride, like I
- 21 said, will be done in the simulator, with the exception of the
- 22 | route check, which is done in the field at their base or at a base
- 23 where there's an aircraft available. We don't have enough EC145s
- 24 | in order to justify having a dedicated training 145, so we do that
- 25 at the base.

- 1 Q. Okay. And then, just roughly, how long would that whole
- 2 process take from start to finish? Just kind of a rough timeline.
- 3 A. For an initial new hire, that will take about a week. For a
- 4 recurrent guy, we schedule 4 days.
- 5 Q. And then kind of what you've seen from your vantage point,
- 6 how would you rate the ability of pilots to, I guess, easily
- 7 | transition into BK117 series? Like, for example, if you had a guy
- 8 that was flying a Bell 206, for example, have you seen people have
- 9 | an easy time transitioning to that make and model or if it's
- 10 challenging for them?
- 11 A. Well, the EC145 platform is a common platform that the U.S.
- 12 Army uses right now, right? So we do get a lot of highly
- 13 experienced 145 pilots out of the Army out of the Lakota program.
- 14 So there is -- it's all over the map. I mean, if I take a
- 15 | civilian guy out of a single-engine LongRanger, like you're
- 16 mentioning, and I transition him into a 145, it's obviously going
- 17 to be more complicated for him; rather than if I take a guy out of
- 18 the Lakota program in the Army and transition him, he's going to
- 19 be a quick study. So we really have to be flexible in terms of
- 20 how we deliver our training to those individuals based on their
- 21 skill set.
- 22 Q. Now I know you mentioned before that you guys don't send
- 23 pilots or line pilots to factory training. Do you guys teach any
- 24 maneuvers per the Airbus maneuvers manual or how is that stuff --
- 25 | teaching the stuff in the maneuvers manuals?

- 1 A. Well, you know, we utilized the Airbus maneuvers manual when
- 2 | we developed our pilot training program. And our check airmen --
- 3 | we take kind of a random sampling, and the ones that we need to
- 4 circulate through the Airbus factory training school, they can go
- 5 down there, and they can pull ways to deliver training from them
- 6 and there's no -- there's nothing that precludes them from using
- 7 techniques or whatnot that come from those factory training
- 8 programs. However, we have an approved document that's a pilot
- 9 training program that we're required to follow the structure of to
- 10 the letter of the law, per our FAA FSDO. Right? So that's an
- 11 approved document. So as long as we fulfill our obligation to the
- 12 PTP, secondarily, we can actually add on more training if we need
- 13 to, but we need to check those boxes first.
- 14 Q. How often are the training programs audited here?
- 15 A. Continuously.
- 16 Q. Continuously.
- 17 A. We're constantly using them. Revision 10 has only -- the
- 18 | latest revision has been in effect for about a year and a half
- 19 now. We just added -- we just completed the four simulator
- 20 programs. We're about to combine the simulators and the aircraft
- 21 | together. So we're constantly auditing, rewriting, submitting for
- 22 approval. So I would say it's a continuous process.
- 23 Q. When an audit's done, if people find issues or findings, all
- 24 those findings come back to you then and you look at them or how's
- 25 that structured?

- 1 A. Yeah. They all -- they'll all go through me and then I'll submit them for approval to our POI.
- 3 Q. Okay. How specifically with pilots, you know, dealing with
- 4 having patients in the back of the helicopter, the different
- 5 medical conditions going on, what training do the pilots get to
- 6 combat that stress of having that pressure to deliver a patient
- 7 from Point A to Point B and potentially knowing what their
- 8 | condition is and what's going on? How is that, I guess, trained
- 9 to them so they can combat that?
- 10 A. Well, we have an air medical resource management class that
- 11 | we give all our initial new hires and they sit through that, where
- 12 | that's not just about the aviation focus of it, but they also talk
- 13 to patient conditions. They talk to resemblance of family
- 14 members. They talk to seeing trauma and how that might affect you
- 15 | as well. So we do address it there. You know, there's -- that
- 16 encompasses the majority of what they get.
- We also have certain services available to them that we
- 18 educate them on, like an Employee Assistance Program, or EAP. So
- 19 | if they do end up in a situation where they have a recurring
- 20 | thought or they have a program with it, that's a benefit that this
- 21 | company gets. And we educate them on the fact that they have that
- 22 | benefit available to them at any time. Sometimes it's not easy
- 23 for a pilot to come out and say, hey, listen, I had a problem with
- 24 this or this is bothering me or whatnot. So we allow them to do
- 25 that anonymously and we don't get the feedback on who partakes in

1 | that or who doesn't.

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2 Q. Okay. This many kind of a silly question. I've never flown

3 HA operations before. But if you -- I mean, you've got your

flight medic and your flight nurse in the back and they've got a

5 | patient back there, whatever the case may be, and they're working

6 on a patient. And the conversations that the flight medic and

7 | flight nurse are having between themselves about the patient's

8 | condition, it's getting better, it's deteriorating, whatever the

9 situation may be, is the pilot privy to all that? He can

10 physically hear those conversations between those two individuals

of what the patient's status is, or is there a mode where they

12 just have their conversations between themselves and the pilot is

13 separated from that?

14 A. So the pilot can go in isolation mode. So, yes, there is a

15 mode. Generally speaking, I would say that most cockpits and most

16 | -- the cabin area of the aircraft is, they don't put it into

17 | isolation mode because you're also reliant on that crew member for

traffic avoidance and for certain safety issues as well. Right?

19 You know, I think -- so that happens, probably for the most

20 part, more than one might think it is. They're not focused

21 | completely on flying in their isolation mode. They are privy to

22 what's going on.

23 Q. Kind of shifting gears about the safety program here, how

24 | would you describe the safety culture here at Air Methods?

A. I think we pride ourselves on having a solid safety culture.

- 1 We're transparent with our employees about what our challenges are
- 2 | and how to mitigate risk and we support conservative decision
- 3 making. At any point anybody can raise a safety concern. We have
- 4 | numerous avenues for people to raise safety concerns, from
- 5 | voluntary programs to the SMS program to our AMOR reporting system
- 6 to a completely anonymous silent whistle program that anybody can
- 7 | bring up anything at any time. And I know that that works, even
- 8 anonymously, because generally speaking, that comes down through
- 9 the 119 group to figure out how to take care of that issue. So I
- 10 | would say robust.
- 11 Q. And then from your position and perspective as a chief pilot,
- 12 what are some of the top hazards you feel that Air Methods faces?
- 13 A. I would say the top hazard that Air Methods faces is the
- 14 | competitive nature of the industry right now, and the internal
- 15 pressures that each one of our line personnel faces on a daily
- 16 basis when they're operating. And if I can qualify that, we do
- our best to not push them to make bad decisions; however, when
- 18 | flight volumes ebb and flow and people that are working at the
- 19 base see that, and their families and their mortgages are
- 20 dependent on that base being operational, they may have certain
- 21 | internal pressures. And that's our single, number one, hardest
- 22 | thing to combat, is ensuring that they're making the right
- 23 decisions for the right reasons based on what we've told them our
- 24 expectation is.
- 25 Q. Okay. Since you've worked at Air Methods, have you ever felt

- 1 any pressure from company management to have your helicopter or
- 2 | aircrew operate in less than optimal conditions?
- 3 A. Never.
- 4 Q. No. Have you heard of it going on in the various regions
- 5 | since you've worked here?
- 6 A. Never. As a matter of fact, if it's ever even suggested, I
- 7 | mean, it's a pile-on. So we address it immediately if there's
- 8 ever any issues surrounding it at all.
- 9 Q. Talking to Cory before about you guys' internal
- 10 accident/incident review process by your management team, are you
- 11 part of that as the chief pilot?
- 12 A. Of the accident/incident review process? I am.
- 13 Q. Okay. And then is there a formal Aviation Safety Council
- 14 here at Air Methods?
- 15 A. We're transitioning a little bit now from one -- what we had,
- 16 which was a roundtable of sorts at the 119 level, to a corporate
- 17 | safety committee, which is what we have now. So we're in the
- 18 middle of transitioning that right now. But we do have meetings
- 19 that we hold on a monthly basis that speak to the safety of all of
- 20 our certificates.
- 21 Q. In talking with Cory before, that for the 145 flights they
- 22 | are required to fill out a flight risk assessment package and send
- 23 it up to the OCC for review.
- 24 A. Yeah.
- 25 Q. But for part 91 repositioning flights or like a maintenance

- 1 | check flight or a training flight, they're still required to fill
- 2 | out a flight risk assessment package, but that doesn't get
- 3 approved then by the OCC, or it does?
- 4 A. It's not a requirement.
- 5 Q. Not a requirement.
- 6 A. And it doesn't. So for ferry flights, we're in the process
- 7 of changing that to the requirement. But for training flights, we
- 8 don't, and I'll tell you why.
- 9 Our check airmen are basically representatives of myself out
- 10 | in the field. If they can't assess risk appropriately, then we
- 11 have deeper problems than that. So we use the pre-flight risk
- 12 analysis form for them, so that they can train the line pilots in
- 13 how to use it, what the best way to go about doing it is, how to
- 14 mitigate risk, et cetera. But then we allow them the flexibility
- 15 to self-approve their own flights, and it gives them the authority
- 16 to be able to -- to accept risk if they need to but it also -- and
- 17 | it also minimizes the workload on the Operational Control Center,
- 18 because we have a number of training flights that go out every
- 19 | single night, different pilots in one evening, multiple events.
- 20 And that could be burdensome to that group.
- 21 Q. Okay. You kind of touched on training flights. Can pilots
- 22 | do single-pilot IFR training here by themselves?
- 23 A. In the clouds?
- 24 O. Yeah.
- 25 A. If they're current qualified -- if they're current and

- 1 qualified, then yes.
- 2 Q. They can. Shifting gears. With the FAA, who's your -- who's
- 3 the POI?
- 4 A. Eric Monteith.
- 5 Q. Eric Monteith. And do you know now long he's been POI for?
- 6 A. He's been the POI, I believe, about 3 years.
- 7 Q. Okay. Three years. And then he's probably got several
- 8 assistant POIs below him?
- 9 A. No.
- 10 Q. No? Just him only?
- 11 A. Yes.
- 12 Q. Okay. And how would you describe your relationship between
- 13 the POI and your guys' company?
- 14 A. It's -- we have a great business relationship. We have the
- 15 | ability to call each other and ask questions appropriately.
- 16 think it's, I would say, good, would be how I would describe the
- 17 | relationship with Eric.
- 18 Q. Okay. And then do you feel the POI provides adequate
- 19 oversight and assistance to you guys if needed, if you guys need
- 20 assistance, or you feel he's doing his job of providing adequate
- 21 oversight on all your operations?
- 22 A. Adequate oversight, yes.
- 23 Q. Does he travel at all to any of the bases here outside of
- 24 Denver at all? Does he --
- 25 A. Not that I know of.

- 1 Q. Okay. So he pretty much just liaisons with your
- 2 headquarters; is that correct or --
- 3 A. Yeah. And then he has a number of operations inspectors out
- 4 there in the field that are his eyes and ears out there.
- 5 Q. You said before you haven't flown the BK117 C2 then, correct?
- 6 A. No.
- 7 Q. Just talking to guys in the field that you work with, what's
- 8 | your kind of -- the feedback you've gotten on that specific model?
- 9 A. Oh, they love it.
- 10 Q. They love it?
- 11 A. Yeah. It's a complex airframe. They love it. It's
- 12 academic, autopilot. You know, I mean, it's a great platform.
- 13 It's a great IFR platform.
- 14 Q. Did they ever communicate to you anything about ergonomic
- 15 | issues or design issues with placement of controls or levers? Any
- 16 issues with that stuff you hear about?
- 17 A. No.
- 18 Q. And then no feedback from those guys about issues with the
- 19 way the procedures are written out and explained by the
- 20 manufacturer?
- 21 A. No.
- 22 Q. And then how would you describe the relationship between
- 23 Airbus and Air Methods?
- 24 A. Yeah. We're a customer of Airbus and we're also dependent on
- 25 Airbus. So it's -- I think it ebbs and flows. I tend to not get

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- 1 | involved with the business dealings with Airbus very much from a
- 2 | support standpoint. And from what I need from the chief pilot's
- 3 office, I get what I need from them -- flight manuals, et cetera,
- 4 for their training program.
- 5 Q. Let's see. With the FOQA program under Cory, do you interact
- 6 | with him at all with the findings or trends? How is the FOQA
- 7 data, I guess, brought to your level with results and findings on
- 8 that?
- 9 A. Our FOQA program is in its infancy right now. I think that
- 10 | we're still working through how to apply the knowledge that
- 11 | they're getting out of the FOQA program to operational and
- 12 training requirements. And I think we're still working through
- 13 those processes. We have a process in the training department
- 14 where we've got an avenue for FOQA right now to give us feedback
- 15 | so that we can make adjustments to the training program; however,
- 16 | we haven't utilized that yet.
- 17 Q. And then, since the accident occurred has there been any
- 18 | changes here at the organization? Outside of maintenance, I
- 19 should say.
- 20 A. As far as --
- 21 Q. Any operational changes that you guys have made since the
- 22 accident occurred?
- 23 A. Well, I mean, I'm sure we have. But as a direct result of
- 24 | the accident, no. I mean, it would take me a little bit to think
- 25 through that a little bit more, but --

- 1 Q. And then how would you rate overall employee morale here at
- 2 Air Methods?
- 3 A. I would say it's pretty good.
- 4 Q. And then from your position as the chief pilot, do you feel
- 5 that Air Methods has adequate personnel and equipment to do the
- 6 mission?
- 7 A. I do. Yes.
- 8 Q. And then from your position as chief pilot, what safety
- 9 programs would you like to see added here? Like, for example, if
- 10 | we said you're going to be King of Air Methods for the day, what
- 11 | would you do then for safety, program-wise, around here?
- 12 A. You know, I think that we have a great foundation currently
- 13 in terms of how we operate and the culture at which the corporate
- 14 level desires us to operate. And I believe that we need to work a
- 15 | little bit better messaging down to the line personnel in terms of
- 16 what that is, because I think that there might be sometimes a
- 17 perception out on the field, at the field level that thinks that
- 18 | there's -- that that culture doesn't quite exist to the extent
- 19 that it actually does.
- 20 So, if I was king for the day, I would like to try -- well,
- 21 | we're already working on it, but we're better at bridging that gap
- 22 between the Denver office and the line personnel.
- 23 Q. Okay. And then does Air Methods get any -- I know we talked
- 24 about a lot of internal auditing that's done here at the company.
- 25 Do you guys have any external audits that are done in the company

1 by external companies or people? 2 We do. We have CAMTS. We also have the CARF. And we also 3 have the FAA that does that. Sometimes we'll bring in certain 4 people to come in and look at our business practices, et cetera. 5 MR. HODGES: Brice, do you have any questions? 6 BY MR. BANNING: 7 They just -- and I'll know you'll explain it in more Yeah. 8 detail tomorrow at the Operational Control Center. But your folks 9 there who are reviewing the flight risk assessment packages, are 10 they -- do you have a formal training program that they go 11 through? 12 We do. Α. And do you have recurrent training for them also? 13 14 Α. They do. Yes. 15 MR. BANNING: Okay. That's all I have. 16 MR. HODGES: Doug? 17 MR. BRAZY: Not one. 18 MR. HODGES: So do you have any questions for any of us? 19 MR. HELWEG: No. 2.0 Okay. We'll go ahead and stop recording. MR. HODGES: 21 (Whereupon, the interview was concluded.) 22 23 24

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017 Interview of Raj Helweg

ACCIDENT NO.:

ERA17MA316

PLACE:

Greenwood Village, Colorado

DATE:

February 14, 2018

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.

Skylar Grace Savarin

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316 *

ON SEPTEMBER 8, 2017

Interview of: CHRIS BRYANT

Director of Aviation Risk and Compliance

Air Methods

Air Methods Headquarters Greenwood Village, Colorado

Wednesday, March 21, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

CHRIS BRADY, Associate General Counsel Air Methods
(On behalf of Mr. Bryant)

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1	<u>INTERVIEW</u>
2	(3:10 p.m.)
3	MR. HODGES: Today is Wednesday, March 21, 2018. We're doing
4	the Air Methods interviews at Greenwood Village, Colorado. It's
5	1510 local time.
6	I'm Mike Hodges, with the NTSB, Operations Group Chairman.
7	MR. BANNING: Brice Banning, NTSB.
8	MR. BRAZY: Doug Brazy, NTSB.
9	MR. BRYANT: Chris Bryant, Air Methods.
10	MR. BRADY: Chris Brady with Air Methods, personal
11	representative of Mr. Bryant.
12	MR. HODGES: And then does anybody have any objections to
13	recording this interview?
14	MR. BANNING: No.
15	MR. BRAZY: No.
16	MR. BRYANT: No.
17	MR. BRADY: No.
18	MR. HODGES: Okay. And today we're going to be interviewing
19	Chris Bryant who is the director of aviation risk and compliance.
20	Do I have that right?
21	MR. BRYANT: That's correct.
22	INTERVIEW OF CHRIS BRYANT
23	BY MR. HODGES:
24	Q. And can you tell me how long you've worked for Air Methods?
25	A. Fourteen months.

- 1 Q. Fourteen months. Okay. And then what did you do prior to
- 2 coming to Air Methods?
- 3 A. Spent 21 years in the Army. I was a Kiowa Warrior pilot.
- 4 The culmination of my career was at the Army Safety Center. I
- 5 spent 2 years on the Go Team as an accident investigator, and my
- 6 | final assignment was the deputy chief of the aviation safety
- 7 officer course for the Army. After that, in 2011, when I retired,
- 8 I went to work for Airbus Helicopters. It was American Eurocopter
- 9 at the time. I was their fleet safety manager, which was an
- 10 outward focusing safety role with the company. I worked with them
- 11 for 2 years, and then left the company to go to TCU to pursue my
- 12 MBA, which I completed in 2014, and had a safety management system
- 13 consulting business for a few years until I hired on here January
- 14 | 5th of 2017.
- 15 Q. And then since you've started working here, you've been doing
- 16 the same thing the whole time?
- 17 A. Yes. That's correct.
- 18 Q. And then just aviation background, certificates and
- 19 approximate hours, roughly what is that?
- 20 A. Around 2700 hours total time, rotor wing, single engine land,
- 21 instrument.
- 22 Q. Okay. And then you're based out of here at headquarters in
- 23 Denver?
- 24 A. I am.
- 25 Q. Okay. And can you kind of go over your day-to-day duties

- 1 here with your position, please?
- 2 A. Sure. Day-to-day duties include -- it's really twofold. On
- 3 | the one hand it's compliance. So from time to time we have VDRP
- 4 disclosures that we put into the system, work through that with
- 5 the POI and certificate management team.
- In addition to that, there's an aviation risk component which
- 7 is -- the safety is separated out. They're in a different branch
- 8 of the company. I usually deal with some of the more operational
- 9 risk items that arise, and those usually come in the form of
- 10 AIDMORs or, you know, direct notification from the field, or a lot
- 11 of times, these notifications come through operational control
- 12 center, which I also oversee. I have 2 supervisors and 18 total
- 13 operational control specialists working there.
- 14 Q. From the VDRP interactions with the FAA and POI, you're the
- 15 | sole, I guess, point of contact for that. And does the chief
- 16 pilot or DO do that, or that's just strictly that does that
- 17 | interaction?
- 18 A. Well, no. So I'm the primary point of contact for that;
- 19 however, the chief pilot and the DO have the ultimate -- and the
- 20 | DOM have ultimate responsibility, but the DOM has another
- 21 individual on the maintenance side that does his VDRPs.
- 22 Q. Okay. And then are you on flight status here at Air Methods?
- 23 A. Not presently.
- 24 Q. Okay. And then outside of your position as a director, do
- 25 you have any other additional duties here, anything else that you

- 1 do here?
- 2 A. No, just -- I mean, the routine duties as assigned, you know,
- 3 | special projects and things like that, that arise from time to
- 4 time, but nothing that would fall into a routine.
- 5 Q. Okay. And then do you work part-time at any other companies
- 6 or organizations?
- 7 A. I do not.
- 8 Q. Okay. And you said with -- the structure with you, you have
- 9 two supervisors below you, correct?
- 10 A. Right.
- 11 Q. And then the operational control specialists are below the
- 12 | supervisors?
- 13 A. Yes. That's correct.
- 14 Q. Can you just kind of give us an overview of how the
- 15 operational control process is conducted here at Air Methods with
- 16 regards to a flight being prepared, released, conducted and then
- 17 | concluded?
- 18 A. Sure. So we have an information management system called 411
- 19 and the pilots will log into 411, where they make an attestation
- 20 of their duty time, you know, stating that they've had significant
- 21 | rest. They'll log in. They'll obtain a flight release for the
- 22 day, and then they'll fill out a preflight risk assessment, which
- 23 is done electronically. That's then submitted via iPad to the
- 24 OCC, and one of our personnel will pull it out of the queue and
- 25 review it, and they'll compare and contrast that with the risks

- 1 | that are identified and then anything that they see that maybe
- 2 | wasn't identified correctly or wasn't on the risk assessment,
- 3 | they'll correct those errors and then ultimately they'll approve
- 4 | it and the pilot will be depart.
- 5 Q. And then with your operational control training program, can
- 6 you kind of explain how it's done for the operational control
- 7 specialists, the supervisors, and then even for the 119 people, if
- 8 you can explain how that training program for operational control
- 9 is conducted here?
- 10 A. How the training program works?
- 11 Q. Yes.
- 12 A. Yes. So there's a requisite 80 hours training for the
- 13 initial and then 40 hours recurrently each year. After April 22nd
- of 2016, the OCC became a regulated entity and those training
- 15 requirements became one of the aspects of ensuring that we had
- 16 people that are current and qualified at all times.
- 17 Q. Okay. And then does your operational control training
- 18 program for all those folks involved in the chain of command with
- 19 that, does that also include going over operational control
- 20 | failure modes?
- 21 A. Yes, it does. Yes.
- 22 Q. Okay. With 119.69 it requires, you know, persons who
- 23 exercise operational control to qualify through training,
- 24 experience and expertise. How exactly do you guys accomplish that
- 25 here at Air Methods with the whole training experience and

expertise areas?

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A. So the initial part of the training is conducted using a combination of weight and in-person training. Once the 80 hours of requisite items are trained, obviously the training is recorded, but at that point in time, those individuals are now tethered to one of the supervisors until they demonstrate proficiency. We essentially look at it as a check ride.

So once they've demonstrated proficiency, we ask them if they feel like they're prepared to get checked out, and then there will be performance-based examination that's done with the supervisor conducting an over-the-shoulder ride, if you will, to ensure that they are competent. And at that point in time, another entry is made in their training record and then they'll be assigned with one of the senior members of the operational control team, and it kind of goes from there.

- Q. And then with this tracking, so I understand, of the operational control specialist, there's not a requirement for them to have an actual dispatcher license, correct?
- A. No. So there are three basic principals that we draw from, either from the flight line -- so they'll either be a certificated pilot, and that's required for them to be a senior operational control specialist. So those are the only two distinctions, if you will. There's senior and then there's operational control specialists. The operational control specialists may come from a dispatch background, which they routinely do, or an aircraft

- 1 | control background, which would also have folks that come from
- 2 | that discipline as well.
- 3 Q. Okay. With 135.77, the required list of operational control
- 4 | delegates, where do you guys keep this list at Air Methods?
- 5 A. For the delegates?
- 6 Q. Yeah, for the required list of operational control delegates,
- 7 | where do you guys keep this list at here at your company?
- 8 A. Well, it's kept internally. It's located with the training
- 9 records that we keep on hand that denote the individuals by name,
- 10 that they carry that level of authority.
- 11 Q. And then can you kind of give an overview of how the business
- 12 | model is structured between a hospital and Air Methods with the
- 13 way operations are done with operational control? For example,
- 14 | with Life Flight and Air Methods, how that relationship is?
- 15 A. So we have three business models. We have community-based,
- 16 | an alternate delivery model, which is any combination of us and
- 17 | the customer owning those components of pilot, crewmembers and
- 18 | aircraft, and then we have the hospital-based systems. The
- 19 majority of hospital based systems have their own com center. We
- 20 | call those third-party com centers, and they actually will -- they
- 21 | follow a model that our AirCom utilizes, but they do utilize a
- 22 different type of software to input their flight plans.
- 23 So over the past year, we've upgraded to Flight Vector, which
- 24 has been a more expeditious and reliable method of putting those
- 25 | flight plans in. Most of the hospital-based systems still use

- 1 | something called FLOG; it's an acronym, F-L-O-G, that stands for
- 2 | Flight Log, and that's the software that they utilize. But their
- 3 requirements directly mimic our AirCom requirements.
- 4 Q. Okay. And then with that respective hospital that is working
- 5 | with Air Methods in that specific business model, the hospital
- 6 | itself doesn't have any sort of operational control over the
- 7 helicopter or any crewmembers, correct?
- 8 A. They do not exercise operational control. The one service
- 9 that's integral to 135 operations that they provide for us is
- 10 | flight following, so the creation of the electronic flight plan
- 11 and flight following.
- 12 Q. Okay. So if you guys have a call that comes in for let's
- 13 just say a patient transfer from, you know, Point A to Point B, in
- 14 the state somewhere and, you know -- this is just a hypothetical
- 15 | question, but if there's maybe, you know, two or three Air Methods
- 16 bases within that designated pickup point, how do you guys make a
- 17 decision to assign a certain base to go pick up that patient when
- 18 you've got maybe two or three bases within that area? You say we
- 19 want this one to go here instead of these two bases; how do you
- 20 | guys kind of go about that?
- 21 A. That's a decision that AirCom would make.
- 22 O. AirCom.
- 23 A. Yeah, that's something that is -- and I'm blind to that
- 24 process. So our dispatchers would actually have the answer for
- 25 that question for you, but I don't know.

- 1 Q. Okay. And then duty times and rest times for, you know,
- 2 pilots and flight medics and flight nurses, how is that all
- 3 tracked here from an operational control perspective?
- 4 A. It's tracked electronically.
- 5 Q. And then same thing with dispatching a helicopter, ensuring
- 6 it has the required minimum equipment on board, is that also done
- 7 through the 411 system?
- 8 A. In concert with Ramco --
- 9 0. Ramco.
- 10 A. -- which is a -- it's the maintenance program. It interfaces
- 11 | with 411 and it'll give the pilot a short-term do list. There's a
- 12 report called a triple nickel report that's the next 5 hours, 5
- days, and something else 5 related. But those are some of the
- 14 awareness interfaces that Ramco and 411 share with regard to
- 15 aircraft maintenance facts.
- 16 Q. And then how many operational control specialists work in the
- 17 OCC at any given time?
- 18 A. At any given time?
- 19 O. Yeah.
- 20 A. Three.
- 21 Q. Three. And that's like a hardline number; you have to have
- 22 | three at all times?
- 23 A. No, it's not a hardline number. We have minimum staffing
- 24 requirements of two at any given time, but -- now those three
- 25 don't include the supervisor. So three to four is what we

13

- 1 typically see in staffing logs.
- 2 Q. And then if you have an operational control specialist, and
- 3 | they have a limitation on their shift -- I think only work like 10
- 4 hours or what is that?
- 5 A. They do, yeah. Currently it's 10 hours.
- 6 Q. Ten hours.
- 7 A. Yeah.
- 8 Q. Okay. And then are they required to have "X" amount of hours
- 9 off, rest before they start their next shift?
- 10 A. If they exceed 10 hours. So we can't plan to work them
- 11 longer than 10 hours. If we do, due to unforeseen circumstances,
- 12 which is in accordance with regulation, we have to ensure they
- 13 receive a minimum of 8 hours.
- 14 Q. Eight hours.
- 15 A. So -- but we don't have anybody working close to 16-hour
- 16 | shifts. So it's not that --
- 17 Q. Okay. And then kind of going back to the 411 system, when a
- 18 | pilot's -- let's just say a pilot's out of a remote base in
- 19 Montana and they're initiating the 411 system, they're going
- 20 | through the process of 411, are they actually reporting themselves
- 21 | that they're currently qualified?
- 22 A. Yes, they are.
- 23 Q. Okay. And then when that request goes through to the OCC
- 24 specialist, they're validating that against --
- 25 A. Right.

- 1 Q. -- you guys' databases to verify what the pilot is saying is 2 correct?
- A. That's correct, yes. As a matter of fact, I think that -now I'm speculating here a little bit, but I know that portions of
 the flight times are recorded and automated in 411 with the
 notable exception being night vision goggles. So a pilot has to
 manually update his night vision goggles. So when he goes out and
 he performs his three HNVGOs, he has to make sure that that gets

2.0

logged into the system.

So if flight operations flags that pilot for going to current for annual check ride or sometimes we have dissimilar aircraft where the primary is not the same as the spare, and they let their spare currency lapse, they'll be flying, in the system they'll be locked out. So at that point it's a non-starter for the pilot. It won't even come to the OCC because he'll be locked out of the system. So there's some automation built into that, but I think that the only thing that is not fool proof is the night vision goggles. The pilot is required to report that manually.

- Q. Okay. Since the accident occurred has there been any changes here at Air Methods at all from, you know, in your department at all, the way you guys do business?
- A. Yeah. One of the things that we've taken a look at is trying to develop quicker awareness when we have an aircraft that's deviated from an anticipated path of flight. And so one of the

- 1 | things we're doing is we're working with the folks from Sky
- 2 | Connect, and we found that there's a capability that we had not
- 3 been exploiting and that will give us an alert if there's an
- 4 excessive descent rate. So we didn't pick that feature. It's
- 5 | already built in, but we went back and activated that for the
- 6 entire fleet since the accident to try to give us, you know, more
- 7 responsive awareness in the event that we have an aircraft that
- 8 experiences an excessive descent.
- 9 Q. And just real quick, going back to that, when you guys have
- 10 -- I know you have multiple ships flying at once, but in your
- 11 tracking system, how often are those points dropped? Is it every
- 12 | 3 minutes or 2 minutes, the data points?
- 13 A. I see what you're saying. Each program pays for that ping
- 14 rate and the closer together the ping rates are, the more
- 15 expensive it is. So it's not going to be consistent throughout
- 16 the fleet, but we can read the track and be able to tell you what
- 17 | that interval is, but there's not a standard interval that's set
- 18 for corporation-wide right now.
- 19 Q. So the hospital program pays for the tracking rates?
- 20 A. They do.
- 21 Q. And they set it? Okay.
- 22 A. Yeah.
- 23 Q. Now you said you've been here for 14 months then.
- 24 A. Right.
- 25 Q. How would you rate overall employee morale here since you've

- 1 been here?
- 2 A. I think the employee morale is fantastic.
- 3 Q. And you feel the company has adequate personnel and equipment
- 4 to do its mission?
- 5 A. I do.
- 6 Q. And then you sound like you come from a very thorough, you
- 7 know, aviation safety background. Are there any aviation safety
- 8 improvements you'd like to see implemented here, whether it's with
- 9 operations or equipment, maintenance, whatever, in your
- 10 perspective?
- 11 A. No. To be perfectly honest with you, everything that I would
- 12 like to see implemented is on schedule to be implemented. So I
- 13 | think that's very encouraging, that Air Methods doesn't skimp when
- 14 it comes to safety. So I'm very pleased with their posture with
- 15 regard to safety and being proactive about countermeasures and
- 16 making corrections when they're warranted.
- 17 MR. HODGES: Okay. I think that's all I have.
- Brice, do you have any questions for him?
- 19 MR. BANNING: I think just one question.
- 20 BY MR. BANNING:
- 21 Q. You talked about the training provided to the OCC
- 22 specialists. Out of curiosity, is that an FAA-approved training
- 23 program?
- 24 A. It is, yes.
- 25 Q. Okay.

- 1 A. Yes, it is. We had -- forgive me, I'm trying to remember the term.
- Chris, if I could pick your brain for this, we had the big
 group of FAA, the component that went around and inspected us. I
 can't remember what the term for that inspection committee was,
- 6 but --
- Anyway, we went through a very extensive inspection last
 year, and they scrutinized our training and actually gave us a
 commendable rating and said they'd like to see that as a standard
 for other programs.
- MR. BANNING: That's the only question I had.
- MR. HODGES: Doug?
- MR. BRAZY: Just a couple.
- 14 BY MR. BRAZY:
- 15 Q. About the new high descent rate warning system, have you
- 16 gotten any since you activated that?
- 17 A. A couple, yes.
- 18 Q. And is that -- do you think that's going to solve the
- 19 | solution or the desire to have a sooner -- based on what you've
- 20 | seen, had a couple, is it providing what you wanted it to provide
- 21 | in terms of awareness?
- 22 A. Well, the only time we've seen it has been on maintenance
- 23 flights when they're doing autorotations. So --
- 24 O. It works.
- 25 A. Yeah, it works. So if it actually occurred in the field, you

- 1 know, on a 135 flight, it would certainly ping us and, you know,
- 2 | would -- if nothing else, it would give us the ability to reach
- 3 | back to AirCom and say, hey, we're getting an alert from this
- 4 | aircraft, why don't you give them a call and, you know, make sure
- 5 ops are normal. And then it would expedite the process so that
- 6 | they're not just waiting and waiting and waiting for, you know,
- 7 | time to expire since the last time they talked to them. So it's a
- 8 | conversation starter, if nothing else. But from a procedural
- 9 standpoint, you know, we think it's a step in the right direction.
- 10 Q. Is it turned on fleetwide?
- 11 A. It is, with the Sky Connect.
- 12 Q. The whole fleet doesn't have Sky Connect?
- 13 A. Right. Not yet. We're moving towards that, but we did have
- 14 some aircraft that were purchased through acquisitions that still
- 15 | had Outerlink, and they are -- it's programmed into, you know,
- 16 whatever their phase maintenance allocations are to to upgrade to
- 17 | Sky Connect throughout the entire fleet.
- 18 Q. Does the activation of that system -- when an alert occurs,
- 19 does it only come to OCC or would it also go to the hospital-based
- 20 | -- I forget; what do they call it?
- 21 A. FLOG?
- 22 Q. Flight following folks.
- 23 A. At this point, since it interfaces with AviationSentry, it
- 24 | would come to AirCom and it would come to the OCC. It would not
- 25 | necessarily go to a third-party com center unless they have

1 AviationSentry. If they still have FLOG, the functionality is not there for them to see that. 2 3 But they're a radio click away, so --4 Yes. That's exactly right. 5 -- that's how it's supposed to work? 6 Α. Correct. 7 The only other questions I have is kind of a closing one, and 8 it's that were there any questions that you expected us to ask 9 that we didn't or that you wanted us to ask that we didn't? 10 No, that was always my last question too, so --11 MR. BANNING: That's all I have, Mike. 12 MR. HODGES: Chris, did you have any questions? 13 MR. BRADY: No. I'm good. 14 Do you have any questions for us on anything? MR. HODGES: 15 MR. BRYANT: No, I appreciate it. 16 Okay. All right. We'll go ahead stop the MR. HODGES: 17 recording at this point. 18 (Whereupon, the interview was concluded.) 19 2.0 21 22 23 24 25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Chris Bryant

ACCIDENT NO.:

ERA17MA316

PLACE:

Greenwood Village, Colorado

DATE:

March 21, 2018

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

Kathryn A. Mirfin Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

*

Interview of: JASON QUISLING

Director of Operations

Air Methods

Federal Aviation Administration Denver Flight Standards District Office

Denver, Colorado

Thursday, March 22, 2018

APPEARANCES:

MICHAEL HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

MATT RIGSBY, Air Safety Investigator Federal Aviation Administration

CHRIS BRADY, Associate General Counsel Air Methods
(On behalf of Mr. Quisling)

I N D E X ITEM PAGE Interview of Jason Quisling: By Mr. Hodges 4 By Mr. Brazy 43 By Mr. Rigsby 49 By Mr. Brazy 59 By Mr. Banning 60 By M. Rigsby 61

1	<u>INTERVIEW</u>
2	(2:30 p.m.)
3	MR. HODGES: Today is March 22, 2018. We're at the Denver
4	FSDO in Denver, Colorado. I'm doing the ERA17MA316 interviews.
5	It is 1430 local time.
6	I'm Mike Hodges, with the NTSB, Operations Group Chairman.
7	MR. BRAZY: Doug Brazy with the NTSB.
8	MR. BRADY: Chris Brady with Air Methods here as
9	representative for Mr. Quisling.
10	MR. QUISLING: Jason Quisling with Air Methods.
11	MR. RIGSBY: Matt Rigsby with the FAA Office of Accident
12	Investigation, FAA Coordinator.
13	MR. BANNING: Brice Banning, NTSB.
14	MR. HODGES: And today we're interviewing Jason who is the
15	director of operations.
16	INTERVIEW OF JASON QUISLING
17	BY MR. HODGES:
18	Q. Jason, how long have you worked for Air Methods for?
19	A. Since 2000.
20	Q. 2000. Okay. And what did you do prior to coming to Air
21	Methods?
22	A. I worked in Alaska, part 135 aviation, with a couple
23	different companies, Temsco and Era Aviation.
24	Q. Oh, cool. Very cool. And if you could kind of just explain

your aviation background with certificates and approximate hours?

- 1 A. Sure. So I started flying part 135 operations in Alaska with
- 2 | tour operations initially, and then when I went to work for Era,
- 3 that included pretty much all types of part 135 charter, to
- 4 | include oil and gas, utility work, firefighting, those types of
- 5 operations as well. In 2000, I started in HAA or EMS role. That
- 6 was with a company called CJ Systems Aviation. I flew for them in
- 7 | the Midwest, in Michigan and Wisconsin. They were purchased by
- 8 Air Methods in 2007. At the time I was -- I had just moved from a
- 9 line position to a check airman role, and I continued that role
- 10 with Air Methods till today, really. Eventually I became an
- 11 assistant chief pilot with Air Methods about 2½ years ago and just
- 12 this fall, I again changed positions to director of operations.
- 13 Q. Okay. So roughly how many hours do you have total?
- 14 A. I'm just over 6,000. I think around 6300 hours right now.
- 15 Q. Okay.
- 16 A. And most of that is helicopter. I have, I think, around 1200
- 17 hours of fixed wing time.
- 18 O. Okav. ATP?
- 19 A. I'm dual rated ATP and dual rated instructor.
- 20 Q. Cool. Cool. And then you're currently based out of North
- 21 Carolina, but you're in the process of moving out here to Denver
- 22 then?
- 23 A. That's correct. I just started the director of operations on
- 24 December, and I'll be relocating to Denver this summer.
- 25 Q. And can you kind of go over just roughly your day-to-day

- 1 duties with your position?
- 2 A. Sure. So as director of operations, I'm in charge with or of
- 3 the oversight of our flight operations. That includes being part
- 4 of the 119 Certificate Management Team, meaning we're responsible
- 5 for making sure we maintain operational control of aircraft and
- 6 pilots, and then also maintaining compliance with all the
- 7 | appropriate regulations for the 135 and 133 air carrier
- 8 | certificates that we hold.
- 9 Q. And what helicopters are you qualified to fly at Air Methods?
- 10 A. So the current helicopters I'm qualified in are the EC135 and
- 11 EC145 aircraft.
- 12 Q. All right. And then do you have any additional duties you do
- 13 at Air Methods outside of the director of operations job?
- 14 A. I'm still qualified as a check airman. So occasionally I may
- 15 administer a 299 line check. I'd like to be doing some of the
- other checks, but I just don't have time right now.
- 17 Q. Sure. And then do you work part-time or do you any part-time
- 18 | flying in any other organizations or companies?
- 19 A. Not currently.
- 20 |Q. Okay. And can you describe the HAA mission that Air Methods
- 21 performs, kind of just give us an overview of how it's structured
- 22 and how you guys do business basically, please?
- 23 A. So it's an air medical transport company. We have roughly a
- 24 little bit over 320 bases around the country. We're in 48 states,
- 25 and we have an operation in Haiti. That encompasses around 417

- 1 | aircraft, give or take. The majority of those aircraft are
- 2 | helicopters. Our fixed wing fleet I think is numbering somewhere
- 3 close to 30 right now, which are PC-12s and a few King Airs, but
- 4 the bulk of our operations are performed with rotorcraft. The
- 5 bases are staffed with a mixture of crews. Sometimes they are
- 6 entirely Air Methods personnel; so the pilots, the mechanics and
- 7 | the clinicians could be Air Methods personnel. That's what we
- 8 refer to as a community-based or CBS model.
- 9 We also have a more traditional model which is where we have
- 10 a hospital that is a customer and they want to provide their
- 11 medical crews. So the clinical team is employed by the hospital
- 12 and we act as the aviation vendor with pilots and mechanics and
- 13 provide the support equipment.
- 14 Q. And what kind of helicopters does Air Methods fly?
- 15 A. Well, we fly a lot. There are -- I believe we're somewhere
- 16 | in the neighborhood of 27 or 28 makes and models right now. Do
- 17 you want me to through and list all of them?
- 18 Q. No, that's okay.
- 19 A. Okay.
- 20 Q. That's okay. And then with the organizational structure, so
- 21 I understand it correctly, and correct me if I'm wrong, but above
- 22 your level, you report directly to the president of domestic air
- 23 medical services. Is that correct?
- 24 A. I report to senior vice president of operations -- of
- 25 aviation operations.

- 1 Q. Okay.
- 2 A. And that's Leo Morrissette. And then Leo reports to the
- 3 president.
- 4 Q. And then the president reports to the CEO, I assume, or --
- 5 A. Correct.
- 6 Q. Okay. And then with your position as the DO, do you have a
- 7 designated assistant director of operations or are those
- 8 considered like the regional managers? Or how is that structured
- 9 with, I quess --
- 10 A. So I don't have anybody that's a designated assistant, per
- 11 se, but I have direct reports which are regional aviation
- 12 directors. There's one of those for each of the six regions that
- 13 | we have, and they serve as the head of my aviation team for that
- 14 region to provide oversight and compliance functions for our
- 15 certificate.
- In addition to those individuals, I have a director of
- 17 | aviation risk and compliance who works for me as well, and his
- 18 tasking is twofold. He oversees the operational control center
- 19 and ensures that it's functional and running and handles the
- 20 personnel that work in that center. And then he also would
- 21 essentially be a special projects person for me, to assist with
- 22 | whatever types of trending, investigations, compliance things,
- 23 that we need to do for any of the six regions or the company as a
- 24 whole.
- 25 Q. And those regional folks below you, they're the ones I guess

1 responsible for pushing out the standardization aspects and the

2 dissemination of information; they kind of help push it out from

- 3 your level. Is that correct?
- 4 A. They assist with delivering the messaging to the field as
- 5 | well as making sure that people are following the guidance that we
- 6 have out there.
- 7 Q. Okay. So if you, as a DO, got like a SAFO or info sent to
- 8 you about, you know, whatever, you would pass it onto those folks
- 9 and then they would stream it out, or would you guys just put it
- 10 in 411 or how would you guys go about disseminating that?
- 11 A. So we have several ways to disseminate information. So one
- of the immediate direct ways we have is to go directly to the
- 13 regional aviation directors and have them pass on to their direct
- 14 reports. It's like a call tree. We have the 411 system which we
- 15 use for the pilots, and that has a messaging board, if you will.
- 16 When you first log in, you have a home board, and we have the
- 17 ability to put messages on there as well as tag those with a box
- 18 that lets us know if the pilot has actually read that information
- 19 or not.
- In addition to those two kind of standard messaging items, we
- 21 have a communications department that assists us with corporate
- 22 | communications as far as weekly newsletters, special bulletins,
- 23 all of those pieces as well. If it's something related directly
- 24 | to maintenance, maintenance also has a quality alert notice that
- 25 they can put out.

- 1 So there are kind of multiple layers of communication that we
- 2 | could perform depending on what the message is that we need to
- 3 deliver.
- 4 Q. And then you mentioned you became the DO back in December of
- 5 2017.
- 6 A. Correct.
- 7 \mathbb{Q} . And who was the DO prior to you taking over?
- 8 A. So we -- the DO would have been Dennis McCall until
- 9 approximately July of 2017.
- 10 Q. Okay.
- 11 A. And then we had an interim DO in place, which was Bernie
- 12 Reynolds, that covered the position while we were doing the job
- 13 search and determining who was going to take it full time.
- 14 Q. Okay. So Dennis, he retired, and then Ernie or -- is that
- 15 his name?
- 16 A. Bernie Reynolds.
- 17 Q. Bernie Reynolds came in and was the interim, and then you
- 18 took over in December?
- 19 A. Correct.
- 20 Q. Okay. And then when these, you know, personnel changes with
- 21 Dennis leaving and Bernie coming in, did you guys submit all these
- 22 formal notification changes to the CMT, then, process?
- 23 A. Correct.
- 24 Q. Okay. Can you kind of just give us an overview of how the
- 25 operational control processes are conducted at Air Methods? Kind

of, you know, basically go over how a flight is prepared, release conducted, and then concluded.

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A. So we have a two tier system for operational control. We have at the management or the corporate level, we have individuals like myself that are listed in OpSpecs A006. Those are the people that are allowed to exercise operational control for decision making.

We use the operational control center as kind of our agent or tool to oversee all the aircraft that are around us. That's kind of a central reporting point where we have the ability to see the visibility on where are those aircraft, who's flying them, are they people that are authorized to fly those aircraft. That's also the clearing house for our preflight risk analysis. It comes into the operational control specialist that have all been trained in accordance with 135 in order to be able to review and authorize or not authorize a PFRA. So that's kind of a high level view of how the company can maintain operational control from up here.

Down on the front line, we have individual pilots that are the second tier of operational control and the pilot in command then is the person that makes the decision about whether or not we're going to initiate a flight, whether or not we're going to turn down a flight or anything in between. And their process involves logging into our 411 system, which captures the start and end of their duty day. It automatically determines if they've had the rest that they need prior to coming back in. It tracks the

flight times that they enter in at the completion of every flightlike. And that gets populated into a report where they can see,
similar to a pilot log, what type of flight time they've
accumulated, so that we can track for the big picture of rest and
all those issues. That also populates into daily flight logs
which are used to track the time for the flights as well as the
time on the aircraft. It's populated through our maintenance side
of 411 and Ramco to track component times, next inspections due,
those types of issues.

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On the 411 system, in addition to the duty day, the pilot has to submit for a flight release, and that flight release is an automated way to check that he's in our system as current qualified in airframe and check his, you know, proficiency items as far as day and nighttime landings and, in our case, NVG operations. It also gives him a snapshot of what we call the triple nickel: the inspection's coming due within 5 days, 5 hours or 5 cycles. And it allows him to do administrative functions such as print out short-term do lists on the aircraft, maintenance inspections and manage those daily flight logs so that they populate into the system.

Q. And then with your operational control training program that you guys have in place, is it the same for everybody in the operational control kind of chain, if you will, or is it structured differently for like the operational control specialists or, you know, someone like you, for example, in your

- 1 position or chief pilot? Is it the same program for everybody or
- 2 | is it tailored for the different levels of responsibility in the
- 3 operational control chain?
- 4 A. So I'm not entirely sure I understand your question. The
- 5 people that have the ability to exercise operational control are
- 6 the group that are listed in A006, which is a small group of about
- 7 25, 30 people, including myself, and then there are the pilots in
- 8 the field. The operational control specialists are not authorized
- 9 for operational control decisions. They're part of the
- 10 administrative function of clearing, you know, requests and making
- 11 | sure we follow policies and procedures, but they don't have that
- 12 authority to actually --
- 13 Q. I guess I should reword differently. They have the same, I
- 14 guess, training and exposure onto what operational control is as
- 15 someone like you would have with --
- 16 A. They do because since we have more than 10 aircraft, our
- 17 operational control center is a regulatory requirement under 135.
- 18 Q. Right.
- 19 A. And in 135, it spells out the specific requirements for the
- 20 | areas that have to be trained for those people. So they receive
- 21 about 80 hours of training which includes regulations, operational
- 22 | control, weather, flight planning, all of those pieces. So it's
- 23 very, very similar to what any of our pilots would receive at
- 24 different points throughout their training in terms of those
- 25 subjects.

Okay. And if you can explain how I guess the business model -- I don't know if that's the correct word or not, is structured between a hospital and like a local base at Air Methods, how that whole relationship works with you guys being headquartered here and then, you know, the local base, you know, being in Montana, for example, and working in coordination with the hospital for a mission. Can you kind of explain how that whole model is structured and set up? So, I mean, at the simplest level, no matter how it's structured, the basic model is the same across the board. somebody has a request for air transport, and so they initiate a call to a request center, if you will. In the case where the hospital is a customer that's in a partnership with us, many times the hospital will have their own transfer center or number that they want the customers to call to request their services. So in the case of Duke, we have a hospital entity that has the calls come into them. They know that there's a need to transfer by air. They're going to contact us to find out if we can then conduct that flight with our assets. That decision's going to be made locally by the pilot in command as to whether or not he has the weather, equipment and safety items and all those pieces that go into any given flight. If they line up, and he can conduct the flight legally and safely, then he would say yes, and at that point in time, you know, he's accepting the flight and initiating that 135 flight.

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- 1 Q. Okay. How long has Air Methods had the Duke Life Flight
- 2 | contract for?
- 3 A. I know that it's been a long time, but I would have to have
- 4 somebody look it up --
- 5 Q. Okay. No worries. No worries.
- 6 A. -- to give you an exact date.
- 7 Q. And then there's two base locations, correct, for Duke Life
- 8 Flight then?
- 9 A. Correct.
- 10 Q. Okay. And how many pilots total are assigned to Duke Life
- 11 Flight?
- 12 A. Typically you would have four pilots assigned to each of the
- 13 bases. At the time of the accident -- I would have to go back and
- 14 check the records. The Smithfield Base where the aircraft came
- 15 | out of, for a long -- a long time up to somewhere last year was a
- 16 two-pilot operation because they only ran 12 hours a day. So they
- 17 | would start in the morning and then they would end in the evening.
- 18 I want to say it was 10 a.m. to 10 p.m.
- They have, somewhere between this summer and end of the year,
- 20 I know that they went to a 24-hour operation there. So they would
- 21 have increased their staffing to four pilots to cover that base,
- 22 four pilots that cover the Raleigh Base, and then occasionally,
- 23 because we have multiple bases, there can sometimes be an
- 24 additional headcount of what we would call a lead pilot that is
- 25 going to assist with administrative functions and help cover open

- 1 shifts.
- 2 Q. Okay. And then typically how many flight nurses or flight
- 3 medics are assigned to each of those bases?
- 4 A. That number can vary widely, and since it was the customer in
- 5 this case, I would have to go back to Duke to find out.
- 6 Q. Sure. Okay. And just to confirm -- I think I already know
- 7 | the answer to this, but anytime you guys were working with a
- 8 hospital of any sort, they don't exercise any sort of operational
- 9 control over the flight whatsoever?
- 10 A. That's correct.
- 11 Q. That's strictly you guys then. Okay.
- 12 This is just so I understand this correctly. When you guys
- 13 have -- this is just an example. When you have a call come in for
- 14 a transfer, for example, to go from Point A to Point B, and, you
- 15 know, you're in a state like North Carolina or, you know,
- 16 wherever, a relatively populated area, you may have several bases
- 17 | within the radius of that pickup point, and there's several
- 18 hospitals and aircrews, for example.
- The decision, I guess, to launch one helicopter from one base
- 20 as opposed to other ones, that's kind of strictly based upon the
- 21 hospital then that coordinates that since you have multiple assets
- 22 in that area or do you guys at headquarters get involved in that
- 23 decision making, or how does that kind of work when you've got
- 24 multiple assets in that area?
- 25 A. So it's a complicated setup and I can't give you one

- 1 particular answer because across the country it's going to vary.
- 2 | Sometimes there are very specific arrangements with 911 call
- 3 | centers, so that if it's a request to go to an accident scene, for
- 4 example, the 911 call center has the ability to identify the
- 5 closest aircraft and call them.
- At other time, you know, with patient transfers and there's
- 7 not always the same sense of urgency that an accident generates,
- 8 so it may be a requesting hospital that's sending a patient to a
- 9 specific receiving hospital, and the coordination would occur
- 10 between them as to which -- what this customer wants for their
- 11 patient, and they may have a preference on who they want to fly
- 12 them. So I don't really have a way of telling you specifically
- 13 | it's always going to happen the same way.
- 14 Q. Okay. And then with -- you know, if you're out, let's just
- 15 | say, for vacation for 3 weeks, who kind of falls upon the
- 16 operational control if you're physically out of the picture for a
- 17 | week or something?
- 18 A. So the A006 list are all the managers that can exercise that
- 19 operational control, and on that list are my regional aviation
- 20 directors. And so any one of those people would likely be
- 21 somebody that I would go to and say I'm going to be gone for the
- 22 | next 3 weeks and I need you to cover, and they would be my
- 23 designated representative. And then they would work in
- 24 | conjunction with the chief pilot and the director of maintenance,
- 25 who also have operational control, to make sure that we're

1 covered.

- 2 \mathbb{Q} . Okay. And with the 411 system, when initiating a mission,
- 3 how do you guys determine if a pilot's eligible to take flight?
- 4 A. So the 411 system itself has the ability -- when we initially
- 5 | hire a pilot and they go through training, that generates
- 6 paperwork that comes from our approved pilot training program.
- 7 That paperwork comes back to our records office and the records
- 8 specialist will review paperwork and make sure that it meets all
- 9 of our requirements in accordance with that training program.
- 10 Once all of those pieces have been verified and are shown to
- 11 | basically have all the checklist boxes checked, then the record
- 12 specialist has the ability to turn or unlock that pilot in the 411
- 13 system. So now they have the ability to log in and actually try
- 14 and get a flight request in an aircraft.
- Once they've dutied in, once they fill out and populate the
- 16 | flight request form, when they click submit on that, it will be
- 17 | into the system, and then if there are any flags on that flight
- 18 request, that would go back to the operational control center for
- 19 | follow-up, showing that something on that sheet is currently
- 20 showing out of compliance for some reason.
- 21 Q. Okay. And then how does the 411 system interact with
- 22 | basically determining if a helicopter is eligible to do a mission?
- 23 A. So the system has a maintenance module. That module works in
- 24 | concert with another program called Ramco, and the times and
- 25 cycles for the aircraft are tracked through those systems, and

- 1 | they will have the ability to generate reports that can be printed
- 2 out by the pilot or the mechanic on request, but additionally they
- 3 have the ability to generate automated alerts. So if a component
- 4 has reached a limit or there's an inspection due at a certain
- 5 | time, and we are now showing that we're at or beyond that time, it
- 6 will be flagged in a red color. And in order for the pilot to
- 7 generate a flight release on that aircraft, he actually has to go
- 8 down and check a box that brings up a banner that says you
- 9 understand that you are requesting this flight release even though
- 10 there's an issue that shows that it is out of tolerance.
- The only time that he would accept checking that box would be
- 12 | in the cases where maintenance has just been performed but because
- 13 the computer system hasn't updated on the midnight cycle, it still
- 14 shows that that inspection is due even though we have a logbook
- 15 entry that shows it was completed.
- 16 Q. Okay. And then with the accident pilot, did you personally
- 17 know him?
- 18 A. I did.
- 19 Q. You did. Okay. Can you kind of, you know, describe him, his
- 20 abilities as a pilot with your, I guess, working relationship with
- 21 him, how you know him?
- 22 A. So I would have to check, but I want to say it was around
- 23 2009 that he came into Air Methods as one of our pilots. I don't
- 24 | believe I did his initial training, but I did a good majority of
- 25 his recurrent training from that point on, both in the EC145 as

well as he also flew the EC135 as their backup aircraft. And so I flew with him, gave him training and check rides in that aircraft as well.

2.0

He was a pilot that I would say was always prepared for the training events that we did. He had always studied for check rides. I don't remember any specific issues that we might have had during those events, but I could check the training records. But I do remember that we spent a great deal of time before and after any of our events talking about safety related items, whatever the, you know, hot topic of the day might have been and just discussing personal strategies and techniques and best practices that we might have used to avoid getting ourselves into trouble around those situations.

I believe for some time he was designated as the safety officer for the Smithfield Base. He performed lead pilot duties at the Smithfield Base, was generally a very conscientious, fairly organized pilot when it came to getting in the aircraft. He would have his kneeboard and all of his charts laid out. He would have his flashlight in one location and all of his pieces would always kind of be in the same place. So he was generally well organized, well prepared and I would say, you know, always had exhibited good piloting skills.

- Q. And then before he started working for Air Methods, what did he do prior to Air Methods?
- 25 A. He was performing the role of an HAA pilot with a different

- 1 | company. I believe it was STAT MedEvac in the Pennsylvania area.
- 2 Q. Okay. And like you said, he was just qualified on the EC135
- 3 and EC145 or 117 for you guys, correct?
- 4 A. Correct. Yeah. So the EC145 is a BK117 C-2. I know that
- 5 before he came to Air Methods, he flew the BK117 series, the other
- 6 models, C-1 and below. I don't know exactly which models, but I
- 7 know he was -- he had a fair amount of flight time in the 117
- 8 itself. The EC145, even though it shares a type certificate, it's
- 9 | considered enough of a change in the airframe that it's almost
- 10 like a different aircraft.
- 11 Q. Okay. And then he didn't have any previous violations or
- 12 | incidents or accidents to your knowledge since you've known him or
- 13 | worked with him in the past?
- 14 A. Not that I'm aware of. I would have to do a records check.
- 15 Q. And then since he started working for Air Methods, did you
- 16 guys send him to any sort of factory training for anything?
- 17 A. I don't believe Air Methods sent him to any factory training.
- 18 | I would have to check. Our pilot training program itself is based
- 19 on the factory training program. Our check airmen have attended
- 20 the factory schools, and if you compare the Airbus training slides
- 21 to our training slides, most of them are one-for-one comparison.
- 22 Q. Okay. And then did you ever take disciplinary action against
- 23 the accident pilot for anything when he worked for Air Methods?
- 24 A. Not that I'm aware of, but I wouldn't have been -- I was not
- 25 his supervisory manager.

- 1 Q. Okay. And then kind of switching gears to the accident, with
- 2 | the accident flight route, with coming out of Smithfield Base and
- 3 going over to the eastern side of the state, was that, would you
- 4 say, a relatively familiar route for him to be traversing to and
- 5 from those areas?
- 6 A. Yeah. I would say anywhere in the state of North Carolina
- 7 | would have been commonplace, and they frequently flew across the
- 8 border into Virginia or down into South Carolina just a little
- 9 ways.
- 10 Q. Okay. For standards for employment as an HAA pilot at Air
- 11 Methods, what's your guys typical requirements for a new person
- 12 | coming off the street? What are you guys looking for, flight
- 13 certificates and ratings and hours? What are you guys looking for
- 14 to work here?
- 15 A. So the most common minimums that are going to be needed are
- 16 2,000 hours total time. Usually around 1500 of that needs to be
- 17 | in helicopter, roughly 100 hours nighttime. They have to hold at
- 18 | least a commercial helicopter rating, which now for helicopter air
- 19 | ambulance includes having instrument privileges on their
- 20 | commercial certificate.
- 21 Q. Okay. Can you just kind of give us an overview of the
- 22 | simulator training program that you guys use for the various
- 23 helicopters you operate?
- 24 A. So we have two types of simulator training that we do. There
- 25 is contract training, which takes place in our fixed wing fleet.

- 1 For the helicopter fleet, we have our check airmen that perform
- 2 training and evaluations in simulators. Four of those are located
- 3 here in Denver at a FlightSafety building. We have an EC135,
- 4 AStar, Bell 407 and an EC130. Those are all full motion, Level D
- 5 | flight simulators. We also have, and this would have been
- 6 starting in about August of last year, 2017, we have a full
- 7 motion, Level D, EC145 flight simulator down in Shreveport,
- 8 Louisiana that we use.
- 9 So we're doing as much training in those simulators as we
- 10 can. There are times where the number of pilots required to do
- 11 the training exceed the capacity of the simulator schedule, and so
- 12 we will shift some of the training into aircraft on occasion. But
- 13 all of the pilots get rotated through the simulator facility over
- 14 the course of a year, and that's where the bulk of the training
- 15 occurs.
- 16 Q. You mentioned before about factory training and then the
- 17 | folks that just go to that are the check airmen then, correct?
- 18 You just don't send regular, I quess, line guys out to do that,
- 19 it's just all the check airmen?
- 20 A. On a standard basis, yes.
- 21 Q. Okay. And then kind of with the preflight planning process
- 22 | with you guys, you know, I know pilots are required to be familiar
- 23 | with performance values for the flight and all that. With that in
- 24 mind, do you guys require them to have any sort of like
- 25 performance planning card they're required to have all these

- 1 | values on and reference during the entire flight? If they've got
- 2 | a 3-hour flight and they've got that --
- 3 A. Yeah. So not referencing like what you find in the military.
- 4 Q. Yeah, that's what I meant, yeah.
- 5 A. I think that's what you're talking about. No, we don't have
- 6 | a specific card that they carry in the aircraft or that's required
- 7 for logging anywhere. They are required to do all the performance
- 8 planning for that flight at the base before they leave, and then
- 9 they have the ability to update that planning as they're going
- 10 along, you know, through the flight at different stops. But that
- 11 | would not be something that we would keep a historical log of,
- 12 other than the weight and balance form itself.
- 13 Q. And then with the, you know, BK117 series, you know,
- 14 training, not simulator-wise but actual training, you know, if you
- 15 had a guy at a base in Tennessee, for example, he would do all of
- 16 | his local training in the helicopter there at that base; is that
- 17 | correct? He wouldn't do it here in Denver or do it somewhere
- 18 else? He would mostly do it there at that base with --
- 19 A. Well, it -- so it would depend on his aircraft and if his
- 20 aircraft has a simulator available. So in other words, if he was
- 21 | flying an EC135, then he would come to Denver where he would
- 22 | complete ground school on the aircraft and then he would be
- 23 scheduled for an initial round of training in the 135 simulator.
- 24 He'd receive a check ride in the 135 simulator, and he would also
- 25 complete time of -- training time and a 299 check ride in the

aircraft, EC135 aircraft that's at Front Range Airport here as part of the complete training package.

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for, then that training has to happen in the aircraft obviously, and so that's usually going to take place at the base where he's going to be flying. The aircraft will be configured for training mode. Sometimes due to the operations at the base, it is impractical to take an aircraft and put it in training configuration and take the base out of service. So occasionally a spare aircraft of the equivalent make and model will be used and that training could take place at that base or it could take place at another facility around the country.

If he was flying an aircraft that we do not have a simulator

Q. Okay. And then using the BK117 as an example, if you had a brand new guy to the company who's never flown that before, you know, roughly how long does that whole process take from start of training to getting complete and signed off, kind of a rough timeline overview?

A. So in most cases, it's going to be between 2 to 4 weeks probably for that training to occur. You have roughly 3 days plus or minus of ground school that's going to need to occur just on the airframe itself. And this is after -- if they're brand new to the company, they have basic indoctrination and other onboarding things that have to happen, right. But if we just get to the aircraft, we have ground school, we have flight training, we have a check ride, and then we have some type of local orientation. So

- 1 | that whole process is going to encompass somewhere in the
- 2 | neighborhood of 9 to 20 hours of flying and it's going to take
- 3 probably 2 to 4 weeks logistically to complete all of that.
- 4 Q. Okay. And then with all these training programs you guys
- 5 have in place, how often are they internally audited by the
- 6 company?
- 7 A. Internal audits, I would say that the internal audit itself
- 8 is probably a direct function of -- they're audited by our FAA
- 9 team on a fairly regular basis. So we have less of a formal
- 10 auditing process for the pilot training program, but on any given
- 11 | year there's probably at least two revisions that are in the works
- 12 that are going to require submissions to the FAA which requires a
- 13 review by the certificate team of those items. So there is
- 14 probably every 6 months some type of auditing process taking place
- 15 between our company and the FAA and actual use of that program.
- 16 Q. Okay. And then when you to travel to the different bases, do
- 17 | you get to, you know, sample and kind of check on the different
- 18 training programs at the local levels, is what you get to do?
- 19 A. Well, there's no different training programs at the local
- 20 levels. There's one pilot training program.
- 21 Q. Sure. Sure. I guess I should say to see how they're doing
- 22 | at the local level from I quess a standardization aspect, you get
- 23 to do that?
- 24 A. We get to do that as check airmen. We get to do that as
- 25 managers. I get to do that in my current role. We have regional

- 1 safety directors that perform directed safety audits in a more
- 2 formal process. We have format -- forms-type format for local
- 3 | line personnel to complete base audits which are designed for
- 4 safety and compliance. So there are a lot of formal processes as
- 5 | far as day-to-day operations at a base and things that are going
- 6 on there.
- 7 Q. Okay. Then how would you describe the overall safety culture
- 8 here at Air Methods?
- 9 A. I would say that it's a strong culture, but it's always
- 10 trying to grow into a robust culture.
- 11 Q. Okay. And then can you kind of explain how the structure of
- 12 the Air Methods safety management system is set up as?
- 13 A. Sure. So we have a SMS manual that outlines all the process
- 14 that's supposed to take place behind the safety management system
- 15 | itself. It has gone through review all the way up through level 4
- 16 of the FAA qualification air status. It is a very large program
- 17 | in terms of there are a lot of moving pieces.
- 18 So you have at the corporate level, a couple of different
- 19 groups that meet to review safety items and issues and concerns
- 20 that are happening throughout the company. You have, as you start
- 21 to spread out throughout the regions, I mentioned the regional
- 22 | safety officers that are overseeing kind of their region. Just
- 23 like the regional aviation directors are concerned specifically
- 24 about compliance, they work hand-in-hand though with the
- 25 designated safety personnel as far as trying to address,

understand risk that might be in the particular region and then figure out what type of mitigation strategies may be needed or what type of changes might be needed in equipment or operations in order to eliminate the risk if it's considered to be unacceptable.

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At the individual base level, you have safety boards with information. You have quarterly publications to share that information that's in the system. You have several reporting systems for them to enter information into the SMS system. So we have a form called the AIDMOR, which is kind of a catchall accident, incident, anything that an employee feels is something that we need to know about. They can submit that form. It gets visibility with all my managers, myself, the executive team immediately, and then it has the ability for the different safety councils to take a look at that information from an organizational view and determine what needs to be done to act on it for loop closure.

In the event that an individual does not feel comfortable attaching their name to the reporting item, then we have an alert line function, which is an anonymous system or system that allows you to remain anonymous to report any kind of a concern with the organization.

- Q. Okay. And from your position and perspective, what are some of the top hazards that Air Methods faces?
- A. I think that they're -- in a lot of ways, they're no different than they've always have been. The number one issue

that is always at the forefront is that we have human beings that work in a very dynamic and complex environment. So any lapse in attention, any lapse in planning, any lapse in day-to-day functions as far as using checklists, performing walkarounds, performing a thorough preflight, you know, not following a procedure, any of those things can have severe consequences very quickly.

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You know, we certainly are always concerned about the high potential incidents as far as inadvertent IMC because that can have very severe consequences. So that's always at the top of the list that we talk about. It's part of our initial and recurrent requalification training to make sure that we're spending an adequate amount of time on those skills and that ability in case they find themselves there.

We've added a great deal of technology to combat the IIMC or the controlled flight into terrain issues particularly that can happen at night. So entirely NVG-equipped company. If you want to operate at night, you essentially have to be using NVG equipment or you have to be on an IFR flight plan. And we have a few locations with enough ambient lighting on the surface, such as a major urban center, Los Angeles, New York, Chicago, where we can get a conditional flight release. But outside of that, you essentially have to have one of these pieces of technology available.

In addition, we've added early warning systems to the

- 1 aircraft to supplement the NVG component. We have to have radar
- 2 altimeters when we flight at night. All the aircraft are equipped
- 3 with a sufficient avionics suite that even our most basic VFR
- 4 aircraft have the ability to perform instrument approaches and
- 5 make it out. So that loss of visibility, inadvertent IMC piece is
- 6 | a very big piece of our concern regardless of what the accident
- 7 | rate is just because it's always there --
- 8 Q. Sure.
- 9 A. -- and has severe consequences.
- 10 We're also, lately have been focused on adverse wind events.
- 11 | That could include anything from LTE to vortex ring state, to wind
- 12 shear and localized conditions, just because we've found, just
- 13 like the airlines to some extent, unstabilized approaches have a
- 14 higher degree of risk, and so we're trying to make our pilots
- 15 aware of those scenarios. And with the simulators we're able to
- 16 train those scenarios more effectively, let them practice
- 17 experiencing those items before they occur.
- 18 Q. Okay. And since you've worked at Air Methods, have you ever
- 19 | felt any pressure from company management to have your helicopter
- 20 and aircrew operate in less than optimal conditions?
- 21 A. No.
- 22 Q. Okay. And then is there a formal, I quess, aviation safety
- 23 council at Air Methods, where you have, you know, pilots and
- 24 mechanics where it's a separate independent council where they go
- 25 for safety issues or is that just done separately by management?

How is that kind of structured?

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A. Well, there are several different groups that go over safety. So we have -- directly out of the safety department itself and part of the SMS program, we have a general safety council and we have an executive safety council that are the formalized structure to look at some of the bigger issues that come out of the other places.

In our safety department we have an ASAP and MSAP program, which we have representation from the FAA office here in Denver. We have pilots on there. We have mechanics on there. We have managers on there. We have safety department personnel on there. And they meet monthly to review events that have gone into our reporting system, and not only determine how to handle the individuals involved with those reports, but also what type of action items come out of that information that comes into our system, and they assign that to people throughout the system to have follow-up and determine how to close those actions.

At a more local level, each of the regions have monthly safety calls, and usually at the base there is a person that is essentially designated to gather the safety information and disseminate it throughout the base, share that information with the employees that are involved and also be the primary person to go to in the event that they find something at the base that is considered to be, you know, a hazard or risk for being a hazard, and then send that back up through the system to be addressed.

- 1 Q. And then utilizing the PFRA, that's a requirement to use that
- 2 on every single flight then for you guys?
- 3 A. It's a requirement to use it on every single HAA flight.
- 4 Q. HAA flight. So if they're doing like a part 91 repositioning
- 5 | flight or maintenance check flight, they're not required to?
- 6 A. That's correct. By regulation. Now our pilots do perform a
- 7 PFRA for every flight that they do; however, they can pilot
- 8 approve a PFRA if it is not a part 135 HAA flight. If it falls
- 9 into the HAA category, the PFRA that they submit goes to the
- 10 operational control center, and then a trained specialist has to
- 11 review that and agree with their assessment. Once that happens,
- 12 they send back authorization and then the flight can occur.
- In the event that it was, you know, a part 91 flight like
- 14 you're talking about, the pilot would still fill out this same
- 15 form. He would still submit it. It would be logged into the
- 16 system, but it would be logged under pilot approved, and that
- 17 | would have the same risk categories as far as green, yellow, red
- 18 for the different levels that you would see anywhere else.
- 19 Q. Okay. And then with your entire fleet, I mean, you guys fly
- 20 a variety of helicopters. With the new rule coming in place here
- 21 in April, I assume by April you're going to have fleetwide FDM
- 22 devices on board then. And then I quess my question is, are they
- 23 all going to be using the same type of system, like an Appareo
- 24 or --
- 25 A. Okay. So the rule that goes active in April is a very

generic set of items that is required for FDM. So by the -what's listed in the CFR as well as FAA letter of interpretation,
our fleet is essentially 100 percent compliant right now because
we have tracking systems on the aircraft that meet all of the four
items that are required by the rule. We have a separate part of
our safety department that is dedicated to building a FOQA
program, and that's currently in implementation. And so the FOQA
program is going to involve higher level FDM devices, if you will,
that record a much larger range of parameters and would be
downloaded and sent through an analytical process on a regular
basis. That is going to involve several different types of
recording devices.

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We initially started with the company Appareo. We have now avionics coming from Garmin that are capable of giving us the same kind of information and sometimes at a better fidelity. So we will have a mix of devices that will be in the fleet, and we will -- we're working pretty aggressively to install those devices in all the aircraft in our fleet. I don't know -- I can't say that by April we're going to have all the advanced FDM devices in our aircraft, but we will be in compliance with the regulation.

- Q. Okay. And then outside of like an FDM device, like an Appareo, for example, do any of your helicopters have like crash review FDRs on board? A black box, for example, do you guys have those?
- 25 A. So we have aircraft that have the Appareo devices on them

- 1 today. We have aircraft such as the EC145, not the entire fleet,
- 2 | but I think at one point we had about 10 aircraft. Right now, due
- 3 to aircraft moving around and coming and going from our fleet,
- 4 | we're sitting at about four or five aircraft that have the
- 5 Outerlink Voice and Video Recording System that was installed by
- 6 Metro. It's, for lack of a better term, it's a legacy system. So
- 7 | it was installed before FDM really became a forefront item.
- 8 Those systems are not -- I don't know that they necessarily
- 9 meet your definition of crashworthy. They're not designed to that
- 10 same level. They have hard memory and protection, but I don't
- 11 know that any of them, including Appareo, are actually at like an
- 12 FDR level.
- 13 Q. Okay. And then with the tracking systems, do you guys use
- 14 like Sky Connect, for example? The time intervals for the data
- drop points, you know, for the helicopter, is that something
- 16 that's set by you guys or is that set by the individual hospital
- 17 | that's providing the flight time? How are those times set, I
- 18 | quess is my question?
- 19 A. So the bulk of our fleet, the timestamp that we want is
- 20 essentially 1 minute reports or less. The reality of way the
- 21 signals come back and forth to the satellites, sometimes those
- 22 | timestamps vary. You know, the ideal aircraft reporting, we're
- 23 getting a ping every 5 seconds, but I can't guarantee that we
- 24 always have a track that shows every 5 seconds because of issues
- 25 with the transmission and reception.

- 1 Q. Okay. And then kind of switching gears here, how often do
- 2 | you interact with Eric Monteith as the POI?
- 3 A. Well, now that I'm in my current position, I would say we
- 4 | interact probably at least face-to-face at least once every 2
- 5 | weeks or so. We frequently have phone calls in between and if I
- 6 was full time here in Denver, it would not be uncommon for us to
- 7 see each other at least once a week.
- 8 Q. Sure. And then how would you describe the relationship
- 9 between Air Methods and the POI?
- 10 A. I would say that it's a workable relationship right now.
- 11 There are times where the office is not quite as responsive to our
- 12 needs for reviewing and approving new programs, but I know that
- 13 like any couple of businesses, there are always logistical issues
- 14 in reaching the products that they both need.
- 15 Q. Do you feel that, you know, the Certificate Management Team
- 16 here, they have adequate people to assist you guys with and
- 17 provide oversight? Do you feel they have enough manpower to do
- 18 | that?
- 19 A. I can't really answer that question because I don't work in
- 20 | their office --
- 21 O. Sure.
- 22 A. -- and so I don't really understand all of the demands on
- 23 their time.
- 24 O. Sure.
- 25 A. And I know that we are a very large and complex certificate

- 1 and that requires a lot of manpower to cover.
- 2 Q. Okay. Talking about the accident make and model helicopter,
- 3 the BK117 C-2, with that helicopter itself, have you noticed in
- 4 your flying career if there are any ergonomic issues with the
- 5 design of anything on there such as, you know, the layout of the
- 6 flight controls, the switches, the levers, anything that you've
- 7 seen over the years that's kind of like -- doesn't make any sense
- 8 of why it's set up like that or that's not the best design? Is
- 9 anything that kind of sticks out to you about it?
- 10 A. No. The aircraft itself is generally well organized. It has
- 11 | a lot of cabin space compared to many other helicopters, which
- 12 gives the pilots plenty of places to put reference materials,
- 13 kneeboards, those kinds of things. It has holders for
- 14 flashlights, kind of some simpler minor touches that we don't find
- 15 | in many aircraft. So ergonomically, most things in that aircraft,
- 16 | I really can't think of anything that doesn't make sense other
- 17 | than the insignificant item, the one complaint every pilot had for
- 18 many years, were cycle counters that were on the overhead that
- 19 were very, very small and most people needed a magnifying lens to
- 20 | read. They've since done away with using the counters and they
- 21 have a manual cycle counting process, so that issue has resolved.
- 22 Q. Okay. And do you feel the various emergency procedures in
- 23 the RFM are clearly communicated by Airbus and are easy to follow
- 24 and understand?
- 25 A. I think they're as clear and concise as any other flight

- 1 manual that I've read.
- 2 \mathbb{Q} . Okay. With the BK117 C-2 -- this is just kind of a
- 3 hypothetical systems question just so I understand it better. If
- 4 you have a problem with one engine and the healthy engine is in
- 5 | the process of taking over for it, if you will, from the problem
- 6 engine, will there be an indication shown on the healthy engine
- 7 during this process?
- 8 A. So I don't -- I guess that's too generic of a question. I
- 9 don't know that I can answer it the way you're asking. Is there a
- 10 more specific scenario?
- 11 Q. Yeah, I'm just trying to understand, I guess, if you have one
- 12 engine that's in the process of having like a loss of power or
- partial loss of power, for example, if the number 2 -- the number
- 14 | 1 experienced that, for example, and then, correct me if I'm
- 15 wrong, the number 2 is going to take over that load for number 1
- 16 then, right, in that process?
- 17 A. Right. So you have -- as far as the pilot's indications, you
- 18 | have what's called first limit indicator, or FLI, that has
- 19 essentially on the left and right side of it three sets of
- 20 parameters, or I should say three parameters on each side. So you
- 21 have, at the top you have torque, in the middle you have TOT, and
- 22 at the bottom you have N1. And there will be a little white box
- 23 next to one of those three parameters on either side and that box
- 24 tells you which parameter is going to hit the red line or the
- 25 | limit first at that point in time, and that's what's represented

by the needle that's on the FLI display.

So in the event that you're flying the aircraft and you have two needles, which would generally be matched by the (indiscernible) system, and they would historically, other than very high altitude operations, would be a torque limitation. As the aircraft is flying along, if either of the engines increases or decreases in power, you would see the respective number 1 or number 2 torque needles -- or number 1 or number 2 FLI needles that represent torque adjusting up or down as they get closer or further away from that red line.

11 Q. Okay.

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- 12 Okay. So in your scenario where one engine is having this 13 partial power failure and the other engine is then trying to pick 14 up that additional torque from the so-called bad engine, you would 15 see the needles splitting off from each other respective of --16 let's say the number 1 engine is partial power, so it's going to 17 be decreasing and indicating a loss of power, and number 2 is 18 going to be correspondingly at an equal rate going up and spiking 19 potentially above the red line.
- Q. Okay. How would you describe the relationship between Airbus and Air Methods?
- A. I would say that it's a good working relationship. We have a lot of Airbus aircraft in our fleet, and so we frequently have managers, pilots, mechanics that have interactions on a day-to-day basis with Air Methods personnel.

- 1 Q. Would you say they're pretty responsive if you guys have
- 2 | issues you're bringing up to them or, you know, data requests or
- 3 whatever, they're pretty responsive with helping you guys out with
- 4 | your needs?
- 5 A. As a general statement, yes. I would say, like any other
- 6 | business, there are times where the things we want from them
- 7 are --
- 8 0. Sure.
- 9 A. -- are not as responsive as we need. But as far as a high
- 10 level overview, I would say we generally have a good working
- 11 relationship.
- 12 Q. Okay. And then since the accident occurred, have there been
- 13 any organizational changes here at Air Methods?
- 14 A. So fairly quickly after the accident occurred, due to the
- 15 | investigation process, there was a lot of focus on the inspection
- 16 and coking of the rear bearing line. While all that discussion
- 17 | was going on, our director of maintenance and the maintenance
- 18 department got together and did a review and came up with a
- 19 procedure and a more restrictive inspection interval, as well as
- 20 | criteria for trending and things that were not necessarily clear
- 21 in the maintenance manuals.
- 22 They issued what we call a fleet campaign directive with that
- 23 quidance to all bases that operated the 145, and we initiated that
- 24 enhanced maintenance inspection into our fleet, and then that
- 25 inspection itself was later used by the FAA for the issuance of a

SAFO to the general population.

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We've had — in the pilot training program itself, every year we have a meeting of all the check airmen and flight instructor staff. And so one of the items that was discussed was the pieces that we could release as far as what we knew about the Duke accident, and we had general discussions about all of the different things that could potentially be emergencies that were identifiable from kind of that very big picture. And we had discussions about what can we do as far as scenario training to account for some of these issues. Whether they actually took place in the Duke accident or not, we didn't know, but the idea was that we could spend time emphasizing those things to pilots and still get a benefit out of it.

I think those are the only definitive actions that were taken at this point, partly because we don't know — there was one additional maintenance item that was done, and that was when we found out that we were missing the SD cards in the quick access recorder, then maintenance also put out a directive for an immediate inspection of the other four or five aircraft that had that recording device to confirm that we had good SD cards in the quick access recorder for those aircraft. I think those are the only items, because everything else at this point we really don't know where we are.

Q. Sure, sure. Going back, related to the circumstances as we know them now, were there any previous safety concerns with

- 1 anything?
- 2 A. There were no safety concerns on the radar for the Smithfield
- 3 Base. There were no safety concerns on the radar for the EC145
- 4 aircraft.
- 5 Q. And how would you rate the overall employee morale here?
- 6 Dealing with all these different levels and bases, how would you
- 7 say the overall employee morale is at the company?
- 8 A. I would say the overall morale is good.
- 9 Q. And do you feel the company has adequate personnel and
- 10 equipment to do its mission?
- 11 A. Yes.
- 12 Q. And from your perspective as the DO, are there any safety
- 13 improvements that you'd like to see implemented at the company,
- 14 whether it's, you know, operations, safety program, equipment?
- 15 A. Well, as DO, and I know the group that I work with, we're
- 16 always evaluating what else can we do, what else can we add to the
- 17 | fleet. We're fortunate we work for a company that is willing to
- 18 spend money on anything that has value added in terms of safety.
- 19 That's where we spend millions of dollars in simulation training.
- 20 We've spent millions of dollars on NVG equipment and moving maps
- 21 and having good avionics suites in the aircraft, the HTAWS
- 22 devices. I know that right now we have a great deal of emphasis
- 23 on taking our pilot training programs to the next level and
- 24 approaching the same type of training that takes place on a 121
- 25 | world with enhanced scenarios with LOFT training.

We're greatly looking forward to getting our FOQA program fully up and running because that will be the data collection point, and then the distribution back down to our training department to figure out which are the highest value scenarios to incorporate into our training. We're hoping to move from reactive and sometimes proactive viewpoint of our operations to a predictive viewpoint, so that we can try and find a way to get ahead of incidents and accidents before they happen. That includes a lot of behind-the-scenes training that's taking place with all of our managers for root-cause analysis and installing new process and procedures around the SMS system, trying to take our SMS system and mature it to again a higher level of operation than what it is right now.

So I think on any given day we are looking at many different types of technology to add to the aircraft, whether they be crash resistant fuel systems; we are looking right now at bird impact resistant windows for the aircraft, pulse light systems for the aircraft. We're installing ADS-B to not only be in compliance, but also because that gives us greater visibility of other people that are flying around us and easier operations as far as IFR operations, tracking of the aircraft. We're in the process of electronic flight bag approval with the FAA, and trying to get all of those systems to then talk to each other --

O. Sure.

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25 A. -- and be able to share that information back and forth. So,

- yeah, I would say that there are a lot of moving pieces there, but
 we are continually looking at installing new technology, new
 training and a lot of new elements related to safer operations.
- 4 MR. HODGES: Okay. I think that's all I had.
 - MR. BRAZY: I have a few short, what I think will be very short questions. But we've been sitting here for a while, does anyone want to use the restroom or get a drink of water? No one?
- 8 UNIDENTIFIED SPEAKER: I'd say Jason probably --
- 9 MR. BRAZY: Well, Jason --

6

- 10 UNIDENTIFIED SPEAKER: Do you want a drink of water? Do you want some water?
- MR. BRAZY: -- he's been doing all the talking. Do you want me to get you a water or --
- MR. QUISLING: I'm okay right now as long as they're short questions. But if they go too long, Doug, then I'll ask for a break and take you up on that one.
- MR. BRAZY: Mine are short, but I'm first. So don't be bashful about needing to take a break.
- 19 MR. QUISLING: Okay.
- 20 BY MR. BRAZY:
- 21 Q. You mentioned most recently here there was some scenario-
- 22 based training developed somewhat under the information based on
- 23 | the Duke accident. Has that scenario-based training taken place?
- 24 Is it done or is it in progress or is it going to start?
- 25 A. No, some of it was -- in theory, some of it was already in

place when Duke happened. So, for example, one of the possible scenarios that has been discussed was the possibility of a fire in the engine compartment. That's one of the emergency procedures that we train. In the simulators, it's introduced in a fashion where it's occurring as part of a normal flight, right, where we have a pilot -- sometimes we have them picking up a patient at a simulated scene call and flying that patient to the hospital and en route they may experience this simulated fire condition. And at other times, you know, it could happen on takeoff or landing to any one of these locations. With our instrument pilots, sometimes it happens during the middle of an ILS approach.

So we had what I would maybe classify as more high profile but generic emergencies, that they were already kind of pre-built as scenarios, but we would take that training then and tie it back to a what if this happened with the Duke incident to try and connect it to reality, so to speak.

We have incorporated brand new scenarios in terms of things like vortex ring state and LTE events and brownout, whiteout events. Those are things that were previously very difficult to incorporate into any kind of scenario with an aircraft if you're training in the field just because of safety considerations.

Q. Sure. Yeah.

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A. But in a simulator now, we have built ways to create these scenarios for the pilot while he's doing a normal flight operation, not as a we're going to set you up for vortex ring

state now.

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- 2 Q. I understand.
- A. And then we've talked about things such as standard recoveries and things such as -- that have been big press lately on alternate recovery techniques like the Vuichard technique for

6 vortex ring state.

We also work through different power scenarios with the pilots in terms of partial power loss, low fuel indications, all of those pieces, to try and develop not so much the skill set around those particular emergencies, as much as the decision making process about how quickly do we land the aircraft, how do we make that decision, you know, how do you prioritize these events as they're unfolding and sometimes more than one thing is happening.

So I would say that those are the scenario-based set that we have in all of our simulators right now, and then like I said, with the FOQA program, with the different information we get out of these accident investigations, all right, then we're waiting to plug in specifics that we know as that information is given to us.

- 20 O. Sure. Okay. Great.
- 21 A. So that's where we're at.
- Q. Would it be better to characterize that as saying that you use sort of the information from the accident as input into an
- 24 already existing scenario-based training program?
- 25 A. Yeah. And I would add there were some skill sets that we

- already did, but we also increased the attention we spent on them,
- 2 such as autorotation training.
- 3 Q. Perfect. That's exactly what I was looking for.
- 4 New topic.
- 5 A. Okay.
- 6 Q. A little bit -- a little while ago, you had mentioned, in
- 7 addition to another -- in addition to adjusting some scenario-
- 8 based training, another action that had happened after the
- 9 accident was some adjustments to some maintenance on the
- 10 helicopter. We have what those were so I don't want you to go
- 11 through all of the details. My question really is that campaign,
- 12 does it have a sunset date or do you plan on keeping it in place
- 13 until a certain date or until a certain thing happens or until
- 14 further notice?
- Just let me -- tell me a little bit about -- I'm really kind
- 16 of interested in the maintenance interval adjustment, but the
- 17 | whole thing in general, do you plan on doing that forever or until
- 18 more information comes down the pike, or have you adjusted it
- 19 because of a recent service letter that we got from the engine
- 20 manufacturer, for example?
- 21 A. Right. Okay. So I'll start at the easier end. So we have
- 22 | not adjusted it. And I'm just a pilot, but I believe the
- 23 maintenance letter had a 400-hour interval, I think, for the
- 24 inspection. We're stuck at our original fleet campaign directive
- of 100 hours. We have no date when we're going to change that.

At this point in time our goal is to keep it there until we have enough information for the trending that we can reliably see whether or not anything is happening.

Once we get that information, then the maintenance department intends to do a QA type analysis to figure out, based on what's happening in industry and where the manufacturers set the inspection times now that they're starting to put out literature on it, from our 100 hours to whatever their numbers are, we will probably find an incremental level that we move to until we develop enough trending information there that we feel comfortable going to whatever the manufacturer has set. It's all based on the trending data that we get.

Q. That's exactly what I wanted to know.

New subject. You mentioned the FOQA program is kind of in development now. The FDM requirements are taken care of for April. You're installing some more sophisticated equipment with plans of collecting that data in a FOQA program, as I think we all understand. Do you have any timing information when you think that's going to be turned on, I guess, or finished or is this something that's going to -- you're going to start pulling data off helicopters in a week or is it 6 years down the road or beyond that? Just give me a little bit of timing information.

A. Sure. Absolutely.

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Q. And it's just out of my own curiosity. I don't have any other reason for asking that question other than I'm curious

- 1 because of my previous position in the flight (indiscernible).
- 2 A. So the program is new but it's turned on now.
- 3 Q. Oh, it is? Okay.

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A. We have -- I can't give you a number. It's less than 100 aircraft with the Appareo devices, but we have them installed in aircraft already. We have, you know, fleet scheduled to add devices to remaining aircraft over the period of the next few years. I don't know if that's a year and a half or 3 years or where they are, but our engineering department has a schedule for every airframe to eventually outfit them with a recording device.

The information is coming out of devices that are in the aircraft right now. It is being downloaded. It is being looked at. That's created a new set of problems for us because the devices that we've installed, some of them are having calibration issues, where they frequently go out of calibration and we end up with bad datasets. So our safety department right now, it is trying to figure out what is the best recording equipment to have in the aircraft so that we can eliminate that issue, where we're kind of fighting ourselves right now to try and get good data.

But it -- we already have the initial test group of aircraft that the FOQA team built trigger points around the datasets, if you will, you know, for rates of descent and airspeed and pitch and bank, and the software is out there. We also have started to work with another company, Truth Data, to analyze information coming from other devices.

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1
         So we are getting information. We've used it in a few cases,
 2
    inadvertent IMC and other events, to help figure out what did the
 3
    aircraft go through, how did this event occur, what can we do to
 4
    prevent that in the future? Right now I would say that we're kind
 5
    of at the initial stages of the program and I think over the next
 6
    1 to 3 years, we're going to reach, you know, that full stage
 7
    where we involve into 100 percent fleet and full compliance as far
 8
    as feeding that information back into our SMS system.
 9
         MR. BRAZY:
                     Perfect. I have no further questions.
10
         MR. HODGES:
                       Brice.
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         MR. BANNING:
                       No, thank you.
12
         MR. HODGES:
                       Matt?
13
         MR. RIGSBY:
                       I've got a few.
14
         UNIDENTIFIED SPEAKER:
                                Break?
                                         I want a break -- I want to
15
    take a break.
16
         MR. HODGES: We'll take a break.
                                            Pause the recording at this
17
    time.
18
          (Off the record.)
19
          (On the record.)
2.0
         MR. HODGES: Okay. We are back recording.
21
         BY MR. RIGSBY:
         Jason, how many total pilots do you have -- are you
22
23
    responsible for?
24
         So right now we're just a little bit under 1400 pilots.
25
    want to say the number right now is about 1387 but it goes up and
```

- 1 down.
- 2 Q. And all those are direct Air Methods employees? You don't
- 3 | have any contract pilots like floaters and that type of thing?
- 4 A. No. Anybody that operates on the part 135 certificate and
- 5 does any kind of HAA flights are all Air Methods employees. We
- 6 occasionally may have with a purchase agreement of an aircraft or
- 7 something like that, you know, an aircraft that has to be moved
- 8 across the country or from out of state, out of the country, into
- 9 the U.S., that could be a contract person, but everything else is
- 10 us.
- 11 Q. Okay. There -- and this is maybe going back, but Air Methods
- 12 | just has one certificate now, right? They don't operate like Life
- 13 Med and for a while, there was several certificates.
- 14 A. Yeah. For the HAA operations, it's the Air Methods
- 15 | certificate. There are -- listed in the ops specs, there are DBAs
- 16 for certain programs but it's all under one certificate.
- 17 Q. Okay. And you are the DO for all those?
- 18 A. I am.
- 19 Q. Okay. When you guys do your orientation training and all
- 20 | that, how involved is the FAA, either the POI or one of his other
- 21 | five operations inspectors, in that program for new employees and
- 22 training programs?
- 23 A. So our Certificate Management Team out here, their office as
- 24 | a touch point primarily when we go from the end or completion of
- 25 basic indoc to the qualification in the aircraft or possibly

- 1 recurrent training. Most of their involvement in there is related
- 2 to the check airman status and their maintaining currency and
- 3 standardization in the aircraft. So when a check airman requires
- 4 | an observation or a check airman requires his own initial or
- 5 | recurrent check ride in an airframe, the FAA will generally have
- 6 an inspector there to administer that check or possibly observe
- 7 | one of our check airmen doing that training for another check
- 8 airman.
- 9 Occasionally they will also come out and observe an entire
- 10 | initial ground school, an entire initial flight training through
- 11 | the check ride, same thing with recurrent training, to validate
- 12 our pilot training program is staying in line with what we have as
- 13 | far as the approved program.
- 14 Q. Okay. Do they do that both for the aircraft and the
- 15 | simulator?
- 16 A. Yes.
- 17 Q. Okay. The Duke program, was it a IFR program?
- 18 A. Yes, it was.
- 19 Q. Were all the pilots -- at the time of the accident, were all
- 20 | the pilots IFR qualified and capable?
- 21 A. To the best of my knowledge, I believe so. I would have to
- 22 look. I know there were some newer pilots that had been brought
- 23 in. I think they had completed their IFR training by that time.
- 24 Generally speaking, a new pilot comes in, is hired, is trained for
- 25 | 293 or the VFR requirement along with the ability to use the NVGs,

- 1 and then after a few months, say, 3 to 6 months in the aircraft,
- 2 | where they have gotten used to the operations, the aircraft, the
- 3 | location that they're flying in, then we bring them back into a
- 4 | separate iteration of training that includes their instrument
- 5 qualification with the company and another check ride.
- 6 Q. Okay. How often are they required to do their instrument
- 7 competency checks?
- 8 A. Every 6 months.
- 9 Q. Okay. And they don't have to do it in that particular
- 10 aircraft. Like if they're flying an EC135 and 145, they can do it
- 11 in either/or and be qualified in the other, correct?
- 12 A. They have to do an initial in each of the airframes. Once
- 13 they're qualified in both the airframes under 297, then they will
- 14 essentially alternate. So every 6 months, they will complete the
- 15 293, the 297 and the 299 for that airframe, and then 6 months
- 16 later, the other airframe, they'll do the 293, 297 and 299, so
- 17 | that they're -- every 6 months they're doing the entire check ride
- 18 process to include the instrument, but it'll be alternating
- 19 airframe.
- 20 Q. Okay. On the simulator training itself, you said it's done
- 21 at FlightSafety. Is it FlightSafety employees that are performing
- 22 | the training or are they Air Methods?
- 23 A. The helicopters, the simulators are kept at a FlightSafety
- 24 center, but we have a contract with FlightSafety that allows our
- 25 | check airmen to go in and perform all the training, all of the

- 1 evaluations in the simulator.
- 2 Q. Okay. Is there a syllabus for that type of training?
- 3 A. There is. So our approved pilot training program as it sits
- 4 | right now, it has a training program for each airframe, and then
- 5 airframes like the 145 that have a simulator available, they have
- 6 | a FSTD or flight simulator training device syllabus that mirrors
- 7 | what we do in the aircraft, but it's specific to the Level D
- 8 flight simulator.
- 9 Q. And I know the training program has to be approved, but the
- 10 syllabus, does it -- it allows you -- you're allowed to have some
- 11 variation that are based on your process and procedures, maybe
- 12 it's in the checklist flow or something like that, right?
- 13 A. Right. So the program itself is approved, which includes in
- 14 the program the actual syllabus in terms of modules and the tasks
- 15 | that have to be completed for each module. We're allowed
- 16 | flexibility in the order that we teach those modules when we're
- 17 | doing training. We're also allowed flexibility in terms of the
- 18 lesson plans that we create to support those modules. So the
- 19 scenario that we might incorporate to cover something like vortex
- 20 | ring state can change based on what we wanted to do, but vortex
- 21 | ring state is a required item. So we have to make sure we include
- 22 that in our training and in our checking.
- 23 Q. What you're doing here with FlightSafety is a mirror image of
- 24 | -- is it a mirror image of what's going on at Metro? You are
- 25 providing your crews, your pilots and instructors there or do you

- 1 use Metro instructors for the 145?
- 2 A. So just to clarify because it gets complicated.
- 3 Q. Okay.
- 4 A. So in Shreveport, Louisiana, co-located with Metro Aviations'
- 5 | headquarters is a training center building that's owned by Metro.
- 6 Metro had a partnership with FlightSafety that designates that
- 7 | also as a FlightSafety training center. At that training center,
- 8 regardless of who you want to call it, there are currently two
- 9 Level D flight training simulators. There's an EC135 and an
- 10 EC145. Air Methods has a contract with FlightSafety, and we
- 11 utilize that facility with our instructors and our pilots and the
- 12 EC145 simulator to conduct our training.
- 13 Q. Okay. Has the FAA ever been to that facility in your
- 14 principal operations there?
- 15 A. Yes. They -- all of the simulator programs, the FAA was
- 16 there as we -- throughout the process as we wrote the training
- 17 program; throughout the process, as we spooled up the simulators,
- 18 they observed training, they observed ground schools, they
- 19 observed check rides. They also administered any of our check
- 20 airmen in those aircraft with the simulators. Generally in the
- 21 simulator is where they get their check rides and their
- 22 observations. So the FAA is there on a regular basis to check
- 23 them.
- 24 Q. Okay. If you had a problem with Eric, with the principal
- 25 operations inspector or any of the other operations inspectors

- 1 | that you are dealing with, your next step would be to go to the
- 2 | FSDO manager? Do you go to the FLM, the front line manager, or
- 3 how is that relationship? I mean, you feel confident in going to
- 4 | them and saying, hey, we've got an issue; we need to get it
- 5 solved.
- 6 A. So we spend a great deal of time and effort to try and have
- 7 an open and transparent relationship --
- 8 Q. Sure.
- 9 A. -- with our office. Every month, at the beginning of the
- 10 month, we have a meeting. It alternates between here at the FSDO
- 11 office and at Air Methods. That includes all of the office
- 12 managers here from at the very top, Dale Ogden, all the way down
- 13 to our principals and oftentimes, some of the inspectors that work
- 14 underneath the principals attend from the FAA. The top of Air
- 15 Methods management, starting with Mike Allen and our senior VP of
- 16 aviation operations, the 119 team, myself, the chief pilot, the
- 17 director of maintenance, we all get into the same room at the
- 18 beginning of the month and go through whatever issues are
- 19 happening in our company or with the FAA or with the industry that
- 20 may impact us.
- 21 We all have each other's contact information. So at any
- 22 | time, if I needed to, I could pick up the phone and reach any of
- 23 those other people in that management chain all the way up to the
- 24 top.
- 25 Q. And in this case, and obviously you weren't the DO at the

- 1 | time, but when they became aware of this accident, part of your
- 2 post-accident plan is a call to the POI or the office here to
- 3 notify them of the accident, correct?
- 4 A. So -- yeah. Our basic process, whenever we have an event
- 5 that is possibly reportable, we have a notification process which
- 6 includes director of operations making a phone call notification
- 7 to the POI. The director of maintenance usually makes a phone
- 8 | call notification to the POI for maintenance. In addition, we
- 9 usually have some kind of email traffic that occurs once we've
- 10 either made or attempted to make the phone notification. It's
- 11 usually an email that gets sent to the FAA principals to share
- 12 | with their office as far as whatever details we might know. A lot
- of times, it's very basic. It depends on how much information's
- 14 | coming in initially.
- 15 Q. Sure. Sure.
- 16 Is there a union at Air Methods, pilot union?
- 17 A. There is for the pilots.
- 18 Q. Okay. And are you the point of contact for that? I mean, is
- 19 that one of your additional duties?
- 20 A. It can be. Right now, the chief pilot has been the point of
- 21 contact as far as day-to-day interaction with union leadership on
- 22 any pilot issues or contract negotiations or things along those
- 23 lines.
- 24 Q. Okay. You mentioned the ASAP program. Are you the person on
- 25 | the ERC, event review committee, or is it somebody that works for

- 1 you?
- 2 A. It can be myself. At times it could be the chief pilot or
- 3 one of his assistant chief pilots. We do have a few dedicated
- 4 personnel from operations that are always scheduled to be there,
- 5 but if the chief pilot or myself are available when they're
- 6 running the event review committees, then we will usually attend,
- 7 as well as my regional aviation directors if they're in Denver for
- 8 other reasons like record audits and things like those. If one of
- 9 those committees is running and they're here, then they will
- 10 usually attend as well.
- 11 Q. Okay. Have you had pretty good luck with that, I mean, as
- 12 far as -- and I guess this is abuse on the FAA's side of the
- 13 house, them taking something they have learned in there and then
- 14 hitting you guys with some type of certificate action? Have you
- 15 | ever run into that?
- 16 A. I don't think that we've experienced any negative effects
- 17 | from our ASAP or MSAP program. I think we've only experienced
- 18 positive.
- 19 Q. Okay. Great. Each base has a safety officer, correct? It
- 20 may or may not be a pilot.
- 21 A. Correct.
- 22 Q. Okay. Was Duke a CAMPS accredited program?
- 23 A. They are.
- 24 Q. They are. Okay. And CAMPS is just -- you guys know what
- 25 CAMPS -- okay.

Preflight risk assessments, obviously it's the regulatory requirement now. Are those evaluated -- once they come in, is there a team or something that goes in and evaluates those after they're submitted kind of as a, I'll say, sanity check or something? Because they can be -- my experience with preflight risk assessments is they can become a complacency issue where the checks -- all the blocks are check, check, check, check, check, and it gets submitted. Is there somebody that goes in and reviews, either from the Certificate Management Team or within Air Methods that goes in and looks at those, say, a month from now and says, gosh, this guy's always green and, you know, over a 2-month time period there's got to be some yellow in there at some point? I mean, you know what -- am I making myself clear? From a quality assurance standpoint?

- 14
- 15 Correct. Correct.

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So as it sits right now, the role of the director of aviation, risk and compliance, who is my report that oversees the operational control center, one of his roles and responsibilities is to look at that data in several different ways. run reports to see what the time frame is from submission to review to acceptance or to rejection, so that we can see how many reports in a given month we are sending back to the pilot saying, no, this isn't good enough; how many reports we have to call a pilot to find out more information; how many are automatically accepted and what that time frame is.

And then an additional part of his review would be to go back and look at the aggregate data and more from the sense of how many are low risk, medium risk, high risk, what are we seeing in terms of any trend information. That is supposed to be shared with the safety department, and that's a piece that's in the works right now, to get a more automated QA process so that we can develop more of a day-to-day live dashboard.

MR. RIGSBY: That's it.

BY MR. BRAZY:

2.0

Q. Okay. When Eric has -- Eric Monteith, your POI, has deployed -- and this may be -- you may not be able to answer this since you weren't the DO, but, you know, he has other responsibilities outside the FAA sometimes that he gets called up for. Have you seen a lack of Certificate Management Team coming in, you know, when he's gone? Is nobody filling his shoes? You know, does it delay your programs or approval process for manuals and that type of thing? Has that been an issue?

A. It has been an issue. I would say that we don't have a lack of surveillance during those times. We still have, I would say, normal interactions with the ASIs and the other individuals that are performing the regular surveillance of a certificate and the observed rides with their check airmen, those types of things, but from the administrative level and our ability to update manuals and get programs approved, things like that, it does create substantial delays in our workflow.

- 1 Q. Okay. I mean, you're probably more aware of it than some,
- 2 | but how aware is Air Methods familiar with the responsibilities of
- 3 | a POI as far as what his job -- not only does he do the
- 4 | Certificate Management Team, but his other responsibilities within
- 5 | the FAA? It may be a question you can't answer. Does the senior
- 6 management realize that Eric's one cog in the wheel and Air
- 7 Methods is one cog for him? He's got other responsibilities. Is
- 8 that --
- 9 A. I don't want to put words in any people's mouths. I think
- 10 that my best guess is that people are relatively aware because we
- 11 have, like I mentioned, a monthly meeting where we have
- 12 communication, that the different levels of FAA management do also
- 13 interact with the different levels of Air Methods management. So
- 14 I think that there's good information sharing in terms of what
- 15 types of roles and responsibilities exist at the POI level and
- 16 throughout the organization.
- 17 MR. BRAZY: Okay. I'm done.
- 18 MR. HODGES: Brice.
- 19 BY MR. BANNING:
- 20 Q. Just one question really. Is there anything that you think
- 21 | we missed that's important that you didn't get asked, you felt is
- 22 imperative to the accident that you wanted to share?
- 23 A. I don't think so. At least not that I can think of right
- 24 now.
- MR. BANNING: That's all I had.

- 1 MR. RIGSBY: Sorry. I was on the wrong page.
- 2 MR. BANNING: No, go ahead. That was all for me. So thank
- 3 you. I appreciate your time.
- 4 BY MR. RIGSBY:
- 5 Q. You had mentioned some of the training you've been doing. Do
- 6 | -- it's not a requirement to do autorotation training on a dual
- 7 | engine aircraft, but does Air Methods do that?
- 8 A. Yes.
- 9 Q. Okay. In the simulator or --
- 10 A. No. Well, I mean we did -- we perform autorotation training
- 11 | in the aircraft even in the multi-engines. Now the multi-engine
- 12 aircraft are generally prohibited by the flight manual to perform
- 13 a touchdown on a rotation, but we are able to train and perform
- 14 power recover autorotations and it's part of the pilot training
- 15 program we had. With the advent of the simulator training, we
- 16 have the ability to perform autorotations through touchdown, and
- 17 | we have the ability to perform autorotations from different
- 18 profiles that were previously either high in risk or completely
- 19 unsafe to try.
- 20 O. Sure. Okay. That's it.
- MR. HODGES: Okay. Do you have any questions for us?
- MR. QUISLING: No, I'm good.
- MR. HODGES: Okay. We'll go ahead and stop recording then.
- 24 (Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Jason Quisling

ACCIDENT NO.:

ERA17MA316

PLACE:

Denver, Colorado

DATE:

March 22, 2018

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

Kathryn A. Mirfin Transcriber

Free State Reporting, Inc. (410) 974-0947

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

Interview of: ERIC MONTEITH

Federal Aviation Administration
Denver Flight Standards District
Office

Denver, Colorado

Thursday, March 22, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

MATT RIGSBY, Air Safety Investigator Federal Aviation Administration

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1	<u>INTERVIEW</u>
2	MR. HODGES: Today is March 22, 2018, and we are at the
3	Denver FSDO in Denver, Colorado. We are doing the ERA17MA316
4	interviews. It's 9:31 local time.
5	I'm Mike Hodges with the NTSB, operations group chairman.
6	MR. BRAZY: Doug Brazy, NTSB investigator in charge.
7	MR. TOMICICH: Mark Tomicich, Office of Chief Counsel,
8	Federal Aviation Administration.
9	MR. MONTEITH: Eric Monteith, principal operations inspector
10	for the Air Methods certificate.
11	MR. RIGSBY: Matt Rigsby, AVP-100, Office of Accident
12	Investigation, FAA coordinator on this accident.
13	MR. BANNING: Brice Banning, NTSB.
14	MR. HODGES: And then does anybody have any objections to
15	recording this interview?
16	MR. BRAZY: I do not.
17	MR. TOMICICH: I'll reserve any objections pending the
18	witness's answer.
19	MR. MONTEITH: I do not.
20	MR. RIGSBY: I do not.
21	MR. BANNING: I do not.
22	MR. HODGES: Okay. And today we're going to be interviewing
23	Eric Monteith who is the Air Methods' CMT POI.
24	INTERVIEW OF ERIC MONTEITH
25	BY MR. HODGES:

- 1 Q. Eric, when were you hired by the FAA?
- 2 A. In December of 2008.
- 3 Q. Okay. And then can you kind of describe your aviation
- 4 background prior to coming to work for the FAA, please?
- 5 A. Prior to coming to work for the FAA, I spent roughly 18 years
- 6 working in the airline industry in the 121 role, fixed wing. In
- 7 addition to that, I spent, in 2008, about 20 years flying for the
- 8 Army. So I'm still in the U.S. Army Reserve, no longer flying,
- 9 | but most of my time was spent flying in the Army.
- 10 Q. Okay. And then just certificates, ratings and approximate
- 11 | flight time, just a rough number?
- 12 A. I'm an ATP certificate, both fixed wing and helicopter. I
- 13 would hazard a guess around 7- or 8,000 hour of flight time.
- 14 Q. Okay. And then are you currently qualified in the BK117
- 15 EC145 series?
- 16 A. I am not.
- 17 Q. Okay. And then you mentioned about being in the Army
- 18 Reserves. Is that considered like your outside function like with
- 19 | -- you have part-time commitments for that also?
- 20 A. Correct.
- 21 Q. Okay. And then roughly 2 years prior to the accident, were
- 22 you deployed at all or gone for an extended period of time with
- 23 | the Army?
- 24 A. Over the last 3 years, I have roughly deployed twice a year
- 25 for between 30 and 60 days at a time.

- 1 Q. Thirty to 60 days at a time. Okay. All right. And then
- 2 | with your responsibilities, is Air Methods the only certificate
- 3 you're responsible for then?
- 4 A. Yes, it is.
- 5 Q. Okay. Then how long have you been the POI then for Air
- 6 Methods?
- 7 A. A little over 3 years.
- 8 Q. Three years. And how long have you been assigned to the
- 9 certificate for?
- 10 A. Ten years in all.
- 11 Q. Ten years.
- 12 A. Since I was hired at the FAA.
- 13 Q. Okay. And then what other duties do you perform outside of
- 14 doing certificate management functions?
- 15 A. We're considered general aviation operations inspectors. So
- 16 that entails covering the front desk, pilot deviations, just
- 17 | general walk-in duties, certification for folks, CFI renewals,
- 18 those types of events.
- 19 Q. Okay. And then what FAA office is the Air Methods
- 20 | certificate held at?
- 21 A. It's under the Denver Flight Standards District Office.
- 22 Q. And then how many inspectors make up the certificate
- 23 management team and what are their roles and specialties?
- 24 A. For operations, which is what I'm familiar with, we have six
- 25 inspectors. Currently one of them will be coming back who we lost

- 1 | briefly over to the GA side. Of those inspectors, I have four
- 2 qualified inspectors who are current in the flight program for the
- 3 FAA, which means they can go out and administer check rides, then
- 4 | two inspectors, including myself, which are not.
- 5 Q. Okay. And then do you have a dedicated assistant POI then
- 6 | for the certificate?
- 7 A. The certificate has authorized one, but I have not had one
- 8 | since I've been the POI.
- 9 Q. Okay. And then from your perspective as a POI, do you feel
- 10 you have adequate members on the team to do certificate management
- 11 functions?
- 12 A. I would say we could use more inspectors to be more
- 13 effective.
- 14 Q. Okay. And then can you kind of explain how you guys do
- 15 | oversight with the various Air Methods bases scattered throughout
- 16 | the country?
- 17 A. So the Air Methods for surveillance -- we do different types
- 18 of things. So for surveillance, the FAA has rolled out a system
- 19 | called SAS, and what that is, it's a risk-based data-supported
- 20 system. So surveillance that we do based on risk for the Air
- 21 Methods' certificate is supposed to be entered and tracked in SAS.
- 22 Individual certification events such as pilot check rides required
- 23 under the rule, 293, 297, 399, 340, those types of events are
- 24 still required to be documented in the PTRS system.
- 25 Q. Okay. Now with the local base in Smithfield, North Carolina,

- where the accident helicopter originated from, you request
 assistance from geographic inspectors. How do you work with --
- 4 inspectors. I have not done that on the operations side.
- 5 Q. Okay. And then are you, in your position, like allowed and

There is ability to request assistance from geographic

- 6 do you travel to the bases throughout the country to do --
- 7 A. I would be allowed to, I guess. I have not really -- since I
- 8 don't do check rides, most of our travel budget is -- so on the
- 9 operations side, there's check rides that we have to do per the
- 10 | regulations. So those are the priority ones, surveillance events
- 11 that we have to do. So most of our budget actually goes to that.
- 12 Once the inspectors are at those locations, I can then utilize
- 13 them to go look at other areas.
- 14 Since I am not current in the flight program, I don't do
- 15 check rides. I travel very little. The money is better spent on
- 16 other inspectors who are actually going out and doing
- 17 surveillance.

- 18 Q. Okay. And then from an operational aspect, have there been
- 19 any higher level concerns you've seen with Air Methods? I mean
- 20 | not like administrative stuff, like someone forgot to turn in a
- 21 | risk assessment, but kind of higher level operational concerns?
- 22 A. My biggest concern with the Air Methods certificate is just
- 23 their -- they have been trying to get a SMS program up and running
- 24 at that company for years, and I literally mean years, and it just
- 25 seems like every time they're getting ready to really implement

1 it, it takes several steps back. And the reason I say it's a concern is that SMS has lots of tools embedded within it that the 2 3 certificate could use to manage some of the risks that they look 4 at on a day-in/day-out basis. So, to me, that is a significant risk because I do see breakdowns on occasion and it interfaces 5 6 between the lines of business at Air Methods. And SMS would 7 really help facilitate them as far as integrating their systems, lines of business, to prevent some of the occurrences I see. 8 9 And how would you describe your relationship between the FAA 10 and Air Methods like with your daily interactions with them and --11 I would say it's good. 12 Good relationship. Okay. And have you had any prior issues at all with the management team such as, you know, director of 13 14 operations or chief pilot, any of those folks? 15 We have gone through cycles with Air Methods where they 16 freely provide information. They're comfortable doing that 17 because they believe the FAA is going to use the information in an 18 appropriate manner. Where, in the past -- remember I've been on 19 the certificate 10 years -- we had windows where the only way we 2.0 corresponded with Air Methods was through letters of 21 investigation, which does not generate a good relationship. So I would say throughout the 10 years I've been on the 22

certificate, there have been a few bumpy patches where the communication was not good with the Air Methods certificate management team.

- 1 Q. Okay. And then going back to the local base, just to
- 2 | confirm, you've never been --
- 3 A. Correct. I've never been to that base.
- 4 Q. You never met the accident pilot then before?
- 5 A. I have not, no.
- 6 Q. Okay. And then from what you've seen with Air Methods, how
- 7 | would you describe their organizational safety culture there?
- 8 A. They have a strong organizational safety culture that could
- 9 benefit from some structure.
- 10 Q. And then can you describe the FAA training received for
- 11 providing oversight and surveillance regarding operational control
- 12 for a part 135 operator?
- 13 A. The training I received?
- 14 Q. Yes, from the FAA.
- 15 A. There is no specific training for me in reference operational
- 16 | control. There is a course, and I can't exactly remember the name
- 17 of it, Fundamentals for Principal Operations Inspectors, something
- 18 | like that, which I did attend after I became the POI, which helps
- 19 you become a better POI and understand kind of your role with the
- 20 certificate. But as far as operational control specifically, no.
- 21 Q. Okay. And then can you just kind of give us an overview of
- 22 | how operational control is performed at Air Methods?
- 23 A. Air Methods uses a two-tier system of operational control.
- 24 Tier 1 would be the management and the tools management uses to
- 25 | fulfill its obligations. Tier 2 would be the pilot in command.

- 1 And those are all listed in the chief pilot's office at their main
- 2 base of operations to comply with the operational requirements of
- 3 the ops specs.
- 4 Q. And then have you noticed, had any, you know, higher level
- 5 concerns of operational control --
- 6 A. I have not.
- 7 Q. -- in the process with them? Okay. And then with -- coming
- 8 | back to what you were saying before about the Tier 1 operational
- 9 control, what employees in Air Methods are authorized to do or
- 10 exercise Tier 1 operational control?
- 11 A. I'd have to look at the ops spec to specifically give you the
- 12 list of individuals listed, but primarily from the operations side
- 13 of the house, it would be the chief pilot, the director of
- 14 operations and regional aviation directors.
- 15 Q. Okay. And then what about the folks that are allowed to
- 16 exercise Tier 2 operational control?
- 17 A. Those are the pilots in command, and they're on the list
- 18 | that's kept in the chief pilot's office.
- 19 Q. Okay. And then 119.69 requires persons who exercise
- 20 operational control be qualified through training, expertise and
- 21 experience. How is that accomplished at Air Methods?
- 22 A. Most recently, Jason Bourne [sic] was appointed as the
- 23 director. They submitted him to be appointed as the director of
- 24 operations. They submitted a packet to myself. I reviewed his
- 25 experience, his qualifications. I conducted an interview with

- 1 Mr. Quisling. And based upon that process, I then either would
- 2 approve or disapprove him, and in his case, I approved him as the
- 3 director of operations.
- 4 Q. Okay. And then 135.77 requires a list of operational control
- 5 delegates to be maintained. Where is this list maintained at for
- 6 Air Methods?
- 7 A. I would have to -- I'm not exactly sure what operational
- 8 | control delegates, I'm not sure --
- 9 Q. Yeah, they have a list of all the persons that are
- 10 authorized. I guess like would master list be an appropriate
- 11 | thing to call it, would you say?
- 12 A. I'd have to see the rule.
- 13 MR. TOMICICH: I think -- let me just interject. It appears
- 14 to me now we're getting into kind of the same problem we had
- 15 before. We're talking about regs and other documents. It would
- 16 be helpful if the witness could get a copy of those.
- 17 MR. HODGES: Sure, sure. Okay.
- 18 MR. TOMICICH: It really isn't fair.
- MR. MONTEITH: I'm not sure specifically who you're referring
- 20 to, so that's why I'm not sure.
- 21 UNIDENTIFIED SPEAKER: Well, and I think you answered the
- 22 | question. I think you indicated that there was Tier 2 training or
- 23 Tier 2 operational control is held by the pilots. That list was
- 24 | in the chief pilot office.
- 25 MR. MONTEITH: Correct.

- 1 UNIDENTIFIED SPEAKER: So I think that -- yeah.
- 2 MR. HODGES: Okay. No worries.
- 3 UNIDENTIFIED SPEAKER: Yeah. We're not concerned.
- 4 MR. MONTEITH: Okay.
- 5 BY MR. HODGES:
- 6 Q. When was the last time you observed or had another inspector
- 7 observe operational control procedures at Air Methods?
- 8 A. I would say approximately 2 weeks ago.
- 9 Q. Two weeks ago. Okay. And then can you just kind of go over
- 10 | the Air Methods operational control training program?
- 11 A. For the operational control specialists?
- 12 Q. Just for all the folks -- operational control specialists,
- 13 DOs, chief pilots, all those folks.
- 14 A. So there's different levels obviously. Operational control
- 15 | specialists don't actually exercise operational control but they
- 16 man the operational control center, so they have a very specific
- 17 approved training program that they have to go through. As far as
- 18 the management individuals exercising operational control, it's
- 19 not an approved training program, per se. It's based upon their
- 20 experience, qualifications. They do go through, as they become a
- 21 RAD, a regional aviation director, a training program which
- 22 basically outlines their responsibilities and duties for the
- 23 corporation, and in that is where they talk about how they
- 24 exercise operational control, but that's not an approved training
- 25 program.

- 1 Q. Okay. And then can you explain your relationship between the
- 2 | Air Methods operational control center here in Colorado and with
- 3 | like a local hospital communications center like in Montana, for
- 4 example, kind of how that process works, initiating the flight and
- 5 doing the flight and concluding the flight, please?
- 6 A. Okay. So there's two things that are regulatory
- 7 | requirements. One of those is flight following. Flight following
- 8 is conducted by the communications centers. Flight progress
- 9 monitoring, and I'm paraphrasing there, is conducted by the
- 10 operational control center. So both organizations have visibility
- 11 of the flight while it's being conducted.
- 12 The communications center actually executes the flight
- 13 following regulatory requirement, where they monitor the flight,
- 14 they do position checks, those types of functions. The OCC with
- 15 the OCC specialists monitors the flight progress, looks at
- 16 | weather. If something's coming up, they would then reach out to
- 17 | the pilot of that flight and just alter the courses of action,
- 18 routes, those types of things.
- 19 Q. Okay.
- 20 A. Did that answer the question?
- 21 Q. Yes. Okay. With the 411 system that Air Methods uses when
- 22 initiating a mission, how does Air Methods determine if a pilot's
- 23 eligible to do a flight?
- 24 A. So they build gates into the 411 system, and I'm not an IT
- 25 expert, nor an expert on the 411 system. But they build gates

- 1 | into that system so when you duty in, the system checks for when
- 2 | the last time you dutied out, make sure you have the appropriate
- 3 crew rest. They enter into that system the dates of your check
- 4 | rides, the airframes you're qualified on. So when you go to get a
- 5 flight release, which is the pilot's kind of piece of operational
- 6 | control, it doesn't allow that to occur unless you have gone
- 7 through all those gates in the computer system.
- 8 Q. Okay. And then with the aircrew members, or passengers,
- 9 | since you've been assigned to the certificate, with like the
- 10 flight nurses and flight medics, do they typically fly as aircrew
- 11 members or as passengers from what you've seen?
- 12 A. So they're used as aircrew members on Air Methods because
- 13 they're a 100 percent NVG operator, and there are requirements for
- 14 them to fly under goggles. They have to have gone through the
- 15 training that the pilots have gone through. They have to maintain
- 16 currency, those types of things. Air Methods also imposes a
- 17 | restriction on them in their operations manual to be current
- 18 qualified under goggles.
- 19 Q. Okay. And then -- I know we talked about Jason Quisling
- 20 | before, but when did Jason roughly become officially the DO?
- 21 A. October of 2017, approximately.
- 22 Q. Okay. And then who was there prior to Jason?
- 23 A. Dennis McCall.
- 24 Q. Dennis McCall. And then when did Dennis leave the position?
- 25 A. I would guess July --

- 1 Q. July.
- 2 A. -- approximately.
- 3 Q. And I'm assuming there was an interim --
- 4 A. There was. Bernie Reynolds as the interim director of
- 5 operations. I appointed him as the interim director of
- 6 operations. I'd have to go back and look at the dates, but he
- 7 filled that gap between the two.
- 8 Q. Okay. All right. And then during this whole process, they
- 9 -- I'm assuming they submitted formal notification to you --
- 10 A. They did.
- 11 Q. -- of Dennis leaving, Bernie coming in and --
- 12 A. Correct.
- Q. Okay. I'm sure, you know, you're familiar with this with
- 14 being in the Army, you guys do performance planning cards for
- 15 | every flight. Does Air Methods do anything like that? Like do
- 16 they have a requirement for pilots to do a performance planning
- 17 card for --
- 18 A. Well, there's a regulatory requirement for the pilots to make
- 19 themselves familiar with everything about that flight. Multi-
- 20 engine aircraft actually have to prepare a load manifest and
- 21 retain it for I think it's 30 days after the flight. So there's
- 22 | both regulatory requirements and procedural requirements that the
- 23 company does comply with, yes.
- Q. Do they use an actual card, per se, with all the values on it
- 25 that they keep on a kneeboard for the flight or anything like

1 | that?

- 2 A. Well, again, they have different tools based upon whether
- 3 | it's a single or multi-engine aircraft. They have specific loads
- 4 and, again, without the card in front of me or the sheet in front
- 5 of me -- I believe it's called an optional configuration. And so
- 6 they weigh certain pieces of equipment. They use the weighed,
- 7 | aircraft weight and then they configure the aircraft appropriately
- 8 for their mission that they're going to conduct. So all that data
- 9 is available to the pilot, yes. But they are required to do
- 10 weight and balance before every flight.
- 11 Q. Okay. Can you explain the simulator training program that
- 12 Air Methods uses on the helicopters they operate?
- 13 A. They currently have five aircraft which have approved
- 14 curriculums to be conducted in a flight simulation training
- device. It's the AS350, EC130, EC145, Bell 407. Is that five or
- 16 | four? I can't add. So, yes, they do have approved simulator
- 17 | curriculums, which are not much different than the actual aircraft
- 18 | curriculums.
- 19 Q. And then do you travel at all and take part in any of the
- 20 | simulator sessions?
- 21 A. They have a centralized training facility here in Denver
- 22 where four of those simulators are located. Those have all been
- 23 approved over the last year and a half, and then they have one
- 24 | aircraft, the EC145, that is not in Denver. I have not been to
- 25 that simulator, no.

- 1 Q. Okay. With the flight data monitoring devices on board, does
- 2 | Air Methods use all that data in a formal FOQA program?
- 3 A. They do have an approved FOQA program which gathers data from
- 4 | the aircraft, and it's a growing program. They've had it for a
- 5 | little while, and as with all programs, it matures and develops as
- 6 they go, but it's becoming a very good program.
- 7 Q. Since the Duke accident occurred has there been any
- 8 organizational changes at Air Methods?
- 9 A. The only thing I can really think of is myself directing or
- 10 appointing Jason as the director of operations. That's really the
- 11 only organizational structure I'd be familiar with.
- 12 Q. And then since the accident occurred, have you changed
- anything with how you do your duties as the POI?
- 14 A. I have not.
- 15 Q. Were there any previous safety concerns related to the
- 16 circumstances that we know about the accident for the operator at
- 17 all?
- 18 A. Not that I'm aware of.
- 19 Q. Okay. And then how would you rate overall employee morale
- 20 here, you know, working as a POI, interacting with folks on a
- 21 regular basis?
- 22 A. Of the operator or --
- 23 Q. Yeah, of the operator.
- 24 A. Of the operator. Obviously since I don't get out to the
- 25 bases to interact with employees that much, I don't think I can

- 1 accurately answer that.
- 2 Q. Sure. And then from what you've seen as the POI, do you feel
- 3 | Air Methods has adequate personnel, facilities and equipment to do
- 4 their mission?
- 5 A. For the most part, yes.
- 6 Q. Okay. And then as a POI, are there any safety improvements
- 7 that you would like to see implemented at Air Methods that are --
- 8 A. I'd like to see a full blown SMS program actually up and
- 9 running there. The only other area that I would say they could
- 10 stand from some shoring up would be in the training department.
- 11 | It's quite diverse. With the number of makes, models and series
- 12 of aircraft they have, it's somewhat challenging. And since I
- 13 spent most of my life when I was in the airlines in training
- 14 departments, and the military, I would say I'm a little bit more
- 15 structure minded, I think, than what I see in their training
- 16 department. So that would be one area I think they could shore up
- 17 | a little bit to provide a more consistent product.
- 18 Q. Okay. And this is my last question. With your position as
- 19 the POI, do you feel that, you know, you have adequate time to
- 20 | fully commit to certificate management duties of Air Methods,
- 21 being as it's such a large operator with, you know, bases and
- 22 personnel and equipment?
- 23 A. For the most part, for myself, I would say, yes. My FLM does
- 24 | a fairly good job of deflecting, I believe, many of the general GA
- 25 functions, pilot deviations, those types of things. I do get

- 1 some. I have walk-ins sometimes quite extensively over a quarter,
- 2 five, six times. Some quarters I don't have any at all. So,
- 3 unlike a 121 certificate, where the POI doesn't do any of that,
- 4 it's a little different. Now, the inspectors I think are more
- 5 challenged with that. You'll get better insight, I think, with
- 6 Inspector Fernandez, but they are pulled many different
- 7 directions.
- 8 MR. HODGES: Okay. I think that was all I had.
- 9 Doug, do you have any questions?
- 10 MR. BRAZY: No, I do not.
- 11 MR. TOMICICH: Nothing.
- 12 MR. HODGES: Matt?
- MR. RIGSBY: I've got a couple.
- 14 BY MR. RIGSBY:
- 15 Q. As part of your GA function, do you do accident investigation
- 16 duty?
- 17 A. I do.
- 18 Q. Okay. About how many times a year do you get it? Is there
- 19 | an average?
- 20 A. Gosh, it just -- it changes. I think last year I did it
- 21 several times. I did two fatals, I think, last year. This year,
- 22 | it's been pretty slow. I haven't -- I think I've only gone out
- 23 once.
- 24 Q. Okay. But that's auxiliary to your duties as a POI?
- 25 A. Correct. That is scheduled accident duty.

- 1 Q. Okay. How many models, different models does Air Methods fly
- 2 | that you're responsible for?
- 3 A. Without looking at the sheet, I'd say approximately 25
- 4 different make, model, series.
- 5 Q. And the four inspectors that fly, are they -- do you have
- 6 somebody qualified in each of those models?
- 7 A. I do not.
- 8 Q. Okay.
- 9 A. One -- talk to the inspectors. The FAA has gone through a
- 10 cycle of how they qualify inspectors. We used to go to actual
- 11 | manufacturers' qualification courses and then that was my focus
- 12 area; we assigned check rides by fleet. So you would be my 145
- 13 guy, 350 guy, et cetera. The FAA has gone away from that with the
- 14 centralized flight program where inspectors are no longer
- 15 | qualified in make, model and series. It's just you're a
- 16 | helicopter inspector who's current, so you go out and conduct
- 17 check rides.
- 18 Q. When we talked about the FOQA program earlier that Air
- 19 Methods has, are they -- is there a regulatory requirement for
- 20 that FOQA program?
- 21 A. It is not. That is a voluntary program. They participate in
- 22 FOQA, ASAP, and they're users of the VDRP system, which are all
- 23 | voluntary programs.
- 24 Q. Okay. And the voluntary program, can you kind of give us an
- 25 | overview of that?

- 1 A. Which one?
- 2 Q. The voluntary VDRP.
- 3 A. Oh, VDRP. So VDRP is a system in which, if the operator
- 4 becomes aware of a certificate violation through any of the
- 5 programs, be it FOQA, ASAP, they can disclose it to the FAA, say,
- 6 hey, look, we may have had a regulatory issue here; we're going to
- 7 do some investigation and provide a report to you. Then I as the
- 8 POI would review that report and either agree or disagree with
- 9 them that there was a regulatory violation. I can then return it
- 10 to them if it was not, or put it into the system and allow them to
- 11 | continue to do research, do a root cause analysis and determine a
- 12 potential course of action that would prevent it from happening
- 13 again.
- 14 Q. Okay. And how often do you meet with Air Methods or this
- 15 | team?
- 16 A. There isn't a team for VDRP, per se. That's a system that as
- 17 | the POI, I'm the only guy that can move it forward. I do have one
- 18 other inspector, Inspector Odegard, who can go in and he does look
- 19 at stuff, and since he's one of the qualified inspectors, he can
- 20 provide some insight as he's out and about in the field.
- 21 Q. Okay. Do you attend Air Methods training?
- 22 A. I do not.
- 23 Q. When they have indoc --
- 24 A. You mean conduct surveillance on it?
- 25 Q. Yes.

- 1 A. Yes, I do. The only ones I personally do is I'll go out and
- 2 I'll visit with the indoc guys. They invite me every time they
- 3 have an indoc class and, with the DO and the chief pilot and
- 4 myself, I'll talk to them and answer any questions, kind of put a
- 5 | face to the FAA for the new employees of Air Methods.
- 6 \mathbb{Q} . The indoc, is it just for the pilots or is it for medical
- 7 | crew?
- 8 A. So when they do indoc for the management team, which I'm not
- 9 part of but I get invited to, they combine all the indoc classes
- 10 that are currently going, be it a clinical, maintenance or
- 11 operations pilot.
- 12 Q. Okay. One more. When you're -- when you say you were
- 13 deployed for a certain amount of time --
- 14 A. Yes.
- 15 Q. -- who takes over the POI responsibilities at that point?
- 16 A. So for one of my deployments they actually had an acting POI.
- 17 | That was John Woods. He's now a FLM. I know they have been
- 18 pursuing that. I deploy again in about a week and a half. As of
- 19 now, I don't know if there is a backfill.
- 20 Q. Okay. But they typically do backfill that position
- 21 obviously?
- 22 A. The last time was the first and only time they've actually
- 23 designated an acting POI that I know of. Previously, other
- 24 | inspectors just covered down on whatever was going on while I was
- 25 gone. I should take a step back. I think I made an incorrect

- 1 statement. I did have an assistant POI, Larry Ciancio, a few
- 2 | years ago. So I think I made an incorrect statement there.
- 3 MR. RIGSBY: Okay. That's all I have.
- 4 MR. HODGES: Brice?
- 5 MR. BANNING: I just have a couple of questions.
- 6 BY MR. BANNING:
- 7 Q. You indicated that you have six inspectors that help you with
- 8 this certificate?
- 9 A. There is --
- 10 Q. Ops, six ops inspectors.
- 11 A. Six ops inspectors assigned to the team, yes, sir.
- 12 Q. Are they dedicated only to Air Methods or do they manage
- 13 other certificates themselves?
- 14 A. They don't manage other certificates but they are considered
- 15 GA inspectors. They'll do the full variety of all the things that
- 16 keep GA busy, which is pilot deviations, hotline complaints,
- 17 | safety complaints, whistleblower complaints, all of those types of
- 18 things.
- 19 Q. Okay.
- 20 A. Including accident duty.
- 21 Q. And then you -- the ops specialists that work in the OCC for
- 22 Air Methods, you mentioned their training program.
- 23 A. Yes.
- Q. Do you as the POI have the opportunity to review or have you
- 25 | had the opportunity to review that training program?

1	A. That's an approved training program. So I actually approved
2	that program when the new rule went into effect. So we watch that
3	program extensively.
4	MR. BANNING: That's the only questions I had. Thank you.
5	MR. HODGES: Do you have any questions?
6	MR. MONTEITH: I do not.
7	MR. HODGES: Okay. We'll stop the recording at this point.
8	(Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Eric Monteith

ACCIDENT NO.:

ERA17MA316

PLACE:

Denver, Colorado

DATE:

March 22, 2018

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

Kathryn A. Mirfin Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH *

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316 ON SEPTEMBER 8, 2017 *

Interview of: JOE FERNANDEZ

Operations Inspector

Federal Aviation Administration Denver Flight Standards District Office

Denver, Colorado

Thursday, March 22, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

MATT RIGSBY, Air Safety Investigator Federal Aviation Administration

MARK TOMICICH, Esq.
Office of Chief Counsel
Federal Aviation Administration

ITEM ITEM PAGE Interview of Joe Fernandez: By Mr. Hodges 4 By Mr. Rigsby 17

1	<u>INTERVIEW</u>
2	MR. HODGES: Today is Thursday, March 22, 2018. We're at the
3	Denver FSDO in Denver Colorado. We are doing the ERA17MA316
4	interviews. It's 10:21 local time.
5	I'm Mike Hodges, with the NTSB, Operations Group Chairman.
6	MR. BRAZY: Doug Brazy with the NTSB, investigator in charge.
7	MR. TOMICICH: Mark Tomicich, Office of Chief Counsel,
8	Federal Aviation Administration.
9	MR. FERNANDEZ: Joe Fernandez. I'm one of the ops inspectors
10	on the Air Methods team.
11	MR. RIGSBY: Matt Rigsby. I'm with the Office of Accident
12	Investigation, FAA coordinator on this accident.
13	MR. BANNING: Brice Banning, NTSB.
14	MR. HODGES: And then does anybody have any objections to
15	recording this interview?
16	MR. BRAZY: No, sir.
17	MR. TOMICICH: I'll reserve any objections pending the
18	witness's response.
19	MR. FERNANDEZ: I have no objections.
20	MR. RIGSBY: No.
21	MR. BANNING: No.
22	MR. HODGES: Okay. And today we're going to be interviewing
23	Joe.
24	INTERVIEW OF JOE FERNANDEZ
25	BY MR. HODGES:

- 1 Q. Joe, when were you hired by the FAA?
- 2 A. June of 2010.
- 3 Q. 2010, okay. And can you describe your aviation background
- 4 prior to coming to work for the FAA?
- 5 A. Sure. I spent 20 years in the Army, 15 of which I flew Black
- 6 Hawks in the Army. I did a year as a civilian flight instructor
- 7 for the Army as well. And then I got hired on, so -- since, like
- 8 | I said, June of 2010.
- 9 Q. Okay. And then just what certificate ratings and approximate
- 10 flight time?
- 11 A. I have a commercial, multi-engine, single engine land. I
- 12 also have my rotorcraft and then I have instruments airplane,
- 13 instrument helicopter. I have my CFI for rotorcraft and
- 14 helicopter as well, and then I have approximately, I don't know, a
- 15 | little over 3,000 when I left the military.
- 16 Q. Okay. Cool. And then you're also qualified and current in
- 17 the BK117 C-2 model?
- 18 A. I -- no. I've been through the factory course, but there's
- 19 no currency requirement for the aircraft itself. I'm rotorcraft
- 20 current, right. So to say a specific model --
- 21 Q. Okay. Sure, sure. And then what exactly is your position on
- 22 | the Air Methods Certificate Management Team?
- 23 A. I'm just one of the ops inspectors.
- 24 Q. One of the ops inspectors.
- 25 A. Yes.

- 1 Q. And then are you assigned for any other -- assigned to any
- 2 other certificates outside of Air Methods?
- 3 A. No. I'm just on the Air Methods.
- 4 Q. Purely that. Okay. And then how long have you been assigned
- 5 to that certificate for?
- 6 A. Since I've been with the FAA.
- 7 Q. Since the day --
- 8 A. I was a direct hire into the position, yes.
- 9 Q. And then what other duties do you perform outside of doing
- 10 certificate management?
- 11 A. Just within the team itself, you mean, as far as --
- 12 Q. Do you do any other additional duties? Do you do like front
- 13 desk duty or accident investigation?
- 14 A. Oh, yeah. I mean, do assist obviously with the walk-in. We
- 15 | call it the front desk duty. Answering the phone when I'm on duty
- 16 as well. GA will sometimes request our assistance. I'm one of
- 17 | the few helicopter current qualified individuals within the
- 18 office, and I also deal with the nation. I get tasked to go and
- 19 help other offices if they need current helicopter qualified. I'm
- 20 one of the few NVG current qualified individuals as well. So
- 21 | there's just a handful of us, and so I go around and do those as
- 22 | well. And then, of course, whatever else is assigned, PDs,
- 23 | accident investigations and things of that nature.
- 24 Q. So with your background, do you get assigned to other
- 25 certificates outside, say, to help out with, you know, check rides

- 1 and --
- 2 A. With checks?
- 3 Q. Yes.
- 4 A. Yes, absolutely.
- 5 Q. Do you get kind of tasked --
- 6 A. Yes, I get requests to do those. Yes. Yeah, there's a
- 7 system within the agency that they would send out a request, if
- 8 there is either that individual that oversees them, the POI is not
- 9 available or not qualified, and so they'll send a request and ask
- 10 who's available to do that, and I'll do a handful of them every
- 11 year.
- 12 Q. Okay. And then talking to Eric Monteith before, he kind of
- 13 explained to us the general structure of the CMT with how many
- 14 people are on it and how it works and stuff. And from your
- 15 perspective being an ops inspector, do you guys feel you have
- 16 enough personnel on the ops side of the house --
- 17 A. From my perspective?
- 18 O. Yeah.
- 19 A. Well, we can always use more help. We fluctuate in numbers.
- 20 Currently we only four current qualified individuals on the team.
- 21 You know, between medical, going on leave, things of that -- going
- 22 to classes and stuff like that, we can always use more, that's for
- 23 sure. Yeah.
- 24 Q. And then with all your duties combined you do here, with your
- 25 additional duties and then traveling out to other areas to help

- 1 out, do you feel you have adequate time to dedicate to the Air
- 2 Methods certificate here?
- 3 A. Oh, absolutely. I mean, that's still my primary role. Since
- 4 I'm only overseeing one certificate, I put most of my attention to
- 5 that. It's when I get tasked to go somewhere else, where, you
- 6 know, I put all my attention on that task at hand, but as soon as
- 7 | I leave there and I come back here, then I complete my paperwork
- 8 for that, my primary role is Air Methods.
- 9 Q. Okay. And can you explain to us how oversight is conducted
- 10 | with the various Air Methods bases scattered throughout the
- 11 | country, being that the certificate is out here in Denver and Air
- 12 Methods is out here in Denver?
- 13 A. You mean as far as like I do go to a facility and then --
- 14 Q. Yeah.
- 15 A. -- do a check or something like that?
- 16 Q. Yeah. Like so, I mean is it common for you to go out to like
- 17 | a, you know, an Air Methods base in Montana or --
- 18 A. Absolutely.
- 19 Q. -- Georgia?
- 20 A. Absolutely.
- 21 Q. You go there and interact with the local guys and --
- 22 A. Absolutely. Yeah, on the ops side, we're not broken down by
- 23 | regions amongst the ops inspectors that go out. So whoever's
- 24 available to -- if we need to go somewhere specific, then it gets
- assigned to somebody, but for the most part it's who's available

- and then we'll branch out and go to all the different areas. I've
 been all over the country, all different bases across the country.
- 3 And a lot of times I'll go out there to -- what gets me there
- 4 is I'm normally performing a check and then we kind of will spend
- 5 a day or two extra to visit the facility and speak to the line
- 6 pilots. A lot of the programs, there's multiple bases within an
- 7 | area. Like I can go to Reno and I can visit five or six bases
- 8 | within a 2 or 3-day period. And so I'll go there and visit and
- 9 look and look at all the various items that we're expected to do,
- 10 depending on what's the priority, what's the risk at that moment.
- 11 Q. Okay. Have you been to the accident helicopter station at
- 12 Smithfield, North Carolina? Have you been to that base before?
- 13 A. I have, yes.
- 14 Q. You have. Okay. Did you have any interactions at all with
- 15 | the accident pilot; did you know him?
- 16 A. I did.
- 17 Q. You did?
- 18 A. Yes.
- 19 Q. What was your general impression of him as an aviator?
- 20 A. Well, I knew him personally. I had a friendship with him.
- 21 He and I flew in the Army together.
- 22 Q. Oh, okay.
- 23 A. Yeah. So we -- a number of years ago. And honestly, I
- 24 | didn't know, once we left our duty stations together, I had no
- 25 | interaction with him until I visited the base a few years back and

- 1 | I ran into him and found out that he was working for Air Methods
- 2 and there he was. So, of course, we have mutual friends --
- 3 Q. Sure, sure.
- 4 A. -- on social sites, Facebook and stuff like that, and so I
- 5 knew of, you know, like what he was up to kind of deal.
- 6 But I mean, as far as professionally, I flew with him a
- 7 number of times when we were stationed together in Hawaii. You
- 8 know, I -- like I said, he was a great friend of mine, but I never
- 9 flew with him in my capacity as being in FAA. I just ran into
- 10 him. I was there to fly check airmen and he just so happened to
- 11 be the line pilot on duty and walked in through the door and there
- 12 he was. So --
- 13 Q. Was he tracked in the Army or what was his track?
- 14 A. At the time that I knew him, no, he was not tracked. So
- 15 | whether he did it after he left my duty station, I don't recall if
- 16 he was or not.
- 17 Q. And then when you visited the local base there in Smithfield,
- 18 North Carolina, was there any issues you noticed with the way they
- 19 do business at all?
- 20 A. No, not at -- no.
- 21 Q. Okay. And then this is just kind of a general question, not
- 22 | just focusing on the North Carolina base, but how would you
- 23 describe the relationship between the FAA and Air Methods?
- 24 A. I mean, professional. I mean, as large of an operator they
- 25 | are, obviously it's hard to interact with everyone. I know of a

- 1 | number of individuals within the organization that I have gotten
- 2 | to meet, you know, numerous times over my 8 years now, and so
- 3 | they're all very professional and our interaction with them I
- 4 | believe is very professional. I would describe it more as like a
- 5 | team concept.
- 6 Q. Okay. And have you had any issues in the past with the
- 7 management team, such as director of ops or chief pilot, any
- 8 issues with working with them in the past at all?
- 9 A. No, none personally, no. I mean, I didn't -- being just one
- 10 of the ops inspectors, I mean, I would have interactions when I
- 11 have flown with a couple of them over periods of time, but, no,
- 12 nothing that I recall having any issues with them.
- 13 Q. Okay. And how would you describe the organizational safety
- 14 culture at Air Methods?
- 15 A. Well, I feel like they -- I feel like they put a lot of
- 16 support behind being safe. I know Jason Quisling through my
- 17 | interactions of flying with him, but I don't know him in his
- 18 capacity as being DO. But the last DO, I thought he was very
- 19 supportive of individuals. I was on the ASAP ERC for a number of
- 20 years, and I'm still technically one of the assistants if need be.
- 21 And he was always very supportive if there was any suggestions
- 22 about -- especially when it involved safety, he backed up his --
- 23 as far as my interaction, he absolutely backed up his pilots if he
- 24 | felt that they were in the right for various things such as
- 25 turning down missions or things of that nature, allowing them to

1 -- if they need be, if they felt like they needed to just get a 2 little bit of extra flight time, to just go out and just maintain 3 their skills, he -- from what I saw, again with the last DO, 4 didn't hesitate to tell them to go ahead and take the time if he felt the need to go out there either to learn the aircraft more or 5 6 to practice their instrument flying skills or something of that 7 nature, he always encouraged it. So as far as that aspect goes, I think (indiscernible) and had a really good concept on that, yeah. 8 9 Okay. Can you describe the FAA training you received for 10 providing oversight and surveillance regarding operational control 11 for a part 135 operator? 12 Well, a lot of it I would say is OJT. So I went through the 13 initial course years ago. It was done through an industry local 14 flight school. So to say they knew everything that happened on 15 the 135 side, I would absolutely not say that. We went to it, and 16 a lot of it, they would say, well, you know, based on your 17 experience, it's kind of like what you -- I was an instructor 18 pilot in the military. So it was a lot like we used to do, and 19 from that point on, it was pretty much what does the order say, is 2.0 required to go out. And then I've done so many checks now, it's 21 just second nature now for me. But as far as the initial 22 training, they just kind of show you the form, here's the 8410 and 23 this is what you're kind of expected to do and you go out there 24 and learn the rest of it on the job. 25 Can you kind of explain how the process for operational

- 1 | control is performed at Air Methods?
- 2 A. Okay. Well, they refer to it as a two-tier system. So Tier
- 3 | 1 being like their managers and directors and whoever is listed in
- 4 the ops specs is listed in that system. Ultimately, their Tier 2
- 5 system are their pilots. They are the ones that are ultimately
- 6 responsible for operational control.
- 7 Q. Okay. And then have you noticed any issues with their
- 8 operational control processes at the various levels at Air
- 9 Methods?
- 10 A. Not in those levels, no.
- 11 Q. And when was the last time that you observed or had another
- 12 inspector observe operational control procedures at Air Methods?
- 13 A. When was the last time? Well, I just did a check ride last
- 14 | week, and so I -- absolutely, it's always like I said, Tier 2 is
- 15 | their primary. So every time I go out and observe a ride. So I
- 16 was in Farmington, New Mexico last week and so I observed it then.
- 17 Q. And then can you explain the Air Methods operational control
- 18 training program they have in place for kind of going from the
- 19 operational control specialist all the way up to the DO, for
- 20 example?
- 21 A. In what specifically?
- 22 Q. Going over, you know, whoever's exercising operational
- 23 | control and kind of how the functions and responsibilities are and
- 24 | how that -- how they train their folks on how to do that
- 25 basically?

A. Well, like I said, they put all the -- most of the emphasis on Tier 2, on the pilots. So it's the pilot's responsibility that when they get a flight request, they're the ones that will go ahead and check the weather. Before they even get to that point, when they first duty on, they have to -- they have a system they call 411, which is kind of their tracking system to ensure that they meet the required rest requirements, that they're trained and that they're current. And so when they get on 411, if everything looks good there, then they get a flight release, and that flight release allows them for the time that they're on duty to go out and perform their operations.

2.0

From that point, once they have that flight release, they'll get tasked to do some mission. From there, then it is their responsibility to check the weather. Of course, they've already gone through the aircraft to make sure it's airworthy, and then they have to do their preflight risk assessment. Once they have all that said and done, then one of the things they added to their preflight risk assessment is, once they submit it and they wait for the reply that it's been accepted through OCC, they also have to verbally -- well, not verbally, but they have to physically show it to the med crew and they have to verify that it's been submitted and it's come back. And once it's all done, then they're -- they take off at that point. If there's any questions about weather or something, it all falls on the pilot.

Q. Have you seen any issues at all with the 411 system, how they

- 1 | have it structured, from your perspective at all?
- 2 A. Well, there's been a few issues in the past. I mean,
- 3 | information -- if the pilots don't get their information in there
- 4 on a timely manner, such as maintaining their NVG currency or if
- 5 they don't put in the required amounts, if they're not logging
- 6 | their HNVG ops, then it's just tied -- the 411 system will count
- 7 | the numbers, and if it's not there, it will say that they're not
- 8 current. It doesn't mean that they're not current; it just can
- 9 mean that they forgot to log it in or didn't log in enough. So
- 10 that system is designed basically, if the information is not put
- 11 | in there, then it's going to give you those errors. But the
- 12 pilots at that point will see it, you know, flag it, and the
- 13 pilots will say I know I am current, and then they'll go back and
- 14 put it in the information they need to have in order to take that
- 15 portion off it. So --
- 16 Q. And then since the accident occurred has there been any
- 17 | organizational changes at Air Methods?
- 18 A. Not that I know of, no.
- 19 Q. And then since the accident occurred have you changed
- 20 anything with how you do your duties as a POI or an inspector
- 21 | assigned to the certificate?
- 22 A. No.
- 23 Q. Okay. Then how would you rate the overall employee morale at
- 24 Air Methods?
- 25 A. Not being an employee, it's hard to say. I don't know. I

- 1 mean, like any job, there's some people --
- 2 Q. Sure.
- 3 A. -- love it, some people that don't.
- 4 Q. And then from your perspective as the POI, do you feel Air
- 5 Methods has adequate personnel, facilities and equipment to do
- 6 | their mission?
- 7 MR. TOMICICH: Actually I think you misspoke. You called him
- 8 the POI.
- 9 MR. HODGES: I'm sorry.
- 10 BY MR. HODGES:
- 11 Q. I'm sorry. As an inspector assigned to it, do you feel Air
- 12 Methods has adequate personnel, facilities and equipment to safely
- 13 do their mission, fulfill their mission?
- 14 A. I really don't know how to answer that.
- 15 Q. Sure.
- 16 A. They have -- there are a number of bases. When I do go to
- 17 bases, one of my questions I do ask them is if you have enough
- 18 personnel. Some bases are shorthanded, they would say. Air
- 19 Methods has, they call them -- I would refer to them like
- 20 | floaters, individuals that are -- they will task and say can you
- 21 | cover this base for this period of time if somebody's down or
- 22 | something like that. So I -- as far as manpower goes, I mean,
- 23 | that's -- from what I've seen, it seems to work for them, I guess.
- 24 | I mean, I can't judge that.
- 25 Q. Okay. And then are there any safety improvements you'd like

- 1 to see implemented at Air Methods, whether it's operations, safety
- 2 | program, equipment, anything of that nature, anything you'd like
- 3 to see done based off your experience working with them?
- 4 A. I mean, nothing comes to mind for -- from a personal
- 5 standpoint, especially not having any industry background. So
- 6 comparing it to the military is too difficult to do.
- 7 Q. Sure.
- 8 A. Most of the pilots I run into obviously have military
- 9 backgrounds, and so -- but myself, not having any industry
- 10 experience, I can't compare it to any other operation.
- 11 Q. Sure.
- MR. HODGES: I think that was it.
- Do you have any questions for him?
- MR. BRAZY: I do not. Thank you.
- 15 MR. TOMICICH: Nothing.
- MR. HODGES: Matt, any questions?
- 17 BY MR. RIGSBY:
- 18 Q. Just a couple, Joe.
- 19 A. Sure.
- 20 Q. You talked about the FAA training, the OJT you received, you
- 21 | went through the initial inspector courses in Oklahoma City.
- 22 A. Yes.
- 23 Q. Have you been to the -- they used to call it the HEMS class.
- 24 They may call it the HAA class.
- 25 A. Yes.

- 1 Q. The helicopter air ambulance course.
- 2 A. Yes, I have.
- 3 Q. You have been to that?
- 4 A. Yes.
- 5 Q. Okay. When did you go to that?
- 6 A. It was when it was originally called the HEMS.
- 7 Q. Okay.
- 8 A. I haven't been to the -- I know there was an updated one. I
- 9 haven't been to that one.
- 10 Q. Okay. But you went to that primarily because you were
- 11 assigned to a HAA?
- 12 A. Honestly, I wouldn't say because I was assigned. It was an
- 13 available course and -- I remember there was individuals in there
- 14 that had nothing to do with HEMS or HAA at the time.
- 15 Q. Okay. You mentioned ASAP and ERC. Can you kind of talk --
- 16 explain -- like those are acronyms, what ASAP stands for; what ERC
- 17 stands for?
- 18 A. Aviation Safety -- I believe it's the Action Program or
- 19 | something along that line. ERC is the Events Review Committee.
- 20 So I sit on a number of ERCs for different operators. So I'm not
- 21 just Air Methods. So my role obviously is to sit in on the ERC,
- 22 listen to the reports, and determine if they meet the criteria to
- 23 be accepted into the program.
- 24 Q. Okay. Since you're one of the four that's qualified -- I
- 25 hate to use that -- current in rotorcraft, how many models that

- 1 Air Methods has that you have been to school on or fly, give check
- 2 | rides on, I guess?
- 3 A. Well, I give check rides on every one of them.
- 4 Q. Every one of them. Okay.
- 5 A. I mean, I've been on -- I can't say every series, but -- I
- 6 mean, they have close to 30 make, model, series of aircraft.
- 7 Q. Okay.
- 8 A. But I've been in every make and model that they have. I've
- 9 only been to the EC145 course as far as actually my own training,
- 10 and that was -- I went back in February of 2013, that I went to
- 11 | that course. And now we don't go to factory courses anymore. We
- 12 just go to the rotorcraft -- I don't even know what they call it
- 13 anymore. Just go down to Alliance and then the program --
- 14 Q. How often are you required to do that?
- 15 A. Every quarter.
- 16 Q. Every quarter.
- 17 A. Yes.
- 18 Q. And how many hours do you fly at that?
- 19 A. Quarterly, when it's not my annual training, I get anywhere
- 20 between 2½ to 3½ hours on that one particular quarter. But since
- 21 | I maintain my NVG currency, I'll rent an aircraft now, and that's
- 22 anywhere between another 1 to 2 hours a quarter. And then
- 23 annually we have to do a refresher course and that's roughly 10
- 24 hours, and then the NVG refresher course is roughly 4 hours.
- Q. Okay. So how many hours total annually are you getting with

- 1 -- between all your check rides and --
- 2 A. I usually tell people anywhere between -- as far as my own
- 3 | flying time, I say between 20 to 25 hours. Of course, when I'm
- 4 | actually doing checks, I don't count that as my --
- 5 Q. Right. Can you explain how you do a check ride --
- 6 A. Sure.
- 7 Q. -- to -- you know, are you checking the pilot himself? Are
- 8 you checking the check airman?
- 9 A. I do both.
- 10 Q. Okay.
- 11 A. I do both. You know, all of the 135, at a minimum, they have
- 12 to do an annual check, the 293, 299. If they're in an IFR
- 13 program, then they have to do a semiannual 297, which is an IFR
- 14 check. Of course, they still have to do their 293, 299, and
- 15 that's make/model specific. So if they're assigned to more than
- 16 one aircraft type, then they have to do a 293, 299 in both
- 17 | aircraft. The 297 will count for both.
- 18 So -- and I also do the check airman biennial checks, so
- 19 135.339. And they also have a training captain check which is
- 20 | biennial as well; that's 135.340. So I'll do those, and we're the
- 21 only ones that are authorized to give those checks, but they're
- 22 biennial, but we usually have a number of them to do per year
- 23 because they have 50-plus check airmen that they have, give or
- 24 take a few. So I'll do those as well.
- 25 So the check airmen, they have to maintain their requirements

- 1 | as well, their annual requirements, and so we'll give them their
- 2 | checks as well. So --
- 3 Q. Okay. And you have GA inspector duties as well?
- 4 A. And, yeah, I get tasked -- especially in our office, on the
- 5 GA side, there's no helicopter current qualified individuals on
- 6 the GA side. And so within our office, of course, we have
- 7 helicopter operators within our area that we're responsible for.
- 8 So within the office, Andrew and I -- Andrew Eagleton is one of
- 9 the other ops inspectors that's current and qualified. So we're
- 10 the only two within this office. Our other two inspectors are
- 11 remotes. So one lives in West Palm Beach, Florida, and the other
- 12 one lives in Atlanta. So usually if it's local within the office,
- 13 | then Andrew and I will cover it -- oh, I take that back. There's
- one GA guy that he can do it as well. So they'll task us for
- 15 those as well.
- 16 Q. Okay. And then do you ever get tasked by the POI to assist
- 17 | with either the training approvals at Air Methods or manual --
- 18 A. Yeah, absolutely.
- 19 0. -- reviews and all that?
- 20 A. Absolutely. That's a common occurrence. I call it an extra
- 21 duty. I oversee the special instrument approach procedures that
- 22 Air Methods has, and so that's one of my common duties that I kind
- of oversee to give Eric assistance. But absolutely, if there's a
- 24 manual that comes in, training update or anything like that, then
- 25 any one of us gets tasked to look those over.

```
1
         And then once you get done with a check ride, do you have to
 2
    come back and enter it into SAS or PTRS?
 3
         Both.
    Α.
 4
         Both, okay.
 5
         Yeah, absolutely both. We find it easier to -- at least as
 6
    of this moment, it's still a lot easier to track in PTRS than it
 7
    is in SAS, as you guys learned, I believe, yesterday. So we kind
8
    of have a common thing where we do both.
 9
         MR. RIGSBY:
                       That's it.
                                   Thank you.
10
         MR. HODGES:
                      Brice?
11
         MR. BANNING: I don't have any questions.
                                                      Thank you.
12
         MR. HODGES:
                       Do you have any questions for us?
13
         MR. FERNANDEZ:
                          No.
14
                      We'll go ahead and stop the recording at this
         MR. HODGES:
15
    point.
16
          (Whereupon, the interview was concluded.)
17
18
19
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21
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23
24
25
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Joe Fernandez

ACCIDENT NO.:

ERA17MA316

PLACE:

Denver, Colorado

DATE:

March 22, 2018

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

Kathryn A. Mirfin Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

*

Interview of: MIKE HARRIS

Front Line Manager

Denver FSDO

Federal Aviation Administration Denver Flight Standards District Office

Denver, Colorado

Thursday,

March 22, 2018

APPEARANCES:

MICHAEL J. HODGES, Operations Group Chair National Transportation Safety Board

DOUG BRAZY, Investigator in Charge National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

MATT RIGSBY, Air Safety Investigator National Transportation Safety Board

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1	INTERVIEW	
2	(11:00 a.m.)	
3	MR. HODGES: Today is Thursday, March 22, 2018. We're at the	
4	Denver FSDO in Denver, Colorado. We are doing the ERA17MA316	
5	interviews. It is 11:00 local time.	
6	I'm Mike Hodges with the NTSB, Operations Group Chairman.	
7	MR. BRAZY: Doug Brazy with the NTSB.	
8	MR. TOMICICH: Mark Tomicich, Office of Chief Counsel,	
9	Federal Aviation Administration.	
10	MR. HARRIS: Mike Harris, Denver Flight Standards District	
11	Office, front line manager.	
12	MR. RIGSBY: Matt Rigsby with the FAA Office of Accident	
13	Investigation, FAA coordinator on this accident.	
14	MR. BANNING: Brice Banning, NTSB.	
15	MR. HODGES: And does anybody have any objections to	
16	recording this interview?	
17	MR. BRAZY: I do not.	
18	MR. TOMICICH: I'll reserve objections pending the witness's	
19	answer.	
20	MR. HARRIS: I don't have any objections for the interview.	
21	MR. RIGSBY: No objections.	
22	MR. BANNING: I do not.	
23	MR. HODGES: Okay. And today we're going to be interviewing	
24	Mike.	
25	INTERVIEW OF MIKE HARRIS	

- 1 BY MR. HODGES:
- 2 Q. And then, Mike, when were you hired by the FAA?
- 3 A. I was hired by the FAA September 3rd, 1991.
- 4 Q. Okay. And then what was your aviation background prior to
- 5 coming to work for the FAA?
- 6 A. I started out in college, University of Washington, 1976,
- 7 degree in aeronautics, in astronautics, bachelor's of science
- 8 degree, to be precise. From there I went to the Navy Flight
- 9 School, Pensacola, Florida. Instructed first in the fixed-wing
- 10 | side of the house, the T-28, then in the helicopter side of the
- 11 house the following year. I came back to the fixed-wing side as
- 12 an instructor for a year and half, finished up my active tour, or
- 13 tours, in the H3 Sikorsky Sea King; for the sake of the listening
- 14 audience, a large twin-engine helicopter.
- 15 Q. S-61 equivalent?
- 16 A. Yes.
- 17 Q. Okay.
- 18 A. Did 10½ years active. From there I went to Petroleum
- 19 Helicopters as a commercial helicopter pilot for 7 months and then
- 20 I got hired on with the FAA, as I said September 3rd, 1991.
- 21 | Continued with reserves flying H3 helicopters, also working for
- 22 the San Diego Flight Standards District Office as a principal ops
- 23 inspector. Finished up with the reserves 2000. Got a job as
- 24 | front line manager in Baton Rouge. Managed the certificate
- 25 management office there, which took care of all the dogs and cats

- 1 | in the Louisiana area. Later on I was the manager for the
- 2 | Certificate Management Unit, which had Petroleum Helicopters and
- 3 Air Methods, if memory serves. Then from there I moved to the
- 4 Portland office for 12 years, again as a front line manager,
- 5 promoted to assistant manager, and then finally here to Denver
- 6 December 15th, 2015.
- 7 Q. And then just certificates and ratings and approximate flight
- 8 time you have, just a rough estimate?
- 9 A. Approximately 5,000 hours total between helicopter fixed
- 10 wing; roughly 1,000 fixed, 4,000 helicopter. My certificates that
- 11 I currently hold are ATP helicopter and multi-engine land,
- 12 | commercial privileges, private engine -- excuse me -- single
- 13 engine land.
- 14 Q. Okay.
- 15 A. My CFI expired, so that's why I'm not listing it.
- 16 Q. And then with your position as the manager, how many
- 17 different certificates are managed by the folks below you?
- 18 A. Currently, and I've been in this position since May 2017,
- 19 just -- the only certificate we're managing is Air Methods
- 20 Corporation.
- 21 O. Okay. And like you said, since you've started here, you've
- 22 been solely committed to Air Methods only then?
- 23 A. Well, when I started December 2015, I was the GA unit
- 24 manager.
- 25 Q. Okay.

- 1 A. And then in May 2017, I became the Air Methods operations
- 2 unit manager.
- 3 Q. Okay. Now, we talked to Eric before about the structure of
- 4 | who is below, you know, below you with the operations and
- 5 maintenance.
- 6 A. Um-hum.
- 7 Q. Now since you've been here, there has not been a dedicated
- 8 assistant POI then for Air Methods?
- 9 A. When I first took on the position, Eric was the principal and
- 10 John Wood was the assistant.
- 11 Q. Okay.
- 12 A. Eric went to Korea, John Wood took over as the acting
- 13 principal. Eric came back. John Wood was hired on as my
- 14 replacement in GA, and since that time we have not had an
- 15 assistant principal. We are in the process of hiring.
- 16 Q. Okay. And then with the current numbers -- I know you say
- 17 | you are hiring additional folks. Do you feel you guys have
- 18 | adequate personnel to attend to the Air Methods certificate?
- 19 A. Yes, I do feel we have, based on the evidence that we haven't
- 20 had a panic situation, if you will.
- 21 Q. Sure. Okay. And then can you kind of explain, from your
- 22 | position as the manager, how you guys conduct oversight, you know,
- 23 with the various Air Method bases scattered throughout the
- 24 | country? Basically, I guess I'm asking is with sending your folks
- 25 out and how they interact with like, you know, the local units and

- 1 such.
- 2 A. Well, as Eric explained yesterday, we send the folks out to
- 3 the bases to do check rides, for the most part. That's not the
- 4 only way they get out there, but that's the principal operations,
- 5 | how we do it. And while they're out there, they do base
- 6 inspections and they interact with the bases using the SAS DCTs
- 7 to, how should I put it, as their script on questions to ask.
- 8 Q. Okay. And then since you've been the manager here, have you
- 9 notice any issues with Air Methods from an operational aspect at
- 10 all?
- 11 A. No, I have not.
- 12 Q. And then how would you describe the relationship between the
- 13 FAA and Air Methods?
- 14 A. Amicable.
- 15 Q. Amicable?
- 16 A. Um-hum.
- 17 Q. And then have you guys had any issues here with the
- 18 management team at Air Methods such as, you know, the director of
- 19 the operations, chief pilot, any of those folks at all?
- 20 A. No, we haven't. Communication is always a challenge with any
- 21 interactions.
- 22 Q. Sure.
- 23 A. So once we nail things down, they have been responsive. And
- 24 by nailing it down, I mean, you know, make it clear what our
- 25 expectations are.

- 1 Q. And how would you describe the organizational safety culture
- 2 at Air Methods from what you've seen as a manager here?
- 3 A. From what I've seen, they have a positive safety culture.
- 4 Q. Okay. And then have you noticed any issues from your
- 5 perspective as a manager with the way operational control is
- 6 exercised at the various levels at Air Methods?
- 7 A. No, not from my viewpoint.
- 8 Q. Okay. And then, I think we talked about this briefly
- 9 yesterday, but with your position as a manager and, you know,
- 10 talking to the inspectors with sending them out to do these
- 11 | follow-up trips for data collection and interacting with the local
- 12 bases, you know, we all know that requires funding to send people
- out on these trips, and have you ran into any budgetary
- 14 restrictions or issues with getting money to fulfill those
- 15 | requests for the inspectors?
- 16 A. We have not had any high priority inspections or visits
- 17 | cancelled due to budgetary issues.
- 18 Q. Okay.
- 19 A. We have, from time to time, looked at our priority list and
- 20 said this is a lower priority, it'll wait.
- 21 Q. Okay. And then since the accident occurred has there been
- 22 any organizational changes at Air Methods that you know of, that
- 23 they've changed or implemented since the accident?
- 24 A. None that I'm aware of.
- 25 Q. Okay. And then since the accident occurred have you changed

- 1 | anything with how you do your duties as the front line manager?
- 2 A. No. I have not changed.
- 3 Q. And then from your perspective as a manager here, do you feel
- 4 | Air Methods has adequate personnel, facilities and equipment to do
- 5 their mission?
- 6 A. As far as I know, yes, they do.
- 7 Q. Okay. And then are there any safety improvements that you
- 8 | would like to see implemented at Air Methods, based off your
- 9 experience, whether it's with operations, safety program,
- 10 equipment, anything of that nature, you'd like to see implemented
- 11 there?
- 12 A. We're working with Air Methods to improve their safety
- 13 management system culture.
- MR. HODGES: Okay. That's all I had.
- Doug, do you have any questions for him?
- MR. BRAZY: None. Thank you.
- 17 MR. HARRIS: You're welcome.
- 18 MR. BANNING: No questions.
- 19 MR. HODGES: Matt?
- 20 BY MR. RIGSBY:
- 21 Q. So you were at -- when you were at Baton Rouge, so you
- 22 managed the other large helicopter operators as well --
- 23 A. Um-hum. Yes.
- 24 Q. Back on the budgetary issues, I guess how does the training
- 25 | with like Eric or -- let me back up. Let me change that question

- 1 first. Do you manage just the operations inspectors?
- 2 A. That's correct.
- 3 Q. Okay.
- 4 A. I have only operations inspectors in my unit.
- 5 Q. Okay. So the six/seven operations?
- 6 A. Um-hum.
- 7 Q. Okay. Who is responsible for ensuring that they have the
- 8 training that is required of them as far as qualifications in the
- 9 | aircraft and that type of thing?
- 10 A. As the front line manager it's my responsibility to request
- 11 | the training that I feel that they need to do their job.
- 12 Q. Okay. And obviously the FAA has annual requirements for
- 13 those inspectors to be trained?
- 14 A. Yes, they do.
- 15 Q. Okay. Have you seen any reductions or -- I know Flight
- 16 Standards just reorganized with -- if Joe or Eric come to you and
- 17 say, hey, I need this class, are you the first person they start
- 18 | with, and then you start pushing that up the chain?
- 19 A. Yes, I am the first person.
- 20 Q. Okay. Are you allowed -- does the FAA just give you a pot of
- 21 money at the beginning at the fiscal year and say, Mike, this is
- 22 your money to work with; do as you see fit?
- 23 A. No, they do not. What they --
- 24 Q. Okay. Who -- I guess if they come to you for training, you
- 25 approve it and then it has to go to the office manager?

- 1 A. It goes through the office training coordinator.
- 2 Q. Training coordinator, okay.
- 3 A. And the office training coordinator works with the, what used
- 4 to be the regional training coordinator, who is now, I guess, a
- 5 national training coordinator.
- 6 Q. Okay. So these guys get lumped in with every other inspector
- 7 | that is out there requesting training?
- 8 A. Yes, that's -- that's the case.
- 9 Q. Okay. Eric -- or not Eric -- I'm sorry. Joe mentioned that
- 10 he oftentimes gets requested to assist other offices when they go
- 11 out on check rides and things like that. Through -- I forget the
- 12 program that they have; it used to be national resource specialist
- 13 but is not that anymore. But if an office calls, put's in a
- 14 request for an NVG guy, do you approve that first, or do you have
- 15 | the ability to say, Joe, you're just too busy right now, we need
- 16 to pass it off to somebody else?
- 17 A. No, we do not have that ability. John Dunkin some time ago
- 18 said these are work assignments. When the requests come to you,
- 19 you -- and when I say you, I am referring to Dale, our office
- 20 manager -- will indicate which inspectors are available and then
- 21 | the FSIRP, Flight Inspector Resource Program, coordinator or point
- 22 | contact, will choose which inspector will respond to that specific
- 23 request.
- 24 Q. Okay. Do you have to fund that or does the requesting office
- 25 | fund that?

- 1 A. The FSIRP program funds it.
- 2 Q. FSIRP. Okay. So it doesn't take away from you?
- 3 A. No, it does not, other than manpower.
- 4 Q. The manpower. Do you look at this -- I mean, obviously these
- 5 quys get a lot of work. Do you get involved with tracking their
- 6 time, their flight time and all that, at all?
- 7 A. I don't get involved with tracking their flight time. What I
- 8 do get involved with is time and duty.
- 9 Q. Time and duty.
- 10 A. As in T&A, time and attendance.
- 11 Q. Okay. Do you have the ability to -- if Joe comes to you and
- 12 just says, I'm dog tired, I can't go, do you have that ability to
- 13 say, we'll keep you in the office, you know, we'll see if other
- 14 people can fill that need? If he's fatigue or --
- 15 A. If it's a safety concern, I will definitely work with Joe and
- 16 ensure that we address safety concerns.
- 17 Q. Okay. Eric mentioned he's going to be leaving again before
- 18 long, or redeployed again, is somebody -- will somebody take his
- 19 place as the POI? Will you assign that person, or how does that
- 20 work?
- 21 A. Our assistant office manager is working that question right
- 22 now.
- 23 Q. Okay. Do you go over on -- when Air Methods does their
- 24 | indoctrination training, Eric mentioned that he goes over. Do you
- 25 go over?

1	A. I have not going over with them on that trip. I've gone with
2	them on other events, and I'm sure sometime in the future.
3	Q. Okay. Do you they also mentioned they pull duty, like the
4	desk duty and all that. Your responsibility as FLM, you don't
5	cover any of that, right?
6	A. I don't cover the desk duty, no.
7	MR. RIGSBY: Okay. That's all I have.
8	UNIDENTIFIED SPEAKER: I don't have any questions. Thank
9	you.
10	MR. HODGES: Okay. Do you have any questions?
11	MR. HARRIS: No, I do not. Thank you.
12	MR. HODGES: Okay. We'll go ahead and stop recording then.
13	(Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017
Interview of Mike Harris

ACCIDENT NO.: ERA17MA316

PLACE: Denver, Colorado

DATE: March 22, 2018

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.

Katia Toniolo Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

Interview of: GUY RANDELL

Lead Pilot Air Methods

> Duke Life Flight - Smithfield Base Johnston Regional Airport Smithfield, North Carolina

Thursday, May 17, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

JASON QUISLING, Director of Operations Air Methods

CHRIS BRADY, Associate General Counsel Air Methods (On behalf of Mr. Randell)

ITEM ITEM Interview of Guy Randell: By Mr. Hodges By Mr. Quisling By Mr. Banning 13

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1	<u>INTERVIEW</u>
2	(9:43 a.m.)
3	MR. HODGES: All right. Today is May 17, 2018. We are doing
4	the ERA17MA316 interviews in Smithfield, North Carolina. It is
5	9:43 local time. I'm Mike Hodges, with the NTSB, Operations Group
6	Chairman.
7	MR. RANDELL: Guy Randell, Air Methods, Lead Pilot for
8	Smithfield.
9	MR. BANNING: Brice Banning, National Transportation Safety
10	Board.
11	MR. BRADY: Chris Brady with Air Methods. Here as personal
12	representative of Mr. Randall.
13	MR. QUISLING: And Jason Quisling, Air Methods, Director of
14	Operations.
15	MR. HODGES: And does anybody have any objections to
16	recording this interview?
17	MR. RANDELL: No.
18	MR. BANNING: No.
19	MR. BRADY: No.
20	MR. QUISLING: No, sir.
21	MR. HODGES: Okay. And today we're going to be interviewing
22	Mr. Guy Randell.
23	INTERVIEW OF GUY RANDELL
24	BY MR. HODGES:
25	Q. And, Guy, just kind of starting off with your background, how

- 1 long have you worked for Air Methods for?
- 2 A. For Air Methods, since August 2016.
- 3 Q. 2016. Okay. And then what did you do prior to Air Methods?
- 4 A. Prior to that I was working for Orange County EMS as an EMT.
- 5 And before that, I had been working in the U.K. and as a pilot in
- 6 the Royal Navy.
- 7 Q. Okay. Cool. And then can you just kind of give me just a
- 8 brief overview of your aviation background? Just what
- 9 certificates and just approximate hours.
- 10 A. So, currently, I have a second class medical. And I've got a
- 11 | commercial pilot's license with an instrument rating. I've got
- $3\frac{1}{2}$ -thousand hours, about 150 in the 145 and the 135.
- 13 Q. And then since you've worked for Air Methods, you've been
- 14 here at Smithfield the whole time or --
- 15 A. Yes.
- 16 Q. And then do you do any duties outside of Smithfield? Do you
- 17 | work at the Durham base or do you work at any other bases, or this
- 18 | is just your main base?
- 19 A. So this is my main base of operation. Last weekend, for
- 20 example, we needed to fill-in with extra pilots, so I was working
- 21 up at Duke. So we do flip-flop between Duke and Smithfield as
- 22 required.
- 23 Q. And then for the helicopters, you just fly the 145 and the
- 24 135 here, correct? That's the --
- 25 A. Yes.

- 1 Q. Okay. And then you mentioned about being the lead pilot.
- 2 | When did you transition into the lead pilot position here?
- 3 A. Jeff was originally the lead pilot. And then, by default, I
- 4 moved into that position.
- 5 Q. And then do you have any additional duties outside of being
- 6 the lead pilot? Are you like a safety officer or maintenance
- 7 | check pilot, or do you have other additional --
- 8 A. No.
- 9 0. -- functions?
- 10 A. Uh-uh.
- 11 Q. Okay. And then do you work part-time in any other companies
- 12 or organizations? Do you do anything on the side for aviation, or
- 13 any other jobs?
- 14 A. Not for flying.
- 15 Q. Okay. Just switching gears and talking about the accident
- 16 pilot, Jeff Burke, how long have you known the pilot for?
- 17 A. I did some pre-interviews up here back in June 2016. I've
- 18 known Jeff since.
- 19 Q. And then just from a, you know, professional aspect here in
- 20 | aviation, what was your overall perspective of him?
- 21 A. Jeff was a very impressionable person. He was very
- 22 | hospitable, very nice quy. Nothing was too much trouble. And,
- 23 actually, he kind of took me under his wing and introduced me into
- 24 | Smithfield's method of operation, any questions or queries I had,
- 25 and he was only too happy to spend time and sit down with me and

- 1 let's go through this or let's work that out. And so very, very
- 2 helpful.
- 3 Q. Did you ever have any professional concerns with him as a
- 4 pilot, anything that you noticed with being around him or flying
- 5 | with him?
- 6 A. None at all. If I'd put a label on Jeff, I'd say he was one
- 7 of our safest pilots.
- 8 Q. Safe pilot?
- 9 A. Very much a case of I'm not going to fly until I've got all
- 10 the I's dotted and the T's crossed.
- 11 Q. And then outside of work, were you guys friends outside of
- 12 work and you guys did stuff? Or what was your perspective of him
- 13 kind of outside of the professional side?
- 14 A. Occasionally. But because I live so far away, not very
- 15 often.
- 16 Q. Just flying with Jeff, from a CMR aspect, how did he do with,
- 17 | you know, communicating and --
- 18 A. We're single pilot operations, so I wouldn't fly with Jeff.
- 19 Q. Did you guys ever do like, I guess, like orientation flights
- 20 or training flights, where you'd in the left seat and he would go
- 21 | over stuff, or you trained together? Or was it just purely --
- 22 A. Only initially. And I flew with him maybe once or twice.
- 23 Q. And then here at the local level, how would you describe the
- 24 | organizational safety culture here at the local level at
- 25 Smithfield?

- 1 A. It's the primary goal, to make sure we leave here safely,
- 2 carry out our task and return safely, everybody home.
- 3 Q. And then how would you rate overall employee morale here at
- 4 | the base with all the different employees here?
- 5 A. Because of our mix and the way we work together, I think it's
- 6 incredibly high. Still is.
- 7 Q. And then how would you describe the relationship with Duke
- 8 Life Flight and Air Methods?
- 9 A. The relationship is very good, I think. We don't actually
- 10 see it as a "them" and "us" scenario. It's very much a team game.
- 11 And so we all work together, and if something's got to be done --
- 12 for example, some of the crews might need to wash the truck. So
- 13 it's like, well, let's go help wash the truck. Or we've got to
- 14 clean the base. Let's get the vacuum cleaner out or wash up, or
- 15 whatever we need to do, we all go and do it. So we work together
- 16 as a team. The same way that if we need to get cooking done or
- 17 | something like that, we do together as a team. So it's like we
- 18 cook for everybody. And that's the day crew -- sorry -- the truck
- 19 crews as well as the flight crews.
- 20 So that transposes thorough to the way we do our business
- 21 when we fly. And so, we all work together as a team. Usually, as
- 22 | a pilot, we'll go in with the medical crews, and we can help brief
- 23 | the patient's family, for example, on what's going on, where we're
- 24 going to, give them directions to the hospital, that kind of
- 25 thing. And so we work all the time as a team. There's no real

- 1 great differential between Air Methods and Duke at all.
- 2 Q. And then since you started working here at Air Methods, have
- 3 you ever felt any pressure from company management to go fly in
- 4 less than optimal conditions.
- 5 | A. Absolutely none. In fact, it's the opposite. Three to go,
- 6 one to say no; be safe.
- 7 Q. And then if you or any other employee found a safety issue
- 8 here, whether it's with maintenance or operational procedures,
- 9 whatever it may be, do you feel that if you brought that issue up
- 10 to management that it would get addressed in a timely fashion
- 11 and --
- 12 A. Absolutely. Immediately.
- 13 Q. And do you feel that the company has adequate, you know,
- 14 personnel and equipment to do the mission, the HAA mission out
- 15 here?
- 16 A. Yes. As with all these things, we would like to have more
- 17 advanced equipment, but it's a cost business --
- 18 0. Sure.
- 19 A. -- thing. But we are adequately provided with what we need
- 20 to do our job.
- 21 Q. And then with Air Methods being such a big company spread
- 22 | throughout the country, do you guys feel like you have adequate,
- 23 you know, communication and support from the headquarters folks in
- 24 Colorado?
- 25 A. Yes. I think we do. Yeah.

- 1 Q. Okay. And then since the accident occurred have there been
- 2 any changes here at the local level that you guys have implemented
- 3 or done anything different, since the accident occurred?
- 4 A. I don't think we've made any specific changes. The safety
- 5 culture has remained the same. Our method of operation has
- 6 remained the same, apart from we've switched to a -- an IFR
- 7 aircraft to a VFR aircraft. So our core requirements are slightly
- 8 different inasmuch as the weather conditions we can fly in.
- 9 Q. Since the accident occurred has there been anything that
- 10 you've done differently on a personal level with the way you do
- 11 | your day-to-day duties?
- 12 (Telephone ringing.)
- MR. RANDELL: I thought I put silence on. Sorry.
- 14 Sorry. Could you repeat the question?
- 15 BY MR. HODGES:
- 16 Q. Since the accident occurred has there been -- have you
- 17 changed anything personally with how you do your duties here at
- 18 the company with flying or planning or anything of that nature?
- 19 A. I think I do it exactly the same way. I'm just probably a
- 20 lot more meticulous over certain things. And I think we're
- 21 probably much more caring about one another on a personal level.
- 22 Q. And then are there any safety improvements you would like to
- 23 | see implemented here at the local level, whether it's with, you
- 24 know, maintenance, equipment, operations, anything of that nature
- 25 | that you would like to see implemented?

- 1 A. No. I think those issues, particular issues we have
- 2 | addressed with our area manager, and they're in the process of
- 3 resolving particular issues that we raised. But other things --
- 4 for instance, we have moved across to the other side of the
- 5 hangar, requested a fuel locker to keep our fuel samples in, and
- 6 that appeared the next week. So, yes, a lot of the stuff happens
- 7 pretty quickly, should we need it.
- 8 Q. That was it for my questions. And before we go around the
- 9 table for the rest of the folks, was there anything that I missed
- 10 that you feel that was important to discuss, or you wanted to
- 11 bring up with regards to the accident or --
- 12 A. I think with respect to the accident, I was the night pilot
- 13 that day and had handed over to Jeff and the crew that morning,
- 14 very much as we had done this morning, and our standards of
- 15 operation were exactly the same way. And as far as I could say
- 16 about Jeff, if there was a pilot that could fly out of that kind
- 17 of incident, he was our safest pilot that would have been able to
- 18 do that. And Jeff was an incredible chap. Very, very nice fellow
- 19 to work with.
- 20 MR. HODGES: Just kind of go around the table.
- Jason, do you have any questions?
- 22 BY MR. QUISLING:
- 23 Q. The only question I have, Guy, is as far as training, do you
- 24 feel that, you know, previously you received the adequate type of
- 25 training and safety training, emergency training, to do the job

- 1 successfully, and has that changed at all since the accident? Do
- 2 | you think it's the same, it's worse, it's better?
- 3 A. Our training is the same. But what I would dearly love to do
- 4 | is have extra flight hours in a month for two pilots to get in the
- 5 aircraft and go fly, for example.
- 6 Q. At your base?
- 7 A. At your base. The sharing of information between pilots is
- 8 huge. And having worked on squadrons, we get that flow of
- 9 information between one another, which we do on shift changes.
- 10 And so, our shift changes never last half an hour; they actually
- 11 | are probably about 1 or 2 hours, because we discuss all sorts of
- 12 things. And if we were able to get in the aircraft, do some
- 13 | continuation flying, whether it's -- because we're an instrument
- 14 flying base, if we could do some instrument flying, and maybe some
- 15 practice emergencies in those periods of time, I think that would
- 16 be tremendous value. But I know there's a cost involved from all
- 17 | angles -- pilots' hours and aircraft hours and fuel and all that
- 18 kind of thing, but that would be one thing that I'd really like to
- 19 see.
- 20 Q. I appreciate that. Do you feel the time you spent in the
- 21 simulator has been beneficial? Or is that -- is the aircraft a
- 22 | better training environment?
- 23 A. I find the aircraft the best training environment because of
- 24 | the realities of, yes, okay, this is a single engine running
- 25 | landing, or whatever it's going to be. And that is very easy to

- 1 do in the aircraft. Very easy inasmuch the perspective of visuals
- 2 and that kind of thing, and the reality is always there. The
- 3 simulator has huge advantages inasmuch as the emergencies that we
- 4 can do in the simulator we can't do in the aircraft for real --
- 5 | engine fires, failures and that kind of thing. So for switching
- 6 drills and that sort of stuff, the simulator's absolutely
- 7 invaluable and really a great tool to use. But I do really get a
- 8 lot of value out of hands-on in the aircraft.
- 9 MR. QUISLING: Okay. Thank you. That's all I have.
- 10 MR. HODGES: Chris?
- MR. BRADY: Nothing for me.
- 12 MR. HODGES: Brice.
- 13 BY MR. BANNING:
- 14 Q. You mentioned when you were talking about safety, three to
- 15 go, one to say no. Have you ever had an experience where somebody
- 16 in the back spoke up and said that --
- 17 A. Yes.
- 18 | O. -- I'm not comfortable?
- 19 A. Absolutely.
- 20 Q. Can you share that with us?
- 21 A. We had planned to launch out of here and it was nighttime, we
- 22 were on the NVGs. There was a thunderstorm around. We were in
- 23 the 145, so we had got a weather radar, so I'm quite comfortable
- 24 | with flying around thunderstorms, isolated thunderstorms rather
- 25 than lines of thunderstorms. And the nurse in the back was, no, I

don't want to go. I'm like, that's good enough for me. And so we didn't fly. So I have absolutely no issue.

And as far as I'm concerned, if the nurses are comfortable to

And as far as I'm concerned, if the nurses are comfortable to turn around and say, no, I don't want to fly, then I back them up to the hilt. But it also gives me a level of credibility with

- those nurses that they are willing to turn around and say, no, I don't want to fly.
- 8 Q. Right.

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- 9 A. And there's no push-itis. Let's put it that way. So --
- 10 Q. Good. Thank you.
- 11 MR. BANNING: I think that's all I had.
- MR. HODGES: Okay. Do you have any questions for me or anybody else before we conclude?
 - MR. RANDELL: No. It's more, I guess, about time scale of where we're getting to with the completed report and those kind of things, and whether there's any conclusions that we might have.
- 17 MR. HODGES: Okay.
- 18 MR. RANDELL: But that's all I have.
- MR. HODGES: Okay. I'll go ahead and stop the recording, then, at this point.
- 21 (Whereupon, the interview was concluded.)

22

23

24

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017 Interview of Guy Randell

ACCIDENT NO.: ERA17MA316

PLACE: Smithfield, North Carolina

DATE: May 17, 2018

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 Coen Brooks

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH *
IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

Interview of: CHRISTINA SHELTON

Clinical Team Lead Duke Life Flight

> Duke Life Flight - Smithfield Base Johnston Regional Airport Smithfield, North Carolina

Thursday, May 17, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

JASON QUISLING, Director of Operations Air Methods

RENE BORGHESE, Administrative Director Duke Life Flight (On behalf of Ms. Shelton)

I N D E X

<u>PAGE</u>

Interview of Christina Shelton:

By Mr. Hodges

1	<u>INTERVIEW</u>
2	(11:01 a.m.)
3	MR. HODGES: Today is Thursday, May 17, 2018. We're doing
4	the ERA17MA316 interviews in Smithfield, North Carolina. It's
5	11:01 local time. I'm Mike Hodges with the National
6	Transportation Safety Board, Operations Group Chairman.
7	MS. SHELTON: I'm Christina Shelton, the clinical team lead
8	for Duke Life Flights.
9	MS. BORGHESE: And Rene Borghese, the administrative director
10	for Duke Life Flight, serving as a support for Christina.
11	MR. BANNING: Brice Banning, NTSB.
12	MR. QUISLING: And Jason Quisling, Air Methods, Director of
13	Operations.
14	MR. HODGES: And does anyone have any objections to recording
15	this interview?
16	MS. SHELTON: No.
17	MS. BORGHESE: No.
18	MR. BANNING: No.
19	MR. QUISLING: No, sir.
20	MR. HODGES: Okay. And today we're going to be interviewing
21	Christina.
22	INTERVIEW OF CHRISTINA SHELTON
23	BY MR. HODGES:
24	Q. Christina, how long have you worked for Duke Life Flight for?
25	A. September of 2005.

- 1 Q. And then what did you do prior to Duke Life Flight?
- 2 A. I was a cardiac care nurse and also a paramedic.
- 3 Q. And then right now your current position is clinical team
- 4 | lead. Can you just kind of give me a brief overview of kind of
- 5 | what that does, and how you, you know, do your duties around here
- 6 at this location, please?
- 7 A. Yeah. I do oversight for the Smithfield Base. I staff all
- 8 of the aircraft or the ambulance two shifts a week. And then the
- 9 other two days, I serve as administrative support for the base.
- 10 So --
- 11 Q. And then you're just solely based out of Smithfield, then?
- 12 Do you do like float duty at all to Durham or any other hospitals,
- or this is just the primary location for you, then?
- 14 A. This is my primary location. I could staff at either base,
- 15 depending on the need of the program. And I do go to Durham for
- 16 administrative, our administrative days.
- 17 Q. And then do you do any sort of flight duties at all with --
- 18 A. Yes.
- 19 Q. You do? Okay.
- 20 A. Yes.
- 21 Q. And then that's -- just so I have it correctly, are you
- 22 considered a flight medic or a flight nurse?
- 23 A. Flight nurse.
- 24 Q. Flight nurse. Okay. Just trying to make sure I have all
- 25 those correct titles sorted out there.

- 1 A. That's okay.
- 2 \mathbb{Q} . And then you fly in both the 135 and the 145, then?
- 3 A. Yes, sir, I have.
- 4 Q. Both. Okay. And then outside of your function as a clinical
- 5 | team lead, do you have any other duties at the organization? Are
- 6 you like a safety representative or do you have any other
- 7 | functions you do outside of your job?
- 8 A. My job also encompasses our clinical education. So I also do
- 9 re-credentialing for our team for any certifications that we hold,
- 10 so -- to include our communications team. So our whole team. So
- 11 oversight for education. Also involved in all of our councils --
- 12 interviews, safety, quality. So I serve on those as well.
- 13 Q. And then do you hold part-time employment at any other
- 14 | companies or positions anywhere else?
- 15 A. I do not.
- 16 Q. And just switching gears now, going from your background,
- 17 | talking about the accident pilot, Jeff Burke. How long did you
- 18 know Jeff for?
- 19 A. I have known Jeff since his entry into our program. So I
- 20 have -- I've worked with him since day 1 of him coming here.
- 21 Q. And just from a professional aspect, what was your overall
- 22 professional perspective of Jeff?
- 23 A. Very friendly, team oriented, safety oriented, very thorough.
- 24 Q. Did you ever have any professional concerns with him, either
- 25 inside or outside of the cockpit?

- 1 A. No, sir.
- 2 Q. No. And then when you would fly with him as a flight nurse,
- 3 how did he perform from like a crew resource management aspect,
- 4 | with communicating and actions and all that kind of -- how did he
- 5 perform doing those kind of duties?
- 6 A. Very thorough. I mean, crew briefings, always encouraged us
- 7 | speaking up, very much an advocate for that. If there were any
- 8 | concerns or issues, we would stop and communicate and talk about
- 9 | it. So --
- 10 Q. And then did you know Jeff outside of work, too, on a
- 11 personal level?
- 12 A. I do not know him and his family.
- 13 Q. Were there any concerns with Jeff outside of work?
- 14 A. No, sir.
- 15 Q. Just kind of switching gears, just talking about both Air
- 16 Methods and Duke Life Flight. Here at the local level, at
- 17 | Smithfield, how would you describe the organizational safety
- 18 | culture here with everybody and all the equipment?
- 19 A. I mean, our culture is to put safety first, and that's kind
- 20 of -- that's our practice. That's how we approach our day-to-day
- 21 operations.
- 22 Q. How would you rate the overall employee morale here at this
- 23 | location?
- 24 A. Currently? I mean, I think we're doing well. I think we're
- doing as well as a team could be expected to. We're a cohesive

team.

- 2 Q. Just kind of -- jump to my next question. How would you
- 3 describe the relationship between Duke Life Flight and Air
- 4 Methods?
- 5 A. We -- from this perspective, I mean, we're one team. We work
- 6 | very well together operationally here at the base. Between the
- 7 | mechanics, pilots, air, ground, we all work as a whole unit.
- 8 Q. And then since you've worked here with -- particularly doing
- 9 your flight duties, have you ever experienced it or seen others
- 10 experience it, where they felt pressure from company management to
- 11 do flights in less than optimal conditions?
- 12 A. No, sir.
- 13 Q. And then when a pilot's doing their, you know, pre-flight
- 14 risk analysis process prior to taking on a mission, can you kind
- 15 of explain your role with how you partake in that as a flight
- 16 | nurse, with your input and the discussions you guys have with --
- 17 prior to taking off during that risk assessment process?
- 18 A. So once we're toned out for a flight, we all move to the
- 19 aircraft and our pilots are getting their risk assessment. We do
- 20 | our walk-arounds, ensure everything is -- you know, equipment,
- 21 everything is buttoned up. And then always before -- they show us
- 22 | their iPads, like, you know, so that we all know that we're
- 23 agreeing to go. And so that's kind of our practice here.
- 24 Q. Okay. Visual confirmation, then?
- 25 A. Visual confirmation usually, yeah. And -- visual and verbal.

- 1 So --
- 2 Q. And if, you know, someone like you, like a flight nurse or a
- 3 | flight medic, for example, found a safety issue, whether it's with
- 4 operational procedures or maintenance procedures or equipment
- 5 procedures or whatever it may be, do you feel that if you brought
- 6 that issue up to a member of the management team it would get
- 7 addressed in an appropriate timely fashion?
- 8 A. Yes.
- 9 Q. And then just kind of tying in with my next question -- I
- 10 know we talked about this yesterday, about Air Methods has a
- 11 safety reporting program in place for their employees. And my
- 12 understanding, talking from yesterday, is that they're not
- 13 directly tied into your guys' program, but they do have a separate
- 14 program for Duke Life Flight, then?
- 15 A. Absolutely.
- 16 Q. Okay. Here at the local level, do you feel that there's
- 17 | adequate personnel and equipment to do the mission?
- 18 A. Yes.
- 19 Q. And then I kind of asked this question for the Air Methods
- 20 | folks, but with Duke Life Flight's headquarters being in Durham,
- 21 do you guys feel that at the Smithfield base you guys have
- 22 | adequate communications support from your quys' headquarters to do
- 23 your mission?
- 24 A. Yes. And, I mean, if we were to need a different kind of
- 25 resource or additional resources, then we speak up to make sure

- 1 | that we're able to accomplish the mission that we need to do.
- 2 | That's just how it is, how it goes when you're a satellite base.
- 3 Q. Since the accident occurred, have there been any changes here
- 4 at the local level that have been implemented since the accident?
- 5 A. I'm trying to think in terms of things that are different or
- 6 that have changed.
- 7 Q. This could be like operational procedures or briefing
- 8 procedures or --
- 9 A. We still continue to brief the same way we did before, so
- 10 that's not any different. I can't think of anything. We've done
- 11 some updating to things like our emergency contact things, those
- 12 sorts of things.
- 13 O. Sure. Sure.
- 14 A. And you always go back and you look at things like your PAIP
- 15 and that sort of thing. So I can't think of really anything else
- 16 off the top of my head.
- 17 Q. And then since the accident occurred, have you changed
- 18 anything personally how you do your fight duties at all, like on a
- 19 personal level?
- 20 A. Other than I may pause a little longer --
- 21 O. Sure.
- 22 A. -- and just making sure when I'm doing my walk-around, that
- 23 I'm, you know, just -- sometimes you just take that extra, so,
- 24 | yeah, everything is good. I think that's a normal thing. But I
- 25 | think being routine oriented is -- it's the way we're trained.

- 1 Q. Sure.
- 2 A. So in terms of doing that, I don't feel like I'm doing
- 3 anything different
- 4 Q. And then here at the local level are there any safety
- 5 | improvements you'd like to see implemented here, whether it's with
- 6 equipment, personnel, operations, maintenance, anything you'd like
- 7 to see implemented here?
- 8 A. I mean, I can't -- right now we're working a little bit
- 9 differently because we're in our backup aircraft, so we take all
- 10 of that into consideration right now. So I think -- I can't think
- of anything that we should be doing differently or that I would
- 12 | want to see done differently, because we have leeway to -- if it's
- 13 mission-oriented, if we feel like it's something that we're not
- 14 safe to do, then we don't do it.
- 15 Q. Sure.
- 16 A. So I can't think of anything right now that we need to be
- 17 doing differently.
- 18 Q. That was it for my questions. Before I go around the table
- 19 with the rest of the folks, was there anything that I missed, that
- 20 | I didn't bring up you feel is important to discuss related to the
- 21 accident or safety or anything of that nature?
- 22 A. I mean, just the fact that I did work with Jeff a long time.
- 23 And so -- he was very methodical in his processes, and so that's
- 24 what we were used to. So I can't really think of anything that
- 25 | you haven't asked.

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1
         MR. HODGES: Jason?
2
         MR. QUISLING: I don't have any additional questions.
                                                                  Thanks
 3
    for your time.
 4
         MR. HODGES: Brice?
 5
         MR. BANNING: I don't have any questions. Thank you.
 6
         MR. HODGES: Rene?
 7
         Do you have any questions for me or for anybody else, or --
8
    okay.
 9
         MS. SHELTON:
                        Thank you.
10
         MR. HODGES: All right. We'll go ahead and stop recording at
11
    this point.
12
          (Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Christina Shelton

ACCIDENT NO.: ERA17MA316

PLACE: Smithfield, North Carolina

DATE: May 17, 2018

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 Coen Brooks

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

**TN HERTEORD NORTH CAROLINA **

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 * *

Interview of: CAROLINE COX

Flight Nurse Duke Life Flight

> Duke Life Flight - Smithfield Base Johnston Regional Airport Smithfield, North Carolina

Thursday,
May 17, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

JASON QUISLING, Director of Operations Air Methods

RENE BORGHESE, Administrative Director Duke Life Flight (On behalf of Ms. Shelton)

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By Mr. Hodges		4

1	,
1	<u>INTERVIEW</u>
2	(11:23 a.m.)
3	MR. HODGES: All right. Today is Thursday, May 17, 2018.
4	We're doing the ERA17MA316 interviews in Smithfield, North
5	Carolina. It is 11:23 local time. I'm Mike Hodges with the NTSB,
6	Operations Group Chairman.
7	MS. COX: And I am Caroline Cox, flight nurse with Duke Life
8	Flight.
9	MS. BORGHESE: Rene Borghese, Administrative Director, Duke
10	Life Flight, in support of Caroline.
11	MR. BANNING: Brice Banning, NTSB.
12	MR. QUISLING: Jason Quisling, Air Methods, Director of
13	Operations.
14	MR. HODGES: And does anyone have any objections to recording
15	this interview?
16	MS. COX: No.
17	MS. BORGHESE: No.
18	MR. BANNING: No.
19	MR. QUISLING: No.
20	MR. HODGES: Okay. And today we're going to be interviewing
21	Caroline Cox.
22	INTERVIEW OF CAROLINE COX
23	BY MR. HODGES:
24	Q. And how long have you worked for Duke Life Flight for?
25	A. I stared with Duke Life Flight in May of 2016.

- 1 Q. And then what did you do prior to Duke?
- 2 A. I worked for Duke Hospital since 2012. I was -- I've worked
- 3 there ever since I graduated from nursing school. Started in the
- 4 | neuro ICU, and then I worked in the emergency room.
- 5 Q. And then your position here is as a flight nurse?
- 6 A. Yes. I do both ground and air --
- 7 Q. Ground and air.
- 8 A. -- transport. Yes.
- 9 Q. Okay. And then are you strictly based out of just Smithfield
- 10 or can you rotate out of the Durham base, too, or just --
- 11 A. I initially started at the Durham base, but I've been full
- 12 | time at Smithfield since March of 2017. I occasionally pick up
- 13 | shifts in Durham, but I primarily work here.
- 14 Q. And then can you just kind of explain your day-to-day duties
- 15 | as a flight nurse, just from the flight side of the house, please?
- 16 A. Okay. Like what we do when we come in each morning before a
- 17 | shift or --
- 18 Q. Just kind of just a general overview of just kind of your
- 19 duties and functions, you know, both on the ground and in the air.
- 20 If you want to explain, that's fine, about how --
- 21 A. Okay.
- 22 Q. -- your day works, or whatever's easiest for you.
- 23 A. Yeah. Sure. So we do both ground and air transport. We're
- 24 assigned to either one. On any given shift, we know which one
- 25 | we're going to be on when we come in. We fly, either I'll be

paired with another nurse or also a paramedic.

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We do inter-facility transports, hospital to hospital. So we fly out to small community hospitals to pick up critically ill patients from these small outlying facilities where they don't necessarily have the resources to take care of those patients, and we fly them back to Duke. That's the majority of our transports.

We also to scene calls, where someone in the community, whether it be a first responder or a 911 center, there's an emergency, whether it be accident, farming, industrial, stroke, anything like that. We can actually respond to the scene, where we would land on a highway or in a nearby field, and then we can get that patient quickly to the nearest large tertiary care facility.

We do 12-hour shifts. We do 8 a.m. to 8 p.m. I primarily work day shifts. We come in each morning, we equip ourselves with our medications, narcotics that we need. We each carry a pack on our person. We talk about our day, who's going to be on our crew. We start out with a shift brief with our pilot, where we talk about the weather for the day, the status of the aircraft, any due maintenance, any scheduled commitments, whether that be a PR event or any pending flights for patients. And then we go through all of our emergency procedures.

We then go out to check the aircraft, do our walk-around, check the equipment inside the helicopter, make sure we have everything we need, it's all functional, there's no concerns with

- 1 | that. And then we're essentially on-call for calls that come in
- 2 on the radio, and then we respond.
- 3 Q. And then for flight duties, you fly in both the 145 and the
- 4 135? You fly in both?
- 5 A. Well, I primarily fly out here in Smithfield, so now it's
- 6 just the 135. But if I were to pick up a shift in Durham, it
- 7 would be a 145.
- 8 Q. And then do you have any additional duties you do here
- 9 outside of a flight nurse? Are you like a safety representative
- 10 or anything else you do outside of just being a flight nurse? Any
- 11 | other duties you have here?
- 12 A. Yes. I am the chair of our quality council, which is where
- 13 we evaluate things that we can improve, whether it be related to
- 14 patient care, documentation, policies, procedures, equipment,
- 15 supplies. And we meet monthly. So I chair that committee and
- 16 help steer some of those things.
- 17 Q. How many folks are on that committee here?
- 18 A. So I'm the only one that chairs it, but we -- as a program,
- 19 we all attend all of the committee meetings. Yeah.
- 20 Q. And that's just strictly Duke Life Flight folks, then?
- 21 A. Yes.
- 22 O. It doesn't include Air Methods?
- 23 A. We do -- so we have a pilot that attends the safety
- 24 quality -- well, we're combined with the safety qualify committee.
- 25 We meet together as one. And we have a pilot representative, who

- 1 | is Josh Haring, and then we also have a mechanic that calls in
- 2 | when able, which is usually either Dennis or Nate.
- 3 Q. Just kind of switching gears and talking about Jeff Burke,
- 4 | how long did you know Jeff for?
- 5 A. I first met Jeff when I started here full time, so that was
- 6 probably March 2017. So that would have been about 6 months
- 7 before.
- 8 Q. And then just from a professional aspect, what was your
- 9 perspective of him as a pilot?
- 10 A. I respected him a lot. He was very kind. He was friendly.
- 11 He interacted very well with the medical crew. He was thorough.
- 12 He was patient. He was understanding. He was always willing to
- 13 explain things, answer questions. He was a great pilot. I always
- 14 felt safe with him. I never had any concerns.
- 15 Q. And then just from a crew resource management aspect, with
- 16 you being a flight nurse in the back and him being the pilot up
- 17 | front, how did he perform with doing like CRM duties and
- 18 | communicating and delegating, things of that nature?
- 19 A. We always talked about procedures, emergencies, things like
- 20 that, what we would do. And in terms of flying in the aircraft on
- 21 patient flights, he was always talking to us over ICS and telling
- 22 | us things -- you know, I've got traffic at 3 o'clock or, you know,
- 23 there's a cell that's forming over here, we're going to divert
- 24 over here a little bit. He was always talking to us. I'm going
- 25 to climb to, you know, 3,000 feet, little things. He constantly

- 1 | communicated with us, and we always knew what we were doing and
- 2 | why. And he would always ask us, you know, if you aren't
- 3 comfortable with this, let me know, I'm happy to do this or --
- 4 those kinds of things.
- 5 Q. And did you know Jeff outside of work on a personal level?
- 6 A. I did not. Only at work.
- 7 Q. And then were there any, you know, concerns with Jeff that
- 8 you knew of outside of work, anything --
- 9 A. Never.
- 10 Q. -- that was brought to your attention? Okay.
- 11 A. Not that I know of.
- 12 Q. And then just switching gears, talking about the company here
- 13 | with both Air Methods and Duke Life Flight, how would you describe
- 14 the overall organizational culture here?
- 15 A. I've always felt very safe here in terms of our processes and
- 16 our policies and our procedures. And I've always felt like if I
- 17 | had something I was concerned with, I could speak up and that it
- 18 | would be received well and that it would be addressed. So I've
- 19 never had any concerns over the safety at Duke.
- 20 Q. And then how would you rate overall employee morale here
- 21 | since you've been here?
- 22 A. Before the crash or after?
- 23 Q. Both.
- 24 A. Both. You said 0 to 10?
- 25 Q. What's that?

- 1 A. Did you say rate it on a scale of 0 to 10?
- 2 Q. Just an overall --
- 3 A. Oh.
- 4 Q. I guess, whatever's easiest for you to --
- 5 A. Oh. Sorry. I thought you asked for a number. If I were to
- 6 give a number, I'd give probably a --
- 7 Q. Okay. That's fine.
- 8 A. -- an eight.
- 9 Q. An eight? Okay.
- 10 A. Yeah. Nobody's perfect. But I think overall we enjoy our
- 11 job, and we feel safe and we like working here and feel that
- 12 things work well. There's always things to improve on.
- 13 O. Sure.
- 14 A. But overall, we're all very happy here, and many of us,
- 15 despite things, continue to stay.
- 16 Q. Sure.
- 17 A. Um-hum.
- 18 Q. And how would you describe the relationship between Duke Life
- 19 Flight and Air Methods here at the local level?
- 20 A. I'd say it's good. We don't have all that much interaction
- 21 in terms of Air Methods leadership or anything like that. But in
- 22 terms of Air Methods employees, like our mechanics and the pilots,
- 23 that's -- we have a good relationship with them.
- 24 Q. Okay.
- 25 A. Yeah. Some people talk about other programs and their

- 1 relationship to the pilots and mechanics, and they always say that
- 2 ours is pretty good compared to some other places. That's good to
- 3 know.
- 4 Q. Since you've started doing flight duties have you ever
- 5 experienced it or seen others experience it where they felt
- 6 pressure from company management to fly in less than optimal
- 7 | conditions?
- 8 A. No. I have not.
- 9 Q. And then, you know, before you guys launch on a medical
- 10 mission and the pilot's doing their pre-flight risk analysis
- 11 process, can you kind of explain your role with that process and
- 12 how you, as a flight nurse, is involved with that process with
- doing the formal risk assessment and deciding to launch or not
- 14 launch?
- 15 A. Um-hum. So there's -- as the medical crewmembers, for us,
- 16 we're looking at things like fatigue, you know, are we rested, is
- 17 | this our fifth flight of the day or is it only our second; are we
- 18 | nearing shift change. So are we well rested, have we eaten, and
- do we have everything we need, things like that.
- 20 And then obviously the pilot's looking at weather, and they
- 21 involve us with that, too, and they're explaining, and we can
- 22 actually go in there, and if weather's iffy that day, we're
- 23 looking at the radar map with them and they're showing us what
- 24 they're seeing. And then we talk about it as a group, and we
- 25 preach the whole, three to go, one to say no. And if anybody, for

12

- any reason, feels like this isn't a mission that they feel comfortable taking, then we don't. And there's no question asked.
- 3 Q. I know you kind of talked about this before with the safety
- 4 and the quality council, but if an employee came up to you, for
- 5 example, or brought it up to the safety council about an issue
- 6 | with equipment or training or whatever it may be, do you feel that
- 7 | that would get brought up in the chain of command, if you will,
- 8 and get addressed in a timely fashion?
- 9 A. Yes. We're pretty good about solving things and -- on a
- 10 peer, staff level. But if we ever felt like it wasn't something
- 11 that we could come to a resolution just with a committee meeting
- 12 | with staff, then we would go to our CTLs or our manager or
- director, and they would kind of help us come to a resolution for
- 14 that easily.
- 15 Q. And then since you've been here, do you feel the company here
- 16 at the local level, or organization, I should say, has adequate
- 17 personnel and equipment to do the mission?
- 18 A. Yes, I do.
- 19 Q. And then, you know, being that Smithfield is like a satellite
- 20 | base, if you will, from the headquarters at Durham, do you guys
- 21 | feel that you have adequate communication and support from your
- 22 | folks in Durham, being a satellite based out of here?
- 23 A. There's room for improvement on that. Our communication
- 24 center, I think that they could probably have a better
- 25 understanding of how we do things from a satellite base in terms

- 1 of not being with a helicopter on the roof, and our process for
- 2 | launching is a little different with, you know, the helicopter
- 3 being on a dolly and pulling it out --
- 4 Q. Sure.
- 5 A. -- and things like that.
- 6 Q. Sure.
- 7 A. Our lift times, you know, may be a little bit longer than at
- 8 Durham. So I think that there might be a little bit of a
- 9 disconnect with communications. But it's not a safety issue by
- 10 any means.
- 11 Q. Sure. Sure.
- 12 A. But, if anything, we could probably improve on that.
- 13 Q. Okay. Since the accident occurred have there been any
- 14 changes here at the local level with anything, the way day-to-day
- ops is done or briefings or policies, anything of that nature?
- 16 A. Not our day-to-day operations, so to say. If anything -- I
- 17 | can't speak for everyone, but on a personal level I'm just more
- 18 | cognizant and aware of speaking up if --
- 19 O. Sure.
- 20 A. -- you know, what was that noise or that -- was that supposed
- 21 to feel that way, you know, when, you know, maybe the aircraft
- 22 makes a -- turbulent or something like that.
- 23 Q. Sure. Sure.
- 24 A. And so I think, if anything, we're just all more keenly aware
- 25 of those things and we ask and speak up much more quicker than,

you know, just assuming oh, that was probably normal.

But day-to-day operations, I don't think there's any huge changes. We've reevaluated our PAIP process and looked at whether there was anything that we could do differently or better to support our team in the event that we needed to use one of those again. So that's probably one of the biggest things, is

- 8 Q. Are there any safety improvements that you'd like to see
- 9 implemented here at the local level, whether it's with training,

evaluating that process, and what went well and what didn't.

- 10 maintenance, equipment, staffing, anything you'd like to see, you
- 11 know, improved from a safety aspect around here?
- 12 A. I think my biggest thing is probably just improving the
- 13 connection that our communications center has --
- 14 Q. Sure.

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- 15 A. -- with our satellite base. I think that's the biggest thing
- 16 for me is, is maybe having them come down here and seeing what we
- 17 do on a day-to-day basis from out here.
- 18 Q. Okay. I did have one more question from you. With being a
- 19 flight nurse in the back and having the pilot up front, if -- and
- 20 | you guys all wear helmets then, correct, in the back?
- 21 A. Yes. Um-hum.
- 22 Q. If a pilot's in flight and they have a caution or warning
- 23 light go off, are you guys able to hear that specific tone, if you
- 24 | will? Are you guys isolated from hearing that or can you hear
- 25 everything that the pilot hears up front with the systems in the

- 1 helicopter?
- 2 A. I don't hear anything, so to say. But they always tell us.
- 3 Q. They verbalize it to you?
- 4 A. Always. Yes. We always know anything that's going on.
- 5 Q. That was about it for my questions. And before we go around
- 6 the table to see if anybody else has questions, was there anything
- 7 | you feel that I missed that's important to discuss about the
- 8 accident or safety or anything of that nature?
- 9 A. Just that Jeff was a very, very, very safe pilot and I never
- 10 had any concerns flying with him. And if he were here, I would
- 11 | fly with him again tomorrow. That was never a concern with any of
- 12 us. If anything, we joked sometimes that he'd turn down flights
- 13 that, you know, we actually would be okay with taking, just
- 14 because he was that safe.
- 15 Q. Sure.
- 16 A. And he didn't take chances with anything. So --
- 17 MR. HODGES: Jason, do you have any questions?
- 18 MR. QUISLING: I don't have any questions. Thanks.
- 19 MS. COX: Okay.
- 20 MR. HODGES: Brice?
- 21 MR. BANNING: I don't have any question. Thank you.
- MR. HODGES: Rene?
- MS. BORGHESE: No.
- MR. HODGES: And do you have any questions for me or anybody
- 25 else?

1	MS. COX: I don't think so.
2	MR. HODGES: Okay.
3	All right. We'll go ahead and stop recording at this point.
4	(Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Caroline Cox

ACCIDENT NO.: ERA17MA316

PLACE: Smithfield, North Carolina

DATE: May 17, 2018

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 Coen Brooks

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316 ON SEPTEMBER 8, 2017 *

Interview of: NATE ALLEN

Mechanic Air Methods

> Duke Life Flight - Smithfield Base Johnston Regional Airport Smithfield, North Carolina

Thursday,
May 17, 2018

APPEARANCES:

MIKE HODGES, Operations Group Chair National Transportation Safety Board

BRICE BANNING, Operations Group National Transportation Safety Board

JASON QUISLING, Director of Operations Air Methods

CHRIS BRADY, Associate General Counsel Air Methods
(On behalf of Mr. Allen)

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By Mr. Hodges		4

1	
1	<u>INTERVIEW</u>
2	(11:49 a.m.)
3	MR. HODGES: All right. Today is Thursday, May 17, 2018.
4	And we are doing the ERA17MA316 interviews in Smithfield, North
5	Carolina. The time is 11:49 local. I'm Mike Hodges, with the
6	NTSB, Operations Group Chairman.
7	MR. ALLEN: I'm Nate Allen, the mechanic with Duke Life
8	Flight, or Air Methods.
9	MR. BRADY: Chris Brady with Air Methods, as personal
10	representative of Mr. Allen.
11	MR. BANNING: Brice Banning, NTSB.
12	MR. QUISLING: And Jason Quisling, Air Methods, Director of
13	Operations.
14	MR. HODGES: And does anyone have any objections to recording
15	this interview?
16	Mr. ALLEN: No.
17	MR. BANNING: No.
18	MR. BRADY: No.
19	MR. QUISLING: No.
20	MR. HODGES: Okay. And today we will be interviewing
21	Mr. Nate Allen.
22	INTERVIEW OF NATE ALLEN
23	BY MR. HODGES:
24	Q. Nate, how long have you worked for Air Methods for?
25	A. About 3½ years.

- 1 Q. Three and a half years. And your position is just basically
- 2 a --
- 3 A. A base mechanic.
- 4 Q. Base mechanic.
- 5 A. Yes.
- 6 Q. Okay. And then what did you do prior to Air Methods?
- 7 A. I worked at Novo Nordisk as a packaging line lead, packaging
- 8 insulin.
- 9 Q. And then can you just kind of give me a rough overview of
- 10 your aviation certificates and what you have with --
- 11 A. I currently have an A&P. I've had it for the last $3\frac{1}{2}$ years.
- 12 I'm working towards the IA certificate. Prior to Novo and
- 13 aviation-wise, I was in the Navy for 6 years as a aviation
- 14 structural mechanic. And after that, I went to Fort Bragg as a
- 15 aviation contractor, and worked on phases and resets for on the
- 16 Black Hawk 60s.
- 17 Q. And then here, at Smithfield, you're qualified to work on
- 18 both the 135 and the --
- 19 A. Yes.
- 20 Q. -- 145? And then, so are you strictly just based out of
- 21 Smithfield or do you float around to Durham, too?
- 22 A. No. I'm based out of Smithfield. Now, during our on-call
- 23 times, we will float to Durham, or to any other hospital when they
- 24 have an issue.
- 25 O. Sure.

- 1 A. We'll go wherever they're at.
- 2 |Q. Can you just kind of give me just a rough overview of your
- 3 day-to-day duties as a mechanic here?
- 4 A. Day-to-day, we'll come in, take the paperwork from the day
- 5 prior, scan it in, send it into the Air Methods vault and to our
- 6 auditor. We'll complete any airworthiness that's due, oxygen, oil
- 7 levels. Any inspections -- flight hours, calendar hours, or
- 8 flight -- or inspections, we'll take care of either that day or
- 9 plan the week out of when we're going to take care of them.
- 10 And then we'll do turnover with the pilot. We come in a half
- 11 hour prior to shift change so we can talk with both the night
- 12 | shift pilot and the day shift pilot to make sure everything's
- 13 being passed on, not only to us, but also to the other pilot.
- 14 Q. And then outside of your duties as a mechanic, do you have
- 15 any other duties or functions here? Are you like a safety
- 16 representative or anything like that?
- 17 A. No.
- 18 Q. You're just solely mechanic?
- 19 A. Solely mechanic. Yes.
- 20 Q. And then do you work part-time at any other --
- 21 A. No.
- 22 Q. -- jobs or anything? Okay. And just switching gears,
- 23 talking about Jeff Burke, how long did you know Jeff for?
- 24 A. Prior to me coming to Duke, I worked for UNC, and we'd -- I'd
- 25 carry him down to other like aircraft for -- spare aircraft, so he

- 1 | could ferry aircraft for us. So I've known him probably 3 of the
- 2 | 3½ years I've been with Air Methods. And then, obviously, I got
- 3 to know him real well when I came up here to Duke.
- 4 Q. Sure. And then from a professional aspect, what was your
- 5 | professional perspective of Jeff as a pilot?
- 6 A. I think he was one of the best. I mean, I actually preferred
- 7 flying with Jeff over other pilots, mainly because I just felt
- 8 | comfortable with Jeff. Between his experience with the Army and
- 9 Air Methods, I would have flown with Jeff over anybody.
- 10 0. Sure.
- 11 A. Yep. He was very -- made sure, when he started the aircraft,
- 12 | you had -- you weren't -- he would make sure you did not speak
- 13 until he was at either cruise level or, if we're doing ground
- 14 runs, until the aircraft was to the point we needed to be at, then
- 15 | we were allowed to talk on the, you know, mikes and stuff like
- 16 that. But other than that, it was -- he was very professional.
- 17 Q. Did you have any professional concerns with him at all?
- 18 A. No.
- 19 Q. And then from the times you did fly with him, from like a
- 20 crew resource management aspect of him just communicating with you
- 21 and the aircraft, what would you say that was like?
- 22 A. Again, I'd say he was pretty top notch for that. Because if
- 23 | we were to go on a maintenance flight, it would be sterile cockpit
- 24 until we got to cruise. And then he would announce, hey, we're at
- 25 cruise now if you need to say something, or obviously you can

- 1 | break radio silence if you see an emergency -- bird, planes, stuff
- 2 | like that. But, yeah, he would -- it was sterile cockpit until he
- 3 was cruising.
- 4 And then, very helpful for a maintenance guy being up there,
- 5 say, hey, I need you to do this, this and this. And he would help
- 6 me read numbers or if I needed to go higher or whatever I needed,
- 7 he was very courteous to us.
- 8 Q. And then did you know Jeff outside of work also?
- 9 A. I did. Him and I were in a hunting club, him and his son and
- 10 I -- in Zebulon. So we went and shot a few times, and hunted
- 11 together and hung tree stands and stuff like that.
- 12 Q. Were there any concerns with him outside of work, anything --
- 13 A. No. I'd say he was -- I mean, he had a pretty good way of
- 14 just leave -- work stayed here, home life was completely
- 15 different.
- 16 Q. Sure.
- 17 A. So it was kind of nice having, you know, the work Jeff and
- 18 home life Jeff.
- 19 Q. Yeah. Sure. Sure. Just kind of switching gears and talk
- 20 about the company now. How would you describe the overall
- 21 organizational safety culture here at Smithfield?
- 22 A. It it Air Methods point, or like --
- 23 Q. Just like overall with, I guess, Duke and Air Methods operate
- 24 together.
- 25 A. I think it's pretty good. I know -- I think coms kind of

- 1 | will not take into perspective that these -- like they are paging
- 2 | them out right at shift change. Some of these pilots, they need
- 3 | -- they're more thorough with pre-flights, so they need a little
- 4 longer on pre-flight.
- 5 Q. Sure.
- 6 A. Or, you know, not being paged out right at shift change.
- 7 Other than that safety aspect of it all, I think they work very,
- 8 very well together. And it doesn't take it -- for example, our
- 9 pilot one day, they tried to page him out and the pilot just said,
- 10 no, not until I'm ready. Because, you know, it's a -- it is
- 11 safety issue. They need to see their aircraft and brief their
- 12 crews and have that time.
- 13 Q. Sure. And from your position, how would you rate the overall
- 14 employee morale here?
- 15 A. Here? Oh, it's pretty good morale around here. We have a
- 16 | really good working relationship with all the nurses and the
- 17 | flight crew here.
- 18 Q. And then since you've worked here, have you ever seen flight
- 19 crews ever receiving pressure from company management, you know,
- 20 to go fly in less than optimal conditions? Have you ever seen
- 21 that?
- 22 A. Oh, no. No. That's one thing I'll give them. No. If it's,
- 23 | weather's questionable, they just won't take the flight. There's
- 24 no reason to risk it.
- 25 Q. Okay. You know, if you or another employee found a safety

10

- 1 | issue, whether it could be with, you know, equipment, maintenance,
- 2 | training, whatever the issue may be, do you feel that if you
- 3 | brought that issue up to management it would get resolved in a
- 4 | timely fashion?
- 5 A. Some things yes; other things no. For example, we've asked
- 6 | for almost 2 years now to get safer ladders just for working on
- 7 | the side of the aircraft. It never seems to make it into the
- 8 budge, even though we've had people fall off ladders. We've had
- 9 the -- not injury reports, but like the risk of falling off
- 10 ladders, and a constant complaint every month of we need these
- 11 style ladders. And it just -- I think that goes on deaf ears.
- 12 Q. Okay.
- 13 A. But other things, such as if we need like forklifts, like
- 14 stuff for safety of the aircraft or protection of parts on the
- 15 | aircraft, yeah, we'll get it; safety stand to lift an engine or to
- 16 protect the blades or -- we'll get that when we need it. But it's
- 17 | almost as if ladders or personal stuff that we might need, it's --
- 18 0. Sure.
- 19 A. -- it's kind of pushed to the wayside a little.
- 20 Q. Okay. And then, with you guys being here at Smithfield and
- 21 | Air Methods headquarters being out in Colorado, do you guys feel
- 22 | there's -- I guess, kind of mentioned before about communications
- 23 support with you guys being, you know, kind of satellite base,
- 24 kind of far away from headquarters?
- 25 A. So, support. We have full support. Like if we need special

- 1 tools and stuff like that, yeah, we'll get what we need from
- 2 | Denver. Sometimes it takes a little while, but we -- Denver
- 3 normally will give us what we need. So --
- 4 Q. Okay.
- 5 A. The time difference is odd. Like we start our day at 7:30.
- 6 Q. Yeah.
- 7 A. You have 2-hour time difference, so sometimes we have to wait
- 8 until --
- 9 Q. Sure.
- 10 A. -- someone's in the office to get a ball rolling.
- 11 Q. Yeah. Yeah. Since the accident occurred, have there been
- 12 any changes here at the local level that you've seen, anything's
- 13 | that's changed, whether it's with operations or maintenance or
- 14 equipment or anything of that nature?
- 15 A. No. I mean, I think -- actually, I think the morale's
- 16 improved. Everyone -- I think it brought to light that the risks
- 17 | that they take every day, has really came to light to them. And
- 18 they seem to enjoy each other's company now a lot more, instead
- 19 of --
- 20 O. Sure. Sure.
- 21 A. -- the piddly stuff that they, you know, hold tension over.
- 22 | Now everyone's kind of good friends and -- and but, culture-wise,
- 23 | it's probably improved.
- 24 Q. And then since the accident occurred has there been anything
- 25 with the way you changed anything personally with the way you do

- 1 your duties as a mechanic?
- 2 A. Yeah. I mean, I've tried my hardest to pay a lot closer
- 3 attention to detail. But it's still -- I mean, I didn't feel like
- 4 I didn't pay attention prior to the accident. It's just now it's
- 5 | -- you're like a little hypersensitive to engines now. Engines,
- 6 you might take 15, 20 minutes to look at an engine to make sure
- 7 | everything's good, or when you're looking at the rotor head to
- 8 really focus on the rotor head. But change-wise, no. I still
- 9 follow the same maintenance procedures that was put out for us to
- 10 follow.
- 11 Q. Okay. And then just from your perspective -- I know you've
- 12 got quite the experience in aviation maintenance. Are there any
- 13 safety improvements you'd like to see implemented here at the
- 14 company level, whether it's with training, safety program --
- 15 A. Training, I'd like to see the mechanics start going to more
- 16 factory schools at a -- maybe at a faster pace. I've been to the
- 17 | factory schools. The other mechanic that's currently on vacation
- 18 has also been on factory schools. But the time frames of how long
- 19 you have to wait, obviously because of availability of the factory
- 20 school.
- 21 O. Sure.
- 22 A. But it would be nice to see, even at a local level where they
- 23 send an Airbus or Safran employee out and trained.
- 24 O. Yeah.
- 25 A. We have zero problems training pilots on simulators. It's be

- 1 | nice if they had the same concept when it came to mechanics --
- 2 Q. Sure.
- 3 A. -- on keeping us up-to-date on 145s, 135s, 130s, or even the
- 4 engine logs. It'd be nice to see that be pushed forward.
- 5 Q. Okay. Before I finish up on mine, and before we go around
- 6 the table with any more questions, do you -- is there anything
- 7 else you feel that I missed that's important to discuss about the
- 8 accident or safety, or anything you feel you need to bring up?
- 9 A. The only thing I'd -- I think I'd push is -- and, again, I'm
- 10 just a mechanic, I'm not the nurses or the pilot. But when we get
- 11 to kind of sharing an office with all -- with the whole crews, you
- 12 kind of see where coms doesn't really -- I don't know how to --
- 13 | the best way to put it. They kind of -- not pressure, but when
- 14 they page something out at shift change or they forget that they
- 15 | need to do their stuff on -- it's an aircraft.
- 16 Q. Sure.
- 17 A. It's not getting in a truck and driving --
- 18 O. Yeah. Yeah.
- 19 A. -- from here to Durham or here to WakeMed. It's --
- 20 O. Yeah.
- 21 A. They're getting in an aircraft. They need to have the time
- 22 | to really look that aircraft over, just for a sense of, just --
- 23 Q. Yeah.
- 24 A. -- confidence.
- 25 O. Sure.

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         So that would be the only thing, just to reiterate that these
 2
    guys need their time at shift change, at least, you know, a half
 3
    hour, 45 minutes, so if there's anything like pending prior, maybe
 4
    it should go on the shift prior, not --
 5
         Yeah. Yeah.
 6
         -- right at shift change. That would be the only thing.
 7
         MR. HODGES: Jason, do you have any questions?
 8
         MR. QUISLING: No. I don't have any. Thanks.
 9
         MR. HODGES: Brice?
10
         MR. BANNING: I don't have any question. Thank you.
11
         MR. HODGES: Chris?
12
         MR. BRADY: None for me.
13
         MR. HODGES: All right. Do you have any more questions on
14
    anything?
15
         MR. ALLEN: No, sir. I'm --
16
         MR. HODGES: Okay. All right. We'll go ahead and stop
17
    recording at this point.
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         (Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017 Interview of Nate Allen

ACCIDENT NO.: ERA17MA316

PLACE: Smithfield, North Carolina

DATE: May 17, 2018

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 Coen Brooks

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL HELICOPTER CRASH
**
**IN HERMEORD NORTH CAROLINA*

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 *

Air Methods Corporation

Via Telephone

Monday, July 9, 2018

APPEARANCES:

MIKE HODGES, Air Safety Investigator Operations Group Chair National Transportation Safety Board

BRICE BANNING, Senior Aviation Accident Investigator National Transportation Safety Board

MATT RIGSBY, Air Safety Investigator Federal Aviation Administration

JASON QUISLING, Director of Operations Air Methods Corporation

CHRIS BRADY, Associate General Counsel Air Methods Corporation (On behalf of Ms. Smith)

ITEM PAGE Interview of Melanie Smith: By Mr. Hodges By Mr. Rigsby 29

1 INTERVIEW 2 (4:06 p.m.)MR. HODGES: 3 We are recording at this time. We are doing the 4 ERA17MA316 interviews telephonically. Today is Monday, July 9th, 5 2018. The time is 1606 Mountain Daylight Time. I'm Mike Hodges, 6 with the NTSB, Operations Group Chairman. 7 Brice, could you go ahead and introduce yourself, please? MR. BANNING: Brice Banning, senior aviation accident 8 9 investigator with the NTSB. 10 MR. HODGES: And then, Matt, could you go ahead and please 11 introduce yourself? 12 MR. RIGSBY: Yep. Matt Rigsby, with the FAA's Office of Accident Investigation, air safety investigator. 13 14 MR. HODGES: Thank you. 15 And then, Jason, can you please introduce yourself? 16 MR. QUISLING: Yes, sir. Jason Quisling, Director of 17 Operations and accident investigator with Air Methods Corporation. 18 MR. HODGES: Thank you. And then, Chris, can you please 19 introduce yourself? 2.0 MR. BRADY: Sure. Chris Brady, associate general counsel, at 21 Air Methods, here as the personal representative of Ms. Smith. 22 MR. HODGES: Thank you. 23 And then, Melanie, can you please introduce yourself? 24 MS. SMITH: Hey, Melanie Smith, pilot in command for Duke at 25 the Durham base with Air Methods Corporation.

- 1 MR. HODGES: Thank you.
- 2 And so let's go around the table once again. Brice, do you
- 3 have any objections to recording this interview?
- 4 MR. BANNING: No. I'm good.
- 5 MR. HODGES: Okay. And then, Matt, do you have any
- 6 | objections to recording this interview?
- 7 MR. RIGSBY: No objections.
- 8 MR. HODGES: Okay. And then, Jason, do you have any
- 9 objections to recording the interview?
- 10 MR. QUISLING: No objections.
- 11 MR. HODGES: Okay. Chris, do you have any objections to
- 12 recording the interview?
- 13 MR. BRADY: No.
- MR. HODGES: Okay. And then, Melanie, do you have any
- 15 objections to recording the interview?
- 16 MS. SMITH: No, sir.
- 17 MR. HODGES: Okay. All right. We'll go ahead and start
- 18 then. Today we're going to be interviewing Melanie Smith. She's
- 19 a pilot at Air Methods.
- 20 INTERVIEW OF MELANIE SMITH
- BY MR. HODGES:
- 22 Q. Melanie, how long have you worked for Air Methods for?
- 23 A. Just over 10 years as of March.
- Q. Okay. And then your position basically is just pilot in
- 25 command or line pilot; is that correct? Or do you have any other

- 1 | titles or --
- 2 A. That's correct. That's all.
- 3 Q. Okay. And then what did you do prior to working at Air
- 4 Methods?
- 5 A. I was an Army Black Hawk pilot for about 10 years.
- 6 Q. Okay. And can you just kind of give me just a rough overview
- 7 of your aviation background like with certificates and approximate
- 8 hours, please?
- 9 A. Oh, if I had to guess, I'd say I'm around 6,000 or just over
- 10 6,000 hours total time.
- 11 Q. Okay.
- 12 A. I've got probably, oh, 3,000 or 4,000 goggle time.
- 13 Q. Okay.
- 14 A. And probably 5,200 or so pilot in commands.
- 15 Q. Okay.
- 16 A. Those are rough guesses. I haven't looked at a logbook in a
- 17 long time.
- 18 O. Okay. No worries. No worries. And then --
- 19 A. You want weather time or anything else? Most of my
- 20 background is 4 years combat, Iraq, Afghanistan, about 1,000 -- or
- 21 about 800 hours per year.
- 22 Q. Okay.
- 23 A. So a lot of desert environment, high altitudes and goggles.
- Q. Okay, cool. What did you fly in the Army?
- 25 A. Black Hawks.

- 1 Q. Black Hawks? Okay. Were you a warrant officer or
- 2 | commissioned officer?
- 3 A. Warrant officer.
- 4 Q. Okay, cool, cool. And were you track, too, or --
- 5 A. Say that one more time.
- 6 Q. Were you also -- did you also have a track?
- 7 A. I tracked at the very end. I didn't want to track because I
- 8 | wanted to get out. So at the very end of my career I tracked
- 9 safety officer. I did that for about a year.
- 10 Q. Okay. And you said you're based out of the Durham base,
- 11 | correct?
- 12 A. Yes, sir, out of Duke.
- 13 Q. Okay. And then do you also work at the Smithfield base or
- 14 strictly just the Durham base, you're at?
- 15 A. Only on overtime.
- 16 Q. Okay. And then can you just give me just a rough overview of
- 17 | your day-to-day positions or your day-to-day duties with your
- 18 position, please?
- 19 A. Sorry, the end of that did not come through. You want my
- 20 day-to-day what I do?
- 21 Q. Yeah, basically like your day-to-day duties there with your
- 22 position, just like a rough overview, please.
- 23 A. Okay. We clock in at about 6:30, and I collect all my
- 24 | information for briefing, which is weather, moon data, maintenance
- 25 due on the aircraft, how much oxygen, weather for the state, sort

- 1 of a statewide briefing. I get all the NOTAMs for 120-mile radius
- 2 and then anything significant going on, like a TFR or a drone
- 3 NOTAM. I preflight the helicopter, and at 7:20, I go downstairs
- 4 and brief the crew in the coms room. And then we all sit and wait
- 5 for a call.
- 6 Q. Okay. And then what make and models are you qualified to fly
- 7 at Air Methods helicopter-wise?
- 8 A. Currently the EC145 is my primary, and the EC135 is my
- 9 backup.
- 10 Q. Okay. And then do you have any additional duties at the
- 11 company? Like are you a safety representative or anything of that
- 12 | nature, or you're just strictly like a line pilot, pilot in
- 13 | command?
- 14 A. Just a line pilot.
- 15 Q. Okay. And then do you work part-time at any other
- 16 organizations or outfits?
- 17 A. No.
- 18 Q. Okay. All right. Just kind of switching gears now, talking
- 19 about Jeff Burke. How long have you known Jeff for?
- 20 A. He hired on at Duke about 1 year before I did. And I want to
- 21 | say I've been there 6 years, so he's been there 7.
- 22 | Q. Okay. And then just from a professional aspect, what was
- 23 your professional perspective of Jeff?
- 24 A. Jeff was a little too much of a stickler in my opinion with
- 25 maintenance checklists, that sort of stuff.

- 1 Q. Okay.
- 2 A. He -- I don't know how to put it in words. He always had a
- 3 lot going on in his brain. Like he's always got a lot of ideas
- 4 and things he wants to do. Not just at work, just lots of things.
- 5 He's always, I don't know, trying to come up with the next thing
- 6 he wants to accomplish, if that makes sense.
- 7 Q. Okay.
- 8 A. He's the good idea bus.
- 9 Q. Okay. And then did you --
- 10 A. He doesn't sit still.
- 11 Q. Okay. Did you ever have any professional concerns with Jeff
- 12 at work?
- 13 A. No.
- 14 Q. Okay. And then have you flown with Jeff before like on
- 15 training flights at all?
- 16 A. The first part, have I done what with him on training
- 17 | flights?
- 18 Q. Have you flown with Jeff before like on training flights?
- 19 Have you done that before with him?
- 20 A. Only -- no, not a training flight. I got a ride from him
- 21 from Smithfield to Duke just a couple months before the accident.
- 22 We were ferrying the aircraft back for maintenance or something
- 23 along those lines, and I sat in the co-pilot seat and he was the
- 24 pilot.
- 25 Q. Okay. Just from --

- 1 A. That's the only time I've ever flown with him.
- 2 Q. Okay. Just from that experience, just perspective-wise in
- 3 | the cockpit, what was he like?
- 4 A. It sounds cheesy, but exactly how we're supposed to be.
- 5 Q. Okay.
- 6 A. He holds the checklist, he does it, has a pattern. I can
- 7 tell he said the things that he says every flight. Like a lot of
- 8 pilots tend to do that, don't break our chain, we do the same
- 9 thing every time.
- 10 Q. Yeah. Okay. And then did you know Jeff outside of work?
- 11 A. I've never hung out with him outside of work except for one
- 12 retirement party maybe a year ago, and other than that, we just
- 13 talked in passing on rooftops and shift changes.
- 14 Q. Okay. I know Jeff was former Army also. Was he a tracked
- 15 | warrant officer also or --
- 16 A. I believe he was a warrant officer, yes.
- 17 Q. Okay.
- 18 A. But I never knew him in the Army.
- 19 Q. Okay. Do you know what his track was in the Army or --
- 20 A. I don't remember his track. I know he had some Korea time.
- 21 Q. Okay. All righty. Switching gears then. Since you have
- 22 worked at Duke Life Flight, have you ever been exposed to
- 23 situations as a pilot where you have caution or warning lights
- 24 come on in the cockpit and you have to perform emergency
- 25 procedures?

A. Yes. You are getting at exactly what I thought you were going to call about. We had a fire light in flight, and it was me and Ally and Angie Strickland. We were lifting with a patient, and it came on so quickly that I didn't really have enough time to identify it. I didn't have time to see the light, but it's a very distinct sound, that fire bell. And it sounded to me like the fire bell, even though it was more of a chirp than a bell.

2.0

And to give you a little more background on that, I think that was my first day for my shift for my week, and my handoff from the pilot before me was the traffic avoidance system is making a tone but it's not doing anything. So they thought it was the traffic avoidance system making that little beep noise. And I don't know how many times they heard it, and I don't know if they told maintenance about it and I don't know how long it went on. I just know that my briefing on my first day was, hey, I heard a tone a couple times; I think it's the traffic avoidance but we can't tell.

So I already had that in my mind. And on my lift off from Maria Parham I heard the little bleep, but it definitely sounded like the fire bell to me. So I looked inside, saw no lights, cautions, warnings. I was trying to make a decision, and kind of in aviation if it's not broken you can't fix it; like a light needs to stay on. It's kind of hard to say to your mechanic, hey, I left it in a remote hospital because I thought I heard a noise. If that makes sense.

- 1 Q. Yeah.
- 2 A. I wanted to be sure. I wanted to see a light. I wanted to
- 3 | hear it again. I don't know. I just -- I heard it. I'm pretty
- 4 | sure it was the fire bell, but I just was still making a decision
- 5 in my mind.
- 6 During that time it came on again. And this is like a year
- 7 ago, so I don't know exactly how long it came on the second or
- 8 third time or exactly what happened, but this was a short time.
- 9 This was on liftoff, I believe as I was transitioning to forward
- 10 flight. It was very warbling, wavering, intermittent, like when
- 11 | it doesn't have enough power, like when a toy is dying or
- 12 something.
- 13 Q. Okay.
- 14 A. So in my mind, the way it was working was it didn't have
- 15 | enough electrical power, like it was a short. It definitely
- 16 seemed like a short to me.
- So this time it stayed on long enough for me to see it was a
- 18 | fire light but, again, it was going off; it was going on. It was
- 19 very dim, wavering, warbling. Then it went off and stayed off for
- 20 a minute or maybe 30 seconds, I don't know how long. And I
- 21 announced to my crew at the time, I said, okay, that's the fire
- 22 | bell going off, fire light; I'm sure it's not a fire because the
- 23 way it's going off. I don't know exactly how I explained it to
- 24 them, but I was talking to them out loud.
- 25 And we literally just lifted off. So I said, I'm positive we

- don't have a fire, but I'm not going to risk that flight home even though we have a patient. It's like 2 a.m. I said, I'm just going to go back around and land at the pad.
 - But those two particular crew members are some of our more novice crew members. So they both got quite worked up when they heard we had a fire light. And I was completely calm. So I came back around and landed, and during that time it finally came on and stayed on. So it was a continuous fire bell going for the final portion of my flight. I landed. I said, oh, I'm just going to shut it down. And I think it went off and on a couple more times, but there was a period where it was on steady for like 10 full dings, and a fire light flashing as the system should when you have a fire.
- 14 Q. Okay.

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- 15 A. Then it went back off. Then it came back on, warbling, 16 wavering, all that stuff.
 - Because I had nervous crew members, the one, the second we hit the ground, she jumped out and looked at that engine. She was terrified. And she came immediately and said, yep, there's no fire. So then we shut down as normal, and they took the patient by ground, and the mechanic came out and we troubleshot it on the pad most of the night. I think it took 2 days to finally get it off that pad.
 - Q. Okay. Do you remember roughly -- I know this was about a year ago -- roughly when it happened, month and day, by any

- 1 | chance? Do you remember --
- 2 A. Actually, I want to say it was summer of last year. So
- 3 probably exactly a year ago, like July. I know it was just before
- 4 the accident.
- 5 Q. Okay.
- 6 A. But I want to say it was in 145, not 146.
- 7 Q. Okay.
- 8 A. I'm a hundred percent sure I did an AIDMOR, so I can get
- 9 those answers for you. I can look at my AIDMOR.
- 10 Q. Okay. Do you remember roughly what time of the day or night
- 11 | this happened at, this event?
- 12 A. It was like 2 a.m. Like midnight or 2 a.m.
- 13 Q. Oh, okay.
- 14 A. Like maybe the mission started at midnight, and when it
- 15 | happened it was 2 a.m.
- 16 Q. Okay. And then the -- what was the hospital you took off
- 17 | from then, or the pad you took off from?
- 18 A. Maria Parham in Henderson. It's like 35 miles
- 19 north/northeast of Duke.
- 20 Q. Okay.
- 21 A. It's one we go to all the time.
- 22 \mathbb{Q} . Okay. And then when you took off from that pad, and then the
- 23 first, I guess, iteration of this noise going off, how long would
- 24 you say into flight? Like 3 minutes, 5 minutes, between time you
- 25 took off and when you first heard it?

- 1 A. I'm positive less than -- I mean, single-digit minutes, but I
- 2 | don't know exactly how long it took. I want to say it was right
- 3 on takeoff when it first started dinging, but it could have been
- 4 | like 3 minutes into the flight. It's been a year so I'm not 100
- 5 percent sure.
- 6 Q. Okay. Yeah, no worries, no worries.
- 7 A. But I know when it went off I thought about it for a minute,
- 8 wanted to see the light stay on, talked to my crew about it, came
- 9 around and landed. It was, total, less than 10 minutes, is how I
- 10 remember it.
- 11 Q. Okay. And then when the light did start fully illuminating
- 12 as this event progressed, was it the engine 1 or 2 light that came
- 13 on?
- 14 A. Oh, it's been a year.
- 15 Q. No worries. No worries.
- 16 A. It was number 2, the number 2, because Nate was up on the
- 17 pilot's side working on that engine.
- 18 Q. Okay. And then so you flew back to Maria Parham then, the
- 19 same pad you took off from, correct? Just so I understand that
- 20 right.
- 21 A. Yeah. That's where I landed it back to.
- 22 |Q. Okay. And then during this whole sequence, did you smell any
- 23 | smoke or see any smoke or anything of that nature at all?
- 24 A. No, and I actually said that out loud to the crew. I said, I
- 25 have absolutely no indication of a fire. It's turning off and on,

- 1 | it's wavering. I feel like it's a short; I'm going to go back and
- 2 land anyway. But there were no other indications.
- 3 Q. When you were in flight did you, like, do any sort of like
- 4 turning maneuvers to confirm any smoke or anything like that,
- 5 or --
- 6 A. Well, I was turning to come back to the pad.
- 7 Q. Okay, okay. All right. Let's see. And then once you guys
- 8 landed back at the pad, did you and Ally and Angie, like, do any
- 9 | sort of debriefing at all about what happened?
- 10 A. Again, those are two of my most nervous crew members, so I'm
- 11 | a hundred percent sure I had a talk with them to calm their
- 12 nerves. I don't know if I did it right there in full on the
- 13 helipad. I know we talked on the helipad. But I probably talked
- 14 to them again later after we all got back to Duke just to make
- 15 | sure that they were okay with everything that happened.
- 16 Q. Okay. And then you said after, if I remember his name
- 17 | correctly, it's Nate, the mechanic, he was working on it
- 18 | afterwards; is that correct?
- 19 A. Yeah. He was on call that night. He came out and was trying
- 20 to figure out which of the fire light detectors was bad. So I was
- 21 sitting in the cockpit. He was doing something in there, touching
- 22 them to make them activate, and I would tell him when the fire
- 23 light was on or not.
- 24 Q. Okay. And then did you ever hear any more follow-up from the
- 25 maintenance folks? Like if they did any parts replacements or

- 1 anything of that nature, or did they say they were able to find
- 2 | out what it was or --
- 3 A. So I forget exactly what happened with Nate or how his
- 4 troubleshooting worked. I want to say when he first came out we
- 5 couldn't recreate it. But we actually did a flight. So after the
- 6 crew was gone with the patient, Nate was messing around on the
- 7 engine for a while. I think we couldn't recreate. So he believed
- 8 me obviously, but needed a light to be on to fix it. So we took
- 9 the helicopter up for a circle to see if it would come back on.
- 10 And we lifted off, and as I was transitioning forward it came
- 11 on again, and it was intermittent and wavering, and it did almost
- 12 the exact same thing, but it stayed on steady this time and it
- 13 never went off again. So it was a very short take it up, circle
- 14 around the hospital, come back and land. But it stayed on steady
- 15 for the whole, like, circle around and landing.
- 16 Q. Okay. And then on that second check flight, if you will, you
- 17 | quys didn't have any smoke or any indications like that, no smells
- 18 or --
- 19 A. No.
- 20 Q. Okay.
- 21 A. No, we had nothing.
- 22 Q. Okay. And then after that flight, did you ever hear back
- 23 from the maintenance folks about any other follow-up on that about
- 24 what may have caused that or their thoughts on anything with it,
- 25 | with the issue?

- 1 A. We landed, and that's when he was having me sit in the
- 2 | cockpit and tell him when the fire light was on or not. And he
- 3 | narrowed it down to the exact indicator that was giving the bad
- 4 | signal that was -- it needed to be replaced. So he ordered it.
- 5 And I want to say they put that one in, and that was it.
- 6 Q. Okay.
- 7 A. I wasn't the pilot on shift when it finally got fixed, so I'm
- 8 not exactly sure.
- 9 Q. Okay. No worries. Okay. And then outside of that one day
- 10 from a year ago, have you had any other fire light indications in
- 11 | the past?
- 12 A. No. I've never had a fire light in flight.
- 13 Q. Okay. Has it happened to anybody else you work with? Any
- 14 other pilots that you know of?
- 15 A. Not that I know of. That's something we'd probably talk
- 16 about, and no one has ever said anything.
- 17 Q. Okay. After the event that happened with you, did you talk
- 18 about it with anybody else, any of the other pilots, anything of
- 19 | that nature?
- 20 A. Yeah. I told all the pilots at Durham, and I want to say I
- 21 told some of the ones at Smithfield as I ran into them.
- 22 Q. Okay. So I would hate to say the word assume, but I assume
- 23 Jeff knew about the event then?
- 24 A. I can't say that for sure.
- 25 Q. Okay.

- 1 A. I don't know. Because I don't see him very often.
- 2 Q. Okay. No worries. No worries.
- 3 A. A lot of times when they fly in to Duke, there's already
- 4 another helicopter here and I get kicked off the roof so they can
- 5 come in, and then I come back when they clear my pad.
- 6 Q. Oh.
- 7 A. So I don't even see him very often.
- 8 Q. Okay. All righty. I do want to ask you too just about the
- 9 fires in-flight procedure for the BK117 C2, and I know you've got
- 10 a lot of experience flying that helicopter, and a lot of
- 11 experience flying Black Hawks. Just for the emergency procedure
- 12 | itself that's listed in the RFM, are there any -- based off of
- 13 your experience, any improvements you can think of to the EP you
- 14 think that would be beneficial for pilots? Like easier to do it a
- 15 different way or more beneficial, you know, based on your
- 16 experience or -- I just wanted to ask what your, kind of, thoughts
- 17 on the EP were. Any potential improvements to it?
- 18 A. I don't think so. And the problem with the manual is it's so
- 19 black and white, and aviation is so gray.
- 20 O. Yeah.
- 21 A. I mean, how can they predict I'm going to have a broken
- 22 | indicator and get intermittent fire lights. So there's no way to
- 23 like electrically troubleshoot it in flight. And you wouldn't
- 24 want to do that anyway because if by chance it were a fire, you'd
- 25 want to just go land anyway. So, no, I don't think there's any

- 1 improvements to be made.
- 2 Q. Okay. All right. Let's see. After the event occurred, did
- 3 you or anybody else send in like an SDR to the FAA or anything of
- 4 | that nature about the issue with the light or --
- 5 A. Did we do what?
- 6 Q. Submit like a service difficulty report or anything of that
- 7 | nature about the component to like Airbus or the FAA?
- 8 A. Oh, so I had to do a mechanical interruption report because I
- 9 didn't complete my patient mission.
- 10 Q. Okay.
- 11 A. That's a maintenance one. And then I had to do an AIDMOR,
- 12 which is just sort of an information system of safety throughout
- 13 | Air Methods. And I think that's all I had to do.
- 14 Q. Okay. Cool, cool. All right. Just kind of shifting gears
- 15 | now and just talking about the company. And what I mean by the
- 16 term company is both Duke Life Flight and Air Methods kind of
- 17 operating together as one operation. I just want to ask kind of
- 18 | how would you describe the overall safety culture there?
- 19 A. It seems very much like when I was in the military. People
- 20 | tell on themselves when they mess up so that we can all learn.
- 21 And they seem to be appropriately safety oriented. Air Methods
- 22 | doesn't balk at spending money on fixing things.
- 23 Q. Okay. And then how would you rate the overall employee
- 24 morale there?
- 25 A. Well, currently --

- 1 MR. QUISLING: Hey, Mike -- I'm sorry, Melanie.
- 2 MS. SMITH: Yeah.
- 3 MR. QUISLING: I don't mean to interrupt, but, Mike, just to
- 4 clarify, I mean, we can't ask these questions as one overall
- 5 company. I mean, if you want to ask them for both Duke and Air
- 6 Methods, I think that's fine. But, I mean, Melanie works for Air
- 7 Methods at a base where she works with Duke employees, so I think
- 8 | we do need to draw a line there.
- 9 MR. HODGES: Okay. Sure. Not a problem.
- 10 BY MR. HODGES:
- 11 Q. So I'll go with Duke first, and then we can go into Air
- 12 Methods. So just to back to the organizational safety culture,
- 13 how would you rate it for Duke?
- 14 A. Duke is very conservative. They make conservative weather
- 15 | decisions. Like, we're the first to hangar of all the programs.
- 16 | Even though we're the IFR program, we don't take low minimum
- 17 | flights. It's just a very conservative program. I think because
- 18 | it's hospital based with a lot of money and they don't really care
- 19 | if they lose the flight. And the crew members have a lot of say
- 20 and "three to go, one to say no" definitely happens often.
- 21 Q. Okay. And then the organizational safety culture at Air
- 22 Methods?
- 23 A. Air Methods -- very much like Jason was saying, each base is
- 24 | its own island. So it's -- I couldn't speak for more than the
- 25 bases I've flown at.

- 1 Q. Okay.
- 2 A. What I see as a four-man unit in the middle of nowhere, you
- 3 know, many, many states away from my company, is that they
- 4 encourage and push -- you know, we have posters up, and all the
- 5 information is out there. I know what to do, who to go to, what
- 6 number to call. And I've never seen in my 10 years any hesitation
- 7 | if a safety question is asked or if we need something for safety,
- 8 they get it.
- 9 Q. Okay. And then how would you rate the overall employee at
- 10 Duke -- or employee morale at Duke?
- 11 A. Well, certainly since the crash it's different. And Duke has
- 12 also been going through some major changes for the last 2 years.
- 13 So for the pilots we've been unchanged. We just show up and do
- 14 our job, do whatever the radio says, but -- and we sort of --
- 15 | we're by ourselves up in the tower so we don't really get affected
- 16 by the crew, for lack of better term, drama or goings on.
- 17 Q. Okay.
- 18 A. But the crews have had a lot going on for the last 2 years.
- 19 They stood up a nurse/medic for the first time. It used to be
- 20 | nurse/nurse. And they stood up a full peds team at the same time
- 21 | 2 years ago, they did both of those. So they've had some growing
- 22 pains with that. But I think morale has been pretty good, just
- 23 growing pains. Like the old people have always done it their way,
- 24 butting heads with the new people with a lot of ideas.
- 25 Q. Okay. And then kind of shifting gears, how would you rate

- 1 | the overall employee morale just with Air Methods?
- 2 A. Again, I can only talk for the few pilots I know and see.
- 3 And currently there's a little beef because the CBA has been in
- 4 limbo for 2 years, so we're all kind of a little miffed about
- 5 | hoping for a pay raise. But other than that, we're happy to be
- 6 employed and, I mean, it really is the greatest job in the world.
- 7 I get paid to sleep or fly a helicopter.
- 8 Q. Okay. CBA, you mean the collective bargaining agreement; is
- 9 that correct?
- 10 A. Yeah.
- 11 Q. Okay.
- 12 A. There's a lot of rumblings about that, but that's expected.
- 13 Q. Okay. And then just the relationship between Duke Life
- 14 Flight and Air Methods, how would you describe that relationship
- 15 | between the two entities?
- 16 A. Oh, I've tried very hard to stay out of that sort of stuff.
- 17 | I don't really know. I don't know how they feel about Air Methods
- 18 | because it's not very much my business. I think they like us, and
- 19 I think that -- I mean, they signed a 5-year contract. That's
- 20 unheard of. That's a long contract. So I would assume we're
- 21 doing a good job.
- 22 Q. Okay.
- 23 A. I try to avoid management. I like to stay up in the tower
- 24 and be unseen.
- 25 Q. Okay. And then since you've worked at the program have you

- 1 | ever felt any pressure from company management or other pilots or
- 2 | anybody else to operate in less than optimal conditions?
- 3 A. Not at Duke, no.
- 4 Q. Okay. And then when you're doing your preflight risk
- 5 analysis process that you do, can you kind of explain your role
- 6 | with that and how you incorporate the other -- you know, the
- 7 | flight nurse and the medics -- or EMTs, excuse me, with that whole
- 8 process, please?
- 9 A. When I get a weather check, I ask them is this a go or not?
- 10 If they tell me it is, I do my risk analysis on the iPad. And,
- 11 you know, there's some factors for my crew in there. And then I'm
- 12 at the very top of the hospital right by the helicopter, so I'm
- 13 usually in the helicopter strapped in waiting for my crew by the
- 14 | time they show up. And I set the iPad on the dashboard so that I
- 15 remember to show it to them so that I can go ahead and crank.
- 16 They have to see the green before we can go.
- 17 Q. Okay.
- 18 A. But a lot of times, literally the second they show up, I want
- 19 to crank because they're very slow to get there.
- 20 Q. Okay. And do you feel that if an Air Methods employee found
- 21 | a safety issue, whether it's operational procedures, maintenance,
- 22 | equipment, training, you name it, do you feel that that issue
- 23 | could be brought up to company management and the issue would get
- 24 | addressed properly in a timely fashion?
- 25 A. Oh, yes, definitely.

- 1 Q. Okay.
- 2 A. A caveat on the last question.
- 3 Q. Sure.
- 4 A. Because I have a lot of nervous fliers at Duke, and I know
- 5 that, if there is any weather that they're going to see, like
- 6 especially lightning or rain, then I'm standing outside the
- 7 helicopter waiting to meet them with the iPad weather pulled up
- 8 and showing them this is what's going on, this is the movement
- 9 it's doing, this is what I think will happen, this is what I
- 10 expect to see on the flight. And I ask them if they're okay with
- 11 going. We have a lot of super-new people. And especially since
- 12 the crash, we really coddle our crew here at Duke.
- 13 Q. Okay. Being an Air Methods employee, if you had an issue
- 14 like a safety issue with a Duke Life Flight nurse or EMT, for
- 15 example, how would you go about reporting that issue, and to whom?
- 16 A. I've never reported a crew member and I've never had a
- 17 | situation in which I felt I had to.
- 18 Q. Okay.
- 19 A. The culture is sort of if somebody is doing something stupid,
- 20 | the pilot in command kind of chews their butt a little on the
- 21 spot. And then we kind of talk to each other and be like, hey,
- 22 | watch this person, or we debrief about it after again. But it's
- 23 sort of an on-the-spot correction and then people don't tend to do
- 24 that anymore. I've never had to submit anything on a crew member.
- 25 Q. Okay. And then do you feel that the Duke Life Flight

- 1 operation, do you feel that Air Methods has adequate personnel and
- 2 | equipment to do the mission?
- 3 A. Say that one more time.
- 4 Q. For the Duke Life Flight operation do you feel that Air
- 5 Methods has adequate personnel and equipment to do the mission?
- 6 A. Yeah, I would say so. I mean, we clearly have a pilot
- 7 | shortage, but -- yeah, we do what we can do, and I think we have
- 8 enough mechanics, and we beef up maintenance when we have to, and
- 9 the pilots are there.
- 10 Q. Okay. And then do you feel that the local level Air Methods
- 11 employees -- and what I mean by that is local level like at Durham
- 12 and Smithfield, do you feel that they receive adequate
- 13 | communication and support from Air Methods headquarters in
- 14 Colorado?
- 15 A. That's really, really broad. I'm not exactly sure what you
- 16 mean. Like we have the OCC that checks on us, and I like OCC.
- 17 | They've called me and they've told me I can't do a mission if they
- 18 didn't agree. I have my area manager and my RAD. I really like
- 19 Bill Kellogg, my RAD. I ask him questions all the time. Amy, my
- 20 | area manager, I talk to her freely. I like her. And Jason used
- 21 to see us a lot more when he was our check airman, but, yeah, we
- 22 asked him anything. We really liked Jason.
- 23 Q. Okay, cool. I know you kind of touched upon this earlier
- 24 before, but since the accident occurred have there been any
- 25 changes at the company to your knowledge of anything? Just

- 1 procedures, maintenance, training, anything of that nature, any
- 2 changes since the accident occurred?
- 3 A. At Air Methods or at Duke?
- 4 Q. Air Methods.
- 5 A. Air Methods, I was on maternity leave when the crash
- 6 occurred.
- 7 Q. Okay.
- 8 A. So I was quite a bit removed from things that happened. I
- 9 | had just gone on maternity leave like a week before.
- 10 Q. Okay.
- 11 A. So I believe that there was a maintenance directive that came
- 12 out about oil sump lines or something, but I don't know. I was
- 13 out for a couple of months.
- 14 Q. Okay.
- 15 A. It all sort of had gone away by the time I came back. I
- 16 asked questions and got good enough answers. That's about all I
- 17 remember.
- 18 Q. Okay. Since the accident occurred, has there been anything
- 19 with the way you do business differently on a personal level since
- 20 | the accident occurred?
- 21 A. I'm a little more coddling and conservative with the crews
- 22 | because, again, I was on maternity leave so I didn't see how they
- 23 evolved through the experience. But when I came back, I could
- 24 definitely tell people were scared. People were wanting more
- 25 | information and to be more involved. So I always did involve

- 1 | them, but I just kind of upped it a little. And we had so many
- 2 | new people, so I went out of my way to help them more than I used
- 3 to do with the older crews, if that makes sense.
- 4 Q. Okay. Are there any safety improvements you'd like to see
- 5 implemented at Air Methods, whether it's with ops training,
- 6 | equipment, whatever? Anything you'd like to see implemented from
- 7 | a safety improvement aspect of the company?
- 8 A. Not that I can think of.
- 9 Q. Okay.
- 10 A. I wish things moved a little faster. Like all the paperwork
- 11 involved slows things down, like maintenance, and I just want my
- 12 | aircraft back, if that makes sense.
- 13 Q. Okay.
- 14 A. But that's not safety related really. It's just all the
- 15 paperwork involved with anything takes a while.
- 16 Q. Okay. Let's see here. That was it for my questions. And
- we'll go around the table here in a second if anybody else has any
- 18 questions. But was there anything that I missed that you feel is
- 19 important to discuss? Do we still have you, Melanie?
- 20 Q. Oh, sorry. Was there anything that I missed that you feel
- 21 that you wanted to discuss that's important?
- 22 A. Oh, sorry. I thought you were asking everybody else.
- 23 Q. Oh, no. Just for you, and then we'll go around the table
- 24 | with individual questions.
- 25 A. Oh, okay. No. I used to do crash investigation. I know

- 1 your mission here is trying to put all the pieces of the puzzle
- 2 together and that's all you're after.
- 3 Q. That's right. Like I said, we're not out to do a witch hunt.
- 4 We're trying to figure out what happened here with Jeff's
- 5 | accident. So I'll just go around the table now --
- 6 A. I do have one question.
- 7 Q. Sure.
- 8 A. Any timeline on that report coming out? Because it is going
- 9 to be a dark day at Duke. Our crew members are dreading it.
- 10 Q. Sure. I'll tell you what, I can go over the report logistics
- 11 once we're done with the recording. I can go over time -- like
- 12 general timelines, and how that process works through releasing
- 13 the report, once we're done with the recording, if you don't mind.
- MR. HODGES: Right now I'll just go around the table, and
- 15 | I'll ask the other folks if you have any questions.
- Brice, do you have any questions?
- 17 MR. BANNING: No, I don't have any questions.
- 18 Thank you for taking the time, Melanie. We sure appreciate
- 19 | it.
- 20 MS. SMITH: Sure.
- 21 MR. HODGES: Thanks, Brice.
- 22 Matt, do you have any questions?
- 23 MR. RIGSBY: Just a couple.
- 24 BY MR. RIGSBY:
- 25 Q. Melanie, when you -- understood right when you got the fire

- 1 light, I guess, you know, part of your training includes emergency
- 2 | procedures and all that. For the fire procedures, are those, as
- 3 you recall, are they directly out of the book or is there a
- 4 separate emergency procedures checklist for your aircraft?
- 5 A. The fire procedure is one we have to have memorized and do
- 6 | immediately without referring to a checklist. And a lot was going
- 7 through my mind at that moment. Part of it being Maria Parham is
- 8 a very close hospital to us, so I had a lot of gas, and I just got
- 9 a patient. So I'm heavy. I'm on lift out. It's not a good time
- 10 to turn off the engine or push the fire button. And also deciding
- 11 to come back around and land, the entire time I was flying I was
- 12 in a hands-on phase. So it wasn't a time I could really do other
- 13 things.
- 14 Q. Sure.
- 15 A. Not that there were other things, but those are the things
- 16 going on in my mind during that event.
- 17 Q. Okay. And then part of your procedure training you do in the
- 18 | aircraft and then you do some simulator work as well?
- 19 A. Yeah. Pretty much every single check ride we get a fire
- 20 light.
- 21 Q. Okay. In the simulator as well when you do --
- 22 A. That's what I mean, in the simulator --
- 23 Q. Oh.
- 24 A. -- we get a fire light every single time. Every 6 months I
- 25 have a check ride in a simulator and I get a fire light. So it's

- 1 one we do constantly. I know exactly what I'm supposed to do when
- 2 | I get that light.
- 3 Q. Right.
- 4 A. But, again, I was 95 percent sure that was a fake indication.
- 5 The way it presented itself it was clearly a short, electrical
- 6 short.
- 7 Q. Sure. And the simulator, I assume you do -- do you do OEI
- 8 training. Do you do any, like, dual engine failure training in
- 9 the simulator?
- 10 A. Yes. Every single check ride the fire light always turns in
- 11 to, and you push the button, do the procedure, and now you're one
- 12 engine, and you have to come back around and do a shallow landing.
- 13 Q. And then what about dual engine failure in the simulator? Do
- 14 | you --
- 15 A. They'll let you give it a go, if you ask, but it's not
- 16 something we do.
- 17 Q. Okay.
- 18 A. As a normal procedure.
- 19 MR. RIGSBY: Okay, that's it. Thank you.
- 20 MR. HODGES: All right. Thank you, Matt.
- Jason, do you have any questions?
- 22 MR. QUISLING: No, I don't have anything else right now.
- 23 Thanks.
- MR. HODGES: Okay. Thank you.
- 25 Chris, do you have any questions?

1	MR. BRADY: None from me. Thanks.
2	MR. HODGES: Okay. And then, Melanie, like I said, I can
3	talk to you here offline about the report duration and how that
4	process works when we're done with the recording.
5	MS. SMITH: Okay.
6	MR. HODGES: So I'll go ahead and stop recording right now.
7	(Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Melanie Smith

ACCIDENT NO.: ERA17MA316

PLACE: Via Telephone

DATE: July 9, 2018

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.

Katherine Motley
Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

IN HERTFORD, NORTH CAROLINA, * Accident No.: ERA17MA316
ON SEPTEMBER 8, 2017 * *

Interview of: ALLY THOMPSON Flight Nurse

Duke Life Flight

Via Telephone

Monday, July 9, 2018

APPEARANCES:

MIKE HODGES, Air Safety Investigator Operations Group Chair National Transportation Safety Board

BRICE BANNING, Senior Aviation Accident Investigator National Transportation Safety Board

MATT RIGSBY, Air Safety Investigator Federal Aviation Administration

JASON QUISLING, Director of Operations Air Methods Corporation

RENE BORGHESE, Administrative Director Duke Life Flight

INDEX ITEM Interview of Ally Thompson: By Mr. Hodges By Mr. Rigsby By Mr. Quisling 20

1	
1	<u>INTERVIEW</u>
2	(1:15 p.m.)
3	MR. HODGES: We are doing the ERA17MA316 interviews
4	telephonically. Today is Monday, July 9, 2018. The time is 1315
5	Mountain Daylight Time. I'm Mike Hodges, with the NTSB,
6	Operations Group Chairman.
7	Brice, do you want to go ahead and introduce yourself,
8	please? Brice?
9	MR. BANNING: Brice Banning, Senior Aviation Accident
10	Investigator with the NTSB.
11	MR. HODGES: Okay. Matt, can you please introduce yourself?
12	MR. RIGSBY: Sure. Matt Rigsby, with the FAA's Office of
13	Accident Investigation, Air Safety Investigator.
14	MR. HODGES: Thank you.
15	And then, Jason, can you please introduce yourself?
16	MR. QUISLING: Yes, sir, Jason Quisling, Director of
17	Operations and investigator for Air Methods Corporation.
18	MR. HODGES: Okay. And then, Rene, can you please introduce
19	yourself?
20	MS. BORGHESE: Sure. Rene Borghese, Administrative Director,
21	Duke Life Flight.
22	MR. HODGES: Thank you.
23	And then, Ally, can you please introduce yourself?
24	MS. THOMPSON: Yes. My name is Ally Thompson. I'm a flight
25	nurse with Duke Life Flight.

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1
         MR. HODGES:
                      Thank you.
 2
         And then I'll just go back around the table one more time.
 3
         Brice, do you have any objections to recording this
 4
    interview?
 5
         MR. BANNING: I do not.
 6
         MR. HODGES:
                     Okay. Matt, do you have any objections to
 7
    recording this interview?
 8
         MR. RIGSBY: No, sir.
 9
         MR. HODGES: Okay. Jason, do you have any objections to
10
    recording the interview?
11
         MR. QUISLING: No objections.
12
         MR. HODGES: Okay. Rene, do you have any objections to
13
    recording the interview?
14
         MS. BORGHESE: No, no objection.
15
         MR. HODGES: Okay. And then, Ally, do you have any
16
    objections to recording the interview?
17
         MS. THOMPSON: No objections.
18
         MR. HODGES:
                     Okay. Thank you.
19
                         INTERVIEW OF ALLY THOMPSON
2.0
         BY MR. HODGES:
21
         All right. So proceeding forward today we're going to be
22
    interviewing Ally Johnson [sic], who is a flight nurse with Duke
23
    Life flight. And just to confirm, you are a nurse, not an EMT,
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I'm a -- my primary role is a nurse.

24

25

correct, Ally?

- 1 Q. Okay.
- 2 A. I'm a paramedic also.
- 3 Q. Okay. Thank you. All right. We'll go ahead and start.
- 4 Ally, how long have you worked for Duke for?
- 5 A. My employment date was January 9, 2017.
- 6 Q. Okay. And then what did you do prior to this position?
- 7 A. I worked as a registered nurse in the emergency department at
- 8 Sentara Halifax Regional Hospital in South Boston, Virginia.
- 9 Q. Okay. And then for your position right now, are you based
- 10 | solely out of Duke Life Flight headquarters or are you based out
- 11 of the Smithfield location or both?
- 12 A. I'm primarily based out of the Durham, North Carolina, base.
- 13 Q. Okay. And then can you just kind of give me just an overview
- of your day-to-day duties as a flight nurse, please?
- 15 A. Yeah, absolutely. So I work day shift, and I alternate to
- 16 night shift. I arrive down at our training room about a quarter
- 17 | till my start time, so around 6:45 a.m. I kind of get a shift
- 18 brief from the nurses or paramedics who are on the shift prior to
- 19 me, and then I clock in a few minutes to the hour. And then we do
- 20 | a shift brief that consists of myself, my partner, my pilot for
- 21 the day, our communications specialist, and our peds team; anyone
- 22 that will be a part of the aircraft utilization, we do a shift
- 23 brief usually around 7:15 to 7:30 in the morning.
- 24 After that, we go to our aircraft. We check off all of our
- 25 equipment. First and foremost, we do a aircraft walk-around just

- 1 to view the aircraft, see if there's anything that stands out,
- 2 address any concerns that -- or replenish any equipment that may
- 3 be missing, medical equipment related. And then after that, come
- 4 | back down to the training room or if there's somewhere else we --
- 5 | we'll grab some breakfast and go about our tasks for the day.
- 6 Q. Okay. And then what helicopters are you qualified to do your
- 7 duties on at Duke?
- 8 A. Primarily operate out of the EC145.
- 9 Q. Okay.
- 10 A. So N145DU.
- 11 Q. Okay.
- 12 A. And then the EC135 that is in Smithfield.
- 13 Q. Okay. And then do you have any additional duties at the
- 14 company besides being a flight nurse? Are you on a -- like a
- 15 safety representative or anything of that nature, or you just do
- 16 | flight nurse duties only?
- 17 A. I participate in our safety meetings that we do every month.
- 18 | I don't hold a position, but I usually attend those meetings or
- 19 call in and listen to those and overview the minutes that are
- 20 recorded. And then I handle a lot of the PR aspects that we do
- 21 for our program.
- 22 Q. Okay. And then do you hold employment at any other companies
- 23 outside of Duke? Do you work at any other hospitals or for any
- 24 other folks?
- 25 A. No, sir. Solely Duke.

- 1 Q. Okay. Thank you. Just kind of shifting gears here talking
- 2 about the accident pilot Jeff Burke. How long have you known Jeff
- 3 for?
- 4 A. I've known him since I started on January the 9th, 2017. I
- 5 | met him during that first week of employment.
- 6 Q. Okay. And then from a professional aspect, what was your
- 7 perspective of Jeff?
- 8 A. Very professional and safety oriented. He made me feel very
- 9 comfortable on asking questions. This was my first flight job so,
- 10 you know, I have lots of questions. I have lots of, I'm sure,
- 11 | silly questions that have been asked numerous times, but I've
- 12 never once received judgment for those questions, and I ask the
- 13 same questions a lot too, just, you know, for clarification for
- 14 myself. But Jeff made it easy to approach and talk to.
- 15 Q. Okay. Did you ever have any professional concerns with Jeff
- 16 at all at work?
- 17 A. No, sir, no professional concerns at all.
- 18 Q. Okay. And then from a crew resource management, CRM, aspect
- 19 with Jeff being a pilot and you being a flight nurse and working
- 20 | with other flight nurses or EMTs in the back of the helicopter,
- 21 how did Jeff perform from like a CRM aspect?
- 22 A. Communications is key, so he was very adamant on
- 23 communicating with us, especially if it was the first few times we
- 24 flew together. He was very verbal and communicated to me, you
- 25 know, okay, I just want you to be prepared for this and this is

- 1 how I kind of operate, and he just made it very clear-cut and
- 2 concise communication for me.
- 3 Q. Okay. And then did you know Jeff outside of work also?
- 4 A. No, sir.
- 5 Q. Okay. All right. Kind of shifting gears here, kind of just
- 6 going like operationally. Since you have flown for Duke Flight
- 7 | -- or Duke Life Flight, excuse me, have you ever been exposed to
- 8 situations where the pilot has caution or warning lights in the
- 9 cockpit and the pilot has to perform emergency procedures?
- 10 A. Just one. I don't remember the specific date. I wouldn't
- 11 | call it an emergency procedure, more of like a precautionary
- 12 ordeal.
- 13 Q. What were -- when this event happened, what were the
- 14 circumstances surrounding it?
- 15 A. The date of when it happened, I'm not sure of the exact date.
- 16 Roughly estimate about a year ago. Myself and the pilot and my
- 17 partner were flying to a outside hospital. We didn't take the
- 18 patient because the family decided to withdraw care. So we were
- 19 flying back to Duke from the outside hospital with no patient on
- 20 | board. So it was me, myself -- or excuse me -- it was me, my
- 21 partner and the pilot.
- 22 And shortly after we lifted off outside of sterile cockpit,
- 23 | the pilot announced she had a chip light, a caution light. And
- 24 | she communicated clearly with my partner and myself, and we were
- 25 all in agreeance that would turn around and go back to the helipad

- 1 | we just departed from. And we did, and all was safe.
- 2 Q. Okay. You said that was a chip light, or was it a different
- 3 kind of light?
- 4 A. You know, I don't recall the exact light it was.
- 5 Q. Okay.
- 6 A. So I don't feel comfortable saying if it was a chip light or
- 7 | fire light. It was a type of light that --
- 8 Q. Okay.
- 9 A. -- struck the pilot's attention and brought it to our
- 10 attention.
- 11 Q. Okay. And then for the other aircrew members or crew
- 12 members, I should say, who was the pilot and who was your partner
- 13 on that flight?
- 14 A. My pilot was Melanie -- oh, gosh.
- 15 UNIDENTIFIED SPEAKER: Smith.
- MS. THOMPSON: Melanie Smith. Sorry. I'm having a blank
- moment.
- 18 BY MR. HODGES:
- 19 Q. That's all right. No worries.
- 20 A. And my partner was Angie -- or excuse me -- Angela
- 21 Strickland.
- 22 Q. Okay. And then what was the -- you guys took off out of
- 23 Durham for that flight; is that correct?
- 24 A. Yes. We departed from Durham and went to Maria Parham
- 25 | Hospital. That's in Vance County, North Carolina.

- 1 Q. Okay.
- 2 A. Henderson.
- 3 \mathbb{Q} . And what -- was that the EC145 or 135 you were flying in that
- 4 day?
- 5 A. It was the EC145.
- 6 Q. Okay. Do you remember what the tail number was on it, the --
- 7 A. It was N146DU.
- 8 Q. Okay. All right. And then so you guys -- when this event
- 9 happened then, Melanie told you guys, hey, there's some sort of
- 10 light going on, and she made the decision to fly back to Maria
- 11 Parham, the helipad there, and you guys shut down there. Then
- 12 | that was the end of the flight then; is that correct?
- 13 A. That's correct.
- 14 Q. Okay. Did you guys talk about it afterwards, like do any
- 15 | sort of debrief or discussion afterwards on what happened and
- 16 actions of the crew members or anything of that nature at all, or
- 17 was there like a debrief you guys did?
- 18 A. Yes. We debriefed after that event. Yes, sir.
- 19 Q. Okay.
- 20 A. Melanie spoke with us and she elaborated on it and answered
- 21 any questions that I had and my partner had. I didn't have any
- 22 further concerns or anything.
- 23 Q. Okay.
- 24 A. I felt comfortable with the debrief she gave us.
- 25 Q. Okay. During the flight when it actually happened, was there

- 1 any -- outside of Melanie vocalizing to you and your partner about
- 2 this light situation is going on, was there any other sort of
- 3 | conversation she had with you and your partner during that flight
- 4 going back to the pad?
- 5 A. No, sir. I do not recall.
- 6 Q. Okay. And, once again, I know this is from a year ago, but
- 7 once that light came on and you were notified by Melanie, how long
- 8 | would you say from that time to when you landed, how long -- like
- 9 how many minutes or seconds or however long it was? Do you have
- 10 | an estimate of that?
- 11 A. Roughly under 60 seconds.
- 12 Q. Okay. All right. And like you said, that was just the first
- 13 | time you've encountered a situation like that where you're flying
- 14 and a light comes on like that or similar event, you said?
- 15 A. Yes, sir.
- 16 Q. Okay. And was this at nighttime or daytime this event
- 17 | happened?
- 18 A. I'm sorry. There was a beep and I didn't hear what you said.
- 19 Would you mind repeating that?
- 20 Q. Yes. Was this at -- this event occurred during the daytime
- 21 or nighttime? Do you have a rough estimate what time it happened
- 22 at?
- 23 A. This was during night shift.
- 24 Q. Okay.
- 25 A. It was dark outside. I don't recall the specific time or

- 1 hour of the night.
- 2 Q. Okay. And back on your position with your partner, with
- 3 Angie in the back, you guys didn't have any sort of indication?
- 4 Like you guys didn't see, like, smoke or smell any smoke or
- 5 anything of that nature from your end in the back, then?
- 6 A. No, sir. I didn't smell anything. I didn't see anything.
- 7 didn't hear anything other than conversation after we exited
- 8 sterile cockpit.
- 9 Q. Okay. Okay.
- 10 MR. HODGES: Did someone new just join us on the line?
- 11 UNIDENTIFIED SPEAKER: Mike, just me. Sorry. My phone
- 12 dropped off. My fault.
- MR. HODGES: Oh, okay. No worries. No worries. Okay.
- 14 BY MR. HODGES:
- 15 Q. All right. Just shifting gears to a different subject area
- 16 now, just kind of going over some company questions just both
- 17 | about Duke Life Flight and Air Methods. Working at both the bases
- 18 there, working with the Duke people and the Air Methods people,
- 19 what would you -- how would you describe the overall safety
- 20 culture of the operation?
- 21 A. As an overall safety perspective for Duke Life Flight, it's a
- 22 | top priority. As I stated earlier, this is my first flight
- 23 position so situational awareness is always a top priority with me
- 24 personally. And my cohorts, they really preach that to us and,
- 25 you know, adamant on making sure we understand the safety

- 1 perspective behind this. Our safety comes first before anything
- 2 else. So it's a absolutely top priority here.
- 3 Q. Okay. And then how would you rate the overall employee
- 4 morale there?
- 5 A. I think it's great. I wake up every morning and I look
- 6 | forward to coming to work. I enjoy the environment that I work
- 7 in. I enjoy the people that I work with. I think of it as a
- 8 family, not just co-workers. And I have nothing but positive and
- 9 good things to say about that. Even for what's happened, I still
- 10 enjoy it.
- 11 Q. Okay. And then how would you describe the relationship
- 12 | between Duke Life Flight and Air Methods working together?
- 13 A. I think it's a good relationship. They seem to communicate
- 14 very well. Our management team keeps us in the loop on news
- 15 announcements or anything that's coming up. So --
- 16 Q. Okay. And then since you've worked at this job, have you
- 17 | ever felt any pressure from company management or pilots to
- 18 operate in less than optimal conditions?
- 19 A. No, sir, not once.
- 20 Q. Okay. When the pilot is doing his or her preflight risk
- 21 | analysis process before they take off, what is your role in that
- 22 process? Are you included to that process? And, if so, what is
- 23 your role in that process?
- 24 A. Yes. We are included in the process. So say we get a
- 25 | flight, my partner, myself and the pilot, we will walk out to the

- aircraft. After the pilot checks weather, regardless of how nice 1 2 or not nice it is outside, he or she will say weather is good and 3 -- you know, we have the "three to go, one to say no" rule. 4 we're all in agreeance before we even start the aircraft if we feel comfortable taking this flight or if we don't.
 - pilot doing a complete walk-around of the aircraft, making sure doors are latched and nothing is plugged into the aircraft. the pilot has a device that shows us the risk assessment analysis, a number and a color. He shows it to myself and my partner. or she shows it to myself and my partner each and every flight.

And the process continues by myself and my partner and the

- 12 Okay. If an employee found a safety issue there, whether 13 it's with the maintenance of the helicopter, operational 14 procedures, equipment, you name it, do you feel that employee can 15 bring that issue up to management and the issue would be addressed 16 properly and in a timely fashion?
- Yeah, so -- or excuse me -- yes, sir, I do believe that. 17
- 18 Okay. And with being a Duke employee, if you had a safety 19 issue with an Air Methods employee, like let's just say an Air 2.0 Methods pilot or mechanic there at one of the bases, for example,
- 21 how would you go about reporting that issue and who would you
- 22 report it to?

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- 23 First I would address it with said pilot or mechanic, whoever
- 24 the Air Methods employee is. I would address it with them first.
- 25 And then if we don't reach a resolution or understanding, I would

- 1 | then take it up the chain of communication or -- excuse me --
- 2 | chain of command, and go to my clinical team leader, our charge
- 3 | nurse, and then go higher up to the program director, if needed.
- 4 Q. Okay. And do you feel the overall operation has adequate
- 5 personnel and equipment to do the mission?
- 6 A. I'm sorry. Can you repeat that?
- 7 Q. Do you feel the overall operation has adequate personnel and
- 8 equipment to do the missions? It's got enough people, enough
- 9 helicopters, enough medical equipment, et cetera, to do the
- 10 mission?
- 11 A. Yes, absolutely.
- 12 Q. Okay. With the Smithfield base being -- I don't know if a
- 13 satellite base is the proper term, but being detached from the
- 14 main headquarters at Durham there, do you feel the Smithfield base
- 15 receives adequate communication and support from headquarters at
- 16 Durham to do its mission?
- 17 A. Yes. On a daily basis, including the weekends, we do a brief
- 18 that includes them, their flight crew and their ground crew, every
- morning roughly around 8:00, to discuss the same things that we
- 20 did earlier in our brief. So we're in communication with them
- 21 daily. And we have a program on our computers called SharePoint,
- 22 where we can post like our schedule for the day of who's assigned
- 23 to what unit or what aircraft. And if there's any callouts or
- 24 anything that needs to be communicated, you know, we can post it
- 25 on there and everyone can see it at each base.

- 1 Q. Okay. And then since the accident occurred, have there been
- 2 any changes at the company that you've noticed with operations,
- 3 | maintenance, equipment, anything of that nature? Any changes that
- 4 you've noticed with the way things are done differently?
- 5 A. We've just emphasized it more, especially for our newer
- 6 employees, and myself included. You know, we all love this job;
- 7 | we're here for a reason, but like I said, our safety comes first
- 8 and that's a top priority. So --
- 9 Q. Okay. Has there been anything with you on a personal level
- 10 | that you've changed differently with doing your job? Anything
- 11 you've done differently on a personal level?
- 12 A. On a personal level just making sure I take more time to
- 13 really do my aircraft overlook every morning before every flight.
- 14 I'm in the same routine, but just really putting a emphasis more
- 15 on like just viewing the aircraft before we go and, you know,
- 16 | communication is key. So --
- 17 Q. Okay. Are there any safety improvements that you would like
- 18 to see implemented at the company, whether it's with operations,
- 19 maintenance, equipment, you name it? Anything you'd like to see
- 20 | implemented at the company?
- 21 A. Can you repeat the second half of that? It's breaking up a
- 22 little bit.
- 23 Q. Sure, sure. I'll just go over the whole question. Are there
- 24 any safety improvements that you would like to see implemented at
- 25 the company, whether it could be operations, maintenance,

- 1 equipment, training, things of that nature? Anything that you
- 2 | would like to see implemented from a safety aspect?
- 3 A. No, sir. You know -- how am I trying to put what I'm trying
- 4 to say? I feel as what's being done now is working very well. I
- 5 | feel comfortable and I feel like we're on the right path to
- 6 transporting patients safely and making sure our concerns are
- 7 addressed appropriately.
- 8 Q. Okay. That was it I had for my questions. Before I go
- 9 around the table here to the rest of the folks, was there anything
- 10 | that I missed that you feel is important to discuss?
- 11 A. Are you asking me? I'm sorry. I'm --
- 12 Q. Yes, ma'am. Yeah, just -- that was it for my questions, and
- 13 before we went around the table to see if anybody else had any
- 14 questions, I just wanted to ask you was there anything else that I
- 15 | missed that you feel is important to discuss?
- 16 A. No, sir, not that I know of.
- MR. HODGES: Okay. All right. Well, let's do the roundtable
- 18 to see if anybody else has any questions or comments.
- 19 I'll go over to Brice. Do you have any questions?
- 20 MR. BANNING: I don't have any questions. Thank you.
- MR. HODGES: Okay. We'll go to Matt. Do you have any
- 22 questions?
- BY MR. RIGSBY:
- 24 Q. Just real quick, Ally. You said a couple of times about
- 25 doing your walk around the aircraft and that type of thing. Who

- 1 provides that training to you? Is it the pilots or --
- 2 A. Our pilots go over that. We have a check-off sheet for
- 3 aircraft safety and egress that we have to do during our
- 4 orientation phase. And so the pilot, he or she, will primarily go
- 5 | over that. However, with that being said, it's continued during
- 6 the whole orientation process and beyond that with my partners.
- 7 And I'm never assigned with the same partner every shift. We
- 8 rotate. And those guys and girls take the lead and, you know,
- 9 | continue emphasize on the safety perspective of doing your walk-
- 10 arounds before every flight, regardless of if it's at Durham or if
- 11 | we're leaving an outside hospital.
- 12 Q. Okay. And if you have a issue or something, does Duke have a
- 13 reporting system or does Air Methods give you a tool or something
- 14 via the computer that you could report a concern or something like
- 15 that?
- 16 A. Yes, sir. We do have a computer system provided by Duke
- 17 Hospital, but with that being said, if I have a concern I would
- 18 | first address it with my partner and my pilot or whoever it may be
- 19 related to first and my management team if needed.
- 20 Q. Okay. And then you mentioned the "three to say go, one to
- 21 say no" type crew resource management training.
- 22 A. Right.
- 23 Q. Have you in the past turned flights down or said no at times?
- 24 A. Yes, sir. My partner and I and the pilot, we all agreed and
- 25 didn't feel comfortable taking the flight due to some weather, so

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1
    we all said no and were in agreeance of that.
 2
         MR. HODGES:
                      Okay.
                              So --
 3
         MR. RIGSBY:
                      That's all I have, Mike.
                                                 Thank you.
 4
         MR. HODGES:
                      Okay. Thank you, Matt.
 5
         MR. RIGSBY: Thank you, Ally.
 6
         MS. THOMPSON:
                        Thank you.
 7
                      Jason, do you have any questions?
         MR. HODGES:
 8
         BY MR. QUISLING:
 9
         Just, Ally, have you ever experienced any situation that made
10
    you uncomfortable with the maintenance being performed on the
11
    aircraft or the resolution of any discrepancies with the aircraft?
12
         No, sir. I feel very comfortable with the maintenance that
13
    has been done on our aircraft by our mechanics. So --
14
         MR. QUISLING:
                        Okay. Thank you.
                                            That's all I have.
15
         MR. HODGES: Okay. Rene, do you have any questions?
16
         MS. BORGHESE: No, I do not.
17
         MR. HODGES:
                     Okay. And then, Ally, did you have any
18
    questions for us before we finish up?
19
         MS. THOMPSON: No, sir. I do not have any questions.
2.0
         MR. HODGES: Okay. We will go -- I'll go ahead and stop
21
    recording at this point.
22
          (Whereupon, the interview was concluded.)
23
24
25
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL HELICOPTER CRASH

IN HERTFORD, NORTH CAROLINA,

ON SEPTEMBER 8, 2017

Interview of Ally Thompson

ACCIDENT NO.: ERA17MA316

PLACE: Via Telephone

DATE: July 9, 2018

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.

Katherine Motley

Transcriber