ERA22FA279

OPERATIONAL FACTORS

Group Chair's Factual Report - Attachment 1
Interviews
November 1, 2022

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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FATAL BELL UH-1B HELICOPTER

ACCIDENT IN AMHERSTDALE, * Accident No.: ERA22FA279

WEST VIRGINIA ON JUNE 22, 2022 *

* * *

Interview of: MICHAEL HOLBROOK, Owner

MARPAT Aviation

Logan, West Virginia

Thursday, July 28, 2022

APPEARANCES:

DAVID LAWRENCE, Operations Investigator National Transportation Safety Board

TODD GENTRY, Accident Investigator Federal Aviation Administration

I N D E X

ITEM			PAGE
Interview	of Mich	nael Holbrook:	
	By Mr.	Lawrence	6
	By Mr.	Gentry	35
	By Mr.	Lawrence	38

INTERVIEW

MR. LAWRENCE: So let's go ahead and get started. Again, for the record, my name is David Lawrence. I'm with the NTSB. I'm an operations investigator so I'm supporting the investigation, the investigator-in-charge who you probably met, Lynn Spencer.

MR. GENTRY: Sorry.

MR. LAWRENCE: On behalf of the NTSB and I know the FAA and everybody involved, our condolences for your loss. As I mentioned earlier, our role is purely safety. I have nothing to do with certification actions, enforcement, legal, any of that stuff. My role is just to try and find out what happened so we can prevent it from happening again.

And it's very typical to talk to the owner of the company that might have been involved. As I said, this is a very natural part of the process, investigative process.

When we do investigations, we bring in technical expertise and party members. That's why Todd is here. He's with the FAA. They're a party to all our investigations. Right now, for my group, the operations group, it's just Todd and I. And I'll let Todd explain his role as FAA in the investigation.

MR. GENTRY: Yeah. So I'm Todd Gentry for the record. FAA accident investigation is all I do. And I talked to you previously when we talked before but my job is not in any way enforcement, certification action, or anything like that either.

Matter of fact, I can't do that. That's part of the rules that I

cannot take part in. So I'm strictly, like David, safety only.

My role is to figure out if there's something the FAA can do better. That's really my role. And that goes to anything. Did we certify the helicopter the wrong way. Did we put wrong rotor blades on it and approve that. Those kind of things are the things I'm here for. Because I can make that change through the FAA.

So I want you to feel comfortable, Mike. I'm not here to do anything except for find out what happened make sure, like Dave said, it doesn't happen again. Same thing as before.

MR. LAWRENCE: Sure. And as I mentioned earlier -- you've been briefed -- we'll be just tape recording this interview and sending it away for a transcription. And I'll provide you guys copies of that transcription once its complete. It takes a couple of weeks sometimes.

Anytime you talk to the NTSB, you're afforded the opportunity to have a representative. Is Mr. Bailey here who you would like as your representative?

MR. HOLBROOK: Yes, sir.

MR. LAWRENCE: Great. The preliminary has been published. It takes a while for some of these investigations. So it takes a while to conduct an investigation, go through the processes, developing the report. So it might be a year or so before we get to a final report if that answers one of your obvious questions down the road.

Do you have any other questions about the process or any questions to Todd or I right now before we get started?

MR. HOLBROOK: I don't. No.

MR. LAWRENCE: Great. Let's just go -- let's start off with the easy ones how about.

INTERVIEW OF MICHAEL HOLBROOK

BY MR. LAWRENCE:

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- Q. Let me get your full name and your age.
- A. Michael Holbrook. H-o-l-b-r-o-o-k. Seventy-two.
- Q. Great. Do you mind if I call you Mike or Michael or --
- A. Mike would be fine.
- Q. Mike. Great. And I should have mentioned this earlier.
- 13 Even though we're recording, I take notes, you know, just a little
- 14 | bit of notes on the computer. And I'm old school. I used to type
- 15 on the flight management computers like this. So I apologize if
- 16 | I'm not keeping up with how you're talking. If you're talking
- 17 | fast and such. If I'm not making eye contact with you, don't read
- 18 anything into it. I'm just trying to catch up with my notes.
- 19 Also, if any of the questions that we ask -- if you don't
- 20 understand, ask us to clarify and we'll do the same with you. If
- 21 we just need some kind of clarification. I want to make sure
- 22 we're all on the same page. Understand that I don't know is a
- 23 perfectly acceptable answer. If you don't know, that's fine.
- 24 I got your name and age. And what is your current title?
- 25 | A. Owner MARPAT Aviation.

- Q. Just in general, what are your roles and responsibilities at MARPAT?
- $3 \parallel A$. Day-to-day operations.
- $4 \parallel Q$. Are you -- Do you hold any current licenses with the FAA?
- 5 A. I have a repairman's certificate under the 145 Repair
- 6 Station. And a single-engine land certificate.
- 7 | Q. Are you current with your single-engine land?
- $8 \mid \mid A$. Not with the medical. No. I have -- my medical is out.
- 9 Q. That's a private pilot's license. Right?
- 10 A. Yes, private pilot.
- 11 Q. Mike, If you just kind of give me the Cliff notes of your
- 12 | background. What led you to MARPAT Aviation and owning that?
- 13 A. I spent four years in the Air Force as an avionics technician
- 14 during the Vietnam conflict. And got out of that. Went into a
- 15 construction business and the construction business allowed me to
- 16 | build a hangar at the Logan County Airport. And we started out as
- 17 | a flight school with a little Schweizer helicopter. And from
- 18 | there, we progressed to making an application for a repair
- 19 station. And now we're a 145 Repair Station.
- 20 Q. Great. Just in general, if somebody was to walk off the
- 21 street and want to know about MARPAT Aviation, what would you say?
- 22 | A. We're a 145 Repair Station that repairs aircraft and
- 23 | helicopters. Fixed wing and helicopter.
- 24 Q. Been busy?
- 25 | A. Very.

- Q. What's a typical workload like?
- $2 \mid A$. Usually two annuals a week. Something like that.
- $3 \parallel Q$. All GA?

- 4 A. Yes, everything general -- smaller aircraft.
- 5 Q. How many employees do you have?
- 6 | A. One.
- 7 Q. One? And that is you?
- 8 A. No, that's my son Jeff.
- 9 Q. Okay, okay.
- 10 A. I don't consider myself an employee because I don't get paid.
- 11 | Q. And what's Jeff's role there?
- 12 A. Jeff is an AP mechanic under the repair station.
- 13 | Q. Any part-time help or -- that you bring in?
- 14 | A. We do apprentice work sometimes. The repair station allows
- 15 us to actually bring people in that want to do OJT training. And
- 16 | we bring people if they want to try to get their A&P license or
- 17 something like that. It takes two years. They have to work under
- 18 us for two years. And about everybody -- it just kind of comes
- 19 and goes. You know, they'll hit it pretty hard for a while and
- 20 then kind of fade away. Because of the process. It's a really
- 21 drawn-out process with the FAA.
- 22 | Q. That's great. And currently, at the time of the accident,
- 23 was just you and Jeff the only ones -- did you have any
- 24 | apprentices working or --
- 25 A. No.

- Q. -- any other part-time?
- $2 \mid A$. Not at the time of the accident.
- $3 \parallel Q$. So it was just the two of you guys?
- 4 A. Yeah, yeah. The apprentices only come in for maintenance
- 5 work on aircraft. Yeah.
- 6 Q. Under Jeff's tutelage. He's monitoring --
- 7 A. Under mine and Jeff's.
- 8 Q. Okay, yours. Do you -- I know I asked you. You said had the
- 9 | 145 Repair Station. Do you have an A&P?
- 10 A. I don't, no.
- 11 Q. You -- okay.
- 12 A. I have a repairman's certificate under (indiscernible) repair
- 13 station.

- 14 | 0. Got it.
- 15 A. With inspection authorization.
- 16 Q. Let me move on to the day of the event, the day of the
- 17 | accident. Can you kind of explain what the event was, how it came
- 18 about and just how all these people were there, and what the
- 19 purpose of it was.
- 20 | A. We have -- for the last seven years, we have had an annual
- 21 | veterans' reunion. It started out as Vietnam veterans and it's
- 22 | kind of grown into all veterans and their families. And that's
- 23 | basically what it is. It's -- the pilots come in and purchase
- 24 | fuel and we let them fly the helicopter for the fuel purchase.
- 25 | Q. So they purchase the fuel for the --

- A. If they want to ride up --
- 2 Q. Yeah.

- $3 \mid \mid A$. -- with a safety pilot, they purchase the fuel. Every flight
- 4 has a safety pilot.
- $5 \parallel Q$. I'll ask a little bit more of that in just a minute. But I
- 6 was kind of curious -- I was able to see your website that kind of
- 7 | advertised the event this year. Did you do -- do you do a website
- 8 for each year that you've done that?
- 9 A. Yes. For the last three years, I believe. The first four I
- 10 don't think we did anything like that. I'm not real sure about
- 11 | the time but -- I'm thinking it's three years.
- 12 | Q. I got to be honest with you, I wouldn't even know how to do
- 13 postings on a website or anything. It's beyond me. Who did you
- 14 | have or did you do the posting on the website or did you have
- 15 somebody else do that?
- 16 A. John Nagle (ph.). The pilot that was in the aircraft was our
- 17 tech (indiscernible).
- 18 \mathbb{Q} . So John was the one that did the posting and --
- 19 A. Yes.
- 20 0. -- all the information?
- 21 A. He took care of the website. He was an exceptional person.
- 22 | Q. And all these pilots were volunteers. Correct?
- 23 A. Yes.
- 24 | Q. How many did you have total? Not just for this event but in
- 25 | total. What's your inventory of these volunteers?

- A. We only had one regular pilot that flew the Huey for us.
- $2 \parallel Q$. Who was that?

- $3 \mid\mid A$. Ryan Craddock (ph.). He was -- he's a local boy. And we
- 4 helped train him and got him trained up. Then he got his
- 5 commercial license. For the event, we had, I believe, six
- 6 volunteers. Six or seven. I believe it was six.
- Q. Were you the one keeping track of who was coming in and who was volunteering and who was flying?
- $9 \parallel A$. No, sir.
- 10 Q. Who was that?
- 11 A. Michael Daughtry (ph.).
- 12 0. Who is Michael Daughtry?
- 13 A. He is one of the volunteer pilots from Florida. And he
- 14 volunteered to take care of the -- making sure all the pilots were
- 15 current and up to date. And he was pretty much our ops man.
- $16 \parallel Q$. Did he share that information as he gathered it on these
- 17 | volunteer pilots like their licenses or whatever he would gather?
- 18 | Did --
- 19 A. He didn't actually share it. He just said they're all good
- 20 to go. You know, I mean, I didn't see the results of his
- 21 gathering. But --
- 22 \parallel Q. But he was the one that told you these guys are good to go.
- 23 | A. Yes, sir.
- 24 Q. They have their -- whatever --
- 25 A. Yes, sir.

- $1 \parallel Q$. -- they needed.
- $2 \mid A$. He was also one of the safety pilots.
- 3 Q. Yeah. So do you have a list of their names or did Daughtry
- 4 keep the list of the names?
- 5 A. Daughtry kept the list. I could probably recall most of them
- 6 but I don't actually have a list or anything like that.
- $7 \parallel Q$. Sure. If you could recall who -- like I said, the inventory
- 8 of the pilots who you had --
- 9 A. Michael --
- 10 Q. -- particularly that day.
- 11 A. Michael Daughtry, James Nagle, Kevin Warren (ph.),
- 12 Johnnie English (ph.).
- 13 Q. I'm sorry. It was Kevin --
- 14 A. Warren.
- 15 | O. Yeah.
- 16 A. He's one of the -- he -- one of the deceased. He was on the
- 17 | aircraft.
- 18 | Q. Right.
- 19 A. Johnnie English.
- 20 Q. Johnnie English.
- 21 A. Robert Curtis (ph.).
- 22 | Q. Okay.
- 23 | A. That's five.
- 24 0. That's five.
- 25 A. And Ryan Craddock.

Q. Ryan Craddock.

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- $2 \mid A$. Yeah. That's six. Right? Yep. I think that -- yeah.
- MR. GENTRY: That is. That's six.
- $4 \mid \mid Q$. So if I needed contact information -- because I know that
- 5 Chuck and I have talked previously for each of these -- I need to
- 6 go -- you wouldn't have their contact information?
- 7 A. I would have their phone numbers.
- 8 0. That would be fine.
- 9 A. Yeah.
- 10 Q. Is that something after we're done here you could provide?
- 11 | A. Yeah.
- 12 Q. Their phone numbers.
- 13 | A. Yeah.
- 14 Q. Okay, great.
- 15 A. Not a problem.
- 16 || Q. And for this particular event, what was your role?
- 17 | A. I pretty much -- I was meet and greet, you know. I was a
- 18 | Walmart greeter. I just shook hands and welcomed everybody to the
- 19 event.
- 20 Q. Was there anybody that -- was Daughtry the one that was
- 21 organizing like a sign-in sheet? I mean, explain that to me. How
- 22 did people -- when they --
- 23 | A. That --
- 24 Q. -- showed up, they signed up?
- 25 A. That was Mr. Daughtry.

- Q. Daughtry handled --
- $2 \mid A$. Yeah. He had -- he and John Nagle both coordinated the
- 3 website and that's where they worked out the schedule. And
- 4 Daughtry and John Nagle were in charge of that.
- 5 | Q. Did you know Donald Ray Sandolph (ph.)?
- 6 A. Don, yes.

- 7 0. You did.
- 8 A. Um-hum. Yeah. Don had flown with us for probably the last 9 four or five years.
- 10 MR. GENTRY: But he wasn't on the list you just --
- MR. HOLBROOK: No, he wasn't one of the safety pilots.
- 12 MR. GENTRY: He was not.
- MR. HOLBROOK: He was just a volunteer that come up and loved to fly in the helicopter.
- 15 BY MR. LAWRENCE:
- Q. Did he act as a safety pilot at any point in time during this event?
- 18 A. No. No, Don never had. I think he was in the same shape I
- 19 was in. Didn't have a medical. But he had vast experience in
- 20 | helicopters. But you know, when we get up there in years, our
- 21 | medicals can float away.
- 22 | Q. And did he ever fly from the left seat -- even though he
- 23 | wasn't a safety pilot -- at any point during these -- how many day
- 24 | event was this? Three days?
- 25 A. It was supposed to be six days. But we were only into it the

- 1 second day.
- 2 Q. Right.
- $3 \mid A$. This was the second day of the event. No, Don had always
- 4 | flown right seat. Yeah. Only the six people I named flew left
- 5 | seat.
- $6 \parallel Q$. Do you know a gentleman named Michael O'Conner (ph.)?
- 7 A. Michael O'Conner.
- 8 Q. Right.
- 9 A. I know a Tom O'Conner.
- 10 Q. It was Michael O'Conner. He was one of the people on -- the
- 11 day of the accident that had flown in the helicopter. I didn't
- 12 know if you had a chance to meet with him.
- 13 A. I don't recall. I mean, I forget how many people flew that
- 14 day. But I don't recall.
- 15 Q. If you were to guess.
- 16 | A. I would say 12.
- 17 | Q. Twelve flights that day or twelve people flew that day?
- 18 | A. Yeah.
- 19 Q. When I say flew --
- 20 | A. Twelve --
- 21 | Q. -- that were up in the right seat.
- 22 A. In the right seat. Individuals. Yeah.
- 23 MR. GENTRY: Yeah.
- 24 MR. HOLBROOK: That purchased fuel.
- 25 MR. GENTRY: Yeah, I got you. I was like, it had to be more

- than that. Twelve people, you could do that in two sorties pretty quick.
- 3 MR. HOLBROOK: Oh, no. I mean, that's just up front.
- 4 MR. GENTRY: Yeah, I got you.
 - MR. HOLBROOK: That's what I was referring to.
- 6 MR. GENTRY: That makes sense.
- 7 BY MR. LAWRENCE:
- 8 Q. Prior to getting the events going, was there a safety
- 9 briefing given to the pilots?
- 10 A. Yes.

- 11 Q. Who provided that?
- 12 A. Robert Curtis and Michael Daughtry.
- 13 Q. Did you participate in that?
- 14 A. I was there. Yes.
- 15 Q. Do you in general recall what was discussed?
- 16 A. Basically, be safe. When you're up there, you're a pilot in
- 17 command of the helicopter. It's your helicopter. No off-airport
- 18 | landings. Stay in the pattern. Watch out for wires.
- 19 Q. Was there any training done before the event began for the
- 20 | pilots?
- 21 A. They all came in and got current in the helicopter. Yes
- $22 \parallel Q$. Kind of walk me through that. How did that occur?
- 23 A. They came in and flew their three takeoffs and landings and
- 24 got current in the helicopter. All of them were current
- 25 helicopter pilots when they got there. They just got familiar

with the Huey.

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- $2 \mid \mid Q$. And about how long do you know those flights took that -- did
- 3 | they come up and fly around, come back, land, go up, fly around
- 4 | and come back or --
- $5 \parallel A$. Yeah. Just around the airport, through the patterns we had
- 6 designated. Make sure everyone knew where they were supposed to
- 7 be flying and --
- 8 Q. They actually flew those patterns that they would fly
- 9 passengers --
- 10 A. Yes.
- 11 | Q. -- the upcoming days?
- 12 A. Yes.
- 13 Q. So each pilot flew three of those patterns and came back?
- 14 A. Well, I don't know if it was three. But they did their
- 15 required three takeoffs and landings. Yeah. To become current.
- 16 And they would fly together, you know, one be in the right seat,
- 17 one be in the left seat. Then they would swap out and they did --
- 18 they just all took turns and flew. Got current.
- 19 Q. So who was it that was making sure they were current? One
- 20 pilot had to be current in the helicopter. So who was that?
- 21 | A. Ryan Craddock.
- 22 | Q. Ryan Craddock was. Do you know if Ryan has a CFI or --
- 23 A. No, he doesn't.
- 24 | Q. -- instructor --
- 25 A. Just commercial. Johnnie English was a CFI.

- Q. But Johnnie wasn't the one that was doing the three takeoffs and landings checkout for these --
- 3 | A. He --
- $4 \parallel 0$. -- volunteers.
- A. He flew with every pilot. He may have been in the back. But he was in the aircraft with every pilot as far as I know.
- Q. And does MARPAT or anybody have any written guidance you get to these volunteers when they come up to fly one of these events?

 In other words, is there like -- I don't believe you would have
- 10 standard operating procedures. Correct?
- 11 | A. No.
- Q. But is there anything that shows here are the routes, here are the expectations, here's what we need.
- 14 A. Mr. Bailey has a copy of those.
- 15 Q. Oh, good. Appreciate it. Of the routes?
- 16 $\mid A$. Of the routes. Yes. And those are posted on the wall.
- 17 | Q. These were provided to each of the pilots or --
- 18 | A. Yes.
- 19 Q. -- were they in the aircraft?
- 20 A. No. They were on the wall of the office where the safety
- 21 briefing and the morning briefings and everything is always held.
- 22 | Q. Got it. Were copies given to the pilots so they could see
- 23 this when they were --
- 24 A. No.
- 25 Q. -- (indiscernible).

- A. They were just on the wall beside the board.
- $2 \mid Q$. In the office at the hangar?
 - A. Yes.

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- 4 Q. Got it. Were they provided -- the pilots provided names of
- 5 the passengers and who the person sitting in the right seat would
- 6 be for each flight? I don't -- I know not like a manifest, a
- 7 \parallel legal manifest. But were they provided names or was this just --
- 8 | they show up, sign up, and hop in the helicopter?
- 9 A. Mr. Daughtry took care of that. And I'm sure he did provide
- 10 the names of who they would be flying with if it was known at the
- 11 time. Some of them would show up and say, I want to do this. I
- 12 want to fly. You know, when they get up front. And it's just --
- 13 but Daughtry took care of the schedule.
- 14 Q. Got it. And I know you gave me in general Ryan Craddock and
- 15 \parallel a little bit of Johnnie English as a CFI. He was in the aircraft,
- 16 | too. But specific to Mr. Nagle, if you recall, do you recall on
- 17 the three takeoffs and landings, when he did his training prior to
- 18 the event starting, do you recall who he was being checked out by?
- 19 A. I'm thinking it was Johnnie but don't hold me to that.
- 20 0. Sure.
- 21 A. It seemed like he and Johnnie flew 30 minutes together or
- 22 | something like that. But I mean, there's no requirement to check
- 23 out these pilots.
- 24 | Q. Right.
- 25 A. These pilots are authorized to fly anything up to 12,000

- 1 pounds as a helicopter pilot.
- $2 \parallel Q$. I understand. I'm just curious who it was. So we'll just
- 3 touch base with some of these other guys to just fill these holes.
- 4 So I'm sure we'll talk to Johnnie when we have an opportunity just
- 5 to verify that.
- 6 A. Good luck on that. He lives on a boat in Boston Harbor.
- $7 \mid Q$. Oh, really?
- 8 A. Yeah.
- 9 MR. GENTRY: We'll find him.
- 10 MR. HOLBROOK: Yeah, he's --
- 11 MR. LAWRENCE: Todd will find him.
- MR. GENTRY: Yeah, it's not that hard.
- 13 MR. HOLBROOK: He's a bit of a recluse.
- 14 MR. GENTRY: That's okay. So am I.
- 15 BY MR. LAWRENCE:
- 16 Q. So Mike, you touched on a little bit about the payment method
- 17 to come in here. Kind of explain that to me; how that worked.
- 18 Did -- you know, when -- I'm a customer. I show up to a table. I
- 19 | say I want to sign in and I want to fly that Huey.
- 20 A. Right.
- 21 | Q. What's the process?
- 22 A. Whether -- if you wanted to use a check or credit card. You
- 23 would tell me and then we would run it through our machine.
- 24 Q. You had a credit card machine sitting there?
- 25 A. Yes.

- 1 Q. It's like a little desk or a table or someplace to go sign
- 2 | up?
- 3 A. Yeah, well --
- $4 \parallel Q$. That was sitting out there.
- 5 A. The office was a sign-up place. I mean, the whole office.
- 6 That little round table you sit at. That table has flown all over
- 7 the world.
- 8 0. If stories could tell.
- 9 A. Exactly.
- 10 Q. Yeah. Somebody would come in there -- I want to sign up.
- 11 Now, if they just wanted to ride in the back --
- 12 A. Go out and get in line.
- 13 Q. So riding in the back didn't cost anything.
- 14 $\mid A$. No, nothing. The only thing we had was fuel.
- 15 Q. Now, I don't want to ride in. Now I want to get the whole
- 16 experience and sit up front in the right seat. How much would
- 17 | that cost me?
- 18 A. The years past, it was \$250 for 30 minutes. This year it
- 19 went up to \$450 because of fuel prices. Fuel prices went from
- 20 | \$3.90 a gallon to almost \$9.00 a gallon.
- 21 | Q. Right.
- 22 A. And it burns 100 gallons an hour.
- 23 MR. GENTRY: Man.
- 24 Q. It burns 100 gallons per hour.
- 25 A. One-hundred gallons an hour.

- Q. Now, for this \$450, I got to sit in the right -- I would get to sit in the right seat for how long of a flight?
- 3 A. Thirty minutes.

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- Q. Thirty minutes. In that 30 minutes, what could I expect to be able to do in the helicopter? Can I fly it?
- A. Whatever the pilot in command allows you to do. Now, you're
 never -- you were never -- you would never be the sole operator or
 sole manipulator of the controls. Never. And that's one thing we
 stressed in the safety briefings.
- 10 | Q. That was going to be my next question.
- 11 A. Never get off the controls.
- Q. Whether I had -- somebody had helicopter experience previous or not -- let's say they didn't and they just wanted to sit in the right seat, pay \$450 and go for this ride -- if they were
- manipulating, they were not the sole manipulator, like you said,
- 16 but they would be manipulating with maybe the safety pilot on the controls?
- 18 A. Yes.
- 19 Q. Is that accurate?
- 20 A. Yes.
- 21 Q. Would this be occurring while there were people sitting in
- 22 | the back?
- A. It all depend on how many people were there at the time. And probably at some time it could. Yes.
- 25 Q. And let me know, by the way, if some of these things like the

website and pictures -- and we're going to talk a little bit in a minute about the exemption -- exhibit exemption, limitations, and

3 things like that. If you want to look at it, I -- you don't have

to go by memory. I have them right here so I can pull them up and

you can just look at them if you want to refresh your memory.

A. Okay.

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- Q. Okay. But the website donation -- or the website had advertised that it was this, I guess, \$450 to sit in the right seat was a required donation.
 - A. No, it was for purchase of fuel.

MR. LAWRENCE: I understand. But did -- on the website -- and let me see if I can pull this up because I want to make sure --

RECORDING: MARPAT.

MR. GENTRY: Sorry. There's something stupid on my phone and I can't get rid of it. It talks to me and I was looking at the website and I saw --

MR. LAWRENCE: I'm trying to pull that up.

MR. GENTRY: Sorry about that. If it says something, I'm sorry.

BY MR. LAWRENCE:

- Q. This is just part of the website and I just want to show it.

 It said each right seat flight, which is what we're talking about, requires a 250 for 30-minute donation --
- A. To pay for fuel.

- Q. -- to pay for fuel.
- 2 A. Yeah.

- 3 Q. So that's -- if I wanted to show up and say, I want to ride
- 4 in the right seat of that helicopter and fly in the right seat but
- 5 | I don't have \$250.
- 6 A. I'd let you do it anyway.
- 7 0. Why?
- 8 A. Because that's what we do.
- 9 Q. I know some people were asking about the word donation on
- 10 | there. So just so we make sure. Is -- does MARPAT have like any
- 11 | type of 501(c)(3) or any other charitable foundation?
- 12 | A. No.
- 13 0. No. Who are the checks made out to?
- 14 | A. What?
- 15 Q. Like if somebody wrote a check.
- 16 A. MARPAT Aviation.
- 17 0. TO MARPAT.
- 18 | A. Um-hum.
- 19 Q. And the credit card was in -- would be --
- 20 A. MARPAT Aviation.
- 21 | Q. The transaction would be in MARPAT. Thank you. Was there
- 22 | any kind of recordkeeping done for the accounting of the money
- 23 | coming in?
- 24 A. No.
- 25 | Q. Any idea for the two days that the event happened how much

- 1 | money was generated approximate?
- 2 | A. Enough to pay for fuel. \$15,500.
- 3 MR. GENTRY: Wow.
- 4 Q. 15,500?
- 5 A. And some odd cents. Some odd dollars. Yeah. 15-5 is what I remember.
- Q. Let me ask you how would you characterize -- this is just your opinion. How would you characterize these type of flights?
- 9 Were they sightseeing flights? Were they experience flights? How
- 10 | would you characterize them?
- 11 A. They were -- I would characterize them as exhibition flights.
- 12 Q. What do you mean?
- 13 A. That we were exhibiting a historical helicopter.
- 14 | Q. For somebody who is not a layperson in exhibits and such.
- 15 Exhibit to me means static display type of thing where they can
- 16 get up and touch it and run it and walk on it and all that. But
- 17 | exhibit also means taking people up?
- 18 A. Yeah. Experimental exhibition is exhibiting what the
- 19 | aircraft is built for and what it does.
- 20 Q. Got it. Actively exhibiting the --
- 21 A. Yes.
- 22 | Q. -- helicopter, as well. Good. I know you were doing this --
- 23 you've done this for seven years. Was any of these activities for
- 24 these events coordinated with the FAA FSDO office in Charleston?
- 25 A. No. Not required.

- Q. Why not? It's just not required?
- 2 A. Not required. No.
- 3 | Q. What wasn't required? Just the -- from a regulatory
- 4 standpoint it wasn't required or --
- 5 A. Right. Far as I know.
- 6 Q. Did the FSDO office ever come out and observe the -- any of
- 7 these events in the seven years? Do you recall?
- 8 A. Not that they ever came and told me they were there. No.
- 9 Q. Do you know the -- you know the PMI in the FSDO in
- 10 | Charleston. Correct?
- 11 A. Yes.

- 12 0. What is his name?
- 13 A. Jerry Morgan (ph.).
- 14 Q. Jerry Morgan. Okay. When was the last time you saw Jerry
- 15 prior to the accident?
- 16 A. Last week.
- 17 Q. Yeah. Prior to the accident. Sorry.
- 18 | A. Two years ago.
- 19 Q. Two years ago?
- 20 A. Yes, sir.
- 21 Q. What was that for?
- 22 | A. An inspection of the repair section.
- 23 Q. Had you worked with him or had he communicated with you prior
- 24 | to those two years or within those two years virtually because
- 25 (indiscernible) --

- 1 A. No, there was another inspector, Mr. Burch (ph.) that was our 2 regular inspector.
 - Q. When was the last time you saw Mr. Burch?
- 4 A. Probably March. Maybe April.
- 5 Q. Of this year?
- $6 \parallel A$. Yes.

- 7 Q. Just so I'm clear -- it doesn't sound like -- the last time
- 8 you talked to Jerry Morgan was two years ago. Have you had
- 9 regular communications with the FAA over the last two years say?
- 10 A. Yes.
- 11 | Q. How has that communication been? Has it been virtual, by
- 12 phone, videoconferencing?
- 13 A. Phone, email.
- 14 0. Phone, email.
- 15 A. Um-hum.
- 16 \parallel Q. How often would you get phone calls or emails from the FAA?
- 17 A. The only time that they would contact us is if they were
- 18 coming down for a repair day inspection.
- 19 Q. So then the last time they contacted you was two years ago
- 20 | because that was the last inspection.
- 21 A. March or April.
- 22 | Q. Oh, March for --
- 23 A. Mr. Burch.
- 24 | Q. Burch.
- 25 | A. Yeah.

- Q. Got it. Jerry is your PMI but Burch is the one assisting in doing the inspections.
- 3 A. Jerry is the principal maintenance inspector for the FSDO,
- for the entire FSDO. And I think he delegated our repair station
- 6 Q. Okay, I appreciate that. That clarifies it.
- 7 A. Yeah.

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8 0. Perfect.

to Mr. Burch.

- A. I think Mr. Burch is actually our PMI.
- 10 Q. Burch is your PMI?
- 11 A. I'm pretty sure. I think so. Yes
- MR. LAWRENCE: Which is fine. Because we're going to talk to him tomorrow so --
- 14 MR. GENTRY: Yeah, we're (indiscernible).
- 15 MR. LAWRENCE: -- we'll (indiscernible). Yeah.
- MR. HOLBROOK: Yeah. With the COVID thing, everybody has
- 17 been at home. And it's been kind of a distancing thing.
- 18 MR. LAWRENCE: I totally get -- I totally understand.
- MR. HOLBROOK: And I think that Mr. Burch is assigned to us now.
- 21 MR. GENTRY: We'll find out.
- MR. LAWRENCE: Yeah. We'll double check that. Then just to
 move off the actual event day, one final question. Did any of the
 passengers sign a waiver of liability prior to getting loaded on
 the helicopter?

MR. HOLBROOK: No.

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MR. LAWRENCE: Why not?

MR. HOLBROOK: We didn't -- I don't know. We've never had one.

MR. LAWRENCE: Let me move to the helicopter. How are you doing by the way? Do you need water or anything? Do you need a break? Are you doing okay?

MR. HOLBROOK: I'm good.

MR. GENTRY: I just need one second to shoot one email. And I apologize because something on this new phone was --

MR. LAWRENCE: We're going to stop tape.

MR. GENTRY: Just going to be one second and I'll be done.

(Off the record.)

(On the record.)

BY MR. LAWRENCE:

- Q. We're back on record. I want to shift over, Mike, to talk about the helicopter itself. How did you come to acquire 98 Fox?
- 18 A. We bid the firefighting contract for the state of West

19 Virginia and we got it. And we didn't have a helicopter. So we

20 went to San Joaquin Helicopters in California. Inspect out 98

21 Fox. And I sent Jeff and, at that time, Joe Altider (ph.), who

was a guy that was actually our chief pilot, out there to get it

23 | and bring it back.

And we did the firefighting with it for about 18 years. Then the season changed and they wouldn't fly us enough to actually pay

- for the day-to-day maintenance and the insurance that they required and everything. So we had to drop the contract. And we
- 3 dropped the contract. Put it in experimental exhibition just to
- 4 do fairs and festivals with it.
- 5 Q. That answers one of my questions down the road, as well. Who
- 6 is Dr. Gordon Prescott (ph.)?
- $7 \parallel A$. He is the gentleman that purchased the helicopter for us.
- 8 Q. What is your relationship with him and how did he buy it for
- 9 you? Was he part of MARPAT or anything or --
- 10 A. No, he's never been part of MARPAT. At that time, he was
- 11 actually one of our helicopter students. And we told him we
- 12 needed -- we want to do the bid for the firefighting. And he
- 13 | said, okay, find us a helicopter. And we did. He's a good --
- 14 he's just a good friend.
- 15 | O. Good.
- 16 A. Really good friend.
- 17 Q. Did he have any role in the operation of the helicopter?
- 18 A. Never has.
- 19 Q. I know you've got the agent of service documentation with the
- 20 | FAA. I just didn't know if he had any input on how it was done.
- 21 He just purchased it?
- 22 | A. Yeah.
- 23 Q. Got it. Was it insured?
- 24 A. No. Not at this time.
- 25 || Q. Not at this time. So was it ever insured?

- When it was doing the firefighting for the state. Yes. Α.
- 2 Yeah. Ο.

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- 3 They required \$5 million insurance on it. Liability on it.
- 4 So when it wasn't experimental, when it was in restricted
- 5 category, it was --
- Restricted. 6 Α.
- 7 -- insured?
- 8 Yes, sir. Α.
- 9 Yeah. So you answered that question on why you moved it from
- restricted to experimental. That was back in 2014. Correct? 10
- We moved it a couple times. In and out. Restricted and
- 12 experimental. After the fire season. Then we were doing --
- 14 moved it several times. I think maybe two or three times.

wanting to do some fairs and festivals and stuff with it. We had

- 15 when the season changed and they didn't fly us enough to pay for
- 16 anything, we decided to quit. And we just put it in experimental
- 17 permanently. And that may have been '14. I'm not real sure.
- 18 Yeah, I've got -- we've got the documents (indiscernible) --
- 19 Dates and times elude me.
- 20 No, that's okay. I meant to ask this earlier about -- you
- 21 said you've done this for seven years, about seven years, this
- 22 type of event for out at Logan. Has the helicopter done any other
- 23 type of events? I think there was a Run for the Wall or --
- 24 Yeah, we --
- 25 -- some others?

- A. We usually do the Run for the Wall every year.
- $2 \parallel Q$. What is the Run for the Wall?
- $3 \mid\mid A$. That's the -- where the motorcycles leave California and come
- $4 \parallel$ across country and go to the Vietnam Veterans Wall in Washington,
- 5 | D.C.

- 6 0. What is 98 Foxtrot do?
- 7 A. We just go up and do a display for them because most of them
- 8 are -- or 90 percent of them are Vietnam veterans. And we go up
- 9 and escort them as the motorcycles are coming from Kentucky into
- 10 West Virginia. Usually into Hurricane or -- yeah, Hurricane most
- 11 of the time. We would go and pick them up. Bring them to down to
- 12 (indiscernible) and park and let them look at the helicopter and
- 13 | just -- a lot of them get -- sit there and cry.
- 14 Q. That would be at Logan though?
- 15 | A. No.
- 16 Q. Where would that be?
- 17 A. That was at Hurricane.
- 18 0. Hurricane.
- 19 A. Hurricane, West Virginia. Yes
- 20 | Q. Who typically flew those?
- 21 A. We've had various pilots fly those. The last one we went to
- 22 was Ryan Craddock.
- 23 Q. Sorry. I didn't mean to get off tangent. Something I meant
- 24 to ask earlier. Let me ask a little bit about the experimental
- 25 | exhibition operating limitations since it was in experimental.

- And you're familiar with the limitations that this aircraft had while it was in experimental.
- 3 A. Yes, sir.
- $4 \parallel$ Q. Correct. Let me pull this up. I just want to go through a
- 5 couple of these things just to make sure I'm clear on this. The
- 6 home base was Logan. Correct?
- 7 | A. Yes, sir.
- 8 Q. Logan Airport. And who was the person responsible for the
- 9 operation and maintenance of the aircraft?
- 10 A. Myself.
- 11 | Q. Then another requirement was a list of events at which the
- 12 aircraft will be exhibited. And did you have a list or was the
- 13 | FAA provided a list of where this was going to be exhibited?
- 14 A. They were provided a list I think August last year. It was a
- 15 yearly thing. They had to do it every year.
- 16 $\|Q$. In August of last year?
- 17 A. I'm thinking that's what it -- the last one.
- 18 0. Did it include 2022 events?
- 19 A. It would have. If any were scheduled at that time.
- 20 Q. Was this scheduled at that time?
- 21 A. The reunion?
- 22 | Q. Yeah.
- 23 | A. The reunion was not required to be listed. Because it's
- 24 | homebase. I mean, the aircraft is on exhibit 24/7 at homebase.
- 25 | So there's no requirement to -- for any away exhibit.

- Q. The requirements on the experimental limitations was only if it was exhibited someplace other than the homebase.
- $3 \parallel A$. Yes.

or whatever.

- $4 \parallel Q$. Got it. Makes --
- A. And I think that's within a 15-mile radius. I'm not real sure. But I'm -- that's my thoughts. Because the aircraft was allowed to be flown within that radius at any time. For training
- 9 Q. I'm -- I apologize if you answered this earlier but let me
 10 just ask it again. During the safety briefing -- correction.
- During the briefing to passengers when they would get on, were they notified that the helicopter was an experimental category?
- 13 A. Yes.

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- 15 A. Whoever at that time would be loading the helicopter or
- helping to make sure they were buckled in and everybody was seated and in their seats.
- 18 0. So a volunteer?
- 19 A. Yes. And that was several people throughout the days. And
- 20 it -- in big bright letters over the door it says experimental on
- 21 the helicopter.
- 22 | Q. Right.

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- A. And people would ask why it was experimental. We would have
- 24 | to explain it.
 - \parallel Q. I bet that was difficult, too, on aviation people.

- A. Well, it's just because the FAA in its infinite wisdom doesn't think the military maintain helicopters.
- MR. LAWRENCE: Well, that's a perfect segue for me since you're probably tired of hearing me for right now. You know, I don't have anymore questions unless Todd has got --
- MR. GENTRY: I got just a couple. If that's okay.
 - MR. LAWRENCE: Great. I'll pass it off Todd.
- 8 MR. GENTRY: Are you doing all right? You need water or 9 anything? You good? Because you haven't stopped --
- MR. HOLBROOK: Don't start playing me. Come on. Ask your questions.
- 12 MR. GENTRY: Well, no.
- MR. HOLBROOK: Ask your questions.
- 14 BY MR. GENTRY:

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- Q. I noticed on the routes there that you had -- I'm definitely playing you -- 15 minutes. Is there a 30-minute route, as well,
- 17 or are these the two that were supposed to be flown?
- 18 $\mid A$. These are the two routes that we use in the --
- 19 Q. So if a guy --
- 20 | A. They would fly this route twice.
- 21 | Q. That's what I was going to ask.
- 22 A. For 30 minutes.
- Q. Because if a guy says I need -- pay for 30 minutes, I want 30
- 24 | minutes (indiscernible).
- 25 | A. Yeah, yeah. They would just -- if they didn't have to come

- 3 | Q. Was there a different -- is there a different five-minute
- 4 | flight thing for -- if a guy says I'm paying for fuel for 30
- 5 minutes, I'm not going to do a five-minute flight.
- 6 | A. Well --
- 7 | Q. What made it the decision between this one and that one, I
- 8 guess, is my question. Was there a schedule that they needed to
- 9 keep?
- 10 A. No, it depended on if you had people waiting that wanted to
- 11 | ride the helicopter.
- 12 0. So if there was a line --
- 13 | A. Yeah.
- 14 Q. -- they said, we need to get them back.
- 15 A. Exactly.
- 16 Q. Turn around.
- 17 A. Yeah. And that was the only reason to differentiate between
- 18 | the routes.
- 19 Q. I mean, I'm just trying to ask. But if the guy has 30
- 20 minutes, is he going to ride that thing multiple times?
- 21 A. Yes.
- 22 \ Q. So the guy in the front right seat would stay there while
- 23 they load --
- 24 A. Yes.
- 25 \mathbb{Q} . -- different people in the back.

A. Right.

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- 2 Q. I got you. Do you remember who was doing the loading in the
- 3 | back during the accident flight?
- 4 A. Ryan Craddock.
- $5 \parallel Q$. Ryan. He seemed like he was doing a lot of it that day.
- 6 A. Yeah.
- 7 \mathbb{Q} . For the Run for the Wall and the fairs and festivals and all
- 8 those things, did you guys provide rides for those, as well?
- 9 | A. No.
- 10 Q. Nobody on the biking thing --
- 11 A. No.
- 12 Q. -- could say, I want to go for a ride?
- 13 A. No. That was strictly -- escort and the static display.
- 14 | Q. I got you. Where did -- I'm not familiar with that part
- 15 of --
- 16 A. We did the rides off our home airport there.
- 17 Q. I'm not familiar with where that is. Where is the place
- 18 where you would land for the ride -- for the Ride for the Wall
- 19 guys? So if you put it on static display --
- 20 | A. The Hurricane Wave Pool Park. It was a --
- 21 | Q. That's why I didn't --
- 22 A. There's a park in Hurricane that they would clear out for us
- 23 | and --
- 24 MR. LAWRENCE: 64 West off of Hurricane (indiscernible).
- $25 \parallel Q$. I'm just not familiar with it. That's why I was wondering

- 1 where that is. And then the bikers would pull into the park?
- $2 \mid A$. Then park all around the helicopter and --
 - Q. Got you. Got you.
- $4 \parallel A$. You know, there were 7 or 800 bikes every year.
- 5 Q. Actually, it sounds pretty neat.
- 6 A. Oh, it was great. It was great.
- 7 Q. I think that's the only questions I have because you answered
- 8 most of them earlier. Just -- when the airplane -- or aircraft
- 9 was moved in -- out of restricted to the experimental exhibition,
- 10 is that the time when they stopped insurance requirements or
- 11 paying for the insurance on it? Is that -- do you remember when?
- 12 A. I don't remember when the insurance dropped off of it. But
- 13 | it was probably around that time.
- 14 0. Yeah.

- 15 A. I'm not real sure.
- MR. GENTRY: Sure. That's the only thing I have, I think,
- 17 Dave.
- 18 BY MR. LAWRENCE:
- 19 Q. Let me just follow up on something. I had some questions and
- 20 | I forgot. About the routes. Who did recon on these routes?
- 21 A. Michael Daughtry.
- 22 | Q. Michael did it. When did he do them?
- 23 A. Probably three years ago. Same routes every year.
- Q. There wasn't recon done prior to -- on either of these two
- 25 routes?

- A. Oh, yes.
- 2 | Q. Prior to this.
- $3 \mid \mid A$. The day of the qualifying. The pilots were getting familiar.
- $4 \mid \mid$ Yeah, they -- like I said before, they flew the routes. Yeah.
- 5 Q. Who created these in the first place? I mean, who -- the
- 6 routing that you're going to take and then -- not who did the
- 7 | recon but who decided this is the route that I want these guys to
- 8 | take?

- 9 A. John Nagle.
- 10 Q. John Nagle did it.
- 11 A. Michael Daughtry.
- 12 Q. Was there any altitude or speed limitations on these routes?
- 13 A. Depending on if it had the doors open or not. Doors open was
- 14 | 70 knots. Doors closed, there was no restrictions.
- MR. GENTRY: So the doors were open on the day of the
- 16 | accident?
- 17 MR. HOLBROOK: As far as I know. Yes. It was --
- 18 MR. GENTRY: I remember Ryan I think said they
- 19 (indiscernible) --
- 20 MR. HOLBROOK: It was really hot that day.
- 21 MR. GENTRY: -- that day.
- 22 UNIDENTIFIED SPEAKER: Wait, wait, wait. Just don't talk
- 23 over each other. He asked the question. You've answered the
- 24 question.
- 25 MR. GENTRY: The doors were pinned open that day?

MR. HOLBROOK: As far as I know. I'm not real sure. The accident site is over here.

BY MR. LAWRENCE:

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- Q. Right. Any thoughts of why he was off route?
- 5 A. I have no idea. I don't have any idea at all.

an integral role. How did you meet John Nagle?

- Q. I don't want to skip over this. Let me ask you a few more questions or a few questions about Mr. Nagle because his name keeps coming up, obviously, on -- with the accident. But he had
- 10 A. John Nagle is a resident of Gilbert, West Virginia. Just
 11 across the mountain from where we are in Logan. In Mingo County.
- 12 And he and his brother have been in and around the airport for
- 13 years and years and years. And John moved to Austin, Texas. And
- 14 we had been keeping in touch. And he actually flew a gyrocopter
- 15 up here one year from Austin, Texas. In a gyro. And come up for
- 16 the event. But he and his family -- I've known them 15, 20 years.
- Q. Do you know how much experience he had in the Huey before he started flying with you guys?
- 19 A. Before he started flying with us?
- 20 0. Yeah.
- 21 A. Far as I know, he had never flown a Huey before he started 22 flying with us.
- 23 || Q. So this was his first experience flying the Huey?
- 24 A. Oh, no. This was his fourth year.
- 25 || Q. Oh, not today. I'm sorry. Not for the accident day.

- Working with you and doing these for four years were -- was the only time he flew the Huey.
- $3 \parallel A$. As far as I know.
- $4 \parallel Q$. Yeah. Any training -- as far as you know, any training he
- 5 received in his background on the Huey occurred during prep for
- 6 these type of events with you guys. Correct?
- 7 A. Far as I know.
- 8 Q. Did you actually know how much flight time he had or how much
- 9 experience in other aircraft?
- 10 A. I have no idea. I don't know.
- 11 | Q. Did he ever talk to you about any -- his experience flying or
- 12 how often he flew when he was down in Texas?
- 13 A. No. Not really.
- 14 Q. Did you ever fly with him?
- 15 A. Yes.
- 16 Q. When was the last time?
- 17 A. Three days before the accident.
- 18 0. What was that for?
- 19 || A. Just to fly.
- 20 Q. Just to go fly.
- 21 A. Um-hum.
- 22 | Q. How would you characterize his flying?
- 23 | A. Great.
- 24 Q. Tell me about that. Why great?
- 25 A. He was an exceptional helicopter pilot. He was really a good

stick. 1 2 MR. LAWRENCE: Todd, do you have anything? 3 MR. GENTRY: No. MR. LAWRENCE: I don't have anything more, Mike. 4 What I want 5 to make sure is that you have an opportunity to -- maybe if 6 there's something that Todd and I did not ask you that you make 7 sure that you want to have on record or you want to clarify or 8 anything like that. Feel free to. 9 As far as I know, I have no clarifications. MR. HOLBROOK: 10 MR. LAWRENCE: Right. MR. HOLBROOK: I would like for the NTSB and the FAA to jump 11 12 out there and see if you can't get wires marked. It's a straight-13 up wire strike that happened. And wires need to be marked. Wires 14 are helicopter killers. 15 Anything else? MR. LAWRENCE: 16 MR. HOLBROOK: That's all I have. 17 MR. LAWRENCE: I appreciate it. 18 (Whereupon, the interview was concluded.) 19 20 21 22 23 24

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL BELL UH-1B HELICOPTER ACCIDENT

IN AMHERSTDALE, WEST VIRGINIA

ON JUNE 22, 2022

Interview of Michael Holbrook

ACCIDENT NO.: ERA22FA279

PLACE: Logan, West Virginia

DATE: July 28, 2022

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.

Katie Leach Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FATAL BELL UH-1B HELICOPTER

Accident No.: ERA22FA279 ACCIDENT IN AMHERSTDALE,

WEST VIRGINIA ON JUNE 22, 2022 *

Interview of: JEFF HOLBROOK, Mechanic

MARPAT Aviation

Logan, West Virginia

Thursday, July 28, 2022

APPEARANCES:

DAVID LAWRENCE, Operations Investigator National Transportation Safety Board

TODD GENTRY, Accident Investigator Federal Aviation Administration

I N D E X

<u>ITEM</u>	PAGE
Interview of Jeff Holbrook:	
By Mr. Lawrence	б
By Mr. Gentry	14

INTERVIEW

MR. LAWRENCE: Let's go ahead and get started. My name, for the record, is David Lawrence. I'm an operations investigator with the NTSB. We're here for -- to investigate the accident of 98 Foxtrot. On behalf of the NTSB and I'm sure with the FAA, as well, our condolences for your loss. And I'm really sorry we're meeting under these circumstances.

But I want to emphasize that our role here is safety and trying to find out what happened so we can prevent it from happening again. Now, as our investigations -- all our investigations are -- we use what's called a party system. We bring in experts to assist us.

In this particular case, we have the FAA who is party to all our investigations by statute. And on my particular group, ops —the ops group, it's just Todd and myself. So it's just the two of us that are on the ops group right now. And that's what we're looking at.

And I'll let Todd explain his role that the FAA has in our investigations.

MR. GENTRY: Is it okay if I call you Jeff?

MR. HOLBROOK: Sure.

MR. GENTRY: Thanks, Jeff. My name is Todd Gentry. I'm with the FAA. I'm a senior accident investigator for the FAA. So in that role, I work with the NTSB directly on a lot of accidents to try to help the FAA see what we can do to make things better. So

they write recommendations and we write policy. So we're trying to make sure we work together at all times. So that's my role here.

Like Dave said earlier, it has -- I have zero to do with enforcement actions or anything. I just care about safety. That's really what I care about. And finding out what we can do as a team to make things better. Not happen -- like accidents again like this. So I want you to be comfortable and at ease. Feel free to talk because nothing you say can -- we can -- can't use anything against you for any enforcement actions. That's not what I'm here for.

MR. LAWRENCE: During our investigations, you're afforded a representative of your choice. Is Mr. Bailey who you chose to sit in with you today?

MR. HOLBROOK: Yes.

MR. LAWRENCE: Great. I'm going to be -- I'll ask just a few questions. I don't think this is going to take long, Jeff. And I will be taking some notes. And I'll be typing some things down. So I apologize if I don't make eye contact with you. Don't read into anything. I'm just -- I'm old school and I kind of type with my fingers like this. I'll try and stay up with you.

If we ask you a question that you don't really understand, please stop us and ask us to clarify it. And if we get an answer, we just want more clarity, we'll ask.

Also, just so you know, I don't know is a perfectly

- 1 | acceptable answer. So if you don't know the answer, just say I 2 | don't know. Okay?
- 3 MR. HOLBROOK: All right.
- 4 MR. LAWRENCE: Any questions about the process?
- 5 MR. HOLBROOK: No, I don't think so. Yeah.
- 6 INTERVIEW OF JEFF HOLBROOK
- 7 BY MR. LAWRENCE:
- 8 Q. Great. Let's get started with the easy ones. Let me get
- 9 your full name and age, please.
- 10 A. Jeffery, J-e-f-f-r-e-y. Michael Holbrook.
- 11 Q. How old are you?
- 12 A. Forty-seven.
- 13 Q. What's your title at MARPAT?
- 14 A. Mechanic, chief inspector.
- 15 Q. If you could speak up a little bit.
- 16 A. Mechanic. A&P mechanic.
- 17 Q. A&P mechanic. Great. At MARPAT, what are your roles and
- 18 | responsibilities?
- 19 A. Pretty much just -- I do all the inspections and maintenance
- 20 on the aircraft that come in and out. And --
- 21 0. Would that include 98 Foxtrot?
- 22 A. Yes, it would.
- 23 | Q. Just kind of -- Jeff, if you would, just give me a very brief
- 24 | like cliff notes version of your background. What led you here to
- 25 | MARPAT?

- 1 A. Well, it's my dad's company. And he got into wanting to fly
- 2 helicopters and I was hanging around there when he was trying to
- 3 | learn. And he had a few other aircraft before this one. And I
- 4 | flew a little bit (indiscernible) wasn't really in the flying part
- 5 of it. I kind of like turning wrenches and the mechanical portion
- 6 of it. I started working with some other mechanics that he had
- 7 there in the past. And got enough OJT to get a certificate.
- 8 0. When was that?
- 9 A. 2009. I'm pretty sure it was 2009. I'd have to look at to
- 10 be 100 percent.
- 11 | Q. If you could speak up a little bit. Yeah. So about 2009?
- 12 A. Yeah.
- 13 Q. Great. From 2009 to present, have you been employed with
- 14 MARPAT? I mean, you've been employed the entire time here?
- 15 A. Yes.
- 16 \parallel Q. Any other jobs?
- 17 A. I did leave briefly in 2016, I think. I went to Myrtle Beach
- 18 and worked the oceanfront helicopters for a couple months. Then
- 19 came back.
- 20 Q. Great. Did you ever get your pilot's license?
- 21 | A. No.
- 22 | Q. But you took lessons, flying lessons.
- 23 A. I took a few on and off.
- 24 O. Didn't like it. Huh?
- 25 A. No, not really. Had a little issues with motion sickness

- 1 | occasionally.
- 2 Q. That would do it. That would do it. Give me just a general
- 3 | idea -- if I was walking in off the street and saw the sign MARPAT
- 4 Aviation and wanted to know about what is MARPAT Aviation, what
- 5 would you say?
- 6 A. We're an aircraft maintenance facility. Do inspections,
- 7 repairs.
- 8 0. Busy?
- 9 A. Excuse me?
- 10 Q. Are -- have you been busy?
- 11 A. It comes and goes but lately, yes.
- 12 Q. Other than yourself, are there any other employees at MARPAT?
- 13 A. My dad.
- 14 0. So it's just dad and son?
- 15 | A. Yeah.
- 16 | Q. Any part-time help to assist you?
- 17 A. We got some guys that come in occasionally and help out.
- 18 Just like remove inspection panels and stuff like that. But
- 19 | nothing steady. Part-time kind of stuff.
- 20 | Q. Typical workload.
- 21 A. I usually just do one aircraft at a time. We've been
- 22 | fortunate enough to -- that's just the way they've been working
- 23 out. We haven't had a bunch piled in there at once. It's usually
- 24 one aircraft, depending on what it is, up to three to four days.
- 25 Q. All general aviation?

A. Yeah.

1

- 2 Q. So I want to ask you a little bit about the event itself that
- 3 was going on at the time that MARPAT was hosting. Explain what
- 4 | that event was.
- 5 A. It was basically a Vietnam veteran's reunion.
- 6 Q. Were you there?
- 7 | A. I was.
- 8 0. Great. Tell me what the helicopter was doing there. I mean,
- 9 I understand it's a Vietnam vet reunion but what was the role of
- 10 | the helicopter?
- 11 A. Let old veterans get in it and fly.
- 12 Q. What was your role that -- those days? Or let's limit it to
- 13 | the day of the accident. What was your role?
- 14 A. Just to be present in case anything mechanical needed to be
- 15 done. Any fluids added or -- did the daily inspection in the
- 16 morning and usually a post-flight in the evening when they shut
- 17 down.
- 18 Q. When the vets started coming in -- or you mentioned that did
- 19 | an inspection prior to all this going on?
- $20 \parallel A$. Each day.
- 21 | Q. Each day. Tell me what was inspected.
- 22 | A. Basically, just a walk-around for all the fluid levels.
- 23 Climb up and check the rotor head, all the rotating parts. Make
- 24 | sure they had nuts and bolts and safeties. Make sure there are no
- 25 puddles of oil or anything underneath.

- Q. That was each day you would do that?
- 2 | A. Yes.

- 3 | Q. Did you do a post-flight?
- $4 \mid \mid A$. Yeah. Pretty much the same thing. Just the walk-around.
- 5 Q. How much experience do you have with helicopters? How often
- 6 do you get those coming in?
- 7 | A. Civilian helicopters? Not --
- 8 Q. Yes.
- 9 A. Very rare actually. There's one guy on the field that has
- 10 | another helicopter. And he's about the only one that -- like a
- 11 Part 91 operator who is flying a helicopter right now. Around
- 12 here anyway. But --
- 13 Q. Anybody else? I'm sorry.
- 14 $\mid A$. I used to work for EVAC. Air ambulance company. That's
- 15 where I got most of my experience, I guess.
- 16 Q. Most of your experience --
- 17 A. On helicopters.
- 18 Q. Thank you. So you were just standing by. Did you
- 19 participate in any of the passenger loading or taking names of
- 20 | people or anything like that?
- 21 | A. No, I didn't.
- 22 | Q. I understand the helicopter was operated continuously and
- 23 passengers were hot loaded so the pilots had the motor going the
- 24 | entire time. Right?
- 25 MR. GENTRY: I don't think you asked that before.

- MR. LAWRENCE: I understand from other interviews.
- 2 MR. GENTRY: Yeah. But not through this interview.
- 3 MR. LAWRENCE: Okay.
- 4 MR. GENTRY: It's nothing you established here.
- 5 BY MR. LAWRENCE:
- 6 Q. Did the helicopter operate continuously during the course of the day?
- 8 A. As far as I know.
- $9 \mid Q$. And why was that?
- 10 A. Just so you wouldn't have to start up and shut down all the
- 11 time. It's -- you got more chances for something to malfunction
- 12 when you shut down and start up. Electrical loads and starters
- 13 going out, batteries going dead.
- Q. Do you recall how many people were hoping with the loading
- 15 and unloading of the helicopter while it was operating?
- 16 A. I don't. There was several people out there. And they would
- 17 just switch out. Somebody need a break, somebody else would step
- 18 | up.

- 19 | Q. But you didn't --
- 20 | A. No.
- 21 | Q. -- participate in that. Did any of the -- do you recall how
- 22 | many pilots were flying and shifting out during the day of the
- 23 | accident?
- 24 A. No, I don't know.
- 25 | Q. Did any of the pilots come to you with any mechanical

- concerns or discrepancies with the helicopter?
- 2 | A. No.

- $3 \mid Q$. At the end of the first day, since this was the second day
- 4 that the accident happened, at the end of the first day, did you
- 5 notice any discrepancies or see anything or was there anything of
- 6 interest to you or were there a need for fluid replacement or
- 7 replenishment or anything like that with the helicopter?
- 8 A. No. Not that I can remember. I didn't do anything with
- 9 maintenance on it.
- 10 0. No maintenance on it?
- 11 A. No.
- 12 0. No -- didn't have to add oil?
- 13 A. I don't think so. Not that day.
- $14 \parallel Q$. Do you recall if the helicopter had a current annual
- 15 | inspection?
- 16 | A. It did.
- 17 0. When was that?
- 18 A. Oh, I'd have to have the records. So I don't know. It
- 19 was --
- 20 | Q. Just -- yeah, yeah.
- 21 A. It was a couple months before the event. April. April, I
- 22 think. But I'm not sure.
- 23 Q. On the first and the second day, how many total flights do
- 24 you recall seeing the helicopter operate?
- 25 MR. GENTRY: If you know.

- 1 A. Honestly, I don't know. I tried to stay in the air
- 2 conditioning those days.
- 3 0. It was kind of hot?
- 4 A. Yeah.
- 5 Q. It was hot that day?
- 6 A. It was pretty warm.
- 7 Q. Did you know the pilot, Mr. Nagle?
- 8 A. I did.
- 9 Q. Tell me how you knew him.
- 10 A. Just from this event the previous years. I think I met him
- 11 | two years ago.
- 12 || Q. Did you ever go flying with him?
- 13 A. He had a gyrocopter I rode in with him one time.
- 14 \parallel Q. Not just for Mr. Nagle, but did you ever ride in 98 Foxtrot
- 15 with any of these other pilots during these two days of this
- 16 | event?
- 17 A. No.
- 18 \mathbb{Q} . No. How often did you get a chance to ride in it?
- 19 A. Usually after annual, they would take it out for check flight
- 20 | just to make sure we didn't have any leaks or any problems.
- 21 0. Who is we?
- 22 A. Ryan Craddock.
- 23 \parallel Q. Sorry. I'm going through to make sure I have all of these.
- 24 And I apologize. I'm not a mechanic. But so let me ask, is there
- 25 | anything special from a mechanic's side as far as the maintenance

- of the helicopter when it's operated under an experimental
- 2 exhibition operation limitation?
- A. No. To my knowledge, that's just the way it's certified because it's an old warbird.
- 5 MR. LAWRENCE: Right. Was the -- no, you wouldn't know that.
- 6 Hang on. I don't think I have much -- any more questions. Todd,
- 7 do you have any --
- 8 MR. GENTRY: Yeah. I got a couple if that's okay.
- 9 BY MR. GENTRY:
- 10 Q. Did you fuel the aircraft during the event, the two days that
- 11 | it was flying this --
- 12 A. I didn't personally.
- 13 Q. No. You didn't?
- 14 | A. No.
- 15 Q. Do you know who did?
- 16 A. There was a couple of guys that were there helping. One was
- 17 | Jerry Morgan. And -- who else was there. I can't remember the
- 18 other guy's name.
- 19 Q. That's fine. And on your pre-flight checks, I guess, to -- I
- 20 don't know what else to call them. But the --
- 21 | A. Yeah.
- 22 Q. -- morning checks.
- 23 A. Or daily.
- 24 Q. Yeah, the daily and morning.
- 25 | A. Yeah.

- Q. And you would check the fluids you said. But if you had to add oil and you said you didn't have to add but --
 - A. I don't think I did.

- 4 Q. Right. That's fine. If you did though, where would you
- 5 document that? Where did you write that down that hey, I added a
- 6 certain amount of oil to the engine?
- 7 A. I've never documented that at all. I mean, that's something
- 8 that pilots can do. And they don't document it in maintenance or
- 9 anything like that.
- 10 | Q. That's a great segue because did they have a form or a binder
- 11 or something that they would write discrepancies on or anything
- 12 | they noticed? Or if they put oil in it --
- 13 | A. No, if --
- 14 | Q. -- did they have something (indiscernible) --
- 15 A. If they --
- 16 | 0. -- wrote that down?
- 17 | A. -- noticed anything wrong, they would just come to me
- 18 directly.
- 19 | Q. So they didn't have any forms that they would fill out?
- 20 A. No.
- 21 Q. How long does it take to do an annual on 98 Foxtrot just
- 22 | roughly. I mean, I'm not looking for exact minutes but --
- 23 A. About five days.
- 24 | Q. Is it just you doing the annual?
- 25 | A. No. I have a couple of the guys that help me.

- Q. So five days, a couple of the guys. That's a lot.
- 2 A. Yeah.

- $3 \parallel Q$. Did you -- do you -- and I don't know how to ask this so if I
- 4 need to clarify, please tell me. But do you have maintenance
- 5 requirements for the engine itself for the T-53 that you have to
- 6 | follow? Is there anything specific to that engine that you have
- $7 \parallel$ to follow just like on another airplane where it's specific to a
- 8 different engine? Is there something for this one that you --
- 9 that's written that says when you do a check, you do these things?
- 10 A. Well, it would be in the maintenance manual. Yeah
- 11 | Q. So for the Huey, the maintenance manual for the Huey?
- 12 A. No, the engine --
- 13 Q. For the engine.
- 14 A. There would be two separate manuals. One for the airframe
- 15 and one for the engine.
- 16 Q. Got you. Does the engine have different inspection
- 17 | requirements than the annual inspection?
- 18 A. It's all together basically.
- 19 Q. It's all one time or all the same?
- 20 | A. Yep.
- 21 Q. Got you. Excellent. Did Mr. Nagle ever come out to Logan to
- 22 | fly the Huey outside the event, this event, or these events?
- 23 A. Not that I know of.
- 24 MR. GENTRY: That's all I have. Thank you.
- 25 MR. LAWRENCE: That's all I have, too. Anything you want to

share, Jeff, as one final thought since -- maybe we didn't ask you about but you want to make sure that we're aware of --MR. HOLBROOK: No, I don't think so. MR. LAWRENCE: I appreciate it. (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 BELL UH-1B HELICOPTER ACCIDENT

IN AMHERSTDALE, WEST VIRGINIA

ON JUNE 22, 2022

Interview of Jeff Holbrook

ACCIDENT NO.: ERA22FA279

PLACE: Logan, West Virginia

DATE: July 28, 2022

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.



Katie Leach Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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FATAL BELL UH-1B HELICOPTER *

ACCIDENT IN AMHERSTDALE, * Accident No.: ERA22FA297

WEST VIRGINIA ON JUNE 22, 2022 *

* * * * * * * * * * * * * * * * * *

Interview of: ROBERT CURTIS, Witness

Private Pilot

Via telephone

Wednesday, September 7, 2022

APPEARANCES:

DAVID LAWRENCE, Investigator National Transportation Safety Board

TODD GENTRY, Investigator Federal Aviation Administration

I N D E X

ITEM				PAGE
Interview	of Robert Curtis:			
	By Mr.	Lawrence		5,
	By Mr.	Gentry		29
	By Mr.	Lawrence		31

INTERVIEW

MR. LAWRENCE: Okay. Good morning, Robert. My name is
David Lawrence with the NTSB, along with Todd Gentry with the FAA.

He's already explained his role in accident investigation and
assisting the NTSB in its investigation. I've already explained
my role in just trying to find out what caused the accident so we
can help prevent it again. Since we're going to be tape
recording, you're okay with us tape recording, correct?

MR. CURTIS: Oh, I'm sorry. Yes. Please, please. You have my permission to record.

MR. LAWRENCE: Okay. Did you have anybody else in the room or anybody you want to sit in with you, or do you just want to go by yourself?

MR. CURTIS: I'm sitting here all by myself.

MR. LAWRENCE: Okay. So, I'll be typing some notes, as well, just to make sure that we've got everything covered in case the tape breaks or something like that. If I ask you a question, Robert, that you don't understand, please ask me to repeat it. I'll do the same for you if there's an answer I just want some more clarity or something like that. This is not an effort to try and stump anybody. We're just trying to get information. So, whatever you can provide is really appreciated. And this is a very standard part of our investigation, is to talk to pilots who have operated the accident helicopter previous. Any questions about the process before we get started?

MR. CURTIS: No.

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- 2 MR. LAWRENCE: Okay.
- 3 MR. CURTIS: I do not.
- 4 MR. LAWRENCE: Great. Appreciate it.
 - INTERVIEW OF ROBERT CURTIS
- 6 BY MR. LAWRENCE:
- Q. Well, let me start off with a couple of easy questions. Let me get your full name and your age.
- 9 A. My full name is Robert Francis Curtis. I am 73.
- 10 | Q. Okay. And let me go through -- just want to -- for your
- 11 | background, before I ask you about your background, just want to
- 12 confirm that you currently hold a commercial pilot license with
- 13 rotorcraft helicopter and gyroplane instrument helicopter ratings;
- 14 | is that correct?
- 15 A. No, sir. Private pilot, single-engine land.
- 16 \parallel Q. Airplane single-engine land, exactly. Those were dated 2019.
- 17 | I see that you have a third class medical certificate of July of
- 18 2021 for must wear corrective lenses, is the limitation, correct?
- 19 A. Correct.
- 20 | Q. Great. Got that. If you could give me just kind of a very
- 21 | Cliff Notes brief background, what is your background in aviation
- 22 | in just a very condensed version?
- 23 A. My military aviation from 1969 to, well, my last flying
- 24 | assignment in the military was 1988. I was qualified on eight
- 25 different helicopters with the US Army, US Marine Corps, and the

British Royal Navy, starting with Bell 47s. I flew 7 models of the Huey, starting with the A and all the way up through the L. I've been flying this particular helicopter since 2016. I had a total of 171.1 hours in the November 98 Foxtrot (ph.). I was an instructor, flight instructor. I never taught (indiscernible). I have 1,000 of military instructor time in the H-13, the UH-1, the CH-47, and the CH-46. I never was a CFI. I have no desire to teach primary --

(Crosstalk)

- A. -- people how to fly helicopters. I started flying helicopters again after my retirement in 2016, when I decided to fly every helicopter I flew in the order I flew them. I got as far as the Huey. Chinooks are out of the question. Nobody'll let you fly a Chinook, so -- that's a basic background. I got gyro plane qualified in, I guess it was 1997, on the old Air and Space 18A, and I occasionally fly a gyro plane now. I can't afford to operate one, simply because of the insurance --
- 18 | O. Yeah.

- 19 A. -- on gyro planes.
- \parallel Q. True. So, you said -- that was really good, by the way.
- 21 Perfectly condensed, perfect background information. I appreciate
- 22 | it. So, your experience, you have, you said, 171.1 hours in 98
- 23 || Fox?
- $24 \parallel A$. 171.7. I went through and added up all my logbooks.
- 25 Q. .7. Okay. Since 2016, right?

A. Correct.

1

- 2 Q. Was that primarily during the summer reunions in
- 3 West Virginia that you operated it?
- $4 \mid A$. Yes, and also, we would fly to other events, one in
- 5 Bowling Green, Kentucky, one in Effingham, Illinois, one in
- 6 Mexico, Missouri. Let's see. One in -- two in Pennsylvania.
- 7 | Typically, those events were two or three days --
- 8 0. Yeah.
- 9 A. -- tops. But mostly, the flying was done at the reunions,
- 10 the annual reunions.
- 11 Q. Do you recall any flying since, just in general, since June
- 12 of last year? Not this year, but June of last year.
- 13 A. Well, we had the reunion --
- 14 0. Yeah.
- 15 A. -- last year.
- 16 Q. Other than the -- after the reunion -- in between the two
- 17 | reunions, did you do any flying in the 98 Foxtrot?
- 18 A. Hold on a second. I've got logbooks here. Yes, I think --
- 19 well, I think that was before the reunion. We went to Tennessee.
- 20 We did Hendersonville, Tennessee. We did an event. But I think
- 21 | that was before the reunion.
- 22 Q. Okay.
- 23 A. After the reunion, I didn't do any flying again until June of
- 24 | this year.
- 25 Q. Okay. So, between the reunion in the summer of last year and

- 1 the reunion this year, it was just that one-time event in
- 2 | Henderson [sic], Tennessee?
- 3 A. Hendersonville, Tennessee. Yeah, that was -- I'm looking at
- 4 my logbook now. That was actually before the reunion.
- 5 | 0. Okay.
- 6 A. Yeah, here it is.
- $7 \parallel Q$. Before the reunion in 2021?
- 8 A. Right.
- 9 0. Okay.
- 10 A. Right. It was actually before the reunion.
- 11 | Q. And the --
- 12 A. Yeah.
- 13 Q. And the reason why I ask is, you've done some flying in this,
- 14 but we don't have the logs, and we have a gap in time. And ADS-B,
- 15 we don't have data on ADS-B, so we don't know between -- we know a
- 16 | few flights, like the nitro thing, the run for the wall, and a
- 17 couple others, but there's a gap there that we don't have ADS-B.
- 18 So, we're just trying to find out if there are other --
- 19 A. Yeah, no.
- 20 | Q. -- flying.
- 21 A. After the reunion, I did not go back to West Virginia up
- 22 until June this year --
- 23 | Q. Okay.
- 24 A. -- to prep for the reunion.
- $25 \parallel Q$. Okay. Great. And kind of talk me through the reunion this

year. When you got there, what was your role in this whole reunion and the flying with 98 Fox?

- A. They call me the senior pilot, but that's purely an honorary title, since I have no say over who flies or anything else. So, it's strictly honorary. I think it has to do with age more than anything else. I insisted that everyone that is going to fly the aircraft have a refresher, a proper refresher, before they fly it, because it's not a routine to fly a Huey nowadays.
- 9 0. Right.

- A. So, the original idea was to do it on Monday. Let me get the date. Hold on just a second. The original idea was to do it on Monday the 20th of June, but everybody showed up on Sunday, so they went ahead. I wasn't there when they started doing the refreshers. I got there late. I was the last one to do a refresher. My idea was that everyone get 30 minutes of stick time, and the three landings and three takeoffs, proper three landings and three takeoffs, and get properly refreshed in flying a Huey. Huey's an easy aircraft to fly if you're a helicopter pilot. I don't know if you've ever flown one. They're -- it's like driving a Chevrolet, you might say. It's not -- you know, it doesn't require -- if you're a helicopter pilot.
- 22 | Q. Right.
 - A. If you're not a helicopter pilot, it's a whole different story. If you're a helicopter pilot, Hueys is easy to fly. I also insisted that everyone send a copy of their biannual flight

review, and their current medical, and their certificate so that everybody was completely legal as far as flying the aircraft.

Minimum, a private pilot. One guy has a CFI, but he was the only one. And I got there, and I did my refresher; and then, they asked me to go fly with another pilot for 30 minutes just so he could get some stick time. He wasn't one of the pilots that are acting as a, quote, unquote, safety pilot.

And then, on Monday, we started off with -- I insisted we have an all-pilots meeting, everybody be there. We had a safety briefing, we had a full-up safety briefing, and I did the briefing, and it lasted about 30 minutes. And wires were specifically briefed at that. We had them wear a map with the wires, the big wires. And we know, of course, the small wires were pretty much everywhere, but the big wires were all marked on sites and posted right there in the ready room, as it were. And then, jumped into flying. I flew every day for an hour and a half or so during the flight school, what, a total of 5.6 before the mishap.

This is no my first mishap of this type. In 1987 -- 88, rather -- no, it's '87, I'm on a six-month deployment with the Marine Corps. I wasn't in charge that year. We were flying in groups, and we had to set high-tension mines, and went through the operating area we were flying. They were specifically briefed. They were highlighted on everybody's charts and briefed before every flight. And damned if one of our Cobras didn't hit it at

about 150 knots and killed both pilots, and I had the sad duty of bringing their bodies back to the ship. So, it made me hyperaware of wires.

When I did that 30 minutes on Sunday, flying with the other pilot, I went to the area where we normally fly, and I did a high recon and a low recon to make sure there were no new wires that weren't there last year, and covered the entire area where we normally fly. I have a routine. I fly based on a 30-minute cycle. It takes 30 minutes to fly the route. And I flew that route to make sure there was nothing in there that wasn't there last year, and there wasn't. Everything was exactly as it was. The area was clear. We flew over the area where we normally flew.

I say, we. I, of course, was not with any of the other pilots when they were flying, so I have no idea exactly where they flew. You could see them flying, and generally, they flew in the same area I did. But when I flew, I had it down to a routine. It took exactly 30 minutes to give the pilot just, you know, to get flying in the right seat. They called -- they wanted to call the pilots, safety pilots. And at my briefing, I told them they were not safety pilots. They are the pilot. Whatever happens in that aircraft is their responsibility, not anybody else's responsibility, so be aware that whatever happens, you are responsible for it. I'm not. No one else is. You are.

Q. Right. On the briefing that you did, Robert, was anybody

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else -- other than the pilots that were there, anybody else there

- 1 assisting you in the briefing, or did you kind of run that shift?
- 2 A. Actually, my wife kind of recorded part of it. She didn't
- $3 \parallel \text{record}$ all of it, but she recorded the very first part of it on
- 4 her cell phone. And all the pilots that were flying were there.
- 5 One was going to come later, and he did, but I don't think he
- 6 actually flew the aircraft. But everyone else was there.
- 7 | Q. Is it possible if she could share that, you know, just the
- 8 little, short video, so we can get an idea of the pilots that were
- 9 | there?
- 10 A. She's not here, and --
- 11 0. That's fine.
- 12 A. -- I don't have her phone, but I would be happy to share
- 13 || it --
- 14 Q. Okay, great.
- 15 A. -- some other time.
- 16 \parallel Q. When you get a chance, that'd be really good.
- 17 A. I've got your email, so I can send it to your email.
- 18 \parallel Q. Do you recall the pilots that were there? I don't know if
- 19 | you know them all by name, but do you recall the pilots who were
- 20 | in that safety briefing?
- 21 A. I think I've got a picture of them, so -- and you can see it
- 22 | all in the picture.
- 23 \parallel Q. Yeah, if you can send it along with the picture, too. Let me
- 24 ask you specifically about Mr. Nagle, who was the accident pilot.
- 25 Did you do any kind of flying with him prior to the actual reunion

- getting started, like a safety flight or (indiscernible)?
- $2 \mid A$. I haven't spoken with John in a couple of years. I have
- 3 | flown with him several times before he was a safety pilot, before
- 4 he was a safety pilot. He came to the reunions. He was from that
- 5 | area, right.
- 6 Q. Yeah.

- 7 A. He's a local boy. And I had flown with him when he was just
- 8 | a right-seater. He wasn't -- I never flew with him when he was
- 9 acting as a pilot in command. And that was at least two years
- 10 ago. I mean, I haven't flown with him -- since he became a pilot
- 11 | in command, I haven't flown with him.
- 12 Q. Okay. So, just to be clear, this past reunion this year, you
- 13 did not do any kind of fan flight or anything with him? You
- 14 didn't fly with him?
- 15 A. I did not.
- 16 Q. Okay. Good. And in general, you told me about the 30-minute
- 17 doing routes, getting comfortable with the helicopter and such.
- 18 | Is there -- and I know you're not a CFI, so I don't want to call
- 19 it training training. It's getting familiar with the helicopter.
- 20 | But was auto rotations or emergency procedures ever presented to
- 21 | the guys prior to them starting the reunion?
- 22 A. All the rotations, all the rotations were not done. They
- 23 were not done.
- 24 | Q. Okay.
- 25 A. And as you're probably aware, there are far more crisis and

practice auto rotations than there are crashes and engine

2 failures --

1

- $3 \parallel Q$. Right.
- $4 \parallel A$. -- particularly in forward engine aircraft.
- 5 0. Right.
- 6 A. I had two full auto rotations in all the military
- 7 | helicopters. Both times, I reached reciprocating engine aircraft.
- 8 Didn't damage the aircraft either time. But my turbine engine
- 9 time, I've never had any kind of situation. I've got 5,000 hours
- 10 of turbine time. I never had an issue. So, no auto rotations
- 11 were practiced. Emergency procedures were discussed, but only in
- 12 | the most general terms. It wasn't the case that, you know, we're
- 13 going to discuss stuck tail rotor failures, and we're going to
- 14 discuss -- you know, we didn't do that. And the safety procedures
- 15 | that I emphasized were headwork safety procedures. Don't do
- 16 anything that scares anyone, period. Don't fly faster than
- 17 | 80 knots. It's an old helicopter. It gets very vibratey (ph.) if
- 18 you fly it any faster than that. And that sort of thing. No
- 19 | landings off the airfield. Landings on in the grass if the other
- 20 guy's going to land, and don't take your hands off the controls if
- 21 you let him. All hard surface landings will be done by the pilot
- 22 in command. That kind of safety.
- 23 | Q. Sure. Since you mentioned that, no off-airport landings and
- 24 such, are you aware if somebody, during the course of the day, had
- 25 | landed someplace else during one of the little tours?

- A. If they did, it was beyond me.
- Q. Okay.

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- 3 A. I never saw it. Because the areas where we operate are only
- 4 strip mined out areas, and it's clear, but you don't know what's
- 5 down there in the grass. You don't know who's -- you know, if
- 6 something's sticking up, or a big rock or something that's
- 7 partially hidden. So, no landings off the airfield. As far as I
- 8 know, no one did land off here.
- 9 | Q. Okay. Was there any type of minimum altitudes that were
- 10 | briefed to the pilots? I mean, were they allowed to go do contour
- 11 | flying or anything like that along these routes?
- 12 A. Okay. I can only tell you what I did, you know, and what I
- 13 showed the other pilots to do. My typical -- look, well, I'll run
- 14 you through a typical route, if you'd --
- 15 | 0. Sure.
- 16 A. -- if you'd like.
- 17 Q. Absolutely.
- 18 | A. I always do the first takeoff, always, period, just to make
- 19 sure that the aircraft is operating properly, because the other
- 20 guy may not know if something is wrong. So, I take off, fly
- 21 straight out, usually on runway 2-4 because of the prevailing
- 22 winds, climb up. The airfield elevation's 1660 feet. Climb up to
- 23 about 3,000 feet. Head down the valley toward the town of Logan
- $24 \parallel$ and fly well above the town. We're 2,000 feet above the town by
- 25 the time we get there. And the purpose of this is to let the

other guy get comfortable. I do the takeoff; and then, I will let him be on the controls and let him get comfortable. Most of these guys are old Vietnam pilots, but they haven't flown in many years.

So, let them get comfortable.

We fly over the town, then do a big turn over a ridgeline and head back out toward the airfield. There is a dirt roadway there that the Air Guard uses, and to get the low flying out of everybody's blood, I have the do a low pass down the runway. It's down a runway, so, you know --

Q. Yeah.

A. -- low, fast. Okay, great. Take it down to 50 feet. No problem. We come out of that; and then, I had them head back to the airfield. We were about 15 minutes into the flight now. Come back to the airfield, do a normal approach into the grassy area off of runway 2-4. If they want to try to hover, let them try to hover around a little bit there; and if they can actually do it, let them do some tunnel turns and, you know, things like that. And then, do a normal traffic pattern back around, climb up to 2,100 feet, keeping clear of any possible (indiscernible) traffic over the south side of the field, and keeping in mind the medevac people that keep the Jet Ranger down at the other end of the airfield there. Come back around.

And then, if we're going to change passenger seats, passengers. We go back out. And there are -- I had three areas. One is a -- we called it a confined area, but it's not confined.

It's open. It's strip-mined out and reclaimed area. No houses, no nothing around it, no wires, no anything. And we'll approach in there. Right next to it is a ridgeline that's strip mined out. It's level on the top, and it's a beautiful spot to practice a ridgeline approach. And, of course, I run the controls with them the whole time. They come back around to do a ridgeline approach in there. If they're doing really well, there's another area that's sort of a pinnacle that we go to, really big pinnacle. All these areas have great escape routes if anything goes wrong, and they have areas to do all the rotations, too, should the engine decide to quit. And then, we'll come up on 30 minutes, and we head back to the airfield for a pilot change.

Coming back into the airfield, they call it the mark pad approach (ph.). You may have heard of that. We're just flying down the valley back toward the airfield on the north side of the field. Not flying over the houses; flying over the ridgeline. The houses are 500, 600 feet below you. Then, turn up by the Newsom Lumberyard (ph.), do a hard left turn at the lumberyard, and find the road back up to the airfield. No houses on it, so --it's a coal mine on one side. And at that point. You'll get low. You'll be below the ridgeline. And as you come up to the airfield, of course, the road gets closer to you. Then, you turn into the airfield, and you land. And everybody kind of enjoys it, but it's really a nothing approach. If you're a pilot, you wouldn't be particularly impressed with it. But people not used

to flying helicopters think it's interesting.

Most of the time, the doors are closed in the helicopter.

Sometimes, if it's really hot, we would fly with the doors pinned open. But, you know, the airspeed, we get the airspeed back to 60 knots in that case. And that's pretty much a standard run for me. In that time, I've cleared that area for wires. I know there are no wires there. I know exactly where everything is. I've flown that route 100 times, 150 times. I --

- 0. Right. What was --
- A. And that's what I really would like. I would have liked everybody to fly that. They knew that that was the route, but, of course, I'm not with them in the aircraft.
- 13 Q. Right.

- $\mid A$. I have no idea what they do after they leave the airfield.
 - Q. For your flights, I know it's just your flights, what was the predicating decision-making process on which route you would take? Would it be based on the experience level of the person sitting in the right seat? Because you had several routes that you would take. Would it be time? I've got 30 minutes. I got paid for 30 minutes, so I've got to give them 30 minutes, so here's the 30-
- 21 minute route, or what?
- A. It was the 30 minutes, but that route I described, I did it with everybody --
- 24 O. Yeah.
- | A. -- whether they were never flown at all, or whether -- and I

- 1 would do all the flying if they'd never flown at all; or if they
- 2 were not a helicopter pilot, I would do absolutely everything
- $3 \parallel \text{flying.}$ I might let them get on the controls with me, but -- I
- 4 would give them the illusion they are flying, but they're not
- 5 | flying. But I did that route every time. I didn't vary it.
- 6 Because the timing, the timing works out absolutely perfectly for
- 7 what we were doing. If I go off that route, then my timing is
- 8 off.
- 9 Q. Right. You're familiar with where the accident occurred,
- 10 | correct?
- 11 A. Only in what I've read in the preliminary report you had.
- 12 Q. Yeah. From what you've read and what you know, was that, the
- 13 location of the accident, on any one of the standard routes that
- 14 were briefed to the pilots?
- 15 | A. No.
- 16 | Q. Okay.
- 17 A. I don't know exactly where it is. I mean, I've seen charts,
- 18 | and I'm sure, if I overflew it, then I could see it. Because in
- 19 some flights, not this year, but in the past, we haven't done any
- 20 low work at all. It's just been high flying around.
- 21 | Q. Right.
- 22 | A. I just want them to see what -- so, at one time or another,
- 23 I'm positive that I went through that, but, you know, I didn't
- 24 | ever land there, I never did any work there, so --
- 25 Q. Okay. Going back to the safety briefing, was Mike Holbrook

or Jeff Holbrook present during the safety briefing on the day of the accident or prior to you guys starting this reunion?

- A. Yes. I don't know about Jeff. Mike was.
- Q. Okay.

- A. But I've got a picture, so --
- Q. Okay, good. That'll be good. And then, I want to ask a couple of questions. First off, as far as the operation in this whole reunion thing, our understanding, and correct me if I'm wrong, is that there was like a jar or something on a table where people could donate, donate money to ride in it; and then, they could donate money, I guess a little bit more, a couple of hundred dollars or something, to actually be up in the front in one of the pilot seats. Is that how that went?
- A. If you take a look -- you'll have to go back there, 2017, I think. I think that's the last time we did it. It might have been '18. I used to put out a, hello, everybody, we're having a flying reunion, come look at the helicopter, see a Vietnam helicopter, and all that. And in that, I specifically state there is no charge ever to fly this aircraft or ride in this aircraft. Pilots who want to fly in the right seat have to buy the fuel they're going to burn. That's all they're buying, is the fuel they're going to burn, and it burns, you know, 100 gallons an hour, 90 to 100 gallons an hour. So, that, as far as I know, is the only -- the donation jar was there, but it was a completely free donation. There was no requirement to pay anything to fly.

- 1 It was -- a comment I always made is, completely freewill
- $2 \mid \mid$ donations to keep the bird in the air and to pay for maintenance
- 3 | are always welcome.
- $4 \parallel Q$. Yeah. Okay. And the --
- 5 A. Some people did put in 100-dollar bills. I --
- 6 Q. Yeah.
- 7 A. -- (indiscernible)?
- 8 Q. Yeah.
- 9 A. Okay.
- 10 Q. Was there like a signup sheet or anything that you signed up
- 11 | for any particular flight that day?
- 12 A. Mike -- hold on. I'm having one of those brain tics.
- 13 | Anyway, (indiscernible), who's an operations officer, in the last
- 14 two or three years, handled all of the signup for who was going to
- 15 fly when.
- 16 Q. Is that Mike Dougherty?
- 17 A. Before that, I was the only pilot --
- 18 | 0. Yeah.
- 19 A. -- for '16, '17, and '18. And maybe '19. I think, for '19.
- 20 | I was the only pilot that flew left seat. Everybody flew with me.
- 21 0. Yeah.
- 22 | A. And it was, you show up that day and sign up. Until 2019,
- 23 there were more seats available to people that wanted to fly.
- 24 | Then, it got crazy; and then, everybody in the world started
- 25 | showing up, a chance to get some, you know, super rates for a

- turbine helicopter. But, yeah, after that, it was, you signed up online for a flying spot.
- Q. Okay.

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- 4 A. I had nothing to do with it. I was -- that happened after I guit being the only pilot.
- 6 Q. Right. Was that Mike Dougherty on this last one that 7 handled --
- 8 A. Yeah, yeah.
- 9 Q. -- the signup sheet?
- 10 A. Mike Dougherty was the operations officer, if you will.
- 11 Q. Okay. Good. And did Mike Holbrook brief you or give you any
- 12 information about the -- I know the aircraft was marked
- 13 experimental, because we've seen the -- and it was registered
- 14 experimental. Did he talk to you, or let you know, or inform you
- 15 | about the experimental exhibit limitations on the helicopter?
- 16 A. Yeah, but it was a long time ago, and I can't tell you any
- 17 details. Like I say, you know, I haven't messed with this since
- 18 | 2016 --
- 19 Q. Okay.
- 20 A. -- so, yeah.
- 21 | Q. And what was Mike Holbrook's rule during this last reunion?
- 22 | What was his role there?
- 23 A. Mike approved everybody who was going to fly. He rode right
- 24 | seat when they flew in the left seat, and he approved them. He
- 25 | wasn't giving instruction. He was just saying, you're proficient

- 1 enough to fly the helicopter if he was pilot in command.
- 2 | Q. Okay.
- 3 A. He wasn't giving instruction, or a check ride, or anything
- 4 like that. It's his helicopter, and he just didn't want anybody
- 5 that he didn't like or didn't think was proficient enough to fly
- 6 | it.
- $7 \parallel Q$. Got you.
- 8 A. He's a very good pilot. I've flown with him in the right
- 9 | seat many times.
- 10 Q. Okay. Specific to the day of the accident, so we're just
- 11 looking at that particular day --
- 12 A. 22nd, yep.
- 13 Q. Yeah. Who preflighted the helicopter that day; do you
- 14 | recall?
- 15 A. Jeff, Jeff Holbrook, and the other pilots went over it before
- 16 | it was picked up.
- 17 Q. Okay.
- 18 | A. If I'm there before it's running, I always do a preflight.
- 19 open up the (indiscernible) drive shaft cover, and check all the
- 20 | oil levels, and (indiscernible), which is getting more difficult
- 21 in my past years. And check everything up there, do a standard QA
- 22 preflight that I learned in the Army many long years ago.
- 23 | Q. Okay. But on this particular day, you didn't participate in
- 24 the preflight of this one? It was Jeff Holbrook and some others?
- 25 A. You know, I wasn't there when they started flying.

Q. Okay.

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- A. When I got there, the helicopter was already gone.
- 3 0. Okay. And then, on that particular day, did you -- I know
- 4 they did the hot loads, because they kept the engines running the
- 5 whole time. Did you jump in at any point in time to do one of
- 6 your hour-and-a-half things on that particular day?
- 7 A. Yes, I did. That's when -- let's see. Let me get my
- 8 logbooks (indiscernible).
- 9 0. Okay.
- 10 A. I think I flew 1.5 or something.
- 11 | Q. That's okay. I don't think I have to have the specific
- 12 number of hours. But do you recall, was that morning or --
- 13 A. 22nd minutes. Yeah. Here we go. 1.6.
- 14 | 0. Okay.

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- 15 A. And four landings. 1.6, four landings. I flew with four
- 16 different people in that 1.6. A few of the guys flew down from
- 17 Pennsylvania and took turns flying.
- 18 \parallel Q. Was that in the morning or the afternoon, Robert?
- 19 A. It was in the morning.
- 20 Q. Okay. Okay. So, four flights. And then, let me ask you
- 21 about the helicopter that particular day. Did you notice anything
- 22 unusual about the way it flew? Was there an unusual vibration?
- 23 Did you get any kind of engine indications for any of those
- 24 1.6 hours that you were operating it?
 - A. Absolutely normal. There was nothing. All the years I've

- 1 | flown that helicopter, there was nothing different about it.
- 2 Absolutely normal.
- 3 | Q. Okay.
- $4 \mid \mid A$. Power requirements for takeoff and cruise flight were
- 5 | normal --
- 6 Q. Okay.
- 7 | A. -- 25 to 30 pounds of torque, and everything absolutely
- 8 normal. Temperatures on the engine, oil pressures, everything,
- 9 same as it had always been.
- 10 | Q. Okay. And when you said -- you were talking about how you
- 11 | would preflight, not how the guys did it that day, but how you
- 12 would do it. I'd get up there and pull the cowling, look at the
- 13 oil levels, and things like that.
- 14 A. Yeah.
- 15 Q. I mean, I guess you'd have to have a ladder to get up there,
- 16 | as well, too, right?
- 17 A. No, you don't. There's footsteps built into the side of the
- 18 | aircraft.
- 19 Q. Oh, okay. And would that allow you to look inside the front
- 20 end of the engine and the turbine section in the back?
- 21 A. You could make it in the back. I didn't, but you could. The
- 22 | front end, no, you've got to pull the inlet screens.
- 23 | Q. Okay. And --
- 24 A. And that was something that the Army -- we never did in the
- 25 Army, so I never did it in civilian life, either.

- 0. Understood.
- 2 A. I flew the A, the B, the D, the H, the E, and the L model
- 3 Huey, and all the preflights were pretty much the same on all of
- 4 | them.

- $5 \parallel 0$. Right. Then, there are pilot operating manuals and
- 6 checklists, I would assume, that were in the helicopter, correct?
- $7 \parallel A$. Actually, my wife and I took the manual and extracted the
- 8 important, the critical, startup procedures, and we had it
- 9 laminated, and it was there. The entire operator's manual was
- 10 there, full operator manual was there. But we took the checklist
- 11 and had it laminated, and it was used to start and check out.
- 12 Q. Okay. Was this the original UH-1B Army manual --
- 13 | A. Yeah.
- 14 | O. -- the original one? Okay.
- 15 A. Yeah.
- 16 \parallel Q. I'm going to -- hang on just a second.
- 17 A. Between the seats, there's a map compartment between the
- 18 seats, right at the back of the console.
- 19 | Q. Right.
- 20 A. And it was in there, along with the weight and balance and
- 21 registration. All those were right there.
- 22 Q. Okay. I'm going to share my screen, because I want -- this
- 23 is really great. I'm glad you're on here. And I'm going to share
- 24 my screen to see -- I have a copy of it, and I want to make sure
- 25 this is what we're talking about. I'm sharing my screen right

- 1 now. Can you see that technical manual?
- $2 \mid A$. Yes, I can see it.
- $3 \parallel Q$. Is that what was on board? Something --
- $4 \mid \mid A$. I don't know if it had the A in it. I think it was a
- 5 | straight B manual.
- 6 Q. Okay.
- 7 A. No, it didn't have the A model in there. The A and the B,
- 8 there are differences between the A and the B.
- 9 Q. Okay. And then, this was the pilot checklist. Was that part
- 10 of that? I think there --
- 11 A. No.
- 12 0. That was not?
- 13 A. No. It's in the manual, but the separate checklist, there
- 14 was no copy of the separate checklist.
- 15 Q. Okay. And do you have a copy of the laminated checklist that
- 16 you provided to the pilots? You'll have them?
- 17 A. No, no, we don't. I may have -- I think I've got an E copy
- 18 of the manual that I downloaded, the B model manual, to see one
- 19 | that was in the aircraft, and I used it to study up on the B model
- 20 | and refresh myself on it before going flying.
- 21 Q. Is it possible --
- 22 | A. And (indiscernible).
- 23 \parallel Q. Is it possible to get a copy of that, Robert, since that was
- 24 the one that you guys were using in it, the B model --
- 25 A. You know, I don't know if it was the same one. I don't know

- 1 if it was exactly the same one that was in the aircraft or not.
- 2 But it is -- the one I had was the Army B model, and I'm pretty
- 3 sure that it was the same cover, so it's probably the same manual.
- $4 \parallel Q$. Right.
- 5 A. God knows what date. Okay. We're talking a picture of
- 6 briefing --
- 7 Q. Right.
- 8 A. -- and if we still have the snippet. It's not the full
- 9 briefing. It's a snippet.
- 10 Q. Right.
- 11 A. Let's see. Video with briefing. E copy of the manual.
- 12 Okay. Okay. All right. (Indiscernible).
- MR. LAWRENCE: Yeah. So, the copy of the manual, that'd be
- 14 great. And if you need to, you know, download it -- if it is in
- 15 excess of a certain -- you know, if it's a lot to load and you
- 16 can't put it as an attachment to an email, let me know, because we
- 17 have a secure web browser that we can -- I can send you an email,
- 18 you can reply to and attach it, and it'll upload gigabytes and
- 19 stuff. So, if that's -- if the PDF is too big. And then, I think
- 20 | that, right now, covers most all the questions I had. I might
- 21 have one or two follow-ups, but let me see if Todd has any
- 22 | questions for you. Robert, you've been great.
- 23 MR. GENTRY: You already did?
- 24 MR. LAWRENCE: Yeah.
- 25 MR. GENTRY: Thank you. So far, I've learned a lot. I

appreciate it.

BY MR. GENTRY:

- Q. I do have a couple of questions, but I want to make sure I understood. Did you teach anybody else how to do a walkaround?
- 5 | A. No.

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- 6 Q. Okay. So --
- A. Because in the past, until, what, two year ago, I was always the first one to fly, and I always got there early, and I always did a complete walkaround. Wouldn't matter if Jeff had already done it. I went ahead and did it, anyway. Can't have too many eyes looking at something. I done it. And after that, they would be flying right after, so normally, we're going to start flying at
- 9 o'clock simply because valley fog -- you know, waiting until
- 9:00, that's pretty certain the valley fog will have burned off.
- But if it wasn't there, they would be flying when I got there, so,

you know, what happened before I got there, I don't know.

- 17 lot of faith in Jeff Holbrook, and Jeff did the maintenance on it,
- and if Jeff told me it was ready to go, I'd take his word for it.
- 19 Even so, I'm going to walk around just to make sure the panels
- 20 were secure. But I would take Jeff's word for it in a second.
- 21 He'd been working with that helicopter since 2002, so, you know,
- 22 | that very helicopter, so --
- Q. Okay. So, you were taught how to do a walkaround from the
- 24 Army or whatever --
- 25 | A. Yeah.

- 1 0. -- (indiscernible).
- 2 A. Right.
- 3 Q. But we don't know where these other pilots learned how to do
- 4 | a preflight check or -- right? Did they have a checklist for
- 5 preflight?
- 6 A. No, not that I know of.
- $7 \parallel Q$. Okay. And you said something that made me interested a
- 8 little bit ago. I'm not a Huey guy, so I need to learn. But is
- 9 | it possible to look into the tailpipe into the turbine section by
- 10 climbing up the side of the helicopter?
- 11 A. No. You've got to have a ladder.
- 12 Q. You've got to have a ladder to look in the tailpipe?
- 13 | A. Yeah.
- 14 0. Okay. So --
- 15 A. It's not something that's normally done.
- 16 | Q. It's not? It's not --
- 17 | A. No.
- 18 Q. -- in a normal Army checklist --
- 19 A. No.
- 20 0. -- or brief?
- 21 A. It's not normally on a checklist.
- 22 | Q. Ah. But you would think Jeff would do that, though, right?
- 23 Or would you? I mean, he's not a pilot.
- 24 A. I can't answer for sure. I --
- 25 | Q. Yeah.

- A. -- (indiscernible).
- $2 \parallel Q$. Yeah. That's fair. I'm not asking you to answer for Jeff.
- $3 \mid\mid I'm$ just trying to figure out if he used a checklist to do a
- 4 preflight or how he did his. I'll ask him, I guess. I'm not
- 5 | sure.

- 6 A. Like I said, he'd been working on that very aircraft since
- 7 2002 doing all the annual inspections and all the periodic
- 8 | inspections.
- 9 0. Right.
- 10 A. I'm pretty sure that he can, blindfolded, in the dark, do any
- 11 | kind of maintenance on you want done and any kind of --
- $12 \parallel Q$. Right.
- 13 A. -- specs you want done without reference to a checklist,
- 14 simply because he's been doing it since, what, 20 years, on that
- 15 | aircraft. Not that type; that particular.
- 16 MR. GENTRY: Yeah. Okay, I think that's all I've got right
- 17 now, Dave. Robert, thank you.
- MR. LAWRENCE: Yeah, this has been real helpful. Just a few
- 19 | follow-ups.
- 20 BY MR. LAWRENCE:
- 21 Q. Robert, do you do this volunteer type flying in other
- 22 | aircraft or anywhere else in the country?
- 23 A. No, there's nowhere else in the world you could have done
- 24 | this flying, nowhere else in the world you could have done this
- 25 | flying.

O. Why is that?

A. There are other organizations that fly Hueys, but they -- you know, to sit in the right seat for 15 minutes, they'd want \$1,000, and they might let you touch the controls, whereas Mike Holbrook will let you fly his aircraft for the cost of the fuel. So, that is -- the Huey was the only aircraft in the world. There are no others. This particular aircraft, the loss of it is really -- I mean, the loss of the people was the most terrible thing for me. I actually counted up a few year ago how many friends I'd lost in aviation mishaps after Vietnam, and I got to 46. And this brought it up to 50 after Vietnam. And I'm not counting losses no more. So, it's of particular interest to me.

Just for you guys' benefit, in -- well, I did four six-month deployments with the Marine Corps to the Mediterranean flying helicopters off a ship. In the first three, we lost aircraft and people. The fourth one, I was in charge of safety standardization in (indiscernible), so I was in charge of it, and I busted my ass for a year and a half to get that cruise done. I flew with every single pilot on night vision goggles in every possible situation: low-level flying, terrain flying, take your pick. We got through that cruise without losing an aircraft, without using a person, with no mishaps. We won the Chief of Naval Operations Safety Award for that year, and that was my proudest military achievement. Never mind war medals or any of that shit.

But that was -- the loss of that aircraft is just, the

1 \mid 98 Foxtrot, just stabs me in the heart, and that John was flying

2 | it, because John was a good pilot when I flew with him. I'm

 $3 \mid \mid$ waiting for your report, and I'm sort of half-ass hoping that they

say (indiscernible) he had no choice but to do an auto rotation.

5 I mean, he didn't have anyplace to go, and nothing like that, and

6 it wasn't pilot error, I'm hoping. You know, I say I'm hoping.

7 | really don't want to know. But anyway, I digress. And like I

8 told you earlier, this is my second experience with wires, and I'm

not happy at all with it. But anyway, I digress. I'm holding you

10 guys up. You've got work to do.

11 Q. No, I just want to follow up. So, you'd flown with John

12 before, obviously not this time, not this reunion, but you had

13 | flown with him before, because you said he's a good pilot. And

14 then, I just wanted you to expand upon that. What made him a good

pilot? Why did you say he was a good pilot? What makes you say

16 | that?

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17 A. I (indiscernible) socially, as well as flying. After we'd

18 | flown together -- he hits this area occasionally, and we would

19 have dinner, and chitchat, and talk about flying, one thing or

20 | another. He flew a gyro plane from Texas to Logan one year,

21 1,000 miles in one day in a gyro plane --

22 | Q. Yeah.

23 | A. -- which is a major achievement. Matter of fact, I've got a

24 | nice little clip of film. He was flying a gyro plan and filmed me

25 | flying the November 98 Foxtrot at the airfield there. But he was

- $\|$ a good pilot, and he was steady. I mean, he wasn't a crazy guy.
- 2 | Q. Okay.

- 3 A. He never did crazy stuff that I knew of. He didn't get wild
- 4 hairs. He flew. You know, that's all. He didn't try any wild
- 5 ass maneuvers in the helicopter like, you know, high-speed return
- 6 to target things or -- but like I say, I few with him only -- I
- 7 was the pilot in command in the left seat. He was the guy in the
- 8 right seat, and he did what I told him, which was normal
- 9 approaches and approaches into those confined areas. Confined
- 10 areas. Those off-field sites I talked about. We always bring
- 11 | them there to do high-hover. Never touch down off the field. But
- 12 | if anybody was going to crash, I wouldn't have picked John.
- 13 Q. Okay. Yeah. Do you know who did do the kind of checkout --
- 14 now, I don't want to say checkout as in like a checker, but, you
- 15 | know, who flew with him to get comfortable in 98 Fox?
- 16 (Indiscernible)?
- 17 A. He had to fly with Mike Holbrook in the right seat, and Mike
- 18 would sit with me. Like I said, he would be -- he is -- I feel
- 19 comfortable that he could fly my aircraft.
- 20 | Q. Let me --
- 21 A. It wasn't a check ride, per se, you know. It wasn't --
- 22 | Mike's been a helicopter pilot for 50, 60 years.
- 23 Q. Yeah.
- 24 A. And it's his aircraft. I mean, he did firefighting in that
- 25 \parallel aircraft. He done all kinds of stuff back in the day.

- Q. Right.
- $2 \mid \mid$ A. Remember, he still had the medical. Nowadays, he doesn't fly
- 3 at all except the right seat with a qualified pilot in the other
- 4 | seat.

- $5 \parallel Q$. So, I just want to be clear, Robert. So, for this particular
- 6 reunion, prior to the reunion, when Nagle got up there, was it
- 7 Mike that gave him the, you know, knock-the-dust-off ride, three
- 8 | takeoffs and landings, or whatever, or was it Ryan Craddock (ph.)?
- 9 | Or do you --
- 10 A. You know, I don't know. I honestly --
- 11 | Q. Well --
- 12 A. -- don't know. That's because I wasn't there. I was the
- 13 last pilot to arrive on Sunday. Everybody else was done by then.
- 14 | 0. Yeah.
- 15 A. So, I, you know, I can't say.
- 16 | Q. Okay.
- 17 A. Ryan, I've flown with Ryan. Ryan's a great pilot, and I let
- 18 | Ry fly around. (Indiscernible), and he's a good pilot.
- 19 MR. LAWRENCE: Okay. Great. Todd, do you have anything
- 20 | more?
- 21 MR. GENTRY: No, I don't think so. I'm looking forward to
- 22 your report, too, Dave.
- 23 MR. CURTIS: When do you anticipate that report coming out?
- 24 MR. LAWRENCE: It takes --
- 25 MR. CURTIS: Two years from now, or --

MR. LAWRENCE: We've got -- right now, Robert, we've got --

MR. GENTRY: (Indiscernible) years.

MR. LAWRENCE: Robert, we've got a preliminary report, but it's kind of sparse. It's just got the, you know, basic facts and such. That's a requirement (indiscernible) get out right after the accident. The final report, you know, Todd and me are still working on our little portion. We have an engines group, we have an air worthiness group, we have other people that are working their side. Todd and I work in the operations side. We're going to be close here to developing what's called our factual report, but it's only a part of the final report, and the final report --

MR. CURTIS: Right.

MR. LAWRENCE: -- to answer your question, probably a year.

MR. CURTIS: Yeah.

MR. LAWRENCE: It just takes a while for us to go through a lot of information when we gather. So, right now, we're just gathering information; and then, we almost have to combine it all; then, we analyze it and do a metabolizing of all the factual information; and that'll go in the final report, and it takes some time. So, probably about --

MR. GENTRY: And, you know, it has to be accurate. It can't be -- you know, we --

MR. CURTIS: I agree. So, you guys have noticed that I haven't asked for any hints about what you're finding. I understand how that works. My last accident report was much

easier than the one you're working on. There was a flat tree in Turkey with -- the tree was flat on the top. It was a crashed helicopter. Let's see. They landed in a tree. So, that one was pretty easy. Nobody was hurt. The helicopter was destroyed, but nobody was hurt, so that was a lot easier than the one you're working on.

MR. LAWRENCE: Yeah, and what's making it a little bit more difficult, and maybe I could ask you about this, is that we don't have ADS-B data. We have limited radar, obviously, because it's low, and the ADS-B which should have been on wasn't on.

BY MR. LAWRENCE:

- Q. Did you guys -- is there a reason why the ADS-B wasn't routinely turned on?
- A. As I understand it, as I remember it, the ADS-B was -- the power to it was in the position lights.

16 MR. GENTRY: Right.

BY MR. LAWRENCE:

18 | Q. Okay.

required.

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A. So, if the position lights weren't on, the ADS-B wasn't on.

And we were flying in an area where ADS-B is not required. I

mean, we're out in the middle of nowhere. I mean, I have an

Ercoupe that I fly all the time, and I like to look, always look,

at what I did when I finish a flight, so my ADS-B's on all the

time, but I'm flying through a temp (ph.) area where it's

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But in the middle of Nowhere, West Virginia --

MR. LAWRENCE: Yeah. Well, let me -- Todd may want to inform you on something on that, but let's not do it on recording and such. Do you have any questions of us, Robert?

MR. CURTIS: I do not.

MR. LAWRENCE: Okay.

MR. CURTIS: I will attempt to email you the information that we talked about. If I can't get it through email --

MR. LAWRENCE: Just let me know, and I'll send you Kiteworks email that you can respond and attach onto.

MR. CURTIS: Okay.

MR. LAWRENCE: And --

MR. CURTIS: Go ahead and do that, and I will take a look through if I have multiple pictures of the briefing, because everybody was there, and --

MR. LAWRENCE: Right.

MR. CURTIS: -- you know, from my own personal viewpoint, I have almost no pictures of me flying, because when I fly, I fly. I don't take pictures.

MR. LAWRENCE: Right.

MR. CURTIS: I'm hard over on that.

MR. LAWRENCE: Yeah.

MR. CURTIS: And so, any pictures, somebody else took them.

MR. LAWRENCE: Okay. And if -- a lot of times, when we talk to somebody, when Todd and I get a chance to speak and converse with people like you, a day or two later, they kind of metabolize

1 the whole process and think, oh, wow, there's something I could 2 have added or something, or, here's a tidbit of information that might be important to them that maybe they didn't ask about. 3 4 if there is anything that you can think of to help us, because 5 we're just trying to find out what happened, and you think it might be useful at whatever level, feel free to get a hold of Todd 6 7 and I. You have our emails, and you can get a hold of us anytime. 8 MR. CURTIS: Okay. And if you think of any follow-on 9 questions, please let me know. 10 MR. LAWRENCE: I'll send you an email. 11 MR. CURTIS: I want to cooperate in this. Like we said at 12 the beginning, we want to make sure this never happens again. 13 MR. LAWRENCE: Agreed. Thank you. 14 (Whereupon, the interview was concluded.) 15 16 17 18 19 20 21 22 23 24

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: FATAL BELL UH-1B HELICOPTER ACCIDENT

IN AMHERSTDALE, WEST VIRGINIA

ON JUNE 22, 2022

Interview of Robert Curtis

ACCIDENT NO.: ERA22FA297

PLACE: via telephone

DATE: September 7, 2022

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



Lisa D. Sevarino Transcriber

Interviewee: Ryan Craddock

Representative: none

Date/Time: August 25, 2022 / 1100 edt

Location: Via telephone

Present: Todd Gentry, FAA AVP100 **Investigator:** David Lawrence, NTSB

During the interview Ryan Craddock stated the following:

- He confirmed he held a commercial pilot license with a rotorcraft-helicopter rating, issued on June 28, 2021. He also held a second class medical certificate from July 2022. He did not hold a certified flight instructor certificate.
- When asked about his background and how he got into aviation, he said his
 cousin was a pilot and had explained helicopters to him and that is how he got
 interested.
- When asked about his roles and responsibilities at the reunion event in West Virginia, he said he was one of the people loading and unloading the passengers.
- When asked if he flew N98F on the day of the accident, he said yes, and he flew the first flights that day and was one of the ones that started the helicopter up. That occurred about 0800 that morning.
- When asked if he did the preflight on the helicopter, he said yes, he was one of several people that did the preflight, to include another pilot and the mechanic. He said the mechanic that helped with the preflight was Jeff Holbrook. The other pilot he could not remember, but he did the preflight for himself since he was going to be flying it first. He remembered Mike Holbrook, Mike Daughtry and Robert Curtis also being around the helicopter.
- When asked to describe the preflight on the helicopter, he said what he normally
 did was walkaround the helicopter and look for anything abnormal or damaged,
 similar to a fixed wing walkaround, trying to pay attention to details all around
 the aircraft. He would check the oils and get on top of the aircraft to check the
 head and blades.
- When asked if the preflight included looking at the engine, he said yes, and it involved getting a ladder and looking into the exhaust "to make sure nothing was missing" with the blades or any obstructions. He described it as a "thorough visual inspection." When asked if he actually used a ladder to inspect the engine during the preflight on the day of the accident, he said he was certain that he did. He also looked to make sure there were not any bird nest in the engine.

OPERATIONAL FACTORS

- When asked if he noticed anything unusual in the back of the engine when he
 inspected it, he said no. Had they seen anything important, they would have
 informed Jeff Holbrook. He said it was "common practice" for Jeff to also get up
 on the ladder to inspect the engine, but he couldn't remember if Jeff had done
 it on the day of the accident.
- He flew the first flights of the day for about an hour. When asked if he noticed anything unusual with the helicopter or any unusual vibrations or engine indications, he said no because if he had he would have set it down.
- He confirmed that the engine was never shut down during the day and they would load and unload passengers with the engine running.
- When asked if he had reviewed the logbooks before his flight on the day of the accident, he said no.
- When asked how many flight the helicopter flew on the day of the accident, he said it was a long day and he did not know.
- When asked how much flight time he had on N98F, he said about 43-45 hours.
 He said recently he was the one that primarily flew N98F since he was local, and
 he was fortunate to get turbine time while flying it. In the past his cousin had
 flown it.
- When asked the last time he had flown it prior to the reunion week, he thought it was the 25th of May, and had flown it to Nitro for the Run for the Wall.
- When asked about the checkout for John Nagle, he said John had come to West Virginia and John asked him to fly together to "knock the rust off." He said all of the pilots had a lot more time in the Huey than he did, but it had been a while since they had flown it. He and John had gone out and done some approaches and pedal turns and hovering just to "get to know the aircraft again." He did not consider it a "check out," and just flew with John since he was more recent in the aircraft than John who wanted to get to know the aircraft again. He said he believe he flew with John the Sunday before the reunion.
- He had seen John the year before but did not really know John other than talking to him.
- When asked if he and John did any practice autorotation's during their flight, he said, "I did not, no" and they did not do any emergency procedures. If anyone had done autorotation's with the safety pilots it would have been Robert Curtis who was the chief pilot over "all that stuff." He and John just went out and flew normally.
- He said it was his understanding that Robert Curtis was the one that did the check outs for the safety pilots.

- He said he was a little different than the other pilots since he had been flying the helicopter regularly. He was not involved in what Robert Curtis was doing and could not say if Robert Curtis had done an actual check out of John.
- When asked if Mike Holbrook was the one running the program, he said yes since he was the one that owned the helicopter and had the ultimate say.
- When asked if he was aware of the experimental exhibit limitations for N98F, he said he knew it was experimental and thought you could not haul passengers on an experimental aircraft. He remembered making that comment to Mike Holbrook and was told by Mike that he had a standing LOA with the FSDO and told everything was "good to go." He said he didn't think Mike would be doing anything wrong if he had been posting on social media about the event.
- When asked if there was a manual or checklist used by the pilots in the aircraft, he said, "oh yes" and he used the checklist all the time. When asked if they used the checklist to preflight the aircraft, he said yes, and you would use it for the start-up procedure and included preflight items to go over like any checklist.
- When asked if the helicopter had a Hobbs meter, he said "not that I recall." When logging flight time, he would estimate the flight time and give that information to Mike. He said he believed the times were pretty low for the helicopter.
- When asked if there was anyone else in the helicopter on his first flight of the day, he said it was another pilot but could not remember who. He remembered he was a pilot who was a passenger wanting to fly in the Huey.
- When asked about where the helicopter was located during the initial walk around on the day of the accident, he said it was over by the fuel pumps. The helicopter was normally kept outside during the summer months and in the MARPAT hanger during the winter.
- When asked if Jeff Holbrook was the only mechanic that worked on N98F, he said yes, and Jeff was A&P for it. He thought it was a "pretty sound bird."
- When asked about flying the Huey, he said surprisingly it was "a very easy aircraft to fly for anyone with any helicopter time."
- When asked about the routes they used, he said they were supposed to stay in the "cleared" area, which basically was a circle around the airport. The pilots had a map to look at for the routes. When asked if there was any recon done prior to the event, he said he did not know but being a local guy he was familiar with the area around the airport.
- When asked about the safety briefing prior to loading passengers, he said it was typical "safety talks" each morning. The safety briefing was conducted by Robert Curtis and Mike Daughtry. Mike Daughtry was one of the safety pilots.
- He did not recall all of the other pilots who flew prior to John's flight.

- When asked if he had ever practiced an autorotation in the Huey he said yes, and it handled great. There was so much inertia in the blades it just wanted to keep flying. He said he had heard from the Vietnam veterans that there was so much inertia that you could set it down from an autorotation and then get back airborne again, but he had never tried that.
- When asked what he told the passengers prior to loading, he said he would brief the passengers prior to loading on the helicopter to include staying in front of the aircraft and never going behind the aircraft, help with the seat belts, and if they got sick there was a bag above their head. He asked if they had any questions and told them to stay safe.
- When asked if he had ever flown over the area where the crash occurred, he said
 yes he had flown over there several times. When asked if that area would be a
 good area to do an autorotation, he said no. When asked where you would do
 one, he said you would look for a yard or strip area first. He did not know why
 they would autorotate there, if that was the case, since there were other options
 down the road.
- When asked what he believed happened, he said he believed that the lines they
 hit were not marked, and they had turned around and were coming up by Blair
 Mountain and got too low in unfamiliar territory and hit the lines.
- When asked if they would do contour flying for the passenger experience and if there was a minimum altitude to remain at, he said they had to be 500 feet above the houses, but that would still put you below the ridge lines. That was typical for flying in West Virginia
- When asked if there was anything else he could think of to assist the investigation, he said no. He said if there was anything he could do better to just let him know.

Interview concluded at 1140 edt.



Record of Conversation

David Lawrence National Resource Specialist National Transportation Safety Board Operations Specialist

Person Contacted: Jaewon Shim, Certified Flight Instructor

Date: August 17, 2022, 1500 CDT

NTSB Accident Number: ERA22FA279

Aircraft Registration & Make/Model: N98F / UH-1B Huey Helicopter

Accident Location: Logan, West Virginia

Accident Date: June 22, 2022

- His name was Jaewon Shim and he was a flight instructor at Above and Beyond Aviation at Austin Executive Airport (EDC) in Pflugerville, Texas.
- He had close to 400 total flight hours, and a few hundred hours as a certified flight instructor (CFI).
- He confirmed that he received his commercial pilot certificate on February 13, 2022, and his CFI certificate on April 3, 2022.
- The accident pilot involved in the Huey crash in West Virginia was his stepfather.
- The Mooney airplane (N2957L) the accident pilot flew for his most recent biannual flight review (BFR) was owned by the accident pilot's brother.
- Jaewon said he conducted the BFR of the accident pilot on June 16, 2022 in Mooney N2957L.
- When asked what he did on the flight portion of the BFR, he said he printed out the FAA document on how to conduct a flight review and used the Appendix checklist to conduct the flight review. It included steep turns.
- He said he had flown with his stepfather before, including in his gyrocopter. His stepfather also owned a Cherokee that they used to fly in together. They would also borrow his uncle's Mooney to fly.

- When asked if he flew often, he said his stepfather was current outside of his biannual. He knew how to fly and been flying for a long time. He had just gotten a new job and his airplane was down for maintenance, so he was using the Mooney and flying a little less. He said his stepfather owned N6863W, but they flew in the Mooney more.
- He said his stepfather would not log a lot of his flights in his logbook, particularly after he got his licenses. He said there was a "big chunk of time" where he didn't log flight time, which may be a couple of thousand hours. There were quite a lot of hours he had not logged.
- When asked how often his stepfather flew rotorcraft, he said "as often as he could." He was really into gyrocopters and worked with companies to help transport them. He just enjoyed flying those aircraft. He did a few trips across many states.
- His stepfather had done the Huey event in West Virginia for about 4 years.
- His understanding was that the West Virginia group would provide the pilots some sort of checkout in the Huey to check their proficiency.
- When asked if the only time his stepfather flew the Huey was during the annual reunion event in West Virginia, he said he believed so. His stepfather was not in the military.
- When asked if he had participated in the reunion events in West Virginia, Jaewon said he had not, and had only been to West Virginia for his stepfather's funeral.
- When asked how his stepfather had performed on the BFR, he said "he did well." They had a very long oral, about 3-4 hours long. They did the oral portion the night before the flight.
- He said he had just gone through the ATP instructor course at Georgetown, Texas. He said he wanted to make sure his stepfather was safe, knowing he was going to West Virginia. The oral portion took long because he wanted to make sure "he covered all the bases."
- His stepfather did not fly to West Virginia, and instead drove there. He left Austin on 6/17/2022 and arrived in West Virginia on 6/18/2022.
- He said he was not sure how much his stepfather had flown this year, but his brother James would probably know for sure. James Nagle's contact information is and his email was
- When asked if his stepfather had any concerns about flying the Huey in West Virginia, he said flying the Huey was something he looked forward to each year and was passionate about flying for the war veterans.

- One of the days his stepfather was in West Virginia, they faced-timed and his stepfather said he was checking out another pilot in the Huey, and he said it was a lady and they had a little "spook" and he was not comfortable flying with her. He said he was not sure if his stepfather was actually in the pilot's seat or just riding along in the back. He said his stepfather never said he was uncomfortable with the operation.
- When asked how his stepfather knew the owner of the reunion event, he said his stepfather was born in West Virginia and it was a small community, and they may have met there or through Facebook.
- When asked if he ever mentioned the other pilots, Jaewon said he never met any of the other pilots his stepfather flew with in West Virginia, but he did get to talk with one on Facetime named Joe Garapola () who was at the event. He was not sure if Mr. Garapola was a pilot of the Huey there, but they had spoken together on Facetime about his son working for American Airlines and Mr. Garapola could be used as contact down the road.
- He said he was not sure what happened in the accident and thought it might have been a mechanical failure. He did not see his stepfather running into powerlines or doing a control flight into terrain (CFIT). Anytime they flew together and did engine out practice, they never got too low to the ground.
- He felt his stepfather was a safe pilot. He recalled his stepfather doing a long cross-country flight all the way to California a few years back, and thought he had experience flying in mountainous terrain, but was not sure where.
- He said his stepfather used to fly helicopter tours for people in the Austin area doing city tours. But that may have been about 20 years.

Conversation concluded at 1533 CDT.¹

¹ This Record of Conversation was emailed to Mr. Shim on August 18, 2022 for review. Mr. Shim's edits were incorporated into the narrative on August 18, 2022.