

Attachment 19. Engine Mechanic Transcript

DCA12MA020 Maintenance Factual Report

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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SUNDANCE HELICOPTER ACCIDENT
NEAR LAS VEGAS, NEVADA

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Docket No.: DCA-12-MA-020

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Interview of: RANDALL MANABA

Sundance Helicopters
5596 Haven Street
Las Vegas, Nevada

Saturday,
December 10, 2011

The above-captioned matter convened, pursuant to notice.

BEFORE: KRISTI DUNKS
Senior Air Safety Investigator

APPEARANCES:

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I N T E R V I E W

1
2 MS. DUNKS: Okay. So, as I mentioned yesterday, we do
3 record these interviews. So, we're recording this now and the
4 information that we do have recorded does become part of the
5 public record, so, and is you know, used as factual information to
6 support the accident investigation. And you've chosen Robert as
7 your representative, today. Is that correct?

8 MR. MANABA: Yes.

9 MS. DUNKS: Okay. Great. So basically Robert, as we
10 had discussed yesterday, your purpose in being here is not to
11 speak for him, but you know, to provide support.

12 MR. KAAIHUE: Okay.

13 MS. DUNKS: So, we appreciate you being here as well.
14 And let's do some introductions. I've introduced myself and we
15 can just go around the room.

16 MR. BUTTNER: I'm Seth Buttner and I'm with American
17 Eurocopter and I'm here to support NTSB in whatever contact
18 information they might need.

19 MR. CAMPBELL: I'm Gary Campbell. I'm from the local
20 FAA (indiscernible) here in Las Vegas.

21 MS. ALLAHYAR: I'm Maryam Allahyar with the NTSB
22 supporting (indiscernible).

23 MR. BRENNER: I'm Malcolm Brenner, NTSB, and I'm human
24 performance. I'm supporting the means group.

25 MR. MANABA: Okay.

1 MS. DUNKS: So, what we'll do is, I'll ask some
2 questions first --

3 MR. MANABA: Sure.

4 MS. DUNKS: -- and then we'll just kind of go around the
5 room. So, probably Malcolm and I have the most questions and he,
6 you know, is human performance, so his questions will generally
7 stem from that perspective.

8 MR. MANABA: All right.

9 MS. DUNKS: And do you have any questions before we get
10 started?

11 MR. MANABA: No.

12 MS. DUNKS: Okay. Well, if you have any during our
13 discussion, please feel free to ask.

14 MR. MANABA: Sure.

15 MS. DUNKS: And if you need a break or anything like
16 that, let us know.

17 MR. MANABA: Okay.

18 INTERVIEW OF RANDALL MANABA

19 BY MS. DUNKS:

20 Q. All right. So, first off if we could just get your full
21 name and have you spell it for us, please?

22 A. Randall, R-A-N-D-A-L-L, middle initial C, last name
23 Manaba, M-A-N-A-B-A.

24 Q. Okay. And what FAA certificates do you hold?

25 A. Just A&P.

1 Thank you. And can you tell us a little bit about your aviation
2 background? When you got started in maintenance and things like
3 that?

4 A. I think I'm coming up on 8 years.

5 Q. Okay.

6 A. Started at Pacific Helicopters, Kahului, Maui. I moved
7 up there and worked for Papillon for about a year. Then, I went
8 to Maverick for I think, another 3-1/2 years. Then, I went to
9 Turbomeca. Oh, I'm sorry, I went to Sikorsky, SSSI, out in
10 Barstow, California and that was a month there, and then I came
11 back to Maverick, and then I went to Turbomeca, U.S.A. It was a
12 repair station that we had out here. And then from there, I came
13 to Sundance.

14 Q. And how long were you at the Turbomeca repair station?

15 A. Just under a year.

16 Q. Okay. And when did you come here?

17 A. I just made 2 years in October.

18 Q. Okay. So October 2009?

19 A. Yeah.

20 Q. Okay. How did you like Barstow? Was it windy living
21 out there?

22 A. Yeah (indiscernible).

23 Q. Were you right on the field there, or --

24 A. Yeah, out there at the Municipal Airport out there and
25 yeah --

1 Q. Um-hum. Those old wooden hangars and --

2 A. Well, actually they got a new facility right outside of
3 (indiscernible) --

4 Q. Sikorsky.

5 A. They got the wooden hangars. Yeah, on the other side.

6 Q. Yeah. I thought those old wooden hangars were neat.
7 All right. And within Sundance Helicopters, what's your job and
8 what do you do?

9 A. I just got put into the Engine Shop Supervisor position.

10 Q. Okay.

11 A. It's been a little over a month. Before that, I was a
12 line mechanic.

13 Q. Okay. And so since you've just been in that position
14 for a month, in your line mechanic position, what are your job
15 functions? What do you do?

16 A. Primarily, I was working with the power plants.

17 Q. Okay. And as an Engine Shop Supervisor, what are your
18 job functions?

19 A. Basically, when we have engines in for module changes,
20 cycle valve, we do Level III work there and if an engine is off-
21 wing for a couple of days and stuff, I do the inspection and
22 engine inspection on it.

23 Q. Okay. And so you're certified to do up through Level
24 III maintenance on the Turbomeca?

25 A. Yes. Yes.

1 Q. Okay. When was your last training at Turbomeca?

2 A. I don't know what the date would be.

3 Q. Approximately? Is it in your training file?

4 A. November.

5 Q. November?

6 A. Last year.

7 Q. Of last year. Okay.

8 A. That's the minimum data rates for apply for a Level III.

9 Q. Okay. And how often do you have to do that?

10 A. I think that -- I'm not sure what it was as far as the
11 requirements, but I think what it was, was we had to perform a
12 number of Noria interventions to suffice holding the Level III
13 certificate and I'm not positive about the retraining of it. I
14 think what it was, if you didn't actually do the Noria
15 interventions, then after a certain period of time, you would have
16 to go back for retraining.

17 Q. Okay. I think there is some sort of requirement that
18 you go back now for training, but we can verify that later.

19 A. (Indiscernible).

20 Q. That it has changed.

21 A. Okay.

22 Q. But, you may just want to look into that.

23 A. All right.

24 Q. Check that. And -- okay, so you've been working as the
25 Engine Supervisor for about a month now and prior to that, you

1 were working as a mechanic. Any other positions within Sundance?

2 A. No.

3 Q. Okay. And -- sorry about that. Just to go back into
4 your employment history. What different types of helicopters did
5 you work on? You said you worked for Pacific Helicopters and then
6 for Papillon and Maverick.

7 A. Right.

8 Q. What were the makes of helicopters that you've done --

9 A. At Pacific, it was UH-1Hs, U-H-1-H-s.

10 Q. Okay.

11 A. Jet Rangers, MD500s; at Papillon, it was AS350s; Barstow
12 is EC145s; Maverick it was primarily EC130s; and here we are
13 AS351Bs, 1D1s and the EC130s.

14 Q. Okay. And sounds like with your Turbomeca expertise,
15 you're primarily focused on that now. Was that the case of these
16 other facilities that you worked at that you --

17 A. No.

18 Q. -- kind of? Okay. That's just here at Sundance, so
19 that's --

20 A. Yes.

21 Q. -- you've kind of transitioned into that?

22 A. Yes.

23 Q. Okay. And, of course, at Turbomeca, --

24 A. Right.

25 Q. -- USA repair station. Okay. What type of work

1 schedule do you work?

2 A. 7:30 to 4:30.

3 Q. Okay. And that's everyday? Or how does that work?

4 A. Five days a week.

5 Q. Okay.

6 A. Saturday and Sundays off.

7 Q. And that's in your position as an Engine Supervisor?

8 A. Yes.

9 Q. Okay. And what was your schedule as a mechanic?

10 A. As a mechanic, we were staggered. We do 4 days on at 12
11 noon to 12 at night, and then we'd have 3 days off, and then come
12 back and 3 days on, which was the same schedule again: 12 noon to
13 12 midnight, and then 4 days on.

14 Q. Okay. And for this 100-hour inspection, was that? That
15 was done on December 7th, or 6th, excuse me. That was part of
16 your normal work duties? Or, was that overtime? Or, what was
17 that?

18 A. No. That was part of my scheduled day.

19 Q. Okay. So you came in at 7:30 that day?

20 A. Yes.

21 Q. Okay.

22 A. Around.

23 Q. Okay. And what were you asked to do related to the 100-
24 hour inspection?

25 A. To put the -- install the engine on-wing. But before

1 that, to remove the engine that was there. When I got there, the
2 engine was already off-wing, and then what we did was transfer
3 parts, airframe parts, from one engine to the next and install.

4 Q. And about how long does that take you? So, the engine
5 was already out of the helicopter, or you had to remove it still?

6 A. No. I did remove it.

7 Q. Okay.

8 A. Yes. I did remove it. So, a removal usually takes
9 about 2-1/2 hours.

10 Q. Okay. And then how about an installation?

11 A. Installation? Well, then you got the ground time to
12 transfer parts.

13 Q. Um-hum.

14 A. That's another 2 hours.

15 Q. Okay.

16 A. Then about another 2 hours going on install.

17 Q. Okay. So, about 6-1/2 hours total?

18 A. Yes.

19 Q. Okay. And did you do all this work by yourself or did
20 someone assist you?

21 A. On the removal part, yes, I was assisted.

22 Q. By who?

23 A. If I remember correctly, I think it was Randall. And
24 then on the install, I was assisted on putting it back on-wing by
25 Randall. I think it was Randall.

1 Q. And did anyone else assist you with airframe parts or
2 anything like that?

3 A. From what I remember, it was just myself that
4 transferred the parts over --

5 Q. Okay.

6 A. -- while it was on the ground.

7 Q. So, all the work that was conducted was either you or
8 Randall, on the engine?

9 A. Right. Yes.

10 Q. Okay.

11 A. And it was very -- a short duration where just getting
12 it on just required two people to (indiscernible) --

13 Q. Okay. And what other work did you perform for the 100-
14 hour inspection? Anything?

15 A. That was it.

16 Q. Okay. Do you recall who did the fore and aft servo
17 installation?

18 A. I do not.

19 Q. Okay. And how about the tail order installation?

20 A. I do not.

21 Q. Okay. Does an engine change require an inspection by a
22 second set of eyes?

23 A. Yes.

24 Q. Okay. And who did that?

25 A. When it was on-wing and ready to go, it was Gaylan.

1 Q. Okay. And do you recall if he found any problems, or --

2 A. No.

3 Q. Okay. And were you working on any other engines in the
4 facility at the time?

5 A. No.

6 Q. Okay. And about what time did you clock out that day?
7 Did you clock out at your normal time, or --

8 A. I think I clocked out and went back to the shop and
9 closed the computers down. It would have been around 5.

10 Q. Okay. And did you encounter any problems during
11 installation?

12 A. I did not.

13 Q. Okay. So, it was normal?

14 A. Yes.

15 Q. What type of guidance material do you use?

16 A. I use the Turbomeca Maintenance Manual.

17 Q. Okay.

18 A. And for my engine installs, I use the AS350 Maintenance
19 Manual.

20 Q. Okay. And do you use the paper or electronic versions?

21 A. I have both.

22 Q. Okay.

23 A. Whichever is closer.

24 Q. Okay. And do you use your own laptop for the
25 electronic, or is that a company laptop, or do you use a laptop?

1 A. The laptop is my own personal one --

2 Q. Okay.

3 A. -- and I also have a company computer.

4 Q. Okay. And which do you, do you keep the manuals on
5 your --

6 A. I have a set of manuals that's in the engine shop --

7 Q. Um-hum.

8 A. -- and there's also a set that's outside on the floor.

9 Q. Okay.

10 A. Of paper.

11 Q. And of the electronic manuals, are those on your
12 computer or your work computer?

13 A. They're both.

14 Q. Both. Okay.

15 A. Yeah.

16 Q. Got it. Do you have a preference between the two?

17 A. No, I don't.

18 Q. Okay. Now, after an engine's changed, do you know
19 what's required to return the helicopter to service?

20 A. I can't tell you just off the top of my head.

21 Q. Okay.

22 A. So, I would have to say no.

23 Q. Okay. So once this engine installation was complete,
24 then you signed it off in the log? And then paperwork, I guess,
25 for the 100 hour inspection?

1 A. Yes, whatever's listed on the inspection and whatever I
2 did, I sign-off.

3 Q. Okay. And then Gaylan --

4 A. Follows-up with me.

5 Q. -- inspected your work?

6 A. Yes.

7 Q. Okay. And then he stamps next to your signature?

8 A. Yes.

9 Q. Okay. And do you have an inspector stamp?

10 A. I do.

11 Q. Okay. And what's your inspector number?

12 A. It's 6 --

13 Q. Okay.

14 A. -- 06.

15 Q. And your inspections are for the engine. Do you
16 primarily do engine or do you also do airframe inspection?

17 A. Very rarely will I do airframe, but I am, I do airframe
18 work.

19 Q. Okay. And can inspect those items?

20 A. Yes.

21 Q. Okay. Were you at the facility when the final checks
22 and ground runs were performed?

23 A. I was not.

24 Q. Okay. And were you at the facility when the flight
25 check was performed?

1 A. I was not.

2 Q. Okay. And do you recall who did the adjustments on the
3 hydraulic belt?

4 A. I do not.

5 Q. Okay. Okay, I think that concludes my questions. So,
6 now I'm just going to kind of pass it around the table a little
7 bit.

8 A. Sure.

9 MS. DUNKS: So Malcolm, go ahead, please.

10 BY MR. BRENNER:

11 Q. How was work there that day?

12 A. It was okay. It was bearable.

13 Q. Okay. Different kind of question. When you're not
14 working, when do you like to go to bed? And when do you like to
15 get up?

16 A. Because of the shift change going to the five on and two
17 off, I've been going to bed earlier.

18 Q. About what time?

19 A. Nine.

20 Q. Okay. And when do you get up?

21 A. I get up about 5.

22 Q. Now, is that on your days off when you do that? Or is
23 that --

24 A. I try to keep it that way.

25 Q. Um-hum. Let's see, you were off on Saturday and Sunday.

1 When did you go to bed Saturday?

2 A. Saturday?

3 Q. Yeah?

4 A. I'd say around 9 or 10.

5 Q. When did you get up?

6 A. I got up at about -- I would say about 5, 6.

7 Q. Well, what did you do on Sunday? What did you do on
8 Saturday?

9 A. Sunday, I went to church in the morning, went out to
10 breakfast, and shopping with the wife.

11 Q. Well now you know, it's that time of year. Okay. And
12 when did you get to bed Sunday?

13 A. Sunday I went to bed around, I'd say the same time,
14 about 9 or 10.

15 Q. Um-hum. Then you had to get up for work. What time did
16 you get up for work?

17 A. I got up about 5.

18 Q. How well did you sleep?

19 A. Good.

20 Q. Do you have problems sleeping?

21 A. No.

22 Q. Ever talk to a doctor about sleep issues?

23 A. No.

24 Q. Did you feel rested on the day that you were working
25 on --

1 A. Yes.

2 Q. How were working conditions here? How would you
3 characterize that?

4 A. Great.

5 Q. Great? Do you have space?

6 A. Yes.

7 Q. How was the temperature?

8 A. Bearable.

9 Q. Is it too hot or too cold?

10 A. Well, see that's -- (indiscernible) I'm like a
11 (indiscernible) polar bear so, other people are cold and wanting
12 the heater on and I'm sweating. So --

13 Q. Why are you living in hot Las Vegas? Okay. Disregard.
14 Okay. How was the lighting?

15 A. Lighting is good.

16 Q. Ventilation?

17 A. Good.

18 Q. How were the tools?

19 A. Tools are good.

20 Q. How were the parts?

21 A. Parts are good.

22 Q. Do you ever have trouble with parts?

23 A. No.

24 Q. How is morale?

25 A. Morale is great.

1 Q. How often do you see FAA here?

2 A. The last time I saw them was probably within 6 months.

3 MR. BRENNER: (Indiscernible). This guy's too tough for
4 me. (Indiscernible).

5 MS. DUNKS: Maryam?

6 MS. ALLAHYAR: No.

7 MS. DUNKS: Okay. (Indiscernible).

8 BY UNIDENTIFIED SPEAKER:

9 Q. Just a few real quick. So you spent a lot of times on
10 the engine?

11 A. Yes.

12 Q. And what's the hardest part about the engine
13 installation to you?

14 A. The hardest part?

15 Q. Sure.

16 A. The hardest part is when you're initially installing it
17 into the main gearbox power shafts. So, that's why, you know --
18 we need two people there --

19 Q. Sure.

20 A. -- to guide the engine on there to slide on.

21 Q. And about how much time does that take in the 2 hours
22 that it might take?

23 A. That could take about, I mean, it could take -- I would
24 say at the most 3 minutes to actually engage it.

25 Q. (Indiscernible)?

1 A. Yes.

2 Q. Okay. Of all the parts can you can think of that you
3 removed or replaced from the old to the new engine, do any stand
4 out as you're looking at it? Like this is one or --

5 A. No, sir.

6 Q. -- this is normal or anything like that? Nothing
7 (indiscernible) --

8 A. Nothing alarming.

9 Q. Okay. And do you ever get -- you said you weren't there
10 for the initial operation check or the post -- what was the other
11 check you said?

12 A. The flight check.

13 Q. The flight check. So, do you ever get any follow-up
14 from that? Or would they have contacted you? Or would they have
15 contacted someone else if they needed to question you about some
16 part of the install?

17 A. Well, because I was already off-shift, I think they
18 would. I'm not sure how they would do it, but I would say they
19 would go to the supervisors first.

20 Q. Um-hum.

21 A. And then if anything, they would come back to me.

22 Q. Okay. But you've been available to --

23 A. Sure.

24 Q. -- answer any questions?

25 A. Yes.

1 Q. It's not like he's gone, we can't call him
2 (indiscernible)?

3 A. No.

4 Q. And how about the reading of the fuel system and --
5 normal for this? Anything unique about this?

6 A. I couldn't tell you what the reading was. The install
7 went on; the throttle cables went on. And as far as the reading
8 check, it was taken after they -- it's checked by Gaylan before he
9 does his ground run leak check.

10 Q. Okay.

11 A. So, as far as the angle and this and that, I wouldn't
12 know.

13 Q. Okay. And that's it. Fuel lines, I mean hydraulic
14 lines, all seem to be --

15 A. Good.

16 Q. Good with you?

17 A. Yes.

18 Q. Okay. That's all I have.

19 MS. DUNKS: Great. Kyle, anything?

20 MR. REYNOLDS: Nope.

21 MS. DUNKS: Anyone else? Okay. Well, thank you so
22 much.

23 MR. MANABA: All right.

24 MR. KAAIHUE: Thank you very much.

25 MS. DUNKS: If something else comes up that you think of

1 that you wanted to tell us and --

2 MR. MANABA: Sure.

3 MS. DUNKS: And forgot or whatever, you have my contact
4 information, so feel free to call --

5 MR. MANABA: Okay.

6 MS. DUNKS: -- or e-mail, or you know, if any questions
7 come up later, just let me know.

8 MR. MANABA: All right.

9 MS. DUNKS: Okay. Thank you so much.

10 MR. MANABA: You're welcome.

11 (Whereupon, the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: SUNDANCE HELICOPTER ACCIDENT
 NEAR LAS VEGAS, NEVADA
 Interview of Randall Manaba

DOCKET NUMBER: DCA-12-MA-020

PLACE: Las Vegas, NV

DATE: December 10, 2011

was held according to the record, and that this is the original,
complete, true and accurate transcript which has been compared to
the recording.

Vanita Tildon
Transcriber