

NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF MARINE SAFETY
WASHINGTON, D.C.

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EXPRESS SHUTTLE II :
NTSB #DCA05MM002 :
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INTERVIEW OF :
PAUL HYDER :
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An interview in the above entitled matter was held
on Thursday, November 4, 2004, commencing at 1:00 p.m., via
teleconference before:

- BOB FORD, NTSB
- BRIAN CURTIS, NTSB
- NANCY MCATEE, NTSB
- LT. HEATH HARTLEY, USCG
- CHRIS CONNER, SUN CRUZ

1 P R O C E E D I N G S

2 MR. CURTIS: Good afternoon, it's November 4th at
3 1:00 p.m., and we're conducting a teleconference interview
4 of Mr. Paul Hyder with Ring Power, and first of all, I'd
5 like to go around everybody that's on the line and have them
6 identify themselves and who they're affiliated with. I'm
7 Brian Curtis for the NTSB. Nancy McAtee, NTSB; Bob Ford,
8 NTSB; Chris Conner, Port Richey Casino, Port Captain; Paul
9 Hyder with Ring Power Corporation; Lieutenant Heath Hartley,
10 US Coast Guard; John Benton (phonetic sp.) Ring Power.

11 UDS: Outstanding, you guys are right on track
12 here.

13 MR. CURTIS: Mr. Hyder, the reason we're here
14 today is we're conducting an investigation into the fire on
15 board the Express Shuttle II that occurred on October 17th,
16 and we just wanted to ask you some questions regarding that
17 accident, and possibly you may have some information that
18 may assist us in the investigation. So, if you're ready,
19 we'll get started.

20 MR. HYDER: I'm ready.

21 MR. CURTIS: First of all, Paul, your job title?

22 MR. HYDER: I'm a field service technician II for
23 the marine side, for Ring Power Corporation.

24 MR. CURTIS: How long have you been employed by
25 Ring Power?

1 MR. HYDER: It'll be eight years in December.

2 MR. CURTIS: Previous to that any work history in
3 the marine field?

4 MR. HYDER: No.

5 MR. CURTIS: Any specific training for your
6 occupation? Who was that by?

7 MR. HYDER: Of fuel systems, I don't really recall
8 off the top of my head. I have several certifications from
9 Ring Power Corporation and (indiscernible) Company.

10 MR. CURTIS: Regarding the Express Shuttle II, you
11 worked on that the week previous to the accident, is that
12 correct?

13 MR. HYDER: To my knowledge, yes, and this is
14 Hyder. I'm sorry.

15 MR. CURTIS: I understand there were a couple days
16 of work being done on the engine. Were you there the first
17 day, or the second day, or could you just tell me what days
18 you worked on it?

19 MR. HYDER: Yeah, this is Hyder. I was the first
20 technician aboard the vessel. I was dispatched around 8
21 o'clock. I don't recall exactly the time I, you know,
22 stepped about the vessel. Yes, I was the first one on the
23 vessel.

24 MR. CURTIS: Just for procedural, Paul, you don't
25 need to identify yourself, just everyone else that will save

1 you answering that 100 times.

2 MR. RYDER: Okay.

3 MR. CURTIS: You were dispatched there by?

4 MR. RYDER: Dave McGinnis (phonetic sp.).

5 MR. CURTIS: Did he give you any type of a work
6 order? Did he identify the problem with the vessel?

7 MR. RYDER: No, he just said Sun Cruz has a
8 problem, and I headed that way.

9 MR. CURTIS: Just take us through what you found
10 when you got there.

11 MR. RYDER: When I got on the vessel, I believe
12 Chris was on the vessel, Captain Chris. The actual engine
13 hatch cover was off. I just looked over the engine, didn't
14 see anything visual. Then, maybe three, five minutes later,
15 I went ahead and told Captain Chris to go ahead and fire the
16 engine.

17 The engine ran. Once it started, it ran for maybe
18 a second or two. I immediately told Captain Chris to
19 whoever was on the wheel house, to shut the engine off
20 because there was a broken fuel line. I identified it as
21 number 6 cylinder.

22 Captain Chris went ahead and, I guess, retrieved a
23 fuel line that they had on the boat in the stocker. I don't
24 know exactly where they had gotten it from, but within a
25 couple of minutes, I had one in my hand. The first one was

1 not the right one, but we basically identified the right
2 one, and I had changed the line.

3 MR. CURTIS: Okay.

4 MR. HYDER: Are you still there?

5 MR. CURTIS: Yes, go ahead.

6 MR. HYDER: Okay, and in the process, the actual
7 fuel line was broken at the fuel system, where the fuel pump
8 is at. Not at the nozzle, the end of the fuel line. There
9 was no clamps or anything like that. No fuel line clamps
10 holding number 6 on. It took a 3/4 wrench and a 7/8 wrench
11 to remove that line.

12 We matched up the number 6 line, put the new fuel
13 line on there, bled it out, and we started it again. The
14 engine sounded normal. It had a slight misfire on it. I
15 did troubleshooting on the engine. Number 1 cylinder had a
16 slight misfire in it.

17 I proceeded on. The rocker box was actually
18 cracked, and I explained to them, you know, this is how I'm
19 going to do it, and they said no problem, we want to put a
20 new rocker box on that side anyway because it has a crack in
21 it and it was leaking oil.

22 I went ahead and removed all the lines from the
23 fuel system, or I'm sorry, the nozzle end of the fuel lines,
24 and removed the whole rocker box with jumper lines. Removed
25 number 1 injector nozzle from number 1 cylinder, didn't see

1 any visual problems or anything like that with the nozzle or
2 any, you know, process for a misfire.

3 I spoke with Captain Chris for a few minutes, and
4 with both of our decisions, we decided to (indiscernible)
5 the engine, and that just means he lets us see the inside of
6 the engine. You can't see it from the outside. So, I got a
7 hold of my dispatcher, which is Dave McGinnis, and he got
8 the (indiscernible) en route. I drove to the Tarpon Springs
9 store, and waited there, and ate my lunch.

10 I got the (indiscernible). Paul Snyder met me at
11 the Tarpon Springs store, and Paul Snyder and I proceeded
12 back north to the B- where the vessel was located. We went
13 ahead and did our (indiscernible). We found B- there was
14 some carbon build up in the valve B- between the valve and
15 the (indiscernible) on number 1 cylinder. That was a slight
16 misfire we were getting, and there was a crack in the
17 casting of the head, between the valves on number 5
18 cylinder. Then, we proceeded to pull the cylinder head off.

19 Are you still with me?

20 MR. CURTIS: Yes, go ahead.

21 MR. HYDER: Okay, I may have forgotten a few
22 things. It's been a while.

23 MR. CURTIS: Okay.

24 MR. HYDER: Then, I guess, Captain Chris and his
25 crew members, well, I guess the crew members loaded all the

1 necessary parts that we would need to put the cylinder head
2 on. As I was taking the wrapping off of the cylinder head,
3 I noticed that it still had the studs in the cylinder head
4 for the old style bridges, the valve bridges.

5 To do the job correctly and professional, we sent
6 the head back to Ring Power Corporation, or wherever B- I
7 don't know who it was the head came from originally, but we
8 B- Paul Snyder went ahead and brought the cylinder head back
9 to the Tampa store, and our machine shop removed the head
10 or, removed all the springs, the valve springs, and the
11 nozzle chambers, and removed the dowels. There's a special
12 tool for it.

13 I stayed behind at the vessel. I cleaned up,
14 secured everything on board, and covered the engine up where
15 the pistons were exposed and internal parts, with cardboard
16 and oil absorbing pads. I cleaned up my tools, organized
17 everything, packed my tools up, and I went home for the
18 evening. I believe this was Thursday, was maybe the 14th,
19 am I correct? I think it was a Thursday that's when we --

20 MR. CURTIS: Okay.

21 MR. HYDER: -- went ahead, at the shop. The
22 machine shop was finished with the cylinder head. Are you
23 still there?

24 MR. CURTIS: Yes.

25 MR. HYDER: I can't hear you, and I just want to

1 make sure we didn't lose you.

2 MR. CURTIS: No, just go ahead.

3 MR. HYDER: Paul Snyder went ahead and loaded up
4 the cylinder head up. I went ahead and headed north from
5 Tampa to Tarpon Springs, no, Port Richey, I'm sorry, and
6 went ahead and got all the tools out and everything and
7 ready for installation of the cylinder head, and we
8 installed the cylinder head, and you know, I think their
9 crew members cleaned a few of the parts, and we installed,
10 you know, all the water lines, the cylinder head, torqued
11 everything.

12 We adjusted the valves, put the new rocker box on,
13 bled all the lines. There were a few fuel lines brackets
14 missing from the size of the engine that we were working on,
15 and actually, when I found the broken fuel line on number 6
16 cylinder, I brought to Chris' attention that the clamps
17 needed to put on there, and his, I don't know, word for
18 word, his exact words or anything like that but I think it
19 was something like he would take care of it.

20 I don't remember because we're not really rushed,
21 but you know, they're a commercial vessel, and they needed
22 that for B- that's how they make their money, I suppose, and
23 everything else. So, basically, Paul got back there, we put
24 the cylinder head on the boat. Everything was B- I didn't
25 forget anything.

1 So, we went ahead and fired the engine up, and we
2 were on it for a sea trial, and number 3 cylinder had a
3 misfire. We looked at everything, checked the fuel and all
4 that and there was no problems. We brought B- came back to
5 the dock. We checked the valve adjustment. One of the
6 intake valves was a little tight and that's what the misfire
7 was caused from.

8 We readjusted the valves, put the valve cover and
9 air set back on, sea trialed the vessel again. No problems
10 with vibrations. Nothing in that nature. We came back to
11 the dock, cleaned up, and Paul Snyder wrote the service
12 report. I got all the tools and everything off the vessel,
13 cleaned up, looked around the engine. I didn't see any
14 visual leaks or anything like that. No problems. We packed
15 up and headed back south to Tampa.

16 MR. CURTIS: So, the service report, I haven't had
17 a chance to go through our records yet that's the service
18 report was written by Paul, then, Snyder, correct?

19 MR. HYDER: Snyder, yes.

20 MR. CURTIS: Back to the clamps. So, who put the
21 clamps on when you finished the job? They were going to
22 take care of that themselves?

23 MR. HYDER: Yes, well, I remember, once we
24 finished the job, his exact words. Once we finish the job,
25 well, then we'll take care of it.

1 MR. CURTIS: When you did the sea trial, were all
2 the clamps on?

3 MR. HYDER: No.

4 MR. CURTIS: Do you recall who assisted you from
5 Sun Cruz? Was there anybody the first day and the second
6 day? Do you remember their names?

7 MR. HYDER: What, crew members?

8 MR. CURTIS: Yes.

9 MR. HYDER: All I really know is Captain Chris and
10 maybe I heard a name of Wooden or Woody or something like
11 that. I'm not really sure. It was either Woody, or Wooden,
12 or something like that. That's really the only two names I
13 remember hearing.

14 MR. CURTIS: That was the first day or the second
15 day, do you recall that?

16 MR. HYDER: I believe Wooden was there, but not
17 that evening. He wasn't there when I actually stepped on
18 the vessel. He was there Wednesday evening, for, I don't
19 know, maybe around 3:00 or 4 o'clock or so.

20 MR. CURTIS: I'm just going through my notes here.
21 Regarding those fuel lines to the injectors themselves, if
22 you're going to replace one, is there a recommended CAT
23 procedure for them, and if there is, just go through what
24 that would be.

25 MR. HYDER: Well, for one, you would have to

1 remove the clamps. They're actual stands that actually bolt
2 the fuel lines to either the after cooler housing, and I'm
3 pretty sure they'd be on the left and right (indiscernible)
4 side of the after cooler housing. I think, I believe
5 they're called stantions (phonetic sp.).

6 MR. CURTIS: Okay.

7 MR. HYDER: Once you remove the line, you put
8 them B- you know, the line in place. You would tighten
9 your B- snug your nuts up on each side on the fuel system,
10 and on the jumper line side where the nozzle is, at the
11 rocker box. Tighten your clamps up, and then, torque your
12 nuts down.

13 MR. CURTIS: There is a torque value for those
14 nuts? I mean they're not just arbitrarily tightened with a
15 wrench?

16 MR. HYDER: Yeah, there is a torch back on them.
17 I don't know it right off the top of my head. I would have
18 to get my laptop out, and look it up.

19 MR. CURTIS: No problem, Paul. Regarding the fuel
20 oil line being broken, had anyone from Sun Cruz ever
21 identified to you that they were breaking or fracturing or
22 any types of problems with that?

23 MR. HYDER: Not to my knowledge, no.

24 MR. CURTIS: Is that something normal that they
25 would break, or what would cause them to break at an

1 abnormally high rate, or is that something you see once in a
2 while? Just give me a little bit of information there.

3 MR. HYDER: I, honestly, I've only seen one broken
4 like that in the past. It's probably been five or six
5 years. It was on a sister engine to the 308, and it was
6 basically the same reason. The clamp was actually loose.
7 It was there, it just wasn't tight.

8 MR. CURTIS: You said number 6 was broken when you
9 got there, was that fractured or broken clean off?

10 MR. HYDER: It was broken clean off. It was
11 probably B- if you put your two index fingers together B-

12 MR. CURTIS: Yes.

13 MR. HYDER: -- move them apart, you know, where
14 they're touching, your like fingernail to fingernail?
15 That's about how far away they were, you know, the two ends
16 were broke. That's how far apart the two lines were.

17 MR. CURTIS: Regarding this engine, just we're
18 going to get a manual for it. Is there a particular manual?
19 If I get a general 34 white manual, is it a specific
20 version like a 1996, 2000? We're just getting a manual, I
21 want to make sure I'm looking at the right manual.

22 MR. HYDER: (Indiscernible.)

23 MR. CURTIS: Is there any particular version that
24 would apply to that engine, do you know, off hand?

25 MR. HYDER: For the fuel lines?

1 MR. CURTIS: Just for that engine, just for
2 informational purposes for us. I noticed some of these
3 manuals, they have different versions, different years.

4 MR. HYDER: If it's an 8 or a G serial number
5 prefix, you would need to know that and it's a 3408 peak
6 engine.

7 MR. CURTIS: 3408 peak?

8 MR. HYDER: Yes, or a 3408 Z.

9 MR. CURTIS: All right, the only question I have
10 right now, Paul, is, I don't know if I asked you this
11 before, but did anyone from Sun Cruz ever ask you for the
12 procedure of how to properly replace these fuel lines using
13 the torque wrench that you mentioned before?

14 MR. HYDER: No, no one. For me, no.

15 MR. CURTIS: I'm going to pass it along to Nancy.

16

17 MS. MCATEE: This is Nancy McAtee, NTSB, no
18 questions.

19 MR. CURTIS: Bob Ford?

20 MR. FORD: This is Bob Ford, NTSB. I'm not quite
21 sure if I got your training. Is there something like a CAT
22 training school that you would go to? I know, for
23 automotive, the major companies would have that.

24 MR. HYDER: Yes, they have their in-house
25 schooling, which is provided with certificates after you've

1 passed a course here at Ring Power. It was Ring Weaver. I
2 have a certification with Ring Weaver and Ring Power's name
3 on them.

4 MR. FORD: Then, we can get a copy of those
5 certifications?

6 MR. HYDER: Yes, sir.

7 MR. FORD: How long was the class?

8 MR. HYDER: The class is a week, five days.

9 MR. FORD: Five days?

10 MR. HYDER: Yes.

11 MR. FORD: When you go work for Ring Power, do you
12 go out under someone's supervision or do you go solo
13 immediately? How does that work?

14 MR. HYDER: Well, I started out with -- in the
15 shop, and I had to show, you know, what I knew and all that
16 and I spent a year in the shop, and the rest of my time has
17 been at (indiscernible) service.

18 MR. FORD: With eight years at Ring Power, one
19 year in the shop, and then you spent seven years in the
20 field?

21 MR. HYDER: Yes, sir.

22 MR. FORD: How often do you refer to the manual,
23 the CAT manual on the engine?

24 MR. HYDER: Oh, boy, often. I mainly work on the
25 smaller pleasure craft engines. My history with the 3400

1 series engine, it was very great when I worked on the
2 trucks, and they're basically the same engine family as the
3 3408. They have the pump in line. Those are my everyday
4 engines, but there's some things that you do forget. You
5 have to get your laptop out and go into the service manual.

6 MR. FORD: You keep the service manual, it's in
7 your laptop, it's electronic?

8 MR. HYDER: Yeah, our B- or my one, my particular
9 laptop was on the Sun Cruz vessel.

10 MR. FORD: Do you recall, if any, warnings or
11 alerts or anything from either the manual or from
12 Caterpillar, regarding these engines?

13 MR. HYDER: What do B- can you specify a little?
14 I don't understand what you're saying.

15 MR. FORD: Well, this looks like with an
16 automobile, you may have a recall. Maybe, from past
17 history, something's happened. Are you aware of anything
18 that Caterpillar or Ring Power put out that said that you
19 have to be specifically aware of something with this
20 particular engine?

21 MR. HYDER: No, sir.

22 MR. FORD: That's all I have, thank you.

23 MR. HYDER: Do you want me to bring Dave McGinnis?

24 MR. CURTIS: We'll keep going. Captain Chris,
25 please?

1 MR. HYDER: I'm sorry.

2 MR. CURTIS: Captain Chris?

3 CAPTAIN CHRIS: Yes, sir. (Indiscernible.) Chris
4 Conner, Port Richey Casino.

5 MR. CURTIS: Thank you, Lieutenant Hartley?

6 MR. HARTLEY: Hi, this is Lieutenant Heath Hartley
7 from the Coast Guard. Paul, I just want to get a little
8 more clarification on the procedure to move the head. When
9 you removed the head, what was the status of the fuel line
10 delivery? Delivery lines?

11 MR. HYDER: The fuel system is, basically, the
12 same shape as the engine. It's in a V form. You have four
13 lines on each side for an 8-cylinder. Some of the lines on
14 the left side cross over, and go to the right
15 (indiscernible) and vice versa, right (indiscernible) goes
16 to the left (indiscernible). It's on a cam finding of the
17 fuel system.

18 It's really simple to ruin the cylinder head. Do
19 you have a few more lines in the front of the engine? The
20 instrument panel, which has all your gauges, and let's see,
21 there's B- I don't know exactly what gauge is in there.
22 Like oil pressure, oil temperature, water temperature, maybe
23 even transmission oil.

24 Actually, Paul Snyder was in that area. I was
25 working on the top. They're real simple to work on.

1 Removing it takes, maybe, an hour and a half, two hours, you
2 know, the complete (indiscernible) head. Take four fuel
3 lines off, four lines in the front, the exhaust manifold,
4 the elbow, remove the turbo, wipe the pipes, the expand pipe
5 for the turbo, and a few water lines in the back, and the
6 rockers, the bridges, the nozzles, and head bolts, and you
7 get two people to lift it off there.

8 MR. FORD: On that day that you removed the head,
9 you guys did remove all the fuel lines from that (21:08)?
10 At least on the inboard side of that motor?

11 MR. HYDER: Basically, he just removed the fuel
12 line from the rocker box, but you don't have to take the
13 (indiscernible) completely off. There's plenty of room.
14 Once you take the (indiscernible) it's a 7/8 size nut. It's
15 a flare nut. You take all four of them off, and then your
16 rocker box comes out of the way. Then you have, maybe, four
17 to five inches of clearance between the top of the cylinder
18 head and the fuel lines. So, once you lift the head up, you
19 move it over, and you lift it right up.

20 MR. FORD: Okay.

21 MR. HYDER: It saves a lot of time.

22 MR. FORD: That's exactly what the manual calls
23 for, for procedures or removing the head?

24 MR. HYDER: Word for word, I couldn't tell you.

25 MR. FORD: Based on your experience with this

1 series 8 motors B-

2 MR. HYDER: Uh-huh.

3 MR. FORD: -- in the marine field, what might
4 constitute it like a chronic problem of fuel line either
5 leaks or breaks with the fuel line on that particular motor?

6 MR. HYDER: Vibration and pressure are the only
7 two things that are there.

8 MR. FORD: Okay.

9 MR. HYDER: Nothing else, to my knowledge.

10 MR. FORD: All right, that's all I have at this
11 time.

12 MR. CURTIS: I don't have any more. We'll just
13 buzz around once more. Nancy?

14 MS. MCATEE: No questions.

15 MR. CURTIS: Bob Ford?

16 MR. FORD: No, Bob Ford, no.

17 MR. CURTIS: Captain Chris?

18 CAPTAIN CHRIS: No, sir, thank you.

19 MR. CURTIS: Lieutenant Hartley, anything else?

20 MR. HARTLEY: No, thank you, sir.

21 MR. CURTIS: All right, well, this concludes the
22 interview of Mr. Paul Hyder. It's now 1:30 p.m., and thanks
23 a lot for your participation, Paul.

24 MR. HYDER: Right, thank you.

25 (Whereupon, at 1:30 p.m., the interview was

1 concluded.)
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C E R T I F I C A T E

DEPOSITION SERVICES, INC., hereby certifies that the attached pages represent an accurate transcript of the electronic sound recording of the proceedings of the National Transportation Safety Board Interview regarding the Express Shuttle II, NTSB #DCA05MM002.

INTERVIEW OF PAUL HYDER

FIELD SERVICE TECHNICIAN, RING POWER, CORP.

Eve Jemison, Transcriber