

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

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:  
SELENDANG AYU :  
:  
INTERVIEW OF 3RD ENGINEER :  
MUTHA BALAUBRAMANIAM :  
:  
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An interview in the above entitled matter was held  
on Saturday, December 13, 2004, commencing at 2:53 p.m.,  
before:

BRIAN CURTIS, NTSB  
DARRELL HOWELLS, USCG  
ARUN AHFUWAFIA, IMC  
CAPTAIN LEW KWOK YUE, IMC



1           MR. HOWELLS: Darrell Howells, marine inspector,  
2 U.S. Coast Guard.

3           THIRD ENGINEER BALAUBRAMANIAM: Mutha  
4 Balaubramaniam, (indiscernible) from Selendang Ayu.

5           MR. CURTIS: Mutha, first of all, a little bit  
6 about your education to get your license.

7           THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible)  
8 diploma in mechanical engineering, three years course.  
9 After that I joined the Indian Navy October in 1983. I  
10 joined as (indiscernible). I put in 15 years of service in  
11 Indian Navy. '98 October, I (indiscernible) retired, and  
12 1999, I joined the (indiscernible) Navy as a  
13 (indiscernible) engineer in (indiscernible) ship. After  
14 that I went for my class for motor -- marine engineer  
15 officer exams.

16           MR. CURTIS: I'm sorry, just back up a little bit.  
17 You got your license, you started where, in the Merchant  
18 Marine, Merchant Navy? Where was that?

19           THIRD ENGINEER BALAUBRAMANIAM: Yeah, after '98,  
20 when I left Indian Navy, then I joined -- in '99, I joined  
21 one (indiscernible) area, Merchant Navy as a 5th engineer  
22 with a Navy background, I joined. After that -- after six,  
23 seven months, I went -- I went for the exams. Class four  
24 motor marine engineer officer unlimited. Engine unlimited.

25

1           When I cleared the exam, then I joined as 4th  
2 engineer, and my first contract I did six months in the  
3 container vessel. Again, after a month break, again, I did  
4 three months as a 4th engineer, the same (indiscernible).  
5 Then, after three, four months gap, I realized 4th engineer  
6 again in the (indiscernible) area, new built ship, yard  
7 (indiscernible) from (indiscernible) ship, and six months  
8 after I signed off, again, three month's rest.

9           Again, I joined the sister vessel (indiscernible)  
10 another ship from yard, has 30 unit, (indiscernible) area  
11 again. Again, after six months, I signed off. All this I  
12 was there in an other company that is Paramount Shipping,  
13 (indiscernible) ship. Then I joined IMC. My first contract  
14 I've been -- I did in handy dragon (phonetic sp.) bulk area.

15           MR. CURTIS: When did you first join IMC  
16 (indiscernible)? When was that?

17           THIRD ENGINEER BALAUBRAMANIAM: Exactly this --

18           MR. CURTIS: Roughly.

19           THIRD ENGINEER BALAUBRAMANIAM: -- roughly,  
20 (indiscernible) I did eight grade and up, months exactly.  
21 Eight to eight and up months, I did my contract as third  
22 engineer. Then, again, I took three, four months rest, and  
23 then I joined Selendang Ayu, 4th number this year in China.

24           Then, I did a (indiscernible) voyage to Seattle  
25 (indiscernible).

1           MR. CURTIS:    So this is your first trip on the  
2 Selendang Ayu?

3           THIRD ENGINEER BALAUBRAMANIAM:   Yes.

4           MR. CURTIS:    First contract?   What I'd like to do,  
5 Mutha, is have you just go through -- I understand the  
6 problem started Monday on the 6th around late morning, lunch  
7 time area.   So, first of all, you were a day worker, or?

8           THIRD ENGINEER BALAUBRAMANIAM:   Normally, we are  
9 having (indiscernible) watch that is day work, morning 8:00  
10 to evening 5:00.   When this weather goes rough, chief  
11 engineer advised, or he asked us to switch to watch keeping.  
12    So, that time I do 12:00 to 4:00, 12:00 to 4:00.

13          MR. CURTIS:    So that day, you were on watch at the  
14 time?

15          THIRD ENGINEER BALAUBRAMANIAM:   On the day, the  
16 6th --

17          MR. CURTIS:    The 6th?

18          THIRD ENGINEER BALAUBRAMANIAM:   -- all in morning,  
19 12:00 to 4:00 I kept my watch.

20          MR. CURTIS:    Okay.

21          THIRD ENGINEER BALAUBRAMANIAM:   Everything was  
22 fine, it was smooth running.   I was relieved by second  
23 engineer, and I left engine room 4:30 in the morning.   I  
24 left up -- handing over.   Also, I told second engineer in  
25 case -- normally, we keep the watch in case the sea is

1 rough. If it is getting better, or like that then we switch  
2 back to your (indiscernible).

3 So, that was the thing that I had told second  
4 engineer. I told him (indiscernible) if the seas are getting  
5 better or something likely, call me (indiscernible).

6 MR. CURTIS: Were they getting better at the time?

7 THIRD ENGINEER BALAUBRAMANIAM: It was little  
8 okay, little okay. It was not perfectly calm, but.

9 MR. CURTIS: What I'd like to do is go through  
10 when you woke up that morning of the 6th, and take your  
11 time, and just any times you can remember events happening  
12 for whatever time, hour of the day, if you can. I'll need  
13 to go through your whole experience from Monday morning on  
14 the 6th, right until you get off on the helicopter. So,  
15 take your time, and any detail you can. I won't interrupt  
16 you, I'll just let you go. We'll ask other questions  
17 afterwards.

18 THIRD ENGINEER BALAUBRAMANIAM: Yeah. I --  
19 normally, I do the watch in the morning time. After that  
20 I've been told second engineer that if you are reverting  
21 back to your (indiscernible) watch, then I come at the  
22 normal time. Otherwise, he'll give me a call at -- so that  
23 I come before 12 o'clock.

24 This other thing we had discussed, but somehow I  
25 got up in the normal time, like 11:00, 11:30, I was -- went

1 for my meal, and got a call from chief engineer. He said we  
2 stopped engine, and I asked what happened. He said hurry up  
3 and come, the top engine, this Leonard No. 3 unit, engine  
4 number 3 unit liner track compass.

5 So, from there I went. When I got on, it's a  
6 door, when you come to the engine room, first on the right  
7 side, on the port side you have a door called a  
8 (indiscernible) room. I went inside, saw chief engineer,  
9 second engineer, 10, 11, pocket. I asked what happened?  
10 What? He said, Leonard No. 3 unit is cracked. We are  
11 planning to isolate number 3 unit and start (indiscernible).

12 Then, they were preparing to make us -- manual was  
13 there on table. It was opened. They were showing that list  
14 of things to be isolated. As for the in sections, we have  
15 to tell the -- each and every step of things which we  
16 are -- they were plan to isolate. Like, (indiscernible)  
17 pump up number 3 want to do isolate first.

18 Second thing is to isolate exhaust wall  
19 (indiscernible) to blank exhaust while spring air, and to  
20 isolate pilot air, or starting air wall. (Indiscernible)  
21 oppose this on the desk (indiscernible). I confirmed from  
22 second engineer, sir, is the change over, it's already done,  
23 (indiscernible) it is.

24 After that he said okay. Second engineer  
25 told -- he joined me for isolating duct. (Indiscernible)

1 just popped. A little (indiscernible) for isolation. We  
2 started the work to isolate it successfully.

3 MR. CURTIS: I'm sorry to interrupt, but just once  
4 in a while if you could throw in the times, roughly, as you  
5 go along. So, we get an idea of the time line as this all  
6 happens.

7 THIRD ENGINEER BALAUBRAMANIAM: Roughly, the time  
8 taken to isolate, or what time we started the work?

9 MR. CURTIS: As you go along, each step, if you  
10 could just remember, the best of your recollection, the  
11 times.

12 THIRD ENGINEER BALAUBRAMANIAM: If I remember the  
13 time, I'll definitely tell, but I'll try --

14 MR. CURTIS: Okay.

15 THIRD ENGINEER BALAUBRAMANIAM: -- (indiscernible)  
16 the control room.

17 MR. CURTIS: Okay.

18 THIRD ENGINEER BALAUBRAMANIAM: I'm ready to obey  
19 the next part of -- as and from a defense, ex defense  
20 person, so I followed that. I ready to obey the order, and  
21 give little suggestion, and start the work (indiscernible).  
22 That's how I do my work. So, about maybe (indiscernible)  
23 because after the fuel pump isolation, we started  
24 (indiscernible) for the next exhaust wall side.

25 There, people were already doing job like

1 disconnecting the (indiscernible) wall pipe, and so, we just  
2 joined, and we isolated other thing, and after that we went  
3 for starting the engine.

4           When we went for starting engine, there is a  
5 number (indiscernible) of what we use to follow. That is,  
6 (indiscernible), and see that is no other lamps, and we gave  
7 a (indiscernible) through. Then, it was -- and we  
8 checked -- of course, me and 4th engineer, we are always  
9 there on the top platform to see that -- and something's  
10 coming out of the indicator caulk (phonetic sp.). Are the  
11 noises okay, and so, we are there and second engineer's in  
12 control room.

13           Gave a blow through, we said okay, everything  
14 fine. He said okay, close indicator caulks. We close  
15 indicator caulks. Then he went (indiscernible) the numbers  
16 (indiscernible). I (indiscernible) engine we put -- hear  
17 the sound of engine cracking, but there's no explosion  
18 sound. Engine is still just firing some (indiscernible).

19           Again, we tried -- there was (indiscernible)  
20 times. It was tried in between while trying. Chief  
21 engineer is to come and tell us okay, now you check that  
22 (indiscernible) racks of the (indiscernible). So, we would  
23 check -- we checked that out, it was moving, but engine  
24 could not start.

25           After that chief engineer and second engineer were

1 discussing, and is it okay, we will try and -- because when  
2 we are trying the starts. It will not try the starts like  
3 one, two, three, like that. We have to try once, the engine  
4 is not cranking in between. The reason is number three  
5 unit, starting it is as little. So, we got to, and we are  
6 there turning it, and turn little, and try again, or we try  
7 one last turn.

8           No, I heard start (indiscernible) possible again,  
9 as turn, turn, not possible. Then we engage. Turn a little  
10 bit, again, try to start. This was slightly taking some  
11 time, but we were trying that way, and chief engineer and  
12 second engineer desired it, said okay leave -- pull back all  
13 lighter, all whatever they have planned, or isolated. Keep  
14 only the fuel ignition pump isolated, and press all the  
15 things we'll put back so that the starting air, the starting  
16 air ball will help in cracking the engine better way.

17           So, that was again, done. We tried starting, then  
18 poured six to seven (indiscernible) these two  
19 (indiscernible), but never we could hear the -- it was  
20 no -- the (indiscernible) up the engine already  
21 (indiscernible) the air pressure, so we got to wait for some  
22 more time to get the air reservoir to get charged up. It  
23 was the (indiscernible) ten or eleven he used to pin down  
24 then (indiscernible) the air reservoir, bring it to 28 or  
25 29, then try the sequence again.

1           Finally, when we could not fire, it was either ten  
2 exactly, or (indiscernible) because there are  
3 (indiscernible) lights and (indiscernible).

4           UNIDENTIFIED SPEAKER:   Okay.

5           THIRD ENGINEER BALAUBRAMANIAM:   And most of the  
6 time, we are moving around as per whatever their decision.  
7 Okay, check this, check that, feel the fuel injection pipe.  
8       Sometimes they say, okay, hold the pipe and get -- by that  
9 we were getting the pulse  
10 (indiscernible).

11          MR. CURTIS:   Right.

12          THIRD ENGINEER BALAUBRAMANIAM:   So, altogether  
13 their (indiscernible) okay.   It was (indiscernible) okay,  
14 the fuel is going, engine is cranking, engine is not  
15 starting.   What can be the other reason?   Maybe loss of  
16 compression.   This was the thing decided then chief -- I'm  
17 second engineer -- I told (indiscernible) who pulled this?  
18 Who opened that (indiscernible)?   Who inspects piston  
19 (indiscernible)?

20               (Indiscernible) opened up, it was -- it was a  
21 teamwork.   Everybody was there, our level.   Whatever the  
22 (indiscernible) somebody, somebody, whatever (indiscernible)  
23 they did in a faster way, work 20 minutes.   It had been 20  
24 minutes, we could (indiscernible) open all that doors,  
25 because that door was already opened in Seattle, first

1 (indiscernible) space cleaning (indiscernible). So, there  
2 was no hassle.

3 We opened it. Chief engineer and second engineer  
4 were inspecting the rings. Also, there were going to take a  
5 photograph of the condition of the rings. So, second  
6 officer had been called with chief engineer and a second  
7 officer, they were taking their photographs.

8 During the inspection of the piston rings, it was  
9 done by a -- even though it was done by a chief engineer and  
10 second engineer, the inspection together -- sitting  
11 together, and talking together. (Indiscernible) care  
12 properly. As an engineer, I could see, see things, and when  
13 the piston is down at (indiscernible), there's  
14 (indiscernible) reports can be, but what I was interested  
15 to see the fuel (indiscernible).

16 Okay, what (indiscernible) the piston problem is  
17 (indiscernible) or not. This was the thing I was checking,  
18 and also, whether any dirt is there, or any obstruction, or  
19 any other things like water, or any other thing is there.  
20 This is general check up, which I was doing myself. So,  
21 chief engineer called me and showed me this, okay, see the  
22 number six piston rings? It is darkened, and it is sticky,  
23 and the spring action, when you take a blunt tool like a  
24 screwdriver or like blunt tool, and press the piston rings,  
25 it gives a spring action.

1           That kind of action was not there on piston rings  
2 number two and three, and one was very, very minor  
3 (indiscernible) was there. So, chief engineer decided,  
4 okay, the piston rings are sticky, maybe losing the  
5 compression, is that okay? We have to open and take  
6 out -- pull out the piston, and change the rings.

7           This was decided by him, and also engineer opening  
8 the under piston space to examine space, door also was kept  
9 open. After we finished the inspection of this, then  
10 (indiscernible) space was inspected by them.  
11 (Indiscernible) condition of the inspection was not alarming  
12 or not (indiscernible) something like it was just for five  
13 days oiled, and it was clean. (Indiscernible) open other,  
14 or?

15           MR. CURTIS: No, you're doing good. Excuse me?

16           THIRD ENGINEER BALAUBRAMANIAM: Should I continue  
17 more?

18           MR. CURTIS: Yeah, just keep going. You're doing  
19 great.

20           THIRD ENGINEER BALAUBRAMANIAM: Then, since I was  
21 there continuously working, from the noon time, second  
22 engineer said, okay, relax for some time. They are -- we  
23 have to plan for other things.

24           MR. CURTIS: I'm sorry, I didn't want to  
25 interrupt, but just so -- what time was this when you did

1 the inspection? Was this --

2 THIRD ENGINEER BALAUBRAMANIAM: Inspection time, I  
3 will think I don't (indiscernible).

4 MR. CURTIS: Was that Tuesday though, or?

5 THIRD ENGINEER BALAUBRAMANIAM: It was around  
6 12:00, the night time.

7 MR. CURTIS: Around midnight on Monday? Late on  
8 Monday, okay.

9 THIRD ENGINEER BALAUBRAMANIAM: They had the  
10 problem (indiscernible).

11 MR. CURTIS: Yeah, like Monday, you would've had  
12 the problem.

13 THIRD ENGINEER BALAUBRAMANIAM: Ah, Monday --

14 MR. CURTIS: Around lunch time that they stopped  
15 the engine.

16 THIRD ENGINEER BALAUBRAMANIAM: Yeah, yeah, it's  
17 around 11:00, 12:00 maybe.

18 MR. CURTIS: So, this was late that night?

19 THIRD ENGINEER BALAUBRAMANIAM: Yeah.

20 MR. CURTIS: Okay.

21 THIRD ENGINEER BALAUBRAMANIAM: He said he'll  
22 relax for some time, and then he says he'll start the work  
23 up. Then, in the morning, about maybe about 6:30 or 7:00, I  
24 don't remember exactly, it's before 8:00, I was called and I  
25 said, okay, we check out the cylinder head.

1           We prepared a (indiscernible) to take out the  
2 cylinder head, also the piston, and change the rings, the  
3 piston rings. Normally, in this kind of (indiscernible)  
4 jobs, (indiscernible) engine unit jobs, my job is to  
5 disconnect the piston, also remove the (indiscernible) down  
6 in the crank case.

7           MR. CURTIS: Yes.

8           THIRD ENGINEER BALAUBRAMANIAM: And by then,  
9 they'll move the cylinder connections and cylinder bolts,  
10 nuts. So, by the time I finished my everything, then I  
11 joined the team for lifting the (indiscernible). The  
12 cylinder -- at that time the rolling was heavy.

13           We thought, okay, we have to do this work.  
14 There's no other way. We have to do this work. So, we took  
15 help from deck people also, pried up the cylinder head.  
16 Maybe five ropes or six, we tighten in all the directions.  
17 After we got the rope secure, we pulled out the cylinder  
18 head.

19           The moment it came out of the stacks, that's when  
20 we started. So, luckily -- luckily we did not damage  
21 anything. We did not touch even anything. We tried to hold  
22 the cylinder head and secure it on the port side top  
23 platform, and we latched the ropes, and we kept two  
24 (indiscernible) ropes also latched down so that doesn't  
25 move.

1           That was the time when chief engineer and second  
2 engineer, they started (indiscernible). If you take out the  
3 piston, it is going to -- the moment the crown comes out,  
4 the moment (indiscernible) box area is cleared, the piston  
5 part is going to find the --

6           MR. CURTIS: What time was this about?

7           THIRD ENGINEER BALAUBRAMANIAM: It's maybe between  
8 10:30 to 11:30.

9           MR. CURTIS: Okay.

10          THIRD ENGINEER BALAUBRAMANIAM: It's going to  
11 swing and it's going to crack the liner. Then, it took some  
12 time, about 15, 20 minutes, they were discussing. Finally,  
13 they said okay, now let us stop the work here, and be  
14 standby. (Indiscernible) with the weather condition  
15 improves, we shall find (indiscernible) work.

16          Me, I (indiscernible) the engine okay, I have my  
17 lunch then (indiscernible). After that I left  
18 (indiscernible). In the evening, about 4:00, 4:30, I came  
19 down in engine room (indiscernible) even in -- he went in  
20 Sunday, or somewhere also. As (indiscernible) are running,  
21 and only I want to take a -- even if it is suppose it is  
22 given a rest day, a holiday, or something like. I come  
23 down, and check my own rounds.

24          It's around 4:00. I came down and took my rounds,  
25 and then that is (indiscernible) and second engineer and

1 chief engineer discuss having the discussion  
2 (indiscernible). I took my round. After an hour or so, I  
3 went up again. I had my dinner. Came down again. So,  
4 after that they're there for some time, 2:00, 3:00 it  
5 was -- I don't remember exactly sitting and discussing with  
6 second engineer what else can be done. Next day morning,  
7 the new (indiscernible) second, third. We looked at the --

8 MR. CURTIS: Excuse me, I'm sorry.

9 THIRD ENGINEER BALAUBRAMANIAM: 8:00 morning.

10 MR. CURTIS: The next morning?

11 THIRD ENGINEER BALAUBRAMANIAM: Yeah.

12 MR. CURTIS: Wednesday morning?

13 THIRD ENGINEER BALAUBRAMANIAM: Yeah, 8:00

14 morning, again, it's before times, about 7:00. Not all  
15 7:00, or 6:00, 6:30, I don't remember exactly.

16 (Indiscernible) was there for 20, 25 minutes it was there.  
17 After that okay, you know, they said it okay. We lift out  
18 the piston. Crawl to first level that we put some block.  
19 Underneath, we don't block, and disconnect the piston, and  
20 the piston lifting too. So that you can take out the rings,  
21 and renew and after that we can connect our one, put it  
22 down.

23 That was a wise decision, because piston won't  
24 shake out it when they're not really damaged. The work, we  
25 can finish it faster. We did the same repaired the piston,

1 and put the wooden blocks and remove the lifting tool, and  
2 rip out the old rings, and clean the grooves. The piston  
3 grooves, cleaned nicely, and put the rings (indiscernible)  
4 low ring.

5 We went that time (indiscernible) hardly. I heard  
6 second engineer lowering the piston is not going to be a  
7 problem, but aligning the stopping box is going to take some  
8 time for us, because I'll be there, and the down platform  
9 have to first let the stopping box to second come  
10 (indiscernible) place I have been inspect.

11 I told him okay. Normally, we keep the sound like  
12 three times up and two times lower, one, and stop. So, I  
13 was holding the stopping box, but it was very difficult to  
14 align, because too much of rolling, too much of rolling.  
15 Finally, I could align it. At one time I could align and we  
16 lowered it, lowered the piston.

17 Maybe it was maybe I took -- normally, I put  
18 the -- this operation of putting the piston and aligning the  
19 stopping box, normally I take like one (indiscernible) and  
20 whenever we are in port that goes. Maybe 10 minutes, after  
21 10 minutes, I let the alignment and finish that lowering,  
22 but this time I could have maybe 30 minutes, or 31 minutes,  
23 I don't know what exactly. This took time.

24 After that I told second engineer I'm going down  
25 with the fitter, fitter to -- first to check the stopping

1 box. By that even the (indiscernible) no telling when. In  
2 order to check from down -- down below (indiscernible) we'll  
3 be able to put up all the eight boards properly with your  
4 normal hand tightening. With your normal tightening, it  
5 should go smoothly, all the eight.

6 So, that I went through. First going and I  
7 finished the tightening. Then I went for piston block,  
8 bolts tightening. Four boards are there, two on port, two  
9 on starboard (indiscernible). I started my lashing. During  
10 this process, I could hear the announcement, but I cannot  
11 read what was that.

12 MR. CURTIS: Yes.

13 THIRD ENGINEER BALAUBRAMANIAM: Because I am  
14 sitting silver crank case on the big (indiscernible) I am  
15 sitting. I could not follow what is the announcement, but I  
16 started my lashing on port side. (Indiscernible) some bolts  
17 and started lashing. I was lashing. By then, I saw Patel  
18 was there standing and I told okay, I'll ask for  
19 some -- something I want (indiscernible). I told him go  
20 get. He went out (indiscernible) for the thing, never came  
21 back.

22 I finished port side, and went to starboard,  
23 started. One bolt I took -- after that I was  
24 (indiscernible). Second engineer was there near the door,  
25 crank case door, just shouted at me. In a louder voice,

1 shouted means just in a louder voice, he said AHurry up,  
2 come out. Go on board the helicopter.@

3 I came out. I asked why? Why don't we finish?  
4 He said nothing. He just rush up now. I ran, ran for my  
5 life. They went to the (indiscernible) level, to the  
6 stairs. I was told by someone -- someone told, ATake your  
7 life jacket.@ I went to cabin, took my life jacket, then  
8 boarded the helicopter. Afer me, I think two people  
9 boarded. One, I don't remember who was that. I could see  
10 second officer. After me, second officer boarded. After  
11 that one more person, and then we took off.

12 MR. CURTIS: That was the second load of --

13 THIRD ENGINEER BALAUBRAMANIAM: The second one.

14 MR. CURTIS: Okay, good. Very good, we'll go back  
15 and go through some questions here and any detail we may  
16 like to get. Do you know who actually stopped? Initially,  
17 on Monday, when you had a problem with the cracked liner,  
18 who stopped the engine? Do you know who that was?

19 THIRD ENGINEER BALAUBRAMANIAM: Not exactly. It  
20 was -- I was called. When I came down, I didn't see when  
21 they asked in the telephone itself, what happened? He said  
22 chief said engine stopped, come immediately. What happened  
23 is that liner crack. I could not ask for that because liner  
24 crack for engineer is a big one.

25 MR. CURTIS: Right.

1           THIRD ENGINEER BALAUBRAMANIAM: I kept the phone,  
2 and --

3           MR. CURTIS: Did the engine -- somebody stopped  
4 the engine, the engine didn't stop itself? Is that correct?

5           THIRD ENGINEER BALAUBRAMANIAM: This is the one  
6 question I've asked, because when there is a major breakdown  
7 of anything, usually, I never ask or (indiscernible) or try  
8 to ask more questions to my seniors.

9           MR. CURTIS: Right.

10          THIRD ENGINEER BALAUBRAMANIAM: But sometime when  
11 I work in shoulder, shoulder to shoulder, I am working.  
12 He's also standing with me. Like, how I ask the ginger  
13 word. Did you (indiscernible)? Like that I ask. Engine  
14 stopped its own, or you brought it to stop? It is a normal  
15 stop. Either it's normal stop --

16          MR. CURTIS: Okay.

17          THIRD ENGINEER BALAUBRAMANIAM: -- second  
18 engineer. That's all.

19          MR. CURTIS: Okay.

20          THIRD ENGINEER BALAUBRAMANIAM: I did not get any  
21 time to ask them about any incidents, just joined the work,  
22 and tried to finish the work. I have -- normally, when  
23 something happens, after we finish the work, we can ask  
24 second engineer what happened, sir --

25          MR. CURTIS: Yes.

1           THIRD ENGINEER BALAUBRAMANIAM:  -- or how it went  
2 on?  Tell me that.  Tell me this, but during that time, the  
3 action is very much important and we shouldn't delay from  
4 our side -- don't delay.

5           MR. CURTIS:  That would've been -- they would've  
6 been stopped approximately what time?  I'm not sure if we  
7 got that before.  What time would it have been,  
8 approximately that the engine stopped Monday?

9           THIRD ENGINEER BALAUBRAMANIAM:  It would be  
10 around -- I don't know for certain.  (Indiscernible.)

11          MR. CURTIS:  You mentioned you had a manual out on  
12 the desk there, was that a manufacturer's manual?

13          THIRD ENGINEER BALAUBRAMANIAM:  Yes, BMW.

14          MR. CURTIS:  BMW, and that was in the control  
15 room?

16          THIRD ENGINEER BALAUBRAMANIAM:  Yeah.  Normally,  
17 we keep the maintenance book.  This is there always,  
18 available for anyone to go through or anything, but other  
19 manuals also were there.

20          MR. CURTIS:  In the past, on this vessel, did you  
21 see any problems like this?  Cracked liners, or any major  
22 problems that would cause you to have to stop the engine  
23 underway?

24          THIRD ENGINEER BALAUBRAMANIAM:  In the past,  
25 aboard the Selendang Ayu?

1 MR. CURTIS: Yeah, yes.

2 THIRD ENGINEER BALAUBRAMANIAM: I have spent a  
3 month plus three or four  
4 days --

5 MR. CURTIS: Okay.

6 THIRD ENGINEER BALAUBRAMANIAM: -- but we had a  
7 really smooth running --

8 MR. CURTIS: Okay, no big engine problems?

9 THIRD ENGINEER BALAUBRAMANIAM: -- and even  
10 in -- before ship, before (indiscernible) area, and two  
11 (indiscernible) areas, at the end of --

12 MR. CURTIS: Okay.

13 THIRD ENGINEER BALAUBRAMANIAM: Very friendly, and  
14 very smooth running when it runs, and when in those ships,  
15 also, I have never come across a liner crack.

16 MR. CURTIS: With a cracked liner like that I  
17 assume if you're losing water out of your head tank, through  
18 the crack, how long -- I'm not sure if you saw the actual  
19 leak, but how long do you think you could've run the engine?

20 THIRD ENGINEER BALAUBRAMANIAM: Oh, the crack, I  
21 was -- I asked them after that I went and saw, because of  
22 the curiosity, I'm supposed to see.

23 MR. CURTIS: Right.

24 THIRD ENGINEER BALAUBRAMANIAM: But that time, it  
25 is -- I assumed that it was isolated, and there was

1 no -- even our single, double (indiscernible) were coming  
2 out of that.

3 MR. CURTIS: The chief and the second, were they  
4 down there all the time, from Monday at lunchtime right  
5 through, or when did they take a break? Do you know?

6 THIRD ENGINEER BALAUBRAMANIAM: Are you  
7 aware -- when did they take a -- I don't remember exactly.  
8 It was -- I, myself, given -- I was (indiscernible) in  
9 between the rest, okay, I go. Chief engineer have to be  
10 (indiscernible). Sometime control room, engine room, then  
11 (indiscernible) come back. So, I was not totally  
12 (indiscernible). I always -- okay, it's considerably  
13 (indiscernible) second engineer's (indiscernible) for us.  
14 Second engineer is the main one.

15 MR. CURTIS: Right. So, when you left, who stayed  
16 behind to keep working when you left the engine room?

17 THIRD ENGINEER BALAUBRAMANIAM: Me and fourth  
18 engineer, in turn, we were.

19 MR. CURTIS: But when you left, who stayed down in  
20 the engine room?

21 THIRD ENGINEER BALAUBRAMANIAM: Sometime we were  
22 left also, because I worked, I (indiscernible) he come.

23 MR. CURTIS: No, I mean when you abandoned ship.  
24 When you abandoned ship, who stayed in the engine room when  
25 you left?

1           THIRD ENGINEER BALAUBRAMANIAM: What does that  
2 middle platform -- I could see no one. Only second engineer  
3 was just (indiscernible) because he told me rush up. I  
4 started running. On the top platform, nobody.

5           MR. CURTIS: Was the chief engineer still down  
6 there, or you don't know?

7           THIRD ENGINEER BALAUBRAMANIAM: Chief engineer,  
8 when they come to the (indiscernible) I took my life jacket  
9 and on my way, I saw Captain (indiscernible). I could see  
10 chief engineer also (indiscernible).

11          MR. CURTIS: Were you involved with any  
12 discussions when the -- did the captain ever come down to  
13 the engine room? Did you see the captain in the engine  
14 room?

15          THIRD ENGINEER BALAUBRAMANIAM: Maybe, yes.

16          MR. CURTIS: On Monday, when the first breakdown  
17 occurred?

18          THIRD ENGINEER BALAUBRAMANIAM: Monday, Tuesday,  
19 Wednesday I not recollect it.

20          MR. CURTIS: Okay.

21          THIRD ENGINEER BALAUBRAMANIAM: I sorry. Talking  
22 to chief engineer.

23          MR. CURTIS: So, you didn't have any discussions  
24 with the chief whether he wanted -- he obviously wanted to  
25 shut it down on Monday right then, but did he have any

1 discussions with you, or the second, do you recall, whether  
2 or not they should shut it down right then, or let it run  
3 for awhile?

4           THIRD ENGINEER BALAUBRAMANIAM: Shutting down, or  
5 (indiscernible).

6           MR. CURTIS: Monday, they made the decision to  
7 shut it down. Were you involved in any discussions with the  
8 chief or the second, whether or not you should shut it down  
9 right then? You weren't involved in any?

10           THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible)  
11 because when I came down, engine was already stopped.

12           MR. CURTIS: You say they were made aware by the  
13 PA system announcement, was it, to abandon ship?

14           THIRD ENGINEER BALAUBRAMANIAM: Yeah, it was an  
15 announcement.

16           MR. CURTIS: Does the ship, generally, always work  
17 on bridge control, or engine room control?

18           THIRD ENGINEER BALAUBRAMANIAM: Ship work on  
19 bridge. We handle with the controls (indiscernible). Oh,  
20 I'm sorry, I come back to the same answer. After we start  
21 the engine, the control is sent over. The control is the  
22 bridge all the time.

23           MR. CURTIS: When you come back into port, and  
24 before you shut the engine down, you bring the control back  
25 to the engine room?

1           THIRD ENGINEER BALAUBRAMANIAM: No, they have to  
2 follow the (indiscernible) of what all the men  
3 (indiscernible) is going on. Line is past, and whatever the  
4 way after that - that they say okay, at that time they won't  
5 (indiscernible) any --

6           MR. CURTIS: After they're all tied up --

7           THIRD ENGINEER BALAUBRAMANIAM: After everything  
8 is finished then the control is (indiscernible).

9           MR. CURTIS: Is that a direct coupled engine, or  
10 does it have a clutch on it?

11          THIRD ENGINEER BALAUBRAMANIAM: Direct coupled.

12          MR. CURTIS: Direct coupled?

13          THIRD ENGINEER BALAUBRAMANIAM: Yeah.

14          MR. CURTIS: So, air (indiscernible) to reverse?

15          THIRD ENGINEER BALAUBRAMANIAM: Yeah.

16          MR. CURTIS: Do you know if BMW, themselves, were  
17 contacted during this for any information or support?

18          THIRD ENGINEER BALAUBRAMANIAM: The decisions  
19 whichever is taken, I never went through why and how,  
20 whether office is giving instruction, or whether BMW is  
21 giving instruction. I did not went through all those  
22 things.

23          MR. CURTIS: Okay.

24          THIRD ENGINEER BALAUBRAMANIAM: I followed the  
25 instruction what was given to me.

1           MR. CURTIS:  When you got in that  
2 helicopter -- there's a couple questions, were you strapped  
3 in?  When you actually got in the helicopter, were you  
4 strapped in, or you sit without a belt?

5           THIRD ENGINEER BALAUBRAMANIAM:  It was a basket  
6 (indiscernible) maybe.  It was lowered.  I sat inside.  It  
7 went up.  They pulled it inside.  I letted the people that  
8 they're sitting in before me.  So, I got off.  It was inside  
9 the helicopter.  It went -- they pulled it, pushed it  
10 inside.  Then I rolled outside.  Then their basket is  
11 lowered.  I stuck to one of my colleague.

12          MR. CURTIS:  You didn't have a safety belt on, or  
13 any inside the helicopter?

14          THIRD ENGINEER BALAUBRAMANIAM:  I was wearing my  
15 own life jacket.

16          MR. CURTIS:  Okay.

17          THIRD ENGINEER BALAUBRAMANIAM:  Nothing else.

18          MR. CURTIS:  Just one other thing.  As third  
19 engineer, what equipment are you responsible for in the  
20 engine room?

21          THIRD ENGINEER BALAUBRAMANIAM:  Three of the  
22 (indiscernible) engines (indiscernible), boiler, composite  
23 boiler, two main air compressors, one service air  
24 compressor, emergency fire pump, emergency compressor,  
25 emergency air compressor for starting the generator, life

1 boat engine starboard, and (indiscernible) for all this  
2 equipment. Boiler water, main engine cooling water,  
3 generator cooling water, water analysis, and losing chemical  
4 (indiscernible).

5 MR. CURTIS: In the generators, how often do you  
6 rotate from one generator to the next?

7 THIRD ENGINEER BALAUBRAMANIAM: I can give you  
8 little more little that generators (indiscernible)  
9 generators very good. We did number one generator  
10 (indiscernible). After we -- after the departure from  
11 China, after two days, we started, and five days we took and  
12 we finished the decompilization. So, number two was done  
13 before, before I joined the ship.

14 Number three was getting closer for top  
15 (indiscernible) that is (indiscernible) cylinder, only  
16 cylinder (indiscernible). So, we were planning in a such a  
17 way that we will run one and two, three, but it turns out  
18 number three so that's top portal. Again, two after then,  
19 means we (indiscernible) to go to reach China, and during  
20 that time, our departure (indiscernible).

21 So, we were pushing that -- planning  
22 (indiscernible). All the generators were readily available.  
23 So, we have to exploit number one generator and number two  
24 generator. So, we were running number one.

25 MR. CURTIS: What make were they? What kind of

1 generators?

2 THIRD ENGINEER BALAUBRAMANIAM: Die hards, 5 --

3 MR. CURTIS: (Indiscernible?)

4 THIRD ENGINEER BALAUBRAMANIAM: 5 DK 20.

5 MR. CURTIS: 5 DK 20? Mutha, I guess I'll pass  
6 the questioning on. Are you okay, do want to take a break,  
7 or do you want to keep going?

8 THIRD ENGINEER BALAUBRAMANIAM: No, I do both.

9 MR. CURTIS: Okay, Captain?

10 CAPTAIN LEW KWOK YUE: Captain Lew here. You  
11 mentioned that the main engine and the generator runs on  
12 (indiscernible), and (indiscernible) during maneuvering,  
13 exchange to (indiscernible) the main engine, am I correct?

14 THIRD ENGINEER BALAUBRAMANIAM: For auxiliary  
15 diesel engine, generators run on (indiscernible) fuel oil  
16 all the time.

17 CAPTAIN LEW KWOK YUE: Generator runs on  
18 (indiscernible) fuel oil?

19 THIRD ENGINEER BALAUBRAMANIAM: Whenever we have  
20 to change over one generator to another, shut on one  
21 generator, then, or for any reason you wanted to stop for  
22 any maintenance on anything. Then, we change over the  
23 generators to diesel oil. Otherwise, we prefer running it  
24 in (indiscernible) oil.

25 CAPTAIN LEW KWOK YUE: The main engine? What

1 about the main engine?

2           THIRD ENGINEER BALAUBRAMANIAM: Main engine, in  
3 case of any (indiscernible) what to be undertaken  
4 (indiscernible). Then we change over to diesel oil.  
5 Otherwise (indiscernible) type of fuel valve. So, when you  
6 have a boiler, and steam, and the heat, and everything is  
7 there, it can (indiscernible) and you don't have any major  
8 job of disturbing the fuel lines. Then, we can keep it on  
9 heavy oil.

10           CAPTAIN LEW KWOK YUE: Sir, am I correct to say  
11 that the engine stopped on heavy fuel oil, itself?

12           THIRD ENGINEER BALAUBRAMANIAM: Engine stopping  
13 time, what happened I don't know, and what and when the  
14 diesel oil has been changed over from heavy oil to diesel  
15 oil that time is -- I'm not sure. I don't know, but arrival  
16 Seattle time we had number one unit job. So, that time it  
17 was changed over to diesel oil.

18           CAPTAIN LEW KWOK YUE: I mean this time when the  
19 engine stopped. You're not sure?

20           THIRD ENGINEER BALAUBRAMANIAM: I, exactly don't  
21 know what time it is changed over.

22           CAPTAIN LEW KWOK YUE: But several attempts have  
23 been make to start the engine. Was it make on diesel oil?

24           THIRD ENGINEER BALAUBRAMANIAM: Diesel oil, it was  
25 changed over to diesel oil by someone before, and the

1 starting was fine, and they -- I think, in between, the try  
2 was given from heavy oil also. In between the trial, try of  
3 starting the engine was given even in heavy oil. Let us try  
4 in heavy oil that way.

5 CAPTAIN LEW KWOK YUE: When you were isolating the  
6 number three unit, you mentioned that you were referring to  
7 the manual itself --

8 THIRD ENGINEER BALAUBRAMANIAM: Yeah.

9 CAPTAIN LEW KWOK YUE: -- and then later, upon  
10 advice from the company, based on the consultant, you all  
11 tried another procedure. Is that correct?

12 THIRD ENGINEER BALAUBRAMANIAM: I'm not sure,  
13 from -- chief engineer is always getting a telephone call,  
14 or he's getting messages. I'm not sure whether the  
15 (indiscernible) or from office, the directions, their  
16 (indiscernible) was coming, but I cannot tell in a sure  
17 answer on this.

18 CAPTAIN LEW KWOK YUE: When you are about to leave  
19 the engine room, when you mentioned that a second engineer  
20 shouted to you to go up quickly, helicopter waiting, what  
21 was going on in your mind?

22 THIRD ENGINEER BALAUBRAMANIAM: In my mind, I  
23 thought okay, why the (indiscernible) has not come and let  
24 us -- let me finish this closing of crank case tools, and  
25 help the people who were on top platform that is second

1 engineer and his team.

2 CAPTAIN LEW KWOK YUE: When you were doing the  
3 number six piston ring, was there any anxiousness in  
4 completing as soon as possible, changing (indiscernible)  
5 that you have time that you can do on your own self?  
6 Although, I understand it is very difficult. The ship  
7 rolling, you talk about making the (indiscernible) in line,  
8 alignment and all these things.

9 THIRD ENGINEER BALAUBRAMANIAM: About the rings  
10 been able, it's not time consuming job, but as the person  
11 who was on the ship is rolling, but the (indiscernible) was  
12 in place. Piston was not at all moving. It's in place,  
13 safe, and okay. You would not believe there are -- you'll  
14 never believe this that piston ring was taken out, oppose  
15 it's normal style it is taken out, but the cleaning part of  
16 the groove is very important, because it's -- if you put the  
17 rings on a dirty groove, or in a deposited --  
18 (indiscernible) deposit inside, and new rings will not go  
19 inside, and it will never go. You have to break the rings  
20 to do that.

21 So, that cleaning part was taken so religiously,  
22 so many -- I -- with me, I can see second engineer this  
23 side, Peter, and my number one oiler. Imagine that  
24 (indiscernible) dirt is a (indiscernible) and everybody's on  
25 the group cleaning. We are doing so fast, and what was done

1 so religiously that all intentions were to finish the work  
2 fast, and give the (indiscernible), because our  
3 (indiscernible) like that we could not.

4 CAPTAIN LEW KWOK YUE: When you are about to  
5 enter the helicopter, can you remember what number you rode?  
6 Whether you were the first person, second person, third  
7 person?

8 THIRD ENGINEER BALAUBRAMANIAM: Sure, after me,  
9 (indiscernible) boarded. I think one second officer, and  
10 one (indiscernible).

11 CAPTAIN LEW KWOK YUE: And the helicopter has nine  
12 people?

13 THIRD ENGINEER BALAUBRAMANIAM: Yeah.

14 CAPTAIN LEW KWOK YUE: Okay.

15 MR. HOWELLS: This is Darrell Howells. Why do you  
16 think that - that liner cracked? Do you have any idea?

17 THIRD ENGINEER BALAUBRAMANIAM: No.

18 MR. HOWELLS: Have you had experience with that  
19 type of casualty before?

20 THIRD ENGINEER BALAUBRAMANIAM: No.

21 MR. HOWELLS: Do you know if there were any pieces  
22 of piston ring in number six?

23 THIRD ENGINEER BALAUBRAMANIAM: Yeah, one -- one  
24 piece.

25 MR. HOWELLS: There was one piece?

1           THIRD ENGINEER BALAUBRAMANIAM: Yeah.

2           MR. HOWELLS: What would cause a piston ring to  
3 break?

4           THIRD ENGINEER BALAUBRAMANIAM: I don't know.

5           MR. HOWELLS: When it's time to start up the main  
6 diesel engine, is there a checklist that you use or no? If  
7 you have to start the engine on your watch or something, is  
8 there a checklist that people go by, or is it just from  
9 memory?

10          THIRD ENGINEER BALAUBRAMANIAM: No, as for the  
11 checklist.

12          MR. HOWELLS: Do you know if the checklist was  
13 used after the repairs? After the number three unit was  
14 blanked off?

15          THIRD ENGINEER BALAUBRAMANIAM: Well, I was --  
16 weren't there in control room. It's not.

17          MR. HOWELLS: Do you have any idea why it wouldn't  
18 start? Why the engine wouldn't start? What do you think  
19 was the problem why it wouldn't start?

20          THIRD ENGINEER BALAUBRAMANIAM: To start the  
21 engine, I -- as far as I know, to start the engine, you need  
22 a good cranking speed, good compression, and fuel injection.  
23 Timing is no (indiscernible) because the engine was  
24 straining and very good (indiscernible) there -- there and  
25 you don't have to worry about the timing, but compression,

1 fuel injection, and a good cranking. These three are  
2 required.

3           We tried from cranking. Afer that we -- number  
4 three unit we isolated first. Again, we (indiscernible).  
5 We got the (indiscernible) very good. We got the fuel  
6 injection that was confirmed. During starting, the fuel  
7 (indiscernible) were moving all together, and it is  
8 a -- it's not a -- you know, it's not an abnormal kind of  
9 thing just -- I mean engines are very gentle (indiscernible)  
10 after that. We need their (indiscernible) to start her.

11           When we opened under piston space, we could see  
12 the wetness of the piston crown. The fuel is going. The  
13 last one is the compression. That was the thing we have  
14 suspected. To answer this, if (indiscernible) to finish up  
15 and (indiscernible) maybe engine would've started.

16           MR. HOWELLS: I missed a couple of things. Did I  
17 understand you to say that number one, you saw some problems  
18 with the number one piston ring?

19           THIRD ENGINEER BALAUBRAMANIAM: No, number one  
20 piston ring -- number one piston ring -- is it a unit or  
21 number of unit six you're talking about?

22           MR. HOWELLS: Help me out here. The number one  
23 ring on number six.

24           THIRD ENGINEER BALAUBRAMANIAM: It was -- in  
25 Seattle, we did number one unit decarbonization. That's

1 while --

2 MR. HOWELLS: Oh, okay, thank you.

3 THIRD ENGINEER BALAUBRAMANIAM: So, number six you  
4 need. Even the number one piston ring. It was not having  
5 this ring. If I could -- like it should be, but it was  
6 slightly, very, very slightly better than the number two and  
7 number three.

8 MR. HOWELLS: Okay.

9 THIRD ENGINEER BALAUBRAMANIAM: Slight means  
10 (indiscernible) chief engineer could get. Second engineer  
11 could not get. Like there it was sometime ice, very hard.  
12 It is (indiscernible) suppose you wanted to give a -- if you  
13 wanted to compile a report on that then your (indiscernible)  
14 is (indiscernible).

15 MR. HOWELLS: Okay. That's the top ring?

16 THIRD ENGINEER BALAUBRAMANIAM: Top ring?

17 MR. HOWELLS: Could you go over, again, the  
18 maintenance that was done on number one unit in Seattle?  
19 Tell me that again.

20 THIRD ENGINEER BALAUBRAMANIAM: Number one unit in  
21 engine, decarbonization. That's the undertaken on  
22 (indiscernible) anyhow. (Indiscernible) was his  
23 (indiscernible) was second engineer (indiscernible).

24 MR. HOWELLS: I'm sorry, go ahead.

25 THIRD ENGINEER BALAUBRAMANIAM: To -- actually,

1 he's (indiscernible) the connections of the (indiscernible)  
2 has been more than the you know, taking the cylinder head.  
3 Then, the piston is taken out and cleaning of ring grooves,  
4 and changing of piston rings. All the calibrations like  
5 (indiscernible) calibration, piston ring calibration, axle  
6 and (indiscernible) clearance (indiscernible).

7 MR. HOWELLS: Okay.

8 THIRD ENGINEER BALAUBRAMANIAM: Those are very  
9 good (indiscernible). No problem.

10 MR. HOWELLS: Were you the one actually doing that  
11 work?

12 THIRD ENGINEER BALAUBRAMANIAM: I was part of  
13 (indiscernible).

14 MR. HOWELLS: You were part of it? Did it look  
15 normal to you?

16 THIRD ENGINEER BALAUBRAMANIAM: Yeah.

17 MR. HOWELLS: Normal wear, or --

18 THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible)  
19 everything was -- I helped in calibration of the liners with  
20 second engineer.

21 MR. HOWELLS: Is that normal just to do one unit  
22 at a time? You don't always do all units at once?

23 THIRD ENGINEER BALAUBRAMANIAM: Normally, it is  
24 planned very well that one unit, one port is very good and  
25 safe.

1           MR. HOWELLS: Then, during another time, you do  
2 the next unit?

3           THIRD ENGINEER BALAUBRAMANIAM: Yeah.

4           MR. HOWELLS: Is that off some kind of a schedule?

5           THIRD ENGINEER BALAUBRAMANIAM: From  
6 the -- because I was there (indiscernible) new ship also. I  
7 was there in before.

8           MR. HOWELLS: Okay.

9           THIRD ENGINEER BALAUBRAMANIAM: The running hours  
10 have to be planned in such a way, and right from the  
11 beginning, this plan well, that to undertake one unit, one  
12 time. (Indiscernible).

13          MR. HOWELLS: Okay that's all I have.

14          MR. CURTIS: Actually, there are a couple more.  
15 Mutha, the checklist you used to start the engine, was that  
16 part of your ISM safety management system?

17          THIRD ENGINEER BALAUBRAMANIAM: Yes.

18          MR. CURTIS: So, you had a safety management  
19 system on board, and how many rings were there in a  
20 cylinder, four total?

21          THIRD ENGINEER BALAUBRAMANIAM: Four.

22          MR. CURTIS: So, you had three compression, and  
23 one scraper?

24          THIRD ENGINEER BALAUBRAMANIAM: Yeah.

25          MR. CURTIS: Did the chief ever have a discussion

1 with you, or -- that how close you were to the shore, and  
2 that you needed to finish the repairs because you were  
3 getting close to shore? Did he ever say anything to you  
4 about that?

5           THIRD ENGINEER BALAUBRAMANIAM: Roughly, some kind  
6 of information there going on.

7           MR. CURTIS: Okay.

8           THIRD ENGINEER BALAUBRAMANIAM: I cannot say chief  
9 or -- chief -- normally, chief engineer doesn't come running  
10 and tell individuals like that but there are (indiscernible)  
11 the information was going on.

12           MR. CURTIS: You were aware of it, then?

13           THIRD ENGINEER BALAUBRAMANIAM: Yeah.

14           MR. CURTIS: Okay.

15           THIRD ENGINEER BALAUBRAMANIAM: Not from the  
16 beginning. (Indiscernible) from the beginning, no.

17           MR. CURTIS: Okay, right.

18           THIRD ENGINEER BALAUBRAMANIAM: But on that  
19 particular day, maybe two, three hours.

20           MR. CURTIS: Did you feel the vessel ground hit  
21 bottom? Did you ever feel that?

22           THIRD ENGINEER BALAUBRAMANIAM: Feel? No.

23           MR. CURTIS: When you first hit?

24           THIRD ENGINEER BALAUBRAMANIAM: No.

25           MR. CURTIS: That's all I have. Captain Lew?

1           CAPTAIN LEW KWOK YUE:  If you did not feel the  
2 vessel hit the ground, did second engineer shout it to you,  
3 and tell you to come up?  What stage -- can you try to  
4 remember, was the engine assembled, and was (indiscernible)  
5 assemble of the engine?

6           THIRD ENGINEER BALAUBRAMANIAM:  No, when it was  
7 running upwards to the -- my cabin -- when I was coming near  
8 the top platform level, I could see the cylinder head in  
9 place, and two nuts (indiscernible) there.  Maybe they were  
10 putting the nuts.

11          CAPTAIN LEW KWOK YUE:  Had the helicopter picking  
12 up on -- where did they pick you up from?

13          THIRD ENGINEER BALAUBRAMANIAM:  Forward port side.

14          CAPTAIN LEW KWOK YUE:  Forward port side?

15          THIRD ENGINEER BALAUBRAMANIAM:  Parallel to the --

16          CAPTAIN LEW KWOK YUE:  (Indiscernible) --

17          THIRD ENGINEER BALAUBRAMANIAM:  --

18 (indiscernible).

19          CAPTAIN LEW KWOK YUE:  -- or on the main deck, or  
20 hatch cover, or --

21          THIRD ENGINEER BALAUBRAMANIAM:  Main deck, port  
22 side --

23          CAPTAIN LEW KWOK YUE:  Port side?

24          THIRD ENGINEER BALAUBRAMANIAM:  -- number one.

25          CAPTAIN LEW KWOK YUE:  Number one harbor boats

1 (indiscernible). During the -- prior to this happening  
2 itself, that means departure from Seattle to the engine  
3 break down, was there any abnormal noise that you heard from  
4 the main engine, or the turbo charger itself?

5 THIRD ENGINEER BALAUBRAMANIAM: One or two times a  
6 surging was there.

7 CAPTAIN LEW KWOK YUE: One or two times surging?

8 THIRD ENGINEER BALAUBRAMANIAM: Yeah, not in my  
9 watch. Sometime (indiscernible) that is a evening also  
10 is -- very sorry, not evening. Morning (indiscernible)  
11 eight to five sometime.

12 CAPTAIN LEW KWOK YUE: What about on the  
13 (indiscernible) Passage across? Do you hear or so this  
14 abnormal surging?

15 THIRD ENGINEER BALAUBRAMANIAM: No,  
16 (indiscernible) Passage was okay, no problem.

17 CAPTAIN LEW KWOK YUE: You talk about fuel  
18 injections, the possibility that could be one of the reason.  
19 Who is responsible for cleaning the fuel injectors?

20 THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible).  
21 (Indiscernible) second engine.

22 CAPTAIN LEW KWOK YUE: Second engine is? Is that  
23 (indiscernible) on the landing (indiscernible) systems how  
24 regularly you all do that?

25 THIRD ENGINEER BALAUBRAMANIAM: Yes, second engine

1 was (indiscernible).

2 CAPTAIN LEW KWOK YUE: (Indiscernible) you have no  
3 idea? (Indiscernible).

4 MR. HOWELLS: This is Darrell Howells. Can you  
5 think of anything else to add to the discussion that maybe  
6 we haven't asked you?

7 THIRD ENGINEER BALAUBRAMANIAM: Nothing.

8 MR. CURTIS: Just one last question, Mutha. This  
9 is Brian Curtis, and we'll finish up here. I certainly  
10 appreciate your time this afternoon. When you left the  
11 engine room, if you were allowed to stay down there and keep  
12 working, how long do you think it would've taken you to  
13 finish up to the point where you could start that engine?

14 THIRD ENGINEER BALAUBRAMANIAM: (Indiscernible)  
15 the work, in a sense (indiscernible) number of people is  
16 required. Like, cylinder head nuts tightening, and  
17 connection of all the piping's. Maybe, if  
18 things -- everything was going nice, like their  
19 (indiscernible) pump okay, and we were able to connect on  
20 the first time.

21 MR. CURTIS: Okay.

22 THIRD ENGINEER BALAUBRAMANIAM: Maybe about 3, 2,  
23 3 2 hours, maybe.

24 MR. CURTIS: Another 3 to 3 2 hours, you'd been  
25 finished?

1                   THIRD ENGINEER BALAUBRAMANIAM: Yeah.

2                   MR. CURTIS: All right, that's all I have.

3 Anybody else? I certainly appreciate your time this  
4 afternoon, Mutha, and this concludes the interview. It's  
5 now about 16:00. Thank you, sir.

6                   (Whereupon, at 4:00 p.m., the interview was  
7 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 grounding of the Selendang Ayu on December 9, 2004.

INTERVIEW OF THIRD ENGINEER:  
MUTHA BALAUBRAMANIAM

Eve Jemison, Transcriber