UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

ENGINE FAILURE ABOARD

OSV OCEAN INTERVENTION * Accident No.: DCA21FM012 *

ON APRIL 21, 2021

Interview of: JOSEPH SOILEAU, Port Engineer

Oceaneering International

Via Telephone

Wednesday, May 19, 2021

APPEARANCES:

BRIAN YOUNG, Marine Accident Investigator National Transportation Safety Board

, Chief Warrant Officer (CWO)
United States Coast Guard

I N D E X

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INTERVIEW

(1:00 p.m.)

MR. YOUNG: The recording is on. It's May 19th at 1:00. My name is Brian Young. I'm with the National Transportation Safety Board. I'm working with the United States Coast Guard doing a joint investigation on the engine failure aboard the *Ocean Intervention* back in December of 2020. My last name is Young, Y-O-U-N-G. With the United States Coast Guard?

CWO : Chief Warrant Officer . The last name

MR. YOUNG: Great, and Joe if you mind introducing yourself, please?

MR. SOILEAU: Joseph Soileau, S-O-I-L-E-A-U. I work for Oceaneering International.

MR. YOUNG: Thank you, Joe. As we talked before, thank you for joining in today with this interview. We're -- just to have a few follow-up questions regarding your role with Oceaneering, the vessel itself, the incident, and maybe what the results were of the repair. And as we discussed as well before, we are recording this interview and we would just like you to acknowledge that you understand that we are recording it for the purposes of having a transcript made.

MR. SOILEAU: Understood.

MR. YOUNG: Okay, thanks.

INTERVIEW OF JOSEPH SOILEAU

2 BY MR. YOUNG:

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- Q. Can you talk a little bit just about your job as Port Engineer, and how it relates to the *Ocean Intervention*?
- 5 A. All right, so for my company, my role is that I oversee,
- 6 manage shipyard projects, whether it be mobilization,
- 7 demobilization, special projects, special surveys, or intermediate
- 8 dry dockings, which just you go around. We did an intermediate
- 9 dry docking, and we did a -- repair, an engine that had a failure,
- 10 so we did a repair, and got that out during this project.
- 11 | Q. And was that the engine failure? Anything prior to the
- 12 December incident? Or is, was this the one we're talking we
- 13 | about?
- 14 A. Yeah, yeah, I'm sorry, this is the one we're talking
- 15 about.
- 16 Q. Oh, okay. So, and as, as a Port Engineer, how long have you
- 17 been doing this job as a Port Engineer for Oceaneering?
- 18 A. For Oceaneering, going on eight years.
- 19 Q. And did you have any previous experience --
- 20 | A. Yes, sir.
- 21 Q. -- in the marine industry?
- 22 A. Yes, sir. I've been working in the marine industry all my
- 23 | career.
- 24 | Q. And did you sail in the merchant fleet?
- 25 A. No, sir. No, sir.

- Q. So would it be fair to say it's mostly shoreside support in the marine industry?
- $3 \mid \mid A$. Exactly. Shore support, shoreside support.
- $4 \parallel Q$. And currently, how many vessels are you responsible for?
- 5 A. We have -- let's see, seven, we have seven vessels currently, 6 that belong to Oceaneering.
- Q. And are all of those vessels under your guidance, or are there other Port Engineers that support those vessels?
 - A. My marine manager actually supports the vessels. I just get assigned to what project, and what vessel, at whatever time that
- 11 he would like for me to oversee. In addition, Blair Matherne, I'm
- 12 sorry he couldn't be on the call for jury duty, he does them as
- well. Other guys in our group, depending on where we all are, and
- 14 what projects we're on, if we have another one going on
- 15 simultaneously. So ultimately, at any given time, yes, I could
- 16 oversee any one of the specific vessels.
- 17 Q. Okay. So it's pretty much the *Intervention* may not always be
- 18 your, kind of, responsibility, but it may just be as projects come
- 19 up, and you get assigned to those specific projects.
- 20 A. Correct.

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- 21 Q. Okay, okay. And just when we're talking about the vessel,
- 22 | are the Oceaneering vessels classed by ABS?
- 23 | A. Yes, sir.
- Q. And for my report, it always asks who the owner is, and who
- 25 the operator is? Is Oceaneering International both the owner and

operator of the Ocean Intervention?

A. Yes, sir.

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- $3 \mid \mid Q$. Okay. Great. Soon after the accident I received a few
- 4 documents from Oceaneering, and the Coast Guard, just identifying
- 5 some of the maintenance that had been completed aboard the vessel
- 6 and it was on a bit of a -- it looks like a computer program. Is
- 7 | that some sort of package unit you use to track the maintenance
- 8 aboard the vessels?
- 9 A. Yes, I -- that's more on the Blair Matherne side but -- so
- 10 | from what I understand of it is that that's a system that was put
- 11 in place, I think it's (indiscernible) ISM. I believe they're
- 12 going, slowly moving over to another program, Helm Solutions, I
- 13 believe it's called.
- 14 0. Yeah.
- 15 A. But ultimately, yeah, that's a maintenance tracking program
- 16 | that was built and put together.
- 17 0. Okay. And had that been used throughout the fleet?
- 18 A. On the older vessels, yes, and like I said, some of them have
- 19 been replaced since then with Helm. The *Intervention* hasn't been
- 20 | replaced yet due to not having availability to meet with the
- 21 | vessel, train the crew, and start implementing it.
- 22 | Q. Okay. Due to operational since he's busy working?
- 23 A. Yeah.
- 24 Q. Does that make sense? Okay.
- 25 A. Right, right.

- 1 Q. Understood. And previously we talked about the number of
- 2 vessels in the Oceaneering fleet. Did you say it was seven,
- 3 | total?
- $4 \parallel A$. Let's see. One, two, -- six; it will be six total.
- $5 \parallel Q$. Okay, six. And do you know off the top of your head, if most
- 6 or all of them are equipped with Caterpillar diesel engines? Or
- 7 is there a mix?
- 8 A. There's a mix, there's a mix. They're not all equipped with
- 9 Caterpillar.
- 10 | Q. Okay.
- 11 A. One, two, three, one, two, three; three for sure that I'm
- 12 aware of are equipped with Caterpillar diesel (indiscernible)
- 13 engines.
- 14 | 0. Okay.
- 15 A. Diesel electric engines.
- $16 \parallel Q$. And for the CAT engines aboard the Oceaneering fleet, who do
- 17 you use for major maintenance as a technician? Is it Louisiana
- 18 | CAT?
- 19 A. Force Power.
- 20 Q. Force Power? Okay, and is that the same company or techs
- 21 | that overhauled and repaired the engine after the incident?
- 22 | A. Yes, sir.
- 23 Q. Force Power. And have they been working with Oceaneering for
- 24 | a while as a, kind of a, long-standing relationship?
- 25 A. I've been there almost right at eight years, and as long as I

- can remember, it's always been Force Power.
- 2 Q. Okay. Can you recall if there's a good -- working
- 3 | relationship between Oceaneering and Force Power?
- $4 \parallel A$. I'm sorry. It cut out a little bit, repeat that question?
- 5 Q. Does Oceaneering and Force Power have a good working
- 6 | relationship?

- $7 \parallel A$. Well yes, sir.
- 8 Q. And they are contractors, right? They're not Oceaneering
- 9 employees?
- 10 A. Correct.
- 11 | Q. Okay. When, getting into a little bit of the engine failure
- 12 part of the interview, and once the engine failed, were you on the
- 13 | notification tree? Were you notified pretty quickly?
- 14 | A. No, sir. Due to the type of work the vessel does, there's a
- 15 | limited, there's a -- there are limited management who corresponds
- 16 back and forth, so, no I was not. I was notified after my manager
- 17 was notified.
- 18 Q. Okay. So the manager was notified and through a chain of
- 19 command, you were notified?
- 20 A. Correct.
- 21 0. And for the Oceaneering vessels, is there some sort of a
- 22 | notification process, such as a -- safety concern form, or some
- 23 | type of accident report that would have been filled out? Or was
- 24 | it a phone call? Do you recall?
- 25 A. I'm sure that the first initial thing would have been a phone

- call, if I'm not mistaken it was, and then the process follows from there.
- Q. Okay. And that -- is that process part of the Safety
 Management System that there is a notification procedure?
- 5 A. Yes, sir.

- Q. And if you could describe, as you understand it, the events that took place that afternoon in Hawaii on the *Intervention* with the engine failure? We have read the Chief Engineer and the crew's statements, and we kind of have an understanding of, you know, what may have happened, but it seems like, if you don't mind starting with what you understand with engine hunting issues that they were looking at?
 - A. Yeah, I'm not that familiar with moments prior to it, and my expertise isn't the mechanical side of the engines. That would be more of a Blair Matherne or Darren McGuire could speak more on that. I just don't know enough about it, what causes it, or why it was doing it, or anything like that, and technically, I didn't read any formal reports yet, you know that's other group, other parties in the group who go through all that. Like I said, I just go down there and manage the, the vendors, the tasks, the calls to schedule, meet the deadline.
 - Q. Okay. So more of a project manager, and not as much as the technical/engineering side of it? Would that be correct?
- A. Yeah, I mean, you know, a title is just a title, in my opinion. Whether you call me a project manager or a port

- engineer, I just, I manage the project.
- Q. Okay, okay. Were you present for the engine repair?
- 3 A. Do -- when you say engine repair, do you mean -- we cut the
- 4 deck, swapped the engine out, put the new one in, and sent the
- 5 other one off? Or are you referring to tearing apart the old
- 6 engine and rebuilding it, the damaged engine and rebuilding
- 7 | another one?

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- 8 0. I guess both, actually, so like, maybe it's a two-part
- 9 question. And that helped --
- 10 A. Right.
- 11 Q. Go ahead.
- 12 A. Yeah, so I was present for cutting the deck open, removing
- 13 the failed engine and all the parts and components, and installing
- 14 | the new engine, and putting the boat back together. After that,
- 15 | the engine was sent back to the mainland, to Houma, to Force
- 16 Power, which Blair Matherne was part of the disassemble, the
- 17 | failure analysis, and reassembled the -- of another engine for our
- 18 | spares.
- 19 Q. Oh, okay, and is that somewhat standard procedure for engine
- 20 | overhauls is to swap them out completely on the vessels, instead
- 21 of rebuilding in place?
- 22 A. No, no, no. We'll typically overhaul an engine in place.
- 23 | This one just had a hole in the side of the block so we, we
- 24 couldn't overhaul that, of course, --
- 25 | Q. Right.

- 1 A. -- and it had to get sent back to Louisiana to get started on
- 2 the failure analysis as soon as possible. No, we couldn't get the
- 3 key people down to Honolulu like we needed to. We wanted to get
- 4 | it, the analysis, done as soon as possible to see if there was
- 5 any, if there were anything that they could have picked up on that
- 6 caused it that we could have corrected on any of our other
- 7 | vessels, you know, before something would happen with them.
- 8 Q. Right. Okay. And from what we understand, that, that engine
- 9 that was brought back to Houma has been looked at and, you know,
- 10 there was a report with some findings on it. Were you involved
- 11 | with that, or was that also Blair that was there?
- 12 A. No, I was still in Hawaii at that time. Blair was involved
- 13 with it.
- 14 | 0. Okay.
- 15 A. I do believe they did generate a final report, which I think
- I think you had received a copy of it as well, of the
- 17 findings.
- 18 CWO : Yeah.
- 19 BY MR. YOUNG:
- 20 Q. Okay. All right, maybe we will talk to --
- 21 | A. But no, I'm --
- 22 0. -- Blair after this.
- 23 | A. I wasn't, I wasn't part of that, that (indiscernible).
- 24 Q. Okay. And based on what you, or what Oceaneering has seen as
- 25 | a result of that engine inspection, have there been any changes

- made to the other engines aboard the Ocean Intervention?
- 2 A. Yes. So what we did as an improvement, we added to both the
- 3 Number 1, and Number 3, we installed pre-lube (ph.) pumps which we
- 4 didn't have before as a corrective action.
- Q. And what was the reason for that, for adding pumps to the two
- 6 | engines?

- $7 \mid A$. So my understanding is for that split second of constant
- 8 starting of engine; you know once the engine's, and then I'm going
- 9 to try to explain this as best as I can from how I understand it,
- 10 which again Blair would be able to explain a lot better, you know
- 11 when the engine's not running and sitting there basically gravity
- 12 | takes, pulls the oil back into the pan, you know, most of it
- 13 drops. So without a pre-lube pump, you have just that split
- 14 second of something being dry right when the engine turns over
- 15 before the oil starts circulating and pumping where it needs to
- 16 | go. So installing the pre-lube pumps, that prevents that from
- 17 | happening. I guess -- so basically you wouldn't have a dry start.
- 18 Q. Okay. So these pumps would run prior to the start, and then
- 19 once the engine came up to --
- 20 A. Correct.
- 21 | Q. -- they'd probably shut themselves off?
- 22 A. Correct.
- 23 \parallel Q. Okay. And, just to be clear, was it done on all the engines
- 24 on the *Ocean Intervention*, or just one and three?
- $25 \parallel A$. No, just the one and three because they were the only ones

- that had the capability of installing pre-lube pumps. These
 smaller Caterpillar, I want to say, it, it's not equipped to deal
 with installing a pre-lube pump. I don't have the exact size of
- 4 the engine off the top of my head, in front of me. I don't want
- 5 | to say the wrong size of these.
 - Q. Oh, okay. So it's -- their --
- 7 A. But it -- but the center engine, the Number 2, it's not, it 8 doesn't have the ability to install a, a pre-lube pump.
- 9 Q. Okay. Is it a different model than the other two engines?
- 10 A. It's a Caterpillar -- it's just, I -- I'm not -- I don't
- 11 | want, if I'm not mistaken, maybe it's a 3512 and the two outboards
- 12 are 3516. The two larger generators, the one that are used the
- 13 most.

- Q. Okay. And how about across your fleet? Do you have any other 3516s that you're aware of?
- 16 A. Yes. We actually have another vessel that was in port that
- we sent Force Power to the vessel to do overhauls, and they also
- 18 included pre-lube pumps on the vessel. It's the sister ship to
- 19 the Ocean Intervention.
- 20 Q. And is this something that Oceaneering decided that would be
- 21 a good idea to put these pre-lube pumps on to each of the engines,
- 22 or was this something from Force Power, or what this something
- 23 that was raised to the level of Caterpillar, say, whether it's
- 24 | their headquarters, or their management?
 - A. No. Force Power made the recommendation, and we went with

- it. It can only help, it can't hurt, --
- 2 Q. Right.

- 3 A. -- and it's, it's more feasible, more -- makes more sense to
- 4 spend that little bit of (indiscernible) than to spend -- to do
- 5 what we have to do (indiscernible).
- 6 Q. Understood. Are you involved at all with the oil analysis,
- 7 | say lube-oil analysis aboard the *Intervention*? Or would that be
- 8 more of a Blair topic to discuss?
- 9 A. It'd be more of a topic to discuss with Blair. We do. When
- 10 the vessels are working overseas, they do take their analysis and
- 11 whenever they are actually in port, they do send them over to us,
- 12 and we send them off to get analyzed. But the specific oil
- 13 analysis prior -- the last one that was taken prior to that engine
- 14 | failure, seems to have gotten lost or misplaced with UPS.
- 15 (Indiscernible) our agent, (indiscernible), there's a lot still --
- 16 | they're still trying to locate the analysis -- the oil analysis,
- 17 the oil samples.
- 18 | Q. And was that the -- kind of the regularly scheduled lube-oil
- 19 analysis that they were, was lost?
- 20 A. Yes, sir.
- 21 0. I saw on the report that after the incident, that it looks
- 22 | like there were some fuel-oil analyses being done as well as some
- 23 analysis for the vibration damper. Do you know if those have been
- 24 | completed yet?
- 25 A. I can follow-up, you know. I want to say I spoke to Blair,

- | | | and they did get the analysis report for the vibration damper, and
- 2 | it did come back good. I would have to follow-up with that
- 3 question with Blair. I don't want to say, yeah, it came back and
- 4 | it's -- it just seems like I remember having a conversation and
- 5 that, I thought he said it did come back good.
- 6 Q. Okay. And maybe we will talk to Blair to try to hit him with
- 7 | a few of these more technical engineering terms. I appreciate you
- 8 | filling us in as much as you can, but understand, maybe, Blair is
- 9 -- this is more of his expertise.
- 10 A. Yeah, we, you know, our manager put together a team that have
- 11 | a specific expertise and it works great until you get asked so
- 12 many questions you can't quite answer.
- 13 Q. Of course, yeah, yeah. No problem.
- 14 A. But yeah, Blaire would be the -- he's real sharp with it.
- 15 Q. Okay, and --
- 16 A. He's our, he's our maintenance and repair manager.
- 17 Q. Okay. And he's tied up at jury duty? Is that for a while?
- 18 A. He is tied up in jury duty. , what you could do is
- 19 shoot him an email and I know he was on the original, but I, I
- 20 don't think he jumped into it because I, you know, it's, it was
- 21 | basically the questions addressed to, you know, who managed it,
- 22 and then the mechanics who did the work, but if you send him
- 23 something, I'm sure he can set something up with you guys once his
- 24 | jury duty complete. I -- and I'm almost positive he'll be in jury
- 25 duty all week.

- Okay, okay. I'll work with , and we'll see if we can 1 2 try to get an interview scheduled with him so we can ask him a few more of these technical questions, and maybe, again this might be 3 4 for him, but just want to see if you had heard anything, but when 5 the engine was being torn apart in Houma, and, you know, as they 6 were getting deeper into the engine, does it ring a bell to you, 7 or did anyone say; This is something that's very, very unique? Or we've seen this before? Or is this common issue with this model 8 Is that something that you have heard? 9 of engine?
- A. I want to say that I did hear that it was a common issue.

 That it was a common issue for that, that type, that model, and
 that they're fix was to install pre-lube pumps.
- Q. And the common issue, I think, were just -- didn't really specify it, but the issue of the erosion, the cavitation erosion, or the bearing cavitation for the connecting rod. Is that what they were concerned about?
- A. No, I mean, that -- I believe that's just the common wear. I know they -- I want to say they were getting close to their hours, not at the -- not at the hours the needed to do the overhauls, but they were getting there, so you will start having some wear on some of those bearings as time goes.
- 22 Q. Do you see any --
- A. And again, that's going to be more Force Power and Blair that can speak a little bit more on that whole process.
- 25 | Q. Okay. And has Oceaneering made any recommendations to adjust

the maintenance schedule for these inspections or overhauls on these engines?

- A. That will be a Blair question because since, you know, he is the maintenance manager, so that would be something that he and Darren would have discussed internally, and to see what intervals they would change it to if it needed to be.
- Q. Okay, okay. Great. I don't know. , if you have any questions, or not, at this point?

CWO : Excuse me. No, Brian, I think I'm pretty good.

MR. YOUNG: Okay. Well, I'm sorry, Joe, I kind of thought with the title, that you may have been more involved with the engineering aspect of this, but I appreciate you advising us to, you know, maybe connect with Blair and we'll reach out to him when he's available. Do you have any questions for us?

MR. SOILEAU: Yeah, no, I'm sorry I couldn't help you more.

You know, I understand a little of it, and I learn more during

every project, but --

MR. YOUNG: Sure.

MR. SOILEAU: -- as far as my expertise, you know, I can change an alternator on a vehicle, and a battery, that's about as far as I can do, but as far as the details and functionality and how everything works, and when it gets changed, and all that, Blair can tell you that off the top of his head. It's just something he's always done from -- a good bit of his career.

MR. YOUNG: Okay. We will absolutely reach out to him, and

I'm going to pause and stop the recording, so it will be off record. (Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: ENGINE FAILURE ABOARD

OSV OCEAN INTERVENTION

ON APRIL 21, 2021

Interview of Joseph Soileau

ACCIDENT NO.: DCA21FM012

PLACE: Via Telephone

DATE: May 19, 2021

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

Deborah Dowling Sweigart Transcriber