U.S. Department of Homeland Security
United States Coast Guard

Commander
U. S. Coast Guard
Sector Corpus Christi

Prevention Department
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Interview Summary

Please Print Clearly:

Name:	[redacted]
Street Address:	249 Glasson Drive
City/State/Zip:	Corpus Christi, TX 78418
Phone No:	361-939-5138
Position:	Coast Guard Investigating Officer

I, the undersigned, make the following statement voluntarily, without threat, duress or promise of reward:

CWO [redacted] & NTSB conducted a joint interview, with the Chief Engineer, Lloyd Almeida of the RIVERSIDE. Representatives from Royston Razor joined representing the MODA dock, Representatives from Welder Leshin joined representing the vessels owners / operators and Liam O' Connell joined representing the P&I club for the vessel. The Chief Engineer was not represented by an attorney. The below is my summary of the interview.

The responsibilities of the C/E consist of maintenance in accordance with the safety management system. This was the C/E's first contract on the RIVERSIDE and he embarked the vessel on February 16, 2021 while the vessel was in Brazil.

This was the C/E's 9TH or 10th assignment as the C/E in 38 months. Prior to that he worked for Marshall Ship management for more than 7 months, prior to that he worked for Royal Tankers for one assignment, prior to that, he worked for XIKIDAL for four assignments and Oceanic Ship Management was his first assignment. The C/E stated that he changed companies and vessel's so often as do many to prevent taxation. He also stated that there were no specific trainings, and that each company had individual specific procedures and policies to follow.

The C/E gave us a timeline of the events on March 15;

- 1 hour notice was given at 0930, at that time the engine was prepped by turning on the air.
- 1035 – The vessel started mobbing with no issues.
- The vessel went to 88 RPM, and the temperature started to increase so he started the FWG.
- 1148 – the engine did not respond from the bridge.
- C/E received the calls from the bridge
- Tugs took control of the vessel and the engines were not needed at that point.
- The vessel was docked
- The incident was reported to the company.

The following day, the technician arrived from Houston ship repair, and the technician checked the turbo charger, the air cooler drain and the blower drain pipe. They did note that they felt the astern valve #88 and #45 were slightly leaking.

The C/E was asked about what occurred on March 12, 2021, the C/E stated the that to get the engines running they had to put the vessel in cancel limit mode, which allowed the engines to received an extra 10% of fuel to the engines, this allowed the engines to start ahead and astern. They identified the #6 air distributor piston to be the root cause of the engines failing to start. The crew removed the piston, cleaned and replaced the piston and the engine worked. The engine was able to start 6 times after that with no issue.

The C/E stated the cause was not identified after the March 12, 2021 incident. The company superintendent suggested the C/E push the fuel racks, and he did that while at the local station, after he cancelled the limit as suggested, there were no kickbacks but there was an ahead sensor failure identified.

The C/E stated the change over of watch from one Chief Engineer to another was too short, the previous C/E has health issues, and the current C/E did not feel comfortable sailing with the vessel in its current condition, and he expressed this to the company via the vessel manager, but the company told him to proceed anyway and told the C/E that he would have time prior to the next Port to address conditions. The C/E focused on outstanding items on the vessel which inclided; the fire exhaust valve being old and overdue. The incinerator did not have spares but had a class certificate noting that. The C/E said there were no issues with sailing and no concerns operating the vessel or firing the engine.

The C/E stated the root cause of the engine malfunction was not found on March 12, 2021 because the limits remained cancelled and thought that it may have been a false alarm. The vessel came into the Port of Corpus Christi while the vessel was still attempting to identify the issue on March 12, 2021 when the engines failed to start and the vessel was drifting.

The vessel departing the EPIC dock while the vessel was in limit cancel mode. Prior to the casualty, the vessel was still in limit cancel mode, and during the transit, the jacket water temperature alarm went off and they put the vessel in Astern causing a kick but there was not an alarm sounding for the air distributor.

CWO [redacted] & NTSB conducted a second joint interview on March 26, 2021 with the Chief Engineer, Lloyd Almeida of the RIVERSIDE. Representatives from Royston Razor joined representing the MODA dock, Representatives from Welder Leshin joined representing the vessels owners / operators and Liam O' Connell joined representing the P&I club for the vessel. The Chief Engineer was not represented by an attorney. The below is my summary of the interview.

When asked what specific items on the engine have been repaired or addressed, the Chief engineer specified that he has repaired the Astern valve #11, the ahead valve #10, the astern valve #88 as well as repairing or replacing; #1, #4, #6 and #5 and the exhaust valve drop down test and changed the pneumatic system for leaks and changed #1 exhaust valve which was inspected by the technician.

He also addressed the following with the technician; Air Distributer piston on #6 was getting stuck up, the piston was removed, cleaned, lubricated and replaced, and then operationally tested. There was also an alarm with a cam failure, the Chief Engineer found the sensor needed to be cleaned.

The Chief engineer specified that when he referred to changing a valve, he overhauled the valve, cleaned it and replaced it but did say he replaced the #1 and #4 valve with spares.

The Chief stated the #6 valve was the reason the engine couldn't get in the astern position. When asked why the valves were inoperable, he stated he conducted a starting air leak test which is what lead them to this conclusion. The Chief stated the valves surface must have worn out between the valve and the seat. The surfaced had to be lapped and reassembled.

The Pneumatic dryer system had a cooling issue and said the company supplied the cooling and he recharged the system immediately and put it back in operation. The dryer system cools and dries the air prior to it going to the engine to prevent any moisture which could cause valves to get jammed or sluggish. The Chief stated the air dryer is normally the responsibility of the second engineer. The Chief stated the air dryer was operational when he came onboard but they did not have the gas (Freon) onboard to recharge the system when he came onboard in Brazil. The Chief stated there was not any time and he was unsure of all the issues prior to sailing. He stated that the vessel was out of Freon at least one month prior to the Chief Engineer came onboard. After the loss op propulsion, the vessel was able to receive the Freon gas in Corpus Christi.

On March 12, 2021, the vessel was drifting waiting for a pilot, but the engine wouldn't start. He spoke with this issue with technician from the company but at this point, they were not aware of what the specific issue was with the engine not starting. The Chief engineer did not find any water in the pneumatic system and all the pneumatic valves were found "perfectly ok" indicating to the Chief Engineer that the control air dryer was not the cause of the main engines malfunction.

March 11, 2021, the vessel switched over to NSGO. On March 12, 2021, the vessel attempted to start the engine from the bridge, but the engine would not start in ahead or astern, C/E switched control to the engine room and was able to get it starting in ahead but not sucking in astern. The C/E switched to local control and was able to start but with a low RPM. The C/E thought of a common valve between the local control station and the engine control room, #11, the valve wasn't that bad in his opinion, but he replaced it anyway. He then did the exhaust valve drop down test and there was no issue and then did the leak test for #1 and #4 which were both leaking and then replaced. The main engine was still not responding in the astern direction.

The C/E put the vessel in the limit cancel mode at the engine control room, the engines were able to start up again in ahead and astern.

When asked if cancelling the limit cancel mode is in the manufacturer's instruction manual, the C/E stated he just tried it and it is not in the instruction manual. He was asked what the limit cancel mode gives the engines about 10% extra fuel. The C/E was asked if removing the LCM solve the problem, he stated that cancelling the LCM did not solve the problem. The problem was the pneumatic system (air distributor #6) that was getting stuck that caused the engines to fail to start in the astern position.

When asked about the air dryer unit, the Chief Engineer stated that the unit was operational but not operating at the temperature it was supposed to operate in as specified by the manufacturers, he stated the unit did not fail all together but operated at a higher temperature than specified.

The C/E stated they left Brazil with no Freon onboard and did not get any Freon while moored up at the EPIC dock In Corpus Christi and did not request Freon until after the marine casualty. When asked about the #25 valve, the C/E stated the MAN technician actually found the #25 valve was ok, and that it was the #6 valve that was found to be sticking.

The C/E stated that after the accident they started logging the temperatures of the air and parameters everyday of the air control dryer but did not do it prior to the incident. They saw the temperature but did not know the correct temperature and dew point until after they reviewed the manual. The control air dryer unit was not cooling without the Freon.

The Chief Engineer was in the position for 38 months.

CWO [redacted]

[redacted]