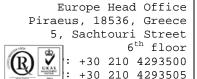


www.palaureg.com Semi Submersible "WHITTINGTON"

Marine Casualty Final Report

1. Introduction

- 1.1. The Semi Submersible "WHITTINGTON" was built on 1974; it was decommissioned and shifted to shallow water about 17 miles away from US Coast (West Cameron 117) in partially submerged state over 6 years
- 1.2. The Unite was bought by RV International DMCC of Dubai on 14/07/2018 for the purpose of recycling, and it was registered under PALAU Adm. on 21/08/2018
- 1.3. The new Owner intend to refloat the unit from its partially submerged state and to wet tow it to the heavy lift vessel located about 240 miles away from anchorage, the heavy lift vessel was chartered to carry the said Unit to its final destination.
- 1.4. The New Owner "RV International DMCC of Dubai" appointed "VR Maritime Services Pvt Ltd (VRM)" to activate the unit partially so that it can be floated off the sea bed and towed to the location of the heavy lift vessel
- 1.5. The unit construction having two large pontoons on which consist of 8 columns were erected, the platform was based on the top of the 8 columns, the pontoon were subdivided into several tanks they are controlled from the pump room at the aft side of the pontoon (GA plan Appendix 1)
- 1.6. The responsibilities of "VR Maritime Services Pvt Ltd (VRM)" as project manager was to insure refloating the unit including activating the generators, starting of ballast pumps, maintaining stability, make necessary towing arrangement, manning, assist in towing and assist in loading of the unit onboard the Heavy lift vessel
- 1.7. VR Maritime Services Pvt Ltd (VRM) has sent 9 dedicated seafarers to ensure smooth operation and supported by shore expert company representative (Crew List Appendix 2)



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2. The Floating Operation

- 2.1. The 9 seafarer joined the unit on 30th September 2018, and on crew arrival, they started to activate the generators and restored the power, it was noted from pump room that one of the ballast tanks (17S) valve had been blanked off, which may have been causing a list of about 2 degrees, though it was still touching bottom.
- 2.2. It was decided that the ballast tank no. 17S would be de-ballasted through the portable pump, which was supplied from ashore. Since the space was narrow to lower down the portable pump, it was decided to cut down the obstructions in the column to reach the tanktop.

3. The Accident

- 3.1. MODU unit's Master Captain Ravi organized the crew duties by 4hrs on and 4hrs off
- 3.2. On 1st Nov 2018, Electrician Officer Mr. Jose & AB MR. Gurmail Singh were on watch from 2000 hrs to 2400 hrs, While Jose went for changing the clothing, he informed Gurmail to wait him on deck, on his return Mr. Jose couldn't trace Mr. Gunnail Singh. After searching the rig, he found Mr. Gurmail Singh in an unconscious state inside the column. He came up and raised alarm. (Location of Accident – Appendix 3)
- 3.3. At 2210 hrs, the alarm heard by 4 persons who are rushed towards the location of which Mr. Sanjay Yadav and Mr. Sultan Ahmad went inside the column to help out Gurmail Singh.
- 3.4. Capt. Karan (marine superintendent) and Capt Ravi also followed the two for further assistance, after about 10 mints they came out and collapsed on deck. Assistance was sought from shore and they were shifted to shore hospital after about 2 hours.
- 3.5. Capt. Karan gave his instruction to not allow anyone to enter the space for search and recovery to avoid any further casualty as the three persons including Mr. Gurmail might IONAL SH have succumbed due to loss of breath and oxygen deficiency



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- 3.6. Owners were informed of the developments, which they were communicated to all authorities concerned.
- 3.7. The crew entered the space at about 0230 Hrs on 02 Nov 2018, with SCBA for recovery of the casualty. Mr Peter who is a medical trained had entered the space and observed no pulse and breathing of Sultan who was on one platform higher than other two casualty. He returned back to the platform and in his opinion all 3 casualties had succumbed.
- 3.8. The USCG boarded the unit on the 2nd of November and they inspected the area. The USCG cordoned off the site as they observed carbon monoxide at the tank level, and they have informed their inability to recover the mortal remains
- 3.9. The Owner arranged a special recovery team to recover the mortal remains; the mortal remains were recovered from the unit at 1600hrs on the 6th of November.
- 3.10. The postmortem was carried out prior departure of the mortal remains and a certification of death have been issued with result of carbon monoxide intoxication (Certification Of Death Appendix 4)

4. Main Cause of Accident

- 4.1. First seaman Gurmail didn't follow the safe working practice to enter the enclosed space and without informing anybody
- 4.2. The atmosphere of the ballast station space inside the column haven't been measured by multi-gas detectors before starting the working operations onboard
- 4.3. The ballast location didn't ventilated by the mechanical means
- 4.4. The 4 crews who are rushed for assistance including master Cap Ravi. Didn't follow the below procedure of person recovery from enclosed spaces:
 - They didn't wear SCABA
 - They didn't measure the atmosphere by multi-gas detectors if the space is safe for entry



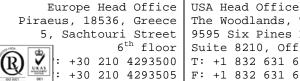
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- No communications have been arranged with the others crew before the entry to the enclosed space
- 4.5. The main reason of death for the 3 seafarers is lack of oxygen level and presence carbon monoxide gases in high level
- 4.6. The gradual oxidation process with metal, consuming Oxygen and leading to increase the percentage of carbon monoxide over the 6 years
- 4.7. All crew were joined on 30th September 2018 and the accident accrued on 1st Nov 2018 which was not enough time for adequate enclosed space training and drills

5. The Recommendation

- 5.1. Must be a clear instructions and procedure from Owner/Manager to all the signed on crew to be understand and familiar with the procedure of enclosed space entry
- 5.2. It is recommended to prohibit any signed on crew to enter any enclosed space before conducting the enclosed space training and drills
- 5.3. The enclosed space must be thoroughly ventilated by natural or mechanical means to remove any toxic, hazardous or flammable gases, and to ensure that there is an adequate level of oxygen throughout the space;
- 5.4. The atmosphere must be tested with properly calibrated and appropriate instruments before and while entering the enclosed space to assess that the atmosphere within the space is safe.
- 5.5. Special care for the long time decommissioned Unit/Vessel, which all the enclosed space where required to work inside to be assigned, ventilated well, and measured by multi-gas detectors before any attempting to entry
- 5.6. All enclosed space access doors, hatches or manholes should be secured against inadvertent entry





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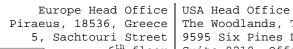
- 5.7. It is recommended that all enclosed spaces are highlighted as being hazardous and requiring an entry permit before entering. This can be done using signs and warning notices.
- 5.8. The rescue team should never enter the enclosed space to attempt a rescue without taking the proper precautions. Many multiple fatalities have occurred when well-intentioned crew have attempted a rescue without following the correct procedures.

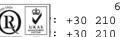
6. The hazard of Carbon monoxide (CO) exposure as following:

- Carbon monoxide is a colourless, odourless gas which is slightly lighter than air and is known as 'the silent killer'. It is usually formed by the incomplete combustion of carbon products, such as fuel oil producing harmful exhaust gases or self heating coal cargoes. Even very small quantities of CO are dangerous.
- Exposure to a 100ppm carbon monoxide atmosphere for 20 minutes may not affect an average healthy person; however, an exposure for over two hours may produce headaches.
- An exposure of 400ppm can be life threatening within two to three hours. A 1,000ppm exposure can render a person unconscious within an hour and be life threatening. (These are approximations and will vary from person to person and the prevailing conditions.)

Flag Investigator to Palau International Ship Registry MCMLXXXI QUI

Hossam Magdy





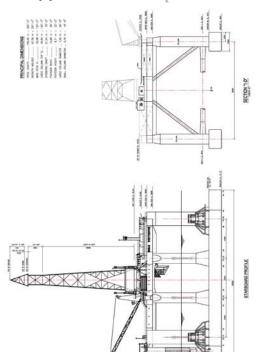
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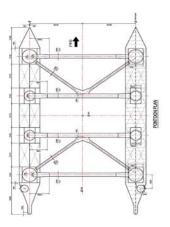
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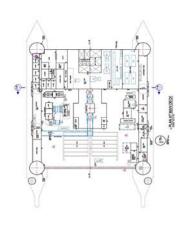
GA – Appendix 1

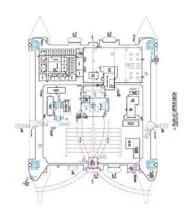
















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Crew List – Appendix 2



Name and type of Ship: NPU/MODU WHITTINGTON

8755871 IMO number Call sign Flag state of Ship: PALAU

Date.: 01-11-2018

S. No	Family name, given names	Gender	Rank	Nationality	Date & Place of Birth		Seamans Book No.	Expiry Date	Passport No.	Expiry Date
1	RAVI MARSHAL FERNANDO	М	MASTER	INDIAN	08-Oct-1975	PUNNAIKAYAL, TAMIL NADU	M/OSV/4152	12-Jan-2024	K9951728	06-Mar-2023
2	ARUN KUMAR SHARMA	М	C/E	INDIAN	23-Mar-1970	CHAK PHALLA, PUNJAB	MUM82115	10-Nov-2021	Z1994769	05-Mar-2022
3	GOGINENI HARINADH	М	E/O	INDIAN	03-Feb-1973	PEDASANAGALLU,AP	MUM244602	08-Dec-2024	Z4105041	06-Apr-2027
4	KUNNATHU UNNUNNY JOSE	М	E/0	INDIAN	30-May-1965	KALAYAPURAM, KERALA	MUM322834	29-Jul-2028	Z4132604	16-May-2027
5	YADAV SANJAY KUMAR	М	FITTER	INDIAN	16-Jan-1989	DEORIA, UTTAR PRADESH	MUM217887	30-Jun-2023	L5005595	15-Dec-2023
6	AHMAD SULTAN	М	AB	INDIAN	22-Nov-1990	GHAZIABAD, UTTAR PRADESH	MUM 219837	01-Aug-2023	N0076671	27-May-2025
7	GURMAIL SINGH	М	AB	INDIAN	07-Aug-1985	SUNAM	MUM 182994	13-Feb-2021	H9963558	22-Mar-2020
8	DUMMU MUSALAYYA	М	COOK	INDIAN	08- Jun-1982	BANDARUVANIPETA, ANDHRA PRADESH	MUM 246481	18-Feb-2025	M5159292	31-Dec-2024
9	DALAI SATYABRATA	М	CRANE OPERATOR	INDIAN	02-Jul-1981	DHENKANAL, ODISHA	CL54372	23-Feb-2026	R3582000	19-Nov-2027





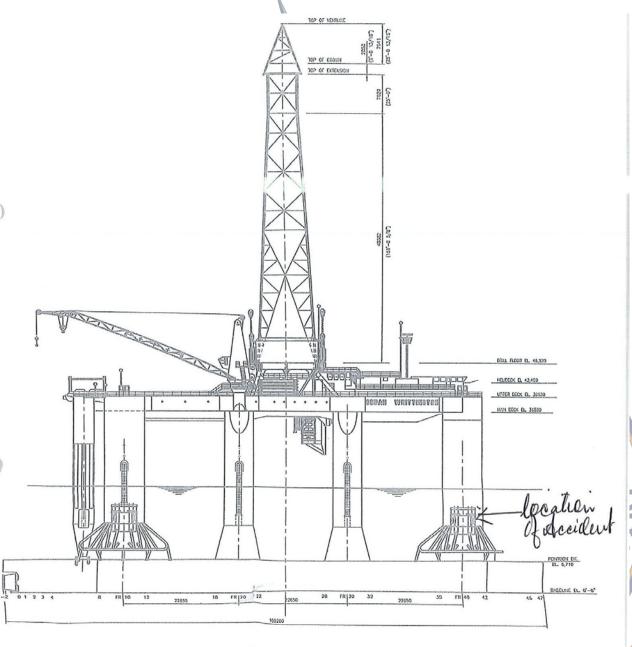
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Location of Accident – Appendix 3



STARBOARD PROFILE

TULY!



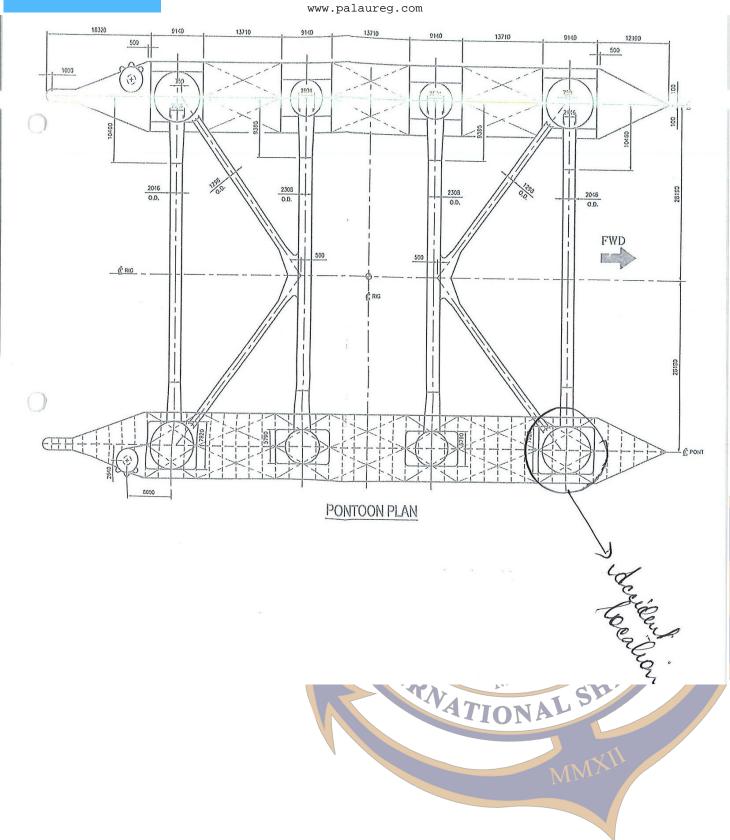
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Certification of Death – Appendix 4

