| **ENGINEER OFFICER FAMILIARISATION**  **(including Chief Engineers)** | | | | |
| --- | --- | --- | --- | --- |
| **QUESTIONNAIRE** | | YES | NO | N/A |
| **1. PROPULSION ENGINE PARTICULARS** | |  | | |
| 1.1. Manufacturer: WARTSILA  Type: 8L46B  2 engines x 7800 KW | |  |  |  |
| 1.2. THE MAIN ENGINE MAY BE STARTED:  - Locally  - From the Main Control Station  - From the Bridge | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 1.3. THE MAIN ENGINE CANNOT BE STARTED IF:  - The turning gear is engaged  - No Main Engine lube oil pump is started | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 1.4. THE MAIN ENGINE CLUTCHES CANNOT BE ENGAGED IF:  - No main gearbox oil pump is started | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| 1.5. THE SYSTEM CAUSING THE AUTOMATIC SHUT DOWN OF THE ENGINE IS POWERED:  - By electric power  - By hydraulic power | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **2. BILGE SYSTEM** | | Cap. | Head | |
| 2.1. SPECIFY: MAX CAPACITY (TPH) AND HEAD OF BILGE PUMPS (FT):  - Pump No. 1 Piston ( Fuel Treat. Room )  - Pump No. 2 Centrifugal ( Fuel Treat. Room )  - Pump No. 3 Centrifugal (Sewage Room)  - Pump No. 4 Piston (AC Room)  - Pump No. 5 Centrifugal ( Evap. Room )  - Pump No. 6 Centrifugal (MM/EE Room ) | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| 2.2. THE VALVES FITTED ON SUCTION PIPING FROM DIFFERENT COMPARTMENTS ARE OF TYPE:  - Hydraulic / Electric  - Manually with special tool | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 2.3. ENGINE ROOM WATERS MAY BE TRANSFERRED TO:  - Dedicated Engine Room Tank(s) (Bilge Tank)  - Reception ashore facilities or to barge, using a dedicated pump and piping system  - Directly overboard  - Overboard through a 15 ppm bilge water separator system fitted with an alarm, on allowed areas | | \_\_\_\_\_\_  \_\_\_\_\_\_  ­­\_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **3. BALLAST SYSTEM** | | | | |
| 3.1. BALLAST TANKS BILGE VALVES ARE LOCATED:  Where ? .........................................................................................................................  ........................................................................................................................ | | | | |
|  | | Cap | Head | |
| 3.2. WHICH PUMPS ARE USED FOR TRANSFERRING BALLAST  SPECIFY MAX CAPACITY AND HEAD  - No. 3 Fwd ( Evap. Room )   * No. 2 Aft ( MM.EE. Room ) * Heeling Pump | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| 3.3. THE FORE PEAK IS USED FOR BALLAST | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| 3.4. THE AFTER PEAKS ARE USED FOR BALLAST | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| 3.5. WHICH DOUBLE BOTTOM TANKS ARE USED FOR BALLAST:  ......................................................................................................................................  ..................................................................................................................................... | | | | |
| **4.0. SEA INLETS** | | | | |
| 4.1. MAIN SEA WATER INLETS ARE LOCATED:  - MM.EE. Room | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| **5. FUEL OIL SYSTEM** | | | | |
| 5.1. WHICH TANK DO BUNKER TANKS OVERFLOW TO:  No .............................................................................................................................. | | | | |
| **6.0. WATER FIRE-EXTINGUISHING SYSTEM** | | Cap. | Head | |
| 6.1. SPECIFY CAPACITY AND HEAD OF FIRE PUMPS:  - Pump No. 1 ( A.C. Room )  - Pump No. 2 ( Fuel Treat. Room )  - Pump No. 3 ( MM. EE. Room )  - Pump No. 4 Swimming Pool | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |  | |
| 6.2. LOCATIONS OF THE VALVES ON FIRE PIPING DIVIDING THE PART OF THE FIREFIGHTING SYSTEM, WHICH PROTECTS THE ENGINE ROOM FROM THE PART WHICH PROTECTS THE OTHER VESSEL'S AREAS: | |  | | |
| 6.3. EMERGENCY FIRE PUMP  - Is located in the Air Cond. Compressor Room  - Is supplied from the Emergency Switchboard  - The sea inlet valve is located in Generator Room   * The sea inlet valve is located in the Air Cond. Compressor Room * Sewage Room | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ \_\_\_\_\_\_ |
| 6.4. FIXED WATER-BASED LOCAL APPLICATION SYSTEMS IN MACHINERY SPACES  - Specific use  - Simultaneous operations  - Operating modes (auto/manual)  - Activating detectors  - Limitations | | \_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **7.0. CO2 FIXED FIRE EXTINGUISHING SYSTEM** | | | | |
| 7.1. CO2 system protects the following spaces:  - Main Engine & Auxiliary Engine Rooms  - Air Cond. Compressor Room  - Incinerator Room  - Galley Exhaust Fan Trunking | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 7.2 Controls of Engine CO2 are located:  - CO2 Room  - Which side - PORT or STBD \_\_\_\_\_\_\_\_\_\_\_ | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 7.3 A pre-alarm of the following type precedes the release of CO2 to the ER  - Electric siren  - Pneumatic siren  - CO2 driven siren | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 7.4 The pre-alarm siren sounding must be of duration at least of:  - 30 seconds  - 120 seconds  - 300 seconds | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 7.5 Release of CO2 in the engine room is carried out:  - Manually: one bottles of gas at time  - Manually: all gas bottles simultaneously  - Manually: groups of gas bottles together & then one bottle at time | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **8.0. ELECTRIC POWER STATION** | | | | |
| 8.1. THE POWER OF THE GENERATOR IS: …….......... kW | | | | |
| 8.2. IS THE AUTOMATIC PARALLEL BETWEEN GENERATORS POSSIBLE? | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| 8.3. IN THE EVENT OF BLACK OUT THERE IS THE AUTOMATIC STARTING OF:  - A main stand-by generator  - An emergency generator | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 8.4. IN THE EVENT OF BLACK OUT THE MAIN SWITCHBOARD/ EMERGENCY SWITCHBOARD CONNECTION OPENS: | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| 8.5. THE GENERATORS AUTOMATICALLY STOP IN THE EVENT OF:  - Very low lube oil pressure  - Very high cooling water temperature  - Over speed | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 8.6. THE GENERATORS MAY BE STARTED:  - Locally  - From the Engine Control Room  - From the main switchboard | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **9.0 WATERTIGHT DOOR SYSTEM** | | | | |
| Following watertight doors are located in the Engine Room:  - No. 1 to 5  - No. 6 to 8  - No. 13 to 14 | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 9.1. THE WATERTIGHT DOORS MAY BE OPERATED:  - From the navigating bridge  - From local control  - From individual remote control manual stations | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 9.2. POWER OPERATED WATERTIGHT DOORS ARE ACTUATED BY:  - Electric power  - Hydraulic power | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 9.3. ARE THERE ANY VISUAL AND AUDIBLE ALARM IN WAY OF WATERTIGHT DOORS WHEN BEING OPERATED? | | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |
| **10.0. ELECTRIC POWER SUPPLY FAILURE TO THE ENGINE ROOM TELEGRAPH ACTIVATES:**  - An alarm ................................................................................... | | ­­­\_\_\_\_\_\_ | ­­­\_\_\_\_\_\_ | ­­­\_\_\_\_\_\_ |
| **11.0. LOCATION OF THE FOLLOWING CONTROLS TO BE OPERATED IN THE EVENT OF AN ENGINE ROOM FIRE:**  - To stop ventilation & exhaust fans: bridge, engine control  room  - To shut fire dampers on ventilation ducts on Bridge Deck and from inside the emergency escape  - To stop fuel oil pumps: engine control room, Deck 4 stbd alleyway, emergency station  - To shut off main engine fuel tank, Deck 4 crew alleyway stbd, near engine room door  - To shut valves under fuel oil head, Deck 4 remote control  - Location and controls of Hi-Fog system | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **12.0. POLLUTION PREVENTION APPLIANCES MANUFACTURER AND TYPE OF BILGE WATER SEPARATOR:**  - RWO Water Technology, type Skit S 2,5 | | **\_\_\_\_\_\_** | **\_\_\_\_\_\_** | **\_\_\_\_\_\_** |
| 12.1. CHARACTERISTICS OF BILGE WATER SEPARATOR:  - 15 PPM  - 100 PPM  WHEN THE OIL CONTENT OF THE DISCHARGE EXCEEDS 15ppm:  - An alarm is given  - The sea discharge valve is automatically closed  - In the event of power supply failure to the oily water content meter an alarm is given | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 12.2. WHERE IS THE SEPARATED OIL COLLECTED AFTER PROCESS THROUGH THE OILY WATER SEPARATOR:-  TANK ................................................. | |  |  |  |
| 12.3. THE PUMP OF THE BILGE WATER SEPARATOR TAKING SUCTION FROM:  - DB Bilge tank  - Directly from Engine Room bilge wells | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 12.4. MAINTENANCE OF OILY BILGE WATER SEPARATOR FILTERS IS TO BE CARRIED OUT:  - Every three months  - Every three months but if in doubt about cleanness then more frequently as deemed necessary | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **13.0. ENGINE ROOM AUTOMATION SYSTEM** | | | | |
| 13.1. THE ENGINE ROOM BILGE LEVEL IS MONITORED BY:   * By computer * Motorman on duty during his watch | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 13.2. ELECTRIC POWER STATION - IN THE EVENT OF A BLACK OUT :  - The emergency generator starts automatically and is linked to the emergency switchboard  - If the emergency generator fails to start automatically, it can be started using compressed air or emergency compressor | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 13.3 The emergency generator will supply power to the following systems:  - Emergency lights  - Emergency fire pump FW and AFT  - Navigation equipment  - Fire doors  - Fire alarms  - Telephones  - Steering gear pump Nr 1 Port & Nr 4 Stbd | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **14.0. HYDRAULIC STEERING GEAR** | | | | |
| 14.1. STEERING GEAR CONTROL  - From the navigation bridge   * From steering gear room   REMARK IF ANY: | | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 15.2. 14.2. PROCEDURES TO BE FOLLOWED FOR STEERING LOCALLY FROM STEERING GEAR ROOM: | | | | |
| 14.3. STEERING GEAR:  - The two hydraulic pump units can be operated independently  - Each hydraulic unit can be isolated manually  - Loss of hydraulic oil will activate an alarm in the engine control room  - Where is the hydraulic oil header tank ?  .................................................................................. | | YES  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | NO  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | N/A  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| 14.4. STEERING GEAR POWER SUPPLY:  - The steering gear is powered directly from the main switchboard  - The steering gear is powered directly from the emergency switchboard  - The steering gear is powered from the switchboard through a substation | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_ |
| * 1. STEERING MACHINERY LUBRICATION:   a) THE LUBRICATING SYSTEM APPLIES TO:  - The main power units and leverages  - The carrier bearing  - The rudder stock  b) THE LUBRICATING SYSTEM IS:  - Manual  - Automatic  - Oil type  - Grease type | | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ | \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_  \_\_\_\_\_\_ |
| **16.0. 15.0. ENGINE ROOM EMERGENCY DIRECT BILGE SUCTIONS:**  - What pump is fitted with this possibility?:       * Where is located the relevant opening/closing valve?: | | | | |
| 1. **LOCATIONS AND OPERATION OF MARISAN SYSTEM (SILVER SHADOW ONLY):** | | | | |
| **17.0. DAMAGE CONTROL ARRANGEMENTS AND EQUIPMENT:**  - Assigned valves in piping  - Hatches or cross levelling valves  - Damage control locker | | **\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_** | **\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_** | **\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_** |
| **18.0. DAMAGE CONTROL ACTIONS AND COUNTERMEASURES:**  - boundaries of the watertight compartments **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  - the openings therein with the means of closure and position of any controls thereof **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  - actions to be taken in various damage control conditions **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  - available equipment to be used as countermeasures **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | |
| Date questionnaire given to the joining Engineer Officer |  | | | |
| Officer's rank |  | | | |
| Signature of Officer |  | | | |
| Date questionnaire returned to the Chief Engineer |  | | | |
| Signature of Chief Engineer |  | | | |
| REMARK:  1. The questionnaire is to be completed, signed and returned to the Chief Engineer within two weeks.  2. Some of the answers are not pertinent to the systems fitted onboard the vessel and the Officer must mark these as not applicable.  3. The Chief Engineer or Staff Engineer must monitor the results of this questionnaire and discuss with the Officer any deficiencies noted. | | | | |