



1. Understand the routine associated with taking over and accepting a watch, the duties to be performed during a watch and the routine associated with handing over to the following watch. Watchkeeping includes UMS/bridge control periods of duty.
2. Understand the safety precautions to be observed during a watch or period of duty and the immediate actions to be taken in the event of a fire, accident or malfunction of machinery or systems.
3. Understand the precautions to be taken to reduce the possibility of machinery space fires.
4. Be familiar with the machinery space fire fighting arrangements and their use.
5. Understand the reason for determining voyage needs: fuel, lubricants, water, stores, expendables etc.
6. Understand the necessity for routine maintenance and the reasons for maintaining records of machinery and its performance.
7. Demonstrate the ability to interpret the performance information with respect to defect diagnosis and be able to locate and rectify common faults in main machinery, steering systems and auxiliary equipment.
8. Understand the reasons for preparing the vessel for sea with respect to main machinery, steering systems and auxiliary equipment. Demonstrate the ability to test plant and equipment.
9. Understand the consequences of sailing with certain items of machinery inoperative and the risks involved in doing so.
10. Understand the (Chief Engineer's) responsibilities and duties concerning bunkering or refuelling operations.
11. Understand the routine pumping operations of fuel oil, fresh water and ballast water.
12. Understand bilge pumping operations and use of the oily water separator and the precautions to be observed to prevent environmental pollution.
13. Understand how to prepare, start, couple and change over alternators or generators.
14. Understand how to connect/disconnect shore electrical power.
15. Understand the immediate actions necessary in cases of electrical shock.
16. Understand the principles of ensuring safe entry into tanks and other enclosed spaces and the safe systems of work which must be applied when occupying these spaces.

