Engine Room Watchkeeping — study guide

An engine room watch keeps propulsion, power and the machinery that supports them running safely. This guide covers the handover, the manning, the hazards and the habits of a safe watch.[1]

Why it matters

Engine room watchkeeping is integral to the marine engineer's duties on board a ship. It must be carried out efficiently to ensure the safety of the crew and the vessel. There may be more than one engine room on some ships — for example at the forward and aft, or a single one at the port or starboard side.

Manning

The number of engineers appointed to a ship depends on the type of ship, the area of operation, and the **Safe Manning Certificate** issued by the Flag State.

Handing over the watch

When handing over the watch, pass on: the levels of important tanks (ballast, bilges, sewage, reserve, slop, fuel, or any tank that may require attention); any special orders relating to the operation of the ship, the control system or maintenance work; all checks made when entering or leaving port; and standing orders from the Chief Engineer or the company. If maintenance work is being carried out in the engine room by another engineer, pass its location on to the relieving officer. If the relieving officer does not seem fit to carry out the watch duties efficiently, **do not hand over the watch** and inform the Chief Engineer.

Unmanned machinery spaces

If the Unmanned Machinery Space (UMS) is in control but there is an issue with engine room machinery, the alarm sounds in the **duty engineer's cabin**.

Knowledge required

All members of the engine room watch should know the survival procedures to follow in an emergency, their duties to a high level, and the location and use of safety equipment such as firefighting equipment in the machinery space.

Hazards

Engine room hazards include heavy moving machinery, enclosed spaces, spaces that can be difficult to reach, and power-operated watertight doors.

Safe watch habits

To keep the watch safe, an engineer should avoid fatigue, never neglect an alarm, obey

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orders, communicate clearly, and call for help when in need.

Key facts to remember

- Watchkeeping is integral to the engineer's duty; run it efficiently for crew and vessel safety.
- Manning depends on ship type, area of operation and the Flag State Safe Manning Certificate.
- Handover: tank levels, special orders, port checks, standing orders; don't hand over to an unfit officer — tell the Chief Engineer.
- UMS machinery alarm sounds in the duty engineer's cabin.
- Know survival procedures, your duties, and safety-equipment location/use.
- Hazards: moving machinery, enclosed/hard-to-reach spaces, power-operated watertight doors.
- Safe watch: avoid fatigue, never neglect an alarm, obey orders, communicate, call for help.

Sources

1. STCW Convention and Code — engine watchkeeping and fitness for duty (Sections A-III and A-VIII).
2. ISM Code (SOLAS Chapter IX) — machinery operation and safe watchkeeping procedures.