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MARINE TERMINOLOGY – V1 (2014)

Occasionally, Fire and Security Consulting Services (FSCS) is consulted regarding marine fire regulations and terminology. Whilst the regulatory requirements are conveniently located in either the National or International marine web sites, the terminology used is often peculiar.

I spent many years at sea and, as my CV shows, have been involved with marine and naval fire protection for a similar period. Accordingly this paper is provided to explain these terms.



SS Hector – Blue Funnel Line

A young cadet engineer - Rick Foster in 1964



International Terms

Flag (registry)

The nation to which a ship is registered and which holds legal jurisdiction over the operation of that ship.

Classification Society

Organisations representing ship-owners, engine builders, and underwriters for the purpose of ensuring that ships are constructed and maintained in a seaworthy and safe condition. They make rules governing ship construction and arrange and carry out surveys during the building of a ship and throughout the vessel's trading life. They also research forms of construction and the efficiency and safety of sea-going vessels and offshore equipment, such as oil rigs and shore plant.

International Maritime Organization (IMO)

A permanent body established by the 1948 United Nations Maritime Conference convened to address safety at sea. IMO is devoted exclusively to maritime matters, determines acceptable maritime standards, and develops and monitors international treaties related to shipping.

SOLAS

Safety Of Life At Sea. The Regulations promulgated by IMO and ratified by member States, regulating the construction and operation of vessels.

Ship Types

Bulk Carrier	Vessels designed to carry dry-bulk cargo such as grain, fertilizers, and ore.
Container Ship	A ship designed to carry containers as cargo.
Container	A steel box of standard dimensions of 8 feet square and length of 20 feet or 40 feet, in which cargo is preloaded.
T.E.U.	Twenty Foot Equivalent Unit for containers
Ferry	A ship or boat used to carry passengers or goods between two or more points across a body of water on a regular schedule.
LASH	Lighter Aboard Ship - a ship designed to carry floating containers or lighters.
LNG Carrier	Liquefied natural gas carrier.
OBO Ship	A ship that can carry ore, dry bulk goods and / or oil.
Oil Tanker	A ship designed for transporting oil in bulk
Ore Carrier	A large ship designed for the transportation of ore.
Ore-Bulk-Oil Carrier	See OBO ship
PANAMAX	A vessel designed small enough for passage through the Panama Canal
Passenger Ship	A ship authorized to carry more than twelve passengers.
Product Carrier	A tanker used to carry refined oil products. Normally four different grades of oil can be handled simultaneously.
Reefer	A ship designed for carrying goods requiring refrigeration
Reefer Container	An insulated container fitted with a refrigeration unit for carrying cargo requiring temperature control
RO/RO Ship	Cargo or ferry ship on which trucks and other vehicles can be driven on and off on ramps through large openings at the bow, stern or side
Self Unloader	A bulk carrier which is equipped with cargo unloading gear
ULCC	Ultra Large Crude Carriers. Tankers larger than 300,000 dwt.
VLCC	Very Large Crude Carriers. Tankers between 200,000 and 300,000 dwt.
Vessel	Any ship or boat*. * Note that a submarine is a boat!

Directions

Abaft	See Aft
Abeam	The direction at right angles to the fore and aft line of the vessel.
Aft	Towards the rear or stern of the vessel.
Astern	Directly behind a vessel.
Centreline	In plan view, the centre of the vessel from fwd to aft.
Down below	Or below, downstairs, beneath or under.
Fore / Forr'd	Same as Forward.

Forward	Towards the front or bow of the vessel.
Fwd	Same as Forward.
Longitudinal	Along the vessel from fwd to aft (or vice-versa). Usually referenced in a <i>longitudinal section</i> , being a drawing showing side view of the vessel from within. May be at the centreline or at some nominated distance from the centreline looking port or starboard.
Port	The left hand side of the vessel when looking forward. Named because this is the side of the vessel that would be against the jetty or wharf, because in ancient vessels had a steering board or rudder Starboard (<i>steerboard</i>) side. The navigation light is red (<i>there's no red port left</i>).
Starboard	The right hand side of the vessel when looking forward. The navigation light is green.
Transverse	Across the vessel from port to starboard (or vice-versa). Usually in reference to <i>transverse section</i> , being a drawing showing a cross section either looking fwd or aft.
Up top	Upstairs, above or over.
<u>Vessel Dimensions</u>	
Beam	The width of a ship.
DWT or dwt	Deadweight Tons. A measure of ship-carrying capacity including the total cargo, bunkers, and stores that a ship can carry up to its waterline, measured in metric tons (2,204.6 pounds) or long tons (2,240 pounds).
Displacement	The displacement in tons of the ship complete with all outfit, equipment, and machinery on board but excluding all fuel, water in tanks, cargo, stores, passengers, dunnage, and the crew and their effects. The light condition displacement includes the lubricating oil for the machinery and water in the boilers at steaming level. Also called light weight.
Draft	The depth of the ship below the waterline measured vertically to the lowest part of the hull
Frame No	Used to identify the longitudinal location
GRT or grt	Gross Registered Tons (Tonnes). Gross tonnage includes a ship's internal volume, excluding such spaces as the peak, double bottom, deep tanks used only for water ballast, bridge, forecandle, open-ended poop, certain light and air spaces, skylights, anchor and steering gear spaces, toilets, the wheelhouse, and certain passenger spaces
Knot	Unit of speed in nautical mile (6,080 feet or 1,852 meters) per hour.
LBP	Length Between Perpendiculars. The length of a ship between the forward and after perpendiculars
LOA	Length Overall. The extreme length of a ship measured from the foremost point of the stem to the aftermost part of the stern.
LWL	Length on Water-Line. The length of the ship at the waterline when loaded to its allowable maximum draft.

Load Line	The line on a ship which indicates the maximum depth to which it can sink when loaded with cargo. Also known as “the marks’ – “down to the marks” meaning fully loaded.
<u>Vessel Attitude</u>	
Heel	The inclination of a ship to one side induced by wind or sea conditions (See list)
List	The inclination of a ship to one side induced by uneven weight distribution within the vessel conditions (See heel)
Pitch	The inclination of a ship to one end induced by wind or sea conditions (See trim)
Trim	The inclination of a ship to one end induced by uneven weight distribution within the vessel conditions (See pitch)
<u>Vessel Parts and Places</u>	
A Class	In relation to bulkheads or decks (1), means that the structure is capable of resisting the passage of flame and smoke for one hour. When followed by ‘15’, ‘30’, or ‘60’, this means that it has specified thermal insulating properties for that number of minutes.
B Class	In relation to bulkheads, means that the structure is capable of resisting the passage of flame and smoke for 30 minutes. When followed by ‘15’ or ‘30’, this means that it has specified thermal insulating properties for that number of minutes.
Ballast	Seawater use to provide stability in vessels in an unloaded condition.
Bilge	Lowest extremities of machinery or cargo spaces, water and spillage collecting areas.
Bow Thruster	A transverse propulsion device, usually electrically driven propeller(s) below the waterline at the bow. Used to assist in manoeuvring. Some new cruise ships now have stern thrusters
Bow	The front part of the vessel structure. Various types of bow structure are used including bulbous, raked and straight.
Bridge or Navigating Bridge	The primary control station for the vessel.
Bulkhead	A wall. A vertical structure between two decks (1).
Bulwark	The raised side of the vessel above the upper deck (1).
Bunker	Compartments in which fuel oil is stored.
Category “A”	Compartment housing the principal propulsion machinery OR Machinery Space housing machinery with a total power equal to or exceeding 750kW. (IMO definition)
Ceiling	The wooden planking forming the deck (3) sheathing in a general cargo vessel.
Chartroom	Adjoining the bridge, used for the storage of navigation charts and carrying out navigation functions.
Coaming	A sill or raised section at the bottom of a door to prevent water entry.

Cofferdam	A void formed between two bulkheads (usually transverse) to provide safety separation between a compartment of high risk and another, e.g. Cargo Pump Room and cargo tank in a Tanker.
Cold Room	Storage area for frozen food kept between -30°C to -10°C.
Companionway	Passageway or corridor.
Compartment	The generic name for any room.
Cool Room	Storage area for food, usually fruit and vegetables and kept between -2°C to +5°C.
Dayroom	The lounge area in a senior officer's accommodation suite.
Day tank	Fuel tank in machinery space for immediate use.
Deck (1)	The platform covering or extending horizontally across a vessel.
Deck (2)	The space between two decks(1).
Deck (3)	The floor. The top of the deck (1).
Deckhead	The ceiling (in land terminology) above you. The underside of the deck (1).
Deep Tank	Tank being part of the ship structure from the double bottom up to the main deck level. Usually adjoining the engine room. Usually used for the storage of specialised cargoes. When I was at sea the deep tank on "Hector" was used for transport of whale oil from the Australian whaling station at Albany (WA) to the UK.
Double Bottom	Horizontal void between the vessel bottom and the lowermost deck (1) for the storage of fuel or fresh water. May also be used for ballast.
Foc'sle	(Forecastle) On traditional cargo ships the forr'd store and service area usually comprising chain locker, paint locker and Bosun's store. Usually raised. Sometimes used as accommodation for deck crew.
FRL	Fire Resistance Level – same as per Building Regulations and used in Alternative Solutions
Frame spacing	The spacing of the frames in mm. Usually consistent throughout the length of the vessel. When known (sometimes nominated on drawings), useful in determining the scale of reduced drawings.
Frame	The transverse structural sections of the vessel. In a traditional steel or aluminium vessel, the keel and stringers are attached and then the plating.
Galley	Kitchen
General Service	Relating to a pump supplying ea water for deck wash down (Washdeck) and sanitary services.
H Class	In relation to bulkheads or decks (1), means that the structure is capable of resisting the passage of flame and smoke for one hour. When followed by "60", "120" or "240", this means that it has specified thermal insulating properties for that number of minutes. The 'H' refers to a hydrocarbon fire growth graph which achieves higher temperatures for longer periods than the standard time/ temperature graph. Previously only used for static offshore oil / gas rigs but now used for floating drill ships / structures and floating oil / gas processing facilities.

Heads	Toilets and washrooms.
Hold	The compartment(s) used for the storage of cargo.
Keel	The bottom longitudinal structural member of the vessel.
Mess	The recreation and dining area for crew.
Poop	On traditional cargo ships the aft store and service area usually comprising steering gear. Sometimes accommodated engine room crew. Usually raised
Pyrotechnics	With "locker", used for storing flares and explosives or flammables.
Saveall	The space between a storage tank and a deck (3) to catch spillage of tank contents from leaking valve and tank connections.
Screw	Propeller.
Scuppers	Waterways (open drains) at deck level draining away water.
Sea Chest (1)	Watertight compartment at the ship's side housing a valve and filter used for drawing sea water into cooling or fire mains.
Sea Chest (2)	Large piece of luggage used by sailors in old times..
Settling tank	Tanks to which fuel oil is pumped from the double bottom bunker tanks for settling out any water and heating before being fed to the machinery.
Stabiliser tank	A horizontal or vertical tank specifically used for ballast water.
Stem	The leading edge of the bow.
Stern	The rear part of the vessel structure. Various types of stern structure including Counter, Cruiser and Transom are used.
Stringer	Longitudinal structural members between frames.
Transom	The structural member or plating forming the stern of a vessel. Usually flat and at right angles to the centreline.
Trunk	A vertical enclosed shaft, May be used as an escape route from down below or for air conditioning.
Wardroom	The recreation and dining area for officers.
Wash Deck	See General Service
Weather Deck	The uppermost continuous deck.

SHIP PARTS

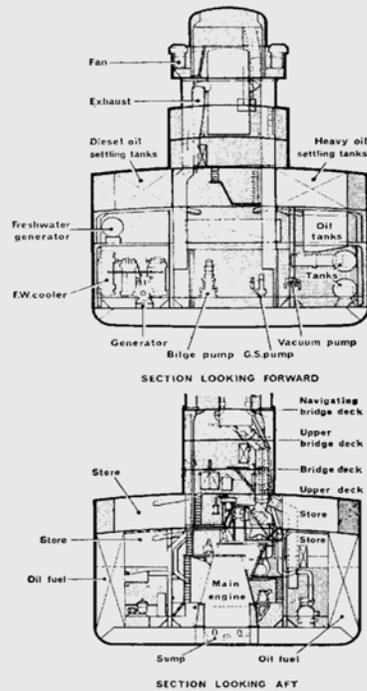


Fig. 3-6A. Sections looking forward and aft of the engine room of a typical motor ship, showing the principal features.

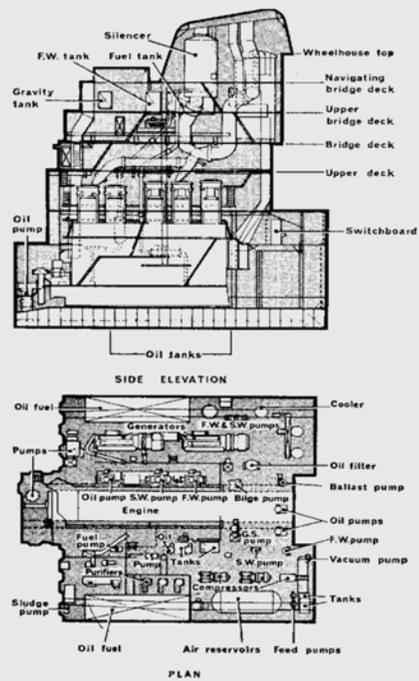


Fig. 3-6B. Side elevation and plan of the engine room of a typical motorship, showing the principal features.

Amusing and Interesting Terms

- To Deck** To hit and land you opponent on the floor (deck)
- Splice the mainbrace** A difficult job rewarded by an extra tot of rum after replacing and joining the large cable (wire or rope) connecting the bow and the top of the forr'd mast.
- Keel Haul** A punishment – being the act of dragging the victim of underneath the ship by a rope from one side to the other. Punishment. If not dead from this act, the barnacles on the ship's hull will cause agonising injuries.
- The Devil to Pey** A threat of punishment. On wooden ships the act of caulking the joining seam between the bulwark and the hull. This seam is called the Devil and to pey is to caulk.
- Between the Devil and the Deep Blue Sea** Self explanatory, a hard place to be – see above.
- Poop Deck** In old times on wooden ships a small platform with a hole was hung out over the stern for obvious use! **True.**

I trust that this paper provides useful advice marine terminology.

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