



OCEAN TANKERS

Basic Safety and Security Knowledge for Deck Crew

Basic English Knowledge

- Objectives

- To achieve a minimum knowledge of ship structure.
- Attain a minimum English knowledge of ship structure

Target Group – Boatswain, Able Bodied Seamen and Ordinary Sailor

Basic Safety

1. What is your lifeboat duty?

- Bowman
- Sternsheet
- Lowerer
- First aid party
- Provision and blanket
- release gripes
- make fast painter
- Embarkation ladder

2. What is your fire fighting duty?

- Fire hose party
- First aid party
- Lifeboat party
- Rescue party
- Engine room party

3. What do you do when you hear lifeboat station alarm?

- Put on helmet and boiler suit and safety shoe.
- wear life jacket
- put on extra clothing
- muster at life boat station

4. What do you do when you hear emergency station?

- Put on helmet and boiler suit and safety shoe.
- Muster at emergency station

Basic Safety

- 5 **What do you do when you see a fire in the accomodation?**
- Raise fire alarm
 - try to put out the fire
 - if not possible, rush to muster station
6. **Who is your safety officer?**
The chief mate.
7. **What is DPA?**
Designated person ashore
- 8 **Who is your DPA?**
Mr Ng Kwang Chiau
- 9 **What is ISM?**
International Safety Management
- 10 **How many times must you conduct lifeboat and fire drill.**
One time every month.

- 11 **How many times you must lower the lifeboat to water level?**
One time every 3 months.
12. **What is the oxygen content of gas free tank?**
21 % by volume
13. **What is the hydro carbon content of gas free tank?**
0 % by volume
- 14 **What is the name of the instrument that measure oxygen?**
Oxygen analyser
- 15 **What is the name of the instrument that measure hydro carbon?**
Combustible gas meter.

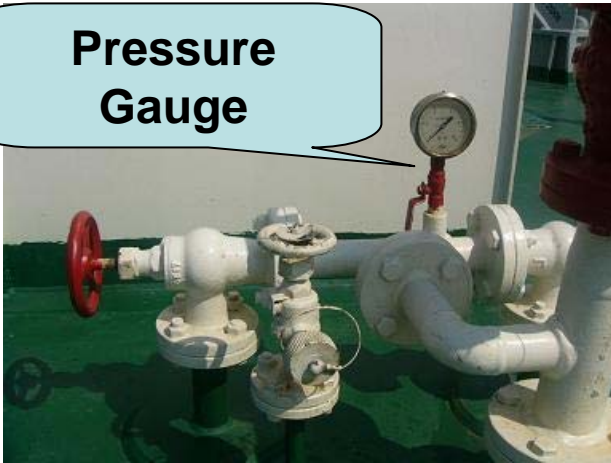
Security

- 1. What is CSO?**
Company Security Officer
- 2. What is SSO?**
Ship Security Officer
- 3. What is SSP?**
Ship Security Plan
- 4. Who is the CSO?**
Mr Ng Kwang Chiau
- 5. Who is the SSO?**
The Master
- 6. What is SSA?**
Ship security alert system

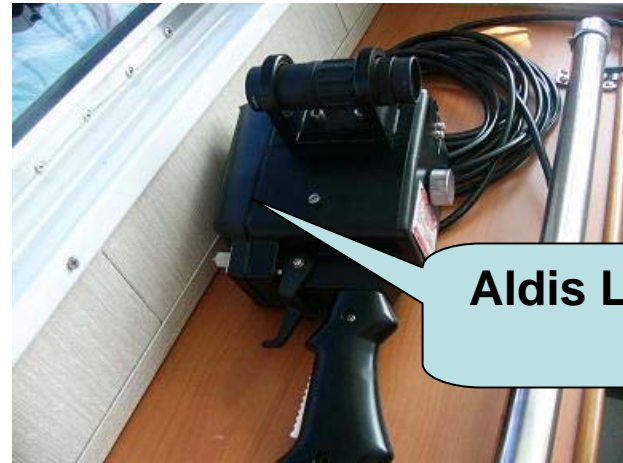
- 7. Name some restricted areas on the ship?**
Bridge, Engine room, Air condition control room, Cargo control room, accommodation, Steering gear, store room.
- 8. What are the 3 security levels?**
Level 1, 2 and 3
- 9. Where do you find security monitoring procedures?**
Appendix 13 of the SSP
- 10. How many time must security drills be conducted?**
One time every three months.

Basic Ship Construction

Pressure Gauge



Aldis Lamp



Alleyway



Fire Wire



Basic Ship Construction

Anchor Ball



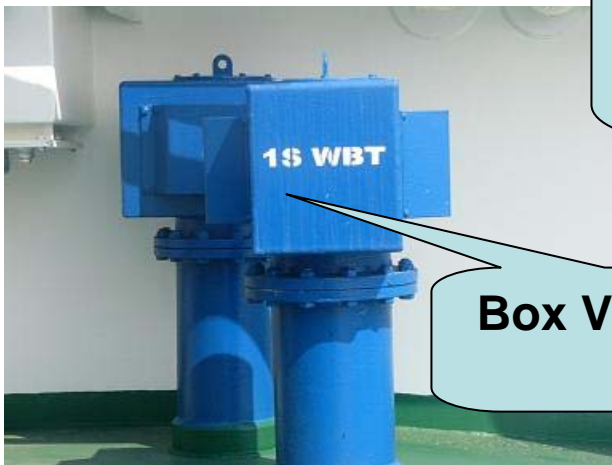
Anchor Cable



Emergency Towing Arrangement



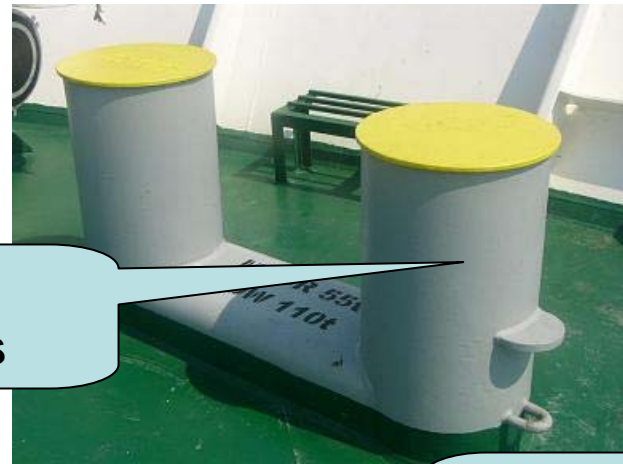
Box Ventilator



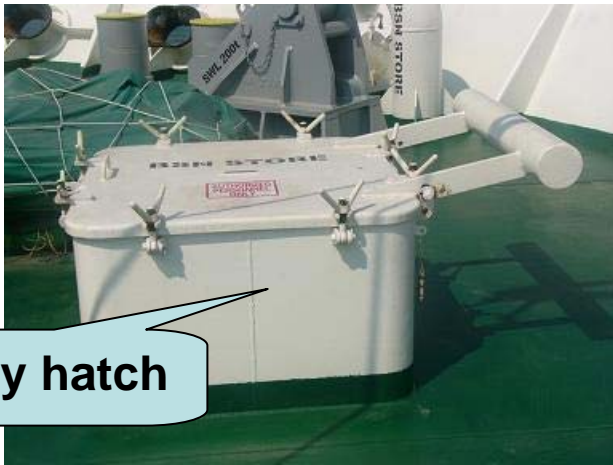
Basic Ship Construction



Binocular



Bits /
Bollards



Booby hatch



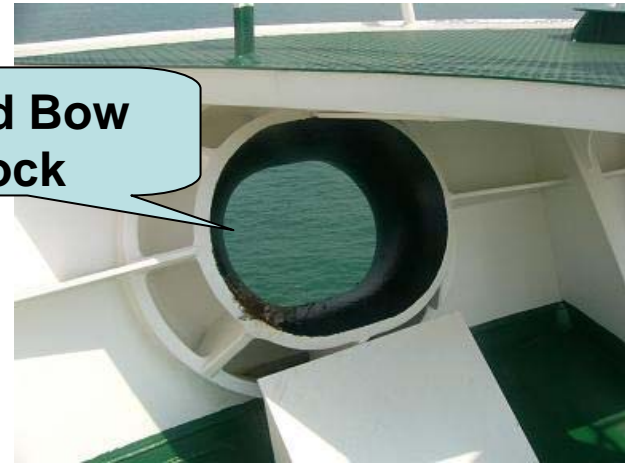
Engine Data
Logger

Basic Ship Construction

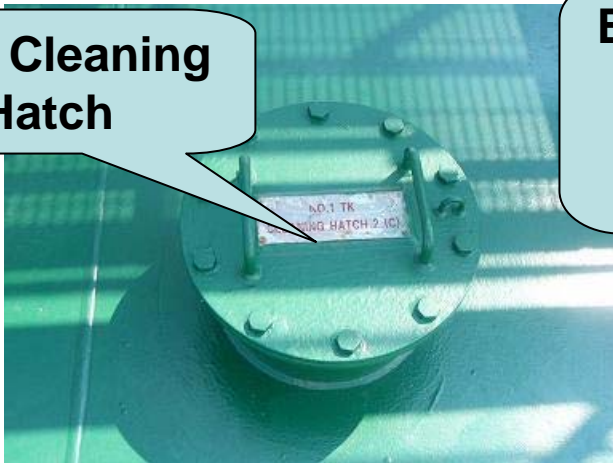
Bow Chain Stopper



Closed Bow Chock



Tank Cleaning Hatch



Engine room pump emergency stop



Basic Ship Construction

Anchor chain stopper



Chronometer



Closed chock



Cargo pump emergency stop



Basic Ship Construction

Course recorder



Deck Crane



Clear View Screen



Emergency Escape breathing device



Basic Ship Construction

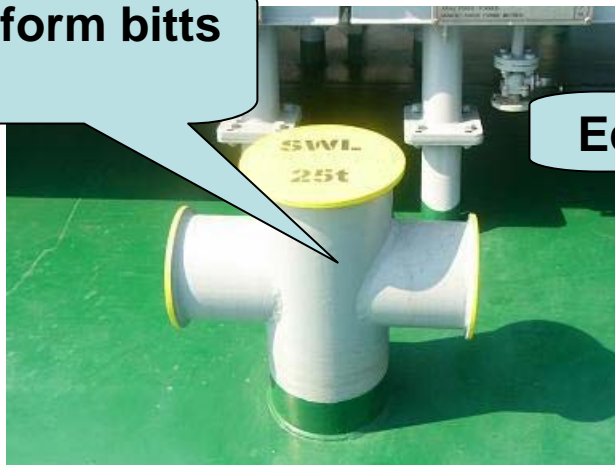


Split Drum



Windlass Brake

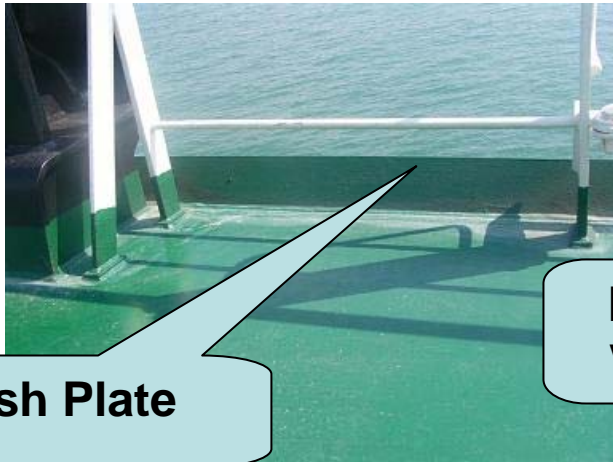
Cruciform bits



Echo sounder



Basic Ship Construction



Fish Plate



Foam Valve



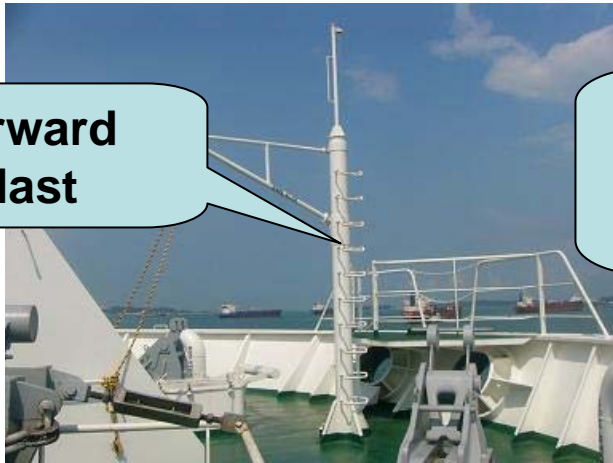
Saveall/ Spill tank



Fog Horn/ Air Whistle

Basic Ship Construction

Forward Mast



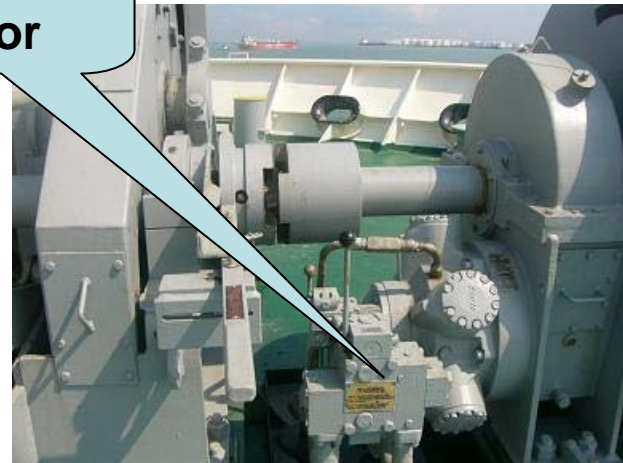
**Gangway/
Accommodation
ladder**



**Air
Motor**

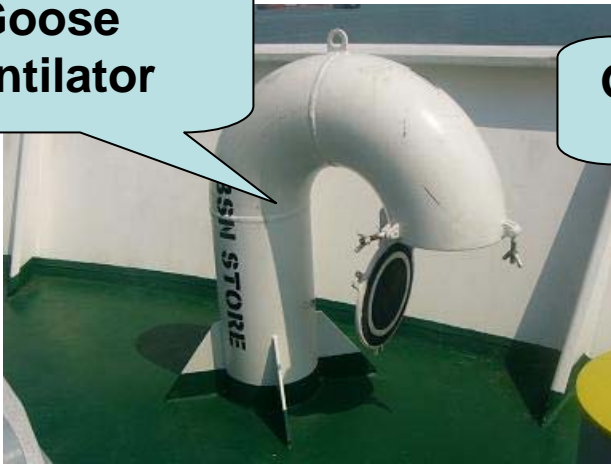


**Hydraulic
Motor**



Basic Ship Construction

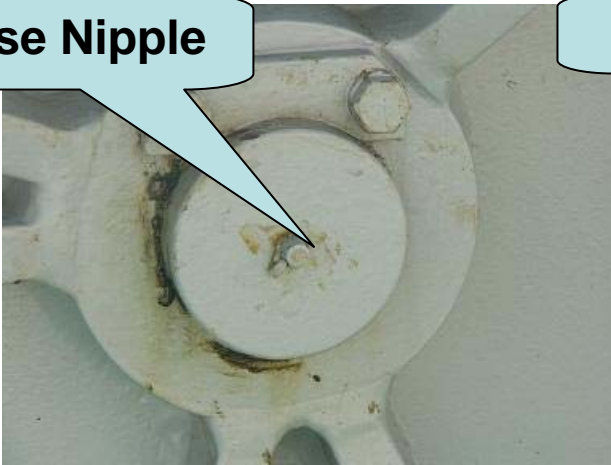
Goose Ventilator



Grab Lines



Grease Nipple

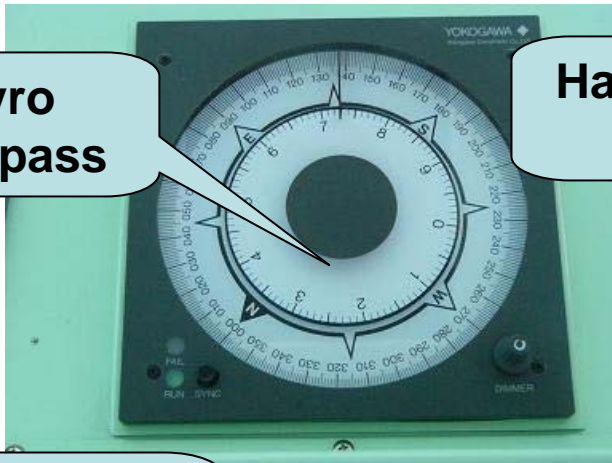


Gypsy



Basic Ship Construction

**Gyro
Compass**



**Hawse pipe
cover**



**Helm
Indicator**

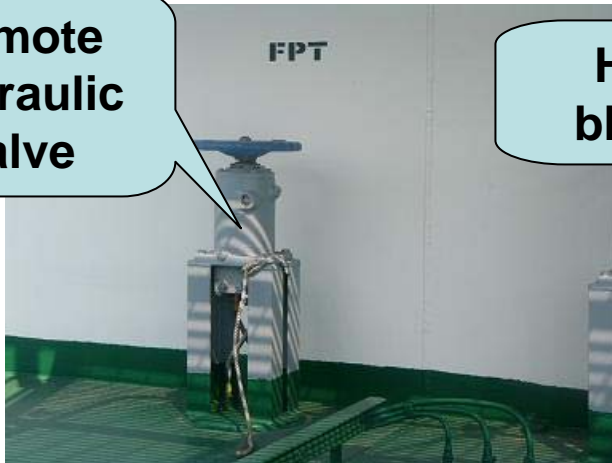


**Hose
Rail**

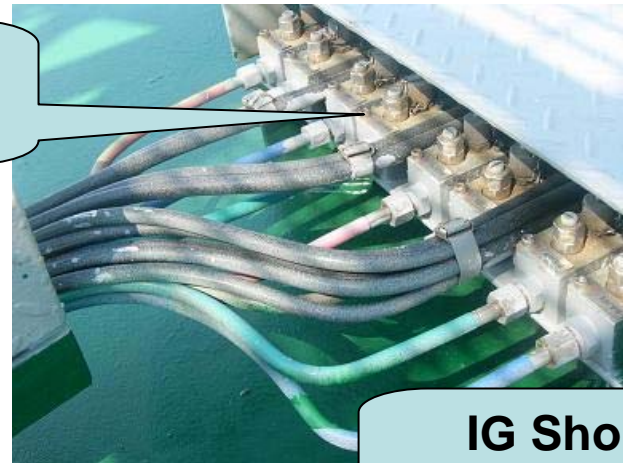


Basic Ship Construction

Remote Hydraulic valve



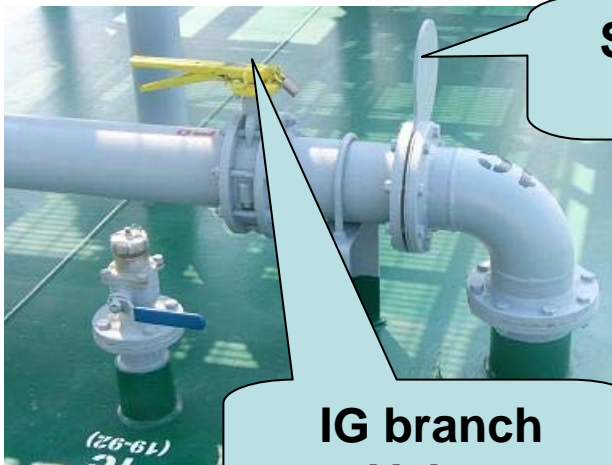
Hydraulic block valve



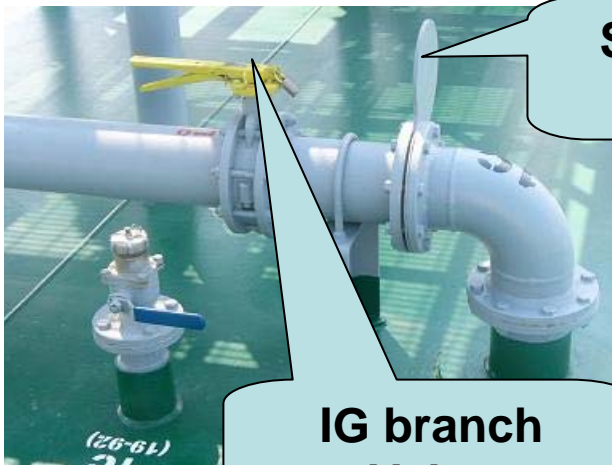
IG Shore connection



Spectacle blank



IG branch Valve



Basic Ship Construction

IGS control panel



Intrinsically safe lamp



Stairway landing



Basic Ship Construction

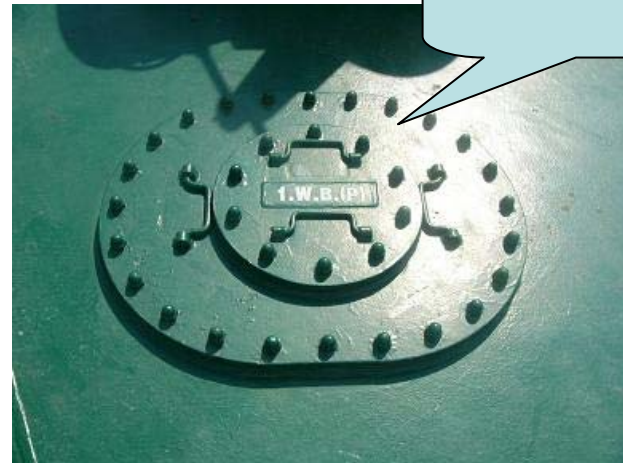
Lifeboat
hook
assembly



Lifeboat
lowering
handle



Manhole



skates



Basic Ship Construction

Limit switch



Reducer

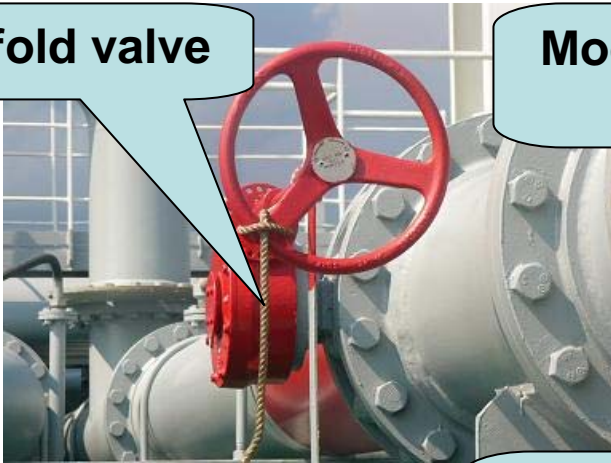


Manifold Drain Valve



Basic Ship Construction

Manifold valve



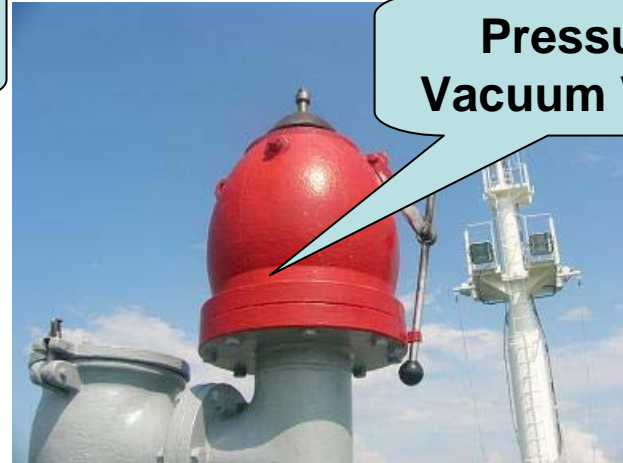
Mooring Rope hatch



Mushroom Ventilators



Pressure Vacuum Valve



Basic Ship Construction

RADAR



Naviagtion Lights control panel



Basic Ship Construction

Reducer for Vapour recovery



Oil Monitoring Control Equipment panel

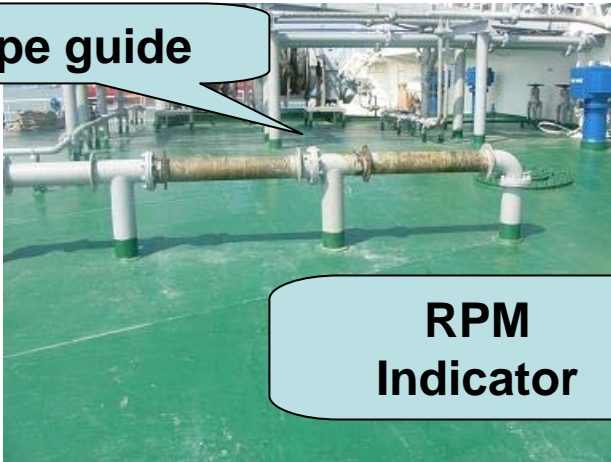
Repeater



Azimuth Circle

Basic Ship Construction

Rope guide



RPM Indicator



Scupper

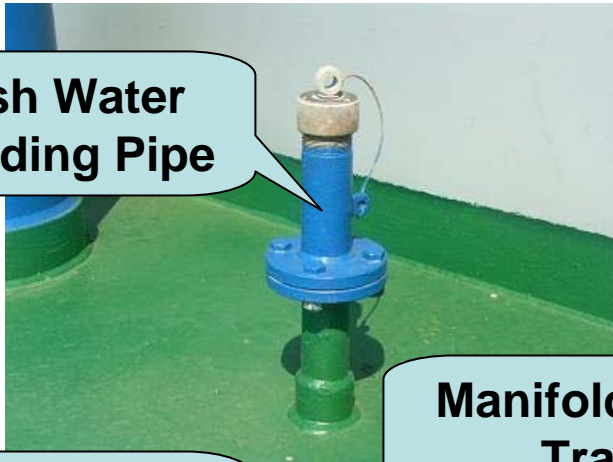


Scupper Plug



Basic Ship Construction

Fresh Water Sounding Pipe



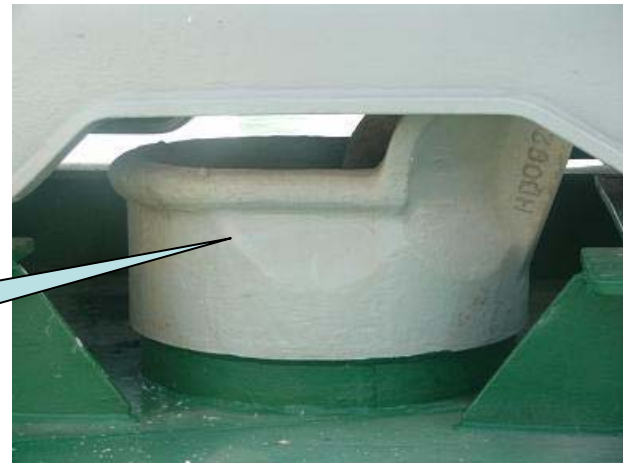
Manifold Spill Tray



Smoke detector



Spurling Pipe



Basic Ship Construction

Speed Log



Spurling Pipe



Standing Roller



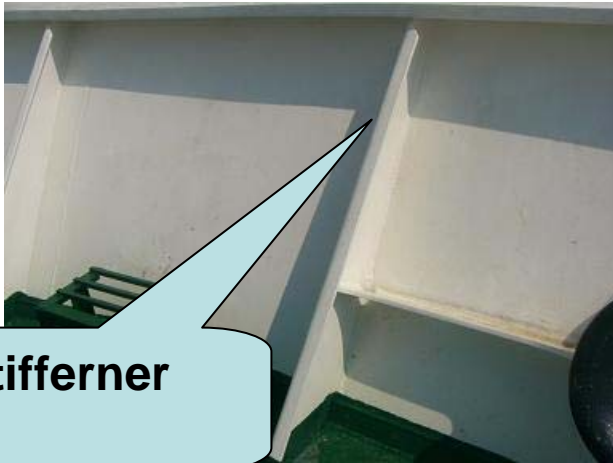
Basic Ship Construction



Heating Coils
valves



Bulkhead



Stifferner

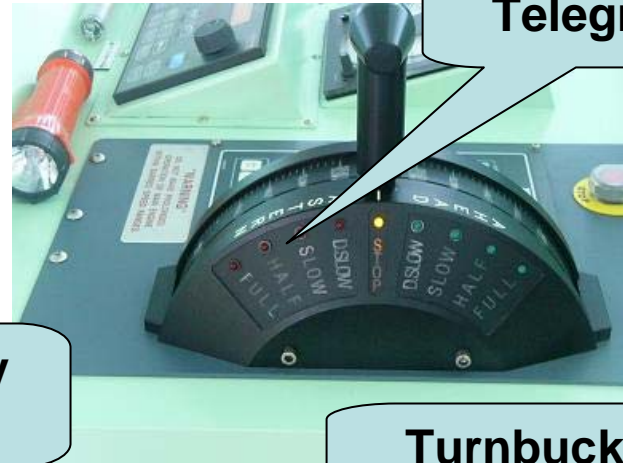


Steering Wheel

Basic Ship Construction



Fixed Tank cleaning machine



Telegraph



Cargo Tank Access Hatch

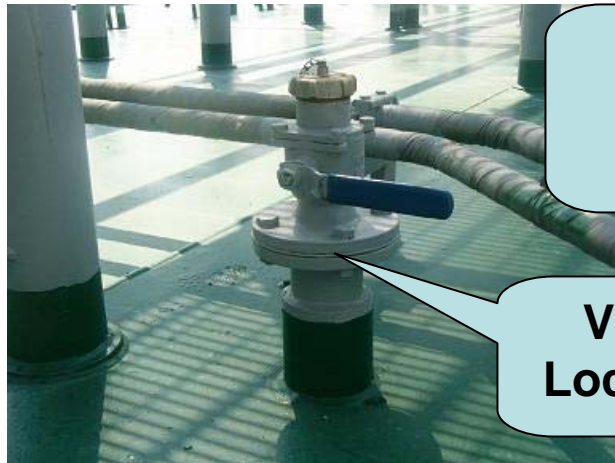


Butterfly nut



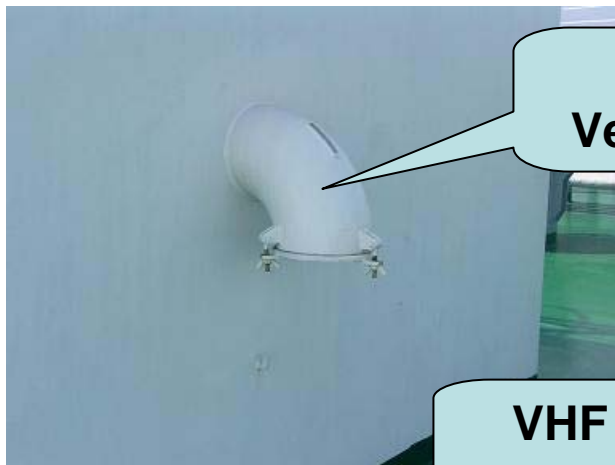
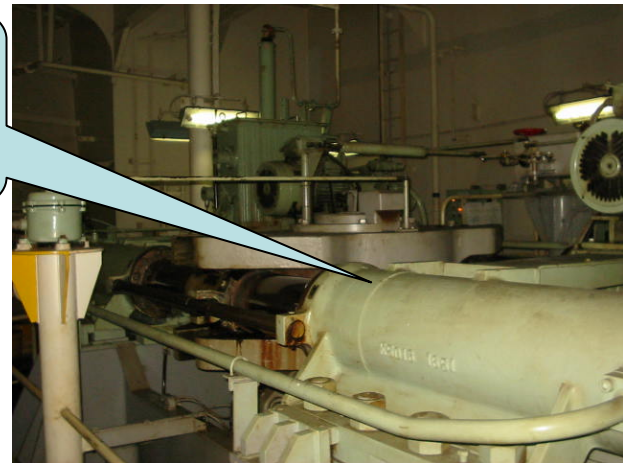
Turnbuckle

Basic Ship Construction



Steering Gear

Vapour Lock valve



Wall Ventilator

VHF set

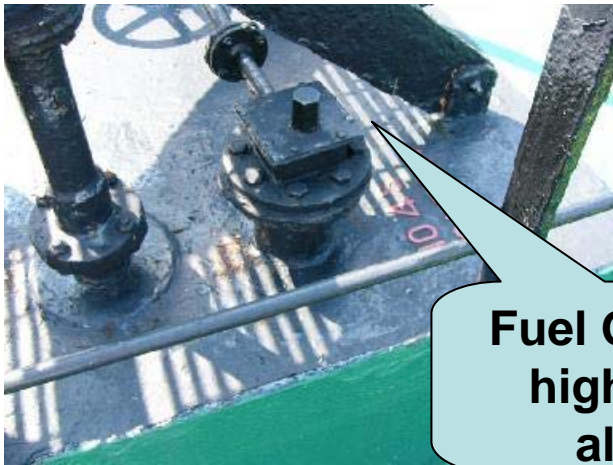
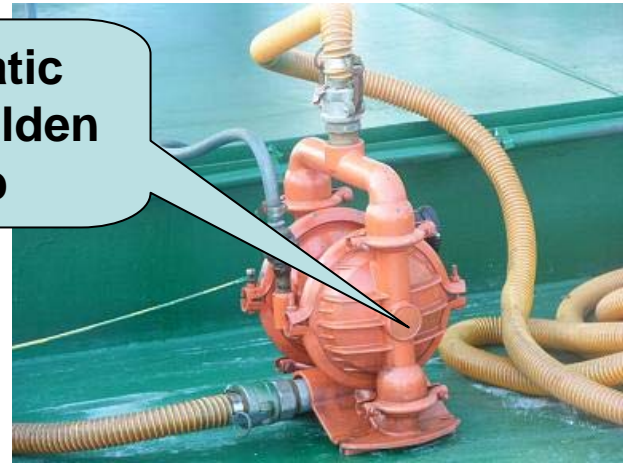


Basic Ship Construction



Warping Drum

Pneumatic pump/ Wilden pump



Fuel Oil Tank high level alarm

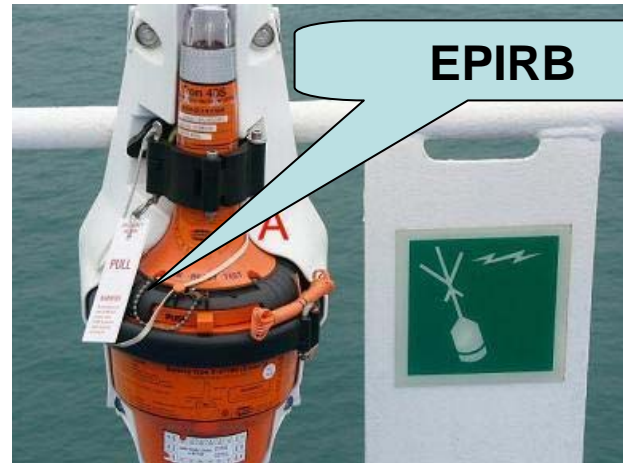
SART



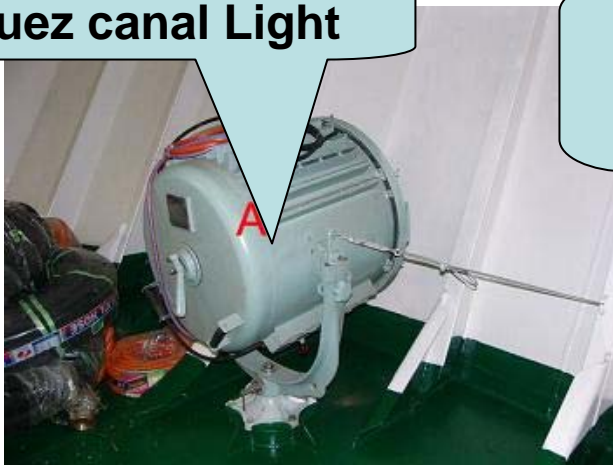
Basic Ship Construction



Port Hole Wiper



EPIRB



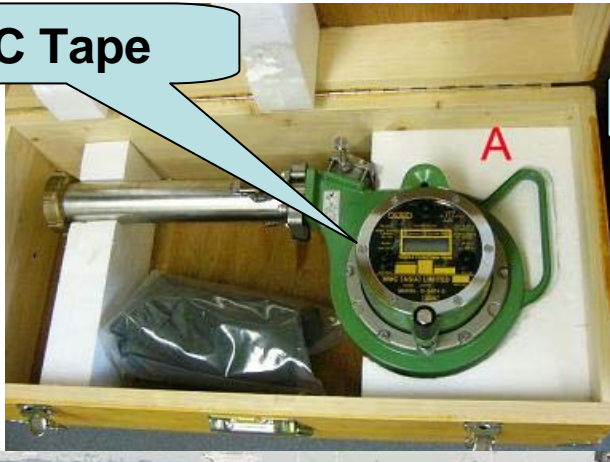
Suez canal Light

Remote Tank Gauging system

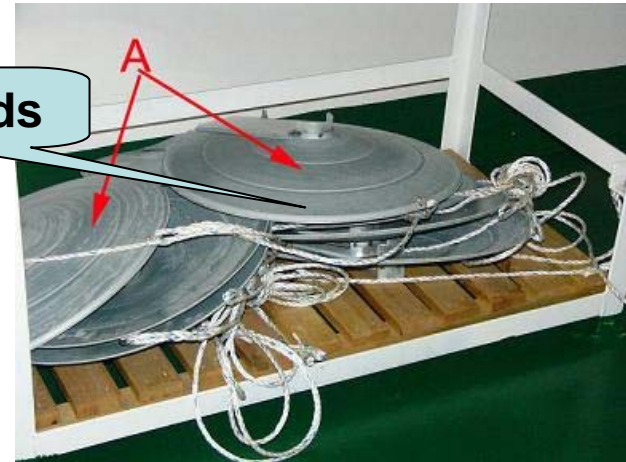


Basic Ship Construction

MMC Tape



Rat Guards



Deck Seal



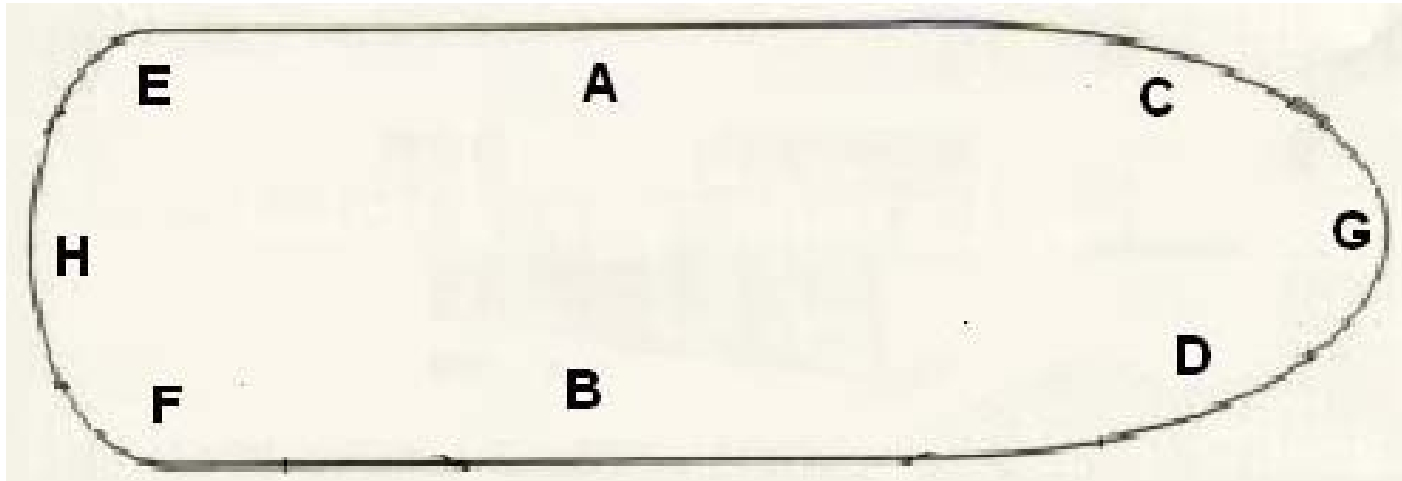
Embarkation Ladder



Basic Seamanship

For Boatswain, Able body seamen
and ordinary sailor

Basic Terms



A – Port Side

B – Starboard Side

C - Port Bow

D – Starboard Bow

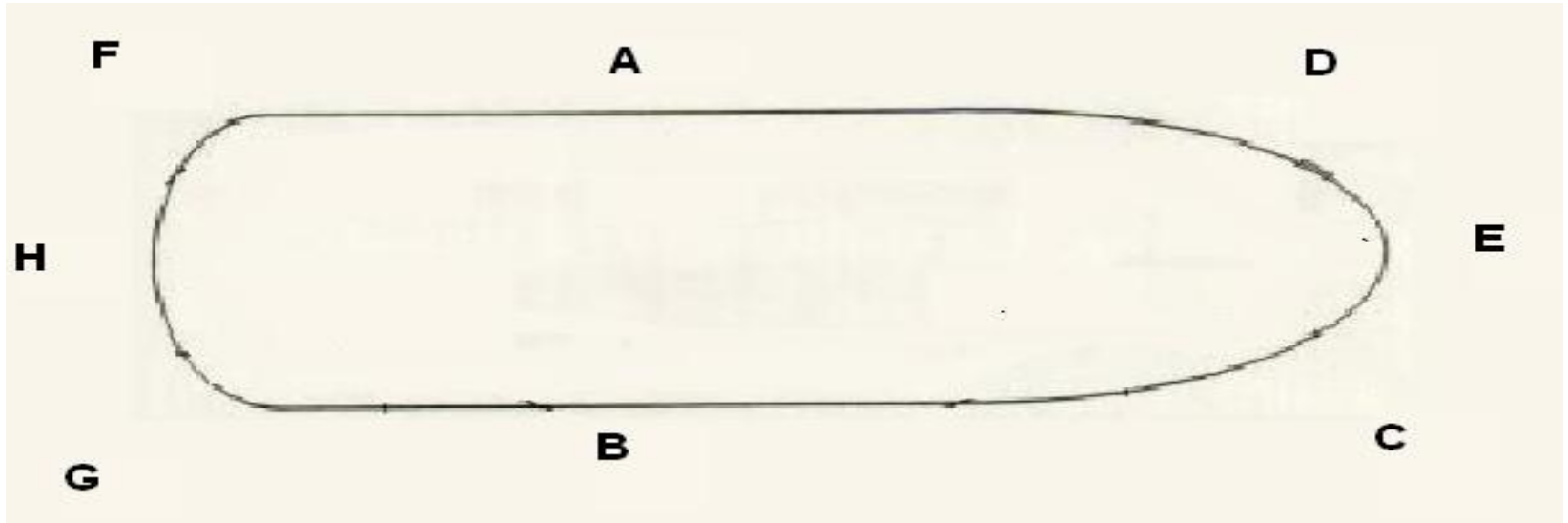
E – Port Quarter

F – Starboard Quarter

G – Stem

H - Stern

Basic Terms



A – Port Beam

B – Starboard Beam

C – Starboard Bow

D – Port Bow

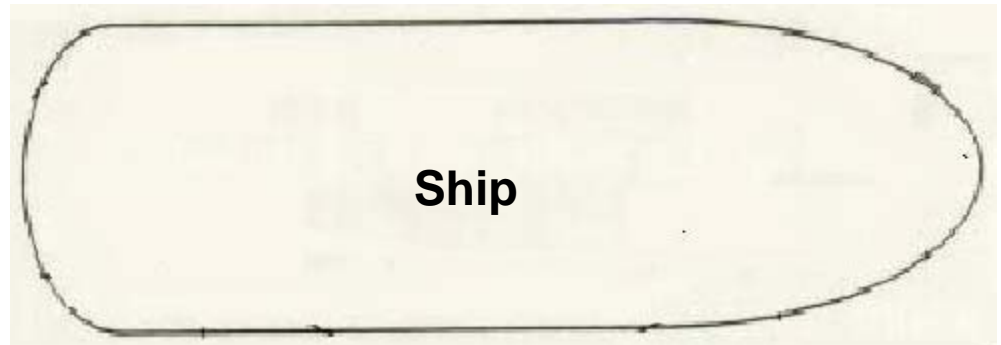
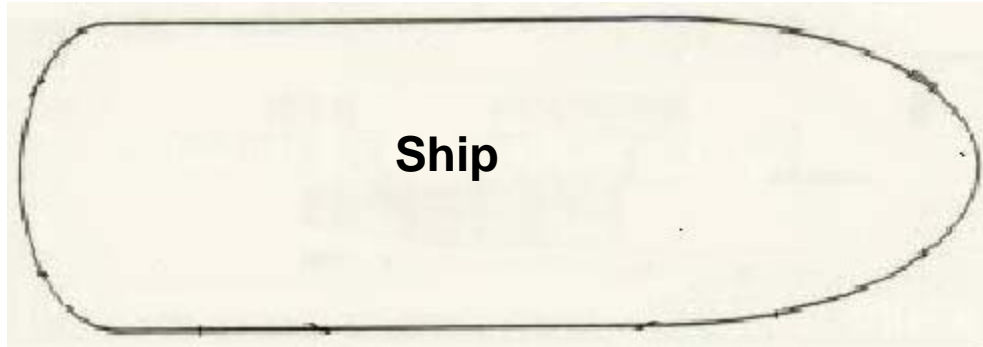
E - Dead Ahead

F – Port Quarter

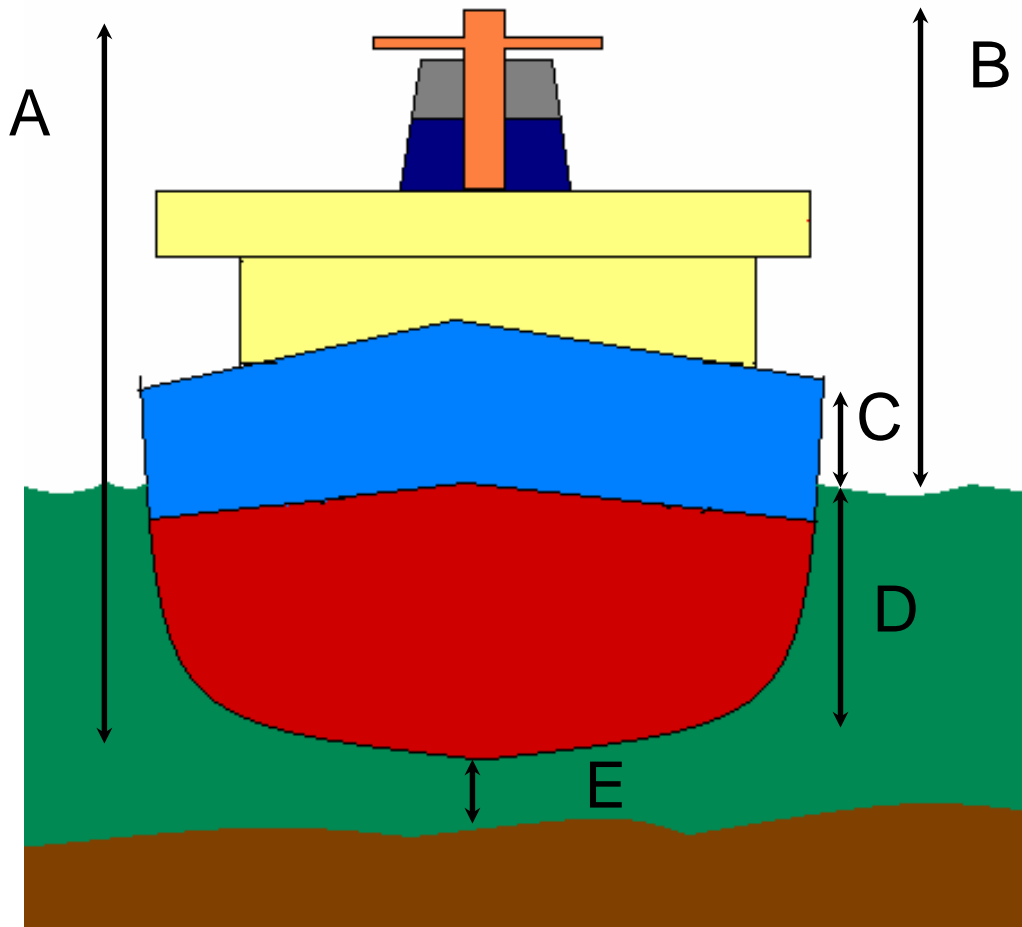
G – Starboard Quarter

H – Dead Astern

Basic Terms



Basic Terms



A – Height

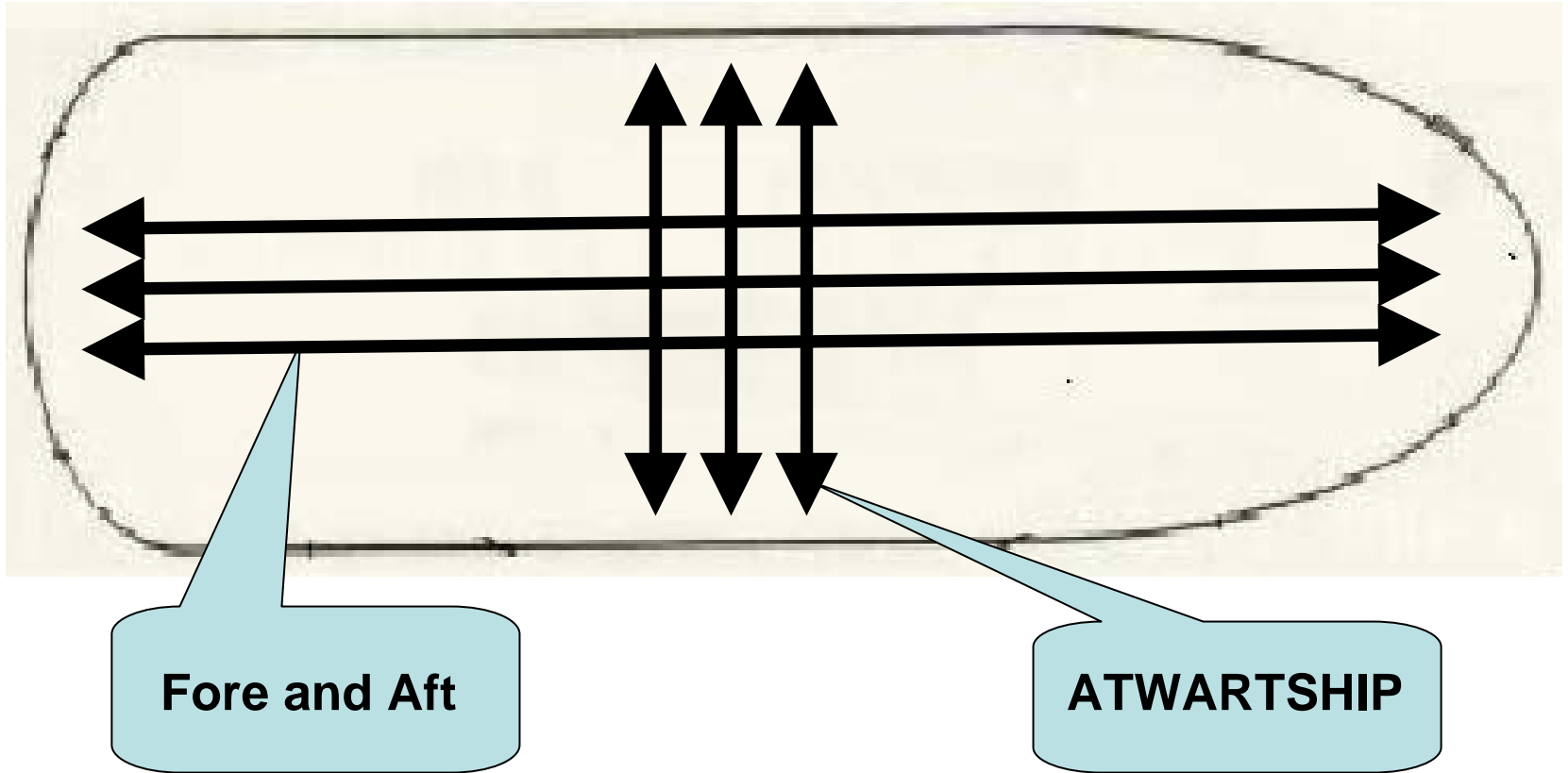
B – Air Draft

C – Freeboard

D – Draft

E – Under Keel
Clearance

Basic Terms



Basic Terms



Anchor

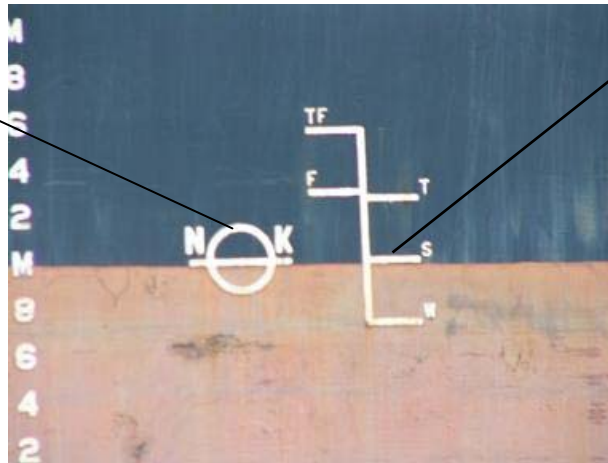
Anchor Cable



Bulbous Bow

Basic Terms

**Plimsoll
Marks**

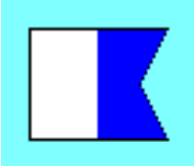
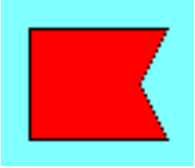

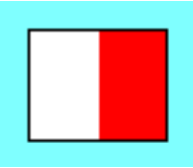


Load Line

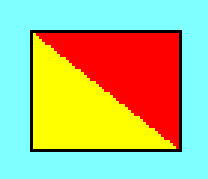
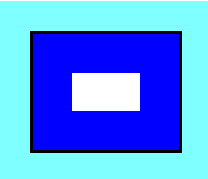
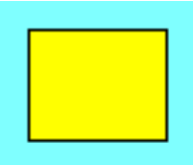
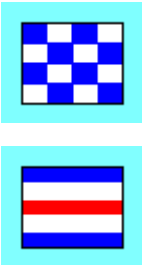


**Draft
Marks**

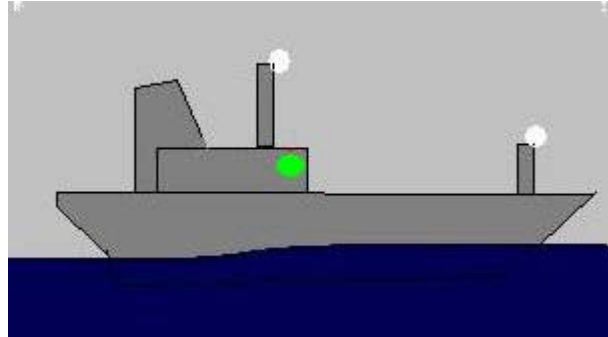
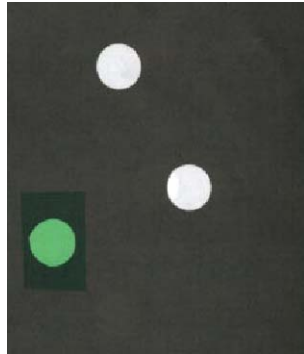
Flags Signal

	A - Diver underwater
	B – Loading and Discharging dangerous cargo
	G – I want a pilot
	H – I have a pilot on board

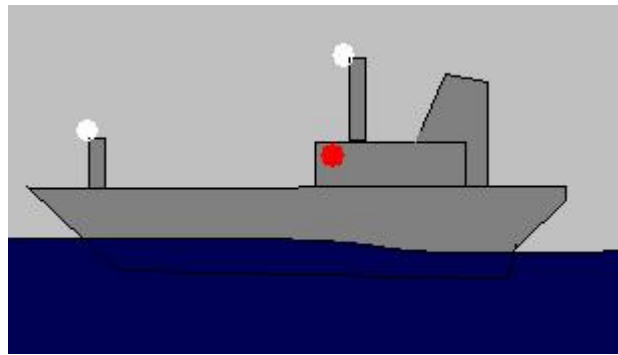
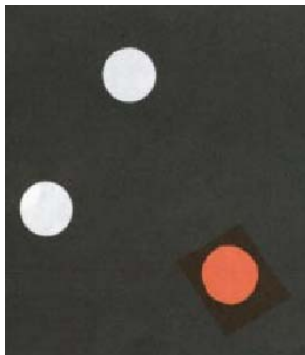
Flags Signal

	O – Man overboard
	P – Shore leave expires. Return to vessel
	Q - Quarantine
	NC – My vessel in distress

Night Signal

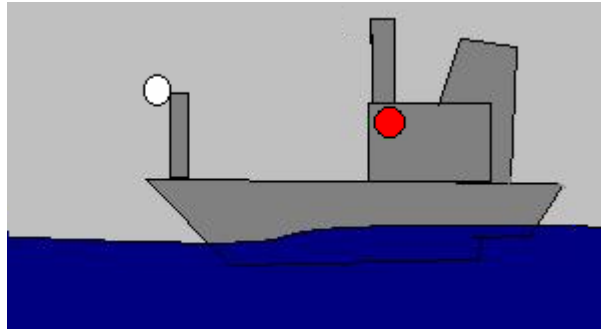
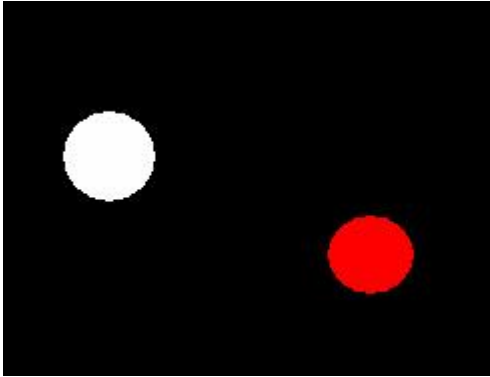


Ship more than 50 metres long
showing starboard side

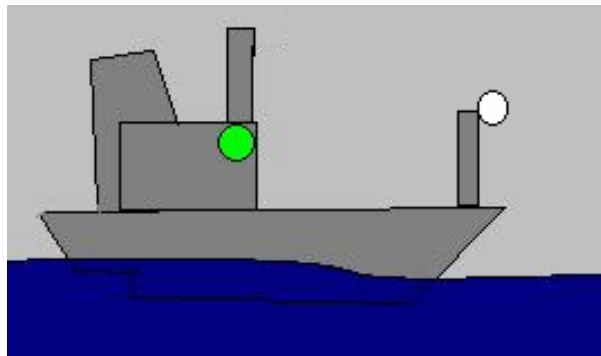
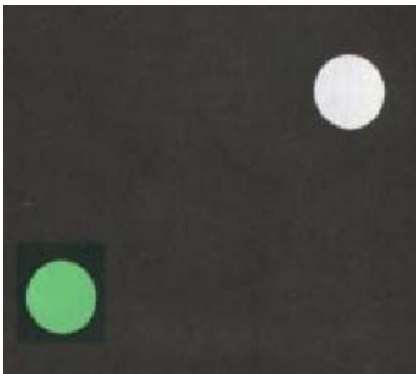


Ship more than 50 metres long
showing port side

Night Signal

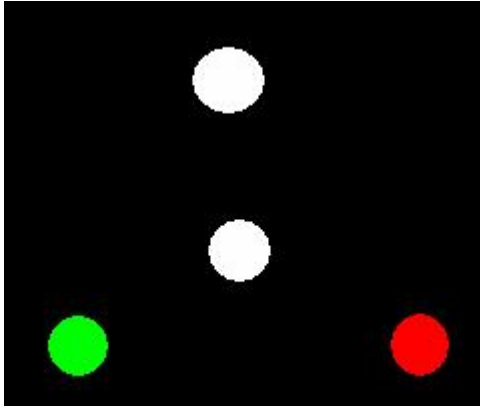


Ship less than 50 metres showing Port side lights

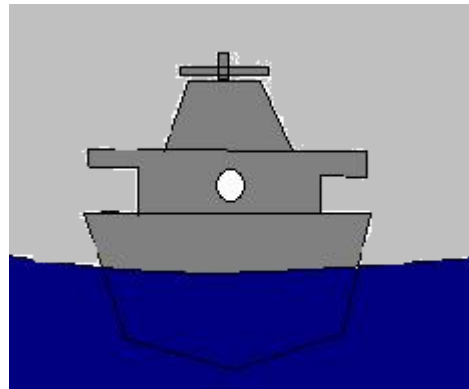
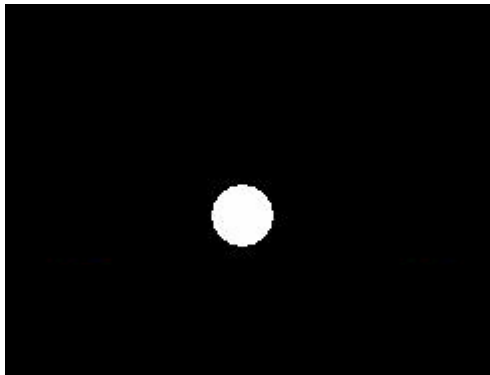


Ship less than 50 metres showing starboard side lights

Night Signal

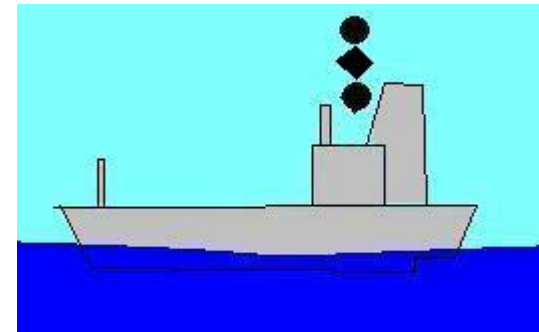
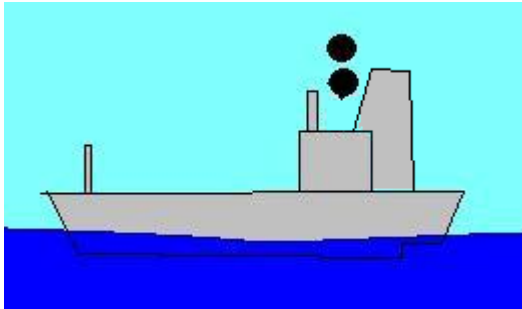
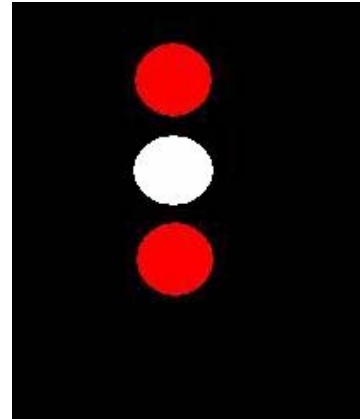
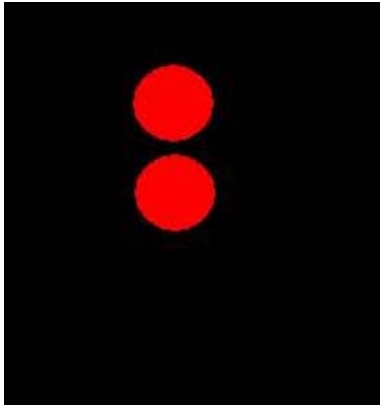


Ship more than 50 metres coming towards you



Ship stern light

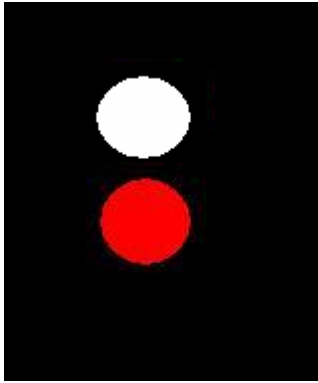
Night and Day Signal



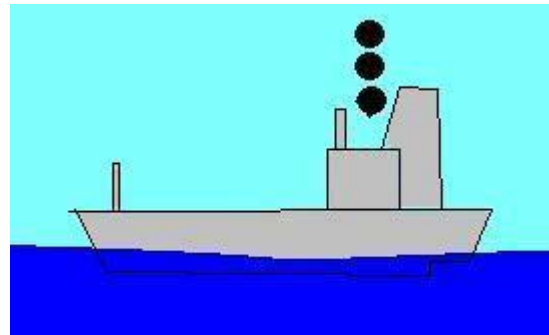
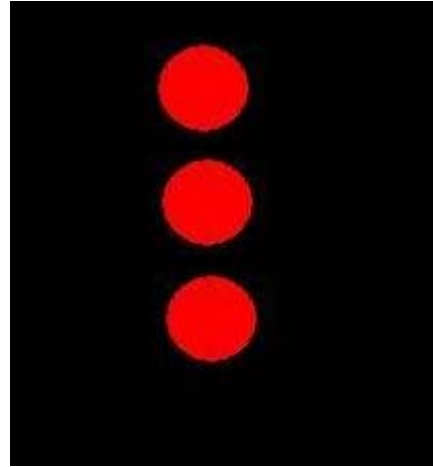
Ship NOT
UNDER
COMMAND

Ship restricted in
ability to manoeuvre

Night and Day Signal



Pilot vessel



Deep draft ship

Parts of the Derricks

**Two Derricks working together is called
Union Purchase**

15 – Topping Span

9 – Topping block

21, 26 27 – Steam Guy

7 , 7A – Derrick boom

12 – Heel block

14 – Cargo Hook

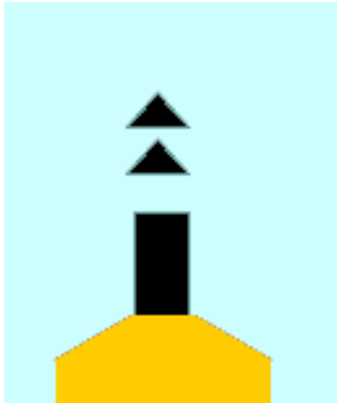
1 - Runner wire

22 – Preventer

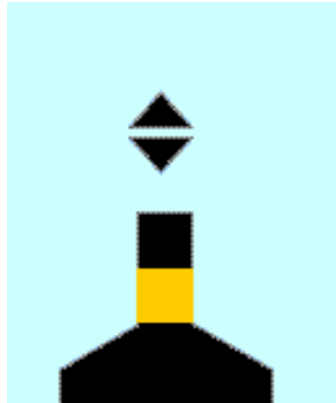
8 – Goose neck

13 – Cargo Block

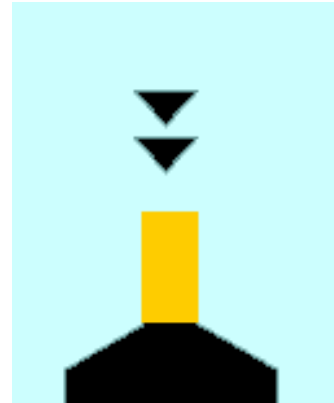
Cardinal Buoy



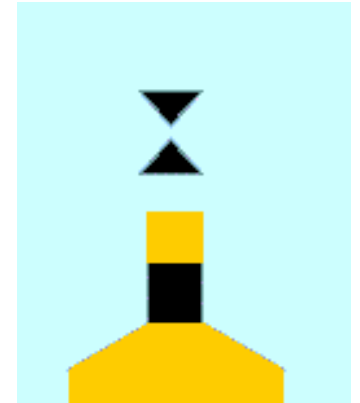
North



East

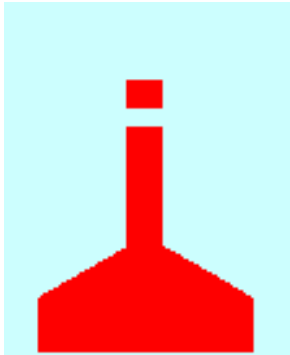


South

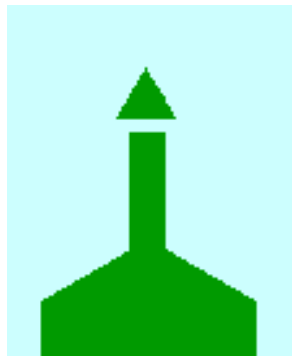


West

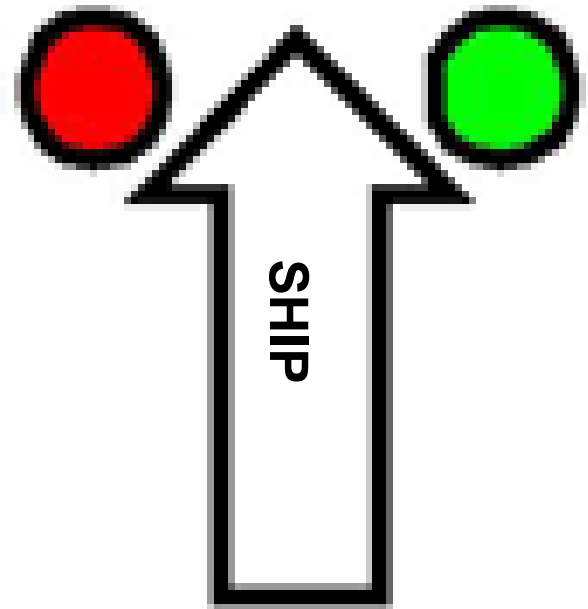
Channel or Canal Buoy



Port Hand buoy



Starboard Hand buoy



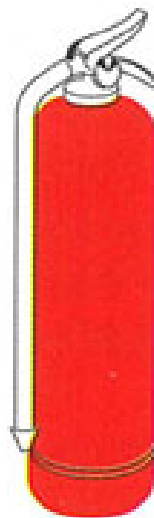
Fire Fighting

Classes of Fire

Class A Fire



Fires caused by paper, wood, cloth, rubber, and certain plastics.



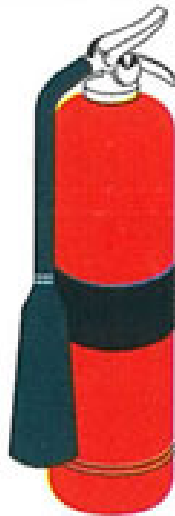
**Water
Extinguisher**

Fire Fighting

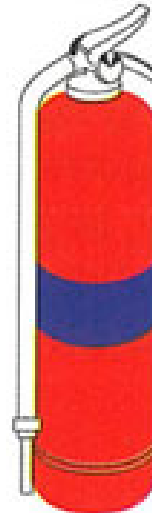
Class B Fire



Fires caused
grease, gasoline,
oil.



carbon
dioxide



Foam
Extinguisher

Fire Fighting

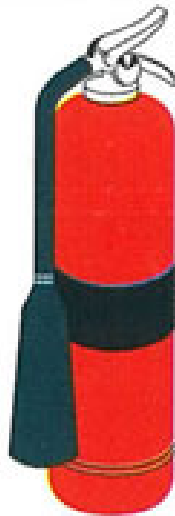
Classes of Fire

Class C Fire

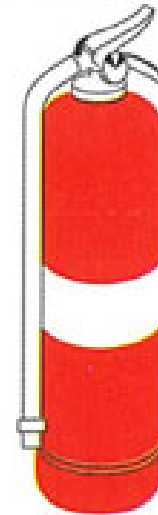


Electrical
Equipment

**Electrical
Fire**



**carbon
dioxide**



**dry
chemical
powder**

Fire Fighting

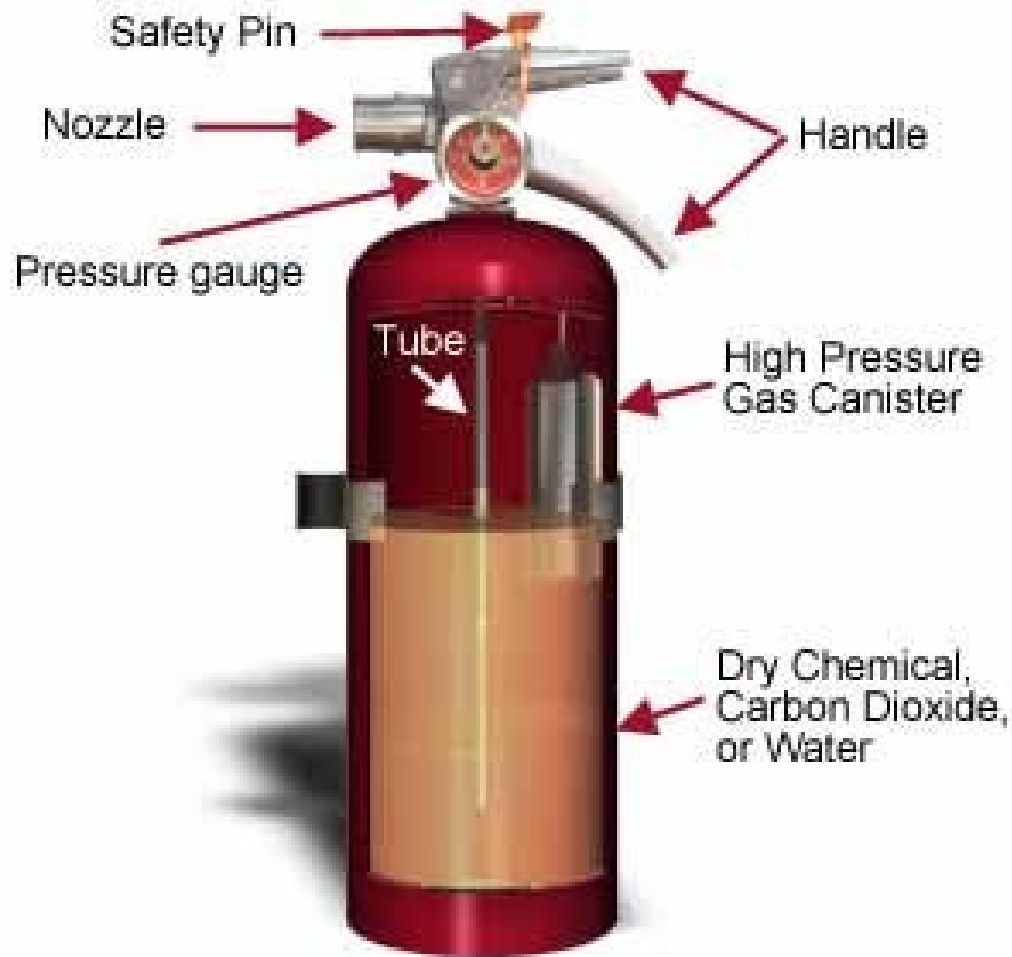
Class D Fire



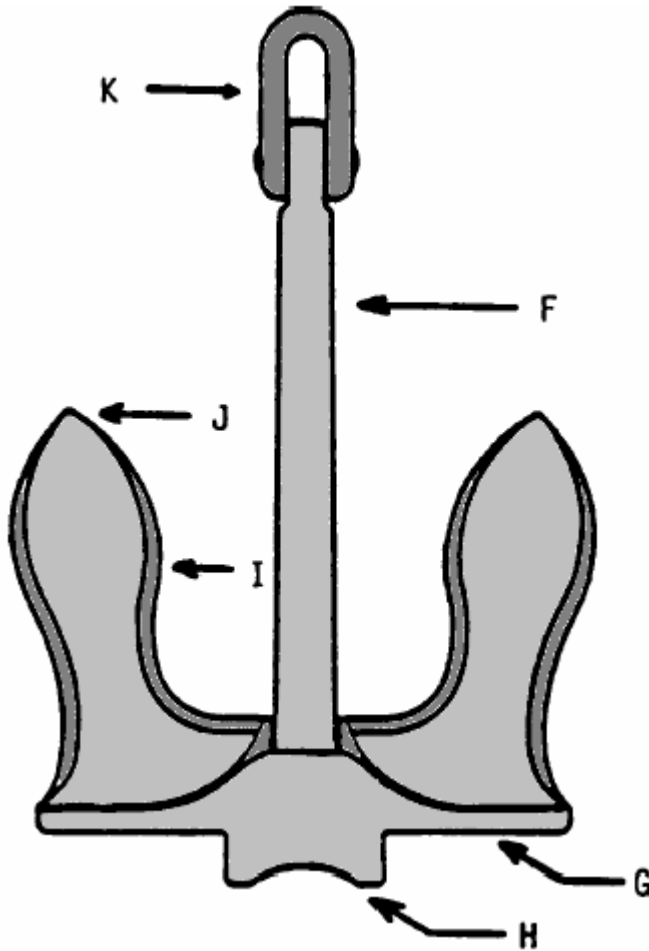
**Metal
Fire**

**No common Extinguishers.
Special fire extinguisher use
Sodium Chloride and Argon
gas can be used**

Fire Fighting



Anchor Work



K – Bending on Shackle

F – Shank

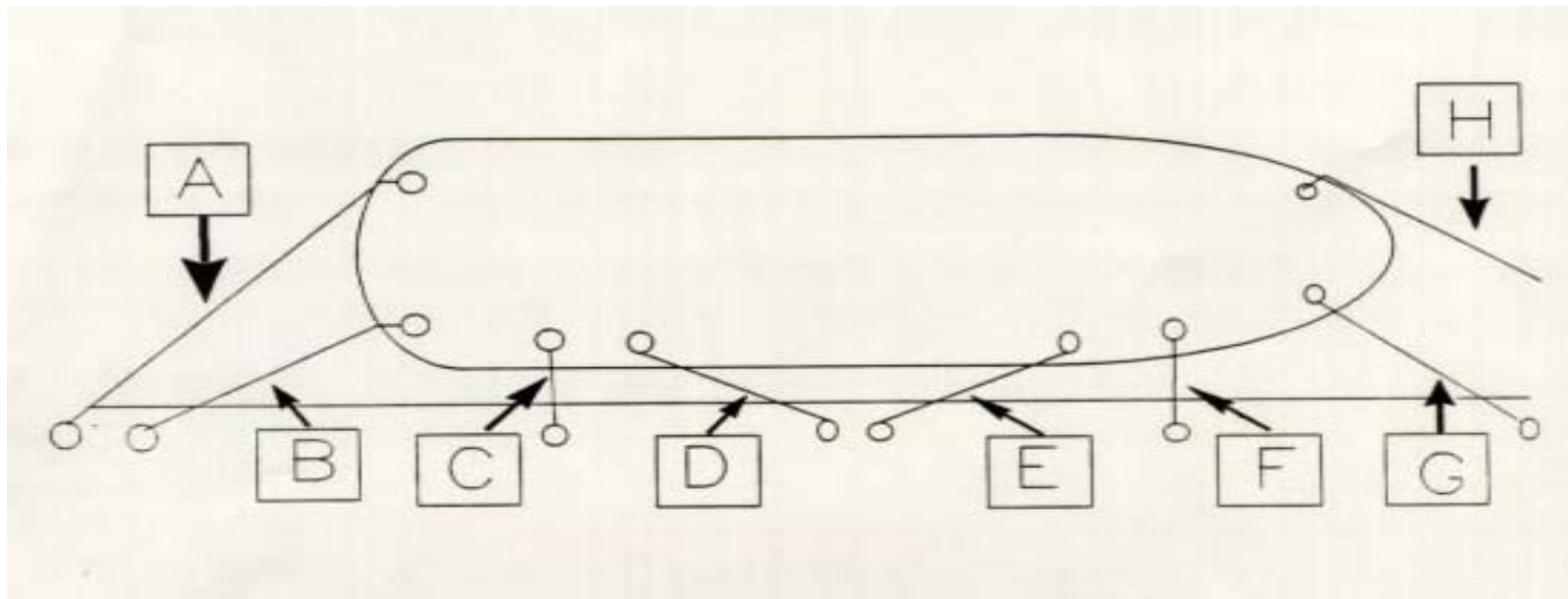
J – Pea

I – Fluke

G – Tripping Arm

H – Crown

Mooring



**A B –
Stern lines**

**D –
Aft
Spring**

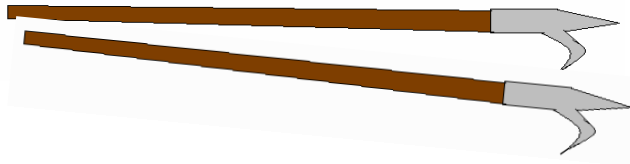
**E –
Foreward
Spring**

**F –
Foreward
Breast
Line**

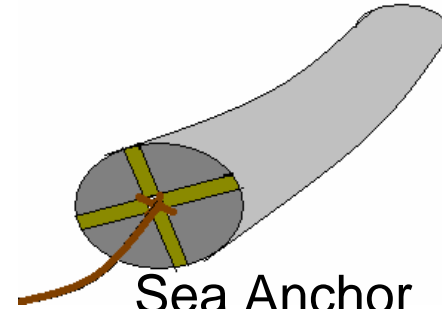
**GH –Head
Line**

**C – Aft
Breast
Line**

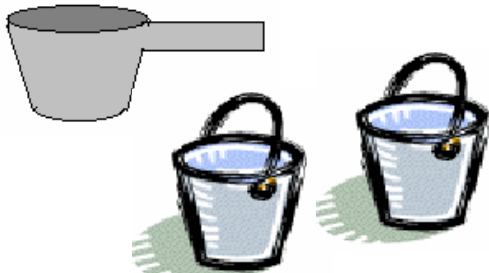
LifeBoat Equipment



2 boat hooks



Sea Anchor



2 buckets and 1
bailer



Crutches



Oars



2 rope painters

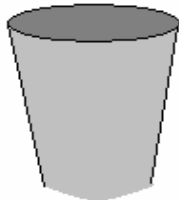
LifeBoat Equipment



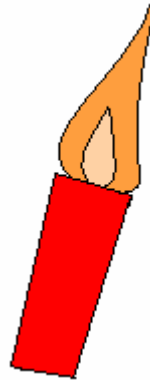
2 axes



Fresh water



3 Graduated
Drinking
Containers



6 hand flares



Torch light



Whistle



First aid kit

LifeBoat Equipment



Anti seasickness tablets



Jack knife

3 portable radio



Fire extinguisher



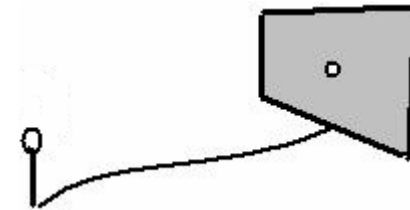
3 can openers



Food ration



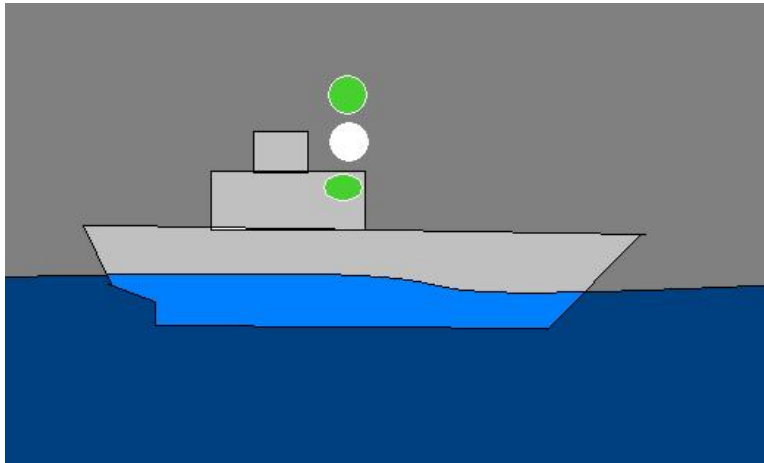
Fishing hook and line



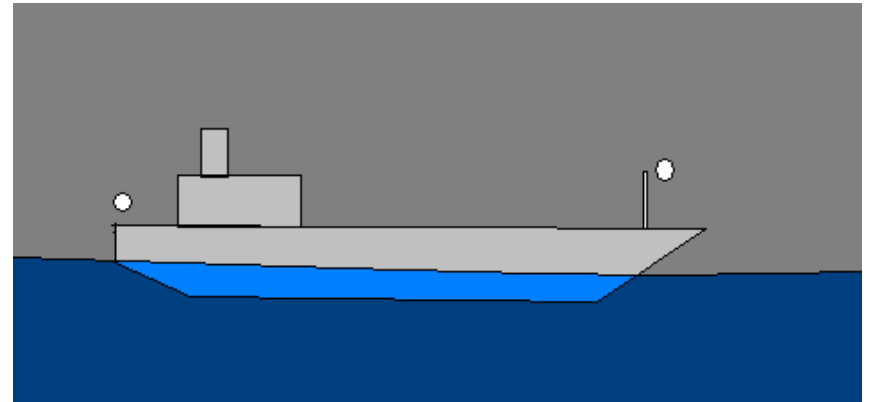
Heliograph

Additional knowledge for Boatswain

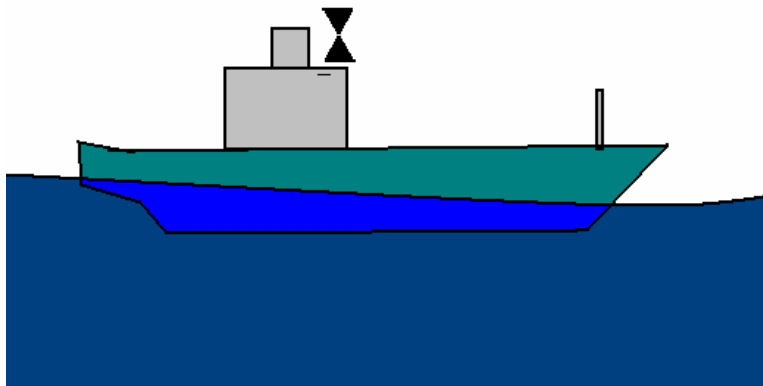
Lights and shapes



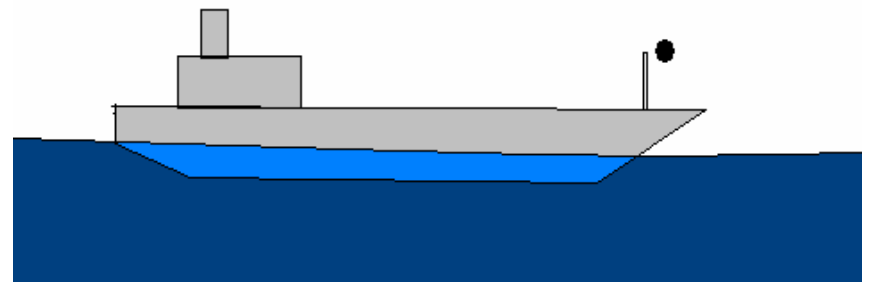
Trawler moving in the water



Vessel at anchor

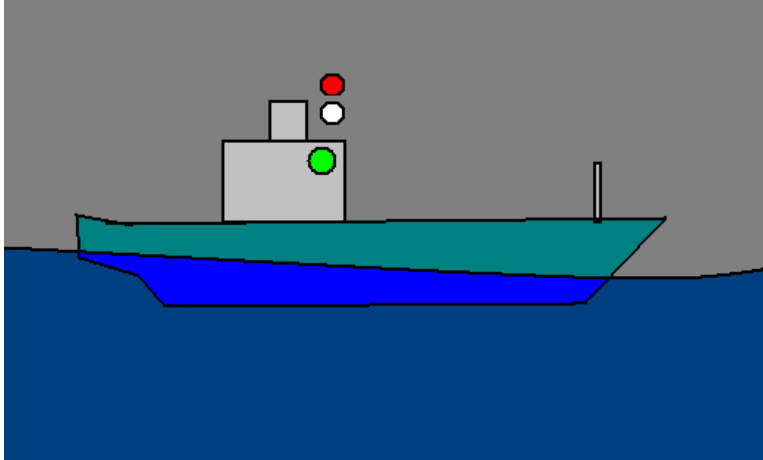


Fishing boat or trawler

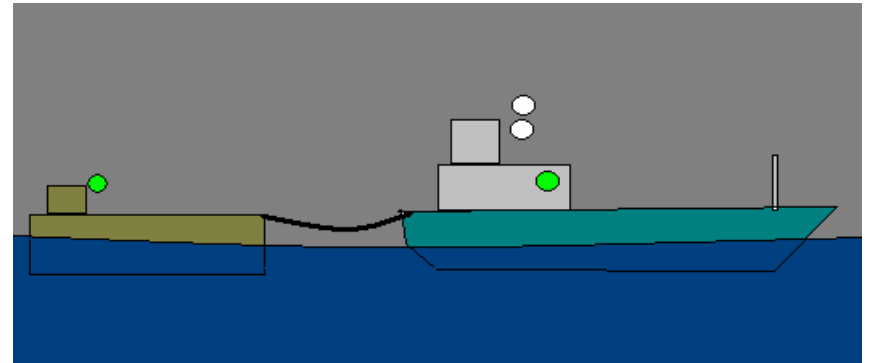


Vessel at anchor – day time

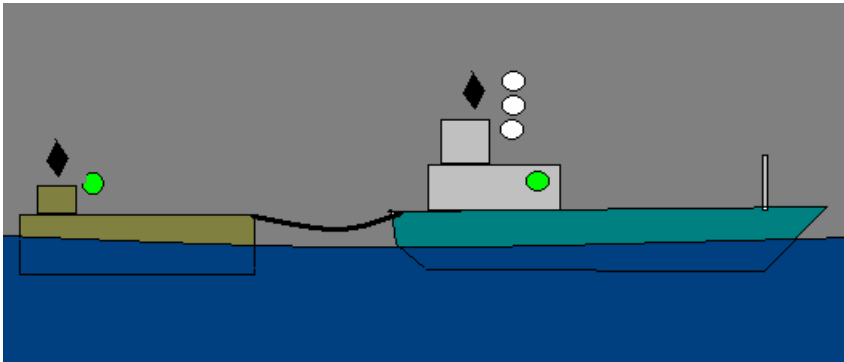
Lights and shapes



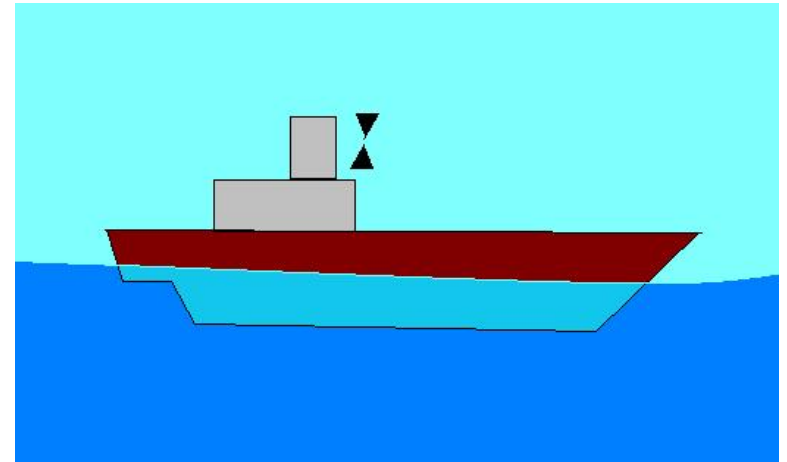
Fishing boat moving in the water



Towing less than 200 meter

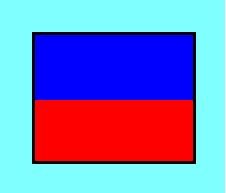
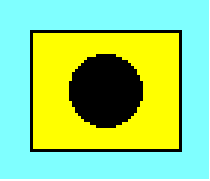

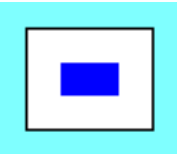


Towing greater than 200 meter

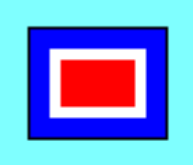





Fishing boat or trawler

Flag Signal

	E - I am altering my course to starboard
	I - I am altering my course to port
	M - I have a doctor on board
	S - my engines are going full speed astern

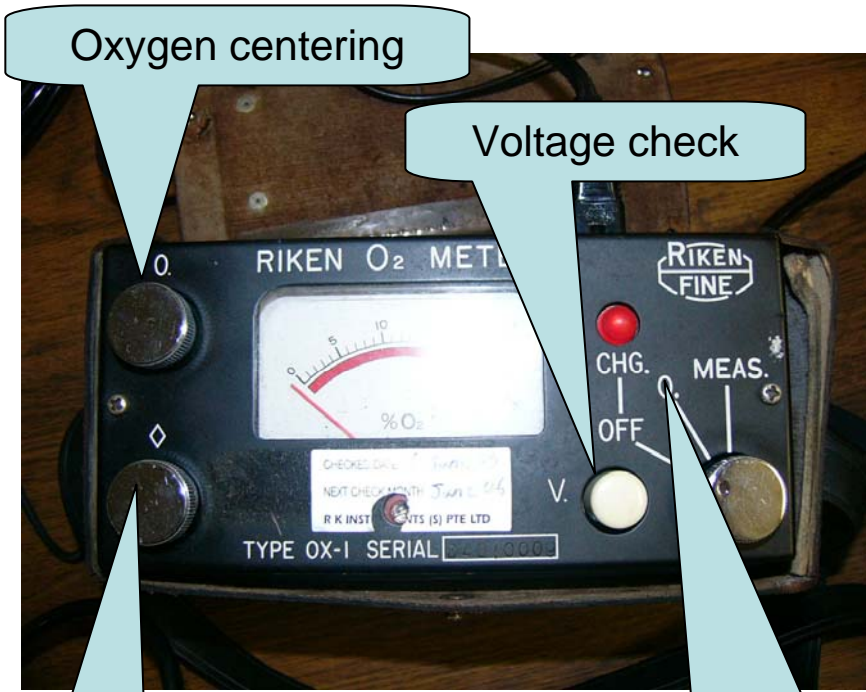
Flag Signal

	W - I require medical assistance
	C – positive (affirmative)
	N - Negative
	V - I require assistance

Cargo System

**Additional knowledge for
Boatswain and pump man**

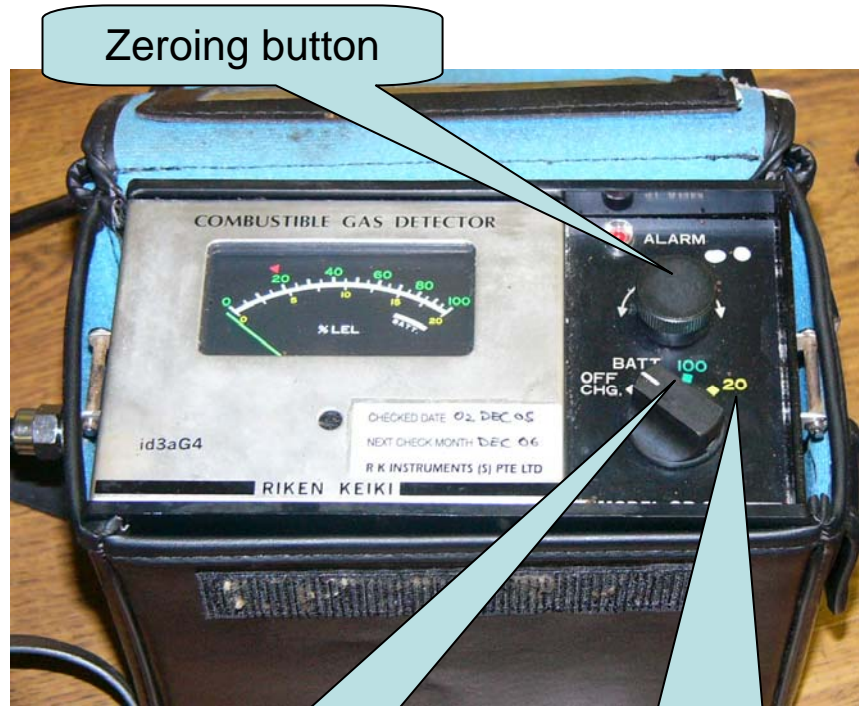
Gas Instrument



Voltage centering

Oxygen Zero Check

Oxygen analyzer

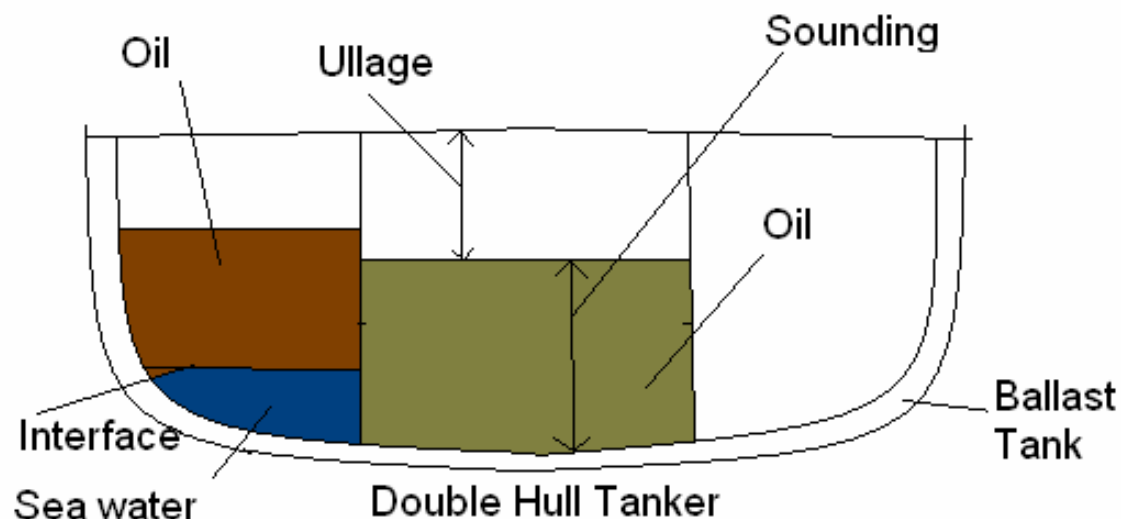


100 percent scale of LEL

20 percent scale of LEL

Combustible gas detector

Cargo terms



OBQ (On board quantity) – cargo found in cargo tanks during inspection **before loading**

ROB (Remaining On board) – cargo found in cargo tanks during inspection **after discharge**