

# Lesson Plan - 2.5-1 SAR Unit Layout & Equipment

Date: 13/1/18  
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## AIM:

Trainer - Provide a full breakdown of the SAR unit layout; where equipment is stowed; names / terminology

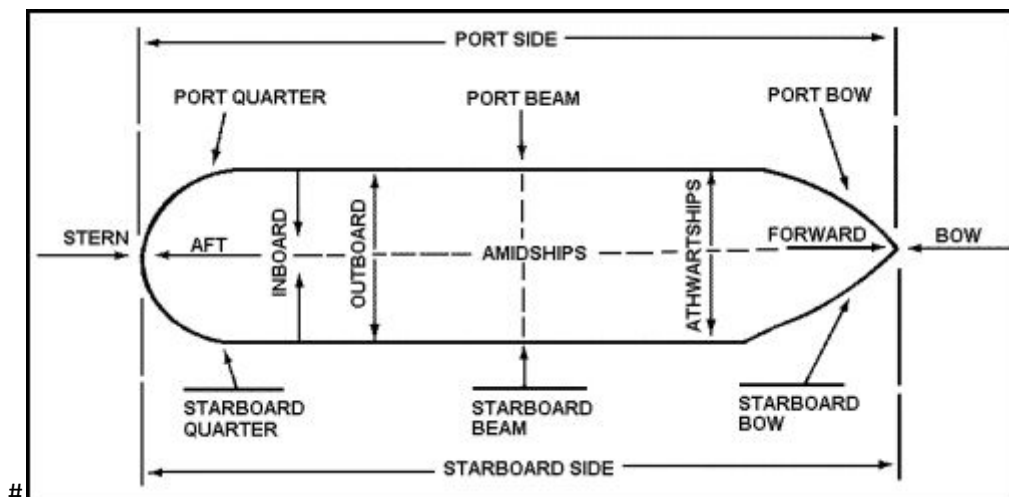
Crew - To be able to explain all parts / fittings of the boat; equipment onboard; terminology of boat parts; hazards; how to minimise dangers / risks; describe alarms;

**Training Shoreside** - Provide a walkthrough from bow to stern of all the SAR unit

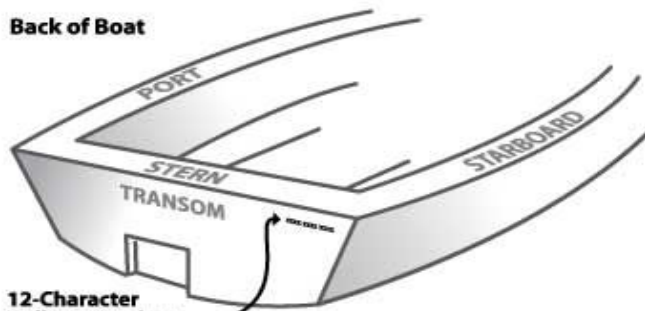
- Parts of the SAR unit and the names
- Fittings and names
- Equipment and where it's stored and its general use ( Deeper understand may be given through other training units)
- Explain the potential hazards and how to mitigate them
- Crew positions on board

**Training Poole** - Crew course

## Unit Parts

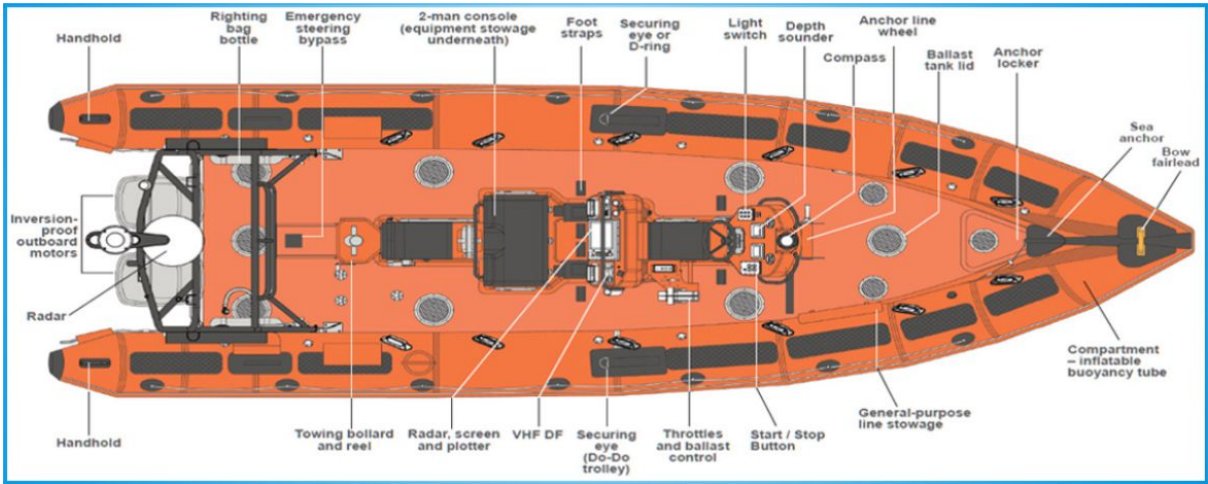


Back of Boat



12-Character





## Equipment

The SAR unit is especially built to hold an extensive array of equipment to aid the crew in the execution of their role.

- 3 Torches
- 5 knives
- Tool kit - bolt cutters / screwdrivers / pliers / pincers / ballast key / bung / spanners
- Medical - Stretcher / Neck braces / Ambulance pouch / first aid kit / cling film / 2 survivor life jackets / body bags / survivor ponchos / oxygen
- spare parts - 2 bulbs / batteries / 1 propellor / 2 prop washers / 5 split pins / prop nut
- sounding pole / tiller
- Salvage pump ( only carried as required)
- sea anchor
- Anchor - Delta 9.5kg with 9.14m chain
- Drogue
- GP lines
- capsized bag
- handheld VHF
- Binoculars / Emergency VHF aerial / Fog Horn / Sponson Pump / 2 Searchlights / Highline gloves
- Handheld Camera
- SAR cards / Cas Care Cards
- Navigation - Charts / Rib Plotter / Handheld compass / tides / Portland Speed ruler / Stopwatch / Pencil
- Flares (2 Red / 6 White)
- Bailey hatch tools
- Fire Extinguisher - Carbon Dioxide. To only be used for fires on the SAR unit and not for casualty vessel **RNLI DO NOT FIGHT FIRES**

### Electrical Equipment

- VHF Radio
- Sims Unit - Radar / Enav
- DF unit
- Depth sounder
- Fitted camera and microphone on A-Frame
- Night sight
- Mobile phone

## Hazards

SAR units operate in hazardous conditions, so it's critical that crew understand those hazards and how to minimise risk of exposure.

- secure positioning of crew - crew should be safely positioned on the lifeboat at all times when underway. Foot straps and hand grip bars will help to reduce movement and impact from the effects of crashing through waves.
- MOB - Seat 1 crew is watched by those in seat 2 / 3 / 4. Seat 2 and 3 watched by their opposite number and seat 4. Seat 4 is not monitored by other crew, they MUST therefore have their MOB red cord attached to their leg at all times, except when moving around the SAR unit.
- Radar - When in use, the radar gives off radiation from the unit above the A frame at the stern of the vessel. The radar must be switched off when operating with a helicopter winchman.
- Entanglement - Towlines / anchor lines / GP lines / Throw lines / Quoit lines, all carry a risk of crew entanglement if not managed correctly.
- Fuel - Fuel spillage can occur on the slipway, refuelling at the fuel berth or when switching fuel lines on the boat. Precautions should be taken to avoid spillage and contact with ignition or heat sources
- Slips & Trips - Moving around in rough sea states or low light presents risks to trips and falls. Deck lights should be put on and head torches used at night; avoid foot stirrups walking around; when required to step on the sponson step on to the non slips black strips along the sponsons and hold on where possible. If leaning over the sponson have a second crew member hold the back of that person's life jacket.
- Steerage failure - in the event of steerage failure, the hydraulic switch must be turned 1 qtr round before fitting the tiller for emergency steering. Failure could result in crew either being unable to steer manually or being thrown / crushed by the main steerage system.

## Alarms

An Atlantic 85 has a number of alarms

- Port and starboard engine alarms (light and sounder) found seat 1 console
- Man overboard (MOB) alarm (light and sounder) found seat 1 console
- Depth alarms (Sims unit)
- Proximity and watchkeeping alarms (Sims unit)
- Engine / gearbox alarms (light shape) found on the TACO / Rev counter unit Seat 1 console
- DSC Alarm
- AIS Alarm

**Warning - In the event there is an overheat of one of the engines and the helm switches off the audible alarm, crew must be aware that it will not resound if an MOB occurs. In this event only the light will trigger; crew should be extra vigilant during this time for the 4th crew member.**

## **Maintenance**

Every month the lifeboat is serviced by the on station mechanics and then given a 6 month more indepth service by RNLI Divisional Technicians. In addition to this the on station mechanics are on hand to support minor repairs and assist in reporting of defects.

The monthly service includes:

- a thorough clean of the whole SAR unit
- Removal and cleaning of bailey hatches - the hull is checked at this point for any issues
- Corrosion block of all electrical points and comms plugs
- Clean and corrosion block of helmets including check for cracks / defects
- check sponson pressures
- clean up bow fairlead
- Check medical kit is in date and fully stocked
- check lights and camera are working
- test 5th man mic
- Check battery levels
- Check filters for contaminated fuel
- check lines for fraying
- corrosion block vhf units and handhelds
- Clean / oil check condition of the SAR unit trolley
- Check flares in date

**Reference Material:**

Video Clip Sar Unit Layout

Crew Handbook