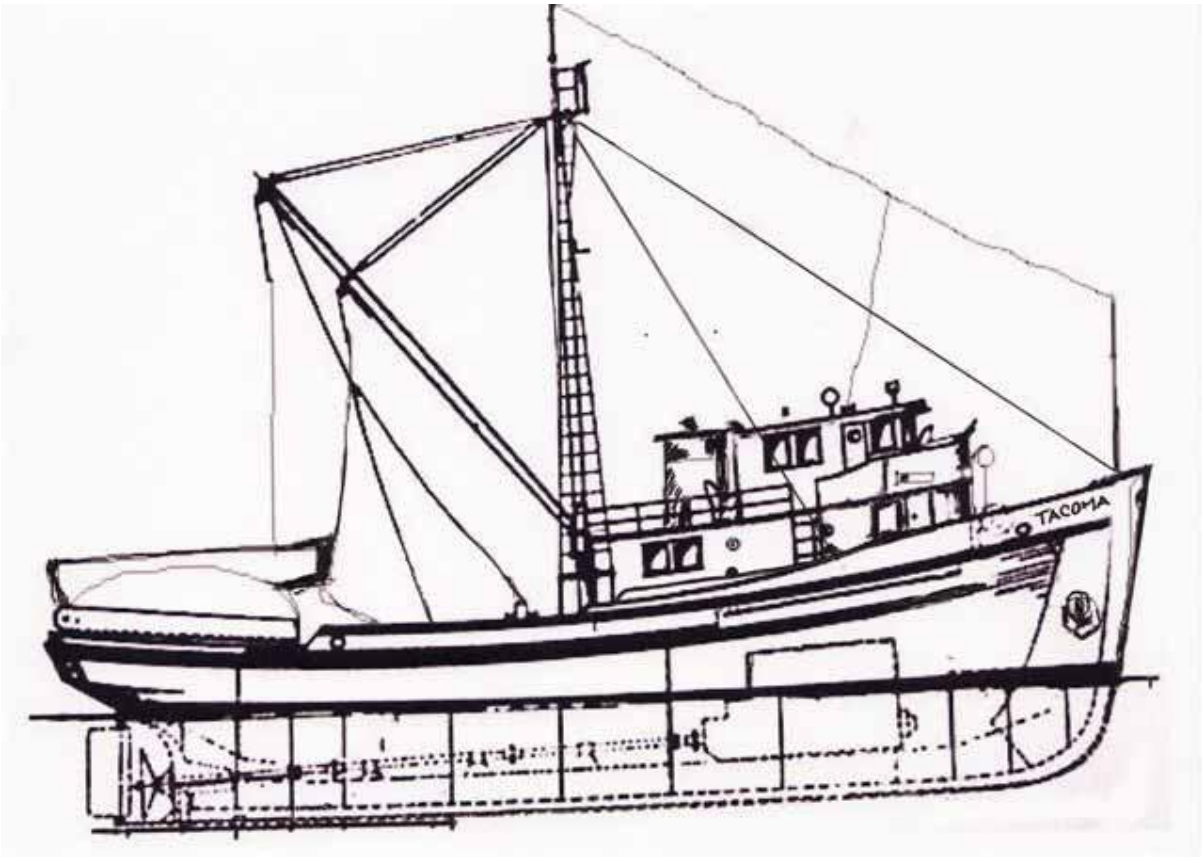
MFV TACOMA
MASTERS Induction book



Instruction to TACOMA MASTERS

THIS INDUCTION DOCUMEDNT is to be completed on the MFV TACOMA
It is important to note that each task has a number of separate parts or components. the book to show that the MASTER HAS satisfactorily completed the induction. Each component of a induction requires a separate signature, . You should also note that this induction do not have to be undertaken in the order they appear,

1 — Radio operations

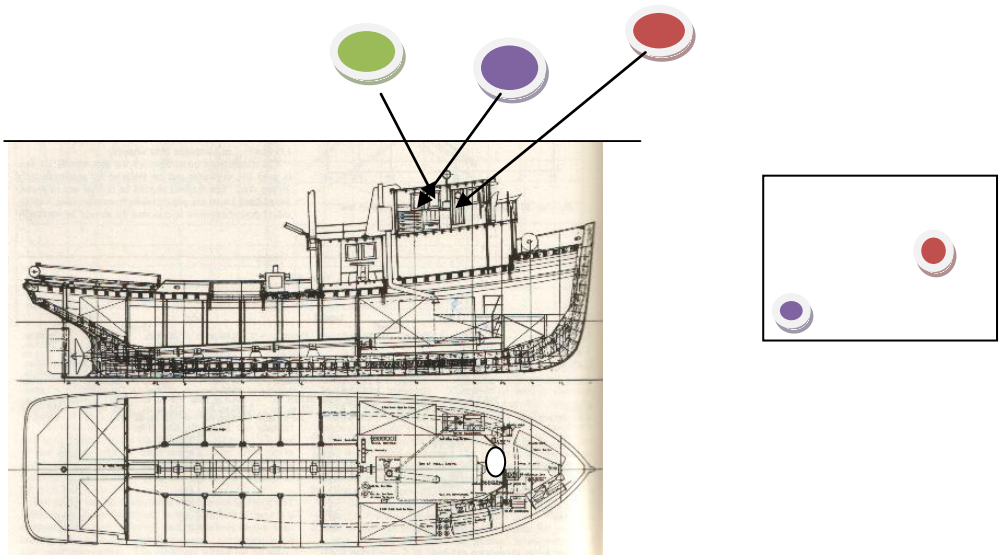
Aim

The aim of this induction is to demonstrate experience in transmitting and receiving information by marine
radio. Specifically to communicate by radio with another vessel or coast radio station using correct procedures, frequencies, and appropriate messages; use a radio to obtain weather forecasts; and to understand how to seek assistance, including urgent medical advice while at sea.

Vessel Signature & Date

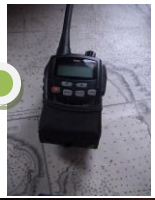
Identify radio equipment

1. the radio equipment onboard Tacoma:



LOCATION PLAN

VHF FIXED



2 X VHF HAND HELD

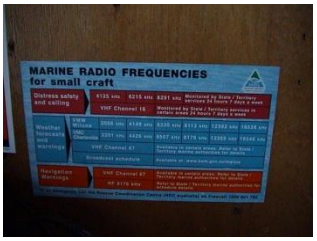
HF CODEN

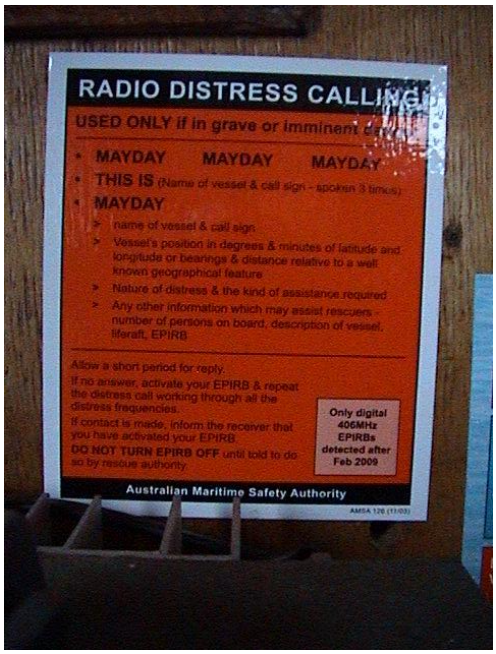
GPS
ECHO SOUNDER

2. the main working frequencies or channels for each radio:

Radio controls
3. Identify and select the controls for each of the onboard radio sets and explain what each control does.

Making distress calls
4. Demonstrate how to select the distress, urgency and safety frequencies or channels for each of the radios onboard. List these frequencies.





5. Demonstrate (not to be transmitted) the ability to make a distress, urgency or safety call.
MAY DAY PAN PAN

Operate a marine radio
6. Obtain weather forecasts from the radio for your area using as many different services, sources or frequencies as are available.

7. Operate each of the marine radios onboard to transmit and receive routine messages between other vessels and shore.

Undertaking basic maintenance
8. Perform basic maintenance checks on batteries and power supplies.

9. Identify and replace fuses.

10. Identify main parts of aerial and earth system and check cables and connections are secured and protected properly.

2 — Safe working practices

Aim

To become aware of safety issues onboard TACOMA and with ways of minimising the risks inherent in working onboard TACOMA and her three vessels.

Special instructions

Discuss the following list of onboard activities with Master and / or Engine Driver onboard TACOMA . In particular the danger and risks inherent in these activities; the correct way to undertake each activity, and how emergency or dangerous situations should be handled.

Berthing the vessel

1. how you would safely:

a) Pay out and retrieve anchor chain and rope in adverse winds and/or current.
b) Handle and secure mooring lines during berthing and un-berthing.
c) Haul in/ease out a line that is under tension.

Entering confined spaces

2. how you would safely:

a) Enter machinery space with main engines running.
b) Enter a compartment or tank (i.e. confined space) that has been sealed up for a lengthy period. List the precautions you would take:

Handling dangerous chemicals

3. how you would safely handle chemicals (cleaning products or paint) below decks where ventilation was inadequate.

Operating equipment and machinery

4. how you would safely:

a) Operate the lifting boom to lift and swing a heavy load. SEE STABLITY BOOK
b) Retrieve fishing gear under tension .

Working on the deck

5. how you would safely:

a) Work on deck / move around inside the vessel in heavy weather.
b) Lash and secure a heavy movable item on a vessel rolling in a seaway.

Working with other persons

6. how you would safely:

a) Supervise passengers and other crewmembers and keep them safe.
b) Control a passenger / crewman who is posing a threat to themselves or others onboard during a voyage. (Simulation or drill)

7. appropriate clothing onboard for an emergency situation or drill.

3 — Fire safety

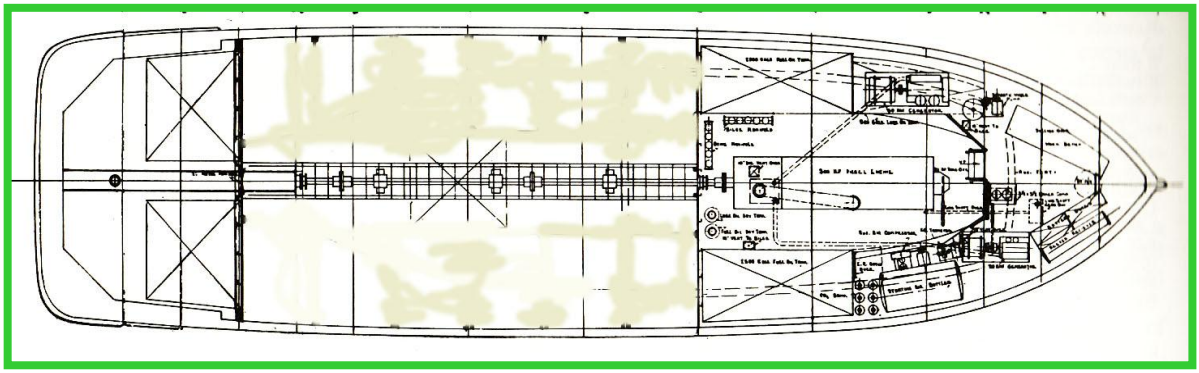
Aim

To become familiar with aspects of fire safety onboard the vessel including fire readiness, minimising the risk of fires, fire protection systems and fighting and extinguishing fires.

Familiarisation with fire systems

1. Identify the different types of fire extinguishers onboard TASCOMA and discuss their uses (i.e.: stored pressure water, foam type, CO2, dry chemical powder).
2. Demonstrate how you would check the fire extinguishers to make sure they are in good order and ready for use.
3. TACOMA has a fire detection system SMOKE ALARMS

a) what causes the detector system to activate the alarm smoke,
b) how you can check whether the detector is working; and
c) whether you can hear the alarm in all parts of the vessel.



Minimising the risk of fire

4. Participate in inspecting the vessel for fire hazards and in minimising the risk of ignition.
5. Explain the preferred methods and locations for storing flammable materials onboard (i.e. petrol, bulk cleaning chemicals, paint).
6. Explain how you would minimise the risk of fire while repairs involving heat (eg welding) are being done onboard. Consider preparation for welding as well as safety after the welding has been completed.

Participating in a fire drill

7. Participate in a fire drill simulating a fire in the:
a) Galley
b) Accommodation space
c) Machinery space
d) Fish hold
8. Where applicable to the vessel's operations, manage passengers in a fire emergency drill.
9. Wear appropriate clothing for a fire during the emergency drill.
10. Use the vessel pumping system to charge up a hose that could be used for fire fighting and boundary cooling.

Fire planning

11. the fire plan for each of the following compartments onboard the vessel:
a) Accommodation spaces and cabin area.
b) Galley.
c) Machinery space / engine room.
d) Store space.
12. In discussing the fire plan consideration should be given to each of the following items:
a) The most likely type of fire for each area (i.e.fuel, paper, oil, etc).
b) The most likely way fires would be detected.
c) The immediate "first response" to the fire.
d) The best type of equipment onboard to deal with the fire.
e) How to control ventilation to the compartment, or how you would starve the fire of oxygen.
f) The major problems that would arise from such a fire (i.e.: smoke, fumes, heat, loss of power, explosion, loss of vessel, etc).
g) How to contain/limit the spread of fire.
h) How to tell if a fire was out and how and when you would go about re-entry to the compartment.
i) What to do in the event that the fire was out of control.
j) What are the responsibilities of each crewmember, and passenger control procedures?

4 — First aid

Aim

To become familiar with first aid facilities, equipment and protocols onboard the vessel.

Vessel Signature & Date

Familiarisation with first aid facilities and equipment

1. Identify the location of onboard first aid facilities and equipment.
2. Identify the designated first aid officer.
3. Check the contents of the first aid kit and ensure that the contents are—

a) in good condition;
b) in date; and
c) that the items and quantity match with the list of equipment to be carried onboard the vessel.

First aid revision

4. hold a current first aid qualification review the first aid kit and discuss how you would treat the following onboard injuries:

a) Fracture
b) Fishing hook injury
c) Cuts and abrasions
d) Amputations
e) Fall and crush injuries
f) Electric shock
g) Near drowning
h) Heart attack

5. Consideration should be given to how you would seek help for such accidents, given the following issues:

a) Area of operation
b) Availability of other vessels
c) Time to reach port
d) Available rescue services. Comments about completion of these tasks can be added here:

5 — Survival

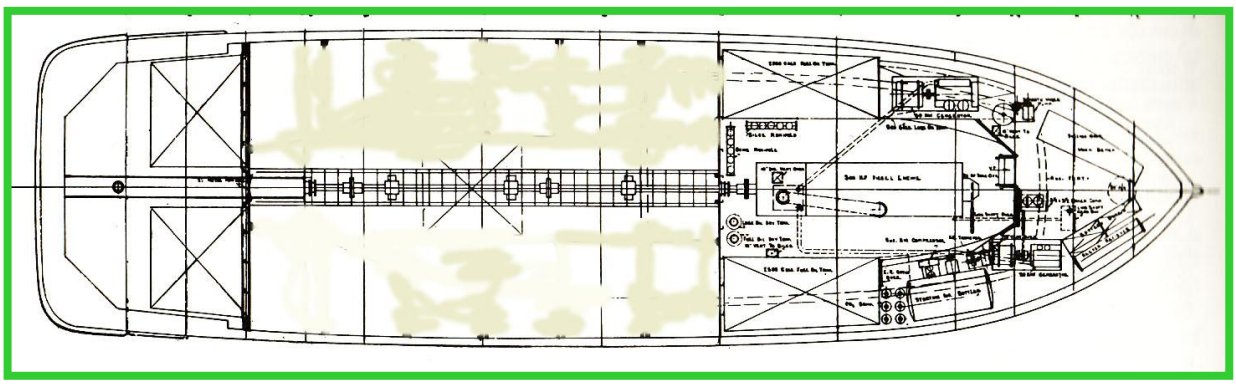
Aim

To become familiar with the location, deployment, use and care of all items of lifesaving equipment onboard the vessel.

Vessel Signature & Date

LifeJackets

1. Locate where the lifejackets are stored and check to see if there are sufficient for your vessel survey.
2. Check the condition of the lifejackets.
3. Correctly put on and wear a lifejacket, and demonstrate how to enter the water wearing a lifejacket, and the use of the whistle and light (if fitted).



7. Locate the following lifesaving equipment:
a) Pyrotechnics (hand-held flares, parachute flares and smoke floats).
b) EPIRBs.
8. Explain when each would be used and precautions necessary to prevent accidental or inappropriate use.

Abandon ship

9 Find out for your vessel and area of operation, how long it would take for help to arrive.

Person overboard

11. Discuss the person overboard procedure for your
vessel with the other crew and participate in a person overboard drill.
Comments about completion of these tasks can be added here:

6 — Effective human relationships onboard a vessel

Aim

To observe the standards of work and behaviour expected onboard a commercial vessel, and to effectively operate as a member of the crew by practising effective communication, co-operation and teamwork, and by displaying respect for other crewmembers.

Vessel Signature & Date

Observing occupational health and safety

1. Co-operate with senior personnel and other crewmembers in implementing safe work practices and complying with responsibilities under OH&S legislation.
2. Learn and observe the rules regarding onboard:
a) Smoking — identify where,
b) Drugs and alcohol — explain the safety issues that may occur from working or being onboard a vessel while under the influence of drugs and/or alcohol – consider the issues to yourself and other crew members.
4. Understand and follow orders given, seeking clarification as necessary.

Emergency training

5. Explain allocation of duties in an emergency.
6. Participate in emergency training drills onboard.

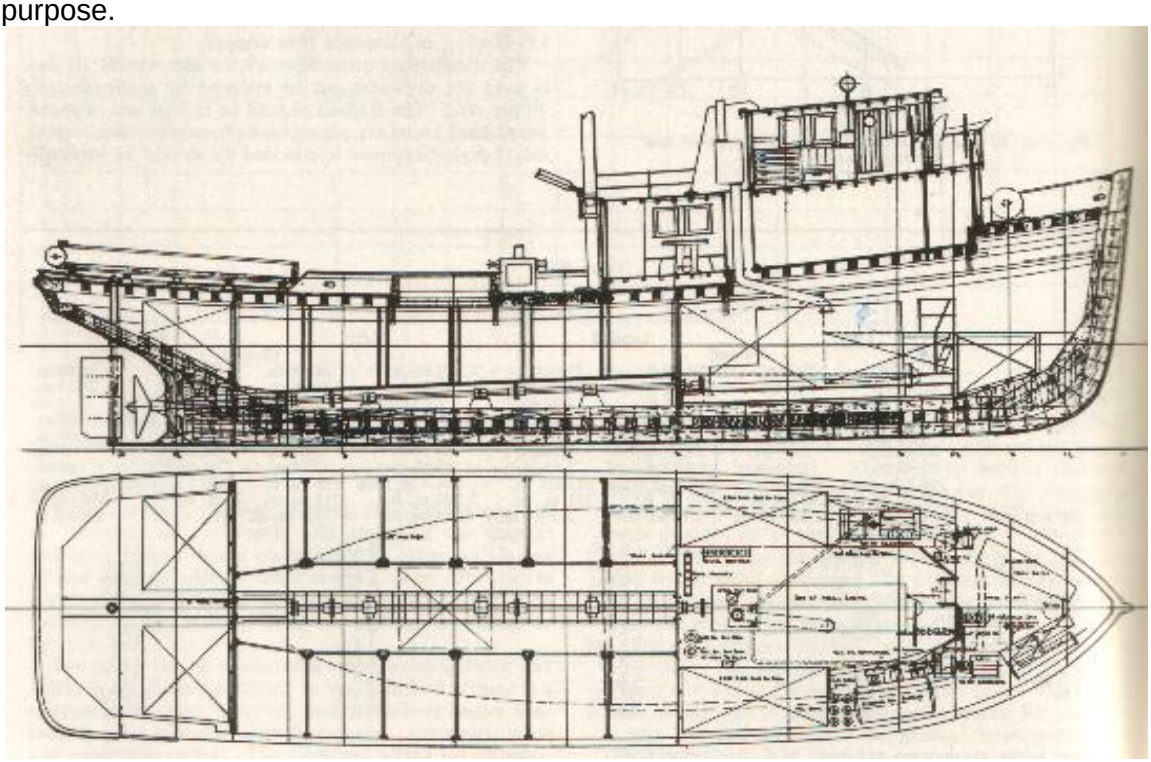
Watchkeeping

7. Where applicable perform watch keeping duties as required, being on time and fully fit for duty.

Deck 1 — Vessel design and construction

Aim

To become familiar with the principal structural components of TACOMA by conducting inspections of accessible parts of the vessel, reviewing
drawings, identifying compartments or spaces in the vessel and understanding their purpose.



WARNING

It is critical that any spaces that are defined as “confined spaces” by occupational health and safety legislation are identified and the dangers associated with them appreciated.

Vessel Signature & Date

Vessel plans and structure

1. Look at the naval architect’s drawings and plans of the vessel and identify all the main structural components, compartments and divisions.
2. Locate and describe the function of the following common structural components of the vessel:

a) Keel
b) Frames – longitudinal and transverse
c) Stringers/Gussets
d) Bearers/Load supports

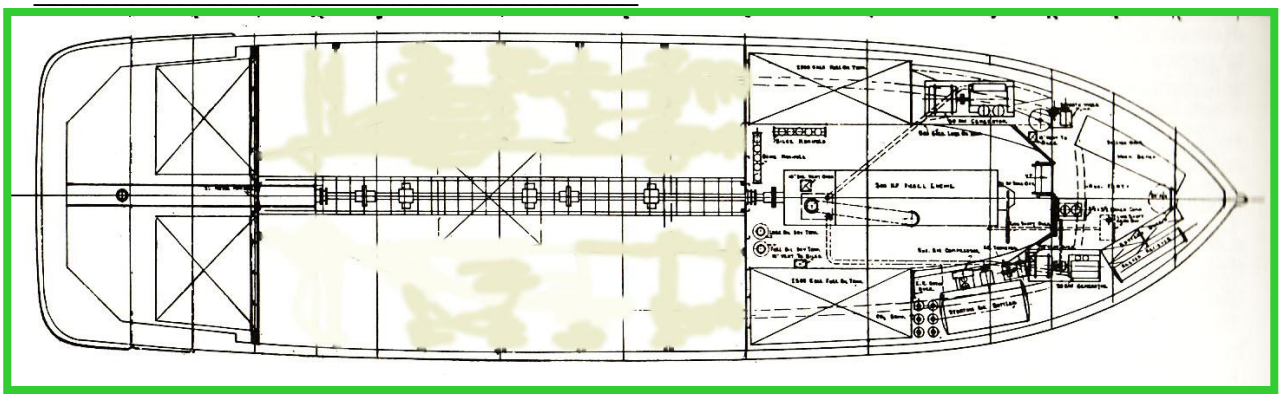
Watertight bulkheads

2. Inspect all watertight bulkheads and decks that limit the spreading of flooding between compartments and check that the compartments remain watertight.

Watertight integrity

3. Locate and describe how the watertight integrity of the vessel is maintained at:

a) Propeller shaft and stern glands



Confined spaces

5. Identify any ‘confined spaces’ onboard your vessel, in particular those which have been closed up for a while.
6. Demonstrate that you understand the dangers of working in confined spaces and precautions and procedures for entering and working in them.
7. Review and list the safety procedures for entering a confined space.

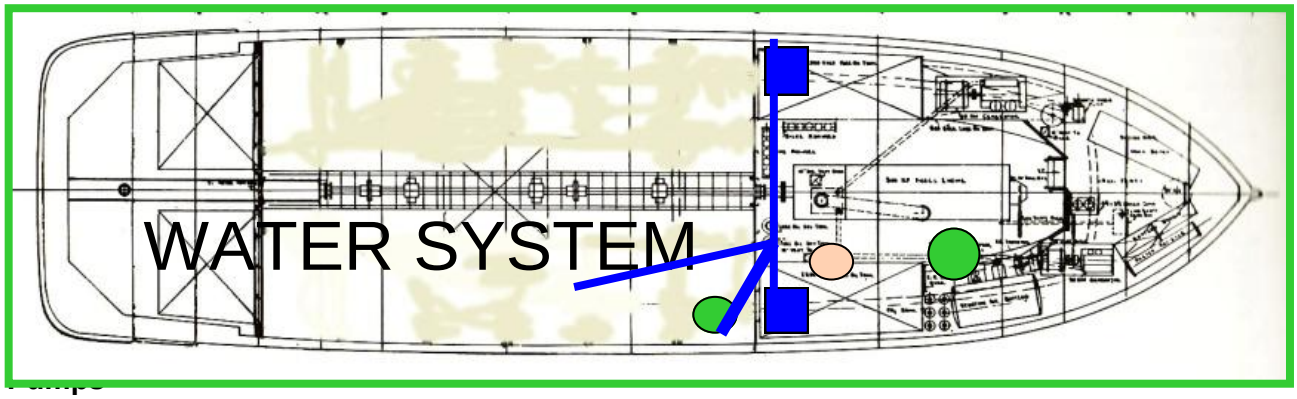
Deck 2 — Pumping systems

Aim

To become familiar with the operation and maintenance of the vessels onboard pumping systems including fuel, fresh water, ballast water, sewage, grey water, bilge and fire.

Vessel Signature & Date

Identify tanks and piping arrangements



3. Clear suction strainers in vessel.
4. Operate pumps and valves .
5. Operate pumps and valves to provide fire fighting/deck water.

Tanks – general

6. Sound and determine the contents of any tank or space.

Fresh water tanks

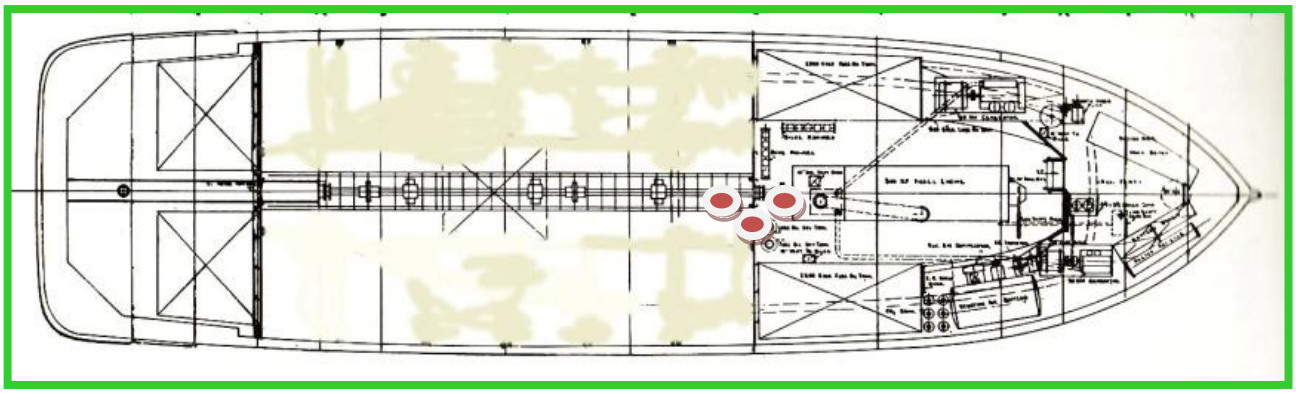
7. Fill fresh water tanks, avoiding contamination of drinking water.

Bilge

8. Keep bilges clean and dry. Identify sources of any leakages and dispose of contaminated bilge liquids without polluting the environment.
9. Ensure prevention of automatic pumping of contaminated bilges overboard.
10. Operate emergency bilge pumping system.
11. Identify local harbour instructions for pumping bilges.

Bilge alarms

12. Locate bilge alarm sensors and position of alarms and controls.



13. Carry out the correct reaction to a bilge alarm.

Preparation for pumping

14. List the preparations for any pumping including the measures/systems for:

a) Minimising overflows of oil or other contaminants entering the harbour.

b) Keeping suction points clear of blockages.

c) Preventing accidental cross connection of systems.

d) Monitoring tank and bilge levels and communicating levels and instructions to control position during pumping.

e) Measures for ensuring bilges are not contaminated with oil and pollutants.

Deck 3 — Operate and maintain deck machinery

Aim

To become familiar with the operation and maintenance of deck machinery on a TACOMA

Vessel Signature & Date

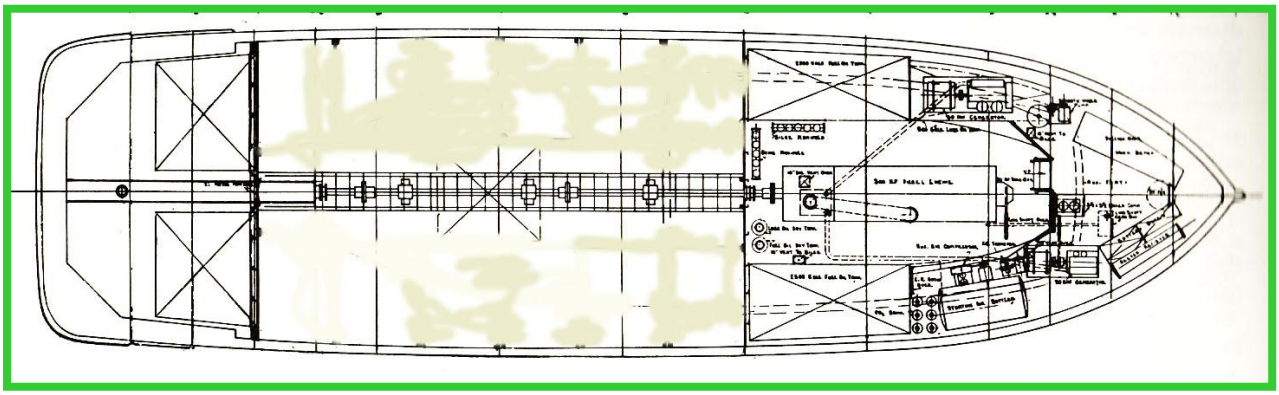
Inspect the deck machinery

1. List items of deck machinery.

a) Winches

b) Derricks (booms).

1. identify the safety features, safety guards, any alarms and the function of each control.



Manufacturer's instructions

2. List the maintenance required for each unit in your exercise book.

Warning signs

3. Confirm all warning signs, safety notices, guards, protective devices, deck warning lines and cut off switches required are in place and are serviceable.

Operate the equipment
4. Demonstrate your ability to use all the equipment safely, identifying limitations or safety issues, and include any signals, commands or communications used onboard to control operations.
Stop etc

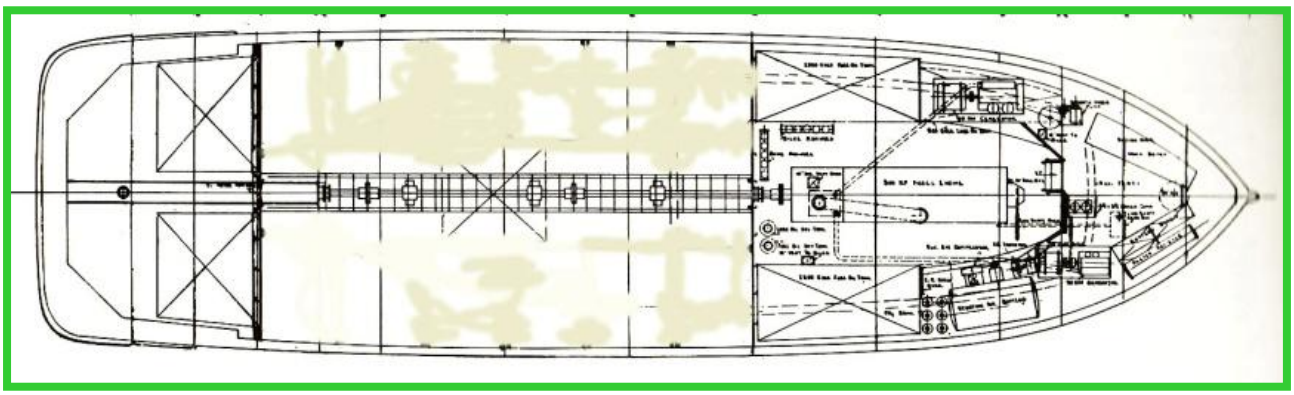
Maintenance of equipment
8. List any special tools, skills and safety precautions required for maintenance of deck machinery items.

9. Carry out all daily user checks and user level maintenance required on the systems.

10. Assist the Master/Engineer/external tradesman with identifying, organising and carrying out higher level maintenance.

Deck 4 — Operate steering gear arrangements

Aim
To become familiar with testing, operation and maintenance of steering gear, and emergency steering arrangements.
Vessel Signature & Date



Familiarisation
1. Read the handbook on the steering system and the autopilot.
2. Demonstrate knowledge of all the functions and controls of the autopilot and the steering system.
Autopilot
3. Demonstrate switching safely to and from an autopilot.
4. Demonstrate how to safely alter course when on autopilot.
Steering
5. Demonstrate competency at changing over from alternative steering position to normal position (i.e. wheelhouse to flybridge).
6. Operate the steering system in normal mode.
7. Operate the steering system in alternative mode.
Emergency steering
8. Demonstrate changing over steering from normal to alternative and emergency system.
9. Rig emergency steering.
10. Practise steering in all alternative and emergency modes.

Maintenance
11. Conduct all user checks and maintenance on the steering system.

Deck 5 — Manage hull deterioration

Aim
To become familiar with correctly identifying deterioration of the hull and deck fittings, and planning the maintenance of the deterioration.
Vessel Signature & Date

Identify deterioration
1. Inspect vessel and machinery on a regular basis and identify deterioration in the hull, machinery and deck fittings.
Maintenance
2. Carry out general day-to-day cleaning and housekeeping and maintenance as required.
3. Use chemicals safely in accordance with instructions and their hazchem card.
4. Conduct maintenance on the following:
a) GRP sections
b) Steel sections (stainless and mild steel)
c) Aluminium sections fittings
d) Timber (varnish/paint)
e) Timber (structural)
f) Watertight doors and hatches including port holes
g) Wire rope
h) Winches
i) Gangways
Safety
6. State and understand the dangers in working:
a) With chemicals, paints, varnishes, glues, etc.
b) At heights.
c) Close to machinery.
d) Over the side.
e) With materials and tools.
Painting

Deck 6 — Slip a vessel

Aim

To become familiar with the tasks required to be undertaken while a vessel is slipped.

Vessel Signature & Date



Prepare the vessel for slipping

1. Participate in and observe the removal of the vessel from the water and assist as directed.
2. List the procedures for preparing a vessel for removal from the water.

_____

Safety precautions

3. Identify and perform all safety precautions (ship and personnel) when working in, around and under the vessel while it is slipped – including safe access.

Identify deficiencies

4. Inspect the hull and underwater fittings and identify
work that will be required on:

a) Hull
b) Rudder
c) Propellers
d) Intakes and overboard discharges
e) Electrolysis and corrosion control (i.e. sacrificial anodes)
f) Transducers.

Hull cleaning

5. Assist with hull cleaning, identification of deterioration and procedures to repair the hull prior to repainting.

Pollution prevention

6. Explain precautions to prevent pollution of waters when working on vessel on a slipway.
7. Describe the sequence for maintaining and participate in the anti-fouling of the vessel.

Watertight seals

8. Maintain the watertight seal normally required for the:

a) Rudder
b) Propellers and Shaft
c) Intakes and overboard discharges
d) Electrolysis and corrosion control (i.e. sacrificial anodes)
e) Transducers

Return the vessel to the water

9. Assist with preparations for the return of the vessel to the water including undertaking checks to see if it is ready. List the items checked:

Deck 7 — Maintain the stability of TACOMA

To develop a practical understanding of vessel stability and how to maintain it, including correctly identifying warning signs. REFRER TO TACOMA STABLITY NOTES

Vessel Signature & Date

Stability information

1. Read the vessel's stability book. Check the layout of the book and read any special instructions/limits applicable to the operations of the vessel. Use the book to find the position of the centres of gravity and buoyancy for various sample load conditions.
2. Identify any limits for loading the vessel.
3. Read draught marks, determine trim of vessel and use stability book to estimate the vessel's displacement from the draughts.
4. Use the stability book to determine which compartments have a high risk of free surface effect and how it reduces KG of the vessel.

Hydrostatic tables

5. Look at the hydrostatic tables section of the stability book and see where the position of the vessel's metacentre (KM) is located for various draughts.
Compare with centres of gravity and buoyancy.

Loading the vessel

6. Observe loading and discharging operations onboard (i.e.: Passengers, catch, cargo, etc).
7. Supervise the loading of deadweight items to ensure the vessel is stable, upright and trimmed safely. Do not exceed any limits stated in stability book.

Flooding

8. Identify the position of deck freeing ports and ensure that deck water can escape easily.
9. Identify areas of potential flooding down into hull and ensure that they are secured properly when the vessel is underway.

Roll period

10. Time the roll period of your vessel at sea and compare it with the GM of your vessel.

Modifications to the vessel

11. Explain the procedure required when modifications and/or alterations are made to a vessel and their potential to impact on the vessel's stability and safety.

Deck 8 — Plan and conduct a safe passage

Aim

To become familiar with planning a voyage and navigating safely using charts, aids to navigation, standard navigation publications and coastal navigation techniques.

Vessel Signature & Date

Chart work

1. Use a navigational chart, identifying all symbols and abbreviations including:
a) Coastal features – rocks, beach, safe haven, elevation, islands
b) Dangers – rocks, wrecks, bars, rough water
c) Depths – metric, fathoms
d) Buoyage – IALA system daytime appearance and night lights
e) Lights – sequence, sectors, ranges
2. Use the chart to identify a light seen at night from the characteristics of its sequence, visibility, range and colour.

Compass

3. Use the chart to determine the compass variation for any locality at the current date.
4. Locate and read the vessel's deviation card to find the deviation of the compass on a heading.
5. From the deviation card note:
a) which heading the deviation is greatest
b) which heading the deviation is least

Calculations for a voyage

6. Calculate the true and compass courses to steer between two waypoints on a chart.
7. Measure the distance between the two locations and estimate the time it will take to arrive at the second location at a given speed.
8. Transfer the waypoints to GPS and compare the answers for speed and time to the GPS calculations.

Prepare a voyage plan

9. Prepare a voyage plan for a voyage between 2 ports at least 200 n miles apart. Record in your exercise book the waypoints, compass courses to steer, tidal data, distances to run, position fixing methods, bridge equipment usage, chart preparations, fuel consumption, weather forecasts, etc.

Recording your position

10. Fix the ship's position using the following means:
a) Dead reckoning
b) GPS
c) 3 shore bearings
d) 3 radar bearings
e) Radar ranges and bearing
f) Combination of all of the above.

Tide tables

11. Use Australian tide tables to find the heights and
times of tide at a primary port and approximate heights and times at a secondary port.
12. Calculate the height of the tide at a given time in a primary port (follow the instructions in the tide tables).

Notices to Mariners

13. Obtain and read copies of Notices to Mariners and explain how they are used to update a chart.

Vessel log

14. Keep a detailed log for a seagoing voyage and attach it to this ROPES book.
Comments about completion of these tasks can be added here:

Deck 9 — Use wheelhouse and navigational equipment

Aim

To become familiar with the operation of all bridge navigation equipment.

Vessel Signature & Date

Familiarisation

1. Read the user handbook/instructions for all the
equipment installed in the wheelhouse,
particularly the following, and list the make and
model:
a) GPS
b) Plotter
c) Echo sounder 1
d) Log
e) VHF radio
g) HF radio
i) Steering and autopilot
j) Internal communications
2. Demonstrate how to switch on each of the items listed above and bring it to an operational state as well as shut it down on completion.
Be able to adjust any illumination and adjust tuning for different conditions. Know the purpose of all the controls.

Lights

3. Demonstrate how to switch on and off the vessel's navigation lights and deck and internal

lighting.

Internal communication systems
4. Use internal communication systems – e.g. telephones, 2-way UHF.
Alarms
5. Identify and explain correct reaction to all alarms in the wheelhouse including fire alarms.
Safe navigation
6. Use bearing marker to determine if risk of collision exists with vessel targets.
7. Use parallel indexing to safely navigate vessel.

Deck 10 — Obtain and interpret meteorological information relevant to a voyage

Aim
To become familiar in obtaining and interpreting meteorological information relevant to a voyage.

Vessel Signature & Date
Obtaining information about the weather
1. Obtain a marine weather forecast for your area daily. Also try to obtain a synoptic weather map each day for 10 days.
Interpret a weather forecast
2. Interpret and explain a marine weather forecast obtained from the bureau of meteorology.
3. Identify severe weather patterns on synoptic charts.
Use a barometer
4. Use a barometer to record variations in pressure and relate observed readings to weather experienced.
Maintain a weather log
5. Maintain a weather log, recording:
a) Wind
b) Cloud
c) Swell
d) Sea
e) Air temperature
f) Barometer reading (where available).
6. Compare weather actually experienced to forecasts and compare forecasts to synoptic chart. Try to identify and record links.
Local weather patterns
7. Discuss local weather patterns with the Master and try to identify links with weather patterns to observations, synoptic charts and forecasts.
Wind strength
8. Use the Beaufort wind scale to estimate wind strength.
Comments about completion of these tasks can be added here:

Deck 11 — Maintain a safe watch

Aim
To become familiar with watch keeping duties.
Vessel Signature & Date

Watch keeping duty
1. Assist in watch keeping and act as understudy for a period of at least 3 DAYS
2. Keep a safe watch at anchor, monitoring vessel's position by use of appropriate transits and anchor bearings.
3. Explain the importance of keeping a watch by night.
Instructions to watch keepers
4. Review with the Master their expectations for:
a) Altering of speed and course during watch
b) Being called upon detection of other vessels
c) Steering changeover from auto to manual
d) Maintaining a lookout
Standing orders
5. Read and discuss standing orders and demonstrate how they would be written if you were master.
Steer the vessel
6. Steer the vessel for at least 2 hours by day and night or until skilled with seas/swell:
a) Astern/on a quarter
b) Ahead
c) On the beam
7. Steer the vessel at sea on a compass course (in differing conditions and during day and night if possible).
8. Adjust course and speed to minimise stress on the vessel and provide most comfortable ride.
9. Steer the vessel in shallow water (depth under keel less than half draught). Note the difference in vessel handling.
Risk of collision
10. Demonstrate the principal ways to detect if there is a risk of collision with another vessel.
11. Practise determining the risk of collision using , compass bearings and relative bearings.

Collision Regulations
12. Obtain and read a copy of the Collision
Regulations.
13. Identify lights and shapes displayed by other vessels in accordance with the Collision Regulations.
14. Determine the vessel's approximate direction of travel by the aspect of their navigation lights.
15. Learn and practice the basic stand-on / give way rules between vessels manoeuvring in close proximity to each other, when in sight of one another and in restricted visibility.
16. Learn and practise the rules for restricted visibility.
17. Learn the sound signals for vessels in sight of one another and during restricted visibility.
Heavy weather
18. Prepare the vessel for heavy weather. List the actions to be taken:

Deck 12 — Comply with legislative requirements
Aim
To become familiar with the legislative requirements applying to your vessel and its operations.
Vessel Signature & Date
Certificate of Survey
1. Look at the vessel's Certificate of Survey and its appendices and be able to determine the operating conditions that have been applied to TACOMA
Legislation
2. Identify which Acts and Regulations apply, as well as how they apply to:
a) Operations of Commercial Vessels (Survey, Crewing, Equipment etc).
b) General boating regulations.

c) Port Management.
d) Occupational Health & Safety.
e) Protection of the Environment.
f) National Standard for Commercial Vessels.
g) Commonwealth Navigation Act & Marine Orders (interstate/international operations).

Local port rules

3. Manoeuvre vessel in the vicinity of large commercial vessels/traffic, obeying local port rules.

Vessel's logbook

4. Make entries into the vessel's log book.

Pollution prevention

5. Learn and undertake pollution prevention measures and precautions for:
a) Fuelling
b) Dealing with a fuel oil spill
c) Managing bilge liquids
d) Sewage and pump out
e) Disposal of rubbish
f) Avoiding noise
g) Anchoring in sensitive environments
6. Explain the regulatory responsibility to report spillage should fuel or other pollutants be spilt/pumped overboard and it enters the waterways.
Comments about completion of these tasks can be made in your exercise book.

Deck 13 — Respond to emergency situations

Aim

To become familiar with the vessel's emergency plan.

Vessel Signature & Date

Emergency planning

1. Demonstrate familiarisation with emergency plans for the vessel including the following:
a) Collision
b) Accidental grounding
c) Assembly stations
d) Fire
e) Abandoning vessel
f) Rescue of other people/vessels
g) Serious medical incident at sea/remote location
h) Heavy weather/tropical revolving storm
2. Identify your own role in the emergency response and identify with the Master any skill gaps to allow you to meet your roles.

Emergency drill

3. Plan a simple emergency exercise drill for each item listed in 1.
4. Brief the crew on the exercise, conduct the exercise and hold a debriefing/evaluation of the exercise.

Training

5. Participate in emergency response training plans. Record these in your exercise book.
Comments about completion of these tasks can be added here:

Deck 14 — Manoeuvre a vessel

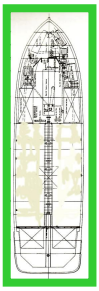
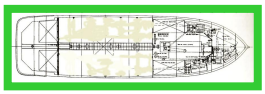
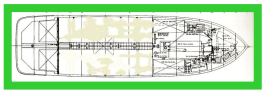
Aim

To gain experience in manoeuvring TACOMA in a variety of conditions.

Vessel Signature & Date

Steer in a fairway
1. Steer a safe course in:
a) An open fairway with traffic
b) A narrow channel with traffic
Steer using a compass and leads
2. Steer a steady course lined up on a set of leads.
3. Steer a safe compass course in a swell in:
a) Following sea
b) Ahead sea
c) Abeam sea
Navigation plan
4. Conduct at least 5 pre-planned course change manoeuvres as per the navigation plan track, plotting the vessel's position before and after the course alteration and adjust the course as necessary to maintain track.
Towing
5. Manoeuvre and steer safety while towing and being towed.
Shallow water
6. Manoeuvre and steer safely in shallow water considering the effects of shallow water and channel banks and wash.
Person overboard
7. Manoeuvre and steer vessel to retrieve a person who has fallen overboard. Use the Williamson turn to retrace the vessel's course.
Search and rescue
8. Manoeuvre vessel in a simulated search and rescue exercise using expanding square or parallel track search patterns (day and night) or other recognised SAR search pattern.
Steer using emergency steering
9. Manoeuvre and steer a steady course using emergency steering.
Safety equipment
10. Manoeuvre vessel to launch and retrieve dinghies and / or lifeboats (if appropriate).

Bar crossing
11. Observe vessels crossing a bar.
12. Research from local experts guidance on how the bar should be crossed.
13. Manoeuvre and steer vessel safely through and across an ocean bar entrance with and against the sea and tide.
Berthing
14. Berth the TACOMA:
a) Port side to a wharf, jetty, marina or other vessel
b) Starboard side to a wharf, jetty, marina or other vessel
c) In a marina pen (or slipway) bow in
d) In a marina pen stern in

Anchoring
15. Manoeuvre TACOMA while coming to anchor.
16. Retrieve anchor and manoeuvre and depart from an anchorage.
Mooring
17. Manoeuvre TACOMA to:
a) Secure to a mooring buoy
b) Depart from a mooring buoy
Coming alongside
18. Bring a TACOMA alongside another which is underway or stopped with an understanding of
interaction between hulls.
Other manoeuvres

19. Any other basic manoeuvres associated with the operation of TACOMA such as pot or trap recovery (list).
20. Manoeuvre TACOMA to turn short round in a confined area.
21. Manoeuvre TACOMA applying visual stand-on / give way rules between vessels for crossing, head-on and overtaking situations.

Dinghy handling

22. Put the dinghy alongside a berth or landing on each side, and depart the berth.
23. Anchor the dinghy.
24. Pick up a mooring in a dinghy.
25. Load the dinghy with its safe complement / weight of stores and conduct transfers with the shore.
(Passengers must not be used for training.)
26. Discuss actions in case of capsize or swamping.

Deck 15 — Demonstrate seamanship skills and techniques

Aim

To become familiar with ropes and their common usage and maintenance.

Vessel Signature & Date

Practical rope work

1. Demonstrate the following rope work and understand when to use each:
a) Reef knot
b) Bowline
c) Sheet bend
d) Clove hitch
e) Round turn and 2 half-hitches
f) Eye splice
g) Rolling hitch
h) Whipping the end of a rope
i) Safe handling of rope, wire and chains
j) Safe handling of mooring lines during berthing and unberthing
k) Lashing and securing heavy items for rough weather
l) Use of winches to control lines under tension
m) Use of anchor windlass to raise and lower anchor, chain and rope
n) Rigging and use of a sea anchor
o) Use block and tackle to lift/move a weight.

Lifting with ropes

2. Operate all deck lifting appliances (where fitted) safely including boat davits, , and booms to raise and lower weights.

Maintenance of ropes and rigging

3. Examine ropes and rigging for wear and damage.
4. Remove and overhaul 3 different items of rigging onboard.
5. Inspect and survey old rigging and remove/unreeve as necessary.
6. Measure and prepare any new lines/rigging including any splicing, joining or similar work. Record details of each item and the work involved in your exercise book

Mooring lines

7. Lay out mooring lines for entering a harbour.
8. Rig and prepare fenders.
9. Participate in berthing TACOMA using:
a) Head lines
b) Stern lines

c) Breasts
d) Springs
10. Explain the purpose and use of each line.

Prepare vessel for sea

11. Prepare a TACOMA for sea including:
a) Make a list of provisions onboard and determine what would be needed for a 3-day voyage.
b) Obtain, record and interpret a local weather forecast.
c) Check all fire and safety equipment is present, in service date and stowed in sea positions.
d) Check all weathertight doors and hatches are closed and escape hatches are clear of obstruction.
e) Check and test steering equipment.
f) Switch on, prepare and confirm that all navigational equipment is operational.
g) Sound and record fuel and water in the tanks.
h) Prepare engines and auxiliaries for starting.

Anchors

12. Prepare the anchors for anchoring.
13. Take charge of the foredeck for anchoring.
14. Secure anchors for sea.
15. List the information needed by the Master from the foredeck:
16. List the information needed by the foredeck from the Master:

Harbour work

17. List the tasks that need to be accomplished before next sailing. Include routine maintenance, necessary repairs, provisions, landing catch and preparing gear, arranging fuel, stores, etc.

Prepare a vessel for lay-up

18. Make a list of precautions to leave a vessel moored for a week or more:
19. List the checks when opening up a vessel that has been left for some time.

Sea anchor

20. Rig and stream a sea anchor.

Section 3 Supervisor's details

Instructions to supervisors

Masters and Engineers of vessels who are supervising the tasks in this book must provide the following details so as to allow verification OF SHIP SAFTEY SYSTEM
Tasks can only be accepted where there are adequate identification and contact details provided for the person who signed the task off.

Name: Position:
Vessel/s:
Contact address:
Phone: Mobile:
Fax: Email:
Qualification/s held: State of issue and #:
Other details:
Signature:
Qualification/s held: State of issue and #:
Other details:
Vessel/s:
Contact address:

Phone: Mobile:
Fax: Email:
Qualification/s held: State of issue and #:
Name: Position:
Vessel/s:
Contact address:
Phone: Mobile:
Fax: Email:
Qualification/s held: State of issue and #:
Other details:
Signature:
Name: Position:
Vessel/s:
Contact address:
Phone: Mobile:
Fax: Email:
Qualification/s held: State of issue and #:
Other

Section 6 Notes

Section 7 Further information