

Skippers are obliged to give a safety briefing / induction to the crew. It provides the opportunity for a good discussion on safety and procedures. Furthermore, it provides an opportunity to discuss any medical issues and highlights the importance of everyone looking out for each other. Use the quick checklist below to keep the briefing relatively short and engaging, and discuss other aspects later.

## Quick Checklist

### Domestic

- ☐ Securing for sea: hatches, personal gear, galley
- ☐ Cooking: stop, gimbals, mugs id (mark individual mugs), ½ full, leave in the sink
- ☐ Gas routine: dangers, alarm, everyone on-board has a responsibility for safety
- ☐ Water: conservation, pump at night and on longer passages (turn on when needed)
- ☐ Heads: pee, poo and paper, seacocks, seated, night use
- ☐ Fire safety: prevention, alarm, action, firefighting equipment, fuel & gas shut-off valves, escape

### Personnel

- ☐ Moving around: one hand for yourself, one for the ship, handholds/grabrails, footage
- ☐ Life jackets: when and how to wear
- ☐ Lifelines (tethers): when to use (night, bad weather, seasick), how to use (jackstays, high side)
- ☐ Seasickness: cause, prevention, security, looking after each other
- ☐ Crew welfare: watch rota, rest well to avoid fatigue, clothing (colder at sea especially at night, sunscreen UV reflection), ask if you don't know something, "open door" policy, help each other, share knowledge

### Other

- ☐ Muster station: cockpit
- ☐ VHF: distress button, mayday procedure
- ☐ Flares: location, types, when to use, authority
- ☐ Liferaft: launching, painter, inflating, boarding
- ☐ MOB: initial actions (shout, MOB on plotter, spotter, crash tack, buoyancy, start engine, recover)
- ☐ Second-in-command (2ic)
- ☐ Provisioning and stability guidance
- ☐ Basic lines handling, tidying up, pulling, easing, O-X-O, winch, fenders
- ☐ Liability for breaks (done intentionally, thoughtlessly, or by using own faulty devices on board)

If you need more info look at the extensive list below which covers all safety elements in detail.

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## Up on deck

- ☐ Lifejackets and harnesses: address the two biggest safety problems, i.e. staying on board and staying afloat.

Main points:

- Content: whistle, inflation toggle, CO<sub>2</sub> cartridge (double check if full and in place), light, top-up tube, crutch straps, safety knife
- [Adjusting](#): no gap between the fist and the body
- When to wear: whenever you feel unstable, at night, when you are on your own, when steering and doing other two-handed jobs, when told by skipper, in fog, if there is a risk of collision, when abandoning ship, in heavy weather, in the dinghy, if you cannot swim, when you want to
- When to clip: whenever you feel unstable, you are on your own, when steering and doing other two-handed jobs ("third hand"), before going on deck in bad weather
- Where to clip: clipping points close to the boat centre to remain on deck, i.e. jackstays/jacklines, D-rings, mast, handholds, padeye strongpoints. Do not use shrouds, guardrails, pushpits and pulpits because they are at the sides and won't keep you inside the boat. Shrouds are more so dangerous because in case of knockdown, you will be dragged to the top of the mast and will fall down all the way back to the deck when the yacht rights.
- Storage: stow it in dry places, and keep it in your own cabin so that you know at all times where it is

- ☐ Getting on and off the boat safely

- ☐ Moving around and footing: what you can walk on, hold onto and clip yourself to

- Do not go until you have a firm grip on something that will not give way
- Keep centre of gravity low (move on knees if necessary)
- Clipping on
- Go from the windward (uphill) side
- Watch out for the boom to avoid doom

- ☐ Deck hazards: boom, tripping, slipping, hatches (do not stand on them as they are pretty delicate and cost a fortune)

- ☐ [Lines and winches](#): basic operation and hazards to be aware of

- At least 3 wraps around the winch barrel so that the line has enough grip / friction (in the direction every winch spin - clockwise)
- Stand towards the winch when operating it
- Gradually release the tension on lines to avoid stress on the rig. To ease a line on a winch, press your hand flat onto the wraps so that the rope grips, and slowly ease it

- To pull lines using a winch put your hands away from the winch above and not from below the line so that your thumbs are over and the line can always be dropped. Keep fingers clear of lines under load and never get your hands and fingers between the rope and the winch barrel
- Pull initially 2 wraps around the winch. Too many turns when pulling quickly can cause a riding turn (jam). To crank/grind, put additional 1-2 loops and lock the line off on the self-tailer (between arm/jaws). Put the winch handle on and crank using fast gear until possible. Finish on slow gear if needed (crank in the opposite direction)
- Do not leave winch handles in the winch. You won't be able to release the line quickly in an emergency, the handle can get in the way of the line when unwrapping, can be lost overboard and is a trip hazard. Always put the handle back to the designated place
- Once finished, put a safety loop around the winch with the loose end to make sure the line is not released from the jaws accidentally
- Do not cleat lines or close a jammer for lines that may need to be quickly released (main sheet, jib sheet, traveller).
- Never release a clutch (jammer) without first taking a line around the winch (at least one wrap). If the jammer cannot be opened, pull the line a little until you can release the jammer
- Coiling / Tidying up lines after use (in hand, on a winch, on deck):
  - [O-shaped](#): for laid docking lines with strands/fibres twisted around each other
  - [Figure-8](#) or [Folding](#) (aka [butterfly coil](#) used by climbers) to avoid/reduce twists and kinks on modern braided lines that have no natural twist. Folding should be used for all lines especially those that run through a block or tackle like the main sheet or halyard
  - To finish the end of working lines in the cockpit use folding and finish with a few turns round, then pull a bight through the top of the coils without finishing up with a gasket (will keep the folds neat and allow to use the line quickly)
- You can leave the lines loose on the deck, hang them on a winch or better put it in a dedicated pocket
- Basic knots:
  - [O-X-O and cleat hitch](#) for securing line on a cleat
  - [bowline](#) for creating a loop
  - [clove hitch](#) for tying fenders

Later:

- [figure-8](#) for securing the bitter end of a line from running out of the retaining device (e.g. clutch/jammer)
- [round turn & two half-hitches](#) for securing a line to a post or ring
- [reef knot](#) for connecting two lines with the same diameter
- [sheet and double sheet bend](#) and [zeppelin bend](#) for connecting two lines with different diameters
- [rolling hitch](#) to [free up jammed line on a winch](#) or for a [snubber](#)

- [anchor hitch \(aka fisherman's bend\)](#) for attaching a line to anchor, post or ring. More secure than round turn & two half-hitches
- [prusik](#) is a friction knot used for securing a loop to a line in a way that can be easily adjusted
- [towboat hitch](#) to secure line over a winch
- [lashing](#) for a reliable connection system
- [halyard hitch](#) for tying a line to a halyard's snap shackle
- [alpine butterfly](#) for creating a secure loop in the middle of a line

#### [Knots strength.](#)

- Whipping to secure end of a line:
  - [Common whipping](#) (limited strength and durability)
  - [Palm-and-Needle whipping](#)
  - [Double whipping](#) (3-strand ropes)
- Certain lines that are infrequently used can be hanged off the railing / guardrails to avoid clutter in the cockpit: e.g. jib control line or end of docking lines. Coil the loose end of the line into a large coil, lay half of the coil over the rail, reach thru the half coil and grab the other half coil and pull it thru.
- Use cleats and fairleads to hold lines under load and to sweat or ease them using friction (surging)
- Make sure that you know a purpose of a line before you use it
- Line preparation for docking, ideal scenario: one line, one purpose, one cleat

#### Method 1 – using a bowline on the dock and pulling the lines from the boat

- Tie a bowline on the line's end that goes on ashore
- Put the line over a pushpit so that it can go directly from the cleat to the dock. Prepare enough length to get the line into the dock but not too long so that it is easy and fast to take the slack
- Cleat the other end of the line and coil the line before throwing
- One crew goes ashore
- Crew on deck throws the line (making sure that lines do not go into the water to avoid prop fouling)
- Crew ashore puts the bowlines over the bollards / cleats on the dock
- Crew on board pulls the line to take the slack and cleats the line

#### Method 2 – using O-X-O on the dock and pulling the lines from the dock (or deck)

- Cleat the line on the deck
- Put the line over a pushpit so that it can go directly from the cleat to the dock. Prepare enough length to get the line into the dock but not too long so that it is easy and fast to take the slack
- 1 or 2 crew members go ashore with the lines in hand to the bollards / cleats ashore
- Put initial round turn over a cleat or bollard to hold the boat and take the slack

- Crew pulls the line from the dock as necessary
  - Crew finishes with O-X-O and optionally hand the line back to the boat (doubling lines for extra security)
  - This method makes it easy to prepare slip-line (line on a slip) when leaving by taking the O-X-O out and leaving a loop over the cleat / bollard ashore
  - If you see or feel any resistance, stop what you are doing (e.g. let out the halyard or sheet a few inches), and carefully inspect, going forward, if necessary, until the problem is solved
  - Do not get off the boat with a line in hands – always throw the line first and then step onto the dock (do not jump)
  - [Lasso a cleat](#) or post with a line from a boat if you cannot go on shore
- ☐ NEVER get your body involved in a collision, use fender instead. Tie them with a clove hitch. A minor collision, one that might not even leave a mark on the dock or the boat, is more than enough force to break bones or cause deep lacerations. The boat will be OK but you could be seriously injured; if it seems like a risk don't take it!
  - ☐ Lockers: location and content (gas, fender storage, cleaning supplies, safety equipment)
  - ☐ Engine controls: starting / stopping, throttle / gear positioning. Never start in gear, use a clutch to make sure the gear is not engaged. When sailing without using the engine put the gear in reverse.
  - ☐ Anchor: how to operate (electric and manual operation, limbs clear of chain), location of a fuse and snubber.
  - ☐ Safety knife(s) – location of
  - ☐ Liferaft: purpose and procedure for use, when and how to launch (leeward midship – boats sink first from the bow or stern, in case of fire – upwind of the fire), how to board, what to take (food, water, equipment, papers, grab bag, TPA – thermal protection aid), painter (must be permanently attached to the vessel – to a weak link if HRU is installed), who authorize the usage (captain).

Don't leave the boat until the boat leaves you (always step up into the liferaft). The boat is the safest place to be almost all the time (except sinking or fire that you cannot contain), and staying with it increases your chances of survival.

Preparing a liferaft does not mean launching!

- ☐ Lifering, lifesling, dan buoy: location and how to use it
- ☐ Emergency tiller: location and how to use
- ☐ Instruments: a quick overview
- ☐ GPS and chartplotter: how to use it, location and use of MOB button
- ☐ If it's rough, don't dangle off the backstay or head for the leeward shrouds to have a pee. Either go below, use a bucket or pee in the cockpit drains
- ☐ Boat damages: make yourself on the boat at home but also treat it as your own

- No crew liability for breaks unless done: intentionally (eg. putting out a cigarette on the teak deck and making a hole) or thoughtlessly (eg. crushing cans on the teak, drinking over a map or a laptop)
  - Boat and most damages are insured.
  - "No blame" policy: it does not matter if something happens, we should think about the ways to prevent and solve it rather than blaming other
- ☐ At least once a day and night, take an inspection tour looking for anything that may be out of place or deficient. Make it a habit to re-cleat and re-coil lines and retie knots, inspect for chafe where things rub against each other, and search for loose cotter pins and fastenings where there's a lot of shaking (e.g. boom)
- ☐ (While sailing) Procedure for hoisting the mainsail
- Steer into the wind using the engine on slow forward gear so that it does not snag on lazy jacks (take charge of this as a skipper and let the crew hoist the sail so that you can see everything and control the boat)
  - Close companionway hatch so that people cannot fall when working on deck (this has a really bad history)
  - Prepare the halyard (put 1-2 loops over the winch barrel) and make sure the line runs free
  - Lift (scandalize) the boom using **KMT** (mnemonic: Kiss Margaret Thatcher):
    - Kicker release
    - Mainsheet ease
    - Topping lift pull
  - Hoist the main sail:
    - Pull halyard
    - Secure and tighten tack
    - Tighten outhaul
  - Lower the boom by using reversed KMT: easy Topping lift, pull Mainsheet, pull Kicker
  - The mainsail is what holds the boom up under sail, so if the main halyard comes loose you have a potentially dangerous situation. This is why you must always leave the topping lift loosely attached or have a boom strut that can support its weight. It is a key safety device and will stop the boom dropping down onto someone in the cockpit

☐ (While sailing) Procedure for unfurling headsail

Hoist the mainsail first for better control (moving centre of lateral resistance back, ability to blanket the headsail)

Method 1 – when sailing upwind in lighter winds and when you don't have much manoeuvring space downwind

- Steer upwind course

- Release the control line by keeping the link with 1-2 turns on the winch barrel (control how much sail to unfurl)
- Pull on the starboard or port jib sheet depending on the tack you are in

Method 2 – in stronger winds and when you have enough space downwind

- Steer downwind course (the deeper you go the more blanketing) to blanket the headsail area to avoid flapping that can damage the sail (also the best method for furling the headsail)
- Release the control line by keeping the line with 1-2 turns on the winch barrel so that you have full control of how much sail is unfurled
- Pull on starboard or port sheet depending on the point of sails

## Below deck

- ☐ Moving around: one hand for yourself and one hand for the boat, handholds/grabrails/granny bars, footage
- ☐ Procedure for exiting companionway in heavy weather (clipping on before leaving, get down on your knees and snake along)
- ☐ First Aid Kit: locations and content, anybody first aid trained?
- ☐ VHF/DSC radio: turning on, squelch, changing channels, transmit switch
- ☐ Mayday and DSC distress button: only use when the vessel or crew is in grave and imminent danger, and requires immediate assistance (e.g. MOB)  
Instruction: Keep pressing the red distress button for 5 sec, then select the nature of distress so the other end knows what kind of vessel to send or the type of action to take (e.g. search pattern for MOB). Keep pressing the red button for another 5 sec if you don't want to provide a reason. In any case, try to send Mayday on Ch 16 afterwards.
- ☐ EPIRB/SART/PLB: purpose and procedure for use, attached to a person. EPIRB is the secondary means of distress alerting. DSC in the appropriate frequency is the Primary method of contacting other stations.
- ☐ Flares: location, types, use, and precautions, who authorize the usage (captain).
  - Rocket – reach a height of 300 metres burn for a minute and be visible a distance of 19 miles, need to be fired downwind
  - Handheld flare – can be seen around 6 miles away
  - Orange smoke – daily only and can be seen up to 2.5 miles away, good for showing location (e.g. if there are many boats around it will be a good indicator which boat is affected)
- ☐ Circuit board: an overview of switches on the panel, electricity is in limited supply!
- ☐ Hatches: ask the crew to find all hatches and go through the bow (emergency) hatch at the bow.  
Emergency hatches: companionway or bow depending on the situation
- ☐ Heads: how to use (exercise manual pump 10 times after initial flush), no toilet paper, sailors pee seated.  
Make it a habit to shut off both the valve and seacock after every use

- ☐ Try to use harbour toilets when in a marina to not disturb others at night
- ☐ Sinks/showers: how to use
- ☐ Shut off the water pump once enough pressure is accumulated in the system to avoid a situation when a leak is developed in pipes and the water is pumped out into bilges. It also protects from a situation where a tank becomes empty and the water pump is running dry
- ☐ Water is in short supply – don't take it for granted and use it wisely, especially on longer passages
- ☐ Galley: location of everything and how each appliance operates (stove, oven, gimbals), the importance of keeping the galley clean. Avoid spilling water in and over the fridge – it will get messy, soupy and smelly. On long passage, to preserve water, wash in seawater and maybe rinse with fresh water
- ☐ Routine before and after using cooker, location of the gas shut-off valve and bottles, why gas is dangerous (heavier than air), burns, gas and smoke alarms if any. Leak test on all connections every time you change a bottle using soapy water or commercial leak spray or detector
- ☐ Don't smoke onboard. If you must, make sure it's on deck away from flammable items
- ☐ Cleanliness: everything on the boat has a place (put everything back from where it came from), keep the deck and below deck clean (a clean ship is a happy and safe ship)
- ☐ Cabins: secure doors so that they do not slam
- ☐ Garbage: general waste and hazardous waste policies
- ☐ Fuel cut-off: location of a shut-off valve
- ☐ Fire prevention: good housekeeping (clean galley, rubbish handling, not overloading power sockets etc.), smoking on deck only on leeward
- ☐ How to fight fire: **FIRE**: Find, Inform, Restrict, Extinguish or Escape  
Shout Fire, Fire, Fire. Extinguish using fire extinguisher or fire blanket. Restrict by closing ventilation, doors etc. See more [here](#).

A fire can be prevented or extinguished by removing any one of the elements in the fire triangle:



Make sure everyone knows the location of all fire extinguishers on board.

- ☐ Bilge pumps including emergency bilge pumps and where they pump from
- ☐ Flooding: bilge pumps (automatic and manual), seacocks, plugs, and bailing
- ☐ Location of emergency lighting (torches)



- ☐ Navigation table: navigation equipment, charts and publications available; do not put personal stuff, food and liquids on the table
- ☐ Logbook: how to fill it and how often
- ☐ Emergency skipper (first mate): who will take the role of the skipper if the skipper becomes incapacitated
- ☐ Discuss health and safety matters before commencing complex tasks (e.g. anchoring, reefing etc): toolbox talk to ensure that any hazards and controls are fully understood
- ☐ Agree on common visual signals for communication in situations where it might be hard to hear each other, e.g. picking a buoy, anchoring, or heavy weather. For example:

Signal	Meaning
Fist	Stop what you are doing now Indicate a problem (e.g. jammed anchor or line)
Thumbs up / down	Move anchor up / down Pull / Easy a line
Finger pointing up and making a circle (the faster the move the faster to go)	Go ahead Make the line fast
Finger pointing down and making a circle (the faster the move the faster to go)	Go astern Release the line
Showing fingers, e.g. 5 fingers (5m left), 3 fingers (3m left), fist (0m) etc.	Reporting distance to objects (buoy, obstacle)
Arm pointing in the direction of something (buoy, anchor chain, berth)	Reporting the location of a buoy or direction of the anchor line
Move open hand horizontally	Anchor touched the seabed
Pointing to eyes with 2 fingers	Anchor becomes visible just below the surface
Bend arm and touch fingers to shoulders	Anchor aboard or line slipped successfully

## Emergencies

- ☐ MOB prevention (e.g. jackstay, clipping on, footing) and procedure (e.g. stop the boat and return, crash tack / heave-to)
- ☐ Abandoning ship procedure
- ☐ Fire procedure and escape routes
- ☐ Grab bag location and responsible person. Store it in the deck locker, not inside the cabin!

☐ Distress signals:

- Mayday over VHF/MF/HF, Phone, SART AIS, SART Radar
- Secondary means of distress alerting: EPIRB, PLB
- Flares, LED, laser lamps
- Acoustic signal (whistle, cannot shots, fog horn)
- Slowly raising and lowering the arms
- Signaling mirror
- SOS: 3 short, 3 long, 3 short
- N and C flag (not very useful)

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## Crew welfare











- ☐ Seasickness: it is ok to be sick, there is nothing to be a shame of, do not feel bad because you cannot stand your watch, you will eventually get over it (95% of people within 3 days at sea). Everyone that was ever seasick will understand and be very sympathetic.  
Do not deny it and try to mitigate it in the best possible way (no definite cure or silver bullet - looking at the horizon, active steering, being active to distract the thinking, laying down below, taking seasickness tablets and patches)  
What to do if you get it (throw up into a bucket or better a plastic bag – do not use toilet and avoid leaning over the side which can be unsafe)
- ☐ Alcohol not allowed at sea (against the law), increase the possibility of being seasick. Drugs are not allowed at all. Any level of alcohol or drug consumption by crew members on-board a ship has implications for the safety of the vessel and crew. Even small quantities of alcohol or drugs have been shown to impair judgment and increase the risk of accidents.
- ☐ Sun protection: hats, sunscreen
- ☐ Hydration policy: everyone must be seen to be drinking water throughout the day (2-3L a day); good idea to have a graduated water vessel so that you can monitor it
- ☐ Medical: Any allergies? Anyone that can't swim? Medical conditions? Food allergies? Diabetes, epilepsy, heart condition, etc. Discuss each other's medical status, medication
- ☐ To be warm, stay dry. Do not sleep in foul-weather and wet clothing to avoid hypothermia. Wear a hat in cool and wet weather for the same reason
- ☐ Policy for handing wet clothes: find a designated place on the boat
- ☐ Teamwork
- Enjoying a voyage is a collective responsibility. Life at sea relies upon everyone working as a team. An efficient yacht means everyone has to be involved with the domestic chores, cooking, cleaning etc.
  - Every person on board has a responsibility for safety.

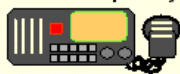




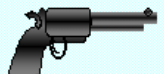







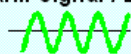

- Make sure you are properly rested (fatigue leads to accidents). This means sleeping as much as possible when off watch.
  - Look out for each other, try to stay positive, be candid, share concerns with the skipper if you are uncomfortable with any aspect of the passage making (we can always make things better).
  - Feedback is always welcome ("open door" policy). Everyone should be able to speak up if feeling insecure.
  - Everyone in the crew brings something unique and valuable to the team and we should learn from each other. Each crew contribution is valuable. Everyone's opinion is respected.
- ☐ Always ask if you do not know or you are unsure about something, the skipper should always be happy to explain and help.
  - ☐ Respect each other by sticking to agreed timing like departure especially when we are bound by external factors (e.g. weather)
  - ☐ Do things as if you were doing it the first time. Complacency and making shortcuts are not acceptable for safety related matters!
  - ☐ At least 1 person on the deck while en route
  - ☐ [Standing orders](#)
  - ☐ Night sailing:
    - Wear a lifejacket on deck and clip-on
    - Going to foredeck only with permission from the skipper
    - Familiarize with basic ship lights and how to use them for collision avoidance
  - ☐ As a skipper get to know the crew a little bit especially if you head for a long offshore passage
  - ☐ Watchkeeping rota: task distribution across the crew
  - ☐ Enclosed space entry. Space not designed for continuous occupancy that have one of both characteristics:
    - Limited openings for entry and exit (e.g. chain lockers, void spaces)
    - Inadequate ventilation (e.g. chain lockers, void spaces)

Precautions: do not enter a space if you don't know if it is dangerous or not, don't enter the space without authorization from the skipper. Carry out risk assessment. Ventilate before entrance, have another person on standby.

## Appendix

*Symbols found on fire extinguishers & what they mean*

					
	Water	Foam spray	ABC powder	Carbon dioxide	Wet chemical
Wood, paper & textiles 	✓	✓	✓	✗	✓
Flammable liquids 	✗	✓	✓	✓	✗
Flammable gases 	✗	✗	✓	✗	✗
Electrical contact 	✗	✗	✓	✓	✗
Cooking oils & fats 	✗	✗	✗	✗	✓

International Distress Signals			
The spoken word <b>'MAYDAY'</b> sent by radiotelephony 	Wave outstretched arms slowly up and down 	Red Parachute or Hand Flare 	Orange Smoke 
Morse <b>S O S</b> by radio or any other signalling method 	Gun or noise at 1 minute intervals 	Continuous sound with fog signal 	Flames or Smoke 
Rockets or shells throwing red stars at short intervals 	Code Flags 'N' and 'C' 	A Square Shape above or below a Ball Shape 	EPIRB Emergency Position Indicating Radio Beacon 
SART Radar Transponder 	Radiotelegraph Alarm signal / DSC 	Radiotelephone Alarm Signal / DSC 	Dye marker 