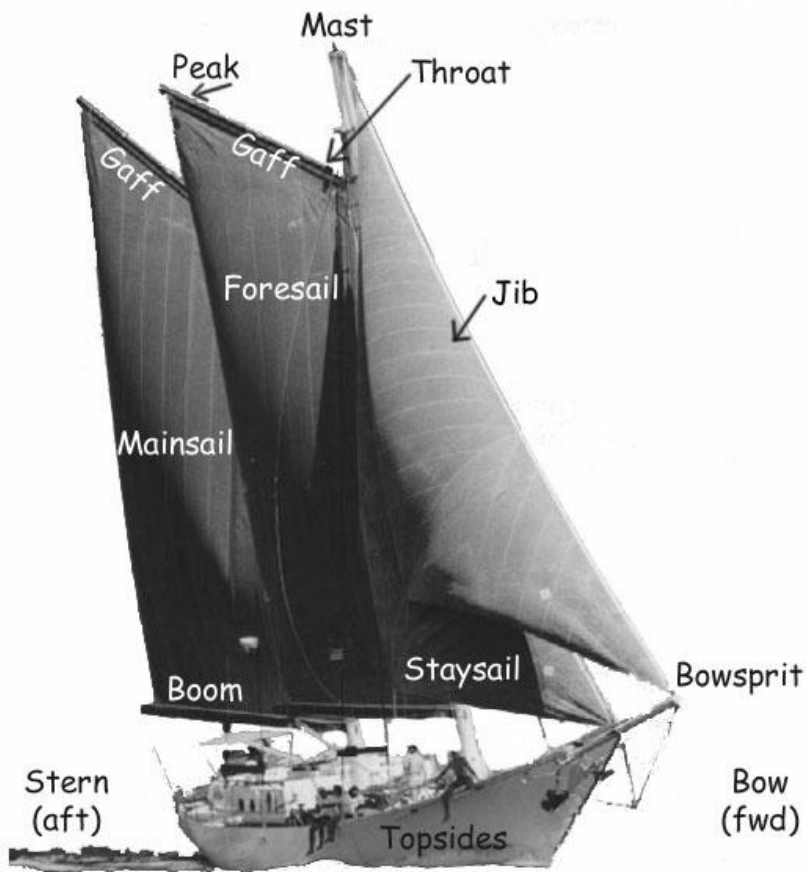


Genevieve Challenge Sail Training Manual

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Welcome aboard *Genevieve Challenge*! She was built to be a training vessel, so her sails and rigging are intentionally designed to require 'all hands' in order to sail her. There will be plenty of time for sitting back and enjoying yourself but the skipper and crew need your help, particularly when raising/lowering sails and entering/departing port. Also, everyone will have daily duties to help keep the boat clean and shipshape. So, please be prepared to join in. This manual will give you the basics of boat layout, procedures and terminology. The more you take part and get involved, the more you will learn and enjoy about the fine vessel *Genevieve Challenge*.



Sail Names

Genevieve Challenge has two masts, which makes her a schooner. She has two headsails (the jib and the staysail) mounted between the bowsprit and the foremast, and two large sails called the foresail (mounted on the forward mast or foremast) and mainsail (mounted on the aft mast or mainmast). Both the foresail and mainsail have a gaff at the top and a boom at the bottom. These are very heavy metal beams that help suspend and stretch the sail from top to bottom. The end of each gaff nearest to the mast is called the throat, and the other end of the gaff is called the peak.

Mainsail	The sail nearest the stern or back of the boat
Foresail	Literally Fore Sail. The sail above the forward cabin
Staysail	Set on the second fore-stay and suspended between the bowsprit and the top of the foremast
Jib	Smaller than the staysail but rigged similarly on the first (forward-most) fore-stay
Spinnaker	A large sail like a balloon that is used to sail downwind in light winds (not shown on the diagram above)

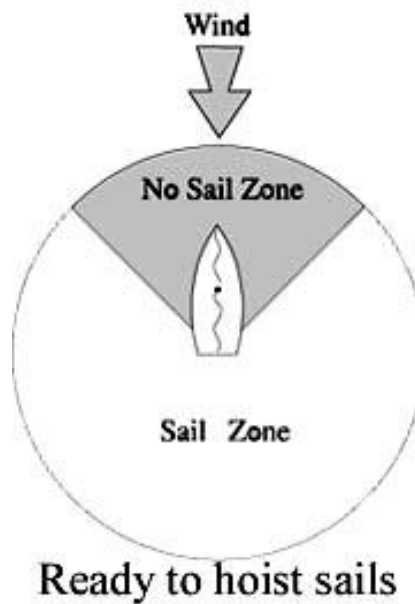
Ropes

To a sailor, ropes are called lines, unless they have a special use—in which case the special name for the line is used.

Lines	Ropes (yachting style)
Sheets	The two lines that are attached to the bottoms of each sail and used to tack and trim the sails (pull them in or let them out)
Halyards	Any line that pulls a sail up or lets it down
Peak Halyard	The line that pulls up the top (aft-most) end of the gaff
Throat Halyard	The line that pulls up the forward end of the gaff where it is connected loosely to the mast
Topping Lift	The line that supports the weight of the boom when the sail is down
Mooring Lines	Heavy lines used to tie up the boat to the dock
Painter	The mooring line coming from the bow (front) of a dinghy (small boat)

Useful words

Port	The left side of the boat when looking forward
Starboard	The right side of the boat when looking forward
Fore, Forward	Towards the forward end or front of the boat
Aft	Towards the after end or back of the boat
Bow	The front, pointed-end of the boat
Stern	The back, squared-off end of the boat
Helm	Steering wheel
Helmsman	The person steering the boat
Captain	The person in charge of the boat
Keel	The bottom of the boat and where the weight is situated that keeps her upright
Hull	The whole outside shell of the boat
Hatches	Doors and windows
Shrouds	The steel wires on either side of the boat that keep the masts straight; similar wires running forward or aft are called 'stays'
Galley	The kitchen on a boat
Heads	The toilets on a boat
Cleats	The brass or stainless steel fittings shaped like a 'T' onto which lines are secured using the OXO method (circle-cross-circle)



Hoisting Mainsail and Foresail

1. First, remove the sail covers and all but one of the sail ties (to keep the wind from filling the sail before you're ready).
2. Only remove the last sail tie from around the boom when both teams are ready to go, and the boat is pointing into the wind.
3. Both sheets need to be slack so that the sail will flap in the wind and not fill.
4. There needs to be one team on each halyard with at least two people on each team—preferably three.
5. When both teams are ready and the boat is pointing into the wind (watch the helmsman and the flag) then both teams can pull the sail up. No racing. If the gaff does not go up level then something could break, and it makes it harder on both teams. WORK TOGETHER.
6. When it becomes difficult, team members need to sweat and tail. This will be demonstrated to you.
7. When the throat reaches the top of the mast, the peak must stop until the throat is tight and tied off.
8. Then the peak should continue, until the sail takes the boom's weight.
9. Finally, check that the topping lift is slack and then 'sheet in' (pull in the sheet that's on the windward side of the boat) until the forward edge of the sail stops flapping.
10. We're sailing!

Teamwork

This boat's rig requires that you work together. You will need to work as a team, communicating with and looking out for each other—otherwise the work is a lot harder and life will be difficult.

This boat cannot be sailed by anyone on their own, so it is in your best interest to help one another.

Making off

When we have finished with any line we will secure it to a cleat. This is done first with a complete loop or 360° turn, then a cross and then another complete turn. The way to remember this is 'OXO.' More than this does not make it more secure—it only hinders releasing the line quickly in an emergency. Never make knots unless you are told to do so. Note that mooring lines are sometimes secured with a bowline knot, and at other times using the OXO method.

Setting sails



When properly set the sails will lay parallel to each other.

We want the sails set at the appropriate angle to the wind in order to get the best speed and keep the boat upright.

In practice we let the sails out until the front edge just starts to flap and then tighten up on the sheets enough to stop the flapping.

This is the optimum angle.

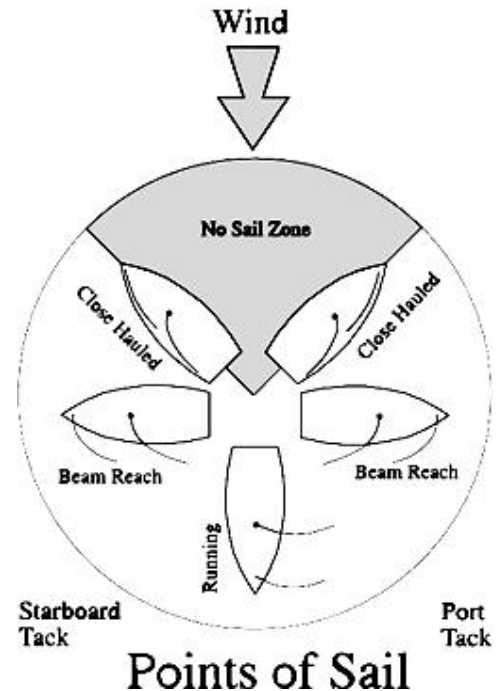
Where can we sail?

We can sail at almost any angle to the wind except directly up wind and a few degrees either side.

Bringing Down Mainsail and Foresail

Again we must be pointing into the wind to remove power from the sails. However, this time we only need one person on each halyard, and as many as possible folding the sail when it comes down.

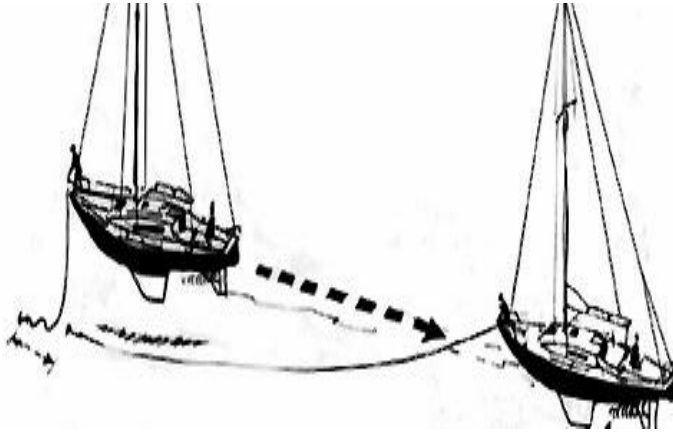
1. Check that the topping lift is tight.
2. Tighten the sheets.
3. Put at least three sail ties between the boom and the sail.
4. Begin lowering the sail, starting with the peak halyard first then the throat halyard, keeping the gaff horizontal as you lower.
5. As the sail comes down, flake it in approximately half metre folds on top of the boom. To make this easier, have someone pull on the back of the sail back to keep it stretched tightly all the way from the mast.
6. Stop lowering the gaff when it is just above the boom and secure it ready for tying the sail ties.
7. When the sails are down, tie the sail ties around the sail and over the gaff. Once the sail ties are on, the throat halyard can be moved away from the mast (to prevent slapping in the night) and both halyards can be tightened and tied off.
8. Finally, put the sail cover on to protect the sail from the UV rays of the sun. This should be done every time we stop unless we plan to put the sails up again within a few hours.



Staysail and Jib

Hoisting and bringing down the staysail and jib is simpler than with the larger sails, but still needs teamwork. The boat must be pointing into the wind and sheets need to be completely loose so that, once hoisted, the sails can flap freely. Remove all but one of the sail ties until ready to hoist. Hoisting is done by two persons on the halyard—one to pull it up quickly by hand at first and then using the winch on the foremast, and the other person to hold the loose end of the halyard so the winch can grip it. Once the halyard is sufficiently tight, the sheets on the windward side of the boat can be 'sheeted in' so that staysail and jib fills, providing more forward thrust.

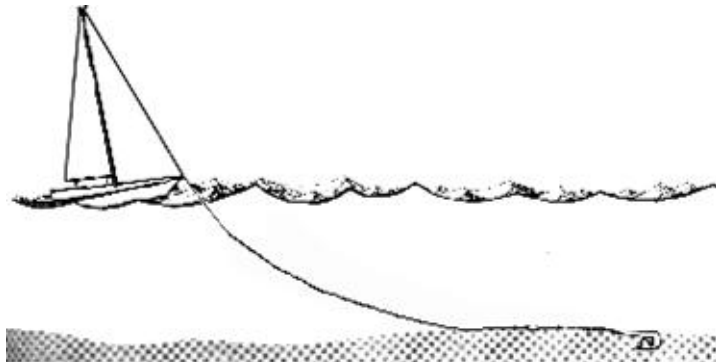
Anchoring



IMPORTANT NOTE

When dropping the anchor, care has to be taken to watch the helmsman for instructions. He may need you to stop the boat in an emergency and there is not enough time to send someone to tell you what he wants.

The anchor needs to have four times as much chain out as the depth of the water. In practice this means that if we are in five meters of water we need to let out 20 meters of chain. The anchor works like a plough and will only hold if it digs well into sand or mud. It does not "like" weed, which does not allow firm holding, and rocks can jam the anchor and make it difficult to retrieve. There are 100 meters of chain, so we can anchor in a maximum depth of 25 meters.



Signals between Helmsman and Anchorman:

Arm flung upwards = drop anchor.

Finger pointing up and circling = bring the anchor up.

Finger pointing down and circling = let the anchor out slowly.

Fists crossed up in the air = stop the chain (use the brake).

Hands forming a 'T' = time out—a delay is required from either end.

The windlass that brings up and lays out the anchor chain is one of the most dangerous parts of the boat. Keep your hands and feet well clear of the chain as it runs out or comes up, as *it can remove fingers or toes in a split second*. When taking up the anchor, someone is needed in the anchor locker to spread the chain evenly as it comes in so it doesn't pile up like a pyramid and cause a jam. Gloves are provided and should always be worn when doing this job.

Bringing up the anchor

1. Engage the clutch
2. Release the brake.
3. After pressing the "on" button on the windlass remote control, press the "up" button when the pressure is not on the chain. Ideally we want the windlass to only pick up the chain, not to pull the boat forward. Point out to the helmsman where the chain lies and he can motor in that direction.

When the boat is directly above the anchor, and the chain is tight, the anchor will have to be broken out of the mud or sand. It is better to let the engine do this than put this load on the windlass, so lock the brake and signal for the helmsman to motor forward. After a few meters the anchor chain will go slack again and you can continue bringing it up (don't forget to release the brake). Finally, secure the anchor with the line attached to its head and pull it up level to prevent it from banging against the hull.

Useful Knots



Reef Knot

This is used for securing sail ties or, rarely on *Genevieve Challenge*, when reefing the sail

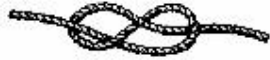


Figure of eight

Should be in the end of every sheet and halyard to prevent it from running through the blocks



Bowline

Used to moor to the quay ashore and for various other purposes—a very useful knot



Round Turn and Two Half Hitches (no illustration)

For dinghy painters and attachment of fenders.

Clove Hitch

Temporary attachment of fenders.

Rules of the road

The first rule is to avoid collision at all costs! So keep that in mind and always allow plenty of time to call the captain or crew if any other ship appears to be passing close.

Boats operating under engine power (even in it is a sailing boat) are required to give way to boats operating under sail power unless they are fishing or restricted in their ability to manoeuvre.

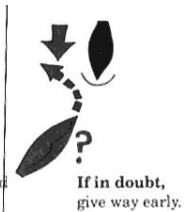
RULES OF THE ROAD

SAIL

Opposite Tacks
Port gives way to starboard.



Same Tack
Boat to windward gives way.

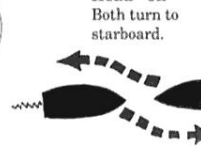


If in doubt, give way early.

POWER

Head-on
Both turn to starboard.

(A) gives way to any vessel in this sector.



Overtaking
Power or sail has to give way when overtaking



Heads (toilets)

Holding tanks are normally used and emptied while at sea. Since the toilets flush directly to the sea when holding tank valves are open, the holding tanks should always be used (i.e., valves closed) at beaches, in port and when there are people swimming.

After using the toilet (please sit—men and women), fill the bowl with water by using the lever next to the toilet. Use the black pump on the wall to empty it. Nothing should be put in the toilet that hasn't first been through you. Bins are provided for toilet paper and other items that should not be flushed down the toilet.

Showers

Limited Water!!! Please check with the captain first to make sure there is sufficient water for you to take a shower.

Use the shower to wet yourself then turn the water off. Soap up and then rinse off. Please do not leave the water running throughout your whole shower. If you like water that much, jump in the sea! When you have finished showering, pump the water out of the bilge using the hand pump on the wall. When the bilge is empty you will hear a sucking noise. If this takes more than 30 pumps you have used too much water.

Washing down

The decks get dirty regularly, and they need to be scrubbed off and rinsed with water. There are buckets aboard to get water from the sea, but always tie the bucket securely onto a rail before you use it and please do not allow the bucket to touch the side of the boat as you pull it up the as this leaves black marks on the white hull and may even remove the paint. Normally the deck is cleaned with salt water as we only have fresh water in dock.

On deck there are two header tanks that provide salt water for flushing the toilets—one for the forward heads beside the forward mast, and the other for the midships heads beside the main mast. These must be filled on a daily basis. Please take care not to spill water while filling the tanks. The paint or varnish on portholes (windows), hatches and rails is ruined by prolonged contact with salt water. If you do spill, please rinse these as well as the windows and seating areas with a small amount of fresh water immediately after the salt water wash down.

Finally!

If you have any uncertainties or are unsure of anything please just ask.

God Bless

The Captain and Crew of Genevieve Challenge

