

Fore and Aft Moorings - a survival guide

Most of you will (I hope)! already know a lot of this, but I have tried to make it as comprehensive as possible in the interests of sharing knowledge around. However, little did I appreciate, before I started writing this document, how much there is to say and how many decisions there are to be made when getting off and on one of these. It's not surprising that they are regarded with a certain amount of trepidation. So, sorry for the length, but I hope that even the old salts might pick something useful out of it. Of course, please contribute if you think I have missed anything out.

There's no absolutely right or wrong way of doing it – if it works for you...etc. But to make it work at all a bit of knowledge, a bit of thinking it through, (and communicating your conclusions to your crew)! Will take the panic out of it. Eventually it will become instinctive, but until then....

What you need to know

- How to set up the mooring lines for easy use
- Which way the wind and tide are going, at what strength and their combined or opposing effect
- How your boat handles under various sail combinations, main + jib, main + genoa, main only, jib only, genoa only.

What you need to think about

Use the time going out in the trot boat or after crossing the finish line to prepare a little plan in your head, given the conditions.

- Think about your crew strength/weaknesses and plan for that too
- Tell them what you are going to do and what you expect them to do
- Have an exit strategy in case it all goes pear-shaped, and tell them that too.

Setting up the mooring lines

The Club provides a pair of lines, usually 3-strand white staple, attached to the fore and aft buoy and long enough to be tied together. You need to double up this arrangement to have two lines at each end.

Initially, it probably seems neat to add two lines ending in eye-splices which you can simply drop over your cleats and, hey presto! the boat is perfectly moored between. In practice, a better arrangement is to duplicate the Club lines, even adding an extra metre of length to each. One reason is that should your neighbours moor a bit tighter together than normal, or should the tide be ebbing strongly, your 'gap' will attempt to stretch out and the Club ropes, when tied together, will be under a lot of tension. Pulling a whole trot of Sonatas towards you would make even Hercules groan. Better to have a bit in hand on your lines, it gives you options.

The Club uses 3-strand white staple for a good reason – it floats and so should your lines. White staple or Blue polyprop floats. Last year's genoa sheets, probably

braided polyester, won't. Does it matter? Ask someone who has got them between the keel and the rudder, or around the prop.

Attaching your lines to the buoys

Preferably use a spliced eye with a thimble in the splice, shackled to the buoy ring. If not, at minimum, take an extra turn around the buoy ring to minimise chafe. Check for wear regularly!

Tying your lines and the Club lines together

Use a reef knot, sheet bend or bowline and hitch. Why so specific? Any of these knots can be released no matter what strain they have been subjected to. Wet, cold hands struggling with wet, cold rope in a tangle leads to swearing.

I tried a couple of stainless carbine hooks but their weight sank the lines when they were slack, so I added a float, but that always got in the way when tying off, so keep it simple with a decent knot.

Cleating your lines to the boat

Errr... but that's easy, no? Yes, but there is a good way and a not-so-good way which can jam up and leads to more swearing.

Start with the line on the inboard side of the cleat. See below for why the inside. Make one, complete, round turn followed by 2 - 3 figure of eight turns. Finish with a locking turn. (Purist Old Salts never add a locking hitch because it is an invitation to a jam. However our rope/cleat sizes make it necessary). If you are really paranoid about your pride and joy going walk-about, tie the ends together inside the forestay/backstay.

Don't forget to tie the tiller amidships. The wear on the pintle pin/gudgeon plates, as the rudder tries to slap from side to side, 24/7 over the season is alarming.

Wind/tide calculations

Our race start/finish times mean that every fortnight we are pretty much dealing with the same tide situation, out and back.

Spring tides, (High highs, low lows thus faster streams) happen every two weeks with high water Upnor roughly around our start time. Getting OFF the mooring at Springs means less emphasis on tidal stream because it will be either gently ebbing, gently flooding or slack (HW).

Getting back on at Springs is another matter. By the time we get back the tide will have been ebbing for about 3 hours – maximum stream (look up the “Rule of Twelfths” if you want to check)! Big strong stream against you as you approach the mooring. Also, uniquely on the upstream Sonata trots, a sideways push towards the bank because they are on the outside of the bend.

One week later and the situation is pretty much reversed. Neap tides (not-so-high highs, not-so-low lows, less stream) with low water around our start time. Again, gentle ebb/flood or slack at LW.

Use the wind

So how do we manage the tidal streams to our advantage? Simple, use the wind. In practice, not quite so simple and this is where the knowledge, thinking and planning comes in.

Lets be honest, we all aspire to sail on/off our moorings, demonstrating our boat-handling skills to our fellow Sonatas and the cackling crowd on the Club patio who are just dying to see us cock it up.

So the first rule is, if there is *any* doubt in your mind that you don't have a workable, safe plan and a bale-out strategy, use the engine. Ok, it's a pain to ship/unship it but rather a bit of pain and no shame than an expensive collision and a red face.

That's the risk-assessment bit. Lets assume you have rated your chances of getting away with it as good. Here are the scenarios you will be facing;

(In all cases I have assumed that you start moored bow pointing upstream and focussed on the upstream Sonata trots although the wisdom can be applied to the South shore trots similarly).

Getting off on the ebb

Tide first. Which way would you drift without sail power? On the ebb, downstream, towards the inside trot. If the wind is anywhere in front of you, ie blowing downriver, with the tide, you exit the trot to Starboard.

First, transfer the Starboard lines to the Port side, outside everything. Tie them together, drop them over the Port side. Unless the wind has a lot of East in it, ie it's blowing over your Port beam, you can't sail upwind between the trots. Remember the foul tide is also pushing you sideways towards the inner trot. Tie the ends of the Port lines together, outside everything. Hoist a foresail. Take a minute to watch how the boat is behaving. Take off all the turns on the Port cleats except for the last half-turn. (this is why you wind them on inside first, as above). This leaves the boat held by the friction of the lines just hitched over the cleats. In strong winds it may slip back. Get the foredeck to stop this by standing on or holding the line. Either fill or back the jib by sheeting it in. The bow will start paying off to Starboard. Foredeck then lifts the line off the Port bow cleat. You encourage the turn by putting the helm hard up, ie to Port. Cockpit eases the sheet/transfers a backed jib to a sheeted jib position, but not hard in. Boat is now pivoting around the stern line which is still tucked under the stern cleat. As soon as it is safe to do so, ie the boat is at least at right angles to the trot and there is no danger of it charging across the gap to the inside trot out of control because the cockpit has eased the sheet even more, lift the stern line off the cleat and steer away downwind. The main is hoisted in a clear part of the river.

What's the bale out? Keep the stern line hooked on and let the jib fly, or even drop it until you have sorted the problem. You may end up alongside your downstream neighbour but the tide will keep you off him and the crew can fend off too, so it's not tragic.

Getting off on the flood

A flood tide with the wind ahead opens some options and may close others depending on the exact wind direction and tide strength. You may be able to drift upstream with the tide, but you do need some speed through the water, otherwise you can't steer. If you think that you can sail up between the trots, using a bit of tide help to pinch up, hoist both main and jib because you are going to need power to get moving and give you steerage. The jib will give you the opportunity to back it and make a tight tack if you don't quite make it. Tacking a Sonata under main only with the tide under you is a bit hit-and-miss. If the wind is strong, or if there is any doubt about laying up the gap between the trots, revert to the ebb-tide manoeuvre above. You will certainly need to back the jib aggressively to force the bow to turn to Starboard against the tide. Warn your foredeck to be prepared to push the tack to windward as far forward as he/she can reach until the boat turns downwind.

The bale-out for option 2 is as before. The bale out for option 1, sailing between the trots, is to let the boat be dragged upstream on the tide, maintaining minimum speed through the water by careful helm and sheet juggling. You need to know your boat well to get away with this!

Getting off, wind ahead, our normal South-westerlies – quick summary

Almost always leave to Starboard. The only exception is if there is a good enough breeze over the Starboard beam to push you forwards and out against the tide bend.

Turning downstream under jib is the best option with the safest bale-out.

Getting off, wind behind

Rare, but we do get some northerlies/easterlies early in the season. Downwind, you have much more control. Choose which side to depart from according to the wind angle – it's the opposite side to the wind so you are blown away from the trot. If it's dead astern, go Starboard, because the tide will be pushing you that way whether flood or ebb.

What sails you put up depends on wind strength. However you will find the main hard to hoist and difficult to control. Safer to use a foresail only, unless it's very light.

Getting on

At race return times it is likely that the tide will play a major part in your plan as it will be either ebbing strongly (Springs) or flooding fairly strongly (Neaps).

Wind and tide from the same direction makes the planning simple. Shorten sail if necessary to give you controllable speed against the tide – almost always the jib unless it's a gale. Control the speed and angle of your approach by easing the sheet. If you come in on Port tack against the normal south-westerly with the trot to Starboard, the tide will edge you over. By juggling the helm and sheet you should end up stationary alongside your lines. Prime the crew with your plan because their job is to grab the lines and get them aboard quickly before they slide under the hull. Drop the main quickly too, because this will be pushing you sideways as well and flogging over the heads of the crew who may be desperately heaving the lines aboard. If the wind angle allows you to lay up to your space on Port tack from

between the trots, this can often be a better option because you have more control (you are pushing up more *against* the tide bend, not being swept down by it) and the crew are grabbing the lines from the windward side, clear of the boom. You can dump the mainsheet completely without worrying that you are going to clout their heads with the boom.

The bale-out: if you over or under shoot, tack off in good time and come around again. Don't risk going alongside your neighbour and man-handling the boat along. Inevitably, both crews will jump to the adjacent decks to fend off and masts, shrouds, stanchions and lifelines will clash horribly.

On a flood tide, even with the wind dead ahead, the tide will drag you faster than you can control the boat. Remember, the objective is to slow the boat down enough not to elongate your foredeck crew by more than 6" a week, and, preferably, to bring it to a controlled stop just alongside your space. This is not possible with the tide under you. Even at 1 knot, a ton and a half of Sonata aiming for a 30ft gap is a dangerous missile, especially when you have cut the speed through the water to almost nil, making it unsteerable. Always approach into the tide. If this means running back down river under jib alone, so be it. Shorten sail, probably the main first, because it is hard to pull it down the track with the boat dead down wind. If that doesn't give you enough speed, take half of it down, laying the boom just inside the guardrails on the correct side not to have to gybe. You can control the speed via the jib sheet, letting it fly forwards to balance the speed of the boat against the tide as you approach. To bale out just dump the jib completely and the tide will stop you or even tug you backwards away from danger.

It is perfectly possible to end-for-end a Sonata on a fore and aft mooring to leave it bow upstream (the Club prefer this). Simply release the down-tide lines. Put them together out side everything and one person walks them towards the other end of the boat as far as their length allows. Another releases the uptide lines, keeping them similarly together outside on the same side of the boat. Put the helm hard over towards the side the lines are on. The boat will "steer" itself away from the trot. Person 1 pulls the boat back towards the trot, crossed over on deck with person 2, and, as soon as they can, gets a turn around the cleat at the other end. Decently long lines are most helpful.

Getting on – quick summary

There will be very few occasions when the tide is not the deciding force. Downwind, approach under jib alone, or half-strangled main and jib. Upwind, approach under main alone unless it's very light. Never be tempted, even with a bunch of Tarzans on board, to try a down-tide 'grab'. The consequences of missing it are horrid, and there's no bale-out in this situation.

Of course, as stated at the beginning, there is no absolutely right way to do any of this because it will be slightly different every time. If you are 100% confident in your boat-handling skills, just bang all the sails up at the start, spin the boat around in it's own length, or sail it out backwards to the admiration of all. But be warned, Sods Law is unequivocal in these circumstances. Once in a while the mainsheet will loop itself over the buoy, the main jammer will refuse to un-jam, the crew loses the boathook or his footing at the exact critical moment and you are left with no 'Get out of Jail' cards. For the rest of us, slowly and safely and going around again if we are not sure is better seamanship.

Lastly, go practice on a soft buoy or your fender in open water, out of sight of the rest of us. Try the different sail combinations and learn how the boat handles differently with all of them. It's not only good mooring practice, it's the way to do man-overboard as well. And, for those Sods Laws that will inevitably catch you out one day, keep a very sharp knife taped under the cockpit hatch rim, or somewhere you can reach it fast. Rope is much cheaper than gelcoat.