Sonar boat handling and speed thoughts –
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Set-up things to do:
- tape hooks that hold spinnaker hatches down – tape over ANYTHING that can catch anything!
- Tape the jib sheet cleat base around the base and into the companionway so that lines can’t get caught under the base.
- use spinnaker hatches (side lazarettes) for storing chute (for first set? For both sets?) It is cleaner to set out of the lazarette. If you have 3 total, it is easier to drop and stuff the spinnaker down below (see notes on Drops for tips), which means the second set will be from down below.
- eye-ball spinnaker sheet on second beat. Pull slack out of sheet. Be sure it is clear for set.
- wrap a bunch of electrical tape around the starboard shroud near the turnbuckle and tape the halyard before the race.
- Tie bowlines to chutes if sheets are tapered.
- Tape all hooks and shackles (topping lift, foreguy even when not in use, halyard shackles (with a tab), jib tack, etc., etc.).

Thoughts for spinnaker work:
On sets, be sure the spinnaker sheet is PRE-CLEATED to a mark, so the chute pops full when the guy is quickly pulled aft by the skipper or crew!

Pre-sneak the tack as much as possible, especially around the starboard shroud base

On gybe sets (rare), the skipper can pull sheet around (tiller between legs). Be sure to have starboard sheet (guy) pre-cleated at a pre-determined mark…and be sure the twings are correct (starboard on; port off).

On windward hoists, the skipper MUST pull sheet around, cause middle crew is hoisting and forward crew is walking chute around, then going for pole. Again, starboard sheet (guy) must be pre-cleated at mark

On windy sets, skipper must be sure not to let boom out against shrouds until chute is up or away from boat.

After set, let backstay off, then take out the slack so the boom end doesn’t get caught in gybes.

On light air sets, jib must be eased a foot or so, then cleated – to let the spinnaker get air as it is setting…but with the pole preset, there should be no problem with the guy getting caught under the foot of the jib.

In heavier air, it is better to burp the jib only a few inches on set, cause otherwise it blows out over gunwhale and traps guy.
If setting out of down below, try to pull chute out of hatch prior to hoist. It is good to pull chute out of lazarette too if setting from there, then close the lazarette once the chute has been pulled out.

If sailing with 3, the trimmer pulls the new twing on, then releases the old twing in the gybes (with 4, the 4\textsuperscript{th} person does the twings).

If sailing with 4, then the forward crew (jib trimmer usually) hoists the spinnaker from the cockpit, drops the jib, then hops onto the foredeck to lower the jib and stand by for gybing.

In gybes, the forward crew (who stands by mast downwind) gybes the pole, clears windward telltale after gybing pole, holds slack out of leeward twing to keep it out of water (sitting to leeward).

In a fast gybe into a possible luff, the twings need to be switched immediately, and the chute rotated so the new tack is at the forestay as the boom crosses over!

On drops, if sailing with 3 and dropping down below, put jib sheets up on cabintop before drop, and drape all the hanging control lines over the port jib sheet cleat holder to open the space and avoid getting the lines tangled in the chute.

If dropping into the lazarette, open the starboard lazarette and stuff the spinnaker in as it is coming down.

**Boatspeed thoughts:**

Upwind set-up (keep the boat powered up for mark exit and possible tacking duel right out of mark):

- skipper pre-sets traveler for rounding, and backstay if needed
- forward crew does outhaul and downhaul as needed

In pre-start, pre-set backstay so it is just snug when going upwind, so it isn’t swinging around in pre-start and catching the boom on gybes.

**General rules:**

- no backstay tension until overpowered, but take up slack because leech gets caught on backstay. Also, need enough backstay to keep forestay from pumping in and out (if can’t trim mainsheet hard enough to accomplish that).
- keep jib halyard on the loose side (some wrinkles); always raise jib with some jib halyard fine tune on, so you can ease halyard tension easily during beat if needed.
- Tighten outhaul enough to flatten foot (remove lens foot)
- No vang upwind, but when trimmed close-hauled, take up the slack which is perfect for downwind
- Traveler up so boom is centered. As get overpowered, ease traveler down until on centerline. Add more backstay to depower. If backstay is on, consider easing traveler below centerline, or easing sheet (whichever is more appropriate for the water and tactical situation) – flat water, keep leech tension and play traveler; chop – keep traveler centered or above and play mainsheet (twist is fast).
- Jib car lead – play the lead as appropriate for the conditions, keeping the jib on the slightly full side down low for best acceleration out of maneuvers, unless over 10 knots, then flatten foot.
• Some like to burp the jib in big puffs. In flat water, we feathered in the puffs and kept the jib in; in waves, OK to burp because you need to keep the bow down and the boat going fast.

• Crew weight all the way forward all the time (unless hiking), and skipper up next to traveler bar.

On tacks:
  • BIG ROLL
  • tack traveler at the moment the boat is rolled – ease main 6” or so, then trim – this keeps the leech from getting hooked on backstay

* Jib back?
  - Under 7 knots – No
  - 7-10 knots – Yes
  - 0ver 10 knots – No

• light air, see if twings are long enough to run aft and pinch into turning block eyestrap

• before raising jib, be sure windward sheet is uncleated and has all the slack out of it and that the leeward sheet has some take-up in it

• traveler up early in tacks, with main extra eased so leech clears backstay…

• be sure traveler is cleated on both sides before bearing away at windward mark in breeze.

• check that when you pull the jib halyard fine-tune, it doesn’t lift the angle of the halyard such that it pops out of the halyard cleat. If so, wrap the halyard tail around something as a back-up.

• Pole stored on deck in breeze is better as it allows the dangle from the windward rail when approaching windward mark on starboard. But putting pole on windward side of boom (NEVER LEEWARD SIDE) is faster in the rushed drops.