

J/22
Dave Perry
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Based on sailing the POW at the Fort Worth Boat Club (TX) boats in 2006, and numerous experiences sailing and coaching at the San Diego, St. Francis and San Francisco YC and Sail Newport...

We typically race with three in the boat, but I have made mention of what the "4th person" can be doing

GENERAL

Boats spin fast!

Boats go fast sideways when downspeed

Use weight to help turn boat, especially in pre-start

Try not to go farther than 45 degrees from centerline when turning the boat

Fiddle with mainsheet cleat system to get just right angle

Sneakers when breeze is on (Dave!)

SET-UP

- Bring lots of electrical tape
- Put telltales on shrouds
- Keep area by base of mast CLEAN - lots of lines there, especially spinnaker halyard
- Tie tails of lines up to mast or put down below
- Lead twings back to driver, if long enough to also go out all the way
- In light air, slide twing bullet block back to spin sheet block; secure with a slipknot of twing through deck-eye
- Spinnaker pole sits on deck inside of shrouds (never between or clipped to shrouds!); no foreguy attached
- Tape foreguy bridal on pole up onto the pole (be careful not to tape the trip line)
- Mark everything (halyards, sheets, topping lift, vang, etc.)
- Put a knot in twing to keep sheet from jumping over end of boom (sail on a tight reach and put the knot just when the twing is slack)
- Rig spinnaker sheet so it can't override in jib sheet winch (pull forward with twing on starboard side)
- Tape the bow cleat, or fill with line
- Tape UP bullet block for spinnaker halyard
- Mainsheet purchase 3:1 in light air; 4:1 when windier

• Rigging the jib sheets:

The jib sheets are typically one continuous piece of line. Typically the SI's for match races in J/22's permit you to cross sheet the jib sheets if you want to. The advantage is that when hiking in heavy air, the sheet is around the windward winch making it easier to trim, including allowing the bow person to reach back and bowstring the sheet to help trim it. But to me, the disadvantages well outweigh the advantages.

Here is why I recommend leeward sheeting at all times (meaning running the starboard jib sheet under the spinnaker sheets).

- 1) You can always trim the jib easily, whether light, medium or heavy air. And it makes it much easier for the jib trimmer in conditions where they are moving from leeward to windward and back in shifty conditions.
- 2) Cross sheeting is very complicated in the pre-start.
- 3) When cross sheeting and hiking, you need to come off the rail a little early in order to load the winch for the tack, which is slow and also signals a tack to the other boat. When leeward sheeting in heavy air, the trimmer can preload the new jib sheet on the winch while still hiking.

- 4) Cross sheeting makes it more likely the spinnaker will trap the starboard jib sheet on the drop, and makes it more likely the jib will not be trimmed properly in the rounding. If cross sheeting, the pit person needs to remember to throw the starboard jib sheet in front of the cabin top, which is one more thing to remember in a tight race.
- 5) If leeward sheeting in heavy air when the jib trimmer is hiking, the main trimmer can help the jib trimmer with the final trim (3 or 4 hands on the jib sheet).
- 6) If the jib trimmer wants to cleat the jib sheet, they can simply put one wrap around the windward cabintop winch and throw the sheet in the cleat.

PRE-START

- Forward crew experiments on where to grab jib foot for effective backing (wear kneepads)
- Pull slack out of mainsheet in pre-start to stay head to wind
- Boats accelerate quickly, so be careful when trimming in pre-start
- Bow person stays in front of mast 100% of time
- 4th person can be in cockpit to trim main in prestart; then goes forward by bow person upwind (unless windy enough for 4th person to trim main)

TACKS

- (If 4th person is tacking traveler), driver bends behind the boom, or delays crossing
- (If 3 people and traveler up), driver eases mainsheet ~4" and cleats it, then tacks traveler
- Back jib slightly in tacks in 8 and under, or any downspeed tack
- Crew stands to roll boat, then snaps jib through on tack
- Go to 4" out on initial trim on jib; get boat rumbling, then trim to max
- Turn jib car around if needed (and if legal to do so)
- Two speeds in turn: first smooth; then quick
- Jib trimmer has to be good and strong! do not use winch handle; if cross sheeting, bow can bowstring the jib sheet from the windward rail. Trimmer can also hand turn winch in some conditions.
- Forward crew goes in front of mast on tack
- In match racing, can't use shrouds to roll boat
- Settle down after a tack...get boat rolling
- If looking like a tacking duel in breeze, consider pinning traveler in middle

UPWIND

- Slight backstay as needed (more in big breeze)
- Slight wrinkles in jib luff
- Slight wrinkles in main luff
- Vang on medium in medium breeze; hard in big breeze (over 12)
- If major shifts or puffs, ease jib when needed, then trim in as boat comes up
- Traveler up in light air; medium up in medium; pinned in center in 12 and up
- Big breeze – forward crew comes back and trims main?
- Keep boat upright (slight heel in lighter air)

SETS

- With 3 people, get driver involved
- If approaching mark on starboard, pre-raise pole with guy inserted (unless a gybe set). In breeze, set the pole on the last port tack before tacking to starboard. In lighter air, put the pole up to leeward or dangle it.
- Forward crew attaches pole during tack (if dangling)
- Be sure twings are correctly set for whatever the set call is
- Pre-feed tack around shroud base before windward mark, and head of spinnaker to the boom
- Don't pin chute behind main on hoist (driver has to keep main in a bit **until** chute is up)
- (With 3) driver grabs leeward spinnaker sheet, being sure it doesn't wrap on winch
- Bow hoists (using head or left shoulder to keep pole from coming back) and trimmer throws chute out to leeward and pulls guy back. (If 4, the 4th person pulls the guy back, then sits in hatchway and cleans up and does twings)
- Keep jib sheet cleated in bear away and drop jib immediately when chute is up (bow drops jib the moment chute is up)

GYBES

- In breeze, don't over rotate the boat
- In lighter air, come out hot for quick acceleration; then roll down to VMG angle
- Skipper or spin trimmer pulls leeward twing on in advance of gybe
- Trimmer releases the old twing when the bow trips the guy from the pole
- In light air, the bow can help the chute rotate by taking the pole off the mast but not the guy, and sweeping the pole aft to help rotate the chute.

DOWNWIND

- Boats like to rock and roll downhill in breeze
- If surfing conditions, driver can pump the main 1:1 by grabbing all parts of the mainsheet (driver always sits to leeward)

DROPS

- Backstay on early
- Jib sheets up on cabin top unless rigged under spinnaker sheets for leeward trimming, in which case jib sheets back in cockpit
- Get slack out of traveler system so car doesn't jam the line; preset to whichever will be the windward side out of rounding
- Pull the spinnaker halyard out through the bullet block before drop
- Uncleat the jib sheet before hoisting jib
- If windward drop (starboard-tack approach), trimmer uncleats the starboard twing to help grab the guy to pull it into the hatchway
- Bow puts pole away to leeward and hoists jib (or 4th person can hoist jib from hatchway) – pole down/jib up in light air; jib up/pole down in heavy air
- Bow (or 4th person) releases the spinnaker halyard and helps gather chute; trimmer prepares to trim jib in rounding (if time, 4th person can jump back and trim main in rounding)

J/22 thoughts for using the spinnaker...this is written for 3 or 4 people in the boat.

Dave Perry, January 30, 2020

Preparation

- Tie up all the loose ends of all the halyard and control line tales as best as possible to declutter the hatch and down-below area
- Run the tapes of the spinnaker carefully before the start
- Tie the spinnaker sheets to the clews by running the end of the sheet through the grommet and tying an overhand knot, then tying the end of the sheet around the sheet itself in another overhand knot. This creates a strong but minimal knot.
- Attach the spinnaker halyard and then tape the shackle shut (being sure to fold the last ¼” of the tape back on itself for easy undoing when that time comes)
- Pull the spinnaker up and clearly mark the halyard when fully raised. Also raise the spinnaker pole and mark the topping lift when the pole is perpendicular to the mast.
- If racing in the same boat for the day, wrap a foot or so of electrical tape around the shrouds down low. Then unwind a couple of inches and tape the spinnaker halyard and the topping lift to their respective shrouds. By preloading the tape, you can quickly retape the halyard and topping lift to the shrouds up the second beat and before the next race, etc.
- A big problem in the set is that the spinnaker sheet or spinnaker itself gets caught on the cabin top winch and/or under the starboard jib sheet. To eliminate this problem, pull the starboard twing on so it is about 6” from the rail. Then pull the spinnaker sheet fairly tight and cleat it (this is KEY). You just have to remember in light air to release the twing after the set; in a breeze you can keep the twing down. You also have to remember to do this on the second beat as well. The jib trimmer also needs to be sure the jib sheet is under the spinnaker sheet if you want to cross sheet (you can also leeward trim with the jib sheet under the spinnaker sheets but you have to cross tack on the last tack to port tack.
- The port twing should be 6” to all the way down, and the port sheet cleated as well.
- The spinnaker pole lives on the side of the cabin top inside the shroud base (never between the upper and lower shrouds!). Before the start, put the guy in the pole. Up the second beat, the bow person works with the helmsman to find the best time to put it in the pole. For match racing, don’t use the foreguy.

Raising the Pole

Approaching the mark on port tack:

- 1) Bow person pulls guy forward to put lots of slack in it. This requires the trimmer or 4th person uncleating the guy and everyone sitting up so they are not “butt-cleating” the guy (skippers!)
- 2) Bow person hands middle person the topping lift (if they can’t reach it themselves)
- 3) The middle person pulls topping lift to mark as the bow person grabs the inboard end of the pole and places it on the mast. If the bow person is ahead of the middle person, the bow can lift the pole

The whole operation should take 6 seconds

Approaching the mark on starboard tack:

- It is strongly preferred to have the pole on the mast before the set, which means before the boat rounds the mark.
- If everyone is hiking, then it is better to put the pole up on the last port tack before tacking on the starboard layline to the mark. Try it before the race to see if the pole will come back against the shroud without having to ease the port twing; it all depends on the length of the spinnaker sheets. It helps to have the tack around the starboard shroud base for this, and possibly release the port twing.
- If it is light air, then the bow person can put the pole up to leeward on starboard tack. Again, a middle person can raise the topping lift or the bow can do their own topping lift.
- If everyone is hiking, it is not worth coming off the rail to put the pole up to leeward. Instead, a middle person pulls the topping lift up to the mark and the pole simply dangles. Then on the tack, the bow person quickly puts the pole on the mast, pushing it forward in the process, and raises the spinnaker.

Setting the spinnaker

- The key to a good fast hoist is the Sneak...
- At a minimum, the bow person grabs the leading corner of the spinnaker and pulls it around the shroud base. The lighter the wind, the more cloth they can pull around, and the more the middle person can sneak the guy around (being careful not to pull the guy so tight that it affects the shape of the jib).
- The middle person (4th crew if you have 4) or bow person can also sneak the head up to the boom, while the middle or 4th person also lifts as much of the spinnaker as possible out of the hatch and places it on the starboard thwart.
- As the boat bears away around the mark, the helmsman calls “Hoist!” as the boat passes a beam reach. Meanwhile the helmsman only lets the main out to about 45 degrees until the spinnaker is at least half way up.
- The middle person trimming the jib does not let the jib out at all; it remains cleated in its close-hauled position; this is KEY. If you are cross-sheeting upwind, be sure the starboard jib sheet is over the spinnaker sheets!
- On hearing “Hoist!” the trimmer (with 3 people) or the 4th person quickly pulls the guy back to its likely position (at the headstay in light air; halfway back to the shroud or more in heavy air). The spinnaker will POP full because it is cleated! The trimmer grabs the spinnaker sheet and immediately works with the helmsman to be sailing as low as possible without sailing too low. The 4th person jumps into the hatchway and starts cleaning up and is ready to gybe the twings.
- On hearing “Hoist!” the bow person raises the spinnaker as quickly as possible (using their head or left shoulder to keep the pole forward) and immediately blows the jib halyard and drops the jib (unless the trimmer can blow the jib halyard on the way to grabbing the spinnaker sheet).

Gybing the spinnaker

- If you have 4, then the 4th person does the twings; otherwise, the trimmer (middle person) does them (unless somehow you can lead them back so the skipper can do one of them).
- As the boat turns down into the gybe, the twing holding the pole down has to be released and the other twing pulled on, preferably all happening before the boom crosses the centerline.
- The bow person, with back to the mast and to windward of the pole, unclips the pole from the mast as the boat begins to turn and quickly attaches the pole to the new guy while it is still right there by the mast. Then the bow person unclips the pole from the old guy (which can often be done at the same time as the pole is being attached to the new guy with a twist of the tripline), and puts it onto the mast. NOTE: the bow person stays up in front of the mast ready for the next gybe.
- If you are going to “Gybe Hot”, meaning the helmsman is going to head up sharply after the gybe, it is CRITICAL that the twings be switched quickly! The bow person simply attaches the pole to the new guy and gives one push out on the pole (unless it is obvious there is no way to get it on the mast). If in one push the pole can’t be put on the mast, the bow person simply holds the guy right where the pole is attached and holds it down as low as possible until the boat bears away and the pole can be put on the mast.

Dropping the spinnaker

- Down the run, the bow person (or 4th person) pulls the spinnaker halyard out through the bullet block behind the cleat and runs the line so it has no knots in it. Also, try to coil the port spinnaker sheet and place it up on the port thwart, and the same with the starboard sheet (place on starboard thwart).
- When it is time to raise the jib, be sure the jib is on the correct side of the mast, and cleated to a beam reach on that side (otherwise it will either backwind when raised, or will wrap around the headstay when raised). Be sure the jib sheets are up on the cabin top (or back in the cockpit if rigged for leeward sheeting).
- Once the jib is up (to its mark!), lower the pole (bow can do their own topping lift, or 4th person can help); if possible place it on the port side of the cabintop. (in light air, lower the pole first, then put the jib up to keep the chute filled as long as possible).
- The spinnaker trimmer does their own “human guy” (blow the starboard twing to help). If on starboard tack, whomever is holding the guy begins the drop; if on port, then someone has to go down to leeward and grab the sheet (sometimes done by pulling in the twing). The spinnaker should be pulled down on the starboard side if at all possible.
- Whomever is pulling down the spinnaker does so by pulling along the foot first and then when the corner of the spinnaker is around the headstay, they pull down on the aft leech (check which color tape is on that leech), and pull it straight down. Never reach forward and grab the leading edge of the spinnaker, as that is what causes it to go up twisted the next time. Whoever is holding the spinnaker sheet lets it slip through their hand with FRICTION so the sheet doesn’t fall under the bow (which is very common on the J 22 because the forestay is right on the bow).
- Once the spinnaker is mostly down, it can be shoved down the hatch.

- During the drop, the bow person or 4th person can quickly tighten BOTH twings to pull the sheets up out of the water, and can tighten the sheets too, but leave enough slack for the spinnaker to be shoved down below (“twing twing sheet sheet”).
- If time, the 4th person can trim the main around the mark. (the backstay should be on well before the mark and the traveler should be pulled to whichever is the windward side for the rounding by the skipper well before the drop).