Racing the Oakcliff Sailing Match 40’s
Dave Perry notes
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Here are videos, with a table of contents for the videos, for Match 40 racing at Oakcliff. The video was taken at the 2017 U.S. Match Racing Championship and features the winning team, skippered by David Storrs:

https://drive.google.com/drive/folders/1tfQo--OIwhW8tcBeWs3rWLiVHRqTVM1I?usp=sharing

Dave’s notes
There are many ways to do things. Here are some notes on how we do things on the Match 40’s at Oakcliff. Most sail with 5 or 6 in the boat. Here are the names I will use for the various positons (from the back forward):

If 5: Driver, Main Trimmer, Jib/Spin Trimmer, Pit, Bow.
If 6: the 6th person is a floater, and their job depends on what their role/skill set is

The “Tactician” position…
There are several ways to set this up…and it will depend largely on (a) what the role of the tactician is on your boat, and (b) the skill set of the tactician

1) the Tactician is the Main Trimmer at all times. On the sets, the Driver or Tactician eases the main out and then the Tactician pulls the guy back. On the drops the Tactician goes forward and takes the pole down, then helps with the spinnaker drop (pulling down the aft leech). If late coming back, the Pit goes aft and begins the main trim after blowing the spinnaker halyard (bringing the spinnaker halyard tail with them to prevent snags). In that case, the Tactician stays forward and helps trim the jib (tails), and is there if there is an immediate tack (do initial trim on new tack).

The downside of this is that the Tactician is often caught not having the main perfectly trimmed (head’s in the boat), or misses a shift or timing because they are trimming the main (head’s out of the boat). It’s tough to do both jobs well at the same time.

2) the Tactician has no boat handling responsibility until nearing the windward mark. Then they take the mainsheet and do the same job as in #1 above. The Pit trims the main in the pre-start and upwind, going forward when it’s time to put the pole up, and coming back after the spinnaker drop at the leeward mark.

This is my choice, as the Tactician and Main Trimmer are each free to focus 100% on doing their jobs well.

3) the tactician has no boat handling responsibility until near the windward mark; then he becomes the Pit.

The downside of this is that the Tactician’s head is in the boat approaching and exiting the corners, and in the tight maneuvers downwind. Plus it is tiring.

Pre-race Set-up
Spinnaker halyard taped to starboard Bow ear or in a Soak Clip (when genoa up) or to the starboard lower shroud (when jib is up), and hatch closed on three corners of chute. Tape balls up against shackles at end of spinnaker sheets.

If genoa up: topping lift run through a Soak Clip tied to the port genoa sheet fairlead (usually added to list of permitted equipment to bring on board) or taped to a piece of shockcord (or something) tied to the forward hole on the port genoa sheet fairlead behind the genoa lead track. If jib up, Soak Clip or shockcord tied to port lower shroud or twing turning fairlead.
You can leave the pole laying on the foredeck with the sheet in the end. Do not attach the inboard end to the shrouds, or put it between the shrouds. **Put it inside the shroud base.** The tip of the pole should be right next to the ears on the bow to keep it from rolling overboard.

Take slack out of spinnaker sheets and put them in the aft of the two cleats right under the primary winches (do not put one wrap around the base of the starboard primary winch). THIS IS KEY! An alternative to cleating them is to put a slipknot as they exit the turning block by the winch. Be sure to uncleat the port sheet when it is time to put the pole up.

**Twings:**

In light and medium air (3-9 knots), port twing max down and starboard twing uncleated. The Pit person may have to hold the leeward twing up out of the water in light air.

In heavy air (10 and up), both twings eased 10”-14” or so and cleated (low enough so boom can go all the way out without hitting sheet when spinnaker is up)

**All controls set for max speed at start** (backstay, outhaul, downhaul, jib halyard, jib lead). The only exception is set the vang at your downwind setting for the prestart in heavy air. Then the Pit person puts it on on your final approach to start.

Bow and Pit have to be careful not to fall in the hole behind the mast when jumping up on the bow. It is a good ankle twister.

**Roles & Responsibilities:**

**Prestart**

(this is based on having a dedicated “tactician” (#2 or #3 above)). If you have 6 people, then the 6th can be cockpit assist (offside trimmer, which means starboard side trimmer).

Tactician behind Driver until final approach to line (~1:30 to start), then forward (just in front of Main Trimmer in breeze; farther forward in lighter wind). Tactician does laylines and helps with tactical and strategic decisions / reminders. If Tactician is forward and the call is to drop the genoa, the Tactician drops, and then tails, the halyard. The Tactician can also help tail and/or trim in tacks while the Bow is still up on the bow in the prestart.

Two options for who calls the time to enter/start:

1) If “tactician” is main trimmer, then Pit calls time to enter/start.

2) If “tactician” is free in prestart (#2 above), Main Trimmer calls time to enter and calls time to start.

Bow/Tactician calls time back to line when on port sailing away from line; and time to burn or kill when sailing on starboard back towards line (we do time to Boat if starting on right of opponent; time to Pin if starting on left of opponent)

Bow is on the bow for the Dial Ups and the Final Approach, and in the cockpit for the circling, then goes to bow for final approach or anytime our bow is near their transom balls. When Bow is on the bow for the Final Approach, the Tactician is the starboard-side genoa trimmer.

If well above the starting line in light air, and the call is to hoist the spinnaker, the Tactician hops on the main, and the Main Trimmer goes to Pit. This is usually a no-pole set. Bow has to unbeak the pole (and remember to beak it again (put the guy in the jaw) before the windward mark).
In the Pre-start, momentum is king. This pretty much holds true all the way around the course but the boats take a long time to get up to speed so managing this pre-start down speed tacking, etc. is a big deal. Way more so than a boat that is small and light.

In judging time and distance, add 30 seconds to your judgement, especially in lighter air. It is more common to be late than early.

**Upwind**

1) light – medium air (4-9 knots), use weight a lot to sail the boat; coordinate the rolling in all maneuvers
2) heavier air (10 and up, when people are hiking) – go max hike before sails load up, and before loading windward winch – trimmer can come to windward for initial speed build, then flash to leeward for final trim if needed.
3) Play backstay and vang a lot, as well as downhaul as needed (that control is harder to “play” when loaded up). Be sure to be depowered *before* a puff hits – boats are relatively tippy.
4) Set main luff tension (halyard) for run, and use downhaul to set main luff tension for upwind
5) Main can handle quite a bit of leech tension (trim in) in breeze (if overpowered, put more backstay on)
6) The jib lead, when using the genoa, is all the way forward in light air, and 2 holes showing in heavy air. With the jibs in heavy air, the lead is pretty much all the way back. (pins forward on the cars)

**Tacks**

In medium air / flat water, you can go to final jib trim straight away; otherwise hike for 5 seconds then back down to trim up remainder.

Same with main: medium air / flat water, no ease. Otherwise (light and heavy air) main ease at head to wind (not too soon), then back on with jib trim. Discuss power situation with Driver. No excess heel out of tack!

In medium and heavy air (8 and up), Trimmer releases (remove winch handle before releasing!) and pulls slack to make sure there are no snags in sheet. Bow does initial trim and goes to high side as soon as possible as he/she trims. Trimmer goes to leeward and grinds if needed, then takes sheet from Bow. Bow hikes and loads genoa sheet and handle on windward primary winch. If the main trimmer is Tactician, then the Pit does the initial trim and loading the windward winch in the tacks.

Driver: smooth slow turn, slightly accelerated through the wind, especially in flatter water.

In breeze, Driver watches clew of genoa / jib. Be sure genoa/jib is trimmed in 90% before landing on it (letting it fill).

**Spinnaker Sets**

There are two maneuvers (“bear away set,” when approaching the mark on port; and “tack set” when approaching the mark on starboard). Do not “gybe set” (no pole gybe set) unless it is 100% starboard tack to the leeward mark / finish. Even then, a “bear away set/immediate gybe” is usually faster than a no-pole gybe set.

Driver calls “Hoist!” as boat nears a beam reach angle (a little sooner in light air; a little later in heavy air).

If we have jibs up (heavy air), we often leave the jib up on the first run, and drop it on the second run (if the race is close). Be sure to ease both sheets about 2 feet (you have to keep some tension on both sheets; otherwise the jib wraps around the forestay in a gybe).

It is KEY that the genoa/jib is not let out at all when setting the spinnaker! We always tack onto the starboard primary winch with the genoa up, and only use the cabin top if we anticipate a tack set (no sailing close-hauled on port tack), or if it is heavy air (because it is nice to have the spinnaker sheet loaded and cleated on the primary in heavy air to free the Trimmer up to help SNAP the guy back. Some always tack onto the starboard cabintop winch to allow them to load the
spinnaker sheet onto the starboard primary (which is particularly useful in heavy air). The downside is that (a) the genoa never gets trimmed in tight enough, so you suffer if on port tack for more than a length; (b) the Trimmer is up where the Pit person is trying to do their work, and (c) there is no cleat for the cabintop winch so the Trimmer has to hold onto the sheet, which makes it hard for them to help SNAP the guy back.

**Bear away set:**
If using the dedicated Tactician set-up, then nearing the windward mark, Main Trimmer goes to Pit; Tactician hops on main.

Pole Up:
1) Max slack in guy (port sheet) – **do not load port primary winch with guy until pole is up!** (Bow says “Made” when pole is on mast)
2) Pit hand on topping lift
3) Pit hoists topping lift to mark as Bow guides (don’t lift!) the inboard end to the ring (we only use lower ring in light air). (be sure any marks on the topping lift are placed so they stop before entering the jammers; tape in the jammers causes them to not work!)

Ease backstay, downhaul, outhaul and vang (if cranked on tight upwind) before windward mark.

Once pole is up, sneak the guy back and the halyard up (the lighter the wind, the more the sneak). The Bow can help “feed” the tack of the spinnaker forward (don’t sneak by pulling the tack aft; it crushes the genoa – just pull the slack out as the Bow feeds the tack forward).

Tactician/Main Trimmer or Driver stands to windward to ease the main sheet in rounding. Do not sit to leeward and try to ease the main (the ratchet will not let the main sheet run out)!

Tactician/Main Trimmer goes immediately to port primary, takes slack out of guy, and on “Hoist!” pulls the guy back quickly to its perfect trim angle (pretty far back in heavy air).

Jib/Spinnaker Trimmer makes sure spinnaker sheet is cleated in aft cleat just under the starboard primary, and holds genoa sheet in tight until genoa is dropping, then pops genoa sheet off starboard primary and wraps spinnaker sheet onto primary. If there is a snag in the hoist, the Jib Trimmer can pop the clutch on the jib halyard as well (but be sure the spinnaker is most the way up first!). In heavy air, the Jib Trimmer leaves the spinnaker sheet in the cleat (key!) and helps the Main Trimmer with SNAPPING the guy back.

Bow hoists quickly (yell “2-1-Made” when the spinnaker is all the way up) and then gathers genoa on the foredeck (flipping the clew forward and pushing it to starboard to make space to drop the pole on the port side of the foredeck on the drop), and listens for “Gybing”.

Pit tails the spinnaker halyard, then drops the jib halyard the moment the spinnaker halyard is up. Pit is ready for a gybe (twings) or to adjust the guy as needed.

**Tack Set:**
Bow opens the hatch and pulls a couple feet of tack forward.

Approaching the mark, some dangle the pole, but this affects the leech of the genoa. And in heavy air is a big risk if the boat heels too far and the pole hits the water. It is best for the Pit to simply raise the pole during the tack and the Bow put the inboard end on the mast during the tack and then hoist. (this means that the Jib Trimmer has to release and trim in the tack)
IF we are going to be sailing on port tack for more than a length or so after the tack, then we tack onto the starboard primary (and it is like a bear away set). If we are tacking around the mark, the Jib Trimmer sometimes tacks the genoa using the starboard cabintop winch. To keep the genoa from going out after the tack, the Trimmer can hold the sheet in their left hand and reach back for the spinnaker sheet with their right hand. With the jibs, it is easier and perhaps better to tack onto the cabintop winch.

Tactician/Main Trimmer (who is easing the main and pulling the guy back) pops the port genoa sheet off the port primary (if not already clear), but does not load guy until Bow says “Made” (when Bow puts the pole on the mast).

In light air, Pit can begin hoist before pole is on mast, but Tactician/Main Trimmer cannot pull guy back until pole is on mast (hear “Made!”).

Gybes

In light air:
1) Bow can usually do pole by themselves (if not, Pit jumps up and helps); take inboard end off mast when boat begins to turn, but leave outboard end attached as long as possible to help with rotation
2) Pit does twings – put new twing on when boat begins to turn, but keep old guy twing down until Bow releases guy to help with the rotation – then jump up and help Bow with pole if needed
3) Tactician/Main Trimmer can ease spinnaker sheet for better control of rotation;
4) Try to rotate 100% of the spinnaker to the new leeward side before the boom crosses the boat (tack of chute at the forestay).
5) Jib/Spin Trimmer rotates spinnaker with old guy/new sheet
6) Tactician/Main Trimmer or Driver pulls boom over and then “pumps” it once hard to pop the batten. Keep boom in fairly tight until apparent wind attaches again, then ease it out.
7) Driver, smooth turn and come out a little “hot” (above VMG angle) to fill chute and build speed quickly.

In medium air:
1) Bow takes pole off mast when boat begins to turn, and as quickly as possible puts new guy in pole (tripping old guy in same motion), and pushes pole forward and out.
2) As boat begins to turn, Pit switches twings then jumps up on foredeck and assists Bow with pole on mast.
3) Jib/Spin Trimmer can sometimes rotate spinnaker on their own. If not, Tactician can ease spinnaker sheet and then wrap it on winch (it becomes the guy after the boom comes over).
In heavy air:
1) Bow does same as medium air
2) Pit – twings both stay down. Hop up before boom crosses and help with pole
3) If Jib/Spin trimmer needs help, Tactician throws boom and then goes to new guy (windward side).

In medium and heavy air gybes, the Jib/Spin Trimmer should not let the guy forward any more than needed for speed (do not “help” the Bow/Pit get the pole on the mast); let the Bow and Pit muscle the pole onto the mast (and when appropriate, the Driver can turn down to “help” get the pole on the mast).

For “gybe hots”, Bow gets pole off mast, puts new guy in pole and goes directly forward to new tack and holds it down as close to the deck as possible. If no time to get the guy in the pole, holding guy down is more important than getting the new guy in the outboard end of the pole. The Pit does *not* go up on the foredeck. The Pit throws the handle in the spinnaker sheet winch and grinds; and also blows vang if needed (in breeze). When no longer needed to grind, Pit hops up and helps manage pole.

Drops

Halfway down run to leeward mark…

Pit – be sure to get downhaul back on if let off at windward mark and run the spinnaker halyard!

Tactician/Main Trimmer – be sure to get backstay back on!

Light air (3-5): it is best to keep the genoa down as long as possible.

Tactician/Main Trimmer prepares the main for trimming around the mark, then goes forward and takes the pole down before jib up. Store pole on port side of foredeck. Pull slack into topping lift when pole is on deck so genoa doesn’t “lift” pole off deck when it is raised (This is Key!).

Bow does “human guy” in front of forestay to hold spinnaker away from forestay when jib gets pulled up (as close to the mark as possible – maybe a length away or closer!).

If starboard approach, Bow just goes down hatch with spinnaker and Tactician pulls down the leech.

If port approach, Bow passes the guy from their left hand to their right hand around the forestay (reach right hand under the genoa and grab foot or guy) and then down hatch. Tactician/Main Trimmer hops back in boat and either goes to main trim or stays forward and helps trim genoa in rounding.

In more breeze, it is generally faster to get the genoa up before pole down. But if approaching on starboard, it is a GOOD option to put the pole away on the port foredeck before raising the genoa. The Tactician/Main Trimmer or Bow will put the pole away and then jump the genoa halyard. The other person on the foredeck (Main Trimmer or Bow) does “human guy”. Remember to pull slack into topping lift when pole is on deck so genoa doesn’t “lift” pole off deck when it is raised.

Pit, before raising genoa, checks that it is on the correct side for the rounding and not trimmed on the wrong side! When releasing the topping lift, don’t let it crash to the deck.

Get the genoa up sooner than you think! Get it to its mark!

In heavy air, get rid of the pole sooner than you think!
If you will have less than 1:00 minute of sailing after the final gybe to the leeward mark, consider doing a “No Pole” gybe (pole down before gybing). The Bow will need to be “human guy” after the boom crosses over. The Tactician/Main Trimmer can jump up after the gybe and help jump the genoa and assist in the spinnaker drop.

If you go genoa up before pole down (or if you have left the jib up in heavy air):

If approaching on port tack, store pole on port side of foredeck.

If approaching on starboard tack, Tactician/Main Trimmer takes pole off mast and pushes inboard end to the port side (leeward side) of the mast over the jib sheets. The Pit releases topping lift with right hand and reaches under vang (over jib sheets) and grabs inboard end with left hand, sliding the pole all the way back into the cockpit on port side and under the spinnaker sheet (OK to leave 12” of pole up on foredeck). This is much faster than trying to store it outside the jib on the port side of the foredeck.

Pit puts one wrap around port cabintop winch and blows 10’ or so of halyard and then holds until spinnaker is under control, then blows the rest of the halyard. If Pit is Main Trimmer upwind, Pit goes aft, with spinnaker halyard in hand to keep it from snagging, and trims main around mark. If Pit can’t leave Pit, Tactician/Main Trimmer has to jump back and trim main.

On starboard-tack approach, Tactician/Main Trimmer pulls spinnaker down by leech, then hops into cockpit and stays forward, tightens the twings and spinnaker sheets so they are not dragging, loads the windward primary for a tack (if not done already), and helps trim the jib (tails), and is there if there is an immediate tack (do initial trim on new tack). On port-tack approaches, Tactician/Main Trimmer cannot help with drop. Just hop into cockpit and help prepare for the rounding.

As spinnaker is coming down, Jib/Spin Trimmer needs to keep some tension on the port sheet so it doesn’t go over the bow. Then quickly clear spinnaker sheet off primary and load jib sheet on the side appropriate to the rounding (could be either side with a gate).

As spinnaker is coming down, Pit or Jib/Spin Trimmer should give both twings a snug before rounding and get sheets up out of water if possible.

For the first tack after the mark, Bow has to babysit the loose halyard and topping lift as they can catch on the pole rings on the mast and snag the genoa leech. Priority in clean up goes to those two lines.

On first port tack, pole can go back onto foredeck, with Bow beaking the pole (putting guy in outboard end) before sliding it forward.

**Tactics**

* The boats have “keep-off” sticks sticking about 3’ off the stern with balls on the ends. These work to prevent hull to hull contact. However, they result in much unexpected ball to boat contact resulting in many penalties. Be Aware! The Bow must give good info to the driver about the location of the balls. The driver cannot see them when close! Also, be careful when bearing away near the other boat. The balls extend much farther to windward than expected.

* On the beat, if leading off to the right by several lengths, it is better to come back about 4 lengths under the starboard layline to avoid the tack set. A tack set is a big loss compared to a bear away set.

* On the run in light to medium air, if S has a piece of P and forces P to gybe in the first half of the run, S should consider gybing away, sailing for a few lengths and gybing back, rather than trying to live in the windshadow of P. S just needs to be sure to gybe back before she gets within a couple lengths of the layline to the zone of the right-hand gate mark or Pin.