U20 notes
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Here is a link to two sets of videos for racing the U20’s at the Bayview YC:
https://drive.google.com/drive/folders/0B1CGMNY44_UiT0lPdGZHdkpnOVE?resourcekey=0-c1o1pWrExZ-1jaoWR4wg&usp=sharing

One set of videos is all about how to handle the spinnaker on the U20.
The other video is how to handle the current in the prestarts at Bayview.

Boat Set-up

Bail bilges

Tape vang attachment at boom

Large Kevlar tape over hardware on port side of mast – needed to wrap with electrical tape to make it stick in the rain

Telltales

Spinnaker set behind shrouds – always

Velcro strap to hold spin halyard and sheets out to starboard rail. Take slack in sheet around forward end of rail and cleat.

Knots in bowsprit extender so that tack just makes it into hatch when pole is “max in”

Knot in line that pulls sprit in so “max in” leaves the pole just flush with bow – no more in than that or shockchord at end can jump over end

Mark tack line so tack is 6-8 inches up from pole end when set.

Mark traveler where centered is; and mark on all sheets – as usual

Y flag lives along front edge of traveler, but even there it occasionally jams the traveler car

Tighten all traveler bolts, etc.

Check all ring dings

Check for wear on jib sheet knots and pole out attachment at aft end

Main halyard can be made 2:1 to reduce stretch; check for wear and tear on part of halyard that goes over shieve
Upwind boat handling

No backing the jib in tacks  
Jib sheets are cross-sheeted  
Throw tail of old jib sheet over the new weather side so it can run freely (hangs up in hatch)  
Roll tacks until hiking, then “speed” tacks (cross quickly and hike before main fills  
Slight ease after tack but not much  
Middle Man assist on final trim and cleat in breeze  
Skipper does main and traveler, except middle does traveler in tack (once hiking, traveler is centered, so no need to touch it in the tack!)

Downwind boat handling  
Set behind shroud - always

Forward crew stays to leeward and pulls sprit out as middle hoists, then grabs spin sheet which is pre-cleated to leeward

Middle then rolls jib up and takes sheet from forward crew (in light air the jib can be rolled as the boat turns the mark before hoisting the chite)

Skipper gets boat on good angle and adjusts main and weight (usually moving to leeward)

Forward person goes to mast and balances while cleaning up and looking around and eases main control lines

GOT TO put an ease knot in theouthaul and blow it to the knot as quickly as possible

Adjust vang BEFORE rounding mark (have a downwind mark) – especially in breeze when it is cranked on

On gybe, use weight big-time to flatten (“2-1-now”) – in breeze, do a “speed” gybe instead of a roll gybe!

Got to pop it up to a FAST angle right out of gybe, then can work on soaking

Be sure old sheet is coiled and has no “knots” in it.

Feed spinnaker halyard into spinnaker bin – do NOT coil it.

Great to give boat a little down at the leeward mark for the drop.

Wait longer on the jib than you think – easy to get it out and slows the spinnaker to get it out. But drop chute a little sooner than you think, especially approaching on starboard – hard to get it around to windward side

If really heated up in breeze with no chance for a down turn, can blow halyard (keep sheet tight!) – again, give a little extra time for this.

If coming in hot on port, can do a Mexican (gybe and drop in same maneuver)

If doing a windward hoist, consider doing a gybe set, or get deep enough so it fills on windward side, and then boat or chute can be gybed

Got to practice tack around / windward hoists.

Used port drops and Mexicans from starboard to port in “shifights”
**Upwind Speed**
Boat likes a lot of mainsheet tension – traveler down before main out!

We played the vang a lot – when Chris was in the boat (forward crew), vang was set for “close-hauled” trim (slack out of vang when main trimmed for close-hauled). As he moved towards the rail, he tensioned vang. Once hiking – tighter. And even tighter (as hard as he could pull) in the big puffs. BUT – have to be quick to power up when the breeze lets up! Put a mark on deadend, and then several marks on moving part.

Traveler at upper stringer when not hiking; centered when hiking; below center when overpowered

Cunningham down was a huge help in the big puffs / breeze

Outhaul bladed in breeze.

We sailed with our leads farther back than most – flat lower section, nice twist, no closed leech.

Keep the boat trucking (bow down whenever possible)

Clear weed before start and after leeward mark (lightest person!). Before start, heel boat and check your crack (space between keel and hull where weed gets stuck)

If leading and know you have a long tack in overstanding, move lead forward couple of holes before tacking.

**Downwind Speed**
Get main out farther sooner!

Angles – Angles – Angles – the spinnaker trimmer is sailing the boat downwind.

We went max hoist (with minimum space between ball and head)...and adjusted the tack height as needed. It was about a foot up in general, somewhat tighter in a breeze or if we got too low and slow.

Be sure to keep it hot on set, then soak.

Got to heat, then can do soak...heat-soak-heat-soak.

Be sure to heat before a gybe! And out of a gybe!

Again, vang is critical – got to be constantly adjusting it for breeze, lull

Weight is critical too – boat likes to be slightly heeled in light air and more upright in breeze. Can heel, then flatten to soak...heel / flatten / heel / flatten. We never sailed with windward heel.

Forward crew in front of mast – everyone forward as much as possible until breeze on. Can’t say we ever planed. Most we ever had was 12 knots.

In medium and up, it is very effective to gybe the boom and leave the spinnaker wung out on the windward side of the boat!

Rolling jib up is good way to slow down, if in downwind penalty kill mode

Rolling jib up is also helpful in a luffing situation, either to weather or to leeward, to “glide” farther than opponent
Downwind Tactics
In the assyms, you can’t hang to leeward and astern of the other boat in less than about 8 knots. Therefore, the classic strong position of being behind and to leeward is NOT strong in assyms. You need to consider the cone of bad air of the other boat much more carefully, and avoid sailing in it. If you are in that position, you usually need to gybe out before you lose distance and speed.

That means that downwind the boats split much more. The starboard advantage is huge as there is no limit to how far you can hunt UP, provided you give port room to keep clear under rule 16.1.

In over 8 knots, you can hang there much more easily.

It is very easy for the trailing boat on port to simo gybe and roll the leading boat, and then, due to the cone of bad air, it is easier for the new windward boat to roll and then soak down in front of the trailer. In DCup 2011, one tactic was for the leader to gybe immediately (gybe set). Then if the trailer crossed over, later down the leg the leader would be approaching the trailer on port. Commonly the trailer had a piece of the leader. The leader would then gybe to windward and ahead of the trailer, putting them in the cone, and often pulling ahead from there.

Pre-Start Boat handling
Need to work on our transition from sailing forwards to backwards – it is a combination of boat angle, speed through the water, which side to push the main out on and how much, and which side to back the jib on. Needs work!

In circling, be sure to let the boom fly all the way out after gybe, pause a second or two, then trim quickly as boat heads up and tacks. Hold all parts of the mainsheet; never trim through the ratchet. As boat passes head to wind, pull boom to windward to “catch wind” sooner, then ease as boat bears away. USE YOUR WEIGHT big time to flatten boat after tack!

Need to practice “crabbing” – walking the boat to windward by backing the jib to port and sculling to starboard – may be use the main somehow too.

Stop watch on mast was very helpful.