IC 24
November 2013
just after the Carlos Aguilar in St Thomas, US Virgin Islands
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Charlotte Amilie Harbor
* flat water
* very shifty and flukey (surrounded by hills)
* wind is constantly shifting, so jib trimmer is constantly easing and trimming jib (watch telltales just under jib window). Main trimmer (usually the skipper) eases and trims according to the jib trim.
* some lifts are short lived, so it is better to not turn the boat and just ease the sails momentarily. You will get a feel for whether you can commit to taking the lift or not. In any case, the sails need to be eased instantly before the boat is turned up.
* normal direction is sort of NE to E
* when breeze is more NE, there are lefties that come over the sidewalk, but often once you get half way up beat, there are more righties coming out of mooring field. Also, it can get light along the sidewalk, so watch that
* when breeze is more E (blowing from mooring field) there are more righties and right pressure, but still some lefties.

An IC 24 is a J/24 with the cabin top removed and replaced with an open cockpit.

The rudder is large so the boat is very controllable, but easy to stall with too much or too quick turning.

They only use the 100% jibs, so the boat is underpowered. Have to keep the boat moving fast, and better to come out of tacks deep and build speed quickly before going to VMG sailing angle

Keep weight forward! When sailing with 4 people, 4th can cross in front of mast in lighter stuff, and it may be better to stay up there in the breeze, cause the shroud base is the widest part of the boat for hiking. If 5, the 5th can be in companion way if not cross sheeting, or in the cockpit (in which case the 4th has to cross in front of mast).

The tiller extensions are very long. Beware getting them caught in the backstay system.

Mainsail:
* no downhaul tension unless massively overpowered
* loose footed main - leave 4-5 inches between foot and boom in light- medium air, and pretty tight when everyone is hiking. Not critical to adjust outhaul for run.
* vang slack until hiking, then start to firm it up. Very tight when max hiking, and be sure to ease it before bearing away at windward mark. In general, may need to ease vang downwind...check top batten area on run to be sure it is not making a hard "V".
* no backstay until everyone hiking, then pull it on pretty hard to keep headstay from sagging too much. Play backstay in puffs, and be sure to ease completely downwind
* upwind, be sure top telltale is flowing around 40% of the time. When in doubt, be too loose rather than too tight.
* skipper holds main sheet and eases instantly when jib trimmer eases for lifts...and trims as boat comes up in lift or wind shifts back. In breeze, the person sitting next to the skipper can trim the main.
* there is no traveler.
**Jib:**
* halyard - have slight wrinkles coming from jib hanks in the middle of the breeze range, meaning that in the puffs there may be more wrinkles, but in the lulls, the luff will not be too tight.
* lead - the jibs vary in their depths. In general, you can have a fairly flat lower part of the jib when everyone is hiking, and then go forward a hole or so when only a couple are on the rail.
* sheet - keep a little twist at the spreader. Again, err on being too twisted rather than too tight. Keep checking your leech...it opens and closes a lot with slight changes in pressure
* in the Carlos you are allowed to cross sheet. Typically you cross sheet when the trimmer needs or wants to sit to windward, otherwise sheet to leeward. Boat has winches. If you cross sheet, it is best to do it in the prestart too. Before racing, practice transitioning from leeward sheeting to windward sheeting in a race (4th crew can load winch while trimmer holds jib sheet during tack).

**Tacks:**
* big roll tacks...skipper counts down to the roll and flatten ("2 - 1 - roll...2 – 1 - flatten"). The skipper can say how many people should flatten ("2 flatten" or "just me", etc.)
* no back in the jib unless downspeed
* jib eased a couple inches out of tack
* main trimmed in as boat turns up, then eased a foot or so coming out.
* if mainsheet swivel only swivels forward, crew next to skipper needs to caddy the sheet in the tack.
* land 5-10 degrees below close-hauled (depending on breeze and speed of boat at time) for fast speed-build

**Spinnaker:**
* sets are out of the forward hatch
* outboard end of pole lives under some shockcord in bow
* tape halyard to starboard shroud near base, and topping lift to port shroud near base.

**Sets:**
* if planning on coming in near starboard layline, and everyone is hiking, put pole up on last port tack. Be sure there is max slack in guy so pole comes all the way back to shroud in tack. If sheet is short, you may need to uncleat the port twing, which can be retensioned and cleated in the tack. Otherwise, pole can be dangled (topping lift pulled up to mark) when on starboard layline, or put all the way up if everyone not needed for hiking.

* port twing all the way down for set. Starboard twing up 1 foot when enough breeze that boom will be all the way out. Otherwise, starboard twing uncleated.

* keep jib in tight for set; do not let it out during rounding.
* you can leave the jib up on the first run in over 12 knots.

**Approaching on port:**
* pole up in advance, open hatch and start sneaking tack of spinnaker towards pole, and sneak 4-6 feet of halyard up. In breeze be sure not to sneak to point of spinnaker catching wind.

* with 4, bow person hoists, the drops jib immediately.
* with 5, 5th person hoists (standing at mast) and 4th person drops jib (be sure to wait until spinnaker is 3/4 way up before dropping jib)

**Approaching on starboard (tack set):**
* near mark, open hatch and pull 2 feet of tack and head out of hatch and close hatch.
* have pole up before tack (or at least dangling)
* if 4, during tack bow person pushes pole to head stay, opens hatch and the hoists...and then drops jib.
* if 5, before tack, 5th person goes to mast. During tack 4th person pushes pole forward and opens hatch and drops jib when spinnaker is 3/4 up. 5th person hoists.
Gybe set, or set and immediate gybe:
*either way, put pole up before set; it greatly helps with the rotation of the spinnaker. If the call is gybe set, or set and immediate gybe, then before mark uncleat port twing and pull starboard twing down. Otherwise, the trimmer needs to uncleat the port twing and tension the starboard twing in gybe.

* the person sitting in front of the skipper pushes the boom out and can assist with the twings.

**Boat trim:**
* keep boat pretty upright until dead downwind in breeze when the boat can be heeled a bit to windward.
* skipper sits to leeward grabbing the main sheets from boom for trim.
* get weight forward!

**Gybes:**
* if 4, spinnaker trimmer does twings or person who normally sits in front of skipper upwind (who may be sitting in front of trimmer downwind) can help by doing both twings, or pulling new one on.
* if 5, 5th person can do both twings, or pull new one on.
* skipper counts down to roll ("2 - 1 - roll"). Trimmer and/or another forward crew can flatten as appropriate (skipper stays to leeward).
* pole comes off mast as boat begins to turn. Clip on to new guy immediately; with practice the bow person can open both ends at the same time by twisting the jaw opening line.
* push the pole out on the angle it will be trimmed to (towards the forestay in light air; farther aft in more breeze).

**Gybe Hot:**
Often in a close match race, the skipper will need to turn the boat quickly up to a tight reach. It is critical that the spinnaker never collapses. Some keys are:

* skipper warns the crew of a possible gybe hot
* the moment the boat turns, the bow person gets the pole off the mast and onto the new guy. Try pushing the pole out...if there is ANY resistance, immediately grab the guy where the pole is attached and hold it down. With experience, you will know, depending on the breeze strength and rate of turn, whether you will have any chance of getting the pole on the mast. Err on holding it down rather than fighting to get it on the mast.
* the twing person has to be quick and get the new one down and old one off before the boom crosses centerline.
  * the trimmer needs to aggressively rotate the spinnaker and immediately put their eyes on the new tack, leaving the tack 6 inches from the forestay. Then when the chute loads up, the corner patch of the spinnaker will be wrapped around the forestay, which is perfect. If the entire corner goes around the forestay it is slow and difficult to square when the time comes.
* in breeze, a forward crew has to grab the vang tail...when in doubt, uncleat the vang.
* if there is a crew person sitting near the mainsheet, it is fast to grab the sheet through the ratchet in breeze. Otherwise, it is good if the skipper can grab it. Normally the skipper will stay seated to end up on the windward side after the gybe, especially in breeze.

During the run the forward crew clean up the cockpit, getting the two spinnaker sheets on their respective sides and forward, and making sure the spinnaker halyard is clear to run. If the spinnaker halyard is led through a bullet block, pull the halyard out through the bullet block for the drop.
Drops:
* jib up about 30-40 seconds before drop. Be sure jib is on the leeward side of the foredeck. If approaching on starboard, pre cleat the port sheet with about 1 foot of ease.

If 4, the crew sitting next to the skipper upwind stays forward and pulls the jib up and uncleats the spinnaker halyard (unless the bow person wants to uncleat the halyard themselves). Worst case, the skipper trims the main around the mark. Best case, the crew gets back in time to do that.

If 5, the crew sitting next to the skipper upwind comes back as soon as the jib is being pulled up by the 5th crew.

* the pole usually comes off after the jib is up. If on starboard tack and time is short, simply throw the pole into the cockpit on the leeward side of the mast. Otherwise, get it to leeward of the jib sheets and onto the foredeck. An alternative, when on starboard tack, is to put the pole away and then raise the jib.

* be sure, before dropping the pole, that the trimmer or someone has their hand on the guy (human guy) so the clew does not go forward one inch when the pole is removed. That requires pulling the clew aft as the pole comes off the mast.

* by rule at the Carlos, the spinnaker needs to come down in front of the mast. Once the bow person, or 5th person has their hand on the guy, the spinnaker halyard is uncleated and let run for about 5 feet. In that time, the majority of the pulling is along the foot, so that the sheet (or spinnaker) does not go under the bow. Then the halyard can be released fully and the spinnaker shoved down the hatch.

* dropping the spinnaker needs the full and coordinated attention of all three people involved. Each has critical jobs to do. The trimmer is responsible for the sheet not going under the bow by keeping tension on it throughout the drop. The halyard releaser needs to see the bow person physically pulling the spinnaker into the boat (usually along the foot) before releasing the halyard. The bow person needs to be a buzzsaw to gather spinnaker cloth like a madman and get it into the hatch.

* the trimmer should keep a slight amount of tension on the sheet as the foot is being pulled around, again to keep the sheet on the forestay so it can't go over the bow. Then once the foot is around, the trimmer can pull a couple of extra feet of slack into the sheet so the spinnaker goes down the hatch easily.

* it is imperative that the hatch be closed before the boat rounds the mark, even if the spinnaker is not entirely down. It is helpful for the skipper to count the time down to the rounding ("10 seconds to a turn...5...turning"). It is common for the boat to tack around the mark, and the hatch needs to be down for that.

* if the boat will need to gybe and sail a short distance to the mark, it is better to take the pole down before the gybe (called a "no pole gybe"). The bow person can ask the skipper if the pole should come down before the gybe, or if the pole should be switched as usual. If the pole is coming down before the gybe, there needs to be a human guy in place coming out of the gybe or the spinnaker will likely collapse and never fill again.

Second beat:
* at some point the guy needs to be put back in the end of the pole. It is the bow person's responsibility to do this. It should be done on port tack. It is a good idea for the bow person to check in with the skipper to find the best time to do it.