Cruising Catamaran 2 Day Class Agenda and Notes

Day 1

- Starts at 8:30 AM – dock time
- Students already know from pre class call that this will be as long as 12 hrs

Agenda

With all life jackets on – start at the bow of the boat and work back to the stern, cover the following:

1. Main beam and seagull striker – explain all three beams and where they are located
2. Have students identify the roller furling and follow the line aft to insure they know how it works
3. Have them ID the anchor (Bruce) and the anchor bridle
4. Open anchor locker and ID the windlass, windlass up and down buttons, and where the breaker is (starboard aft cabin)
5. While in anchor locker ID spare anchor, holding tank, lead line, bridle clip, and anchor safety line and discuss the dangers of operating the windlass (no body parts inside locker, no kids allowed)
6. Move to mask and have them ID Every Line at mask (Halyards- topping lift)
7. Move to front of boom and have them ID all lines running thru the boom (3 reef lines and outhaul) and the Mainsheet with a 12 to mechanical advantage
8. Do not leave the mast until they know how to reef the boat and correctly lead the reef lines to the blocks at the mast step
9. Move to mid ships and cover the differences between mono haul and catamaran standing rigging (Cat has 3 point diamond rig)
10. While mid ships cover the stack pack and Lazy Jacks. Emphasis having someone assigned to watch and insure that battens do not get caught in lazy jacks when hoisting the main, that the lazy jacks need to be eased about 3” on both sides of boom when main is raised and before it is powered up to prevent main from putting pressure on the them, and that the topping lift must be eased about 6-8” when main goes up full or with 1 reef to allow the roached sail to clear the topping lift on tacks
11. Move aft and cover the traveler with emphasis on the fact that the most of the main trimming is done with the traveler with just trim tweaking done with the main sheet (traveler is 1 to 1 ratio – main sheet is 12 to 1)
12. While aft, cover the lazarette contents – propane tank, manual bilge pump, etc. Cover also the correct way to put table leave up
13. Move to helm station and cover instruments throttles (explain idle forward/reverse positions). Explain when they drive the boat they are only use 1 hand to work the throttles and the other hand never leaves the wheel

14. Move inside the boat and go over 12 volt panel and how it is grouped (all instruments lower left section, all boat lights top right section, left side are all misc breakers). Point out the 2 automatic bilge switches and that the need to be leave on auto. Go over where fire extinguishers are, where safety gear is, stove operation (solenoid), correct way to close frig.
15. Move students to dock and insure that they know how to tie fenders on and at what height and how to correctly hang lines (have them practice this). Have them correctly ID all dock lines (they should know which spring line is which). Have them ID working lines vs lazy lines.
16. Have them set the boat up to leave the dock (remove lazy lines and store in anchor locker, single up and tie back to the boat the working lines – bow and stern lines). Remove the AC line with emphasis on someone turning off the breaker, removing the cord from the breaker plug-in and holding it up above their head before anyone unplugs it from the boat. Make cord up and hang on pedestal.
17. Conduct a docking class for cats. Have them ID the most important thing to know (the wind direction) and if they release all lines which part of the boat will move first (usually the bow, but could be the stern – and whether you are going to be push forward toward the dock or move out of the dock). Given which way they anticipate the boat to move with no lines, have them ID the danger points for the boat when it is moved and be prepared to cover these with a roving fender person. Emphasis that no one is allowed on the dock when the boat leaves – all lines are handled from the boat (huge safety issue).
18. Move back to cockpit and review 2 engine operation (what happens to the boat when you move the throttles – I use a standard sheet of paper and just pull or push the corners and again emphasis that there are the idle forward and reverse positions that are spinning the props but frequently people think they are in neutral and they are actually in gear (when they actually start driving the boat, I require them to look at the throttles and insure they are in neutral if that is what the intend rather in one of these idle position (emphasis that the quickest way to lose control of the boat is to be in gear when you think you are in neutral). Also let them know that they are not to turn the wheel at all in docking and all tight quarters maneuvers – rudder are small and not effective at low speeds – everything is engines only in docking and undocking.
19. Have every student tell you how they would move the boat off the dock and get it pointed up the fairway (this is a great way for them to understand the differences between a cat and a monohull). Emphasis on never stopping the momentum of the cat – so backing out straight, and splitting the throttles stops the boat and leaves it at the mercy of the wind (you will hit the steel wall in a lot of wind conditions). Also with 2 engines there is no need to do a tight turn – you can move the boat up 2 or 3 docks while you complete you turn to get the bow pointed up the fairway. This is the called a “Lollipop” which is how I always take the boat out. Boat never stops and you are aleays moving away from the wall.
20. Go back to cockpit and review engine starting procedures (stb first, then port). Start engines and set throttles to about 1200 rpm in neutral to warm them up.
21. While engines are warming up – give the students a 10-15 minute break to visit the facilities etc. (emphasis that diesels operate on heat and shoul always be warmed up before moving the boat)

22. After break, explain that you will take the boat out the first time. Assign a bowline person and a sternline person, review hand signals (driver will just point at them and close their fist and pull back which means take the line in now. Emphasis on only 2 tries to flip the line off – if this does not work they must immediately pull the line thru the cleat and bring it on board. Get big fender in anchor locker out and assign a roving fender person to protect the danger points already ID'ed. Explain to all that you want them to see the how I handle the throttles and for fun have them count the number of throttle moves are made before the lollipop is complete (this is usually 17 to 20). Bow person should throw bowline on net and come back and watch, stern person should bring line into cockpit and watch. Roving fender person should bring fender with them to cockpit and watch. Once boat is pointed up fairway, have them remove all fenders and lines on the way up the fairway. Fenders tied with clove hitch to back of the net on bow. Lines stored in anchor locker.
23. Assign someone to drive the boat out of marina and out to an open space of water, away from traffic going in and out of harbor – stay with them and explain what to look at to drive an offset helm boat – never line up the forestay to what you are driving to or you will drive in circles. Line up a line in the fiberglass right in front of the helm with where you want to drive to.
24. Start with getting them use to operating the throttles and doing maneuvers. Have the person that drove the boat out, stop the boat and do a slow spilt throttle 360 degree turn without the boat going forward or backwards (a tight 360) and stop the boat on a something on the shoreline (house etc). Have this same person then do a faster 360 in the opposite direction and stop it on the same location on shore. Rotate all students thru this. Pick someone else to take over the helm and backup up the boat at least 100 yards keeping a point on shore directly between the aft hulls. Rotate all students thru this. Pick someone different and have them do 2 power Williamson man over board recoveries. Rotate all students thru this.
25. After these power maneuvers, put the main up (with or without wind). Go up full with no wind and have them reef soon after the main is up. Go up with a reef in if you have wind and reef it down to the next reef. If you have enough wind pull out the jib and sail over to Madeline. Dose sails and anchor the boat for lunch. Emphasis on how to get the bridle out with slack back to the windlass so that when the anchor is set, it is set with the bridle with no pressure on the windlass.
26. Rotate assignments for anchoring and pulling the anchor duties. After anchor is up, if you have wind, raise sails and rotate students thru tacks and gibes. To speed things up, leave the main centered and do things quickly. Important to show them have to do gibes correctly, how to preset the traveler for tacks, how to use the clutches to release the gib sheets and trim thru them before putting jib sheet on winch. Once they have the basics down, I will have the do the tightest circle under sail that they can do while keeping the boat bows moving at the same speed all the way thru the circle (360 under sail).
27. While doing sailing maneuvers, keep the boat close to Pikes. Time it so that you can get initial docking practice in (somewhere around 3:30 to 4:00 or sooner if you have no wind). Dose sails and rig the boat for docking. Important that all fenders are on and lines hung before entering the harbor. Rig starboard side. Explain that we will rotate drivers, however the driver only can use one line handler. Everything is by engines – wheel is not to be used. Rotate all students

thru driving and line handling. Line handler is to step off the boat at the bow and immediately get a single on a cleat and take the slack out and tie the line down. Driver responsible for getting the boat close enough to the dock for the line handler to step down to dock. Driver responsible for getting line handler as close as possible to a cleat that driver has chosen in advance. When line is attached driven puts outboard engine in reverse to bring stern into the dock. Very good time to have students do a "power spring" of the dock when leaving the dock. Stress to students that there will be no jumping off boat, no looking hurried going down the dock for the stern line, no loud noise. Boring docking is what you want!

28. Pick a student to put the boat back in it's dock. Talk them thru this first one. Put the boat to bed – all lines made up, AC on, stack pack zipped up, cockpit cleaned up, etc. Give students a break (15 minutes).
29. After break do test review, take test, and correct test. Head out to dinner – typically it is around 8:00 pm and all are tired, so eating at Port Superior is what we typically do.

Cruising Catamaran 2 Day Class Agenda and Notes

Day 2

- Starts at 8:30 AM – dock time
- Day is to complete anything missed on first day and do what the students would like to do

Agenda

While at the dock, cover the following:

1. Knots – cleat hitch, clove hitch, bowline, square knot, sheet shank
2. Show how to set boat up for mooring ball pickup
3. Show how rig preventer
4. Show how and why to rig a barber hauler
5. Show how to rig a barber hauler
6. Do MOBs under sail
7. Show how to back in a catamaran into a dock space
8. Practice more docking, time permitting
9. Special request by students
10. Have lunch on boat
11. Boat cleanup
12. Sign logbooks