CSC Keelboat Level 1 Dockside Teaching Aide May 2024 Sarah Herbelin

Announce the class. I give it 3 hours and that's usually about right. Sample announcement is towards the end.
Reserve Boats if club policy allows
Send info to students- links and email (Sample at end)

Guide students through-

Keelboat Safety Skills
Safety Inspection/Equipment Check/Rigging Check
Raising Main (may need to adjust angle of boat to the wind if it's not a westerly)
Reefing
Jib
Motor
Putting the Boats Away

On the gangway and/or at the dock
Welcome students, share names, ask for their experience, briefly share your experience

On the dock
Find/move Commander and Merritt on either side of one finger dock so that the instructor can teach from the dock and work with both boats. The goal is to point out the differences between both boats so that they understand how to rig, reef, etc either one.
Let students put down their gear and get comfortable.

Keelboat Safety Skills
Focus on what's different between keelboats and dinghys and reinforce lifejackets/pfds I usually ask each student to tell the group a safety item and then fill in the missing ones.

Make sure that these get covered:

- Personal well-fitting lifejackets/PFDs worn and Type IV PFD (throwable flotation cushion) that must be readily available (up on deck).
- How to get on and off the boat- I prefer to generally do this at the shrouds while saying out loud "stepping on" or "stepping off" so that people aboard know that the boat will shift around. Obviously there are times when you need to get on and off at other locations, but this is the safest one for routine access.
- The boom is much heavier and can have much more force.
- Keep the hatch cover closed when not in use- especially when lowering the main sail. Stepping into the void can cause serious injury.
- Working the dock lines through the dock cleats. I hold a bow line and ask where I will go if the boat pulls hard. Answer: into the water between the boat and the dock. Then I guide the line under a dock cleat and ask the same question. Answer: I get pulled down towards the dock. Much safer, and much more controllable. I talk about line handling when casting off and coming into the dock a bit here as well and the forces involved. That you should be able to step off of the boat- if you have to jump to the dock you should just stay on the boat. People are much harder to fix than boats or docks.

- Winch safety- I use a halyard and run it to the jib winch and demo and then have each student practice the skills below. I really emphasize that there is a lot of force involved and that they like to use their hands for many things- don't want to damage them with the winch.
  - safely wrapping the line around the winch keeping their hands well clear of the winch and never having their hand between the line and the winch barrel
  - "Filling up the winch" with wraps before getting the winch handle
  - Using the winch handle for slow and fast speed winching and talk about tailing
  - Removing the winch handle before adding or removing wraps
  - How to safely remove the wraps and ease the line (pulling straight up works well)
- What to do if the skipper goes overboard- this usually works well on keelboats- release all of the sheets and follow the boom with the tiller until the boat settles down to being hove-to without the jib.

Safety Inspection/Equipment Check/Rigging Check

I hand out copies of the Keelboat Pre-Sail Checklist (also at the end) and ask them to find all of the equipment and show them how to do the checks. It's nice to have a copy of the ABCs of California Boating as a reference for questions. Have them actually lift up the bilge covers and look for water and demo the various pumping options. Turn on and discuss the various lights while you check them. Actually push on the lifelines to check for integrity. I ask them to leave the radios on and wait until the beeping reminder to attach your nav device starts so that they know what it is and then have them turn them off. I discuss what's required to be on the boat and the items that each senior brings along in the senior kit. I have them invert/shake the fire extinguisher. Talk about where to find the tides/currents and weather forecast information. Cover the items in the Do's and Don'ts: Best Practices for Rigging Down the CSC Keelboats here and when putting the boats away at the end as well. Walk over to the dock box with the sign in/out sheet and maintenance binder to show them as well.

I leave the motor part to the end. If done earlier it can end up taking up a large part of the class time with questions and curiosities. At the end students can stay on to ask, but often decide they want to head out instead. There's good information in the outboard motor link that you can refer to as well.

Raising Main

You may need to move the boats around in the slips to adjust the angle of the boat to the wind if it's not a westerly.

I have the students remove the sail covers and then identify the main sail controls:

- Mainsheet
- Cunningham
- Outhaul
- Boom Vang
- Reefing Lines
- Adjustable Backstay (if your boat doesn't have one, point out one that does)

Have them ease/release all of them. I ask them to lift the aft end of the boom up a foot or so so that they know that it's free to be lifted by the sail (main sheet and vang are off).

Then have them raise the mains full hoist- point out the different ways that the sails attach to the mast- bolt rope and sail slides and that some boats use cunninghams at full hoist and others don't (they use them for reefing instead). If it works for the boat, tell/show them how to jump/sweat the halyard. You can then alternately sweat and pull in the line and not have to use the winch handle to tighten the halyard. Once the main's up, go through how to set the controls for light and then for heavy air (most are looser in light air except for the vang). Explain a bit about why, but don't go into too much detail. The Senior Study Group does the detail and it can take a lot of time here.

Reefing

Once the sail is set for heavy air, talk through and then have them go through the reefing process:

- prepare- remove cunningham if on, ease vang, I keep the outhaul tight, that way it's ready when you shake out the reef and it keeps the foot under control better, have reef lines uncoiled and ready, get halyard ready to run
- main must be luffing (discuss why, can briefly mention that this can be done by sailing a close reach or in intervals while hove-to if you aren't at the dock),
- ease halyard,
- set new tack (discuss the different ways- using the cunningham or a hook at the gooseneck),
- raise up the halyard and make it tight,
- use the reef line to tighten the clew. Tip: use the adjustable boom lift to raise the boom to make it easier to tighten the reef line (for the first reef you can also use the 2nd reef line if there isn't an adjustable boom lift),
- clean up- put on the vang, tighten the main sheet, coil up the excess reefing lines, **loosely** tie the reef nettles (show the square knot and point out how little reinforcement stitching there is around the reef nettles compared with the tack/head/clew and that you can rip the sail if you hoist it with the reef nettles still tied).

Talk about how important it is to have a flat sail when you are done- halyard and reefing lines should be TIGHT. If you have a baggy reef, it can sometimes be more powerful than a very flat full hoist sail.

Then have them put in the 2nd reef- prepare, execute, clean up. With the reefs in, demonstrate what changes when you tighten and ease the backstay having them look at the middle 1/3 of the sail.

I often demonstrate an "earring" with the 2nd reef- taking a sail tie and passing it through the clew cringle and around the boom twice and then hauling down hard to tighten and tie in a bow knot with the ends tucked in well clear of the main sheet block. This is great for when the angle of of the reef line is more aft than down and the reef line doesn't effectively pull the clew to the boom.

Have them shake out the 2nd reef and keep the 1st and then shake out the 1st reef and go to full hoist.

Teach how to prepare (hatch closed, main sheet eased, cunningham out, halyard ready to run, sail ties ready).
Then lower and flake the mainsail and put on the sail ties. (I have a strong preference for flaking the sails on both boats- it's then ready to raise as opposed to when the sail is rolled.)
Then clean up- hook the cunningham onto the mast, ease the outhaul, pull out the reef lines from the boom so that the sail can be fully hoisted without the extra friction and tuck the extra line into the folds of the sail, loosely snug the vang, ease the backstay if adjustable with just enough tension to keep it out of the way.

Jib

Move on to the jib. Talk about the different sizes of jibs, to always read what's on the tack and not to trust what's on the bags, rig one that's around 100% and talk about how to rig the jib sheets for different jib sizes (you can also briefly touch on the jib cars as adjustments for different wind strengths- a basic guide is light air forward, heavy air back until all of the telltales stop streaming at the same time). Go over the different knots in the ends- and tying them about 8-12 inches away from the end of the line in case you need purchase to untangle something. Hoist the jib and point out the different ways that the tacks and luffs attach on the different boats. Lower and flake the jibs. I like to coil up one jib sheet and tuck it in by the clew, fold the clew over that jib sheet and then coil up the next one so that they don't tangle with each other. Fold up the sail and put it in the bag again.

You can put the boat most of the way away now, or wait until after the motor lesson.

Motor Basics

If students have read through the Outboard Motor Checks it's easier. I have them check the fuel level, the fuel line and it's attachment to the motor, the fuel/water separator, talk about not pinching the line. Each student should practice lowering and raising the motor at some point in the lesson. Do the preparation checks- choke out, throttle at start, in neutral, get ready to look for water once it starts, take the slack out of the line, check that no one is behind your elbow, find safe body positioning, focus on pulling fast as opposed to far. Once it starts, check for cooling water, monitor the choke (you often have to put the choke in a good bit almost immediately) and the throttle while it warms up, and then check both forward and reverse gears. I'd much rather know that there's a problem with the gears at the dock than once underway.

Talk about the two ways to shut the motor off- pushing hard on the red button for 3-4 seconds and pulling the safety kill switch with the lanyard. Have the students do both and learn how to put the safety kill switch back on.

After the first start you need less or no choke and different throttle- it's marked on the throttle for cold start and warm start.

Once everyone has started the motor and worked the gears, leave the motor in forward gear at high RPM/throttle for 2 minutes to burn off any carbon before shutting it off and putting it away.

Check that the boat matches the Do's and Don'ts: Best Practices for Rigging Down the CSC Keelboats. I talk about gratitude to the people who maintain the boats and leaving things ready for the next person.

Thank the students and you're done.

Passing Level 1: I look for the students to be comfortable with the information. If it's the first time they've been on a keelboat and/or first time they've personally put in a reef (dinghy or keelboat), they likely will need to do it again to really know the material. It's usually fairly obvious who understands and is getting it and who still needs to absorb the material. The goal is for them to be able to get a boat ready with the help of the checklist and assist with reefing as needed.

Sample Announcement

Sarah Herbelin is teaching a keelboat lesson on Sunday March 10 from 9:00 AM to 12:00 PM

Prerequisites for this lesson

You must have a Dinghy Junior Rating

Info

There is a maximum of 6 students. Slots will be allocated in signup order. If more students sign up than can be accomodated, all on the waitlist will be notified by email of any cancellation, and the first to respond will get the slot. You can check your signup status on the website.]

You can sign up here (you have to be logged in to use this link).

This is an invitation to CSC Juniors who want to begin to learn keelboat sailing. This is Level 1 at the dock.

Unless heavy rain is forecast, the class will be held.

If you are registered, just show up at the time below – with pfd in hand – at J-dock. Sarah will meet you at the dock entrance and take you through the key steps for getting a Club keelboat ready to sail.

We won't be on the water just yet – it's important to know *how* to get a keelboat ready, just as with a dinghy. But we will walk you through most of the following:

- What to tell the crew to keep them safe
- Boat inspection
- How to check safety gear
- How to go over rigging and choose sails for the wind conditions
- How to reef at dock
- Motor basics
- How to derig and put a keelboat away

If you are a read-ahead person, below are some resources from the CSC website that are relevant to what we'll be doing.

Keelboat Dos & Don'ts
Do's and Don'ts: Best Practices for Rigging Down the CSC Keelboats

Pre-Sail Checklist
Keelboat Pre-Sail Checklist

Outboard Motors
Outboard Motor Checks

Sample Info to Send to Students (use BCC for privacy)

Hello!
You're signed up for the keelboat level 1/ dockside intro Sunday at 9am. If you are a read-ahead person, below are some resources from the CSC website that are relevant to what we'll be doing tomorrow.
There's a chance of showers forecast at this point. Unless heavy rain is forecast, the class will be held.
Looking forward to seeing you tomorrow.
Sarah

Keelboat Dos & Don'ts
Do's and Don'ts: Best Practices for Rigging Down the CSC Keelboats

Pre-Sail Checklist
Keelboat Pre-Sail Checklist

Outboard Motors
Outboard Motor Checks

Safety

- ◻ First aid kit (senior kit)
- ◻ Bucket
- ◻ Boathook
- ◻ Whistle & 2 Flashlights (senior kit)
- ◻ Anchor & rode
- ◻ Simulated victim (if doing COB practice)
- ◻ Life vests for skipper and all guests
- ◻ Type IV throwable cushion
- ◻ Test running lights
- ◻ Throw line
- ◻ Fire extinguisher charged (in the green)
- ◻ VHF on 16
- ◻ Tools-wrench, screwdriver, pliers, knife (senior kit)

Sails

- ◻ Main
- ◻ 75% jib
- ◻ Other jibs optional

Rigging

- ◻ Forestay and backstay properly tensioned
- ◻ Shrouds and spreaders properly tensioned
- ◻ Cotterpins checked
- ◻ Halyards run smoothly
- ◻ Sheets
- ◻ Winches
- ◻ Winch handles
- ◻ Reefed if necessary, otherwise shaken out

Currents

Ebb	Flood	Ebb	Flood	Ebb

Weather Forecast:_____
_____

Engine & Steering

- ◻ Fuel tank over 1/2 full
- ◻ Emergency shutoff cord present and attached
- ◻ Motor swivels freely to port and starboard
- ◻ Retention cable present and attached
- ◻ Outboard motor starts
- ◻ Exhaust water observed
- ◻ Throttle works
- ◻ Gears tested (forward and reverse)
- ◻ Run high 30 sec before shut off
- ◻ Tiller and rudder in good working order
- ◻ 2 Paddles

Hull

- ◻ Bilge empty and dry
- ◻ No major cracks or holes
- ◻ Lifelines and stanchions
- ◻ Electrical unplugged and clipped to dock
- ◻ Registration

Spars

- ◻ Mast
- ◻ Boom
- ◻ Spinnaker pole (optional)
- ◻ Boat hook

Sign Out

- ◻ Sign out in log
- ◻ Record any maintenance findings

Tides

Hi	Lo	Hi	Lo	Hi

_____
_____