

Missionary Sailing School

“The world is a wonderfully diverse and interesting place. As small boat sailors wholly reliant on our own resources, we were privileged to see many of those places almost through the eyes of those who live there. I found that an extraordinarily interesting experience...”

[Denton Moore, Gentlemen Never Sail To Weather]

Video: Watch this 1 min. panoramic view of Luperon, Dominican Republic, another by “Captain C” during his solo sail around the Caribbean. This placid harbor is located on the north coast, a favorite stop over for boats transitting the Caribbean chain. [Observe the wide variety of boats that successfully made the journey. Watch in full screen mode]

<http://www.youtube.com/profile?user=clallaire#p/u/12/U5LC2Otx1eo>

Video: Enjoy the scenes along the west coast of Florida during this small boat’s sail. Some of the footage is shot across the deck or lifelines and, with the boat’s motion, may seem a little difficult to watch. Practice focusing on a point along the horizon and notice how the motion has less effect on you. At other times you may find it helps to keep your eyes on a cloud or even waves further from the boat. More about seasickness (it’s symptoms and prevention) in a later lesson. [The resolution of this 5 min. video is not as good so keep the display at normal size]

<http://www.youtube.com/watch?v=adhhiwNe2pc&feature=related>

Lesson 5: Basic Sailing - Part 2

1. Shoving Off

We are going to take an extended sail this time using a series of videos to demonstrate most of the things we have already covered as well as a few new ones. Try to follow the instructions offered by the video ‘crew’, noting anything not entirely clear [watching a video more than once will help]. After viewing the video we will go over a ‘check list’ of steps to be remembered when performing each task. Ok...let’s “shove off.” [watch this **video** first]

Video: <http://www.youtube.com/watch?v=uwSeZNltIH4&feature=related>

Checklist:

- First, check wind direction and give crew ‘the plan’
- Before releasing dock lines have engine running and test the transmisson [place it in and out of gear]
- As you begin your movement be sure to have enough **way** [speed] to have **steerage**.

[**Important note:** a sailboat's rudder steers the boat when water gliding along the hull encounters the obstruction caused by said rudder being turned to one side or the other. If the sailboat is not moving at all, slowly, or is moving at the same speed as water current going in the same direction, then the rudder is unable to effectively work. On the otherhand, the faster you are moving the more responsive the helm will seem to be. But remember: sailboats don't come with breaks! Take your time in congested areas and in uncertain conditions.]

- At times allow the boat to move in 'neutral', relying on the boat's momentum (slowing down without 'reverse'.)
- Always watch for signs of activity on boats you pass in case one is preparing to pull out [like I said, sailboats have no breaks!!]
- **Fenders** are used to protect the hull of the boat from chafing on the dock or against other boats [Remember: it is just plain "uncool" to go anywhere with fenders hanging over the sides. Get 'em up!]
- **Safety rules for crew as they move about the boat:**
 - ¹ Keep body weight low.
 - ² "One hand for you and one hand for the boat".
 - ³ Watch out for the boom.

2. Raising Sail

Video: <http://www.youtube.com/watch?v=cdqvgeZzIQo>

Checklist:

- Familiarize yourself with all lines to be used before raising sail [Note: the boat in this video is a performance model with many specialized features. The common cruiser will generally have a simpler 'layout']
- You need to **head up** [point the bow into the wind] before trying to raise sail. However, I have preferred to leave the wind slightly off the bow – more to one side – which prevents the boom from swinging across the deck as it is being raised. This video was filmed in an almost flat calm, but in the ocean, where you may need to raise sail while the boat is 'rock and rolling,' the boom can get pretty 'angry'. The **mainsheet** has to be loosened before raising sail, but this gives the boom 'play'. In difficult seas I have used a **preventer line** attached from the boom end to a cleat along the deck to restrict its 'swing' (other uses of the **preventer** in later lessons).

Note: This mainsail was raised entirely by a winch in the cockpit. As will be seen in the last video of this lesson, on many cruising boats the sail is raised either entirely or mostly by hand, standing in a position by the mast, then 'finished off' with a winch to draw it tight (a much faster and maybe easier method).

3. How a Sailboat Sails Upwind

Video:

http://www.youtube.com/watch?v=fUPIn9ki1_Y&feature=channel

Checklist:

- The sail is shaped like an airplane wing, causing high and low pressure areas on its opposing surfaces.
- Sailboats can usually sail no closer to the wind than about 30° [high performance rigs] or 45° [most others. My broad, heavy trimaran is having a good day if it hits 50°]
- The continual effort of adjusting sails to keep them at the optimum 'angle' to the wind is usually only critical for achieving speed while going to windward. You can accomplish the same thing by changing your 'heading' (changing the direction of your boat as the wind changes) if doing so does not affect your planned destination. [There will be more discussion on strategies used in sailing to windward in a later lesson.]

4. Tacking (changing directions upwind)

Video:

<http://www.youtube.com/watch?v=2z7yapVQi4A&feature=channel>

Checklist:

- Remember that *port tack* means the wind is on the **port** side and your sails are on the **starboard** [a *starboard tack* would be the opposite.]
 - Prepare the crew by announcing "Prepare to come about" (usually shortened to "Ready – about") so no one will get hit by the boom or be thrown off balance. Also, if a jib is in use, the crew may be needed to help with jib sheets.
 - When the turn is initiated the helmsman calls out, "Helms to lee" (more popularly, "Hard a lee")
 - Helm is turned to bring the bow across the wind until the main refills [the **luffing** in the sail ends] and the boat begins to 'drive' on its new **heading**.
 - Meanwhile, as the jib becomes limp, the 'working sheet' [one originally taut to keep the jib trimmed] is loosened and the 'lazy sheet' is pulled in.
 - Also demonstrated in the video is how you can pull in the slack on the jib sheet while the jib is 'limp' [before taking wind on new heading, provided you work quickly!]
- Remember:** keep the 'heel' of your hand, not your fingers, towards the winch drum!! (It is possible to break or lose a finger jammed between the lines on a winch!)

A very helpful suggestion: Sometimes it is difficult to complete the tacking maneuver (to get the boat completely across the wind and on to a new heading) for several reasons. These include: ¹ Large seas which slow your progress (by waves beating against the bow as you turn), ² a high *freeboard* (boat hull that stands high out of the water) or structures above deck (such as a pilothouse) causing *windage* (surface area pressing against the wind in sail-like fashion), or ³ the additional hull(s) of a multi-hull, whose downwind hull will have even further to travel as the pivot is made. To give the bow of your boat a little extra ‘nudge’ to finish the turn you may need to keep the **working jibsheet** tight at first. As the boat ‘crosses the wind’ the jib will now *backwind* [filling with wind on its backside] thus ‘sailing’ the boat on over to its new heading. Just be ready to pull tight the downwind jibsheet quickly as you release the windward one (presently the ‘working’ sheet), handling the two lines equally so the jib will not begin lashing wildly.

Review: There are so many items covered in the various ‘checklists’ that for a review it is suggested that you read through them at least once more. Learn the new words!

- Based on the discussion about how a rudder works, see if you can explain this sailor’s adage: “No *headway* – no *steerage*”
- How can a **preventer line** be helpful when raising the main?
- Describe how ‘back winding the jib’ can help you tack.

Watch this *Video* about getting a boat underway and undersail as told by an old Frenchman (a bit funny but a good look at how the rest of us have to do it...and probably you will, too!)

<http://www.youtube.com/watch?v=SrKGvEgeb2s&feature=related>