

**Webmasters Note:** The following was submitted by Tim Long and is used with his permission. It is very good reading even for experienced apollo sailors. Contact Tim on the <http://www.apollosailors.com> discussion page if you have questions.

**APOLLO SAILING 101**  
**By Tim Long #712, Skipper,**  
**And John Keville, First Mate.**

Although we have no formal training, we do have experience and have successfully launched and sailed the Apollo several times and think that it is a fantastic sailboat. This boat has gotten a bit of a “bum rap” because first time sailors often mishandle its high performance design. It was not designed to be a beginner’s boat; an Optimist, Sunfish or Laser would be a more appropriate place to start. I spent 4 years sailing a Sunfish before stepping up to the Apollo and at first was confused by all of the control lines and the addition of a jib sail. I studied the book “Annapolis Guide to Seamanship” over the winter to understand these new features better, and John had some previous experience on a larger daysailer-cruiser.

The good thing about the Sunfish experience is that there are only two controls: the main sheet and the rudder. This is the essence of sailing. It is important to develop a feel for how these controls interact. The Apollo is a double handed boat, so the skipper should control the rudder and mainsheet, and the first mate control the jib and other control lines.

The Sunfish and Apollo are both centerboarders, not keel boats. In a keelboat, a heavy lead weight at the base of the keel balances the boat and prevents it from tipping over. A centerboard boat has no such ballast, and depends on you, the crew, to be the ballast. You should sail the boat with the same attention to balance as you would when riding a bicycle. Sailboats are designed to be at their best when heeled slightly, say 10 degrees. Therefore, in light air if your boat is sitting flat lean your weight to leeward to add some heel and your speed and stability will increase. If your boat is heeling excessively due to high winds, then get as much crew weight as you can hanging out to windward (hiking) to hold to proper heel angle. On a centerboard racer like the Apollo, there are no passengers, just working crew. All aboard must be attentive to this delicate balancing act and attentive to the instructions from the skipper. Surprisingly, with both sails up and shaped properly, and with crew weight positioned properly for optimum heel angle, this boat feels as stable as a keel boat, even in 20 knot winds. This is because the hull of the boat is now on it’s intended plane, and the sail shapes are optimal.

**APOLLO SAILING TIPS**

1. **SET UP:** Set up the boat on land first. I park the trailer at the top of the boat ramp, and pulled to one side so others can pass. We step the mast, hook the keeperstay, and connect the shrouds. Install the boom and attach the main halyard to the aft end of the boom to hold it up while you install the mainsheet line and boom vang. Install the jib and furl it. Set the power box tension about midway, say 6. Install all other lines and the rudder and tiller, with the rudder flipped up. Install the foot of the mainsail into the boom, and tighten and cleat the outhaul. Flake the mainsail over the boom and put a bungee cord around it.
2. **LAUNCHING:** Back the trailer into the water, then pull it up onto the beach if possible. Otherwise, tie it to the nearest dock and park your car. Put the boat into the water with the bow pointed directly into the wind, and have the first mate hold it there, the skipper gets in the boat. Attach the mainsheet halyard to the sail and hoist it up. Drop the centerboard  $\frac{1}{4}$  down. Now with your bow into the wind, decide which side to fall off onto. Choose the side

that gives you the longest first tack with the least traffic or obstructions. If you are going to fall off to the port side, then the skipper should be positioned on the starboard side, holding the tiller and ready to sheet in the main. The first mate now pushes the bow off to port and simultaneously jumps into the front of the cockpit. The skipper may need to lean under the boom to leeward while the first mate jumps aboard to offset the weight. Once underway, flip down the rudder (it will still steer even when flipped up), unfurl the jib, and drop the centerboard to about half.

3. **POSITIONS:** The skipper should sit on the windward side just aft of the traveler cleat, either on the side seat or more often on the top rail level. From here you can comfortably hold the tiller extension and the mainsheet, and ease the traveler car quickly in case of gusts. Keep your feet hooked under the hiking strap, and rest them on the backboard of the centerboard trunk. The first mate should be forward of the traveler cleat, and can either sit on the windward seat or straddle the centerboard trunk, sitting just forward of the thwart board. My first mate found the straddled position best, as he could remain centered in the boat when coming about (duck under the mast!), release the old jib sheet with one hand while sheeting in and clamping the new jib sheet with the other. From here he can also slide to windward or leeward for hiking, leaving one foot draped over the trunk so he can easily return to center. He can also reach the bailers without causing much of a weight shift. As a result, only the skipper needs to change sides when coming about. Less confusion, less trouble. This system has really worked well for us in all wind conditions.
4. **SAILING 101: Please read as much as you can on sailing.** I started with a book called “Practical Sailing”, I would read it, try sailing, then go back and read it again. This is sailing basics, and was very helpful. I later picked up the “Annapolis Book of Seamanship” (at a buck a book store!), which has more advanced sailing techniques. But here it is in a nutshell: you sit on the windward side of the boat, point the boat at a right angle to the wind and stay on this tack until it’s time to come about. If the wind is from the south, then you may sail from east to west and west to east. When it’s time to come about, push the tiller AWAY from you in a slow, smooth motion. This heads the bow up into the wind, and the boat continues to turn until you are pointed in the exact opposite direction. During this transition you should switch to the other side of the boat, so that when the other side of the sail fills, you are ready to provide ballast to the new windward side. Once about, straiten your rudder to sail back in the direction from which you came. Easy, right? Common mistakes include thinking that you can sail in any direction, like a car or powerboat. As you become a more advanced sailor, you will learn how to set your sails and controls to sail in other directions, but for starters, just stay on a beam reach. The biggest mistake leading to capsize is called gybing. If you try to change direction by pulling the tiller towards you, the stern passes through the eye of the wind, not the bow. This causes the boom to swing violently across the boat to the opposite side, with such momentum that when it comes to a stop it pulls the boat over. There is a proper way to gybe, but first time sailors should completely avoid it. The rule of thumb is that the wind should blow across your boat, either from the port side or the starboard side, and you should keep your back to the wind. You can tell the wind direction from an onshore flag. Moored boats always point into the wind, so you should sail across their bows or sterns.
5. **THE CURE FOR EXCESS HEELING FORCE:** The boat is designed for optimum sailing performance with some heeling. However, as your sailing along on an optimum heel angle and suddenly the boat begins to heel more, follow these steps in rapid (but smooth) succession until the boat returns to a controlled position: 1. Hike out further. 2. Push the tiller away slightly to head up. 3. Let out the main sheet about 1’-2’ 4. Uncleat the traveler and let the car ease down to leeward. At this point, unless it’s a hurricane, the boat is flat again.
6. **SAIL POSITIONS:** Imagine looking down on your boat from a bird’s eye view. If the wind is hitting your starboard side midway at say 3 O’clock, then your main sail position, or the aft end of your boom, would be around 7 O’clock (beam reach). If the wind is more forward, say

2 O'clock, then sheet in to 6 O'clock (close hauled). If the wind is more aft, say 4 O'clock, then sheet out to about 8 O'clock (broad reach). In each case set the jib on a similar angle, so that a slot is created in between the jib and the main. The air rushing through this slot and across the back of the main increases speed and stability. If the wind is far aft at 5 O'clock, you may open the sail to 9 O'clock. Pull up the traveler car so that the sail doesn't get ripped by resting on the spreader. This position is called a "run", and is the slowest and most relaxed position. I will often use this position when we need to take a break from the action and regroup. Don't let the wind beyond this point, because if your stern crosses the eye of the wind, you will gybe. Obviously, if the wind is from the port side, the opposite clock references would apply. If you need to stop the boat, head up until the bow is directly into the wind, then quickly straiten the rudder to hold this position. We have used this position to make minor repairs or untangle a line.

7. **THE CONTROL LINES:**

- a.) Cunningham-Sail shaping control. Tighter moves draft forward in sail, looser moves draft back. Position the draft, or the point in the sail where the belly is the deepest, about 40% of the way back from the mast.
- b.) Outhaul- Sail shaping control. Tighter moves the draft upward in the sail, looser to lower.
- c.) Boom Vang-Sail shaping control. Tighter will tighten the back edge (leech) of the sail and flatten the draft, looser will allow the sail to fill more in light winds, or deeper draft. Combine with outhaul to create sail twist, to spill excess wind off the top of the main.
- d.) Traveler Car- Sail angle control. Ease to leeward for high winds to relieve heeling force and add forward motion force. Pull up to windward when sailing into the wind to improve sail angle.
- e.) Centerboard- converts side force on sail to forward motion of boat. We use  $\frac{1}{4}$  down for beach/shallow launch,  $\frac{1}{2}$  down most of the day, fully down when sailing upwind.

**ADD ONS:** The Apollo is well equipped with sail controls, however we have found a few useful add-ons.

- a.) Compass- this helps us a great deal when trying to hold on a good tack position. We can also determine the wind direction when we point into the wind to launch the boat, and then know what our tack options are. I just stuck one to the top of the storage compartment cover.
- b.) Wind indicator: We put a "Black Max" on top of the mast, which attaches quickly and without tools. On light wind days, it's easy to lose your wind direction without one of these.
- c.) Adjustable tiller extension: My first one was too long at a fixed length of 36", and I had difficulty coming about because it got caught in the mainsheet lines. I now have a Forespar twist-lock adjustable 19"-32", just right.
- d.) Jiffy Reefing line: this is like a cunningham for the aft end of the sail. With a reefing line in place, you may decrease your mainsail by one-third. Lower the main by connecting your halyard to the upper hook on the mast, pull the front end of the sail tight with your cunningham, pull the back end of your sail tight with the jiffy reefing line. I simply added an eyestay to the side of my boom under the second grommet up from the clew. Add a cheek block on the other side of the boom opposite the eyestay. To reef, knot the end of a line and feed up through the eyestay, through the sail grommet, back down the other side and through the cheek block, and then forward to a clam cleat (with fairlead) mounted on the side of the boom. We honestly haven't used

this yet, but in theory it should work! And the eyestraps and micro cheek block only cost about \$10!