

## Advanced Sail Trim (Trim Your Sails for Speed)

Most of the clinic will be limited to the mainsail. With a quick-learning class, once they have mastered the main, you can include the outhaul on the jib and its control of both draft and twist.

### On the White Board: (10 Minutes Max)

- Use the sailboat model as well as the white board to show where the cunningham, boom vang, outhaul, and backstay are.
- Draw an overhead view of the mainsail, showing different amounts of draft and explain how draft affects power.

### On the Boat:

- Position the boat so that you can raise the main at the dock. Show the effects of tightening and loosening all of the controls. Try and have the mainsail filling slightly to better see the effects on draft.
- Have the students stand amidships and show them how tightening the backstay bows the mast, drawing the area around the spreaders forward and reducing draft aft of the spreaders.
- Show how the outhaul affects the bottom half of the sail's draft.
- Show how the cunningham flattens the luff, reducing draft and bringing it forward.
- Demonstrate the effect of the vang on leech tension and sail twist. Discuss how the mainsheet will act as a vang on a close haul.
- Go sailing, allowing the students to analyze the weather conditions and choose whether we want a full sail or a flat sail.
- Discuss what effects reefing has on sail controls. How the reefing line acts as a replacement cunningham and outhaul, since they will no longer be working.
- Make sure to rotate out the helmsman. This particular clinic stresses crew and their controls of the sails rather than the person at the tiller. However, the person steering cannot look up at the sail and note different draft changes while avoiding river traffic.

- Use all of the controls multiple times. This guarantees that everyone can see everything while not steering.
- With everyone looking up at the sail so much, be doubly careful of keeping a lookout. Safety is always priority number one.