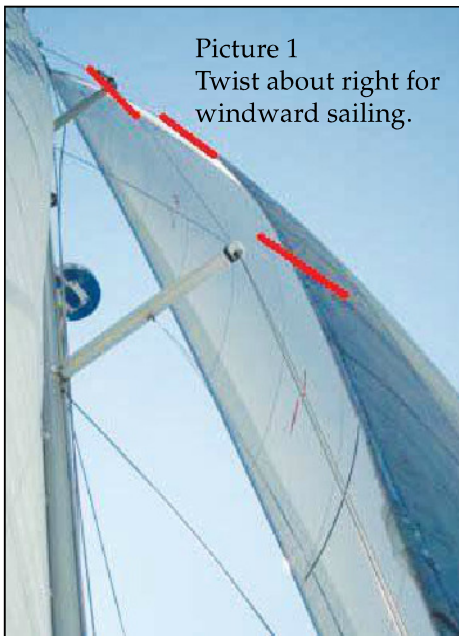


Jib Set – The Basics

Last month we discussed the basics of setting the mainsail and this month we will move on to the jib. These basics apply to all jibs – a 90% jib or a 150% genoa. Let's start with the tools we have to work with:

- Jib Sheet – attached to the clew of the jib and used to control almost all aspects of the jib's set; including draft, twist and angle to the wind.



Picture 1
Twist about right for windward sailing.



Picture 2
Top twisted off (car moved back).

- Jib Sheet Car – usually a fairlead on a track that the sheet runs through on its way from the clew to the winch. Moving the car changes the angle or direction of pull and thereby plays a large role in controlling twist and draft.
- Telltales on the luff of the jib – used to indicate wind flow over the sail.

As you can see, there are fewer tools for us to work with, which, unfortunately, makes the adjustments more complicated. Therefore, I'm going to break these rules into two sections; the first on how to set the angle to the wind and the second for controlling twist and draft. As with the mainsail rules, these apply in light to moderate winds.

Angle to the Wind: This is the basic control of the sail needed to successfully sail all points.

- To Windward – The jib should be sheeted in tight, usually this is limited by the sail coming up against a spreader or shroud but if not, the amount of draft at the foot will become the limiting factor

(flatter for heavy air and deeper for light air). Then steer the boat to keep the telltales both streaming.

- Close Reach to Beam Reach – Set your boat's course and adjust the sheets to again keep the telltales streaming.
- Broad Reach – The telltales will not help in setting the jib much beyond a beam reach; therefore another method must be used. A good approximation is to pretend there is a boom between the tack and the clew of the jib and trim the sail so this boom is perpendicular to the apparent wind (this is the same rule used for the main on this heading, so this pretend boom should also be parallel to the main's boom). On a

deep reach the mainsail will block the wind so the jib will not fly at all. When this happens it is usually faster to do one of two things; come up some so the jib fills or fall off to a run and fly wing-on-wing. Usually a combination of both works well, coming up for a while until you can jibe and run directly toward your destination (or visa versa).

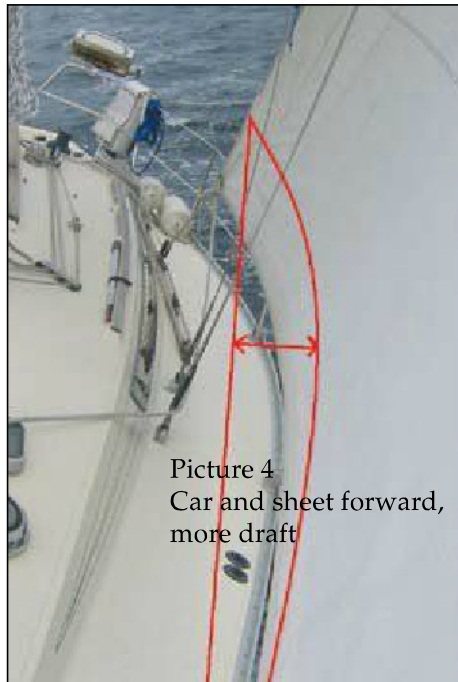
- Down Wind (Running) – Fly wing-on-wing or alternate broad reaches. Accidental jibes are a concern when sailing wing-on-wing so be careful. And, for this reason, when the wind is blowing hard alternating reaches may be safest.

Twist and Draft: Used to fine tune – most cruising boats I see are not making these adjustments and are thereby losing a fair amount of available speed.

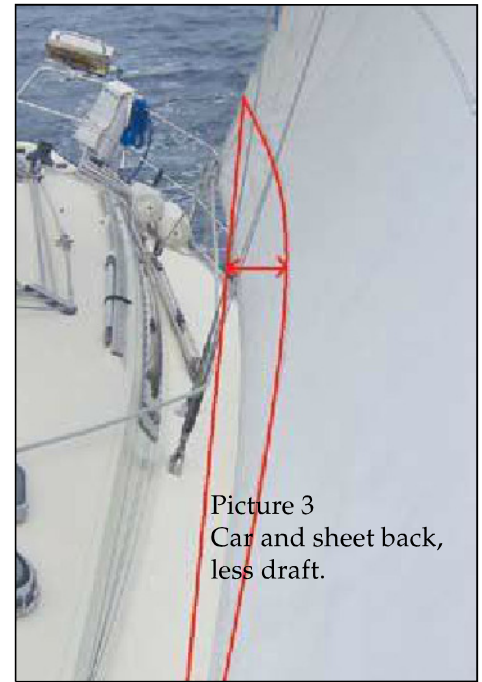
- Twist – When sailing to windward, the car should be positioned so all the telltales break at the same time; doing so assures that the whole sail is working at its full potential. Moving the car forward increases downward pull on the leach and twists the leach in (windward), moving the car back increases tension on the foot and twists the leach out (leeward). Similar to the mainsail, the change in twist is most obvious on the leach at the top of the sail (Pictures 1 and 2) but the telltales are a better indicator when close hauled. Therefore, if the windward telltale at the top of the sail is breaking first when the boat is steered into wind, the sail is twisted off too far and the car needs to be moved forward. Likewise, if the bottom telltale breaks first the car needs to be moved back.
- On a reach the car will need to be moved forward as the sail is let out in order to maintain the same sheet

angle. If this is not done the top of the sail will twist off substantially. Note that on deeper reaches you will not be able to totally eliminate twist due to the clew moving out away from the boat.

-
- Draft – is normally used to maximize the power produced by a sail. In light air a deeper draft will provide more power and in heavy air less draft is used to de-power the sail, thereby reducing weather helm. Sometime, when you have a nice steady breeze, play with the draft on both sails and watch knot meter.
- Draft is controlled by a combination of the sheets and cars – moving the cars forward and easing the sheet just slightly (just enough to keep the angle to the clew the same) will increase draft and, likewise, moving them back and tightening the sheet slightly will reduce draft (Pictures 3 and 4). Note that as the draft increases the point of maximum depth moves aft.



Picture 4
Car and sheet forward,
more draft



Picture 3
Car and sheet back,
less draft.

Many thanks to Bob and Pam Vizenor for the use of their boat and their help taking the pictures used here and in last month's Mainsail Trim article.

Mike Huston owns a computer consulting company in the Seattle area and teaches sailing part-time for San Juan Sailing in Bellingham, WA. He has been sailing for over 40 years, many of them spent racing. He and his wife own a Jeanneau 43DS, "Illuminé."

Indworks
Sailing & Powerboating

your dream. realized.

SEPTEMBER SPECIALS
*Lessons
*Charters
*Club

Basic Keelboat
Basic Cruising
Cruising
Powerboat Cruising

US SAILING

windworkssailing.com.206.784-9386

Deer Harbor Marina

LATITUDE ADJUSTMENT
DEER HARBOR MARINA
Lat. 48° 37.20 - Lon. 123° 00.20

Whether you're here for a vacation or are looking for permanent moorage in a Pacific Northwest paradise, Deer Harbor Marina should be a key waypoint on your journey. Come enjoy the beauty of Deer Harbor throughout the season.

- Winter Rates at \$4.00/ft
- Slips to 50'
- Guest side ties up to 150'
- 30 amp power at each slip
- Pool, showers & laundry
- Fuel dock (gas & diesel)
- Fresh water
- Pump-out
- Nearby restaurants
- Apparel, gifts, books, maps & charts
- Deli, groceries, beer, wine, ice cream, coffee, prep food, DVD rentals & ATM
- Whale watching, kayaks, bike & boat rentals tours and charters

BELLPORT

TEL: 360.376.3037 FAX: 360.376.6091
EMAIL: info@BellPortGroup.com
ONLINE: www.BellPortGroup.com
VHF 78A