

# PRIMER ON RIGGING THE SNIPE

*Here is a selection of time-proven ideas for controls and rigging to help you get more performance and enjoyment from your Snipe.*

These are some ideas for controls and rigging for the Snipe. They were used in a program for novice Snipers at Privateer Yacht Club and are not intended to be the standard for all Snipe Rigging. Styles in rigging change, but they seldom get simpler. We hope you can use some of the ideas presented. If you have good ideas, pass them on. If a novice asks you for help, please give it to him to the best of your ability — he might do the same for you someday.

**MAST RAKE:** These measurements are all based on mast position 60 inches aft of the stem. With jib hoisted and with at least as much load on the luff wire of the jib as on the fore stay, a metal measuring tape is attached to the main halyard and hoisted to the top of the mast. With the mast in the aft position and the tape snug, the measurement to the center of the top of the transom should be between 21 feet 3 inches and 21 feet 6 inches for boats with the 11 inch cut board. Round board boats should be about 21 feet 7 inches to 21 feet 10 inches. The small cut board is closer to the 11 inch board than the round board. Conditions and sailors are all different — measurements range from 21' 3" to 21" 8".

**HOW MUCH "SLOP":** Take the same measurement as above except the mast should be in the forward most position. Approximately 5 to 6 inches difference in the fore and the aft positions of the mast, is the current style. In past years, much more "slop" in the rig was considered desirable. With a tighter rig it is possible to point higher, but the boat is more difficult to hold flat in higher winds.

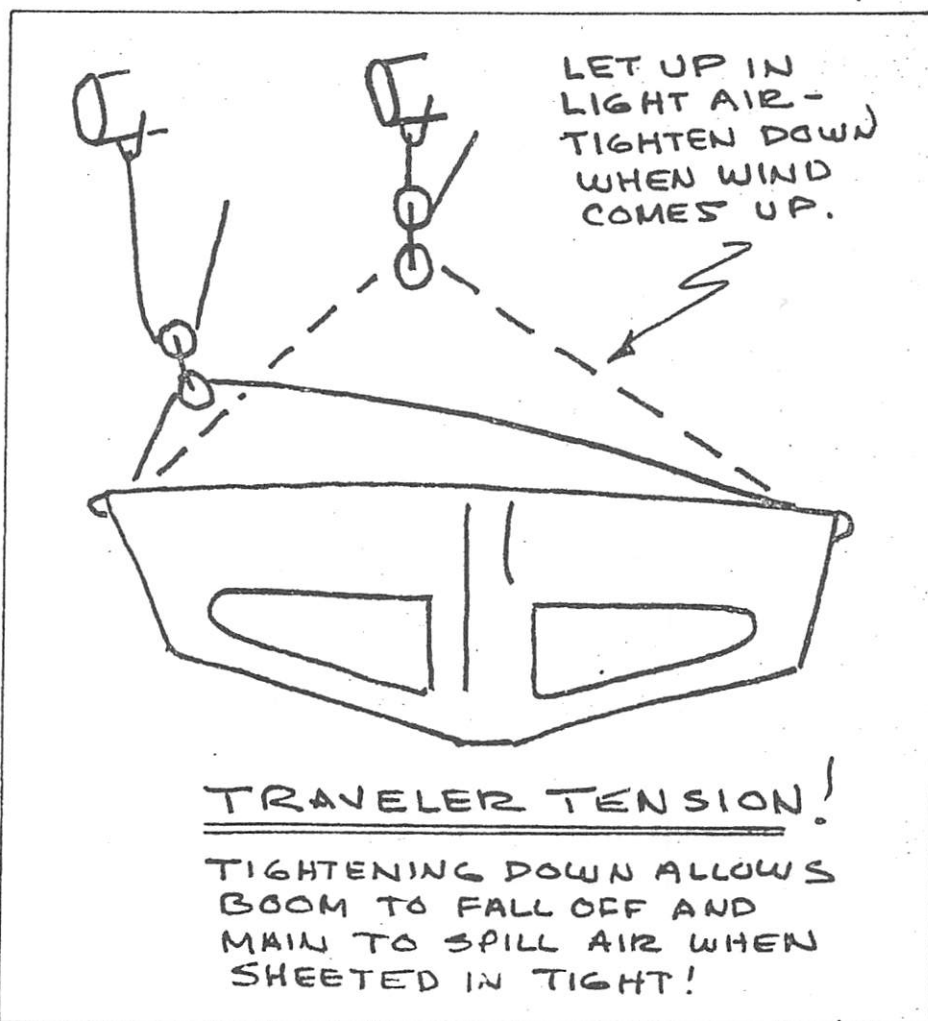
**HOW TO ADJUST THE RAKE:** This is done by shortening or lengthening the fore stay. Relatively little shortening — say one notch — will bring about a relatively large change in the mast rake. Changing the length of the shrouds changes the amount of the slop. Remember to measure both positions when only one is changed, as they interact. Also, it is

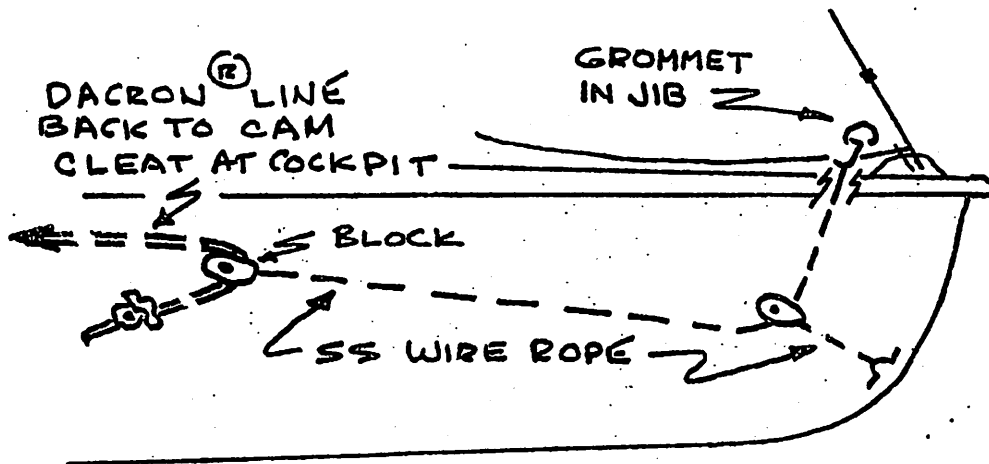
a good idea to see that the mast is straight in the boat. This can be done by measuring the top of mast to a point on the sheer (or chine) on both sides of the boat — they should be equal.

**BOOM VANG:** (Runs from the base of the mast to a block on the boom). The purpose is to keep the boom from riding up on reaches and runs. This serves both as a speed and a safety factor, as a twisting main in high winds could cause a capsizing to windward. The vang should be pulled on before rounding the windward mark as it is both easier to do then, and

won't interfere with other adjustments made during and immediately after the rounding. In very heavy wind, the vang can be loosened to spill air rather than using the main sheet for this purpose.

**OUTHHAUL:** The purpose is to loosen and tighten the foot of the mainsail. This permits one to adjust the fullness (draft) of the sail. Generally, a wire rope runs from a shackle at the aft end of the boom to a lever at the forward end. Tightening the foot reduces the draft and conversely, loosening will increase the draft. Gener-

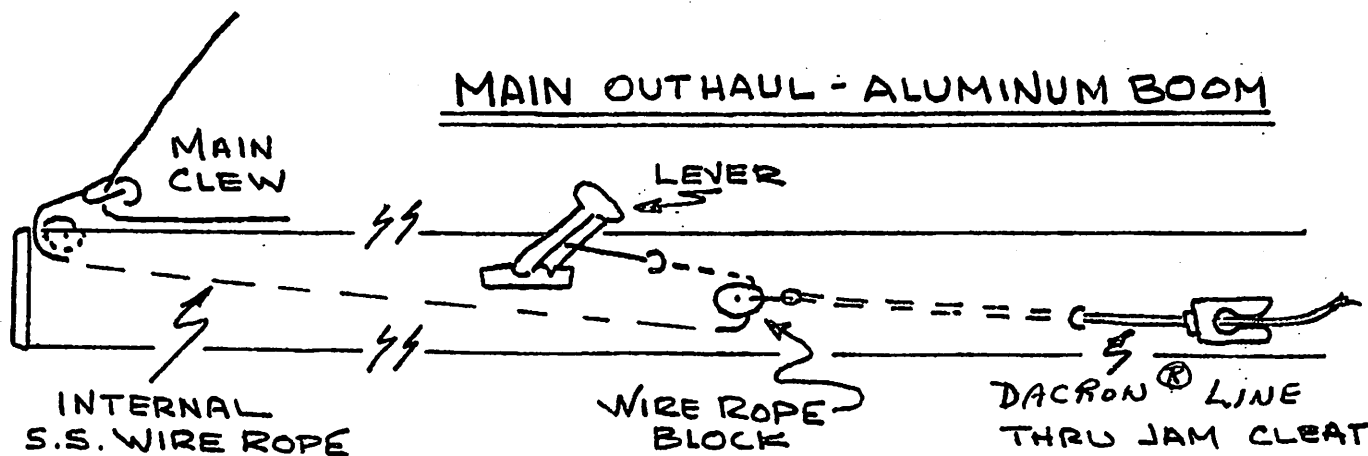




A TYPE OF JIB LUFF ADJUSTMENT

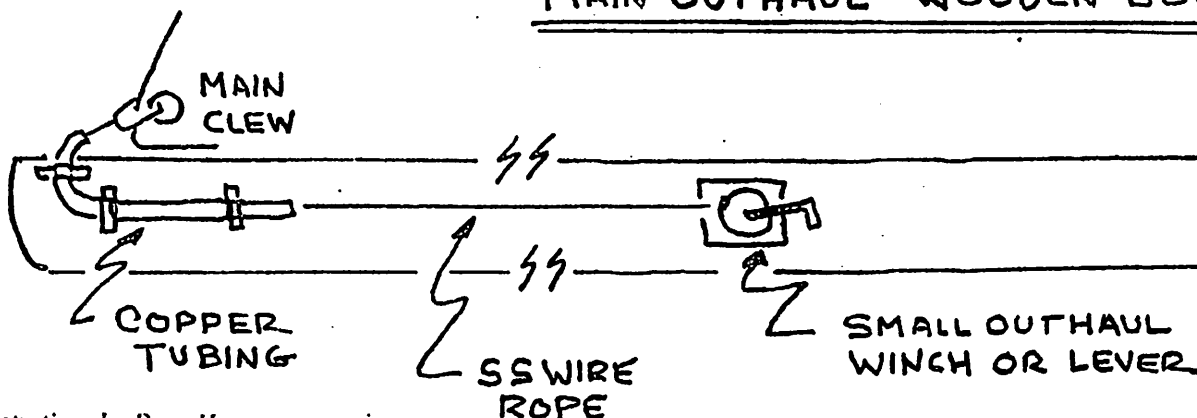
[TIGHTEN LUFF AS WIND INCREASES  
EASE OFF ON REACHES & DOWN WIND!]

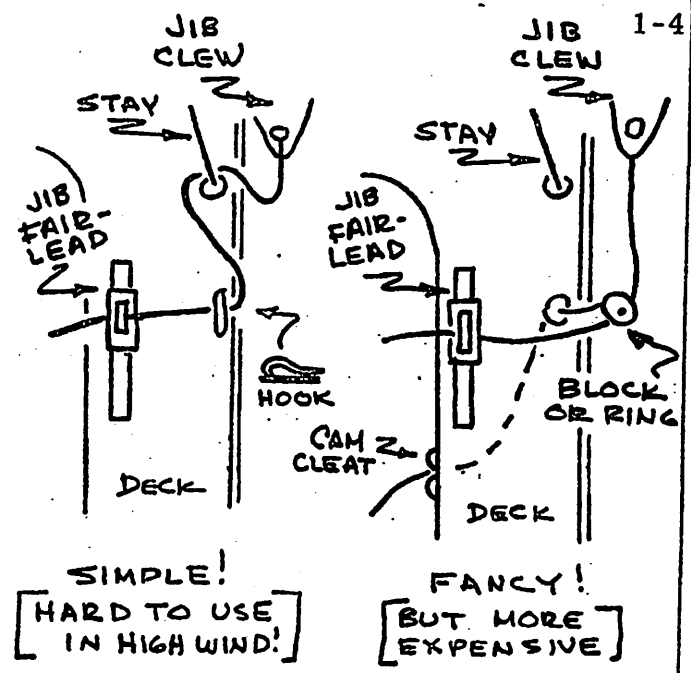
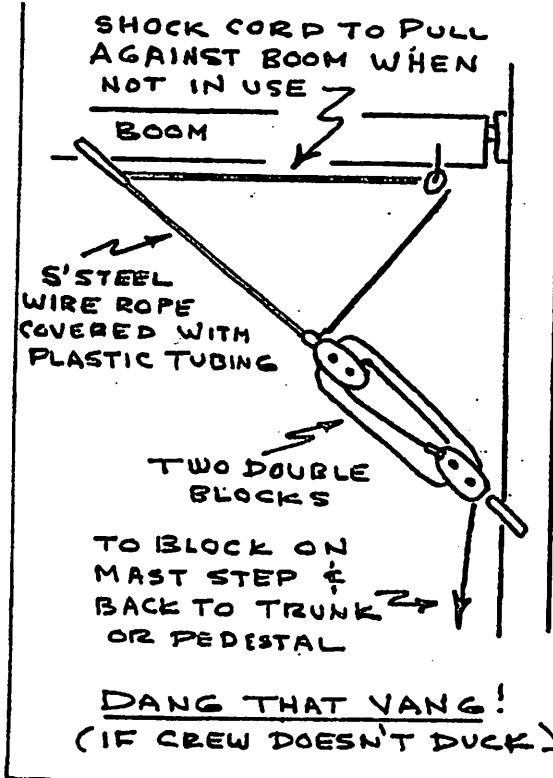
MAIN OUTHAUL - ALUMINUM BOOM



BLOCK AND LINES RUN INTERNALLY &  
OUT THRU SLOTS TO EXTERNAL  
LEVER AND JAM CLEAT.

MAIN OUTHAUL - WOODEN BOOM





**BARBER HAUL - TWO METHODS**

ally, you want less draft on a windward leg as this permits you to point higher. And a sail with more draft is a better shape for off the wind. Also, the more wind you have, the less draft you desire. For this reason, the outhaul has an adjustment to enable you to control draft for different ranges of wind. For example, you will want more draft going to windward in a drifter than when the wind is blowing 15 knots.

**CUNNINGHAM:** The primary purpose is to control the location of the draft. As the wind increases, the cloth stretches and draft moves aft. Putting tension on the luff brings the draft forward. In addition, it reduces the amount of draft.

There is a grommet in the mainsail at a maximum of 6 inches above the foot bolt rope and a maximum of 2 inches aft of the luff bolt rope. A line is passed through this grommet and thence to a cleat. Pulling the line puts tension on the luff. As a guideline, sufficient tension must be put on the Cunningham to remove the wrinkles which appear aft of the mast as the mast bends.

**FORE AND AFT PULLERS:** These two adjustments are attached to the mast by levers, drum or "magic boxes" and enable you to position the mast forward or aft. They are sometimes both applied at once to stabilize the mast in sloppy or confused water. This keeps the mast from flopping and spilling air from the sail. The mast is usually raked aft on reaches. There is disagreement among experts as to whether the mast should be forward or aft on runs. **ALWAYS REMEMBER TO TAKE THE FORE PULLER OFF BE-**

**FORE TRYING TO GO TO WINDWARD.**

When the wind is in the upper ranges, the mast will tend to bend too much and when it does, the mainsail turns inside out. Pulling the control line on the aft puller will correct this.

**TRAVELER:** The traveler is used at the back of the boom to control its position relative to the centerline of the boat. The traveler is usually a rope, although it may be wire or a metal rod. Adjustments are used to center the traveler without pulling it down. The general practice is to position the boom halfway between the centerline and the corner of the transom while going to windward.

In light winds, the traveler is allowed to go up, sometimes to the point of having the blocks touch. Tightening the traveler allows the boom to swing out. This helps to spill air without having to let out the mainsheet, helping to hold the boat flat in heavier winds.

**BARBER HAULERS:** The purpose is to get the jib further out and to open up the slot on a reach. Reaching hooks do the same thing but are not as handy. The jib sheet is let through the barber hauler ring just in front of the fairlead. In the case of hooks, the sheet can be led outside the shroud. In lighter winds, the crew can sit on the low side and hand hold the sheet effectively. In any case, remember that holding the boat flat is important, and sometimes it is difficult to retrieve a sheet that has been led outside the shrouds.

**JIB LUFF:** This is actually a Cunningham, and as in the mainsail, its purpose is to control draft location, as well as

amount of draft. A shackle is attached to a wire run through a grommet in the foot of the sail. It can be pulled tight and cleated. The control is slacked on the runs and reaches and pulled tight on the beats. The degree of tightness depends on the wind - the heavier the wind, the tighter the jib luff should be.

**SPREADERS:** The length and angle of the spreaders determines how much the mast will bend. Most spreaders are within a proper length for the mast but changing the angle will give you more or less bend. If you have a heavy crew, block the spreaders out by attaching shims to the mast where the spreader touches. Taping pennies to the mast where the spreader touches will reduce the bend.

**BOOM TRACK FOR MAIN SHEET BLOCK:** Some boats use this method to determine the amount of mast bend. The mainsheet block is mounted on a track and when the block is moved aft, it forces the boom into the mast and induces more bend. Less bend is achieved by moving the block forward.

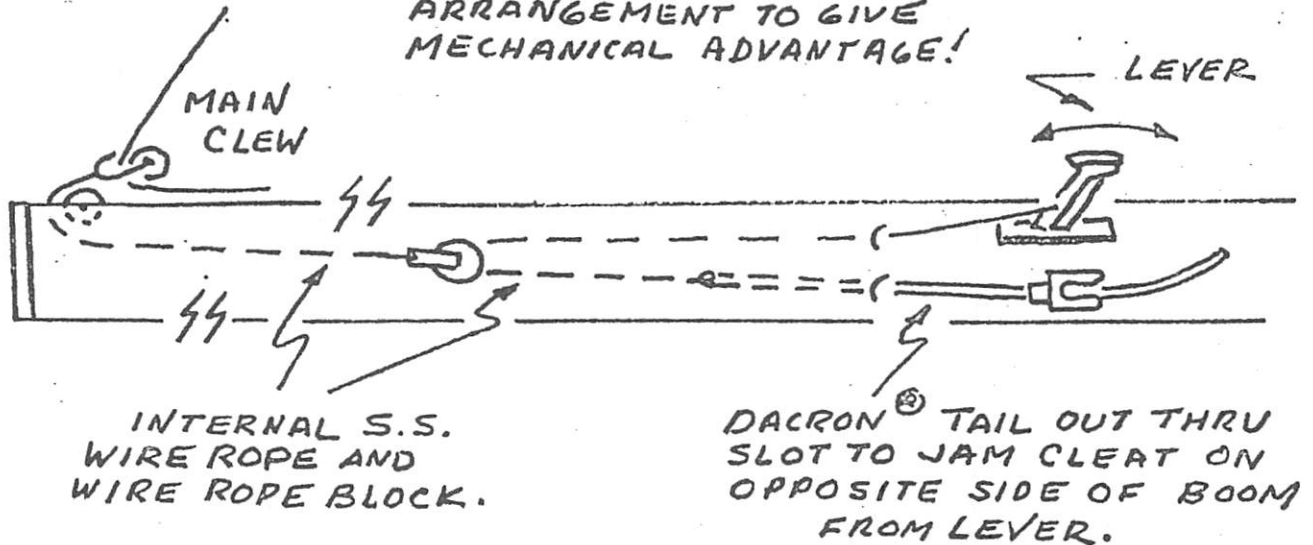
Many of the adjustments were developed as methods of allowing smaller crews to handle the boat better in heavier winds. The heavier crews use the same adjustments, but at different times. The most important thing is to keep the boat flat but it is better to hike harder than to spill air through adjustments.

Keep as many controls as possible near the center of the cockpit where you sit. You won't gain many first places by capsizing while hunting for the string that works the go-fast.

6/78

## MAIN OUTHAUL - ALUMINUM BOOM

DIFFERENT INTERNAL BLOCK  
ARRANGEMENT TO GIVE  
MECHANICAL ADVANTAGE!



INTERNAL S.S.  
WIRE ROPE AND  
WIRE ROPE BLOCK.

DACRON<sup>®</sup> TAIL OUT THRU  
SLOT TO JAM CLEAT ON  
OPPOSITE SIDE OF BOOM  
FROM LEVER.

NOTE: ALSO USABLE ON SOLID BOOM WITH EXTERNAL  
FITTINGS!

D.H.

THANKS TO MEANS DAVIS!

## RIGGING PRIMER (Continued)

*Editor's note: Means Davis has sent us the following contribution as an improvement on the suggested method for rigging the outhaul as printed in the April Primer. Please follow his example and send your own suggestions on rigging.*

The article "Primer on Rigging the Snipe," is a fine one and especially in its concept of acquainting new Snipers with their boats.

I would like to offer what I have found, after 20 years of sailing Snipes, to be the very best way to rig a boom.

This set up can be internal (preferred) or external. The jam cleat and lever should be placed forward on the boom to make them accessible when boom is out, as when on a run. (With all due respect the layout for the boom illustrated in the April issue of the BULLETIN, the way illustrated gives the outhaul no mechanical advantages - except it would take 2 times the effort to pull the dacron line through the jam cleat as diagrammed.)

Means Davis  
Fleet 330



Means Davis (Buzz Lamb photo)