J/105 NEWS

June 1992

Class Jib and Snuffer Stay. Genoa Becomes Local Option.

After two weeks of debate following a proposed rule change by J Boats dated 5/92, including the addition of a 150% roller furling genoa, a consensus was not evident on all matters, particularly the genoa. Arguments put forth included cost, need for more experienced and larger crew to handle in higher wind ranges, more complicated sail changes and concern with compromise of the boat's short-handed concept. Therefore, the proposed rule change on the genoa is dropped. Owners, of course, are free to add the genoa for cruising or PHRF racing in mixed fleets or as a local J/105 fleet option for light air areas. Installed genoa tracks are permitted under class rules as long as they are not used when racing one-design.

The genoa is effective: Last night we took on two J/35s and a Frers 33 in 6-7 knots of wind and finished 1st, beating the J/35s by 1:05 and 1:30 in a 4 mile windward/leeward "no-spinnaker" race. We were higher and faster upwind, equal when reaching at 90 apparent, and a bit faster wing & wing with the genoa.

Similar concern was raised with making the snuffer optional for racing in that this would virtually eliminate its use, because those wanting to use it may feel at some disadvantage with weight in the rig, less adjustability of the gennaker luff length, need for more agile crew, etc. Subsequently we've discovered that a simple sail tie or two solves the problem in heavy weather. There's no need to detach the system. A sail tie throttles the snuffer just above the cone while tying it into and forward of the bow pulpit away from the jib roller drum. Netting between the lower life line and a taut Kevlar or Dacron cord between the bases of the pulpit and first two stanchions helps. Sail ties with quick release knot at the bowcleat and/or shrouds keeps the sock in control and prevents it from filling with water. This means someone has to spend about 15 seconds on the bow in heavy weather to set and maybe 30 seconds to secure. No more than a conventional system.

The proposed "area" rule with a luff length limit for the asymmetric is incorporated in the Rules. Tight dimensions of the original rule type-cast the design and would put some chutes out of class due to normal stretch or shrinkage. Jumbo chutes are questionable. A deeper foot drags in the water at moderate heel angle; more area in the leech increases helm on a reach as the sail's center of effort is too far aft and the main has to be over-trimmed to avoid backwinding. Bigger is not faster with asymmetrics. This sail is always in a reach mode, so shape is more important than area. This new rule encourages development over time of the best all-round shape for the class within the 77 square meters area of the original.

A copy of the current class rules, dated 6/92 is attached for your information.

Tuning the J/105 Rig

So far so good, but we will continue to learn. To achieve about 3 inches of headstay sag in 12-14 knots of wind (a test set of checkstays only improved this by 1/2 inch with slower boat speed), the following tune was applied to J/105 #24 SANDPIPER.

1. Headstay length is standard with about 2.5 inches of thread showing under the Harken Drum with no toggles. Backstay was set up with toggle under the hydraulic cylinder to set the handle forward and release aft. Mast step bolts in middle of slots. No mast wedges in to start. Rake from the back of the mast to a weighted main halyard is 30" on the cabin top.

2. After connecting and taking up shrouds hand-taut to center the mast using the main halyard to equalize distance to the rail outboard of the chain plates, apply maximum backstay on cylinder to bend mast.

3. Tighten upper shrouds equally port and starboard with wrench as far as you dare without stripping threads.

4. Ditto for intermediates.

5. At this point, the front of the mast will be against the forward edge of the mast hole in the deck. Run a jib sheet around the front of the mast from one turning block to the other and winch back the mast to permit insertion of the forward mast wedge. Insert the remaining mast wedges. You will have to slice the back of the mast boot (collar) for this operation.

6. Tighten lowers hand-tight, being particularly sure that the mast is not inverted because the asymmetric spinnaker will make it even more so. In fact, be sure to leave your mast bent in heavy air by NOT releasing the backstay going downwind.

7. Double-check your handywork by looking up the backside and front side of the mast to be sure that it is straight from side-to-side.

8. Go sailing in 12-14 knot winds with max backstay. Take up on the leeward upper and intermediate by two full turns each with a wrench. Release backstay to intermediate position and take up on the leeward lower hand taut. Tack and repeat the process on the new leeward side.

9. Check the straightness and repeat the process making minor adjustments to leeward rigging only to correct.

This edition of J/105 NEWS is written by Bob Johnstone after launching US-24 SANDPIPER and attending FIGAWI Race Week in Hyannis and Nantucket over the Memorial Day Weekend - the highlight of which was sailing into the Nantucket Boat Basin in 25 knots of air doing 12 knots, snuffing the chute, spinning the boat under main and sailing back out.

PHRF Ratings

As of this moment the PHRF rating in Western Long Island Sound is 72 with 153% genoa and class asymmetric spinnaker on the J/Sprit. A 9 second per mile credit to 81 is given a J/105 racing with class jib. New England PHRF issued at 75 rating with 150% genoa. Use of a smaller jib would also earn a credit.

Light Air with the Class Jib

There's been some unfounded concern about the J/105s performance in light air with the class jib. It does move quite nicely.

Last week while harbor sailing in about 6-7 knots of air we were higher and faster than the 12 meter American Eagle which was sailing with a small jib also. In the Wednesday night, no spinnaker, series race of 4 miles in light air (nobody hiking, serving wine in the cockpit) we sailed with small jib and finished second behind a J/35 with genoa and about 2 minutes ahead of a well sailed Frers 33 with genoa.

What was interesting is that we sailed the race with the backstay loose to help headstay sag to power up the jib, but the main looked pretty bad and baggy with a tight leech because there was no way to get headstay sag and mast bend at the same time without a major mast re-tune. The most speed we saw was 5 knots upwind in 11 apparent. Fooling around after the race, I decided to make the main look perfect and forget the jib which had a good amount of round built in already. So I put on lots of backstay. PRESTO! The speed jumped to 6 knots with apparent wind at 11. Which means we gained a knot of speed in 1 knot less or air compared to the race. Maybe some fluky wind pattern existed to throw off the test, but you might try it. Unlike a masthead boat, where the jib is everything, a fractional rig requires better coordinated sail trim between jib and mainsail. Making the main look good at the cost of jib fullness seems to take precedent over making the jib look good at expense of the main. Another way to help the jib with a tight backstay is to ease the halyard somewhat.

"Most User-Friendly Boat"

The first two nights I slept straight through without waking up, feet aft in the V-Berth. It's so big you can lay down in any direction. Simply amazing. Best sleeping boat ever built! Then Mary, my better half, joined me Sunday night. I slept under the J/Sprit, and we managed a reasonable nights sleep in a rolling Northeaster.

Mary says, "The J/105 is the best and most user friendly boat we've done yet. The cockpit and dodger are superb. It's easy to steer, easy to get on and off of, easy to walk around on because there are no big jumps in levels from cockpit to seats to deck, has great non-skid, it works without much effort, the head has lots of space. The boat has real character and isn't pretentious in any way."

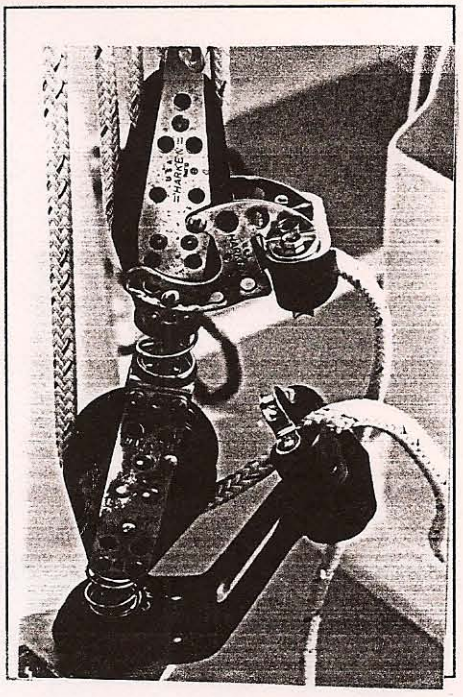
By way of affirmation, we sailed from Nantucket to Newport (70 miles) in 8.5 hours in a 25-32 knot Northeaster in 52 degrees temperature, the first hour being upwind with full main and rolled -up jib on the nose. Normally this would put a damper on sailing for a while. It had the opposite effect. Three of us arrived, all with wide grins and a sense of real accomplishment and joy, praising the boat.

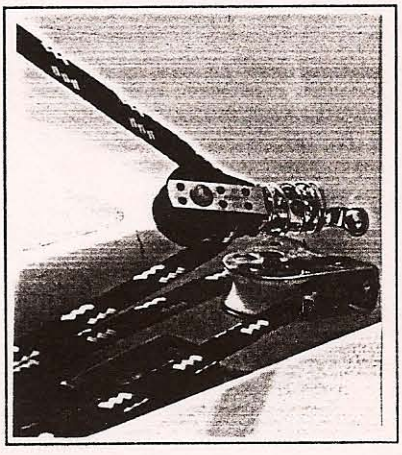
Small Improvements

J/105 owners will be receiving soon a package of hardware and fasteners courtesy of J Boats and Harken that will make sailing the J/105 a bit easier. Here is a listing and photos of where these items were located on SANDPIPER and where they will be located on J/105s starting with hull #51.

Main Cam Cleat - Currently , too low a cleating angle is required to be ergonomically comfortable. By inserting the large black spacer under the Harken cleat on the swivel arm, the cleating angle is raised about 15 degrees.

(optional) This view shows a 4:1 fine tune system in place above the "coarse" 6:1 power main sheet. So, you get a 24:1 power (4x6) adjustment of the main when sailing upwind.





Traveller Control Lead By running the tail of the traveller line through a Harken swivel bullet mounted with stand-up spring and eye strap just over the existing turning block on either side: (i) Anyone can pull from anywhere in the cockpit or behind the wheel to bring the car to weather after a tack, simultaneously cleating it. (ii) Cockpit cushions still sit over the block and line.

Snuff Control Cleats - This loose loop is now tied down in logical fashion by installing two Harken camcleats with eyestraps directly above and in line with the existing pole launching cleat on the starboard side of the cabin trunk. Snuffer UP is UP and DOWN is DOWN. Each time the pole goes in or out, it's necessary to apply or release tension.