F32 Newsletter

The Journal of the Freedom 32 Sailing Yacht Vol. 2 No. 5 May/June 1988

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F32 TO CONTINUE INDEPENDENT OF FREEDOM NEWSLETTER, AT LEAST FOR COMING YEAR

AND...IT'S RE-UP TIME AGAIN, GANG!

Editor-elect John Lease has announced that F32 will continue to publish without any connection to the Freedom Newsletter for at least another year. With FN still in the process of developing its mailing list, class editors and contributors, it was felt that any sort of semi-merge to gain cost efficiencies, etc. was premature. FN at this time plans to publish quarterly; F32 will continue to put out 6 issues a year, with a probable "gang-up" of 3 of the issues during 3-4 months in the winter and early spring. The possibility of FN and F32 associating to promote cost efficiency and eliminate duplicated efforts will be reexamined next year.

RE-UP cont p.2

CRUISE PACKAGES TO GO OUT LATE MARCH

F32's Pre-Rendezvous Long Island Sound Cruise, to take place from Saturday, July 9 to Friday, July 15 (start of the Freedom Rendezvous at Block Island), has drawn a lot of interest, starting with the first cruise meeting held January 30 in Newport (see last issue). The dates for both the cruise and the rendezvous now look firm, and Cruise Director Ian Morrison is assembling an information package that will be shortly sent out to all those who have expressed interest.

If you've not yet contacted Ian please do so now; his address and phone are 1 Curtis Road, Bristol, RI 02809; (401) 253-7036. Present commitments indicate about ten F32s, plus probable F29s and perhaps other Freedoms.

□

MYSTERY BOATS

SOME HAVE BECOME A MYSTERY- AND OTHERS ALWAYS HAVE BEEN

Springtime in a boatyard can be a fine time to strike up a conversation with another F32er- who may turn out to be owner of one of the "Mystery Boats" we've carried on our records since F32's start nearly two years ago.

While our success rate at tracking boats down has been phenomenally good, as reckoned by the survey percentages normally recorded in most such efforts, F32 has nevertheless been stymied by a small, stubborn batch of craft for which we have little or no reliable information, and can't seem to get any, despite the provision of fill-in forms and self addressed stamped envelopes to requestees. Our suspicion is that half or more of the these yachts have been sold to new owners who may be very interested in what F32 has to tell them- if only they could find out about us.

We want to learn about these boats- who owns them, where they are- whether their owners chose to subscribe, or not. Will you help? If a strange F32 is seen, try to find out about it, and let F32 know. Remember, the hull number is the last 3 digits of the 5 digit number within the serial number- and it's stamped into the stern of each boat. Find one of the "mystery boats" and you can help fill a hole in our data base, while probably doing the owner a big favor (F32), and giving yourself the opportunity of making a worthwhile new acquaintance.

MYSTERY cont p.4

Subscriptions

F32 is published every odd numbered month for a total of 6 issues/year. Subscriptions are $18.00 per year; additional subscriptions mailed to crew (owner must pay) are $15.00 per year. A subscription form is part of the last page of this newsletter; please supply data for crew subscriptions on a separate sheet.

The Freedom 32 Newsletter ("F32") was inspired by the interest demonstrated at the Freedom Rendezvous held at Newport in June 1986, and by the obvious benefits that would be gained by the exchange of information between owners concerning the maintenance and operation of the boats. F32's prime mission is the publication, in detail, of information concerning the correction of deficiencies and the institution of improvements to F32s, and will rely primarily on reader supplied articles and information in this area. It will also carry articles on the operation of boat systems, the cruising and racing of F32's, social events, raftups, factory advisories, interviews, owner profiles, classified ads, and anything else deemed of specific interest to F32 owners and crews. All F32 author and editorial efforts are unpaid. Break-even revenues equal approximately 70 paid subscriptions, so your support as a subscriber is solicited and greatly appreciated. Direct operating costs include appromixately 70 complimentary copies to be sent to major yachting magazines, Tillotson-Pearson Corporation, and other organizations worth lobbying.

F32 will solicit the advice and assistance of Tillotson-Pearson, Inc. ("TPI") as appropriate, and plans on a constructive and mutually advantageous relationship with TPI. F32 is however an independent publication of F32 owners and its statements and opinions are not necessarily those of TPI unless specifically attributed. While every effort is made to ensure accuracy, F32, its editor, and contributors are to be held harmless from the consequences of inaccuracies of content.

RE-UP from p.1

Meanwhile, your continued support of F32 is strongly encouraged and requested. A list of subscribers coming up for renewal is found on p.3. If your name is there please get out the checkbook. Among the many subjects planned for F32 in the coming months are:

o The Bierig Camber Spar jib- how it's made, how it works, how its performance differs from conventional jibs.

o Mainsail Design and Construction conversations with F32 mainsail designers and crafters. Will include the different approaches to batten pocket design.

o Heavy Weather Spinnaker Handling a look at possible methods to ensure getting the chute down in one piece when the wind's trying to blow your ha off.

o Halyards- rope characteristics, splice techniques, recommendations for maintenance and wear prevention. We have our own expert: F32er Herb Repass president of New England Ropes.

o Plus More. Got that checkbook out yet? See p.3.

SILICONE TO BE TRIED FOR CABIN WINDOW SEALING

In my latest conversation with Kurt Spaugh he raised some interesting thoughts concerning the sealing of the cabin windows, "The factory's practice and advice notwithstanding, I don't believe I think much of the use of 3M 5200 for sealing the windows- at least not here in Florida, where the hot summer sun is hardening and caking the 5200, particularly at the top of the windows. And it's terrible stuff to work with". Spaugh feels that UV resistant silicone will do a better job, and plans to redo some windows with it when his life calms down a bit. Stay tuned.

SUBSCRIPTION RENEWALS

The following subscriptions run out with the issue shown. Please write your check now, while you're being reminded!

Robarts- March (overdue)
Riedel- May

July 1988 is last issue:

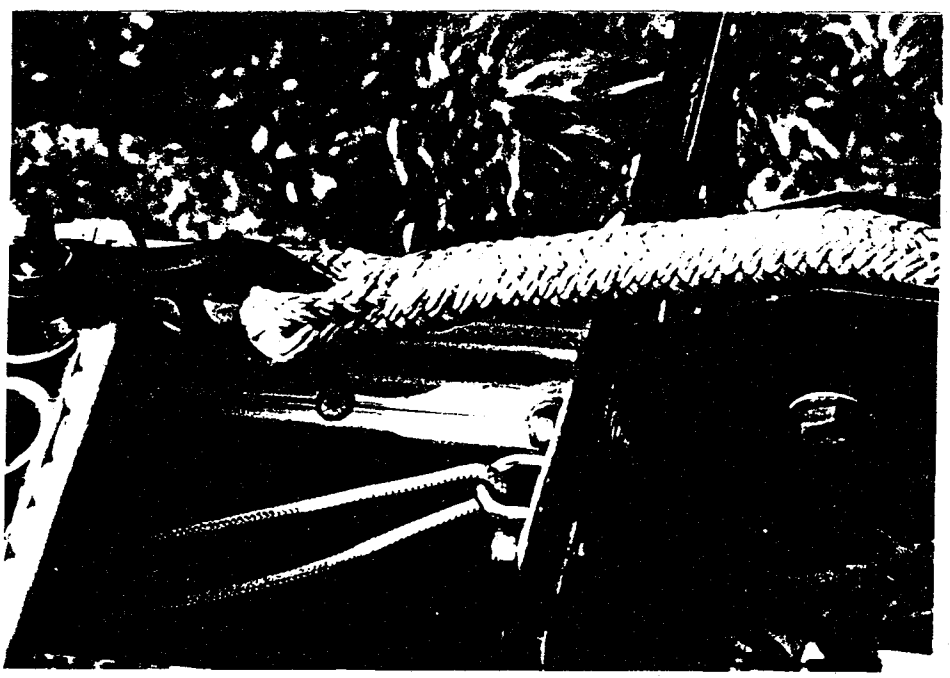
Barton
Belshe
Bentley
Blanken
Brown
Bruestle
Cain
Chesnut
Cook
Corser
Debacher
Deering
Dunn
Farrell
Finch
Germain
Greene/Jansen
Guptil
Haberstock
Hafken
Hansen
Hardy
Hickey
Hitchcock
Horn
Horwitz
Hoyt
Jinishian
Koch
Lease
Lichtenstein
Lion, Jr
Lopata
Marchetti
Marlin
Marsiglia
McCrea
Montgomery
Morrison
Mouligne, J-P.
Mouligne, P.
Mynahan
Oakeley
Pearlman
Phelps
Pizette
Repass
Rickard
Robins
Roettger
Schubert, Jr
Serfustini
Siegel
Taylor
Todd
Walcoff
Webster
Wiegel
Weinstein

Sept 1988 is last issue:

Atwater
Barbieri
Descoteau
Hanshaw
Knudsen
Rolt
Spaugh

FUEL TANK INTAKE RETROFIT

While checking with Aluminum Fabricated Products, makers of the F32s fuel tank, for the recommended size and type of pipe to use on the revised fuel intake, we found that they had a replacement pipe installation kit available. This would be installed beside the inspection cover rather than in it, as the pipe tested was done. F32 is awaiting receival of the hardware for evaluation.



Why halyards wear fast: posed shot shows splice jammed up over sheave and rubbing on sharp edge of sheave box when sail is downwind. Top of sail shouldn't get closer than 12" from truck in order to avoid this (see Spring Checklist). Headboard courtesy of Doyle Sails, Marblehead.

MYSTERY BOATS from p.1

Here is F32's Mystery Boat list, with the hardest cases shown first:

#3 Originally owned and raced in the Neuse River, NC, by Jeff Wygand. Rumored to be in Annapolis. Probably new owner.

#69 Sold by American Yacht Sales (moved; defunct?) out of either Houston or Florida. No other information.

#78 Sailing Ships International, Johns Island, SC thinks they sold this boat. But they don't know to who.

#95 Sold by Windward Marine, Wayzata, MN last year. They won't say who bought it.

#0 Sold to David Lucyk, Mt. Sinai NY. No inquiries answered; non returned by PO (this is situation with several of the following). Sold?

#s 12,16,17. Sold to Freedom Charters, now defunct, of St Thomas, USVI. Perhaps operated by Distinctive Yacht Charters, Red Hook Bay, St Thomas. Sold to private parties?

#14 Sold by HCH, Seattle, to Linda Harker, Whittier, Alaska. Most recent address is Cougar, WA. Boat still in Alaska?

#19 Sold to Set Sail Yacht Charters, San Diego. For sale last year by David Franklin, San Diego. Sold to- ?

#22 Sold to Stanley Pearlman, Manchester, CT. Resold?

#23 Sold to Bob Berger, Oyster Bay, NY. Ditto-?

#52 ALWAYS, reported sold by Jeff Aronsohn last year. Was sailed out of Navy Point, Lake Ontario.

#63 LA DIFFERENC, sold last year by Bill Christman. Portsmouth RI area probable. New owner-?

#72 Sold to Ralph Smalley of Alexandria, VA. Boat based Grasonville, MD-? Sold?

#76 Sold to Gerald Wyckoff, Rye Brook NY. Resold?

#77 Sold to Gary Rosser, Miami FL

#81 Sold to Anne Salerno, Hillsborough Beach, FL. Reported for sale last year- ?

#87 Rumored for sale at Navy Point Lake Ontario, by Jeff Aronsohn (who owned 2 F32s).

#90 Sold last year by Jane Huling. Lake St Clair, MI. (Damaged boat, perhaps sold to a yard).

SPAUGH TESTS OUT WATER PRIMING TRICK; SURGE TANK INSTALLATION AWAITS EASING OF WORK SCHEDULE

F32's Florida Engineering Dept., Kurt Spaugh, has been up to his ears- to the tune of 70 hours a week- at his job with Motorola. So the surge tank installation has had to wait for a bit. But he did have occasion to try out NH dealer John Nimphius' advice on getting the water system to prime (F32, Nov 87). "We're still living on the boat, until we pass papers on the house" he said. "Last week they were doing some work here at the marina and had to shut off the city water, which we're usually hooked into. So I filled the tanks, opened a faucet, and as usual the pump chattered away with no water appearing. It was time to try pinching off the hose to the galley hand pump, which I located up under the sink on my second try. I gave it a good sqeeze, and GUSH! water was roaring out of the faucet. It came, as advertised, faster than I could have said "Paul Petronello". That Nimphius wasn't whistling Dixie. Now I'm looking for a Raritan RCV one-way valve to install in that hose, as he recommended".

NEW OWNERS AND SUBSCRIBERS

The folks following have joined the select ranks of Freedom owners since publication of the Spotter's Guide last May. Welcome aboard!

Owner-Subscribers:

Robert & JoAnn Brown Quarters M-11, US Naval Base Charleston, SC 29408	F32 #125, new boat from TPI, CARINA, 4-11 draft, white hull, grey deck, blue dodger, solid prop, RWB spin, stern Niantic, CT, actual Charleston
Harold & Eileen Horwitz 57 Hazard Ave, Prov., RI 02906 & Jay & Carol Marlin 80 Washington St, Leominster, MA 01543	F32 #79, ex-ZERUAH (Ethan Hoag, East Boston, MA), same name, 6' draft, white hull, white deck, blue dodger, solid prop, RWB spin, stern & actual Padanaram, MA, New Bedford YC
Seymour Pizette & Karen Sather 9 Hiram Road Framingham, MA 01701	F32 #85, ex-SLOOP DU JOUR (Patrick Mouligne, Portsmouth, RI), now IMPETUOUS, 6' draft, grey hull, grey deck, blue dodger, folder, red spin, stern Boston, actual Portsmouth, RI
Al & Rosemarie Marsiglia 55 Normandy Drive Northport, NY 11768	F32 #4, ex Donald Mains, INFINITY, 6' draft, white hull, blue deck, RWB spin.
Paul Descoteau 14 Beach Avenue Saco, ME 04072	F32 #2 ECLIPSE (ex Gordon Hand, Concord, NH), same name, stern Bow, NH, actual Saco, ME
John & Juliet Cain 152 East Rocks Road Norwalk, CT 06851	F29 #10 BARNACLE BILL, stern and actual Rowayton, CT
Bill & Diane Matthes 33 Maple Street Stratford, CT 06497	F29 #16 LE CHAT BLANC, deep draft, white hull, grey deck, white dodger, rainbow spin, stern Stratford CT, actual Milford, CT
Paul & Kathy Reidel 3201 Ramada Highland, MI 48031	F29 #20 MAKIN TIME
Larry Lichtenstein 5848 Dempster Street Morton Grove, IL 60053	F29 #24 NINE LIVES, stern Libertyville IL, actual Waukegan, IL
William & Janice Robarts 860 Maple Hill Road Guilford, CT 06437	F28 #31 JOHN STUART, stern & actual Guilford, CT
Stub & Nan Webster 5 Spindrift Way Annapolis, MD 21403	F36 #77 FINALE, stern & actual Annapolis, MD
Patrick & Chris Mouligne 97 Bayside Avenue Portsmouth, RI 02809	F44 #15 (change of boat)

OWNERS cont p.6

Owners: (cont from p.5)

Joseph D. Lofink RFD 3 Box 1A Carthage, NY 13619	F32 #49 RUNNING FREE (ex LeRoy Horn, Prior Lake, MN), 4-11 draft, ivory hull, ivory deck, maroon dodger, solid prop, same name
William & Laurie Barney 191 High Street Peacedale, RI 02883	F32 #82 (ex WILD TURKEY, Stub Webster Annapolis, MD), same name, 6' draft, white hull, grey & white deck, solid prop, blue & white spin, blue dodger stern Baltimore, actual Dutch Harbor Jamestown, RI
John Carney 12 Arrowhead Drive Paxton, MA 01612	F32 #55 (ex John Emmerson, Avon, CT)

If information on your boat is missing we would greatly appreciate receiving it. Drop a card, or call (617) 944-8158.

Non-Owner Subscribers (since beginning, now active):

David Barton, Birmingham, MI	Crew on #80 WHIM, W C Schubert Jr.
Gordon Bruestle, Cincinatti, OH	Crew on #1 ABU DAI, Bruz Roettger.
Alan Cook, Overland Park, KS	Interested in F32
Garry Hoyt, Newport, RI	F32 Designer
T. Leigh Montgomery, Orlando, FL	Interested in F32
J.P. Mouligne, Bristol, RI	Crew on F44 #15, P. Mouligne.
Sir John Oakeley, Southampton UK	Mfr of "F33" - British F32.
J.M. O'Donnell, Charleston, WV	Crew on #1 ABU DAI, Bruz Roettger.
Robin Sullivan, Cambridge, MA	Crew on #26 ILLUSION, Pam Rickard.

SCUTTLEBUTT

Haarstick Sailmakers, builder of more Freedom sails than any other we know of, has opened a new loft at 606 Ten Rod Road (P.O. Box 295), Wickford RI 02852; (401) 294-3626. This move should facilitate service work for present coastal Haarstick owners, and puts Haarstick right at the center of the major part of east coast Freedom sales.

On the dirty heat exchanger front, the latest word from Pat Donovan (Mack Boring, Braintree MA) is that industrial strength toilet bowl cleaner does a wonderful job of shaping up the exchanger (remove it from the engine first). Upon reflection, it sounds most logical! Pat also mentioned that antifreezes containing silicone and stop-leak additives can gum up when operated very hot, and are of no use in radiator-less engines anyway.

Garry Hoyt's latest Gun Mount based spinnaker system is the Spinn Furl, first shown at the Newport Show by Hall Spars, and pictured here last issue. Spinn Furl rolls up like a roller furling genoa, but is quite flat- and my sailmaker friends tell me that a good deal of a chute's power is in its fullness. At any rate, F32 will continue to attempt to refine the present system with the development of a slippery, steamlined chute to help grease the spinnaker's journey back into its "sock". Some of the F25s had these. Work on the mold should start in April, and we hope to have the "chute" mounted on Indo for the Rendezvous.

SPRING IS HERE- AND IT'S TIME TO "LISTEN UP" TO THESE IMPORTANT, EMERGING CHECK ITEMS

As the F32 fleet matures, a few problems have come to light that were not previously experienced. Be sure to check your boat for the possible incidence of these conditions, a couple of which may be prevalent- and expensive. Fix now, and beat the rush!

- MUST: Propellor Shaft Bonding. Examine and/or electrically measure the connection between the bonding wire and the stuffing box. This wire has corroded away on some boats; developed high resistance on others. In either case the shaft is no longer protected from corrosion by the boat's bonding system. This "floating" shaft has already caused the ruination of one propellor. Tipoff: Shaft zincs disappear in weeks. Fix: Renew or clean up connection. Tinning the wire is advised. Measure cleaned joint with ohmmeter; resistance should be zero. Up to 500 ohms resistance has been measured. Check yearly- other bond connections, too. (From Peter McCrea, John Lease. See Lease' description of correcting this problem in LETTERS).

- ADVISED: Propellor Shaft Strut. Grab and shake for looseness. If loose reinstall bolts with Loctite and/or lock nuts (see Jan '88 p.10). Also- check bonding (see above).

- ADVISED: Main Halyard. Several halyards have worn badly; some have failed- always near or on shackle splice. Reason: Luffs stretching; sails being raised higher, splice now wearing on sharp sheave box edges when downwind, and is being loaded by never getting off the sheave. Fixes: File the sharp edges on the sheave box (see pictures). Install Cunningham in main, keep it pulled down a bit. (From John Lease, Patrick Mouligne, Peter McCrea, others).

- ADVISED: Jibstay. Check at both top and bottom for broken strands adjacent to swage. Use PVC pipe over lower end to alleviate bending load when sail is down. If renewing stay, toggling at both ends is probably a good idea. (From Bruce Hanshaw #51 Sequoyah, Kent Narrows, MD; also McCrea. F32 July '87, p.6).

- ADVISED: Steering Gear Maintenance & Adjustment. You stand on your head to oil and adjust all that stuff every spring, right? Sure you do. This year, use Edson's maintenance sheet and do it, so that the steering shaft doesn't start galling in the pedestal, etc. Some boats are going into their 6th season- ! Touch up the rudderpost stuffing box, too. (From Don Phelps, #42 Schizanthus, Rochester,NY).

- FYI: Gun Mount. We've had our first report of a Gun Mount breaking off. The mounting stud failed. But it's on a high mileage craft in which the chute was frequently carried unbalanced (McCrea). Indo's Gun Mount was removed, checked, magnaglo'd and shot peened; it was fine (3 seasons). FYI.

- Other Spring Improvement Ideas: Seal up cabin windows (see May '87), One-way valve in hand pump line (Sept & Nov '87), Surge tank, and water heater valves for overheating (Sept '87), Mast wedging (this issue), Fuel tank inlet pipe (now working on getting kits).

CONDENSED EDSON PEDESTAL MAINTENANCE GUIDE

This guide has been prepared to assist you in the proper maintenance of your Edson Steering System. To properly maintain the moving parts in the top of the pedestal, it is necessary to remove the compass and its cylinder. For proper alignment when re-installing the compass, we recommend placing 3 or 4 lengths of tape on the pedestal and compass as shown below. Slit the tape when removing compass, align the strips of tape when re-installing the compass for visual compass re-alignment Your compass MUST then be checked for accuracy.

Lubrication of needle bearings should be done by squeezing Edson Fig. #827 Teflon Lubricant into the holes located on top of the bearing housings inside the pedestal bowl. Spin the wheel when squeezing the lubricant in to make sure the entire bearing is serviced. Winch grease or water pump grease can be used as an alternative, but don't let the bearings run dry. Do not over grease as it will run onto the brake pads. Oil the chain with #30 weight motor oil. Do not grease chain as it does not penetrate the links.

Inspect the condition of the wire, tension of the wire and lightly oil. Edson recommends placing about 5 layers of "Kleenex" on the palm of your hand, squirt oil on the tissues and lightly oil the wire. This will lubricate the strands but will also "flag" a broken or hooked strand by tearing off a small section of tissue. If you do have a wire break, replace the wire immediately. See Edson Fig. 885 Wire Rope Replacement Kit. (Caution: Wire splinters can cause painful cuts.) Replace the wire after 5 years. If still good, keep the old wire on board as a spare.

To check for proper wire tension, lock the wheel in position by using the pedestal brake, or by tying off the wheel. Cable tension is best when you cannot move the quadrant or drive wheel by hand with the wheel locked in place. Over tightening will greatly reduce the sensitivity of the system.

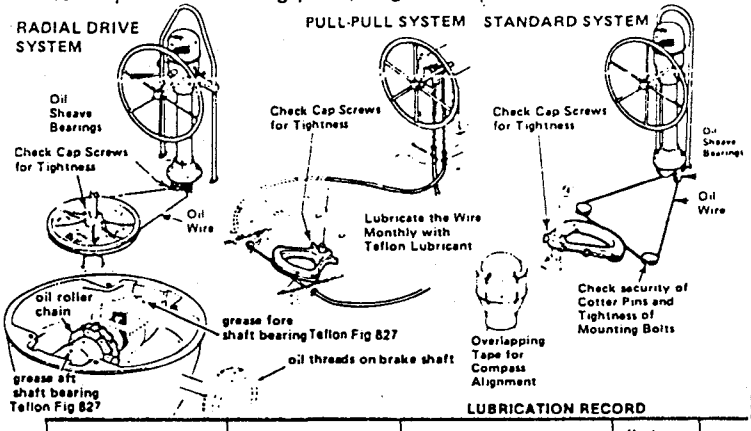
It must be emphasized that all on board must be familiar with the care and operation of the Steering System and engine controls. One person must be assigned the job of maintenance and must be thoroughly familiar with the operation and intent of all the equipment. If at any time your Steering System makes strange noises or reacts differently than it has previously, you must find the causes immediately and correct the problem.

Screws, nuts, bolts as well as clevis and cotter pins that are part of the steering system, engine controls, or pedestal accessories must be checked regularly for tightness and wear. Failure to inspect all steering parts, engine controls and pedestal accessories may cause loss of control or failure of the engine or steering system. *All boats must have an emergency tiller or its equivalent and all on board must be familiar with its location and operation. An emergency tiller drill is just as important as a man-overboard drill and must be regularly conducted.*

On a new boat and at least once a year, inspect the system when under a strong load. On a calm day and under power, go away from the other boats and with the person who is assigned the maintenance watching from below, put the wheel hard over at full throttle. The maintenance man should watch carefully for all parts of the system bending, distorting, creaking, or giving any indication of failing if placed under a heavy load for a period of time. If for any reason, something did fail or needs adjusting the day is early and you will have plenty of time.

When leaving your boat at her mooring or slip, make sure that your Edson wheel brake is tight or that your wheel is properly tied off. DO NOT LEAVE THE STEERING SYSTEM TO FREE WHEEL.

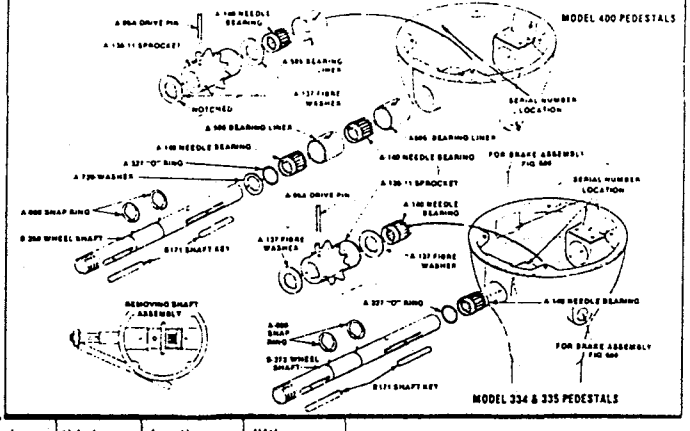
The pedestal exterior should be cleaned with detergent and water, do not use acetone and/or any other strong solvents as they may damage the finish. Edson will be pleased to assist you. Call us or write us if we can help.



PEDESTAL SHAFT DISASSEMBLY INSTRUCTIONS

1. With the wheel and brake assembly removed, replace the wheel nut with any standard thread 3/4" or 1" hex nut.
2. Loosen the steering cables and chain by backing off the take-up eyes at the quadrant or radial drive, lift the chain off the sprocket and tie to the forward part of the bowl.
3. Align the notch in the aft fibre washer with "V" stamped on the sprocket.
4. Carefully drive the pin out of the sprocket (drive from the round end toward the grooved end).
5. With a piece of wood against the hex nut, gently tap the wheel shaft from the housing, see illustration below. Be careful not to drop the shaft components into the pedestal.
6. Remove sprocket, two fibre washers and forward needle bearing.
7. Wipe out any dirt or old grease before reassembly.

To reassemble reverse the above procedure do not grease the bearings until reassembly is completed.
You must check your compass for possible re-alignment or re-compensation.
Note: Check any electric wiring within the pedestal with an OHM meter to be certain the polarity is correct.



LUBRICATION RECORD

component	lubricant	schedule	first year 19__	second year 19__	third year 19__	fourth year 19__	fifth year 19__
sheave bearings	#30 oil*	check and oil monthly					
pull-pull cables	Teflon Fig 827	check and grease monthly					
wire rope	#30 oil*	check and oil annually					
roller chain	#30 oil*	check and oil annually					
pedestal shaft bearings	Teflon Fig 827	check and grease annually					

*Any light oil is suitable. We recommend #30 weight motor oil since most boat owners have it aboard

Caution: 1.) On extended voyages your steering system should be inspected each day and lubricated weekly. Carefully inspect your steering system at least one week before a vacation cruise to avoid last minute maintenance.
2.) When the boat is unattended secure the wheel with the brake or a line. In rough weather the rudder can swing violently from stop to stop causing damage.

For complete maintenance information please contact
Edson International
460 Industrial Park Road
New Bedford, Mass. 02745
Telephone (617) 995-9711

TIGHT PARTNERS WEDGE INSTALLATION PREVENTS MAST TWIST, PROMOTES DRY BOAT

West Coast Skipper Details Proper Methods for Solid Spar Fit

R.R.Baldwin, Saratoga, CA (#48 Trillion, Alameda)

I have enjoyed very much reading the articles in F32, and would like to contribute the story of my experiences installing the mast partners wedge. I believe that the proper execution of this task is extremely important on any boat with a round, unstayed mast. The task involves more than just ensuring that the mast is watertight where it passes through the cabin top; it must also be done correctly as it is an important part of the structural support of the mast, and appears to be a major factor in controlling mast twisting.

Most boats initially have their masts installed by the selling dealer, who usually commissions the boat. After that there may be boatyards or the owner doing the job. I believe that many mast installers do not understand what is required for a proper mast wedging job. Fortunately it is a simple matter for a boat owner to check and correct if necessary, as my own story will show.

Shortly after I bought my boat I noticed that the mast leaked water where it passed through the cabin top. I tried recaulking between the mast and the collar with silicone but this proved only a temporary cure, since the mast eventually leaked again. I blamed this at the time on an indifferent caulking job. The next thing I noticed was that after sailing in a stiff breeze one day the mast appeared to have rotated slightly. I estimated the rotation at about two or three degrees- just enough to be noticeable, if you looked for it. The final clue came when I had the boat out in a dead calm. We were rolling around in the swell waiting for some wind when I went below and heard a noise coming from the forward cabin. I investigated and discovered that the mast was moving back and forth about an eighth of an inch where it went through the overhead in the forward cabin! Something was definitely wrong.

I called TPI and explained the symptoms, expressing concern that the mast was not correctly installed, and asked their opinion. TPI was extremely helpful. After hearing my story they agreed that the mast could indeed have been poorly installed, and told me in detail how to check the partners wedge and redo it if necessary. I followed their advice, discovered that the wedge had not been properly installed, redid it myself, and solved the problem. I would like to pass on what I learned during the process in case someone else experiences similar problems.

The partners wedge is a piece of special polyurethane material obtained from TPI. It is jammed between the mast and the hole in the cabin top as shown in Figure 1. It can be inspected by unbolting and raising the aluminum collar that surrounds the mast. It is important that the wedge extends at least 3/4 of the way around the mast, and it must be jammed in tight.If it can be pried out with a screwdriver it should be replaced. (When I tried this, one piece fell down onto the cabin sole as soon as I touched it). The material can be ordered from TPI and is quite reasonable in price. It is supplied oversize in both width and thickness, and must be ground down using a belt sander with a medium grit belt.

WEDGE cont p.10

WEDGE from p.9

Before wedging the material between the mast and the cabin top the mast, cabin top hole and wedge must be liberally lubricated with either 30 weight oil or liquid detergent. I used the latter since it is easier to clean up. The wedge is then driven in using a block of wood and a three pound sledgehammer. One may want to temporarily tape the mast to protect it from sideswipes of the hammer. If you can bang in the wedge with anything less than a 3 pounder the wedge is too thin and you will have to begin again with new wedge material. Alternatively, you can add thin plastic "shim stock" beside the wedge to increase its effective thickness,but it's preferable to initially shape the wedge correctly. You should be just barely able to drive in the wedge using the wood block and sledge.

The process really isn't as violent as it sounds, but it is very fussy. I would like to say that the whole job can be done in a few minutes, but adjusting the thickness and installing the wedge alone took me over an hour. It is very important when grinding down the thickness of the wedge material to remove only a small amount at a time. I tested its thickness by attempting to drive it in on opposite sides of the mast. Only after I was absolutely convinced that I could not do so would I grind off more material. When I finally did drive it in I would have sworn that it was way too thick; but remember that it is quite rubbery and will squeeze into a much smaller space than you might think. Although it appeared at first that I had barely enough material to extend around 3/4 of the mast's circumference, I discovered that after it was driven in it extended nearly all the way around, with less than a 1/2" gap.

After cleaning up liquid detergent everywhere I began recaulking the mast. I used clear silicone which can be obtained in a cartridge which fits a standard size caulking gun. My philosophy on caulking is that if a little bit is good, then a lot is better- you can't use too much silicone. I ran two generous beads around the mast on top of the wedge material so that I had a ring of silicone about 1" wide and 1/2" high. I then bolted the collar back in place, which caused the silicone to be squeezed out all around the base of the collar. Then I recaulked between the mast and the collar. After cleaning up excess silicone (I had used nearly the entire cartridge) I left the boat alone for a week. TPI recommends a wait of at least 3 days before sailing the boat in order to allow sufficient time for the silicone to cure.

This was done in July 1985 and I have had no mast related problems since.

In conclusion I would like to express the opinion that inadequate mast wedge installations may be at least in part responsible for the mast twisting problem. The wedge material, properly installed, acts as a very stiff spring, in torsion, between the mast and the cabin top. If a torque is applied to the mast the material will allow it to twist a very small amount, but when the torque is removed the mast will return to its original position (assuming, of course, that the mast does not slip relative to the wedge). Whether or not slippage occurs depends upon how tightly the mast has been wedged.

So, to make a long story short, I would advise anyone concerned about their mast to check the wedge and redo if necessary. It doesn't cost much and you don't have to unstep the mast to do it. I can't promise that this will solve all problems, but it can't hurt, right?

□

(Further comments next page -Ed.)

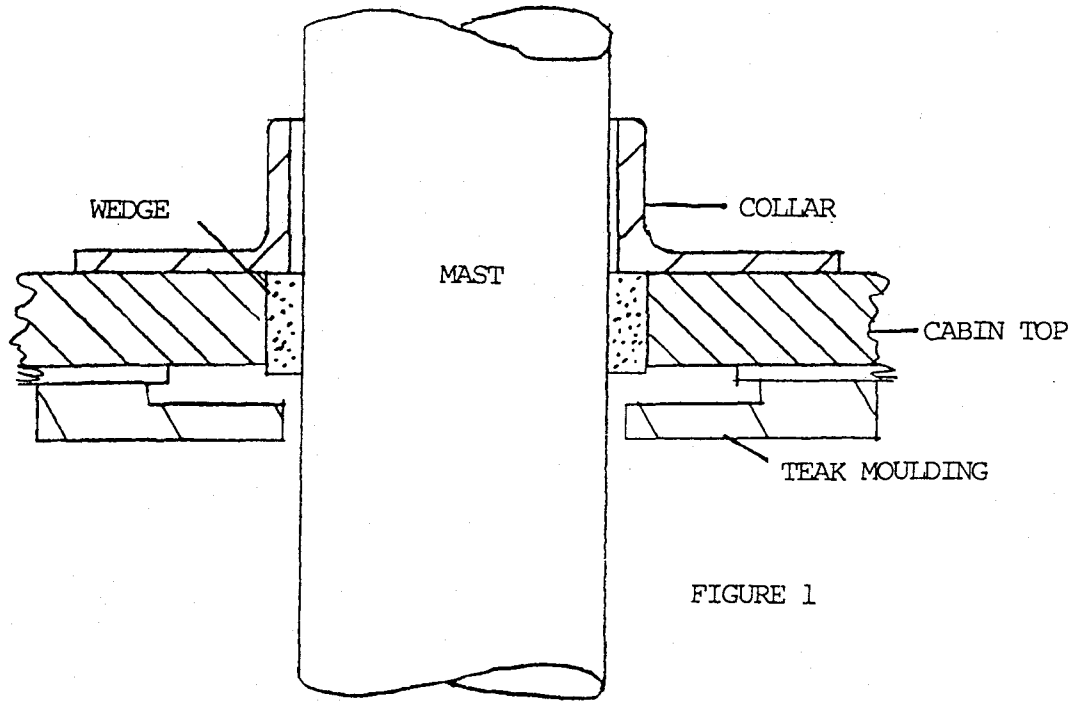


FIGURE 1

Editor's Comments: The foregoing mast wedging article by R.R.Baldwin is a most welcome treatise on an operation that many Freedom owners- and not a few dealers, we think- are unclear on. F32 knew next to nothing on the subject, having reinstalled the mast once since launch, without knowing much (nor having the time to think about) what we were doing. Mr. Baldwin's efforts triggered phone conversations (and a review of the article) with TPI's Customer Service Manager Mark Edwards, plus calls to F32ers who annually install their masts to get the benefit of their experiences, such as editor-elect John Lease. And we thought, and thought, about about the mechanics of the job and what it should really accomplish. The following observations are the result:

- Some readers may have noticed that Mr. Baldwin made no mention of supporting the mast with a crane while the re-wedging was done. A phone call confirmed that he had indeed not used any crane. While I found this surprising, a subsequent conversation with Mark Edwards revealed that working on the partners wedge without mast support was common practice and posed no particular difficulty. In fact, he stated that boats are frequently moved within the yard without full support in place at the partners. The small amount of mast tilt experienced is evidently not enough to make it difficult to move the 450 lb mast around in the partners hole. Also, tightening the forestay the proper amount will pull the mast forward from contact with the after end of the partners hole. It can then be moved laterally with relative ease. Leave a wood wedge in to keep wind from banging the mast around when it's not being worked on.

- Mark did endorse the idea of eyeballing the mast before and during the wedging process to check that it is vertical in both front and side views. A carpenter's level will be of use here to confirm the eye, and ensure that the boat is level. The advisability of doing this appears

COMMENTS cont p.12

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to confirm reports that some mast steps are not concentric with the partners hole. If this is the case the correct wedging will not be even around the mast.

• The mast wedge is a 36" piece of stretchy, rubbery polyurethane. Its rectangular cross section measures 1 1/4" high by 1" thick. The Freedom part no. is 25972, it costs $35.00, and can be obtained from Don Senecal, the Freedom Customer Service representative (Freedom Yachts, Box 328, Warren RI 02885). Don's number is (401) 247-1050. He's personable, accomodating, and very busy.

• It appears most important that the mast be pointed dead forward when the wedging job is started, and that wedging be done in even increments on each side of the mast in order to keep from twisting the mast as the wedge material elongates around it.

• Baldwin used a belt sander to put the initial taper on his wedge, and also to successively thin it until it just barely fit. A band saw can also be used for this task, as well as a hand held or fixed disc grinder. The mast installation should be checked for concentricity right off (mast straight all around while temporarily centered in the partners hole?), as this affects whether the wedge should be evenly trimmed all the way around or not. It's also desirable to leave the wedge's vertical dimension untrimmed in order to get maximum bearing area on the mast.

• Most installations use a single wedge, bent around the mast. Some have been done after cutting the wedge in two; probably to make handling easier. Many F32s were wedged with 2 pieces, and it's understood that some may have been a bit thin.

• While John Lease sticks to water rather than liquid soap as an installation lubricant, Edwards prefers the soap. "Worries about it continuing to act as a lubricant, promoting mast twisting, can be put to rest" he said. "The soap soon dries up, gets hard, and becomes very un-slippery". Baldwin had no trouble with twisting even though he doused the joint with soap.

• Edwards also favors making up a custom "driver wedge" (wedge driver?) by narrowing a piece of 2X4 to the wedge size at one end, and pounding with the sledge on the other. "Make it a couple of feet long, and use it at an angle to the mast to keep from inadvertently whacking the mast with that 3 lb sledge" he said. "We don't like high impact loads on the mast; they promote "ringing" that can conceivably result in delamination".

• If the wedge as finally installed ends up lower than the level of the cabin top, TPI recommends solid shim material- wood, plastic, or metal- to be added atop the wedge to a level even with or a tiny bit higher than the cabin top. This will ensure that the collar is able to hold the wedge down in its tight position. The wedge may otherwise work upwards and loosen. (See Figure 1).

• Baldwin's observation regarding the probable torsional "shock absorber" action of the wedge on the tightly gripped mast describes a technically elegant way to control mast twisting. Instead of all the mast's torque being fed through the two bolts holding the mast step

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into the under-sole structure, most of the twisting load is instead distributed by the whole circumference of the mast into the entire cabin top and hull- without any high impact loads getting through, as they are buffered by the momentary slight deformation of the wedge as the mast twists relative to it. (Note: the mast collar is a loose fit on the mast and does not control it in torsion. The mast step tries to control mast twisting, frequently without success).

• Sealing the mast to water leakage requires that the collar to mast and collar to cabin top joints be sealed with silicone, along with the collar bolts. If the mast twists beyond the silicone's elastic limit the collar to mast silicone joint will crack and leak water, which is why nearly all the masts that leak leak. Evidently the mast torquing on Baldwin's boat does not exceed the silicone's elastic limit, as his mast joint is tight to water, and he does not mention using a mast boot. Edwards lightly sands the mast to get superior silicone adhesion, then tapers the silicone from the mast onto the collar. After the goo cures, he finishes off the joint with Navtec Rig Wrap, wrapping from bottom to top to get a "shingle" effect. Or you can try one of the new neoprene boots (see below).

• Conversations with other installers indicate that Baldwin's installation was very thorough and VERY tight compared to most. The comments were based primarily on the elongation of the wedge that was reported. But no matter how tight the installation, a small but detectable amount of mast movement relative to the partners hole is normal and correct, said Edwards.

• Freedom now has available a one-piece neoprene mast boot that is standard on new boats. The mast must be removed to install it, and the boot warmed up a bit to stretch over the butt, which is 5/16" bigger around than the partners. Cost is $12.00; part no. is 26705. No. 23956 clamp is also required ($2.50). Call Don Senecal at Freedom; (401) 274-1050.

□

LETTERS

Dear Don:

Prop wash! My prop shrank last summer!

Sans Souci came out of the water in November. It was soon noticed that the prop had gotten smaller, and the shrinkage was certainly not due to washing in water too hot. Something or someone had been chewing on the blades. Measurements showed that an eighth inch of metal had been removed from the tip of each blade, as well as much metal from the surfaces. What was once a smooth fourteen-inch solid blade prop was now a 13 3/4" look-alike with surfaces resembling a mid-winter street, potholes included.

Some detective work was in order. We checked and found that no sharks had been sighted in Wickford Harbor recently.

That resolved, a check of the pH of the water seemed to be in order. It was no help. A reading of 6.7 provided no clew. (Pun intended?-Ed).

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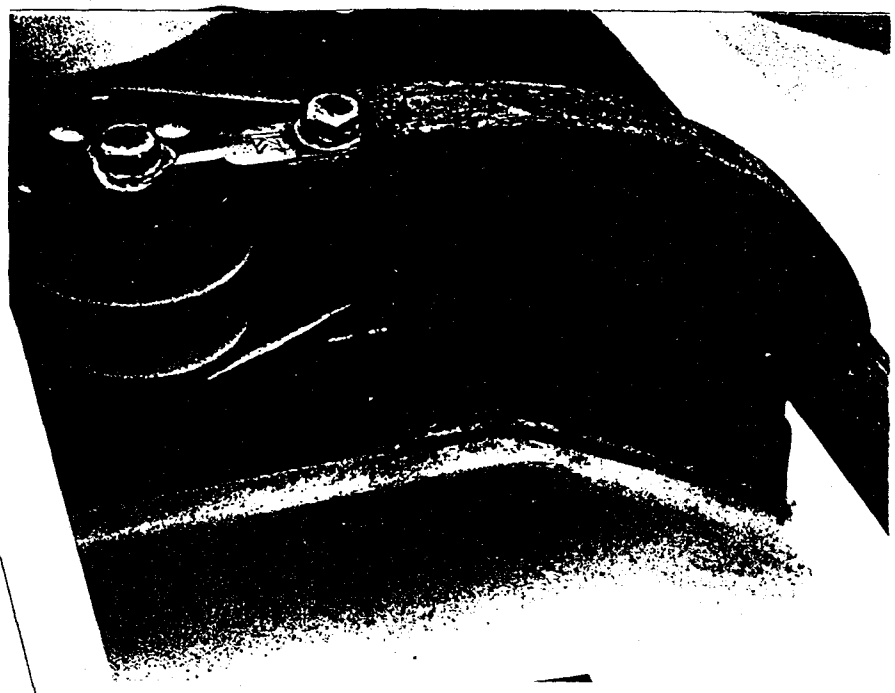
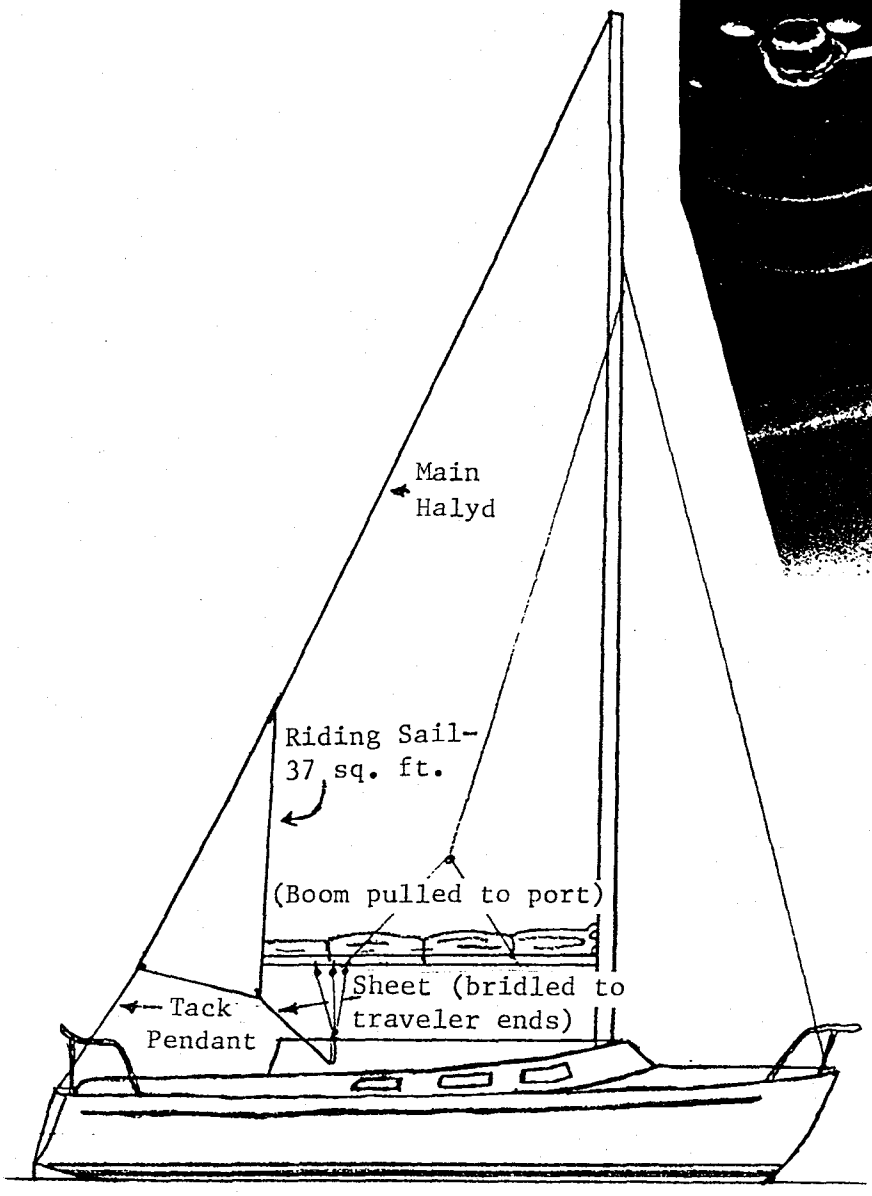


A better view of the traveler end guards installed to defeat mainsheet snagging. They go on with 3 big machine screws, heli-coils, teak plugs. Plans from F32, $2.00. □



Here is a sketch of how Peter McCrea's riding sail (F32, last issue) looks when bent on. Bridling the sheet is probably very effective in helping control lateral movement of the sail, as the sail is not supported aft by a large, tight, stainless steel backstay, as is usually the case. Bridling the pendant might be worth while also, for the same reason. The sail, now also riding over John Finch's Stormalong (#98) on the Great Lakes, is available from Thurston Sailmakers, Box 218, Warren, RI 02885. Price is $160.00 and includes shipping. The 6.5 oz dacron sail will include a 12' pendant. Your check, annotated "F32 Riding Sail", is all that's required. If heavier weight cloth is desired call Thurston at (401) 245-5145. □

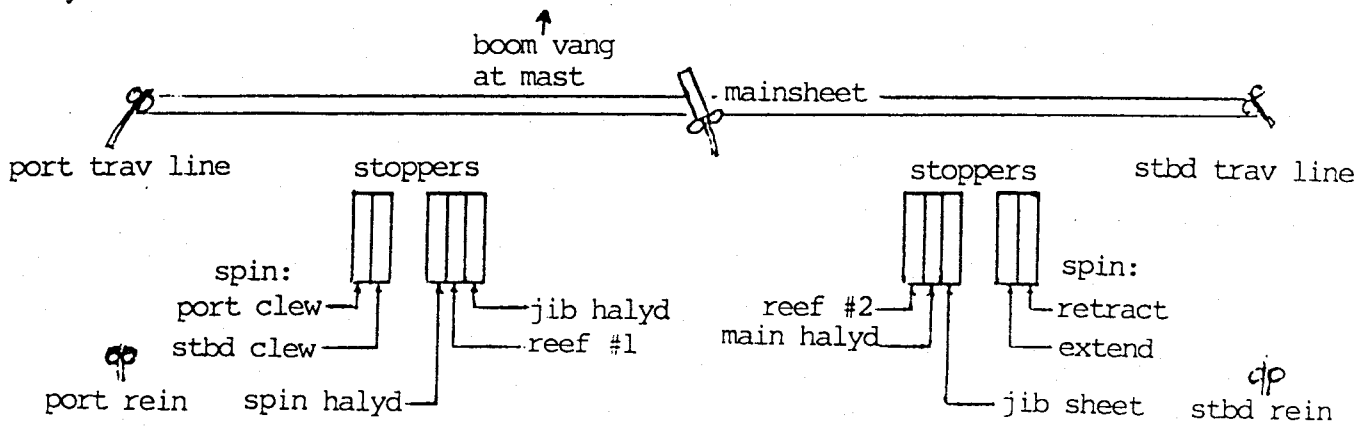
OVERHEAT ALARM EXPERIMENT

With the surge tank/heater line throttle valve still to be completely proved out as a solution to the overheat alarm problem (see Spaugh article this issue), there i a very simple little experiment tha can be easily carried out by any skipper who has his alarm go off. Grab a vise grip, open up the cockpit locker, and clamp part way down on either of the hoses that ru from the engine to the water heater Then give the situation a little time. Betcha the alarm stops. (Greater percentage of the engine coolant is made to go through the engine's heat exchanger). □

ROPE CLUTCHES TRANSFORM LINE HANDLING

Indo's Crew Says "Sayonara" to Backwinching, High Friction Leads, and Difficult, Awkward Trim Situations

I'm not sure whether the running rigging of all F32s was arranged alike. Here is how Indolence was set up by the Milford Boat Works upon her launching in May of 1985:

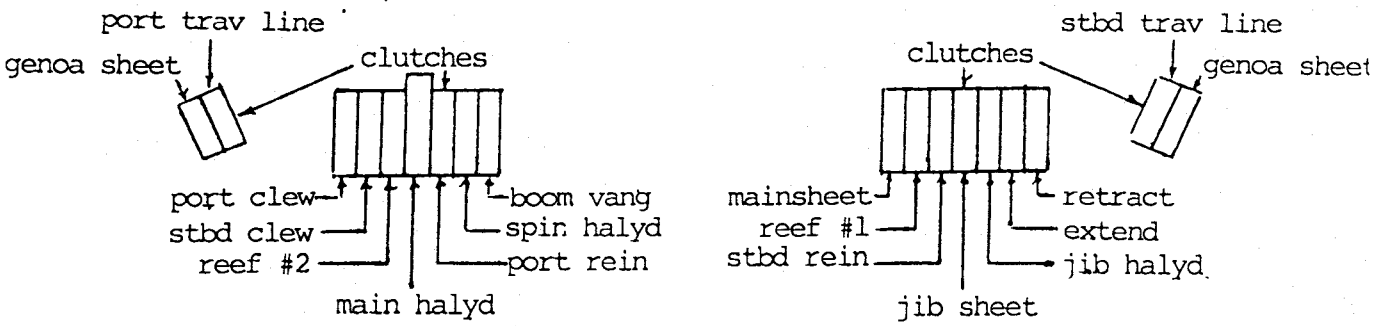


As Delivered Controls Setup

Figure 1

There were a total of 16 lines, controlled by 2 tackle mounted cam cleats, 4 hard mounted cam cleats, and 10 sheet stoppers. Adjusting one tackle, the boom vang, required leaving the cockpit.

In June of 1987 a substantial rearrangement of Indo's controls took place, resulting in the following arrangement:



New Arrangement

Figure 2

The total number of lines is now 18, due to the addition of 2 sheets for a genoa. All 18 are now controlled by rope clutches that can be cast off under load. All lines are accessed from the center of the cockpit, and all are now winchable. The story of this difficult, expensive, successful and very worthwhile change follows.

Starting from the time that we sailed Indo home on her maiden voyage I considered ways to make the handling of her control lines easier. Trimming the mainsheet through the opened dodger window was less than ideal and became down-

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CLUTCHES from p.15

right difficult with the traveler down to leeward in blowy weather. Racing called for two strong young guys pulling for all they were worth (the Hexa-ratchet ended up twisted) at an angle that guaranteed an eventual muscle pull for someone. The inadequacy of this rig has resulted in the most frequently seen of all F32 running rigging modifications, in which the main sheet is carried forward on the boom to a block near the gooseneck, down to a block on deck near the mast, and back to the cockpit where it can be cam cleated in one place and put on a winch when required. A good example of this mod is shown on Lew Weinstein's #31 Freelance (see March/April issue).

Adjusting the traveler- the importance of which is emphasized by Garry Hoyt in his F32 Sailing Instructions- is even less convenient. The lead through the traveler end mounted cam cleat points about 30° outboard, so the trimmer has to be up on the side deck, outside of the dodger. Uncleating the traveler calls for a very awkward outboard reach on the leeward side. As to the vang, its destiny as a set-it and forget-it control was assured by its deck location and inadequate size to remotely cope with the power of the F32's mainsail- even though it is considered an important member of the mainsail control suite.

But the biggest shortcoming was the frequent backwinching required in order to release tensioned lines from the sheet stoppers. This requirement often turned simple operations into fouled up fire drills. Moreover, I just absolutely did not like the fact that I couldn't just throw off the halyard and get that powerhouse mainsail down in a resounding hurry if I had to. Not only is backwinching a pain in the neck, I think its necessity in emergency situations is most undesirable.

After two seasons of experience and observation the stage was set for some changes- which turned out to be of considerably greater magnitude than first planned. The blame for this can be laid upon the Dreaded Overhead.

The first mainsheet redo I saw was at the '86 Rendezvous on Pam Ricard's Illusion (#26, Portsmouth, RI). If I recall correctly, Pam's boat had a new mainsheet jam cleat mounted on the coach roof abaft the sheet stoppers. That cleat had to be through bolted, with nuts and washers, which requires removing the overhead (the "ceiling," of the head, in this case), which requires undoing the light fixture and unscrewing and removing several pieces of exquisitely fitted teak plus some more screws and washers and taking down the fragile, plywood-foam-Naugahyde overhead which only comes out (and goes back) one way, which you must divine, and don't goober it, and don't crack the plywood, because then there'll be a crease. And make sure the cleat bolts aren't too long, they'll keep the overhead from fitting back up. And don't splinter the ends of those beautiful teak trim pieces. "It was no fun," said Pam. Bolting in the cleat was the easy part.

What gradually arose from contemplation of the Dreaded Overheads was the conviction that, if they had to come down, we wanted to take them down once- which, translated, means "do everything that you think you may ever want to do to the coachroof now- all at once. And don't screw it up". "Everything" had become quite a list, having grown from initial notions of redoing the mainsheet, providing a rope clutch for the main halyard, etc., to the full blown replacement of all the sheet stoppers with rope clutches, along with additional clutches for the vang, traveler lines, reins and mainsheet- plus clutches and tracks for a large genoa (article later). The traveler rig was to be substantially reworked, and new double-decker line arrangers would replace the single height units used to route the lines aft from the mast base. Within the boat six overheads would have to come down- the main cabin (2), nav station, galley, head and the forward part of the aft cabin.

During last spring the boat was measured and remeasured for its new hardware. Teak pedestals for the clutches were designed and fabricated, and the genoa

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CLUTCHES from p.16

tracks, arrangers, traveler and mainsheet blocks and a plethora of rope clutches and fasteners were procured. In early June the boat was hauled. We gritted our teeth and down came the overheads- about 3 hours. The boat was now just a bloody mess, and would stay so for some days. The old sheet stoppers and line arrangers then came out, not without a fuss, as the technique for cutting off the bolts flush with the nuts consists of gripping the protruding bolt with a vise grip and bending it back and forth 'till it snaps off- which distorts the threads enough to make the nuts fight removal. It's inelegant but effective- we used the same technique installing the clutches. The double-decker arrangers went in easy; no new holes to drill. Then came the genoa tracks (parallel to and inside of the coachroof grab rails); lots of holes, 2 of which came out partway into the main cabin to galley/nav station bulkhead. They were difficult to get nuts on, but the trim hid everything.

Then came the clutches. First the teak pedestals had to be hollowed on their bottoms with a belt sander to conform to the curve of the coach roof. All the old sheet stopper holes were goo'd shut, and the new batteries of clutches drilled right through clutch, teak pedestal and coach roof, as straight as possible. All bolts were "washered", generally by custom drilling and cutting .060 aluminum plate- as the factory had- to accommodate the 14 bolts that each gang of 7 clutches required. With the port gang freshly installed I stopped for a breather while mate Steve Turgeon thoughtfully regarded the fruit of my labors. "They're on backwards" he observed. There then transpired a desperate fight against rapidly curing silicone to undo 14 slippery nuts, get the clutches off, more goo, back on quick before the old goo really hardened, tighten nuts, etc. It started raining, too.

But, on the whole, the job went pretty well. A lot of time was spent redoing factory shim pieces that supported the overheads under the clutches, as these were greatly affected by all the new bolts in new places. It was many days before the overheads went back in, during which the super-goo'd installation (around the holes, in the holes, under the bolt heads, under the washers) was checked for rain leaks and came out perfect. The overheads survived okay, too.

To accommodate the need for a genoa turning block on each side (and to get rid of those badly angled cam cleats, no longer needed) the double cheek block on each end of the traveler was removed. Double Harken ball bearing cheek block cars were then slid onto the track, upon which they quickly bound up, because it's not Harken track. You then simply belt them further along the track with a 3 lb. sledge until they're just inboard of the spot occupied by the double cheek block previously removed. The old cheek block is then remounted sans cam cleat; its lower sheave becomes the genny turner. The Harken becomes the new traveler block, a higher, easier turning, less easily fouled rig than the original- and it still allows you to let the mainsheet car down as far to leeward as you would ever want to. The Harkens won't move either, believe me. The engineering for this clever, effective rig was courtesy of Jane Huling, until recently owner of #90 Rum Line, Lake St. Clair.

Referring back to Figure 2, here are specific comments on each of the clutches and its line, starting from the port side:

- Genoa Sheet (P+S)- the sheet and its traveler line mate have perfect leads to the winch, gained by running tightened lines from the check blocks to the winch through the double gang Schaefer clutch in "mid-air" and measuring down to the coachroof from the clutch bottom to get the pedestal height. The resulting laminated teak clutch bases are essentially 4-sided truncated pyramids, with some additional trimming to clear the hatch and dodger. The Schaefer clutch handles pull back to release, so they don't interfere with the dodger.

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CLUTCHES from p.17

- Traveler Line (P+S)- adjusting the traveler is duck soup. Pull by hand when it's light, winch when it's heavy. The traveler is now adjusted as often as it should be, which is frequently. Casting off the other traveler line is an easy reach away.

The Port 7-Clutch Gang. This assemblage consists of two triple gang Lewmar Spinlock clutches sandwiching a single Lewmar Spinlock (Easylock) Express, a big baby selected to handle the main halyard load. The gang is mounted on a low teak pedestal (1 1/2") to present the best possible vertical lead angle to the winch (the original sheet stoppers held the lines higher than the clutches do). The Spinlock handles go forward, all the way to horizontal, to release. The lines exit aft through a hole surrounded by a radiused metal fairing to reduce chafe and friction- a much desired feature that the justifiably maligned sheet stoppers don't have.

- Port & Starboard Spinnaker Clews- located as before, now easier to use, no other change.

- Reef #2- the reef lines have been switched port and starboard. I think the strategy had to do with running different lines (with different pull angles) through double blocks at the mast base, and the propensity of various lines to be under tension. Reef #2 has a very good winch lead.

- Main Halyard- this line previously trimmed to starboard, and had a very poor, high friction lead to its winch. Now centered to port, its winch lead is perfect, and winching up is a relative delight. Lowering the main consists of clearing the halyard, then slamming the clutch handle all the way forward- without backwinching! It's wonderful. After the changeover a knowledgeable type observed that tradition called for the main halyard to be to starboard, and the jib to port. Fortunately, I was ignorant. Positioning the main halyard for a good lead was much easier using the port winch than the starboard one. The line lead situation from port to starboard is not mirror symmetrical, because both winches turn in the same direction. Switching the jib and main halyards in the mast calls for bent coat hangers and patience. (The mast was out of the boat, so we could see, too).

- Port Rein- putting the reins on rope clutches smacks of definite overkill. But here are the reasons. We wanted to get the pole end further inboard for reaching, and had to go to the double decker arrangers anyway to handle the vang and mainsheet- which gave us excess arranger slots (gained 6, needed 2). Why not add the reins to the arranger, resulting in a profound inboard pull angle on the yard? This done, the old rein cam cleats wouldn't work, and the only control that was a neat fit, with a proper lead from arranger to cockpit, was yet another clutch. Et viola, reins on clutches, and it works great- you no longer have to run across the cockpit to loosen one so you can tighten the other.

- Spinnaker Halyard- still to port, very nice lead to winch. Can now be judiciously eased without backwinching.

- Boom Vang- this important control is now back where it gets attention and can be winched, which is very necessary, sometimes. Moreover, the original vang has been replaced by a 4-part rig using 3" Harken double blocks. With the vang out by the mast it used to be too easy to raise the main with the vang still tensioned from a previous sail, which tends to overtighten the upper half of the luff. This error doesn't happen much with the vang clutch under our noses.

The Starboard 7-Clutch Gang. Here we have 7 Spinlocks (2 doubles and a triple) mounted on a teak pedestal as on the port side.

CLUTCHES cont p.19

CLUTCHES from p.18

- Mainsheet- Indo's version of the mainsheet redo has the original tackle replaced by a 3" Harken double block at the bottom, and 3 Harken singles on the boom bails. The sheet then goes forward under the boom to another 3" Harken hung from the gooseneck bolt, then down to a 3" double at the mast base (mainsheet and reef #1), then back to the cockpit, where it goes through the clutch and may also be placed in an open cam cleat on the coachroof edge. This arrangement, suggested by single hander Peter McCrea, makes possible control of the sheet, in light to medium winds, from behind the wheel. In this mode the clutch is left undone and the sheet pulled into the open cam cleat. Being able to quickly start the mainsheet is a boon when sailing alone and subject to round-up puffs in crowded conditions.

  The lead to the winch is not good, but the inboard position was best for a right-hander handling the sheet from behind the wheel. A turning block will eventually be added to reduce friction between the clutch and the winch. There is also too much rubbing of the sheet on boom bails, etc.- this will have to be coped with, too. The present arrangement is miles ahead of the stock one, of course.

- Reef #1. Now on starboard. Neither of the reefs probably need a clutch (versus a stopper) very much, but we couldn't "mix and match." Winch lead is not very good, but the reef isn't used much, either.

- Starboard Rein (see Port Rein writeup).

- Jib Sheet- the sheet now can be eased without backwinching and has a pretty good lead to the winch.

- Jib Halyard- used to be to port, now on starboard. The halyard has an excellent winch lead and can be quickly cast off. But it's right next to the jib sheet, inviting a mistaken douse instead of a trim! This pairing will be reassessed in the spring.

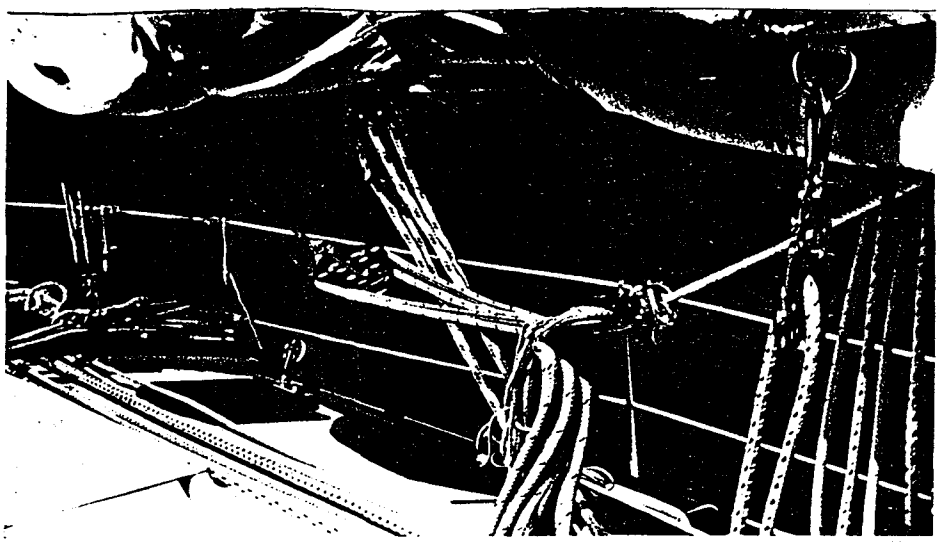
- Spinnaker Yard Extend and Retract- located as before, these controls have benefited markedly from their new ability to be cast off under load, as the initial cast-off of the opposing line has been frequently forgotten, creating a tension-ridden impasse that could only previously be solved by backwinching.

  Starboard 2 Gang Schaefer Clutch- starboard traveler line and genoa sheet. Please see previous port side comments.

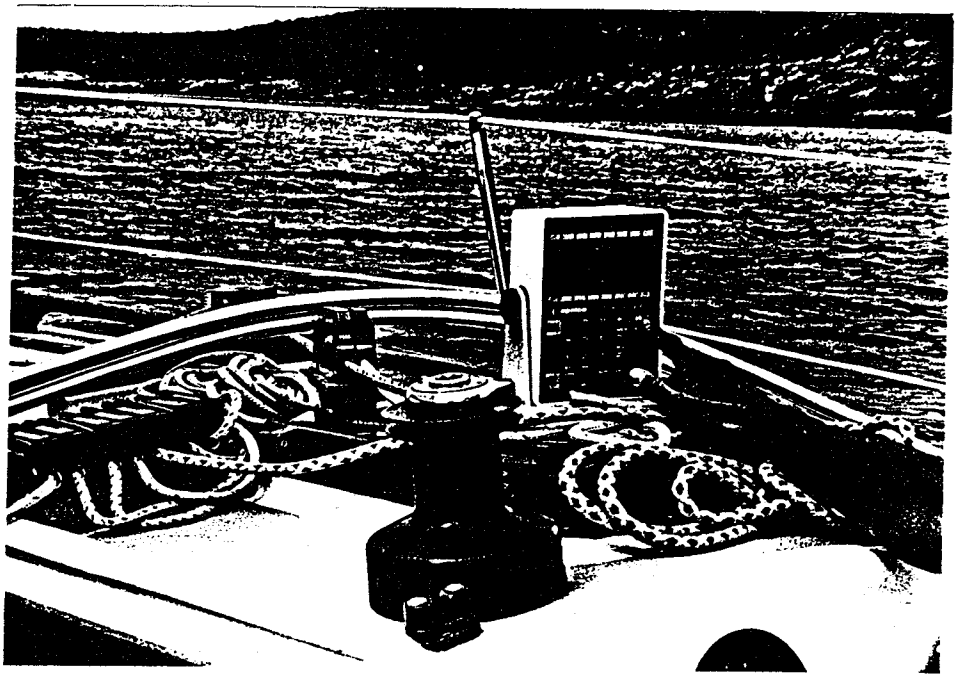
  The old vang hasn't been forgotten- it has now become the adjustable part of a heavy duty, double bail with bridle preventer arrangement that trims, when used, to a pair of shackles bent on each side of the toe rail, forward. The rig drapes under the boom when not in use. Based upon McCrea's similar single-bail arrangement, it has yet to see much use. Its day will come, I'm sure.

Anyone in the business of building things can hold forth on the dangers of making multiple, simultaneous changes to an existing design. Completely unforseen negative effects are frequently experienced. But, because of the Dreaded Overheads, we charged ahead on just such a program, with crossed fingers- and lucked out. Everything worked as planned, even the reins- and there were no glitches. All controls were now within the easy reach of one person, working from the middle of the cockpit. Backwinching became an immediately forgotten skill, and winch power was easily applied to any line calling for it. To say that we were delighted is to understate the case.

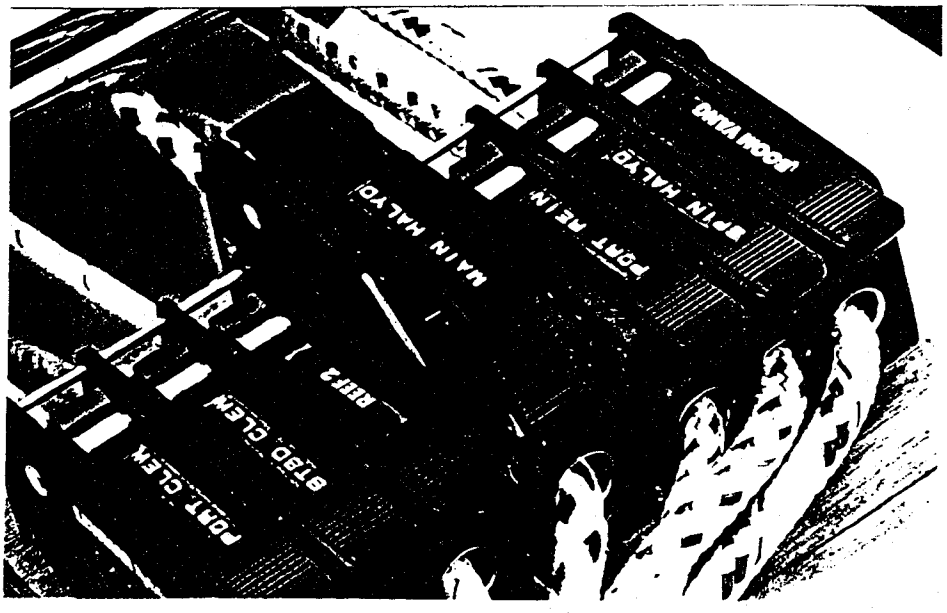
CLUTCHES cont p.21



Mainsheet tackle- note sheet rubbing on cleat under boom. Genoa track and block by hand rail, drooping preventer tackle under boom. Reef hooks have been replaced by arrangement that can't fall out. Anyone know how to keep them from twisting?



Starboard clutches, with supplementary open cam cleat for mainsheet near winch. Superconvenient loran mount uses permanent bolt and wing nut into slot in loran base; loran is passed up through opened hatch to mount. Behind: Mt. Desert Island, Maine.



Port 7-Clutch Gang. 1½" teak pedestal shows underneath.

CLUTCHES from p.19

Rope clutch operations do require knowledge of a few characteristics and techniques, most of which can be learned in an afternoon:

- To cast off a line, the Spinlock's handle must be thrown all the way forward- not just until it feels as if the load is off. At that point the clutch will still try to hold the line. (Schaefer handles release when vertical).

- You can hand pull a line through a closed clutch- but it will initially resist a bit. If this is a problem, open the clutch momentarily.

- When closing on a line the clutch sometimes develops great resistance to closure because it's trying to squeeze the line too much. Put handle back to release point and try again. It's important to hit new crew with this one right off, lest an over-eager snaps a handle off on you.

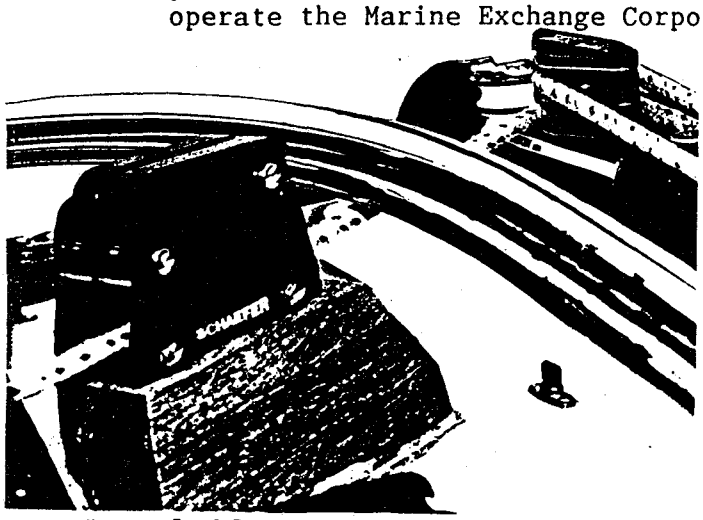
- Put a turn or two on the winch before casting off highly loaded lines. It is too difficult to control them by modulating the clutch handle. The latter skill takes a while to acquire, for any line load.

- Highly loaded lines winched through a closed clutch will slip an inch or so as the line comes off the winch and the clutch takes hold.

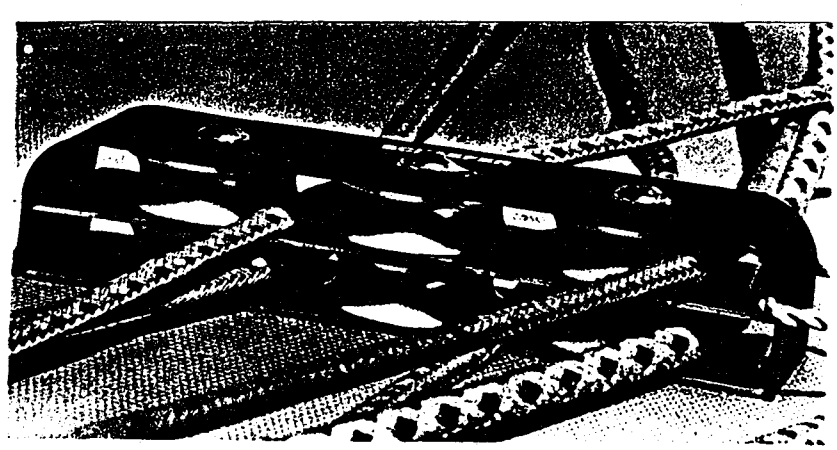
With the mainsheet mod accomplished the dodger window can be kept closed when desired. Indo's dodger had to be notched on each side for the traveler and genoa lines. In the spring we'll review the lateral arrangement of the lines (see jib halyard/sheet comments) and also look hard at the angles of operation of double blocks serving different lines at the mast base, over the full range of boom travel. The mainsheet run will probably be changed to cut down its rubbing on the vang and preventer bails. And- uh- the centralization of controls in the cockpit has, of course, centralized all the spaghetti, which now also includes the vang and, occasionally, a pair of genoa sheets. Honorable wife has announced that this year we will do something about shaping up the cockpit clutter.

As for the bill: looking over all the old receipts it looks like about $1400.00 for the basic controls job, including $175.00 for the teak work and $70.00 for modifying the dodger. This includes all the clutches and other hardware, including the mainsheet and vang. The Harken blocks for the traveler aren't included as they're part of the genoa mods. (The latter, including the 285 ft genoa, came to $1400.00 also.) All the hardware was purchased at discount from the knowledgeable, friendly Montague family who operate the Marine Exchange Corporation in Peabody, MA.

□



Port double gang clutch with teak mount. Mount plans are available. Note teak traveler end guard which prevents mainsheet hangups.



"Double Decker" Schaefer Arranger.

EASY MOORING PICKUPS WITH REVISED PENDANT ARRANGEMENT

In gusty weather, picking up a mooring with an F32 can be a real bear. Getting the boat up to the mooring at a reasonable speed and in the eye of the wind is not too great a challenge for an experienced helmsman. Difficulties start, though, when the boat loses steerage way and the bow promptly blows off. If the bow hand has not yet gotten the mooring pendant onto the cleat- and preferably reeved it through its small, tight bow chock before it goes under tension- the pendant frequently has to be let go and another mooring attempt made. The problem is often exacerbated by the fact that the major arm strength aboard the vessel is back behind the helm, where it's not needed, instead of at the bow. (On the other hand, some ladies seem reluctant to <u>really</u> learn how to handle the boat under power. They <u>should</u>, and should insist on the opportunity to learn).

After going through a season of this nonsense, which also incurred a sore shoulder on one occasion, we devised a new mooring pendant arrangement that has made a marvelous improvement. It has cut the "missed mooring" percentage down near zero while greatly decreasing the "armstrong" requirement for getting moorings. Here's how it works:

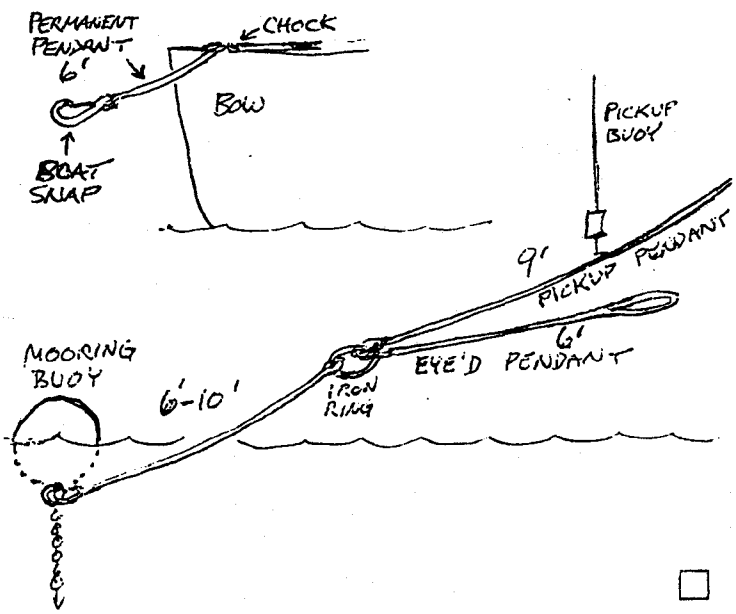
The original mooring pendant was replaced by a 2-piece pendant, which is held together by an iron ring about halfway along its length (see sketch). Spliced also to the iron ring is another piece of 1" braid, about 3' longer than the pendant, and without an eye on its end. The pickup bouy is lashed about halfway along this "pickup pendant"; <u>it is the line that is picked up on the mooring approach</u>. Once fetched it is immediately pulled up over the starboard toe rail and quickly cleated as tight as it will stretch. **No attempt is made to reeve it "properly" through the bow and bow chock.**

THE BOAT IS NOW SECURED. The bow hand can, at their leisure, pull up with the boat hook the eyed pendant, which has now been lifted clear of the water by the tensioned pickup pendant. The eyed pendant is then reeved through the port bow chock and its loop placed over the cleat. (Goose forward with power here if additional slack is necessary). The pickup pendant is then is then uncleate from underneath the loop, reeved properly through the other bow chock, and recleated atop the eyed pendant loop. It sounds like a production, but it all happens in 2-3 minutes. Great strength is <u>not</u> required.

For the 2 or 3 minutes the pickup pendant saws around a bit on the toe rail. We have not been able to detect any wear on either.

A deluxe variation on this scheme has the eyed pendant permanently bent on th bow cleat and kept reeved through the port bow chock. Its end is spliced to a large, heavy duty boat snap. Under way the line is trimmed back from the chock for neatness. When mooring you clip the snap onto the iron ring after securing the pickup pendant, then follow up as previously described. The soaking eyed pendant doesn't have to be worked into the chock each time this way. This is our present rig, and we like it very much. The snap has also proved most useful for clipping onto oversize pendants encountered while cruising (we back it up, of course).

-DELUXE VARIATION-



As soon as the boats moored near ours all summer were hauled and cradled nearby an examination of their props would show if they had suffered the same loss as we, possibly due to stray currents (electrical). All of the ten boats moored around Sans Souci had props that looked like ours did at the beginning of the season. No help there, except to isolate the problem as internal to our boat.

Fortunately, in conversation with Peter McCrea he mentioned that the electrical bond at the prop shaft of his boat when measured gave a reading of 400 ohms. The value should be close to zero. He had lost his shaft zincs as had we, but had not suffered the prop damage.

Up the ladder, off with the cover, into the cabin, pulling up inspection inserts in the sole as well as taking apart cabinetry under the sinks, plus pushing aside the exhaust hose (not easy), gave me access to the joint. (Walking down the street to the local joint would have been a lot easier. Have you heard the one about the magician walking down the street and turning into a drugstore?).

Working through the opening in the sole between the companionway and the sink counter, and through the sink cabinet, I was able to get the multimeter probes on the shaft and bare wire under the clamp on the shaft housing. Depending on how hard I pressed the probe into the wire bundle, readings were from 300 to 500 ohms. Readings from the cable clamp to the shaft were no better. No choice but to disassemble.

As you can guess, the wires and threads on the housing were covered with a thick and unbroken coating of red copper oxide, with no evidence of metal to metal contact.

Evidently, the culprit was galvanic corrosion.

To make a short story long, the wire bundle was cleaned and heavily tinned, the housing cleaned and sanded, the cable clamp cleaned, all covered with waterproof grease and reassembled. The result: 0 to 1 ohm resistance, wire to shaft.

Thank you, Peter.

While I was there with my nose under the boards (there's room for little else) I thought I would sniff around, when what to my startled eyes should appear but the same grounding method being used on the bronze seacock for the sink drain (stainless clamp holding untinned copper wire against bronze seacock). This time the wires were green with copper chloride. The same treatment restored the electrical bond.

Evidently the time has arrived (four seasons in salt water) for inspection of all the bonding joints(?), a task to be completed this weekend.

Based on Peter's experience and my own I strongly suggest to all F32 owners that this inspection be completed before spring launch. I'd hate like the devil to lose a thru-hull while sailing to Block Island or through the San Juan de Fuca Straits.

The prop is not recoverable- it needs a new one, Sahib (sob).

Sincerely,

John Lease

Coming Next Issue.....

The "F33": Sir John Oakeley's British Version of the F32

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