PLEASE SENS & S. TYANKS.

The Concordian

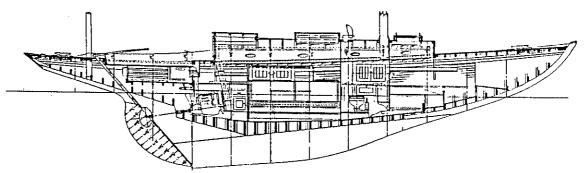
a newsletter for lovers of Concordia yachts



Number 9 - Spring 1990

The Concordia fleet has always been noted for its exuberance. Concordias do not seem to attract owners that are content to leave their yachts as or where they found them. A major project or cruise is usually in the planning, underway or recently past and much of this activity is reported by our correspondents in this issue. There is a wide range of nautical experience amongst the fleet, but who can claim experience sailing a Concordia as a cat-rigged yawl? Curious? Read on.

#11 - Peter Gallant, Stratham, NH: We are supremely WINNIE OF BOURNE fortunate to be not only the owners of such a fine class of boat but to be within a group of some truly great people as well. I thought I'd send along a progress report on the boat followed by a few suggestions I've found to be of value, and finally, a request for some advice. WINNIE was drydocked for almost 4 years, but finally went over Sept. 20. I promised myself I'd put her in before summer was over. New work included: new engine (a Perkins M-30) and gear, new 35 gallon stainless fuel tank below the cockpit (frees up the cockpit lockers and lowers the CG while also using some previously unused space), 25 new floors, 24 new planks, 80 some odd sisters 4 frames, 14 frame butts, new coamings, cockpit well and seats, rebuilt rudder and fittings with plastic (oh no, there's that word) bushings, new toerail, mast steep/keelson, 3 ring frames, extra keel & floor bolts by the stem, deck and house coverings, new hatches and hand rails, all new metal (except ballast) below the sheer, extra stringers aft, extra supports in the stern and all sorts of other re-fastening and new work. She was in pretty rough shape. No wonder she leaked when pounding to weather! To swell her up for caulking and launching I put "diapers" on her bottom consisting of old bed sheets with poly stapled over and wet down daily for 6 weeks. It worked beautifully. The main rig was unusable so we launched her with just the mizzen, which yielded a fair amount of weather helm in a breeze, and allowed us to make sternway quite handily. It was quite entertaining! I'm presently completing a new oval spruce mast and rig and new pine bulkheads. I'll have the ceiling, seats/bunks and hopefully most of the galley in by launch time at the end of June. We hope to get



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to Maine this summer, the Regatta in Newport and Chesapeake Bay in September. Thanks must go out to Elizabeth, Lisa and helpers for "the book," and the good folks in Padanaram for their ideas on restoring the boat to like original condition (with a few improvements of course). Comments: I had a 15 x 15 prop cut down to a 14" diameter with square tips. This gives the necessary tip clearance but better drive than a standard 14". If you re-rig, don't use swages: they don't last. The splices are great if made well, but the Norseman/Sta-Lok fittings may be the best of all. I replaced the original mast step which spanned 5 floors with one that spans 13 floors from the main bulkhead forward, plus I installed 3 heavy laminated ring frames. This fixes the weakness forward, but best of all, gives you something to trip over going to the head. I ran the exhaust out under the stern counter because with the original dual configuration you smell exhaust, diesel in my case, on any point of sail off the wind. I realize this is very controversial and treads on hallowed ground - what can I say? I'm a wimp who gets seasick at the smell of diesel. Now for the most important part, I'm looking for advice on the following: Should I try to locate an original Concordia heater (anybody have one they wish to unload?), or install a diesel bulkhead heater? Which brand? Does it ever stink diesel in the cabin? Can anyone suggest a good skylight raiser? Any preferences for brands and type of fuel for cooking stoves? How about fuel (bottle) storage? What's your favorite brand of varnish? I've been using Epifanes with reasonable success. How about top and bottom paint? Epifanes white and KL 990 Komposition seem to work fine. Can anyone sell or trade a wide boom gallows? I have two of the original narrow folding type. If you can help me or I can help you, please call me at 603 772-8812. I fear I have become somewhat of an authority on the weaknesses of these boats, which may sound a bit negative, but fortunately I was born without both oars in the water so, after six years of ownership, but only one of sailing, I'm still in love with their virtues. I hope I can keep WINNIE long enough to give to my son, who arrived 4 months ago. He's beginning to respond to pictures of boats and an occasional doses of salt spray. Is it too much to ask that his first word will have 4 syllables? (Peter promises a follow up report after a full season of use on his new engine and other - marine and two legged - additions.)

ARAWAK #39 - Donald Tofias, Wellesley Hills, MA: ARAWAK had a great summer. We logged over 800 miles, but never got further away from Padanaram than Edgartown or Newport. We didn't want to be too far from Concordia in case something went wrong. Remember, ARAWAK (ex-FEATHER) had been out of the water for 15 years until she sailed this summer. We kept the original rig including the club footed jib and re-rigged the main sheet to a new winch on the port side of the cabin top. All the winches are new bronze Barients with self-tailers. The sails are all new Manchester's including a light mizzen stays'l. The boat looked good and it seemed fast to us early in the summer so we decided to race a little. We entered the Buzzards Bay Regatta (at the New Bedford Yacht Club) and the Classic Yacht



Regatta (at the Museum of Yachting in Newport) finishing last in both contests. We have carefully inspected the winner of the CYR - #49 MOONFLEET - and discovered in the refit we forgot to specify the new Alden Trull designed winged keel. Watch out CY-39 and CY-41 owners: we have ordered a new keel and have found an old genoa for this summer! Expanding our sailing grounds starting in June we hope to get to Shelter Island, Block Island and Fisher's. In July to Nantucket and then Maine in time for the Eggemoggin Reach Regatta and back to Nantucket for the Opera House, finishing the racing season in Newport with the CYR. Our sailing is relaxing and the racing is for fun. See all you Eastcoasters this summer.

TIDA #99 - David Palmer, Suffield, CT: (from New England Coastal News, 6-15-89) Dodson Boat Yard in Stonington, CT is working on a Concordia which was built by Abeking & Rasmussen in Germany in 1965. The owner said that the original canvas deck looked like a mold field. The decks have been completely replaced. They took the deck off right down to the deck beams and put down a new teak deck. The new deck is a Swedish system called GMT Teak Deck and has been used on many well known yachts including the Swans. Dodsons made up an exact template of the deck. The deck came in two pieces, full length, 40' long. They just laid it down and it is not mechanically fastened to the boat. They used two part exothermic glue and then vacuum bagged the deck down. Cost-wise it was a lot cheaper to go this way than actually constructing the deck themselves. Another project was strapping a lot of the frames. The frame heels were becoming delaminated so Dodsons put bronze straps of them and rivited them in place. The entire boat has been sanded and the brightwork has been all varnished including the spars. The interior has been repainted and a new head installed. Next year the owner plans to redo the canvas on the cabin.

WESTRAY #79 - J. Thomas Franklin, Cambridge, MA: I am refinishing portions of WESTRAY'S interior this winter: forward cabin lockers, main cabin sole and bunk slats, galley surfaces, chest of drawers, table, engine cover and companionway steps, all will be wooded and refinished, and all interior painted surfaces will be sanded and repainted. Much of this is presently in my basement. I am also going to masthead running lights to supplement trunk lights and a new Signet four function (log, knotmeter, depth and temp) instrument to replace my old undependable B&G depthmeter. Also a remodeled mainsail, repaired trysail, RDF, EPIRB, etc. I'm meeting with Jerry Smith at Concordia to see how others have installed new master electrical panels, my main winter project. Unreliable wiring has been my only real problem with WESTRAY to date. Last season I logged 62 days aboard from May 13 through November 6. This year we plan a cruise to Bermuda, leaving Marion June 22, one week after the Newport race leaves, and returning about July 6. I'm also looking for others to sail with us - #85 ARAPAHO is a possibility. Hopefully we will also squeeze in a Maine trip along with our usual pre Labor Day week in Nantucket, but that is secondary to Bermuda.

MALAY I #2 - Gary Custard, Miami Shores, FL: MALAY has sat at the dock for nearly a year waiting for me to find some sails. Thanks again to Barry Light (STREAMER) and Ida Galliher (FLEETWOOD) for a good genoa and mainsail. Installation of a Mercedes diesel is finally complete, new fuel tanks, electronics, new wiring and general varnish, paint and the endless list of "must do's" are almost done. In a few weeks (12-89) we will haul out for topsides and bottom paint, and in January move aboard. We have entered MALAY in the 1990 Newport-Bermuda race. We need a few more head sails, some new rigging and an excellent navigator. MALAY won the 1954 race and placed 2nd in 1968 and has a few other credits. She is hull #2, still a pretty good boat, and it should be interesting to see how she does. Anyone interested is the passage as a navigator please drop us a line. 1079 NE 90th St., Miami Shores, FL 33138.

MEMORY #35 - Richard Navarro, Eliot, ME: At present MEMORY is wet-stored down in the Chesapeake as she was last winter. We sailed her down after the reunion in 1988 and enjoyed the area so much we left her in Virginia for the season. We lived aboard much of the summer and discovered quite a bit of the southern Chesapeake. This June we will sail back to Maine. We want to sail the Maine coast and don't really enjoy being long distance owners. Through the Concordian I was able to find out about Alida Camp's main and mizzen at Bohndell Sails which I bought last spring. They fit perfectly and made quite a difference last season. No major projects are planned, but the last newsletter got me to thinking about checking the rigging more thoroughly, especially the headstay.

SNOW BIRD #59 - Stevens Peale, Old Lyme, CT: Last spring Concordia replaced SNOW BIRD'S old Grey with a new Yanmar 3 cylinder diesel and replaced her stembolts and three keelbolts. The yard did their usual fine job. Summer sailing was not great in our area. Good breezes in early July and mid October, but rain, heat and little else in between. We now have another Concordia on the Connecticut River, Bob Gunther's all bright 41' ARAPAHO. That makes three along with SNOW BIRD and HERO.

CROCODILE #67 - Eleanor Crocker, Manchester, MA: Edgar, Bob and three of their sons plus a couple other chaps took CROCODILE on the Marblehead to Halifax Race in July. Four stayed aboard and sailed down east to St. John, New Brunswick. I flew up and cruised for two weeks, stopping at Kenebecasious Island where Edgar has bought an old farm homestead with a deep water cove where he put down a strong mooring. It is a fine and fun temporary spot for CROCODILE. We had lovely sailing here last autumn and were glad Hugo stayed away from our shores.

MARYANN #26 - Robert Jones, Belmont, MA: We insure MARYANN for \$100,000 at an annual (6 months in the water) cost of about \$2,400. It strikes me that given







the quality (boats, owners, longevity) of the class, we ought to be able to do better than that. There used to be an insurer in the past who wanted these boats. Do they still exist? Of not, what are the insurance statistics on the fleet and could we perhaps entice an insurer into this little "plum" of a craft? I have my brokers here in Boston (Brewer & Lord) looking into it for me and will follow up with you. MARYANN is snug inside at Round Pond, Maine getting a facial and some mast re-wiring, not to mention her new R-10 radar. We and neighbor #58 OFF CALL have done some extensive refastening over the past couple of years and consider it a basic to that wonderful Concordia "feel."

THISTLEDOWN #62 - Alida Camp, East Bluehill, ME: I am one of the few original owners, 1990 will be 32 years. THISTLEDOWN was built for me and has never raced. After 25 years in an Atlantic and racing small boats long before that, I discovered that sailing was more than racing.

ABACO #102 - Jonathan Goldweitz, Stamford, CT: We had a pleasant autumn sailing on ABACO, no long cruises, but several weekends in quiet anchorages, especially by late September and in October. Also got to test out the #2 reef in the mainsail in 35-40 kt winds on 3 different occasions. The club jib and 2nd reef make an excellent combination - 6.2 kts going to windward in 35 kts one day. The annual November cruise back to Padanaram for winter layup at Concordia was in warm weather but no wind. Only sailed for one hour. The bright side was that the old Grey 4-112 purred away like a charm. No plan to replace it yet, but trying to diagnose origin of smoke that seems to come out of the engine box after prolonged powering. Dorothy and I did a lot of refinishing before leaving Stamford, especially toerails, cabin sides, cockpit, shroud rollers, etc. I think as the seasons go by we'll get more efficient at mastering more of this ourselves. No major projects (I hope) at Concordia this year. Will sand/paint bottom and topsides, one coat of varnish on spars and deck brightwork, minor mast rewiring and may change head outflow to a Y-valve to comply with holding tank laws. Dorothy's birthday present this year was a new Dirigo unpressurized alcohol stove. (The stove heats water & contact lenses in 1/3 the time of previous one so Dorothy is up doing chores earlier!) As this is smaller than the old W/C stove, we designed and built a nice compartment to both support the aft end of the stove and also comfortably hold the coffee pot, thermos and pot holders.

IRENE #103 - Doug Cole, Bellingham, WA: February had been a hectic month, one which required being away nearly three weeks, so when I finally had a free week I headed out on IRENE for my annual post-winter/pre-spring solo cruise. It's handy having the boat ready to go year around, occasional winter projects notwithstanding, and it's great being able to pull off the winter cover to find the boat just as you left her in the fall. March is an excellent time for cruising in the

San Juan Islands as there are few boats cruising and you basically have the place to yourself. (Then again if you examined the weather closely you'd see why.) The first night out found us anchored in a secluded cove and it didn't take long for the cares of the world to melt as I settled in next to the fireplace with a good book, basking in the glow of the kerosene lamp while Vivaldi played softly in the background. Two gales roared through that week (it only snowed once) but that made for good sailing in these mostly sheltered waters and I was reminded how manageable a Concordia is for singlehanding if rigged with roller furling, self tailers and autoheim. Two items are very handy for off season cruising. The first is a good heating stove. Last year I replaced the Concordia stove with a Dickinson Newport bulkhead mounted diesel stove. This has been perfectly reliable with no "soot balls" or odor. On this cruise I started it when I left the dock and turned it off six days later when I returned. Even with an occasional gust to 50 (at anchor) it ran without a glitch. It is gravity fed from the main tank in the cockpit and thus uses no electricity (although there is a draft assist fan used for starting only) and about a gallon of fuel a day. I removed the coal bin that the original heater sat on to keep the unit as low as possible. This also enables use of the original exhaust stack through the head with only minor adjustments as bends more than 45 The other item is a "picture window" for the degrees are not advised. companionway to keep the heat in without blocking the light out. I traced the shape of the two drop boards onto one piece of 1/4" clear plexiglass and then cut with a sabre saw. Two small leather lined blocks are used to wedge it in place. When not in use the window stores flat in a sock under one of the main bunks. The first time it's in place each trip the cat, while racing up the companionway, inevitably crashes into it with a bang and finds herself unexplainably back on the floor before rediscovering her "cat-hole" port in the cockpit. All in all an enjoyable and relaxing little cruise. Summer plans aren't definite, but time permitting we'd like to see the Queen Charlottes before they become too crowded or circumnavigate Vancouver Island again.

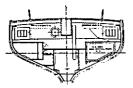


Waldo Howland, Padanaram, MA: The more Concordians I read the more useful I'm sure they are for Concordia owners and others too. Reading them will help all hands in considering changes in detail or planning repairs, plus all the news. The fact that the yawls were built one by one over a period of 25 years has given opportunity to weed out weaknesses and incorporate improvements. It is very tempting for a new owner to immediately wish to make

changes in his new (to him) boat. Details that may have worked out well in previous boats or in one's imagination will not necessarily work out for the best in a Concordia. My 1988 book, The Concordia Years, tried to emphasize this fact and now the Concordian continues to carry on the thinking that change may upset a

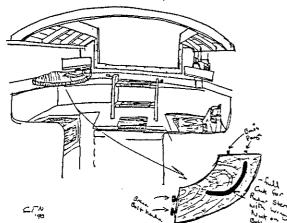
plan of details that is standing the test of time and experience. Likewise, the experience of others about repairs and refinishing will be very helpful to others and could save them money. For example: the screw-in construction of Concordia yawls makes it cheaper and better to repair broken frames from the inside, rather than removing planks on the outside. The information in #8 by an expert like Brion Toss is music to my ears, but more importantly could under the right circumstances save many owners some real money, and some boats a lot of grief. It takes an experienced rigger, to be sure, to splice 1 x 19 rigging. Montigney was our rigger at Concordia and he knew the advantages of splices vs. His portable rigging stand was set up accordingly, and his swaged fittings. hardware of solid thimbles and special seizing wire were kept in stock. I do hope that Brion Toss will follow up "in a future letter." Information like this is priceless and should somehow be saved for years to come, and for future owners. I received the Concordia video (CONCORDIA: A Classic Wooden Yacht) from Richie Perkins and Eldon Scott at Point Films and I feel it is just great. Those fellows did a lot of work on the project, research, contacting folks and putting the whole thing together in a very professional manner. It is another most favorable contribution to our class in particular and to yachting in general. Richie's great grandfather, R.S. Perkins, was the first person to order a cruising boat from Concordia Co. He not only had the 30' sloop Weepecket built but later a little down East type powerboat. His grandfather, Richard S. Perkins, had Concordia design and build for him the 40' motorsailer Hurricane. His father has stored an auxiliary sailboat at the Concordia yard for some years. Now he himself has further benefitted Concordia with the video. Quite a wonderful family connection. I understand the tape is selling in good shape which I'm real pleased about.

#77 - Dan Strohmeier, Scarsdale, NY: Some eight years ago, we MALAY II renewed all the stem/keel bolts on MALAY (built in 1960). There was some deterioration, but not much. Anyway, I felt better for the renewals. Sometime earlier I had an audit of keel bolts (ballast/backbone). The forward-most two bolts showed deterioration and were replaced. The others were OK. Somehow bolts deteriorate first at the forward end of a series. Why? I don't know. Maybe there is more relative motion at the forward end of the cast iron ballast, which is unyielding. My old Malay (#2) had a lead keel with no inherent stiffness and did not tax the forward-most bolts. Radar: In 1982, a practical radar came on the market. I was looking for one with a light weight scanner and low current drain. The Raytheon 1200 seemed to fill the bill: scanner weight 23#, current drain less than 5 amps. On MALAY, the scanner is mounted just below the spreaders on the mizzen, giving it a height above water of about 14'. It is bolted to a 1/8" aluminum disk which is bolted to a new jumper strut replacing by standard strut somewhat higher. This strut is a lovely piece of locust from Concordia (what else?) and long enough for the jumper stay to clear the scanner. A couple of toggles will



extend the old jumper stay to fit. A neat aluminum gusset p/s joins the mast and strut. The lead-in of the Raytheon 1200 is hard-wired to the scanner. It has a fairly large multi-conductor plug to be led to the display. It goes down through holes in the disk and strut, is clipped to the mast and down through a standard deck filler plate in the deck. Split wooden plugs with accommodation for the lead-in cable and buttered with silicon goo make a tight seal. In MALAY, the display location was a compromise between being able to look at it directly from the helm and getting it out of the weather but near the companionway. We located it athwartships on the port side, facing inboard under the coach roof. In that way, the person monitoring it is handy to the helmsman. I should add that on MALAY we had previously narrowed the companion entrance with rugged shelves p/s which give good weather protection to the display. The under side is amply padded to reduce goddammits from anyone doing the dishes under it. After six seasons with it, I would not change. My philosphy is that a crew member should do the monitoring and advise the cockpit. We had a great test this past summer when the fog in Maine was thicker and more persistent than ever in my experience. For Concordians with little excess water for showers, radar can be a boon. In 1984, when we were becalmed and sweltering 100 miles from Bermuda, there came a blessed rain squall without much wind in it. We stripped and revelled in it, soap in hand. Then someone watching the radar said, "Knock it off and rinse. The rain will be over in two minutes." And it was. What a marvelous gadget. It will also show the extent and range of a thunderstorm and the nearest exit. Its maximum range is 12 miles, but we find more use in the 1/4 - 2 mile range for buoy finding and collision avoidance.

OFF CALL #58 - Clarke Staples, Boothbay, ME: I have enclosed a drawing showing the installation of a Raytheon 1200 radar display on the starboard side of the



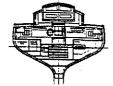
companionway of my Concordia. reason it is put where I described is that we find that it is much more convenient have someone else besides the helmsman observing the scope. However, it can be moved in any direction because of the slot in the board as described. May I suggest that a small sail track might be more convenient for anyone to make rather than the bolts shown in the drawing. We use this only

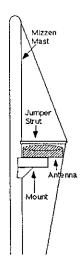
when necessary. The rest of the time the radar is kept in the bottom of the hanging locker. We had an interesting gathering at my place last summer with three octogenarians who are original owners of the Concordia yawls: Graham Pope, M.D., #14 SAXON, Alida Camp, #62 THISTLEDOWN and myself Clarke Staples, #58

OFF CALL. At long last I find that I must sell our beloved OFF CALL. I am having a rather severe vision impairment and if I cannot sail my boat as I have always done I feel that I would rather have someone else own it and enjoy it. If anyone wishes to have it, please let me know. I can give all kinds of descriptions of major renovations that have been done.

HAVEN of Padanaram #100 - John Bullard, So. Dartmouth, MA: We have our radar display mounted over the cabin table underneath the cabin rooftop. The advantages of this are that it is visible from the cockpit and that it does not have to be moved. The disadvantage is that until you get used to it there you will bump your head. Towards this end we have artificial flowers attached to the display to warn the unwary. Our experience has been that it does not take long for those who are familiar with its location to avoid it, but newcomers to the boat will probably make contact with it several times before its presence there becomes fixed in their subconscious.

NIORD #50 - Peter Engels, Lexington, MA: Here are some suggestions for radar installation based on the one we have on NJORD. Radar Selection: The first thing you have to do is choose a model. My choice was the Raytheon R-10. Most of the standard radars for yachts have an antenna that is two feet in diameter (or larger). The R-10 antenna is only 18" and it fits nicely on the mizzen without looking overpowering. It can also be installed without modification to the jumper strut or stay. The other important consideration is the overall size of the display. Most radar displays are too large to fit comfortably anywhere belowdecks on a Concordia. When not in use, the R-10's display fits in the shirt/chart locker (behind the hanging lockers), and is neatly stowed out of the way. When in use, we set it in the starboard corner of the bridge deck, and wedge it in place with a cushion. In this location it is handy for all to see, but never in anyone's way. Although not fastened down, this display seems to stay in place without any problem. I might add that our sailing is limited to New England/Canada, and fog here is usually accompanied by fairly light airs. The Furuno 1720 is about the same size and price with some additional features but was not available at the time. Panasonic is about to introduce one as well. Location and Installation: The most important factor in choosing a location for antenna is height. Because radar, like VHF radio, operates over line of sight only, its range is determined by how high you mount it. For the technically minded, the range (R) in statute miles is related to the antenna height (h) in feet above the water by the equation: $R - \sqrt{2h}$ (multiply R by 0.87 to get range in nautical miles). I think the logical place for the antenna on a Concordia is the mizzen mast. It is completely out of the way and there is little chance of fouling halyards or sails. We found that the R-10's antenna would fit neatly under the jumper strut; if you try to mount it above the jumper, there is less room and the jumper strut will need to be enlarged. This location





results in an antenna height of about 17' which provides a range to the horizon of 5 nautical miles. You also need a mounting platform for the antenna. Our choice was the Boat/U.S. Standard Radar Mount (item no. 308019 on page 205 of the 1990 catalog). The cable should be attached to the antenna before it is placed on the mast as there are 25 or 30 screw terminal connections to be made and it would be impossible to do once the antenna is mounted. Lead the cable down the mast, fastening it to the mizzen every two feet or so with a cable clamp and screws. The cable should go through the deck as close to the mast as possible without having to cut holes through the mast step supporting timbers. On NJORD it goes through the deck about 6" to starboard of the mast step. I then led it through the lazarette and the underdeck locker on the starboard side. The connector end is then coiled up and hangs on a hook just aft of the door to this locker that is aft of the starboard side of the galley (back under the bridge deck). When radar is needed, we place the display on the bridge deck, in the starboard corner. We have a dodger which covers the whole bridge deck and shields the display from any serious invasion of the elements. The antenna cable is just long enough to reach this location without strain, coming through the door at the aft end of the galley that provides access to the starboard underdeck cockpit locker and out of the companionway hatch to the bridge deck. The power cable must also come from wherever your power panel is Ours is adjacent to the door accessing the starboard cockpit locker. Comments on Use: Learning how to use and adjust radar is not simple. There is some interaction between the controls. In addition, the controls need some adjustment as the electronics warm up. Interpretation of the display picture takes some time. Be sure to play with it during periods of good visibility comparing what you see to what is on the chart. We have found that with practice you will be able to spot the smallest nun or can at distances of 1/2 to 1 mile and also small boats. Do not expect consistant and reliable results at ranges more than 4 or 5 miles. The limited antenna height (and relatively low power of the smaller units) makes the radar unusable at ranges of 8 miles or more except possibly to spot very tall lighthouses or high terrain. Even if the antenna were located at the top of the mainmast, an impossible location for any reasonable installation, the maximum range would be no more than 10 miles. Have fun installing - it's great peace of mind in the fog. (Editor's note: Unlike low frequency radio waves that tend to refract and fill around obstacles, microwave radar signals will not, and a slight shadow may result from the mainmast blocking the forward "vision" of the radar. This is referred to as a "near field obstacle." The dead zone depends on beam width (the narrower the beam, the greater the blocking effect) and relative size and distance of the obstacle. Fortunately a 7" wide mast 22' away does not produce much of a problem in the "dead ahead" quadrant. The "dead astern" quadrant is another consideration, especially when you hear a fog horn approaching right on your tail. Try a few slight "S" turns if you're not painting any targets back there. The mainmast won't appear on the display because of the short (about .08 microseconds) pulse duration of radar. This translates into a minimum theoretical range of 40'.)

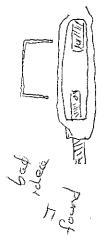
We are fortunate to have a world famous rigging expert and author of <u>The Rigger's Apprentice</u> contributing to the Concordian. Those of us in Washington are even more fortunate to have him nearby and occasionally crawling around our boats. It helps even more that he is a Concordia nut. Brion Toss, master rigger and proprietor of Center Harbor Rigging in Port Townsend has been very generous with his prose and we all benefit from his comments.

Brion Toss, Port Townsend, WA: Hello again. A follow up letter as promised by me and urged by you. First, the matter of tuning the rig. Because a stack wire is subject to shock loading, the basic concern is to see that there is no slack in any of the standing rigging wires. Since a wire under tension will resonate, you should be able to give a shroud or stay a firm pluck and be rewarded with a low musical note. Slack the turnbuckle little by some and the note descends still lower. At a certain point the wire will stop resonating and start rattling around when plucked. That's too loose. Wire length and rig configuration complicate things. First, wire Any standing rigging, even rod rigging, stretches under load. When shrouds stretch, the mast bends to leeward; when stays stretch, the luffs of the headsails sag. There is no way to eliminate this stretch completely, but proper tuning can manage it. Since total stretch is a function of length, long wires will stretch a greater distance than short ones under the same load. Assume that your upper and lower shrouds are the same diameter and construction, and under the same load (not always the case, of course). As the load comes on, the mast bends to leeward. If upper and lower shrouds are under identical tension, the top of the mast will move further than the bottom, because the upper shrouds are longer. To compensate for this, and for any compressive "give" in the spreaders, remove initial elasticity in the uppers by tensioning them somewhat more than the lowers. If there are intermediates, tension them tighter than the lowers, looser than the uppers. When all the shrouds are tuned just right, the mast will stay straight as it moves slightly to leeward with wire stretch. Eliminating sags and bows means that the mast is not subjected to damaging distortion. Jibstays and backstays, being longer wires, are tightened last of all. But do not make the mistake of trying to eliminate all luff sag. This is no more possible than eliminating leeward mast travel. Instead, excessive tensioning only applies a tension and compression load for which wire, mast and hull were not designed. What is more, your headsails are designed to operate most efficiently with a certain, precisely calculated amount of luff sag. Check with your sailmaker or rigger regarding this when tuning. Now for Original Concordia masts, unlike many modern the effects of configuration: aluminum ones, are meant to be inflexible in a fore-and-aft as well as lateral plane. It is common - and I think a good idea - to have a slight aft bow to the mast above the spreaders, but this is not meant to be adjustable, only a way to keep the mainsail draft forward, and to deliver some of the effects of compression to the aft lower shrouds. The forward lower shrouds provide lateral support, as well as the

very valuable service of preventing the middle of the mast from buckling aft, as can happen in heavy chop on boats with only aft-leading lowers and with insufficiently stiff masts. Together, fore and aft lowers locate the mast in both planes, but it is the aft lowers which take the greater strain. Accordingly they should be tensioned slightly more than the forward lowers. With a bendy rig, the as the mast bends, the middle bows forward, loosening the opposite is true: forward lowers and tightening the aft. You have to anticipate this bend when tuning, tightening the forward lowers more than the aft. That way the forward ones won't be too slack and the after ones won't be too tight when the mast bows. Weird, huh? For fractional rigs, there's the added complication of jumper stay tuning. Jumper stays are short wires whose function is dual: to control lateral masthead sag in the absence of upper shrouds at the masthead, and to maintain forestay tension in the absence of a backstay down where the forestay is. Wait, let me try that again. With a masthead rig, tightening the backstay automatically tightens the jibstay. But tightening the backstay on a fractional rig just bows the mast, which actually slackens the forestay. Jumper stays and their struts control this bow. For heavy weather they are usually backed up by running backstays, because jumpers can only provide so much stay tightening leverage. Anyway, tuning jumpers is again a matter of anticipating loads. Underway they'll stretch a bit, letting the masthead go aft and the middle go forward. You tension them anticipating this stretch - just. Too much tension and the mast could curve aft at the forestay; too little and the forward bow will be exaggerated, distorting sail shape. And the other extreme could threaten the integrity of the mast. One often sees jumpers over or undertuned, or even left with one stay tighter than the other, resulting in a compounded asymmetry which is interesting from an aesthetic viewpoint but makes for lousy rigging. With the turnbuckles up in the air, tune adjustment is just more of a bother than most people are willing to take. But the boat suffers. Fuss with those jumpers! Now to translate these ideas into practice. If you have a fractional rig with jumpers, tune them first. If the mast is out, you can do this on the ground, but make sure the mast is lying squarely - ideally face down to simulate back and forestay loads - so that both stays can be evenly tensioned. Check eveness by laying your cheek against the mast near its base and sighting along the length. It should be straight in the lateral plane, with perhaps a very slight forward bow in the fore-and-aft plane. When the stick is in the boat use forestay, backstay and aft lowers to center it laterally and to set its rake. The latter will be determined by step and partner location as modified by your preference. Concordia's usually carry their mains close to vertical, with a little more rake to the mizzen (because if the mizzen is also vertical it will appear to be



raked towards the main). Tighten the wires just enough to locate the mast. Step or row away from the boat to check appearance. The hull itself must be level, of course. With a little practice you can set a mast plumb by eye, but as a backup you can use a halyard to check lateral plumb: slack the halyard away (jib is good) until you can just touch a forward chainplate with the shackle. Walk over to the other side and you should also be able to touch the corresponding chainplate there. This assumes that the hull is absolutely symmetrical, so trust your eyes, too. When the mast is where you want it, take up on the lower shrouds, a little on each at a time so they gain tension evenly; take up too much at a time and it can pull the mast over, tightening the other shroud as it does so. Distortion. With moderate tension on the aft lowers, take up on the forward lowers, not quite as tight. Then work up, doing the intermediates, if any, a little tighter that the aft lowers. Uppers tighter still. Then the backstay, enough to put a little less than the desired bow in the mast. Then the forestay to finish. Check everything over again, finessing. The forward lowers on a fractional rig, especially a bendy one, can be loosened by the tensioning of the forestay, and the aft lowers can be overtightened. Make small adjustments only. Sight up the mast in both planes repeatedly as you tune. At no time should any lateral bend appear. Nor should any unwanted fore or aft bend. If one occurs, the natural inclination most of us have is to tighten a wire to remove the bend. Say the middle of the mast bows to port - tighten the starboard lower shrouds to pull it straight, right? But that assumes that the port lowers are causing the bend. They might play a part, but the bow could also be in part the product of the starboard upper being too tight, or the jumpers unevenly tensioned. So when a bow appears, the best procedure is to loosen everything up and start again at the bottom, this time working to maintain straightness. So much for the static, or dockside tune. Now it's time for a dynamic tune under sail. Go out, preferably in a just-shy-of-reefing breeze, hard on the wind. Sight up the sail track - put your face right against it. Mast straight? Or does the headstay sag to leeward? Or does the middle bow to weather, or jump around in a chop? Or is anything else happening but a perfectly straight stick? Sight up the side. Do you have the fore-and-aft curve you want? A smooth curve, or does it jog aft at the lowers, forward at the forestay? Is the mast "pumping" fore-and-aft in a chop? Finally, look at the leeward shrouds. They should be looser than the weather ones, but are they actually flapping in the breeze? If so, everything is too loose. Stop, analyze what you've seen. Consider how any inequities might relate. Proceed cautiously. Don't, for instance, go to leeward and tighten everything right up; you'll get some unholy strains on everything when you tack. If things are really out of whack, go back to the dock and redo your static tune, as informed by what you've seen under sail. If things are off just a bit, take up slightly, intuitively, on the appropriate leeward shrouds. Tack. Do the new leeward shrouds. Come to weather and make any needed adjustments on fore or backstay. Fall off, tack and tack, checking, fussing. Get it right. This rig was designed by a genius; bring out its potential. Go



to the mizzen. With no heavy staysail loads (the mizzen staysail is a very low-load sail), you needn't tune nearly as tight. But fuss here too. When everything is where you want it, mark your turnbuckle threads, so you can resume this tune if you haul the stick, or, as is good practice, you slacken things, particularily the backstay and uppers, to de-load the hull if you aren't going out for a while. Cotter all around. Or, as a nifty alternative to cotters, get some flux-free stainless steel welding rod. Cut a piece, bend it into a square "C" shape, and pass it through the two cotter holes in the turnbuckle. Bend the ends down to secure. Quick, clean, no snags. Next time we'll be talking about inspecting, serving and preserving all those lovely wire splices, so get ready with your anhydrous lanolin. Fair leads, all.

New Owners:

After 30 years of "education, excitement and darn good fun," Forbes Perkins has sold #80 GOLDENEYE to Robert Hillier of Nonquit and Taunton, MA. Plans are to keep her at Concordia. Rumor has it that #4 TEMPO has been sold to Rick Holley of Seattle and that he is going to sail her home from Miami. Concordias reported currently for sale are: #10 QUIET THUNDER, #58 OFF CALL, #68 BELLES and #86 DAME of SARK.

The first ever Cadillac Award of Excellence was presented to Tom McIntosh of Long Grove, IL, for his outstanding performance in the 1989 Chicago-Mackinac Race. His 50 (sic) year old wooden Concordia yawl, (#66) MISTY, won the IMS Division 10 by almost one hour, finishing 26th overall among the fleet of 172 IMS yachts. (USYRU Newsletter 1/90.)

Three Concordias are scheduled to compete in the 1990 Newport-Bermuda race this June. Along with MALAY I, Greg Carroll is taking #49 MOONFLEET and Bob Snyder is taking #91 SHIMAERA. We wish them well and expect a report upon return.

Mike Gross is a skilled do-it-yourselfer. After completing a unique by-the-water (Eld Inlet) and in-the-woods home (with yacht-like interior) near Olympia, Washington, he decided he would like to take on a major boat restoration project. In anticipation, he built a 35' long shop with a very high ceiling and heavy concrete floor. Then he went shopping for a boat. Soon he found himself lengthening the shop another 10' so his new Concordia yawl could be slipped inside. It appeared to be a good match as Mike wanted a project and #15 SOVEREIGN, built in 1953, needed major repair. When I stopped by in December SOVEREIGN was pretty well stripped down and Mike was just beginning to realize the enormity of what lay ahead: new decks, keel and stem bolts, miscellaneous refastening and joinery, engine work and major refinishing and upgrading. He is estimating at least two years but in the end we expect to see another SAFARI or

WINNIE type return from the ashes beauty. When will he ever find time to complete the matching dinghys he's building for his two sons, Nicholas and John?

The annual Northwest Concordians Midwinter Rendezvous was held on Ben & Anne Niles houseboat in Seattle late January. Ben was singlehanding that night as Anne was in drydock making final preparations for the March 6 launching of Halsey Fernald Niles. (LOA 1' 8.5", Displacement 7 lbs., 3 ozs.) Congratulations. Fleet perpetual trophies were awarded as follows: 150 Grit & Gloss to Doug Adkins, who managed to nearly overturn the US trade deficit by having his bright hulled #82 CORIOLIS completely refinished at the Canadian yard of Bent Jesperson. (Doug reports that he is planning to replace his wheel with a tiller- as soon as Alden Trull comes up with the necessary hardware. Asked if Concordia carried the parts in stock Alden replied, "No, but we can make (\$\$\$) them.") Hospitality Award to Beverly Brazeau for demonstrating her culinary skills (and showing off her new oven) by baking fresh cinnamon rolls aboard #39 CANDIDE for the entire fleet on the last cruise. Pride of Fleet to #103 IRENE for her racing performance and being awarded "Best in Show" at the Victoria Classic Boat Show. Northwest fleet is again planning their summer rendezvous to coincide with the Classic Mariners Regatta in Port Townsend tentatively set for June 2 and 3. Plan to attend and leave your spinnakers at home. This is a fun race, remember?

As mentioned earlier, the 45 minute video CONCORDIA: A Classic Wooden Yacht is finally out. It is very well done and will make a welcome addition to your library... The Coast Guard seems to be on the warpath again against sewage discharge. Anybody have ideas on holding tank installations for a Concordia? Ugh, what a thought... The question of boat insurance brought up by Bob Jones warrants further discussion... As the old Greymarines rust away or second generation diesels wear out the decision about what to replace it with comes up. Are there any strong opinions about this and what has your experience been?... Suggestions for improvements or artwork you may have for the newsletter will be gladly accepted. Has anyone a good typesetting computer that might be used to improve our layout?... New and oldcomers: \$5 a year just about covers printing and postage for the Concordian. Thanks to those who have remitted and extra thanks to those who have remitted extra. And thanks to all who write because that's what everyone is interested in. Share your ideas and suggestions with us and keep those letters and stories floating in.

Smooth Sailing

4344 King Avenue

Bellingham, Washington

98226-8727

Concordia: A Classic Wooden Yacht

A documentary featuring the people and boats in Concordia history.
Archival footage of Concordia Company serrly years.
Race footage of 69 Concordias in Buzzarda Bay at the 50th Anniversary.
Interviews with Waldo Howland. Ray Illunt. Dan Strommeter.
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