

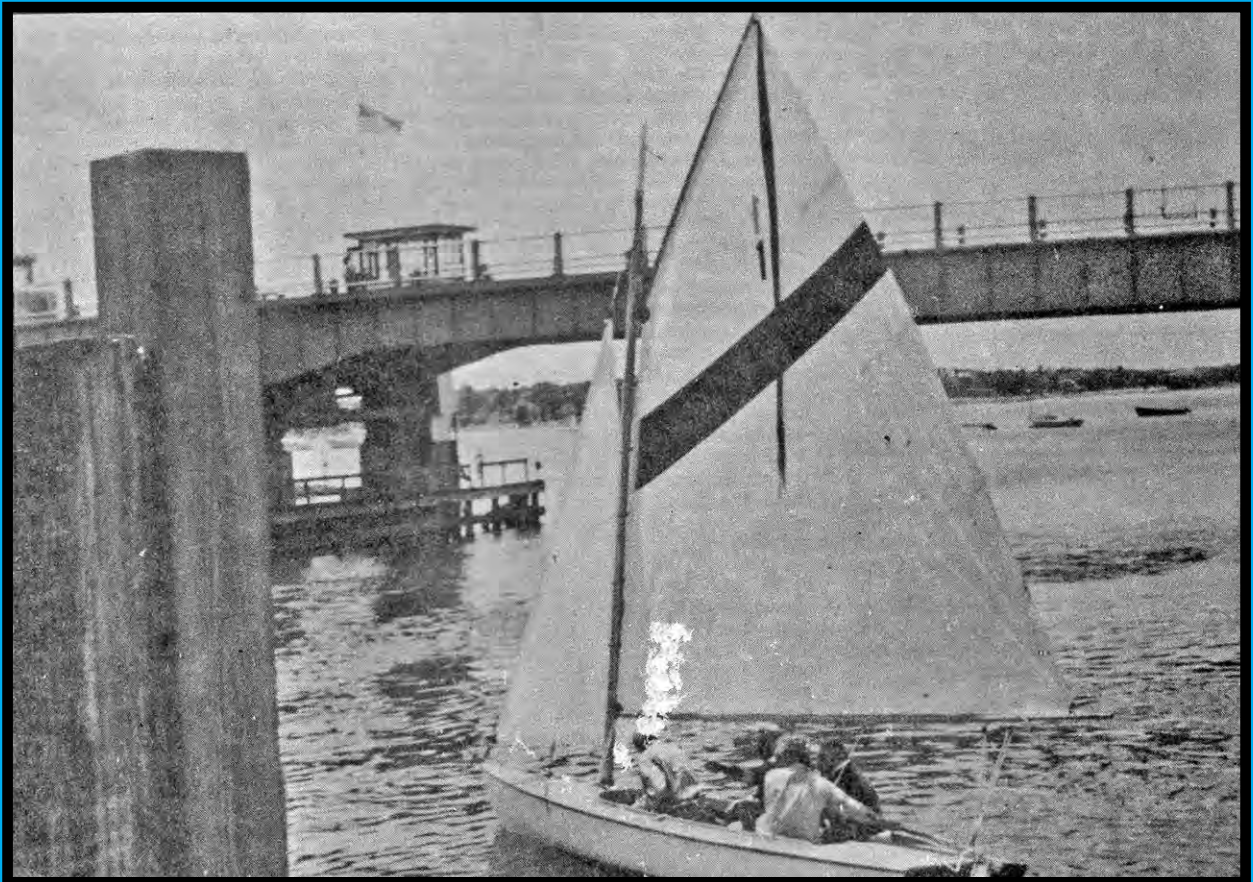


# messing about in **BOATS**

Volume 40 – Number 1

May/June 2022

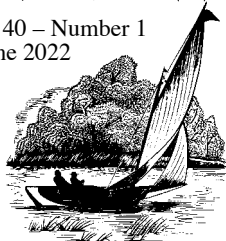
*40 Years & Farewell  
After 40 Years It's Time to Say Goodbye*



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Volume 40 – Number 1  
May/June 2022



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## Subscription Refunds

Since all of you have paid in advance for a year's worth (now six issues) of this magazine, our need to cease publication due to no longer being able to meet its costs leaves you short of what we promised to deliver. If you wish to be refunded the amount remaining for the unfulfilled portion of your subscription we are requesting that you so inform us by email or regular mail (please no phone calls as we cannot guarantee accuracy of information received over the phone).

If you can do so by the end of June it will be helpful to us in closing out *MAIB's* affairs.

*MAIB*, 29 Burley St, Wenham, MA 01984  
maib.office@gmail.com

# Commentary



Getting Started May 1983

**BOB HICKS**

Yep, you read it right on the cover, "40 Years and Farewell, After 40 Years It's Time to Say Goodbye." It may appear rather sudden but the decision to give up an activity that has occupied half my lifetime has been facing me for the last two years. It's all about the money, I still enjoy my work and all the rewarding contact it has brought to me with so many of you in this small boat game. Shrinking income and increasing costs have made further publication unaffordable for our limited resources.

This May/June issue completes 40 years (760 issues) of publishing *MAIB* and I have decided to call it enough. It was a living of sorts until the 2008 crash, after that we became a hobby business. The last two years have not been good, the adjustment made a year ago to six issues/year helped some but not enough. Now we face a printing cost increase (15%) due to cost of paper going over the top and in June the US Postal Service will again be raising its rates for mailing each issue to you. When what

has, over the past couple of years, become just a hobby business that cannot pay all its bills without dipping into our retirement savings, it's time to bail.

Your ongoing support as subscribers and advertisers has been vital. On the facing page is an appreciation sent to me a dozen or so years ago for what I do from long time contributor Robert Summers. I have often had similar encouragement from many of you. While I accept the fact that I do put this little magazine together for all to enjoy, I emphasize that it would not be what it is had not so many of you shared your experiences with all of us. We have all been what is commonly called today a "community."

It's been a great trip and I still enjoy what I do but at 92 life grows short and options for living what's left grow few. And so it is with great reluctance that I say, "farewell," a word which expresses my good wishes for your future "faring well" messing about in boats as we part.



Farewell May 2022

## On the Cover...

Our introductory issue cover from May 15, 1983 reappears on this final issue to bow us out after a "cruise" of 40 years. It represents to me a metaphorical heading out on a cruise to wherever it might lead in the world of messing about in boats. Over those 40 years we made 760 stops along the way to share news of folks messing about in boats with you. I'm sorry to have reached the end but circumstances have now arrived at the point where it is no longer possible for me to carry on. It has been a wonderful trip that several thousand of you have made possible over those years with your support. I explain why this moment has come to pass in my adjacent Commentary.



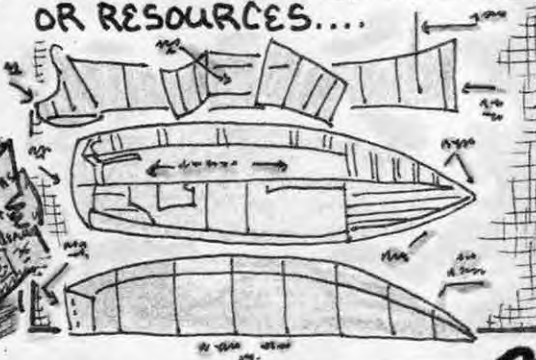
"...as long as enough of  
you continue to support  
MAIB with your stories  
and subscriptions, we'll  
keep turning up every  
month in your mailbox...."



FIRST PUBLISHED IN  
1983, Messing About in Boats  
PRESENTS EXTRAORDINARY  
PEOPLE AND THEIR UNIQUE  
ADVENTURES IN ALL SORTS  
OF SIMPLE WATERCRAFT....



...WITHIN ITS PAGES READERS  
FIND PLANS FOR DINGHIES,  
CREATIVE DESIGN PROPOSALS,  
PLUS HANDY SMALL BOAT  
SAILING TIPS FOR THOSE OF  
US WITH LIMITED SKILLS  
OR RESOURCES....



...ALSO, FEATURE ARTICLES  
BY C. HENRY DEPEW, BOYD  
MEFFERED, DOC REGAN,  
MATTHEW GOLDMAN, AND  
MISSISSIPPI BOB, DISCUSS  
EVERYTHING FROM ROWING  
AND REGATTAS TO COASTAL  
MEANDERINGS AND  
MARITIME  
DISASTERS....



... THANK YOU, BOB HICKS,  
FOR, "Undoubtedly the  
best small boat magazine  
in existence!" \*



\* Chuck Leinweber, Duckworks

## The Riviere des Prairies

From *The Poetical Works of William Henry Drummond* (1912)

I see de many reever on de State an' ev'ryw'ere  
From Maine to Califotrnia, New York to Michigan,  
An' wan way an' de oder, I tell you I don't care;  
I travel far upon them as moche as any man...  
But all de t'ousan' reever I was never pass along,  
For w'at dey call de beauty, from the mountain to de sea,  
Dere's wan dat I be t'inkin', de wan w'ere I belong,  
Can beat dem all, an' easy, too, de Riviere des Prairies!

Jus'tak' de Hudson Reeve, an' de Mississippi to,  
Missouri, an' de res' of dem, an' oders I can't t'ink,  
Dey're all beeg, dirty places, wit' de steamboat gruntin' troo,  
An' de water runnin' in dem is as black as any ink,  
An' de noises of dem reever never stoppin, night or day,  
An' de row along de shore, too, enough to make you scare;  
Not a feesh is wort' de eatin', less you're starvin' by de way,  
An' you're feeling purty t'orsty if you drink the water dere!

So ketch de han' I geev' you w'ile I'm on de humor now,  
An' I bet you won't be sorry w'en you go along wit' me,  
For I show you all aroun' dere, until you're knowin' how  
I come so moche to brag...me...on de Riviere des Prairies.  
It's a cole October mornin', an' de maple leaf is change  
Ev'ry color you can t'ink of, from de purple to de green;  
On de shore de crowd of blackbird, an' de crow begin' arrange  
For de journey dey be takin' w'en de nort' win's blowin' keen.

Quick! Down among de bushes...don't you hear de wil' goose cry  
An' de honk de great beeg gander he was makin' up above?  
On de lake dey call Two Mountain is de place dey're goin' fly,  
But only spen' de night-tam, for dey're always on the move;  
Jus' see de shadder dancin' up an' down, up an' down,  
You t'ink dem geese was passin' in an' out between de tree  
W'en de branch is bendin' over on de water all aroun'  
Now you see de place I'm talkin', dat's de Riviere des Prairies!

Missouri! Mississippi! Better wait tillyou go back  
No tam to talk about dem' w'en dis reever you can see,  
But watch de cloud a-sailin' lak a racer on de track,  
An' lissen to de music of de Riviere des Prairies...  
An' up along de shore dere, don't you envy Bord a Plouffe?  
Oh! dat's de place is lucky, have de reever come so near...  
I'm knowin' all de people, ev'ry chimley, ev'ry roof,  
For Bord a Plouffe she never change on over feefty year!

St. Martin's bell is ringin, can't you hear it easy now?  
Dey're marryin' or buryin' some good ole frien' of me,  
I wonder who it can be, don't matter anyhow,  
So long as we're a-lookin on de Riviere des Prairies.  
Only notice how de sun shine w'en he's comin' out to peep,  
I'm sure he's leetle brighter dan anyw'ere you see,  
An' w'en de fall is over, an' de reever's gone to sleep.  
De w'ites' snow is fallin' on de Riviere des Prairies!

I love you, dear ol' reever, more dan ev'ry Yankee wan;  
An' if I get de money, you will see me on de train,  
Wit' couple o' t'ousand dollar, den hooraw! it's good-bye John!  
You can kill me if you ketch me leaving Bord a Plouffe again.  
But sometam it'll happen dat a feller's getting stop  
Because he's comin' busy wit' de wife an' familiee.  
No matter, if de good God he won't forget to drop,  
Ev'ry day an' night, hees blessin' on de Riviere des Prairies!





# **messing about in BOATS**

Every Two Weeks

Volume 1-Number 2

June 1, 1983

## **Back in the Day...**

The content in our introductory May 15, 1983 issue was entirely my own doing as nobody out there in readerland had yet seen the magazine. First content to appear from the early readers who received that issue were the Classified Ads (lotsa of 'em) in this June 1 second issue which we reprint on pages 12 and 13. Best not to respond to these however after 40 years!

Two issues later in the July 1 issue we had the first individual reader input from Ron Ginger, comments on "Amateur Boatbuilding for the Love of It" which we reprint on page 11. Ron captured exactly a major reason why I had been drawn into this small boat world. He pioneered the ever growing, never ceasing flow of contributions from hundreds of readers that arrived from the growing readership in the ensuing years making the magazine what it became.

The first appearance of a reader contribution that led to ongoing regular columns from readers appeared in the August 15 issue with Tim Weaver's series on his life and times with *Patina*, a New Haven sharpie which we reprint on pages 6-10. He set the stage for an evolving and growing number of reader/columnists whose wide ranging messing about in boats topics lent substance to our name over the 40 years we have been bringing all this to you.

Both Ron and Tim are still with us, as are many of you at hand for this final issue. Your long time ongoing support has made *MAIB* "our" magazine and rewarded my efforts at publishing it a wonderful period of my life. Thank you.



# PATINA



A SIXTEEN FOOT NEW HAVEN SHARPIE BUILT FROM PLANS OF THE W.B. FROM MYSTIC SEAPORT MUSEUM AND DESIGNED BY LESTER ROWE, A NOTED 19TH CENTURY NEW HAVEN BOAT-BUILDER.

## Needs a Home

LAUNCHED IN 1980, PATINA IS SOUND WHITE PINE ON WHITE OAK CONSTRUCTION. THOUGH SHE DOES NEED SOME WORK, SHE IS THE IDEAL BOAT FOR THE RIGHT SKIPPER. OWNER/BUILDER MUST SELL, GOING TO COLLEGE.

The first time I saw PATINA her owner was handing out this flyer in an attempt to sell her:

I took one, although at this point I had no intention of buying a boat, wasn't even looking for one. However, the more I re-read that flyer, the more it appealed to me. I like to think of myself as modestly paternal and PATINA did need a home. And, maybe underneath it all I was a "skipper" and didn't know it. And, here was history, love the subject, and craftsmanship. It was obvious she had a few wrinkles, but a bit down the line there was the promise of a good sail. Two masted, no less. But, it had been ten years since my last boat.

I called the fellow and we made a deal. Terms, cash, but not much. His advice: Read Chapelle and write Mystic Seaport for a copy of the plans to which she was built.

So, late one fall day and with the help of two friends, I drove to Essex, Connecticut, loaded PATINA onto my pick-

up and headed back to Hartford. Took the first place I could find to store her and rolled a couple of logs under her and began to inspect things a bit more closely.

It was a pleasant surprise. She had a nicely cambered half deck, steam bent cowl, inboard rudder and beautiful sheer. Not to mention sails and much mysterious rope and rig, but that's getting ahead of the story. Structurally she was as nice as she looked, good heavy oak centerboard logs, chines, keelson, deck beams, foremast partner and main thwart. Like the W.B. she was neither sharpie nor skiff. She was, instead, Lester Rowe's idea of a miniature sharpie and he would have known. He was a noted sharpie builder and oysterman of Fair Haven, Connecticut.

Without question I had come upon an intriguing little boat.

At this point I took the builder's advice, quickly acquiring copies of Chapelle's books, BOATBUILDING and AMERICAN SMALL SAILING CRAFT and

a copy of the W.B.'s plans from Mystic. And was enchantingly adrift. The small sailing workboats of the past and of that lineage PATINA partakes, rose and dropped astern. Bateaux, Block Island cowhorns, garveys, log canoes, peapods, whitehalls, sharpies, skipjacks, Tancook whalers, scows. The Tancook whaler, now there was a boat, or, getting down to basics, what about a Block Island cowhorn?

But a pleasant journey must end and, as interesting as AMERICAN SMALL SAILING CRAFT was, PATINA was on my mind. The phrase from the flyer, "Though she does need a little work . . ." was beginning to intrude. That phrase boiled down to two words, she leaked. Here was trouble. At its best, a planked skiff that won't stop leaking is a tempest in a teapot. Once these little folk go into the water, they are meant to stay there. And if they leak, they sink. Every time. All summer long. No fun. If things are right, the skiff goes in, promptly sinks and stays that way for a while, then just bail her out and she's all set for the summer. It is positively disheartening to work on a nicely painted swelled skiff that just won't stop leaking. A good skiff should swell tight and stay tight. And, needless to say, PATINA did not. I needed another book.

Enter BOATBUILDING. BOATBUILDING soon became a late evening companion. Keels, sheers, garboards, chines, battens, plans, layouts, timbers, frames, ribbands, fastenings, planking, caulking and hardware swirled through my mind. And tools: Steambox, mallet, adze, plane, spokeshave, augers, scrapers, chisels. I was intrigued by caulking irons: Reaming, common, making, deck, bent, reefing. And all explained and illustrated to some degree. Amazing. And how about the brief section, page 598, "Turning professional." With discipline I pulled my imagination back. My problem was PATINA, your basic flat bottomed model. And here was plenty of help. I would eye details relevant to PATINA, check the Mystic blueprint, and then check PATINA. Nine times out of ten she held up. The right wood was in the right place.

I investigated a bit more, took a few bottom planks off. The fastenings were a touch short by Chapelle's rule, "The rule is the 'penny' of the nail should be the number of eighths of an inch in the thickness of the plank through which it was driven. In soft wood, the 'penny' should be two eighths greater than called for in the rule." And, the bottom planks tended to warp away from the chine at their edges. Not good. Also much of the clamp and chine fastening was done from oak to pine. That went against the sense of things. And the chine was not flush to plank to which it was fastened. I decided the chine must have moved and would continue to do so, causing more leaks.

A decision was reached: Refasten the chines and the clamps, this time from pine to oak; replane the chines flush with their side planks; replace the bottom planks from a bit forward to a bit aft of the centerboard; refasten the remaining planks as needed. So, in late

December I removed the planks I was going to replace.

A necessary preliminary step was the removal of the outer keelson, and it just about peeled off in my hands, further re-inforcing my original conclusion of loose fastenings as a key issue. I must add here that had PATINA been a round bottomed skiff or, and especially so, a dory, John Gardner's book, *BUILDING CLASSIC SMALL CRAFT* and *THE DORY BOOK* would have been just as valuable as *BOATBUILDING*.

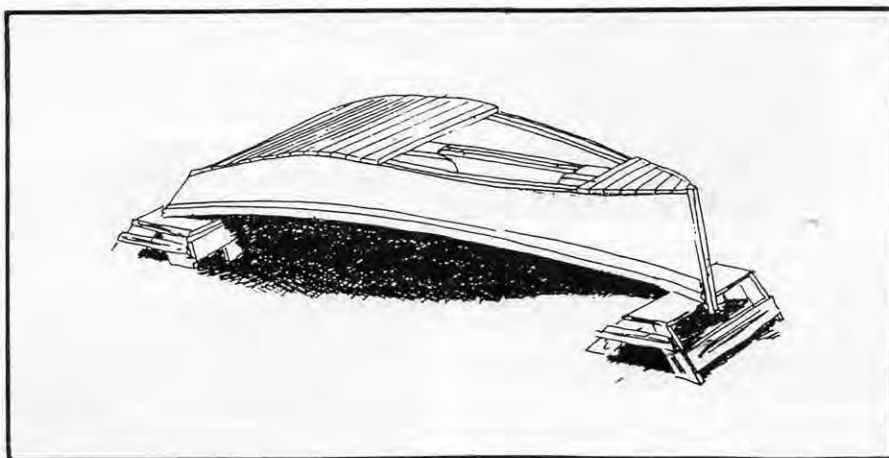
At this point I began to make my mistakes. I thought the bottom would hold its shape on the strength of the remaining planks, the thwart and the deck beams. It almost did until the unforeseen need to move the boat was forced by the sale of the property on which she was being kept. In the process of unloading her and re-setting her up, a slight twist entered the picture. I decided to let it be. PATINA was a sprung shape to begin with and trying to re-establish centerlines without completely rebuilding the boat seemed impossible. So she went back together with a touch of a twist. A bit more common sense at the start, adding a few temporary frames, might have avoided the trouble. But, forward.

With the outer keelson and planks removed, the problem became wood. Chapelle liked air dried wood. It was not available through the usual lumber yards and was just too expensive through the marine lumber yards. The answer was found in a small local sawmill, and I might add that they haven't changed in thirty years. One waits patiently, is heard out, and some wood found. I had the pleasure of discovering Moore's Sawmill in Bloomfield, Connecticut. Over hill and dale it lies, and the Moores have been in business a hundred years.

I wanted white pine, clear. Mr. Moore said fine, adding that growth knots wouldn't hurt, and led me to some rough sawn stock and let me have my pick, though I deftly allowed him to help me with the choosing. The wood set aside, he asked how thick I wanted it planed. I replied as close to an inch as possible. I was then told it would be ready in a few weeks as soon as he had enough work to make setting up the planer practical. Perfect. Just finding the wood, let alone getting help in picking it out, was more than I had a right to expect. I was pleased and paid in advance. I paid either 39¢ or 49¢ a board foot and a week later picked up 60 board feet of good pine. It was much better than the select grade at the local lumber yards. It was nice and heavy, with a fine cream color, and I had had two nice rides out into the country and met a delightful fellow.

I had also met his assistant, Bob Grogan, who repaired, as luck would have it, wooden boats from time to time. I arranged to have him rip my wood into six inch widths. Having explained what I didn't know about what I was trying to do, I got some good advice, and bought a used mooring buoy and some chain in the process. Things were beginning to shape up.

Tools now mattered. I owned a finish saw, a few screwdrivers, a framing



square, a saber saw, a power drill and a hammer. The situation demanded a bit more. Buying used, I added a jack plane, appropriate augers, twist drills, countersinks, three large clamps, and last but not least, a drawknife. The drawknife added immensely to the spirit of things.

Although Chapelle was helpful when it came to tools, another book, *THE USE OF HAND WOODWORKING TOOLS* by Leo P. McDonald (Delmar Press, Albany, NY, 1962) was a great help, if only for its information on sharpening hand planes. A dull plane is a difficult tool, trying to plane the oak chine level with the side plank proved the point. A sharpened one turned the task to joy. Thin shavings took sail. The side and the chine became one so nicely.

But, let me not forget the most critical tool of all, the ever present, bright orange, one-hundred foot extension cord. I worked under an old tree, sometimes at night, and that cord brought light and powered saber saw and drill.

Fasteners were the next problem. My first choice was hot-dipped galvanized boat nails, the traditional fastener, but just as important, the same kind of fastener already used on the boat. I ordered seven and nine penny hot-dipped galvanized boat nails, only to be taken aback. They were spikes. Something was wrong here, going from bottom to side plank, they would surely split the wood.

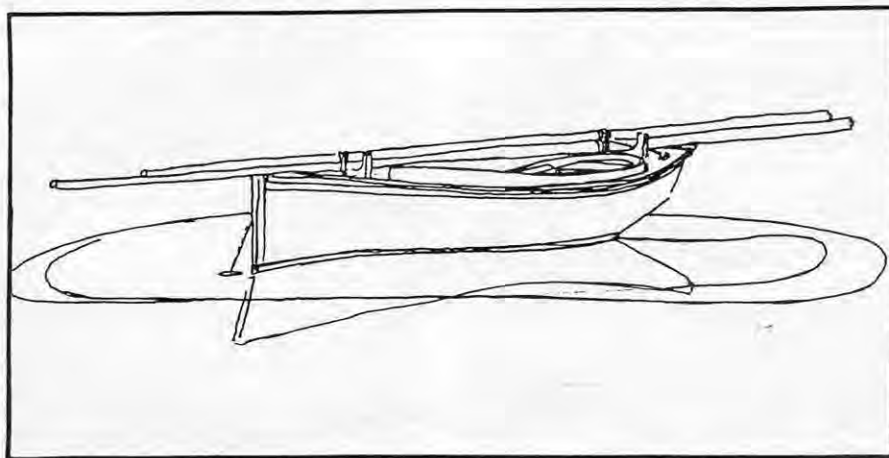
Without a doubt, I had misread Chapelle. It turned out that PATINA, though deceptively sharpie-like, was too small for standard sharpie construction procedures as laid out by Chapelle. She was planked with light stuff, three-quarter to seven-eighths pine. Because of that, the boat nails, at least the kind I located, simply would not do.

Though I still could have used nails; 5, 7 and 10 penny hot-dipped galvanized wire nails were readily available, I chose screws, again hot-dipped galvanized ones. A variety of numbers 8, 10 and 12 screws between one-and-one-half and three inches in length were the choice. I believe, for me it was the best choice. The drilling and countersinking were to be more time consuming but left less room for trouble. Especially important, however, were the sizes of the drilled holes for the screws. A much smaller hole was used where pine was fastened to pine than where pine was fastened to oak. And the smallest length of screw where pine was fastened to pine was three inches, and the smallest size screw used there was number 10.

With the first signs of spring, I spread my lumber and gave it two coats of wood preservative. A nasty, thankless, stinging task. Then I waited for a decent break in the weather.

(To be Continued in Issue #8)

Report & Illustrations by Tim Weaver



# PATINA

(PART II)



Story & Illustrations by Tim Weaver

First we had a blizzard that brought with it four days of January weather. Then it almost warmed up. Then it rained. At this point, I got sidetracked by a most attractive problem, colors. One of PATINA's nicest features is her sheer. It is a pleasure to the eye, embellished as it is with a false wale, half round rub rail and scuppered wash rail, all beginning just abaft the stem. The stem also had a fine forceful line. And the deck with its pleasant camber needed its say. And the same for the masts and rig. Here was a project worth imagining.

But, it needed to sit a while. My choices always seemed too harsh or too subtle until one day I remembered the pleasant skiffs common on the Out Islands of the Bahamas. They often looked so free and easy. I wanted that spirit and I knew my colors: At the sheer a tinted blue-green for the false wale and a smoky greyish brown for the rub and wash rails; for the deck the same blue-green as the false wale; for the masts and sprits the same grey brown as the rub and wash rails; for the floorboards, to relieve the moderately dark brown that already covered the inner hull, the blue-green of the deck; for the bottom a dark copper; for the sides and stem, white; and to add a flash of color and give snap to the overall appearance, a pink bootcap. It was not at all difficult

to get the colors I wanted. I simply went to the hardware store and bought tints to mix with oil base white paint, the only exception being the marine bottom paint.

Finally, by the second week in May, I had the weather I needed. I started to work. Refastening the side clamps and chines first, then planing the chines flush with their side planks and last, the re-planking. This re-planking, however, had me confused, especially as to the space to be left between the new planks when they went on. First, everyone had an answer but each answer was slightly different. Second, therein lies the truth, that is, a bit of a crack will do, a sixteenth of an inch or a touch less between planks an inch or so in thickness and six or so inches wide. In fact, this crack is no crack at all. It is the result of two planks wedged together so that their innermost edges are tight. This allows the caulking to make a slight indentation in the wood when driven in helping to lock it in place when the planks swell in the water.

When I first realized this, I was just a little unsure of myself so I made a try-square like gauge to make sure I was relieving each plank edge about a thirty-second of an inch. That plus a sharp jack plane was all I needed. In fact, I soon threw away the gauge once I got the hang of it. A sharp plane working

with the grain was quite delicate and precise, much more so than I had expected.

An unexpected pleasure crept into things. Choosing a board, planing the edge, bedding the plank at the chine and centerboard, wedging and clamping it at the chines, drilling and countersinking, soaping the screw and running it home with a brace, it all was a treat. Simple tools, a stretch of warm-enough afternoons, shavings flying quietly about the sun speckled shade, and the work coming out. Problems were a pleasure. A little more off here, maybe too much, well, there's a little extra wood so try again. Each evening found me, sitting with an orange and a cup of tea, enjoying the sight, a nice old fashioned skiff under a tree, a beatup pickup, saw horses, tools and the ever present 100 foot, bright orange power cord, and planning the next afternoon's work.

I've since reviewed that period with myself more than once. I just might have gotten along fine without that power cord. True, the power drill and saber saw made short work of time consuming and tedious labor, but, then again, it was a labor of pleasure, not of business. Looking back over things, a few days one way or the other would have made no great difference. This was especially true of the saber saw. There is, in my opinion, a smoothness with a hand saw, a chance to blend a line, that a power saw takes away. If a fellow can't hear himself think, what chance has he got with a minor aesthetic problem?

With the bottom planked, the next step was caulking, and I was a bit hesitant about that also. If I had to do that again I would put together a facsimile set of planks and practice on that. A bolted together practice setup is best, and is the method John Gardner uses in teaching caulking as part of his boat-building course at Mystic Seaport. With this self-teaching tool, one can see exactly what one has done, what works, what might not work, by simply unbolting the facsimile.

As for supplies, not every boatyard or marina would have them, but they were available after a little looking around. For PATINA, loose strand cotton caulking was used. Chapelle's directions were just fine. The wood, the cotton, the caulking iron and the mallet just liked each other. Each seam was painted with an oil base paint as it was finished. In the spirit of curiosity, a few seams were caulked, and completely so, with 3-M 5200, the same stuff I used as a bedding compound when I put on the bottom planks. A few seams were caulked using 3-M 5200 as soft seam compound over cotton caulking, but the majority of seams were caulked with cotton and traditional soft seam compound. The absence of white lead, I might add, made many of Chapelle's directions impossible to follow.

With the caulking complete, the keel was then bedded and bolted on with hot-dipped, galvanized, quarter-twenty-carriage bolts, putting cotton under the head of each bolt before it was driven

home, a recommended procedure. Trial and error taught me to drill holes through oak close to the diameter of the bolt thread, about a sixty-fourth less kept things tight, yet driveable for me. Next I painted the sides and bottom, but did a miserable job on the bootcap.

With the help of six neighborhood boys, I turned PATINA right side up. There she sat, basically sound, needing only a section of wash rail, a set of floorboards and a bit more paint. And with a boottop I could easily do without. At this point I was growing tired, tired yet aware that there were still a few "firsts" to come, amongst them the riddle of the rig.

Then some unexpected help and joy came my way. It came in the form of my son. He lives with his mother, except for the summers when he lives with me and works for the same company I do. School was out and he arrived. And PATINA, I can safely add, was not on his mind. Concerning her, he was a skeptic. He had seen her apart and that had been enough. But he had been hearing plenty about her from me and when I proudly displayed the new PATINA, he was impressed. With a four-day weekend coming up, he agreed to lend a hand for a while.

Well, I was ready when the time came. Scrapers, drills, sanding pads, saw, plane, countersinks, paint brushes, masking tape, you name it. First we fixed the wash rail, roughing out a piece from the leftover planking. Then, after showing Danny how to bed, drill and countersink, I left him to finish off the task. The rail, however, did not turn out as pleasing to the eye as I had hoped, largely because it had not been roughed out and pre-shaped carefully by me. But it was well bedded and solid and I was for letting it go. Dan, however, had other ideas. Hands moving gently but firmly with a plane, feet widely spread and shavings awl, he brought that rail into shape. Later with a sanding pad on the drill, he blended the old and the new, and quickly. It was a nice show of skill. I then painted deck and sheer. The bootcap I turned over to Dan. He went to work with a fifty-nine cent brush and a roll of masking tape. He squinted and bobbed about the waterline, at one point looking at it upside down. There was just enough curve in that side to fool one and just enough left of the original scribed waterline to give one the idea. To translate that into an even width sparkling ribbon of paint was another thing as I had found out. But Dan did it and without using a ruler to check his fine widths at any point. He created a line of fluid authority. It was the line of a gifted youth. That line was just right. Not too thick, not too thin. No waver, and the color, that pink, just stood right out. It sang a song, counterbalanced the blue-green of the sheer and was at home between the white of the hull and the old fashioned dark brown copper bottom paint. That ribbon of paint was a triumphant blast in a pastoral symphony. Just enough.

The day had flown by, and although Dan had liked the work, it was a long weekend and his friends were thirty miles

away. So, off he went, but he was hooked, and he had given my day a special glow.

Now the rains came again. Just as well, I thought, I was still tired and needed time for a little more rigging research. It was research with a history. PATINA had come with two beautiful sails, endless amounts of cord and line, two masts without sail tracks and two sprit booms, poles of no certain species that were each shouldered at one end with one drilled hole each in the other. And, absolutely no hardware, unless you want to call two ten foot lengths of nylon braid with sewn-in grommets "hardware." But, I had Chapelle. His section on sharpies was rather complete: His rigging descriptions likewise.

In fact I had filled my head with the terms and directions therein: Leg o-mutton, sprit booms to be properly shouldered, snotter roves, single sheave blocks, short horses, brails and more, and all to be properly belayed, mind you. At one point I gave up reading directions. I went directly to Mystic Seaport and examined the replica of the W.B. anchored off the waterfront. No luck. All I saw was a couple of feet of rope tied to each mast. I bought a magnifying glass, one with a built-in light, to more closely examine Chapelle's sail plans. I re-read his directions. I re-examined his sail plans. I made a model to practice on in my bedroom. I simply could not figure out what those oldtimers were up to, and the more I tried, the more confused I became.

I gladly abandoned the problem for the fun of the upcoming Small Craft Weekend at Mystic Seaport. I was planning to go with Dan and another friend. Well, that was the weekend of the great flood. My son and friend decided to put off their introduction to small craft, but I, like the Post Office, kept going. Gazing down from the thruway I saw homes and cars afloat as I'd never seen before. With resolve I drove on.

Those were two wet days. And not a sharpie there. Beautiful boats, all sorts of amazing stuff, I was clearly out of my league, but it was a great form of punishment. One could row any boat in sight, and I took advantage of that. Later, John Gardner held a workshop on half-modeling. During a lull, I cornered him. Told him directly of my rigging plight. He asked me if I knew if the mast positions were in their proper places. That much I was sure of. Then he told me to adjust my understanding of things to common sense. I was relieved. Snotter, single falls, close fitting eyes, gun tackle purchases, standing ends and much more fell from my mind's eye. In short I was going home, finish touching up PATINA, launch her, tie that sail to the mast with some cord, tie one end of the sprit boom to the mast and shove the other end into the grommet at the clew of the sail, tie a rope to that and sail away.

Meanwhile back under the tree, the flood had left its mark. PATINA was full of water. She was swelling. Just as well in the yard as in the water, I decided. And she had a few leaks after she had swelled, in fact she leaked a good bit at the inlays at the bow. I had to bail her,

strip the inlay seams of their caulking and let them dry. I did not like the width of those seams, they were much more than a sixteenth of an inch. Having been impressed with the bedding compound, I decided to use it here. It was supposed to caulk, fill a gap, yet remain elastic. That was the product's claim, and that was what it did. After that, PATINA was ready, except for the floorboards. The cheapest 1x12's available, a little more wood preservative and a few galvanized wire nails solved that quickly.

The next week was a busy one. Now definitely confident that PATINA would float, I went about the business of finding her a place on the water. I wanted her close to my apartment, the closer the better. Ten minutes away was a small cove with moorings and a small dock for dinghys. I was hoping to tie PATINA to the dock but she was too long. Over twelve feet she must be moored. So, the plot thickened. A dinghy was found. I liked that. Now there would be a coming and a going with each sail. The mooring gear bought and the harbor master, a must, met, and the mooring set as directed.

Most appropriately, PATINA was launched on the July 4th weekend. It was quite a day and an absolute thrill to watch her play at the end of her painter. A restless one she was. Danny and I tied her to the dinghy and rowed her to the mooring. To our dismay there was no breeze at all, so we decided to put off rigging and sailing her until the next morning.

And there was a breeze that day. Playing it safe, I decided to sail her with her winter rig, one masted and with the mast stepped just forward of the centerboard. The first task was lacing. The simplest way, and I've since discovered another, was to run the cord through the grommets at the luff, each grommet requiring a turn around the mast. The sail laced, the halyard was tied to the grommet at the head of the sail, the halyard itself having been run through an eye at the top of the mast before the mast was stepped. Then up the sail went. It was amazing how smoothly the lacing worked. No hardware whatsoever. Next came the sprit. It was shouldered (shoved) into the grommet sewn into the clew of the sail, a simple task.

Now the plot thickened a touch as the sprit boom had to be attached to the mast in a manner that would make the sail set flat as the sprit was forced aft. I took a piece of rope, tied a noose in one end (using a bowline) and then tied it to the mast (in the manner that a rope end is whipped with twine), the noose having but a few inches of free rope between itself and the mast. This left six feet of rope hanging free. The end of this piece was then run through the hole in the end of the sprit boom and from there through the noose at the mast. From there it was a simple matter to run the rope down the mast to a cleat directly forward of the mast. Pulling this line tight forced the sprit aft, flattening the sail. I then tied a rope, the sheet, at the clew of the sail and PATINA was rigged. No outhauls, downhauls or sail track bracketry here, yet a beautiful efficient little rig. The only problem left

as cleats. There were then and are now, ever enough.

At this point my friend Kerry arrived. Danny, who had been patiently watching me rig the sail, rowed back to the dock for her. It was time to assess the situation. The mooring had been set as far away from other boats as possible, and purposefully so. There would be no need for any quick work here. The breeze was still fine and getting better. PATINA was prancing a bit with sail up, sheet loose and centerboard up. Danny returned with Kerry, and it was time, nervous or not. He tied the dinghy to the mooring, windward of the path we planned to let go on, lowered the centerboard and, as he let go the mooring line, I took up on the sheet and we were away. It was a gratifying moment. PATINA just gathered herself and was on a broad reach. She could turn on a dime, came about without urging and could sail close on the wind. And, she was stable.

The next night, Danny, Kerry and I tried two masts. And it worked, a bit more rope all about, double the shortage of cleats and still no need for hardware. A clever lady nicely dressed and kicking up her heels.

That was the beginning of a summer of many a sail. And it was an education with all the focus, attention and reinforcement anyone could ask for. Danny wanted to sail every night, and we did, although I had to beg off exhausted from time to time.

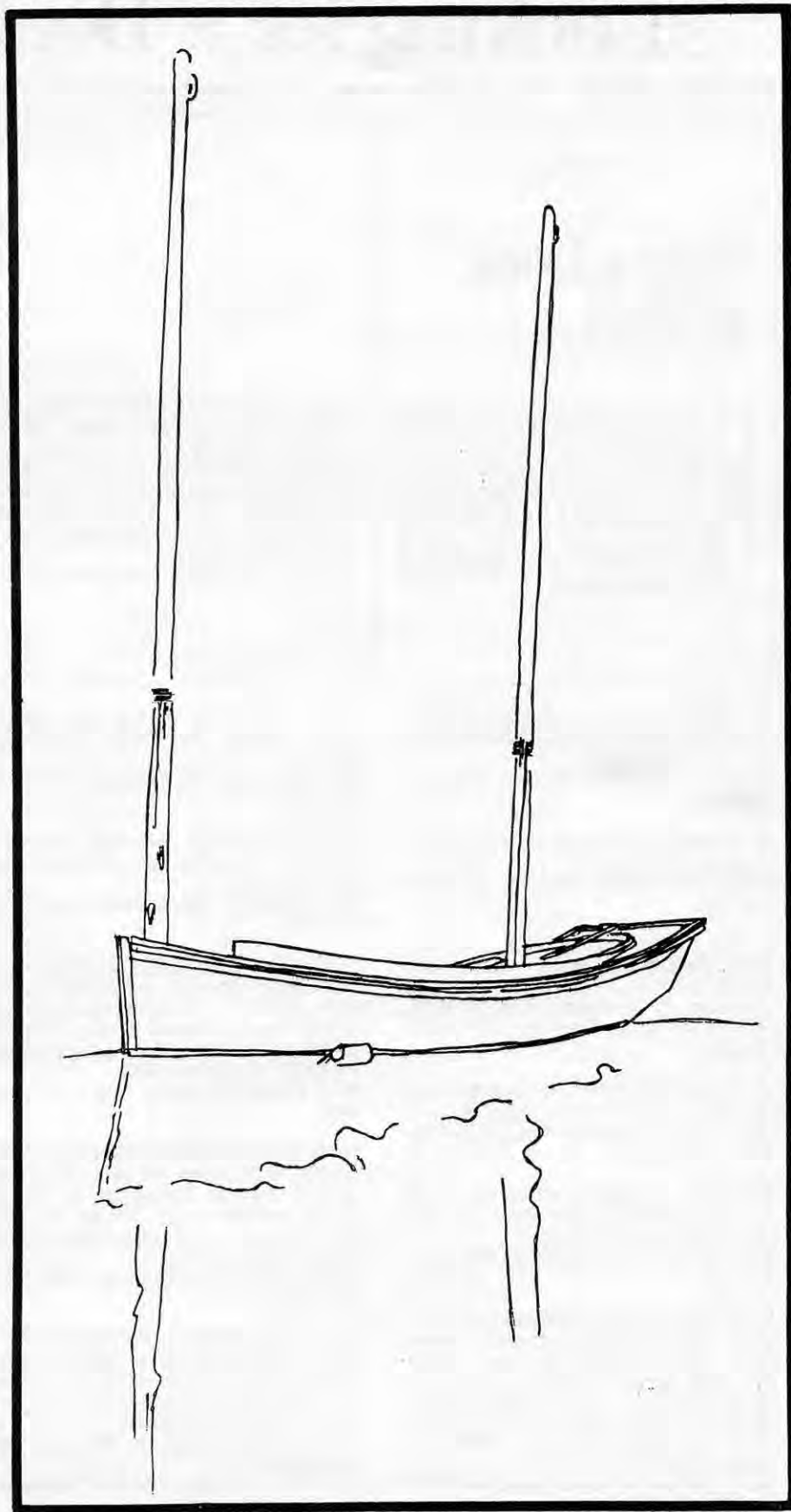
Give a youth a tiller and the liberal or conservative will emerge, and Danny, to my surprise, was a conservative. I realized I had, amongst other things, a conservative rock fan on my hands. He liked to go about things easy, and as his confidence grew, he began to like a bit more wind. For me that cove was a tricky spot, a bowl over which blew the wind. One could never be sure just what was ahead. It was easy to go from a broad reach to a run without being too aware of what had happened. And from that to a jibe was just a slight turn of the tiller. Or going along on a broad reach that just died, leaving the sails luffing. It took a while, but gradually he was keeping track of the wind, every few minutes bringing PATINA's head up to see where the luff point was. And, when things got a bit confusing, he always managed to turn into the wind. PATINA demanded her due. And it must be admitted that a nicer set of sails would have been hard to find. Made by Amy Drinker, they just did the job. And that sprit boom could give as flat or full a sail as one could ask for.

For me, the best part of the sail was coming in. At first I would make the mooring buoy, Danny would tie up and get things shipshape. Soon, Danny was making the mooring, I was tying off and he was making things shipshape. This usually happened at sunset, and I'd climb into the dinghy, search out my thermos and have a cup of tea. He'd take down the sails, sort out the laces, halyards, sheets, sprits and wash her down. He was a youth engrossed, silhouetted a-

gainst a sky moving from pink to gold to silver and lastly, to blue-black. All the while, PATINA moved about a touch to the slap of the water, that special slap that water has when it plays around the

bow and stern of a flat bottomed skiff.

Danny certainly made that summer sing. We had stumbled upon a mutual pleasure. PATINA had brought me more than I had any right to have expected.



# Amateur Boatbuilding... for the Love of It



Ron Ginger discusses amateur building as he has experienced while George Kelley enjoys a pipe and John Roche takes heed.

Dr. John Roche talked the longest and the loudest, or perhaps I should say most forcefully. Not surprising, he's a psychology professor at Cape Cod Community College and used to expounding at length, and forcefully enough to grab the attention of students. George Kelley spoke the shortest time and the quietest. He's accustomed to talking with friends in his Hyannis boatshop. Ron Ginger had the liveliest talk, he's given it in various variations a number of times. The subject, amateur boatbuilding and its virtues.

If there was one single theme running through all three talks, it was that of economy, of building for less. George spoke of nice 4 x 10 x 18 foot yellow pine beams that floated up on his beach. John told of using exterior plywood, none of that marine stuff for him. Ron discussed how an impecunious college lad got himself a 24 foot sailboat for half the yard bill owed on it. So, one important aspect of amateur boatbuilding seems to be economy. Certainly it is much less costly than buying a professionally built boat. And being your own boat, not aimed for resale, you also can make do with materials a professional cannot consider using.

Another obvious theme was that of working out simpler ways to do what needed to be done. George told of sighting the lines of the ribbands on a mold in a basement shop with the stern jammed against a concrete wall, by placing a mirror behind the molds and standing

to one side sighting very nicely, thank you. John described pouring lead into the keel of a 25 foot plywood daysailer by making that keel a laminated sandwich of plywood, with the interior left hollow, and the final outside slab on one side left off, the whole business laid flat on the ground, and 28 pounds of lead at a time (all that would fit into his saucepan over the camp stove) being poured until 800 pounds were in place. Then the final outside plywood layer got glued and nailed on. Ron showed with slides how he solved the problem of extensive rot in the bottom of that low cost sailboat by sawing the bottom off at the waterline with a skillsaw, the upper works suitably braced beforehand, of course.

Well, that was the nature of this very interesting three man discussion. About 30 of us on hand for the Osterville meet really enjoyed the evening of such advice abetted with a number of good color slides. George Kelly is one of the late Pete Culler's close friends. John Roche is an ardent admirer of Pete Culler. Ron Ginger didn't know him but did build a Culler wherry anyway. Yet, despite this affinity for Culler who was certainly a professional builder and designer, these guys spoke strongly of the virtues of amateur building.

They've run a gamut of types and sizes too. George shows up a lot in his little lapstrake butternut canoe, so does John. Ron has had Culler pods, and also a Roger Long stitch and glue kayak. Yet, Ron was involved with boats as big as

an 80 foot schooner (lots of rot in that one), John built that plywood 25 foot cabin sloop, and George was puttering around the meet this year in his 25 foot scaled replica of a Gamage dragger. So they haven't just built "little" boats.

The same basic message keeps on surfacing on this subject of amateur boat building. Don't be discouraged or put off by reading about excellence. It's a desirable goal, eventually, but if you wait around until you think you can build to a high standard of excellence, you'll never build. Just go ahead and start on building the boat you want to, taking a reasonable precaution of keeping that one sort of small and sort of simple.

One of the fellows at the meet was a good example of this. He had his just finished 10 foot flat bottomed rowing skiff on hand, he'd built it under the part time guidance of Loring Wordell of Phoenix Boatshop Co-op. It came out really nice. Now he's encouraged to go ahead with a 19 foot sloop he's fallen in love with.

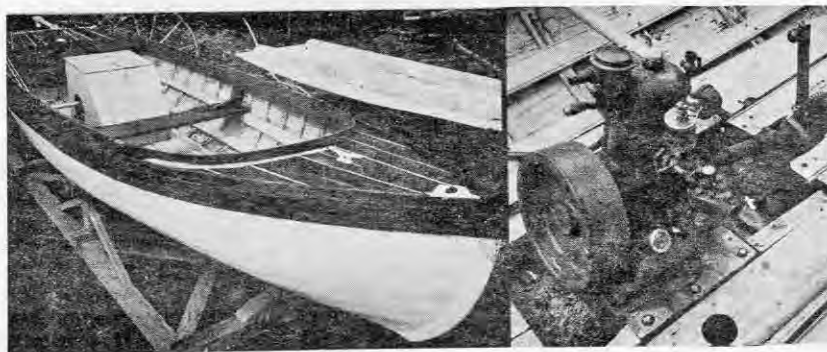
That's the key to the amateur, love. The latin derivation of amateur means for the love of it. Many of you well know what an addictive infatuation this matter of building your own boat can become. Our three speakers on this evening, George Kelly, John Roche and Ron Ginger, all were telling us something about the love they had for the boats they had built.

# Classified Marketplace

## Looking for a Boat?

### Take a Look at This...

Each issue we will feature our choice of an interesting boat for sale sent in by a subscriber. If you have such a boat send along the details together with a photo (black & white preferred, but clear light color print OK) and it might end up as our featured boat. If it is not chosen it will appear anyway on these pages as a regular classified ad with photo. Offer limited to subscribers.



16' ANTIQUE INBOARD MOTOR LAUNCH. Carvel planked professionally fiberglassed. Fitted with one cylinder Detroit Auto Marine water cooled engine and reversible pitch bronze propellor. Deck and interior need refinishing, boat is structurally sound. \$1200.

H.H. PAYSON, So. Thomaston, ME (207) 594-7587.

GLOUCESTER LIGHT DORY, (demonstrator) used summer of '82. \$550.

KAYAK, (demonstrator). \$150.

ZEPHYR (Payson's personal boat) with sail. \$850.

SKIMMER (demonstrator), new design 8ft x 4ft Garvey runabout. \$300.

GLOUCESTER LIGHT DORY (new) with oars & oarlocks. \$750.

SEMI-VEE utility 15ft x 5ft outboard. \$1200.

H.H. PAYSON, So. Thomaston, ME (207) 594-7587.

12' TRADITIONAL LAPSTRAKE wooden dory skiff rigged with 18' mast, boom, bowsprit, marconi main and jib. Rig obviously not original to boat. Galvanized steel centerboard. Hull is sound but paint is poor, needs complete cosmetic refinishing. Whole project for free, could be a nice sailing skiff with some work and little more money.  
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BEETLE CAT SAILBOAT. 12' x 6'. A classic built in the '40's completely rebuilt and fiberglassed, hull and deck. A beautiful blend of natural brightwork and the ease of fiberglass. Dacron sail, anchor and trailer included. \$1395.  
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BRAND NEW 16' TOWN CLASS SLOOP, just built by original builder of Townies, Pert Lowell of Newbury, MA. Finished hull without hardware and rigging is \$2500, you supply rigging, we'll install it at that price. Completely rigged boat without sails, \$5200.

PERT LOWELL CO. Newbury, MA. (617) 462-7409.

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JAY OKER, Manchester, MA. (617) 927-7451 days.

25' HERRESHOFF WATCH HILL 15 SLOOP. Built 1922, 90% restored. New spruce spar in 1981, 3 sets of sails. Fast, able sailer. \$5000 or best offer.  
Attleboro, MA (after 5pm) (617) 222-3009.

16' CRAWFORD CUSTOM DORY. Open gunwale, Drascombe style seating. Extensive brightwork, full flotation, tanbark sail by Smith. 6hp Evinrude, galvanized trailer with spare. \$4000 or best offer.  
Southboro, MA (617) 481-8466.

21' CHAISSON MOTOR LAUNCH. Built in Swampscott, MA in 1951, this unique classic was repowered in 1972 with a 30hp Renault Mercruiser 4 cylinder inboard. \$2200.  
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17' CUSTOM BUILT SWAMPSCOTT DORY. Fiberglass by John Blanchard. Blue hull, teak seats and floor boards. 6hp Evinrude, canvas cuddy, full rear canvas, trailer, extras. \$3300.  
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GARY GAYTHWAITE, Beverly, MA (617) 922-4676.

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**12' YACHT TENDER PROJECT BOAT.** Unfinished traditional lapstrake round bottom type, DEFENDER design by Phil Bolger (from SMALL BOATS). Cedar planking on steam bent oak frames, copper fastened. Needs finishing out, sanding, painting, seats, outside rail, etc. Can be fitted with centerboard and rig for sailing around anchorages gunkholing. \$695.

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**17' OLD TOWN CANOE.** Cedar and canvas, beautiful condition. Two Old Town paddles. Best offer. Sudbury, MA (eves) (617) 443-8236.

**8' DOLPHIN NESTING DINGHY,** sailing model, sails well. Like new, won't fit on foredeck. \$800. ED SELING, Danvers, MA. (617) 777-1228.

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In search of a sailboat to borrow, I am in Greenport with the thick air of a muggy afternoon lying heavy over the saltmarsh, waiting for Kiremidjian. My wife, Flo, and I are staying at the family-owned Silver Sands Motel, which lies on thirty-six acres facing little-spoiled Peconic Bay. Workers scurry about in preparation for the upcoming summer season, and ospreys screech from a nearby nesting platform. Redwing blackbirds gurgle.

Dave Kiremidjian, an emeritus professor of comparative literature at Brooklyn College, has offered the loan of a 1950s-era wooden boat. We have come to Greenport, an old seafaring town at the eastern end of Long Island, New York, to meet him and take a look. As evening approaches he appears in his battered Volvo.

Tall and slim with arresting blue eyes and a grey blond ponytail, Kiremidjian bounds towards us with smooth, feline grace. He makes room within the gear-strewn car, and we bundle aboard.

"This is Lee," he says, introducing us to a dark-haired woman who has been sitting quietly in the passenger seat. "She is restoring a little schooner and I'm helping her."

"I used to live up-island," Kiremidjian explains, "around Hempstead Harbor where many wooden boats were built in the old days, and I founded a nonprofit organization called Full Sea, Inc. Its purpose was to educate kids and others about wooden boatbuilding and the region's boating history. We financed the project by obtaining donations of wooden boats, restoring and then selling them. At one time we were doing pretty well—one year we cleared \$80,000. It's dwindled since I've gotten older and moved out here to Cutchogue. But Full Sea still has *Storm*, a magnificent forty-eight-foot Luders sloop that I've been working on for the past four years. And last year Full Sea was given *Piper*, which might be the right boat for you to use this summer."

Dave turns into the Brewer Yacht Yard, where *Piper*, a twenty-five-foot wooden racing and cruising sloop of the Amphibi-con class, built on Mount Desert Island in Maine in 1956, has spent the winter. The yard is still full of land-bound sailboats being made ready for the spring launch. We find *Piper* up on chocks, tucked away in a back corner. She is a peculiar-looking craft. With a high freeboard, an ungainly pop-up cabin roof and an oddly convex turtle-shape known as reverse sheer, *Piper* lacks the classic beauty of a vessel with the trim elegance of a traditional John Alden or Philip Rhodes design. When we peel away her winter coat of sky blue plastic and climb a ladder to get aboard, the need for a fix-up becomes apparent. Paint has worn thin. Mildew abounds. Wires lead nowhere. No sailing hardware, except for two small antique winches with a fine green patina, grace the decks. Dead leaves half-fill the small cockpit, and tendrils of honeysuckle and poison ivy crowd the boat's transom.

Clearly, considerable work will be required to get *Piper* into the water and operable. Cheerfully, though, Kiremidjian announces that from his perspective as a skilled boat restorer the task at hand is no big deal.

"Sally, who used to own *Piper*, did about 90 percent of what is needed," he says. "She lived aboard this boat and worked hard on her before switching to something bigger and donating *Piper* to Full Sea. She redid the keel bolts, took other steps to strengthen the hull

## Beyond the Blitz

### *Fair Tide, Sailing Towards Long Island's Future*

Beyond the Blitz  
By Roger Stone

Roger Stone's new book, *Fair Tide, Sailing Towards Long Island's Future*, is a study of the impact of development upon the resources and quality of life on Long Island. Roger used an old wooden sloop as a vehicle for his circumnavigational survey of his subject and incorporated into the book's discussion of development issues vignettes from his circumnavigation.

We are pleased to bring you in the next several issues those portions of the book relating to Roger's cruise, concluding with a follow up sequel not included in the book about the fate of his little vessel, *Piper*.

*Fair Tide* is available in better bookstores (\$22.95 hardcover) or direct from the publisher, Waterline Books, 438 River Bend Rd., Great Falls, VA 22066, (703) 759-0368. The book's discussion of the developmental pressures and their results on Long Island, while not boat related, is a fascinating documentation of the impact of population pressures in our time.

and refinished most of the interior. There are a few major jobs to be done—new floorboards for the main cabin, bomb-bay doors for the outboard engine compartment, hooking up the electrical system, installing the deck hardware. The rest is cosmetic. I'd say the whole job would take two experienced people about three full days."

As we continue our exploration, we find more and more evidence that *Piper* can be made into an appealing little cruising boat. She has full headroom in the main cabin, roomy bunks for four, an operable marine toilet, an icebox, a sink, a two-burner alcohol stove, spaces to store food, clothing and gear. The fifteen-horsepower Johnson outboard has just been refurbished and is in fine condition, says Kiremidjian, and *Piper* comes equipped with an excellent suit of sails. With some sweat equity on my part and help from the yard to do the carpentry and electrical work of which I am not capable, I conclude *Piper* can quickly be transformed into a cruising vessel no less comfortable or serviceable than many I have experienced over close to fifty years of often masochistic cruising adventure.

So, over an indifferent seafood dinner in downtown Greenport, I tell Dave that I will take on the responsibility of making *Piper* operable in return for the free use of her during the summer. I need her to complete a task I have set for myself: a circumnavigation of Long Island. My plan is to sail from Greenport, around Orient Point at the tip of the North Fork, westward down Long Island Sound to

New York City, through Hell Gate and down the East River to New York Harbor, under the Verrazano Narrows Bridge, then eastward along the shallow bays and barrier islands of the South Shore to Montauk Point and then back into Gardiners and the Peconic Bays to *Piper*'s home port. As the crew flies, some 300 miles of cruising will be required. Dave quizzes me a little on my credentials as a sailor and, once satisfied, agrees to my proposal. *Piper* will be my partner.

Under a broiling mid-June sun, plagued by wasps seeking places to build their nests, I remove underbrush from *Piper*'s cockpit and mildew from her main cabin. With a rotary power sander I attack the boat's bumpy, blue bottom and, amid flying dust, succeed in turning all of me its color. "Look," says a young mother to her child in a stroller, "there's a blue man!" From time to time Kiremidjian appears in coveralls and, donning goggles and mask, gives expert little demonstrations on how to operate his own set of power tools, use paint scrapers and sandpaper, apply masking tape.

Periodically crew members Kyrill Schabert and Charlie Nichols come to help out. They paint *Piper*'s bottom a vivid red. They sand and varnish. Unsure of the owner's intentions, Nichols declines the high-quality brush that Kiremidjian has carefully selected to make the topsides gleam. He does most of the job with a throwaway. We paint the cockpit but walk on it before it fully dries, turning it into a bluish white, abstract painting. Other mistakes are made, and we try the patience of Kiremidjian, a self-proclaimed perfectionist when it comes to working on wooden boats. Nimble from many years as a yoga practitioner, he gracefully folds himself into a working stance to sand or varnish or apply epoxy. And indeed, when he does it, it comes out beautifully.

By early July we sense progress toward the finish line. The painting and varnishing are nearing completion. Matt, the carpenter, is finishing up the new floorboards and the doors for the engine compartment. Ed, the electrician, who along with Matt forms part of Brewer's skilled crew of workers, has begun to hook things up. Kiremidjian shows up occasionally, bearing boxes of hardware, cushions, sails, odds and ends. Failing to secure the loan of a tender, Kyrill and I patch up an old Sea Eagle inflatable that mice have gnawed and rendered barely serviceable. We make repeated visits to local stores for hardware, tools and food.

The night of July 10, Kyrill and I dine aboard on fresh weakfish, cooked on *Piper*'s balky alcohol stove, as boat and all hands dangle in a sling over the launch site. Keen with anticipation that we will finally be off, we awake the next morning to a buzz of activity. And, sure enough, by late morning the little boat is in the water. In case of heavy leakage, we keep the straps attached while the wood swells. But little water seeps in. "It looks like you have a floater," says Steve, the yard foreman. That afternoon, though, Ed has "a few more hours" of work to do on the electrical system and despite Kiremidjian's harsh eleventh-hour critique of our workmanship, we are at last ready to take *Piper* on a shakedown sail.

Against a strong southwesterly breeze blowing straight toward us down the aisle between two rows of slips, *Piper* refuses to respond to the tiller. We cannot swing her bow into the wind. Skittering sideways, we come

perilously close to collision with several of the beautiful, burnished yachts parked along the alley. Then, giving up, we ignominiously back the boat out into open water. Soon after this inauspicious debut, though, we are under sail in the narrow channel between Greenport and Shelter Island. The boat sails well, with the responsiveness of a dinghy yet the sturdy feel of a much larger vessel. We test the sails and the roller reefing gear, sail upwind and down, anchor for the night at Dering Harbor on Shelter Island, and return early in the morning to the Brewer yard for one final day of fitting-out.

It is a cliffhanger, Ed, who always faces many demands for his time, shows up on schedule in his red truck and completes his wiring. With assistance from us, Matt finishes screwing down the deck tracks for the jib sheets. Kiremidjian brings battens for the mainsail, winch handles, other odds and ends. But soon before quitting time at the yard, Kyrill notices that there is a sag in the goose-neck (the connection between the boom and the mast). Closer inspection reveals a section of rotten wood (and a large section of fungus) that has come unhitched as a result of our test of the roller reefing system, which winds the mainsail around the boom. We see Steve the foreman, hail him, and explain that we can not bear the thought of another night at the yard.

"Quick fix, quick fix," he murmurs. Then he finds Matt, who is working that day only because his wife has been unable to take their planned day off. Together, the two of them find a fine piece of new oak and pare it down enough to make it fit into the connection. Matt remains half an hour overtime to finish the job. Kiremidjian appears, now all smiles, with a camera to record *Piper's* renaissance for Sally,



her former owner. Then, at five o'clock on the evening of July 13, after almost a month of work instead of the six man-days that Kiremidjian forecast, having learned much and suffered a little, we are at last free. Motoring

out of the yard, bow first this time, we head eastward from the Greenport breakwater and down the channel to Gardiners Bay.

To Be Continued...



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Following our late afternoon getaway from the Brewer Yard, we pause at anchor to await the strong favoring tide which will carry us around Orient Point at the narrows called Plum Gut. The tide slackens before turning. Kyrill and I raise the mainsail and set our smaller working jib rather than the genoa that we would have used to gain speed in lighter air. Flying before a 20-knot southwester, we sail east toward our turning point. Just at sunset and with a full moon on the rise, we veer westward, closer to the wind, and commence the first serious sail of our expedition. As we slide fast past the Plum Gut light in the following current, we roll a few turns of reef into the main.

*Piper* sails smoothly and solidly under this rig and we do our best to maintain a heading right down the center of the Sound. But there is a good bit of west in our breeze and we gradually edge northward toward the Connecticut shore. By 0200, close to the Falkner Island light, we run out of breeze and out of favorable current. We take down the sails, crank up our 15 horsepower Johnson outboard and head northwest into the Thimbles, a cluster of rocky, Maine-like islands near Guilford, Connecticut. We decide to anchor here for the night.

The little handheld GPS (Ground Positioning System) receiver that I purchased for the trip shows us quite accurately where we are. But, not expecting to make a landfall on the Connecticut side, I do not have the right chart with me. I cannot transfer the GPS coordinates well enough to place us precisely among the myriad little islets that the bright moonlight is beginning to reveal. Only one outer buoy is lit, so we are compelled to creep in like early explorers, looking for the deep water by feel. Readings from our depth sounder help and so do ripples indicating rocks just below the surface. After an agonizing period of such groping, we edge into an anchorage that offers some protection from the little swell, and gladly sleep.

Morning, and the southwester is still blowing, lightly, but enough to waft us under a hazy sky toward Long Island's North Shore. Our landfall is the pale green hulk of the defunct Shoreham nuclear plant. It dominates and despoils the view of the coast for us and for the many swimmers and boaters at beaches close by. We continue westward, taking short tacks along the shoreline. Small fish, chased by larger ones below, churn the water's surface. Kyrill sets out a trolling line with an ugly red lure. As we approach the narrow entryway into Mount Sinai Harbor, he lands a small but serviceable bluefish and deftly fillets it on the afterdeck.

*Piper* motors past a fleet of visiting yachts toward an anchorage in the Narrows at the mouth of shallow Conscience Bay. It is hot and muggy but the breeze blowing in through the Narrows helps. So does a swim in clean, cool, green water. We eat Kyrill's bluefish, braised on our little stove in garlic and white wine, and turn in early. The next morning begins at dawn with little sportfishing boats buzzing past regularly and many clammers at work. A pair of mute swans paddle up and grunt. "feathered carp" to those who deplore both the displacement of native species by these bossy European immigrants and the substantial nutrient pollution they cause. I see two scuba divers in wetsuits aboard a new outboard. "What you got down there?" I yell over.

## North Shore

### *Fair Tide, Sailing Towards Long Island's Future*

Beyond the Blitz  
By Roger Stone

Roger Stone's new book, *Fair Tide, Sailing Towards Long Island's Future*, is a study of the impact of development upon the resources and quality of life on Long Island. Roger used an old wooden sloop as a vehicle for his circumnavigational survey of his subject and incorporated into the book's discussion of development issues vignettes from his circumnavigation.

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"Sunken treasure?" "No," one yells back. "Just oysters."

On a ferociously hot Saturday, Flo joins *Piper* in Port Jefferson. We load aboard an extra supply of ice in hopes that not all of it will melt; our poorly insulated icebox was designed and built well before the onset of the glistening, space-technology coolers of today. Late in the afternoon we make our way past a huge fleet of weekend power and sail yachts arrayed along the inside curve of Old Field Beach. Back in the little breezeway in the Conscience Bay narrows, I leap overboard to swim in the cooling green water. I admit to a bias in favor of sail power, but here democracy prevails. Jet-ski jockeys, astride their bothersome steeds, swarm noisily about. Some larger craft roar by, paying scant attention to the NO WAKE-SPEED LIMIT 5 MPH signs that are prominently on display. By sunset, with netting carefully installed to protect us from the myriad gnats and mosquitoes rising from the nearby marsh, we are fortunate to have this attractive place almost to ourselves.

On Sunday morning we take delivery of still more ice and the *New York Times* from an itinerant vendor in a small launch. (He also has bagels and croissants.) We weigh anchor and thread our way back through the cruising fleet. A nice little northeasterly breeze is blowing as we motor northward between the twin jetties at the mouth of Port Jefferson Harbor. We make sail and head west. With a favoring current we quickly leave Old Field Point astern.

With the centerboard up *Piper* draws two feet and cannot quite make it into Flax Pond's narrow, shallow entrance except at or very near

high tide. It's half tide now, so as we pass by I can only glance over at the jetty and remember. I drift from my post at the tiller, back to an August day, several years before *Piper's* cruise, when I lingered there in a small boat to swim, birdwatch and read. This is what I wrote:

"Though a few houses can be seen around its periphery, the pond retains almost all its purity. I see terns, common, roseate, the endangered least, plus the larger Caspian, several gull species, the great and the snowy egret. The latter has made a spectacular local comeback from near extinction at the height of the 19th century plume trade. Now a flock of them roosts in trees in front yards along the shore. There are also many shorebirds including some southbound migrants, ruddy turnstones and a little group of black-bellied plovers. I row around the periphery of the pond. No one here but two lady birders in a canoe, and two MSRC students netting samples near the lab building. The marsh grass is at the height of its green. The tide is dead high."

At midday on a calm Sunday, *Piper* passes Eaton's Neck and enters a powerboat-dominated world. Jet-skis, fishing outboards, atrociously noisy, rooster-tail Cigarettes roar by, as do the ponderous, twin-diesel 60-footers, colloquially referred to as "battle wagons." Together, they whip the water into an uncomfortable, multidirectional slop that frequently spills the light breeze from our sails and sends the boom and mainsail careening from side to side. We discuss our suspicion, common among small-boat sailors, that many of the power boaters take a certain perverse delight in taking aim, speeding close by a sailboat, then looking back to savor victory as their wake strikes.

Abandoned by all but the faintest of breezes, *Piper* motors past the shores of this coast. We glimpse the occasional Norman castle, Loire chateau or expansive Georgian spread through alleys of trees, vignettes of the region's opulent past. More prevalent, however, are grander echoes of Levittown. Large houses of many undistinguished styles are crammed together on small lots, bulwarked off from the Sound and erosion's dangers by riprap and heavy wooden fencing. Natural beaches have all but disappeared from this buttressed coastline.

Wakes toss *Piper* relentlessly and we consider stopping early. We can head in to anchor for the night among the handsome yachts moored at the vestigial Seawanhaka Yacht Club where, amid the bustle and change, time has stood relatively still. Members continue to wear white trousers, blue blazers and yachting caps. As we are about to give up, an afternoon southwester belatedly kicks in to cool us and fill our sails. We continue westward across Hempstead Bay and into the open maw of another of the island's traditional yachting centers, Manhasset Bay.

Here we spend a quiet night. In the almost windless morning, as we await a favorable current for our upcoming passage through Hell Gate, the East River and New York Harbor, we watch fleets of tiny, kid-skipped sailboats being towed clear of the anchorage. Cast loose, the kids sail and splash and horse around as college-student instructors yell instructions through loudspeakers. A fairly large turtle (the resurgent diamond-backed terrapin) surfaces briefly near us. At a fuel dock, we fill *Piper's* tanks with gasoline. A skiff bearing two fishermen is there for the same purpose. The fish-

ing is "great," they say, tossing four bluefish into our cockpit to prove it. "Take 'em. We can always go out and get some more." I accept with pleasure and fillet them on the spot.

There is no doubt that we are close to the metropolis now, but even so we absorb images from less uniformly urban times. To starboard is City Island, which for more than a century has been, and continues to be, a busy center for boatbuilding and yachting. Then, passing Little Neck Bay in Queens, we close on Udall's Cove, which the *New York Times* referred to as "a 30-acre curve of Queens coastline that is one of the most unspoiled stretches of New York City." Through the efforts of two elderly ladies, Virginia Dent and Aurora Gareiss, the *Times* report continued, progress is being made toward safeguarding this strategically located wetland area from the usual forms of development.

Closer to the city anomalies abound. We motor under the Throgs Neck and Whitestone bridges. Sirens wail from above, and La Guardia-bound planes whistle and scream. Fishermen work out of little boats and children swim from a beach in Whitestone. We pass the fearsome Rikers Island with its notorious prison and see a few lobster boats. Here we stall and loaf. At last, after the five-knot current changes in our favor, we hurtle past the Triboro Bridge and Randalls Island, shoot through Hell Gate's swirling waters and enter the choppy East River.

At mid-Manhattan, marine traffic consists mainly of Circle Line sightseeing vessels, Delta Airlines water shuttles to La Guardia and fragrant garbage barges being tugged to the huge Fresh Kills dump across the harbor. One such rig crosses our bow several times. Its rich odors waft our way as we sweep past the United Nations building and, still enthralled by the familiar sight, gape at the other highlights of the mighty Manhattan skyline. To port, along the Brooklyn shore, we see twisted hulks of rusted metal, the bedraggled remains of the Greenpoint ferry slip and adjacent piers. In lower Manhattan many visitors are enjoying the South Street Seaport, where the famous Hudson River sloop, *Clearwater*, is berthed. An old oyster dredging boat is taking on tourists for a short harbor ride.

*Piper* clears Battery Park and motors out into the harbor. Dodging Staten Island ferries and commuter hydrofoils headed for New Jersey ports, we kill the outboard and tack in thickening haze past Ellis Island and the Statue of Liberty, out toward the Narrows and the Verrazzano Narrows Bridge. Slowly, the gray city skyline recedes. Police sirens wail as we pass under the bridge.

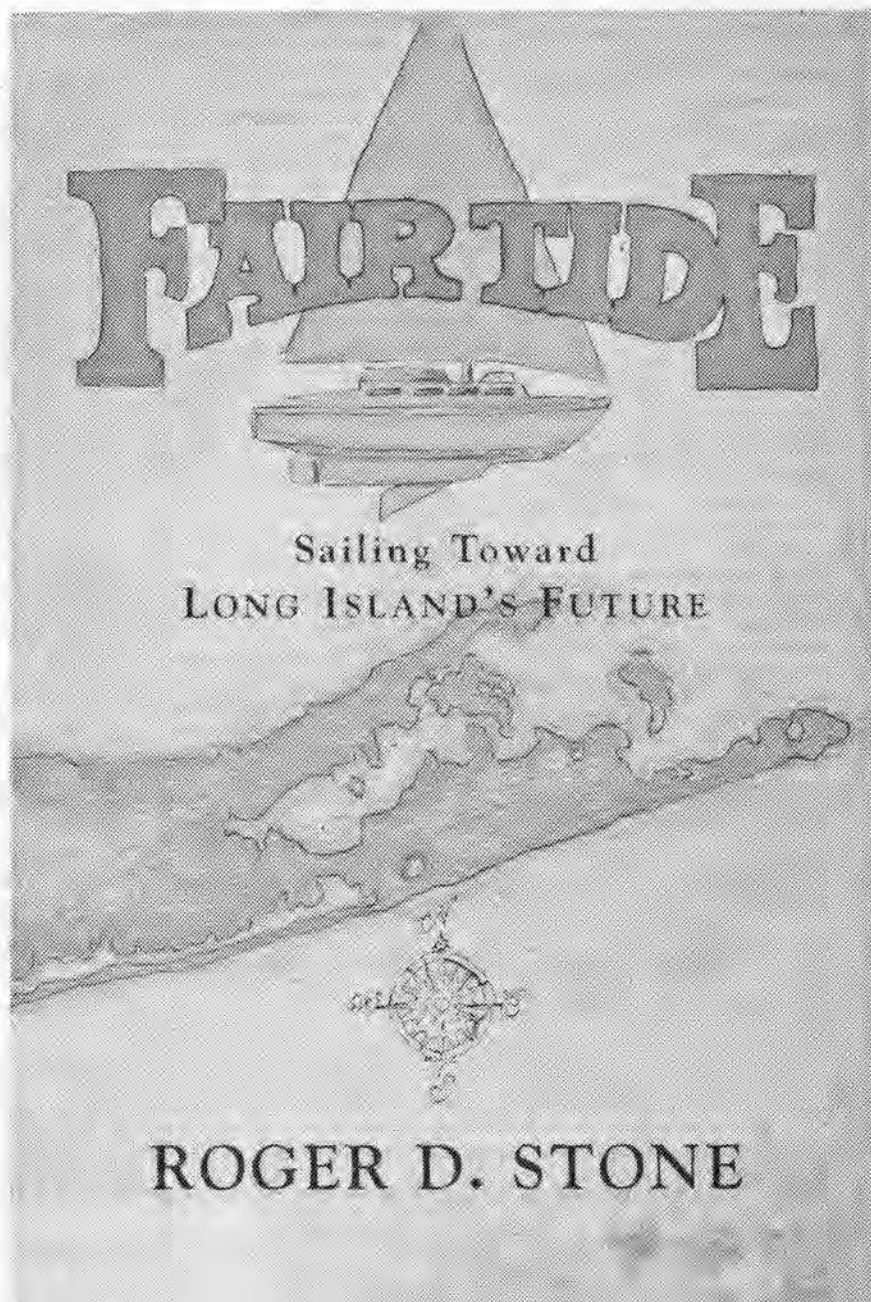
The weather deteriorates. Rain now spatters *Piper's* hull as we round Norton Point at the western end of Gravesend Bay in Brooklyn and turn east. A few swimmers brave the weather along the Coney Island beaches, newly reopened for swimming after many years of being shut down for health reasons. The swoops and curves of the amusement park rides loom out of the early evening gloom. Off our port bow now lies protected Jamaica Bay, habitat for many stubborn shorebird species who have long survived there in the shadow of Kennedy Airport. One of the principal hazards to air travel here is bird ingestion by the jet-engine turbines. The glossy ibis, among other birds once rare or absent from these parts, is now well established and a familiar sight

around Jamaica Bay. Flo and I reflect on the near miraculous survival of this hotspot where biodiversity and technology coincide. As if to punctuate the contrast, a delta-winged Concorde screams through broken, low clouds toward one of JFK's runways while graceful laughing gulls dance and swim in the water around us.

The rain grows heavier as we enter Rockaway Inlet and, using the last moments of daylight, begin to look for an anchorage under its lee. Just west of the Gil Hodges Memorial Lift Bridge, so named in honor of a former catcher for the Brooklyn Dodgers, I find a shallow little cove where a small fleet is moored. Twice I try to set our Danforth anchor on this rapidly shoaling bank and twice, as occupants of the small Rockaway Beach cottages look on in amusement, the anchor fails to hold. The third time the Danforth catches hard. We feast on our donated

Manhasset bluefish and potato salad, snug in *Piper's* little cabin. But the rain and wind strengthen.

Soon recurrent lightning flashes add to the drama. I set out extra scope on the anchor rode and sleep for a while. The wind swings toward the north and at midnight I awake as it begins to tear at the rigging. The whole boat is vibrating like a piano string. Torrential rain washes our deck and trickles through small leaks in the cabin-top, into the forward cabin where Flo still struggles to sleep. *Piper* lunges at her tether. If the anchor fails to hold we will be up on the beach in a scant moment. So, amid wind and rain and lightning periodically turning the shorefront to daylight, I sit in the main cabin, ready to spring forth and crank up the outboard if the Danforth starts to drag. But she holds firm as the storm gradually diminishes. By two in the morning a peaceful calm returns and we sleep fitfully in our dampened bunks.



On the beach, three American oystercatchers stride about, issuing their raucous cries into the gray and hazy dawn. Some early risers are jogging, and some are fishing from a nearby pier. Aboard *Piper*, the midnight storm's only consequence, other than a dampened crew, is a dead battery. Since the reliable outboard's starter is hand pulled, this causes us no immediate problem. I rev her up to begin our exploration of the shallow bays, barrier islands and magnificent ocean beaches of the South Shore. Getting the anchor back aboard is another story. I shorten up on the rode until it is straight up and down, then drive forward, expecting the anchor to break loose as usual. No luck. I back down. The same. Circling is equally unproductive. It is becoming clear that the anchor has snagged on a submerged piling. This means that it might have held the *Queen Mary* off the beach in the previous night's squall. It also means that we are in danger of having to cut loose the anchor and its rode, and waste time and money in search of new ones.

Finally, after much jockeying before our amused little audience on the beach, the anchor pops free. We motor back out Rockaway Inlet in a light westerly breeze, round the tip of the promontory and head east. The beach communities parade past: Rockaway Beach, Edgemere, Far Rockaway at the East Rockaway Inlet. Though some of these towns have narrow streets and low-rise housing such as that of Rockaway Beach, behind which we had anchored, most consist of rows of high-rise apartment houses similar to those lining the coasts of New Jersey or Florida. Blocked by fixed bridges, we cannot enter East Rockaway Inlet to experience the intact marshes of Hempstead Bay. Instead, we continue off the shore of Long Beach Island, past wall-to-wall high rises, from Atlantic Beach to the west to Lido Beach near the ten-mile barrier island's eastern end.

Flocks of dainty laughing gulls dot the waters around us, and twice we see low-flying formations of brown pelicans, one line of six birds, the second of a dozen. This improbable bird with its cavernous beak, long a fixture in the southeastern United States, suffered greatly during the DDT era. In recent years it has made a remarkable comeback and has extended its range far to the north. But I have never seen one in the Long Island area before and am impressed by this display of nature's resilience.

At the little sportfishing community of Point Lookout we look for a portable battery charger. Jet-ski cowboys play the rollers breaking across nearby shallows, while *Piper* navigates the shifting channel. Even though we take care to stay within the buoys, we surf steeply down several large waves before reaching the flat water of Sloop Channel inside the western end of Jones Beach. At Point Lookout, the closest thing we can find to a battery charger is an earringed youth at a bait-and-tackle dock. "We have a charger but I can't work it, and the mechanic is not on duty today," he says. "Just go on up the creek to Freeport. You can get anything you want up there. Give them a toot at the drawbridge, and in twenty minutes you'll be at the marina." We motor up to the drawbridge, gateway to the major marine center at Freeport, and toot. Nothing happens, even though the bridge operator is clearly visible, seated on his perch. Since a sign on the bridge says it will open

## The South Shore

### *Fair Tide, Sailing Towards Long Island's Future*

Beyond the Blitz  
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Roger Stone's new book, *Fair Tide, Sailing Towards Long Island's Future*, is a study of the impact of development upon the resources and quality of life on Long Island. Roger used an old wooden sloop as a vehicle for his circumnavigational survey of his subject and incorporated into the book's discussion of development issues vignettes from his circumnavigation.

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only every other hour, and the weather is fast improving, we decide to carry on with our journey. In sparkling sunshine, with a balmy westerly breeze, we once again negotiate the swells at the inlet, and continue eastward.

Soon we are abreast of the famous Jones Beach and its splendid symbol: a replica of a Venetian campanile that serves as the visitors' water tower. Though we had seen few people anywhere on the beach at any time earlier in the day, now we see a major concentration. Perhaps, we reckon, this is because we have fallen fully under the lengthened shadow of master planner Robert Moses.

A few hours' sailing along the clean uncluttered expanse of Jones Beach brings us to Fire Island Inlet, the gateway to shallow Great South Bay, largest of the South Shore's embayments and the nation's former oyster capital. Once again, jet-skiers attend the rollers cresting on either side of the inlet's narrow dredged channel. Even in the deeper water, a moderate southwesterly breeze pushing against the westward-flowing tidal current sets up a lively sea, and the fading light is making it difficult to see the small channel buoys. Flo peers out balefully when a skiff full of teenagers speeds out past us. It slams off several crests into midair before landing with loud crashes. Nor is she amused when *Piper* herself tilts sharply bow-down while surfing the large combers. But after a few moments of such tension, we round the point and head in under the lee of Fire Island. Here is the Robert Moses State Park, accessible by road via

the Robert Moses Causeway that crosses the bay. Many fishermen have dismounted from their off-road vehicles and are casting big plugs out into the inlet. Still lacking battery power, we grope our way in to an anchorage near the island's bayside shore, set out a flashlight as an anchor light and settle in.

The following day dawns bright, clear and cooler. A lone fly fisherman, waist-deep in the water as if he were stalking trout in a mountain stream, works the small point at one end of the little bight where we are anchored. A couple comes down through dredge spoil to swim in the calm of the island's lee shore.

We motor through the Great South Bay's distinctively olive chartreuse water, following the channel buoys past Saltaire, one of Fire Island's several summer communities. Dozens of party fishing boats, the *St. Anthony*, the *Cap'n Jeff*, the *Liberty Belle*, crowd the channel. So many people occupy these vessels, their fishing poles extending outward at all angles from the main decks, that when seen from fore or aft they bristle like floating porcupines. No one seems to be catching the bottomfish they are all after.

Though the generic name "Blue Point" remains as a reminder of the glory times when this bay yielded more oysters than anywhere, these tasty shellfish have all but disappeared as a result of pollution and disease. With the exception of a few small boats tonging or raking for clams, the fleet we see during our crossing is almost all recreational. And of these, precious few are sailboats: the strong currents of the inlets, the shallow water, the many narrow creeks leading inland all conspire to make this stinkpot country. But our reach across the bay is pleasant. We pass the Heckscher State Park, several thousand acres of forest and marsh and beachfront, and the wonderful old Timber Point Golf Club. All but abandoned before Long Island's postwar boom, this course now is crowded with golfers riding their carts. I read somewhere that the island has ten times as many golfers as its public courses can accommodate and that Japan-like measures are being introduced. There is a course near the city that is open twenty-four hours a day, the story said, so you can tee off at 2:00 AM and play under the lights using Day-Glo balls.

We turn into the pretty Connetquot River, largest along the South Shore, and stop at the Oakdale Yacht Club to ask about a charge for our still-dead battery. That would be thirty bucks, says the young woman at the gas dock. The manager arrives and wants fifty to let us tie up for an hour or so and take a shower. "We can't let just anyone in here," he says. "If you were a big power boat and were taking on five hundred gallons of fuel we might give you a break. But..." He looks deprecatingly at our scruffy little sloop, then guns his inflatable and speeds away. Remaining salty, we go on to the next dock, an outboard motor repair place, where the friendly people charge us up for five dollars.

Then we move out into the river and anchor for the night, close to the REDUCE SPEED sign attached to a stake. We watch an incessant parade of motor craft, all abruptly throttling up or down as they pass the marker. As a placid blue evening settles in, a solitary kayaker paddles by.

After an early departure from the Connetquot River, on a windless morning, *Piper* glides quickly around a corner, past a couple of clambers working the flats, and into

the little boat basin on the grounds of the Long Island Maritime Museum in West Sayville. We tie up at a wharf along with *Modesty*, a replica of a thirty-five-foot oyster buy boat, that the museum keeps in the water as a permanent exhibit. At one point we had contemplated using *Modesty* as our *Piper*, though sleeping in her large hold would have been uncomfortable. But the deal fell through for financial and logistical reasons. Next along the wharf is *Priscilla*, another old oyster boat, and up on land lies the Frank F. Penney Boat Shop, a working boatbuilding shed with a long history. Here museum volunteers fashion new skiffs and sharpies.

In our old wooden craft, and in such surroundings, we feel very much a part of the island's long tradition of boatbuilding and seafaring. The mood sharpens when Al Terry, one of the museum's most stalwart trustees, comes over and greets us. A former marine engineer and flight engineer for Pan American Airlines, Terry, at age 71, has bright blue eyes and a ready wit that keeps us laughing all day. He wears a t-shirt and khaki trousers held up by wide suspenders. Constantly chiding himself for his forgetfulness, he soon persuades us that he remembers as much as anybody about the island's boating traditions. Terry shows us the pretty though rundown twenty-two-foot sloop, *Salty*, built in 1945 by the DeLorie brothers of Amityville and also an early candidate to be our *Piper*. We tour the museum's extensive collection of beautiful wooden half-models of the graceful, swift boats designed and built by Gil Smith. For sixty-six years, until his death in 1940, Smith was the owner of a boatyard in nearby Patchogue and as fine a marine architect as the island ever had. Some of his designs are racing vessels with letters for names: R, P, and S. Other Smith designs (some by Gil's son Asa) are smaller working boats or catboats, which once served as the ferry links between the towns on the South Shore mainland and the communities out on the barrier beaches. At Terry's own house on Homan's Creek in Bayport, we see examples of the many wooden hulls (some beyond repair) that he has amassed on his own as well as for the museum's collection.

In a plastic-covered hothouse on the property is one of five fiberglass replicas of Gil Smith's *Moonbeam* class that Terry himself has built, as well as a larger Gil Smith design called the *Pauline*. "That boat was left outdoors too long and is beyond repair," Terry tells us. "I couldn't renovate it and would end up just making a replica. It's a shame. These boats are works of art. It's very emotional." Terry laments that other priorities, including many meetings having to do with maritime history, leave him with little time for any such work. "All I do these days is talk," he says. "I don't get anything done anymore."

Terry then takes us on a tour of a lively little waterfront commercial area that lies adjacent to the museum. Commercial lobstermen and clambers unload their catch here to have it immersed and cleansed in "holy water," as one entrepreneur calls the pristine ocean water he pipes into shellfish depuration tanks from 200 feet below. Business is brisk at an unpretentious clam bar where we eat an excellent lunch. Manager John Casey fully agrees with my suggestion that most people in this region are quite fervently pro-environment and anti-sprawl. The restaurant is called Kingston's, and like just about everything

around here it was once owned by John Kingston. A broad-shouldered and firm-jawed jack of all trades, Kingston spent twenty years driving a truck for a big company. Then he became a sculptor. Then he spent seven years in the lobster business. Then on the West Sayville waterfront he founded what has become a highly successful custom woodworkshop.

We find him just outside his immaculately clean establishment ("John buys WD40 by the five-gallon can," Terry had told us). A cool southwest breeze blows through the building, and powerful vacuums suck up every last particle of sawdust to be bagged and sold to horse stable operators. When we approach, Kingston is smoking and drinking a Diet Pepsi. He talks of what is still possible in Long Island's seafood trade. "Up in the Sound there are lobsters all over the place now," he says. "By using the latest technologies a skilled fisherman can go way beyond what we could produce in the old days. I know one man, I won't say who, who has gotten 100,000 pounds of lobsters in fourteen days this summer. That's twice the best catch I ever got in a whole month during my whole seven years in the business. The profits are great and the season is short, you only work from July to December. There are so many lobsters around here that big trucks are coming down from Canada to collect them for processing back up there, some canning but mostly the frozen tails." There are many other ways to make a good living from the sea these days. Kingston adds, citing the example of his son-in-law who takes his big eighty-footer on eight- or nine-day ocean voyages in search of tilefish. "They work twenty-two-hour days," Kingston says. "It's tough. But you can do well if you're good."

Back aboard *Piper* at the museum that evening, we see further reassuring bits of evidence of Long Islanders who have not succumbed to the culture of malls, plastic reproductions, ersatz TV renditions of reality. A young family, Mom, Dad, two boys perhaps five and eight, stroll up. The boys have nets on long poles and run around looking for blue crabs swimming near the surface; each time they catch one, they leap and squeal in delight. Joe Candageleri, a handsome, bearded museum volunteer who looks after *Modesty*, swells with pride when he talks of having served as her captain for a trip to New York Harbor to join a gathering of traditional workboats. And Robert Slager, a clammer of Dutch ancestry, takes great pleasure in showing us *Hildegard*, a sturdy power yacht built in the nearby town of Bay Shore in 1921 that he has lovingly restored and outfitted. In return for the right to keep *Hildegard* at the museum, where she looks right at home, the owner does volunteer work. But relations are strained because of the museum's current financial crisis: after some thirty years of subsidies, Suffolk County recently "zeroed out" the museum and times there are tough. "It's a shame," says Slager's wife, Doris. "We were all one big family down here. We all got along and helped each other. Now it's all changed."

Departing the museum the next morning, we backtrack to Bay Shore to catch a glimpse of how this region looked in less congested times. Harry and Genie Havemeyer occupy a flat grassy promontory near the Fire Island ferry docks. The place served as a duck-hunting club before Harry's father bought it in the 1920s. Now it sports two houses, a swimming

pool and tennis courts, a walled English garden with a well-clipped beech hedge where several Havemeyer daughters were married, expansive lawns leading to the water's edge. Taxes are so high, the Havemeyers tell us, that they doubt their children will be able to maintain this spread, which is just about the last of its kind in this once opulent area. The middle class is being squeezed as well, through a combination of high living costs and regional economic problems. "The population around here has leveled off and may even be dropping," Harry says. "It's wall to wall houses for sale."

We walk across the broad lawn to a snug little bight where Havemeyer keeps his thirty-foot power boat and where we have tied up *Piper*. We talk of his battle with environmental officials to protect a shoreline that has been hit hard by the devastating 1938 hurricane and many subsequent storms. For decades, a bulkhead has separated the lawn from a little band of marsh along the beach, he explains. The bulkhead began to rot out and he sought permission to rebuild it. Inspecting the property, environmental officials discovered a small patch of spartina grass growing within an area that had been walled off from the bay. According to their rules, this meant that Havemeyer no longer had bulkheaded property—he now had a wetland and could therefore not rebuild the structure. Havemeyer carried his request through four different channels of permitting, the heaviest-handed being the New York State Department of Environmental Conservation. "We finally worked out a compromise, but it took a lot of work," Havemeyer says. "Of course I'm an environmentalist. But only up to a point."

We leave the Havemeyers after a pleasant lunch, and sail back across the bay's shoal waters to Watch Hill, a marina within the Fire Island National Seashore that is tidily run by the National Park Service and offers many opportunities for education as well as recreation. Here we find a talkative cross section of motorboaters who carry their canvas deck chairs onto the boardwalk to form impromptu encounter groups. Each is eager to outdo the other with tales of big fish, high-seas derring-do and extravagant gastronomy, ashore and afloat. Across the well-kept dunes is the Atlantic. In the mauve light of a misty evening we swim in water that is pleasantly cool, but also oily and fishy-smelling. After a muggy night we awake to fog and are soon engulfed in it as we navigate the buoys back to the north end of Great South Bay and then eastward, into the town marina at the incorporated village of Bellport.

Upscale Bellport, which makes its own rules and apparently has tight ones, is attractive. Marshes and greenery abound. Old shingled houses, bordered by freshly painted white picket fences, line the street from the marina into the village center, whose stores have not perished in the South Shore's general stampede to the malls along Sunrise Highway a couple of miles inland. "Let's just go to the IGA," I overhear one woman say as she leaves the post office. "I always get lost in the big supermarket." From the marina, every half hour in the summer, a little town ferry carries Bellporters across the bay to their own ocean beach. The ferry ticket taker, a contented senior citizen, tells me of other local virtues: "We have our own pool and golf course, tennis courts, bowling alleys for the kids. Our taxes have not gone up in twelve years. What more

could you want?"

Bellport looks even better after Charlie Nichols arrives in his old Toyota, having driven straight through from Washington to take over Flo's place as *Piper's* first mate. I borrow the car to take her over to the train station in nearby Patchogue. Bellport lies neither on the Montauk Highway nor on the even larger Sunrise Highway, where the malls are stacked up, but on a quieter, leafy side road, where a roadside vegetable stand does brisk business. The village of Bellport's economy still gets an "A-minus," according to one source, despite heavy competition from the malls' discount stores. But the number of boarded-up stores and tawdry sights we encounter after turning onto the Montauk Highway is dispiriting.

Her trademark wide-brimmed straw hat firmly strapped on, Flo just barely catches the 1:32, having survived yet another nautical adventure and having even admitted to liking the little *Piper*. As always when she leaves a cruise, I will greatly miss her sparkle, discerning eye and loyal companionship. Under the blazing Saturday afternoon sun, I drive back through downtown Patchogue's empty streets and ponder how the process of planning and zoning could have left Patchogue in such a dreadful mess and in such urgent need of revitalization.

We leave Bellport, motoring into a southeasterly breeze, Charlie, a descendant of William Floyd (a signer of the Declaration of Independence for New York), talked of local traditions around which he had grown up. Near Smith Point he identifies Pattersquash Island, an old duck hunting club. In the old days, he says, the club's members were rumored to be the purveyors of some of the finest corn in the county; their customers, of course, were the ducks. We run aground trying to make it into Home Creek, the entryway to the Floyd estate (now part of the Fire Island National Seashore) where Nichols spent much time as a child. Kedging with a little dinghy anchor quickly frees us, but the grounding wedges some shells and small pebbles into the bottom of the centerboard trunk and jams it in the "up" position for the rest of the cruise. Nichols mumbles something about the strong currents from nearby Moriches Inlet rearranging the shoals.

Having recovered from this mishap,



Charlie guides *Piper* eastward, across Moriches Bay toward the barrier island, then past the Brookhaven town marina at the mouth of the East Leeds, to a superb anchorage nearby. We can set the hook so close to shore, on a sharply angled shelf, that we simply jump over the side and walk ashore onto a hard, sand beach. We head south over a series of grassy dunes and scrub areas. Approaching the ocean, we encounter a number of endangered piping plovers that run fast across the sand, piping vigorously, in efforts to draw us away from their eggs and chicks. Inadvertently, for the warning signs are on the ocean side, we have blundered into a nesting area for these rare little birds. There are about 2,500 nesting pairs of piping plovers worldwide. Around 500 of these pairs nest on Long Island beaches, making the region critical to their survival.

We tiptoe carefully around the birds, move a respectful distance away and take a refreshing swim in the ocean. Enroute back to *Piper*, we circumvent the nesting area, dodging and slapping our way through thickening clouds of mosquitoes, aggressive greenheads and horseflies. Once there we move off the shore, out of range of most of the bugs, and spend an agreeable night surrounded by terns, gulls and other shorebirds including striking black skimmers and oystercatchers, whimbrels and great and snowy egrets. In the morning Charlie catches and fillets a bluefish. A deer peers out at us, then bounds back into the scrub. A red fox patrols the beach.

*Piper* traverses narrow canals linking Moriches Bay with Shinnecock Bay, heading toward the illustrious Hamptons. Passing Westhampton and Quogue, we note that recent humans have done much to alter the natural landscape, adding bulkheads and rip-rap to the gentle contours of this glacial outwash plain. But these attempts to stabilize the land may prove puny in the face of an angry ocean. Of any place on the East Coast, few have been more battered or more expensively repaired than the beaches of Dune Road, Westhampton's beach strip.

The vicious 1938 hurricane sported winds gusting to 186 miles per hour, worked up thirty-foot waves even in well-protected waters, and killed 680 people. The morning it struck, reported Everett S. Allen in his chilling book *A Wind to Shake the World*, George and Mabel Burchard decided they would remain in their rented house on Dune Road to watch the fun. The tide rose as the wind increased. Green, fifty-foot waves began to crash over the dunes which separated the Burchards from the seashore. By midafternoon, the road was inundated, the windows and doors of the house were blown out and the Burchards had to swim for it. Clutching bits of flotsam, they rode the violent, frothy surf across two and a half miles between the beach strip and the mainland. Above them, large objects flew through the air. They washed up bruised and bleeding, but miraculously alive, on the eleventh fairway of the Westhampton golf course.

The storm destroyed all but a few of the Dune Road houses and killed thirty-two people in Westhampton alone. But not only did most of those landowners return to face more recent storms, they were joined by far more numerous hordes of newcomers. Today, recurring images of the aftermath of unremarkable winter northeasters are captured in newspaper photographs of demolished Dune Road houses at the ocean's edge. Whines from their

owners demanding costly "beach replenishment" efforts and federal flood insurance checks ring hollow when the buildings clearly never belonged there in the first place.

One afternoon, weary of the South Shore's narrow channels, the buoyant *Piper* breaks out to the relatively open expanse of Shinnecock Bay. Fog shuts in tight. We use our awesomely accurate little Global Positioning System receiver, the size of a cigarette pack and powered only by AA batteries, to guide us across the bay to Healy Creek. Here we find a place to anchor near scenic marshes and a small beach, close enough to paddle ashore in our leaky inflatable dinghy. Greeting us as we hike along the extremity of Meadow Lane is a wild assortment of expensive houses whose designers obviously care more about making bold individual statements than about advancing the harmonious ideas of a Marsh or a McHarg.

Single file, for the lane offers no pedestrian byway (and Charlie is a big guy), we walk the roadside with a weather eye out for passing traffic. We pass 8,000- and 16,000-square-foot houses bearing ostentatious echoes of the Mediterranean or the noisy, angular tradition of contemporary "coastal" architecture. Some properties sport landscaping more appropriate for shopping malls than for an area rich in natural vegetation of great beauty. Generosity persuades me not to mention the name of the architect whose especially unappealing creation, well-advertised on a roadside placard, is now nearing completion along this high-end shoreline.

One lot is vacant, and it has on it a well-worn pathway leading to the dunes and then the ocean. Surely this is private property, but it lacks NO TRESPASSING signs. We decide to risk the possibility of an electronic alarm system lurking in the shrubbery. Moving low and fast, we cross this terrain and safely make it onto a broad expanse of clean beach. Few people are to be seen. We swim, then retrace our steps back to *Piper*.

A weak cold front passes though overnight. Early the next morning we set forth under crystal sunlight for the Shinnecock Inlet and open water. Though we pass a loon, the principal flying objects in sight this morning are helicopters. It is a Monday, and swarms of them are using the landing area on the Southampton side of the inlet to collect captains of finance and industry and waft them into Manhattan for abbreviated summer workweeks.

An indefatigable fisherman, Charlie works the inlet but catches only kelp and seagrass. Out in the open ocean, we spend an agreeable morning sailing downwind before a balmy westerly, trying to determine the gaudiest-house prizewinner from among the many contenders lining the beaches all the way from Southampton to Montauk, thirty miles to the east. A pink palazzo and a turquoise-shuttered pseudo-Mediterranean tie for top honors. By midafternoon we round the snout of Montauk Point and begin to beat back into a strengthening sea breeze, with the help of a fair current. On one tack the jib sheet snags the corner of the forward hatch cover, and it almost goes irrevocably to sea. But Charlie, using his long reach, manages to save it, thus compensating for having earlier committed the barely pardonable sin of losing a winch handle over the side.

Now we are back in sailboat country: a

cruising ground of great beauty, with Gardiners Island, the lush 3,300 acres of beach, woodland, field and marsh that guards the East End's inner bays, looming before us. Early in the 1630s, British settlers in New England began to explore Long Island Sound. It was such an expedition that brought Lion Gardiner, then living at the old Dutch fort in Saybrook, Connecticut, to the island that still bears his name and that continues to be owned by various of his descendants. By virtue of the close relationship he developed with Wyandanch, Long Island's head sachem (chief), Gardiner in 1639 bought this land for a few Dutch blankets, a large black dog, a gun, some ammunition and some rum. In so doing, he became the founder of the first English settlement anywhere within what is now New York State. Only a caretaker lives there permanently now, but two Gardiner descendants make separate visits from time to time and squabble over the island's ownership and future. In the fall the owners conduct hunts to cull its substantial herds of deer and wild turkey. Another significant species that populates the island is the deer tick, the small arachnid that carries Lyme's Disease and is as effective as barbed wire or vicious dogs at keeping trespassers out of its woods. Here, also, is one of the last stands of old oak around the Sound that has never been logged.

We contemplate using our last gallon of gas to power into Montauk Harbor and refuel. But we fear darkness will catch us in this busy commercial place, and condemn us to spending the night where the wakes of fishing boats and large pleasure craft will keep us awake and knock us around. So we press on, beating

toward the tiny twisting channel, almost invisible even in daylight, that leads into Napeague Harbor on the South Fork. We pass Wilson's storm petrels doing their pretty, wing-fluttering dances on the water of the bay and make it to the harbor mouth just at dusk. Picking our way across unmarked shallows, we find a snug anchorage in ten feet of water. Charlie unhesitatingly dives in and swims ashore. I hold back because the brown tide, which has once again invaded the area after an absence of several years, and has turned the water an unappetizing olive brown. It is so murky that, even if it were light, there would be little point in putting on a face mask to dive under *Piper* and grope around in an effort to free up her centerboard. Even though the foul tide has no effect on human health, the idea of swimming in water clogged with algae holds little appeal for me. I wonder how many billions of those small creatures it takes to change the water's appearance so dramatically.

The next morning we talk briefly with a crew working a seed oyster operation that the Town of East Hampton has installed at Napeague. Fortunately, we hear, the oysters have so far been unaffected, even though the brown tide has already devastated the scallop population and, we learn later, has even helped bring about a fall off in seasonal tourism. Such, in these parts, is the intimate relationship between environment and the economy of which the East End Task Force talked.

We drive *Piper* across the channel from Shelter Island to Greenport and our starting point, the Brewer Yacht Yard. Our circumnavigation of Long Island is complete.

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The sound was as crisp as the snap of a rifle shot. From a smooth six-knot glide under mainsail and motor, *Piper* slammed to a halt onto a barely submerged wall, marked by a decrepit little concrete pillar, in Delaware Bay near the Chesapeake & Delaware Canal. The crash threw me forward from my seat on a bunk in the main cabin of our fragile 25-foot wooden sailboat. My head hit something and began to bleed. Jarred from his position at the helm Martin, my only shipmate, was unhurt but instantly shattered in spirit. In seconds, water began pouring through our badly-holed hull and soon rose to toerail level. The venerable *Piper*, a reverse-sheer Amphibicon sloop built in Maine in 1956, was a goner, stove in beyond repair at any reasonable cost.

As she sank in the rock-strewn water near Reedy Creek Dike, we had blessings to count. On this early September morning the sea was placid and the breeze a benign southerly. Though a light fog-patched drizzle had been falling, visibility was reasonably good. With a dead battery—we had no on-board recharging capability and the little electric bilge pump had been working hard—we could not summon help by radio. Nor did we tow a dinghy or carry a life raft. But we could make do in the shallow water for awhile, or even clamber up onto the concrete marker and wave for help. Should we have to swim for it, shore was but a half-mile away through warm water.

Even as Martin was making *Piper* fast to the nearby marker, though, help was already at hand. Young mom-and-pop crabbers Bill and Holly Jenkins of Townsend, Delaware, who had been hauling pots nearby, responded instantly to our insistent waves. "Hurry," said Bill as their open crab-laden outboard approached. "I've lost two props on this wall myself. I don't want to stay in here very long." We salvaged a little of our gear and threw it and ourselves aboard as Bill hastily began backing away from the shallows. The sturdy Holly gave me a clean towel to stanch the bleeding from behind my ear. "You can always get another boat," she said. "All that matters is that you're OK."

On VHF Channel 16 Bill and Holly's "Crab 164" alerted the world that *Piper* had "hit the wall" and foundered, but that her crew was safely offloaded and OK. Soon George McKee, owner of the Delaware City Marina near the canal entrance, chimed in on the radio with useful suggestions about how to prevent *Piper* from becoming an expensive derelict hazard to navigation along the busy Delaware. Holly's father Jim Reynolds, a game warden for Delaware's Department of Environmental Conservation, stood by at the landing where we came ashore. Under his guidance a well-trained volunteer squad from a nearby fire station bundled me onto a gurney aboard a big truck and sped me to the brand-new, pin-neat emergency room at a nearby hospital. Within a few moments a doctor there had stapled closed my 1 1/2 inch head gash and pronounced me otherwise fit.

Reynolds and a fellow wildlife enforcement officer, the tobacco-chewing D.P. Blaasch, drove with Martin over to the hospital and picked me up. Then we returned to Delaware City and checked in with George McKee about a salvage operation. A crabber had already been aboard and taken off some of the personal gear we had left behind. "Don't worry, you'll get it all back," said McKee's trim wife Jo. "That man would never steal

## The Demise of the Piper

In the August 15th issue Rodger Stone completed the series of excerpts from his book, *Fair Tide, Sailing Towards Long Island's Future*, with the completion of his circumnavigation in the 1956 Amphibicon 25' wooden sloop he resurrected for the journey.

Not included in the book was this sad tale of the subsequent fate of the faithful old wooden sloop which Rodger felt he wanted to share with you.

anything." We joined McKee and the two officers for a bizarre lunch at Delaware City's pizza and cheese steak joint. The conversation centered on odd doings in nearby forests and on local waters. Another attraction was the cheerful Tiny Tim, a 580-pound heavyweight wrestler who had come in to pick up a standard-size grocery bag full of luncheon snacks. Then we returned to the officers' office and delivered a full report of the accident. By midafternoon, Reynolds had delivered us to the Wilmington railroad station. Still clomping around in wet clothes and sea boots, my hair still blood-caked, we boarded the 3:48 for Washington.

Our plan, needless to say, did not include this episode. For more than four decades I had been enjoying accident-free cruising along many stretches of the North and South Atlantic seaboard. Martin, 28, came with a 100-ton captain's license and ample experience aboard a variety of vessels. When we met a few days before the beginning of our ill-fated cruise, we felt an instant sense of rapport. In Martin's company I felt comfortable about the idea of carefully transferring *Piper*, though not equipped for serious deep-ocean travel, from her base in Greenport, at the eastern end of Long Island, New York, to a new permanent home within Chesapeake Bay.

We hit Plum Gut right on schedule at the beginning of a flood current, and with a brisk following breeze scampered westward, under starry skies, down Long Island Sound toward Manhattan. Another favoring current hurried us in jig-time past New York City. Two and a half nonstop days from the outset, after encountering calm and then a boisterous southerly along the endless New Jersey coast, we paused briefly in Cape May Harbor to fill a jerry-can with gasoline for our 15-hp outboard. After a late-evening dinner, we decided to carry on through the Cape May Canal in order to catch the favoring 1.9-knot tidal current up Delaware Bay.

After we emerged from this handy little ditch, I remained at the helm for the 0300-0500 watch. As recommended in one of the cruising guides, in order to spend as little time as possible within the busy shipping lane, *Piper* followed a rhumb-line heading diagonally across Delaware Bay to the C&D Canal entrance. The wind remained strong and rain began spitting into sloppy seas as a cold front approached. This was our third consecutive overnight sail. Tired, I began to hallucinate. Once I spoke loudly to Martin on the foredeck, thinking the jib halyard winch was his head.

Through squinting eyes I viewed endless rows of nearby fishing boats, each with its bright red smiley-faced bow light, all seeming to turn directly toward us.

When Martin relieved me I tottered below and slept soundly, even though noisy surf from a bad leak was cresting well above the floorboards in the main cabin. After dawn we bailed and beat back the waves. At 0900 Martin was on the helm. By choice, we were in quiet water near the Delaware shore, sailing by the lee under main and working jib. The big ships were well to the east and we were among the crabbers. The wind had dropped off. I was below feeling calm and awake. I had breakfast, made coffee for us both. We planned how we would cruise through the coming cold front to a soft landing in a creek off the Chesapeake's Miles River the next day.

As I organized our charts, there came from above a sudden series of luffs, grindings of winch, and exhortations from Martin to a disobedient jib. We decided to take it down and rely on the mainsail and the motor to speed us on to the canal entrance. I doused and stowed the jib. Martin cranked up the motor and set the throttle at cruising speed. We had now moved barely off the northern end of the chart we had been using, and just north of a waypoint, six miles south of the canal entrance, that Martin had punched into our GPS. As we approached a funny looking lighted marker, I was turning to the new chartbook page and preparing to offer advice on negotiating this marker. Since the mile-long "wall" is clearly marked on every chart, I was seconds away from guiding us around this prominent obstacle. Then we struck.

"Don't worry about it," said Jim Reynolds. "Professionals, Coast Guard and Navy people, master mariners, they rack 'em up all the time around here. For the rest of the day I could tell you stories you wouldn't believe." But my pride was hurt far more deeply than my head. During the ensuing days, as I coped with getting the totaled *Piper* off the wall and to a permanent grave, I struggled to understand how Martin and I could have made such a dumb and costly mistake. Sure, we were tired. We had been pumping hard to counter the stubborn leak that mysteriously broke out any time we began to drive the boat hard on port tack. East of Cape May the strong southerly had given us a good pounding. Still, there could be no good reason for our having rammed an obvious obstacle, in benign weather, and lost a worthy little boat.

Several clear lessons, I concluded, can be drawn from all this. One is that the more tired and beat-up you get, the more deliberately you need to focus on the very short-term and take things step by step. Sure, the big picture always needs a place in your head. But I had no business thinking in detail about the Chesapeake while *Piper* was entering unexamined stretches of the Delaware.

Another is an obvious and old one: any ship works better when crew members are fully aware of their duties. Though Martin and I are both deeply versed in coastal piloting techniques, we never established whether the helmsman should also be charged with navigation decisions, difficult as this might be aboard a capricious little sailboat with no autopilot and only two for crew, or whether these should be left to the off-watch shipmate. In itself, a clear agreement on this point would have saved *Piper*.

Thirdly, there is no overemphasizing the importance of patience aboard a cruising sailboat. While we had picked the dates of our voyage precisely in order to avoid any need to arrive "there" at any given moment, both of us kept harping on the need to keep moving. We wanted to take advantage of fair weather or currents, be able to cope better with unfavorable forecasts, not lose time. Just prior to our crash, at the moment when we should have stopped *Piper* dead in the water and consulted our charts, we were steaming ahead at flank speed, imprudently anxious for no special reason to push on.

Finally and perhaps foremost, we were dramatically reminded of the respect due from cruising sailors to the local watermen and those around them. If Bill and Holly Jenkins had not plucked us off *Piper*, we would have survived somehow. But the gentle kindness we encountered from this couple and all others we ran into, around the drab little town of Delaware City, heartened me to think about all the common decency persisting among us. People kept offering us the use of the telephone, snacks, anything to help. They kept reminding us of the craziness rampant on local waters, of drunken boaters and reckless teenagers, and suggesting that we were merely the victims of an extraordinary piece of bad luck. At a bitter moment when our own self-esteem was running at a low ebb, those we met after *Piper's* demise made us feel a little better about ourselves—and a lot better about the world.



## So What About Roger's Amphib-Con?

From Wikipedia

The Amphibi-Con 25 is a trailerable sailboat that was designed by E. Farnham Butler and Cyrus Hamlin as a racer cruiser and first built in 1954. The design was one of the first "trailer sailers" and helped popularize this class of boat. It was built by Butler's Mount Desert Yachts, Sailstar Boats and Burr Brothers Boats in the United States starting in 1954. Some were also built in Finland. A total of 125 boats were completed but it is now out of production. It is a recreational keelboat, initially built predominantly of glued wooden strip construction.

It has a fractional sloop rig with a masthead sloop rig optional. The hull has a raked stem, a plumb transom, reverse sheer, a keel mounted rudder controlled by a tiller and a fixed long keel with a cut-away forefoot, plus a retractable centerboard. The wooden version displaces 3,500lbs and carries 1,100lbs of lead ballast.

It has a draft of 4.25' with the centerboard extended and 2.33' with it retracted, allowing ground transportation on a trailer. It is normally fitted with a small 6hp to 10hp outboard motor mounted in an aft lazarette well for docking and maneuvering. The fuel tank is a portable type, while the fresh water tank has a capacity of 20gal.

The design includes a canvas covered cabin that allows sunshine and fresh air in fine weather or covering in inclement weather. It has sleeping accommodation for four people with a double V-berth in the bow cabin and two straight settees in the main cabin. The galley is located on both sides, just aft of the forward cabin. It is equipped with a two burner stove on the starboard side and a sink and icebox on the port side. The head is located just aft of the bow cabin on the port side. Cabin headroom is 68".

For sailing it is equipped with a topping lift that runs from a V-shaped boomkin and may also be fitted with a spinnaker for downwind sailing. It has a PHRF racing average handicap of 234 and a hull speed of 6.2kts. There is an active class club that organizes racing events, the Amphibi-con Association.

In a 2010 review Steve Henkel wrote, "among her competitors, the A/C 25 is the lightest boat with the least ballast and close to the highest SA/D ratio, indicating that she will be among the liveliest in light air, but with her relatively low Motion Index will tend to be jumpy in a seaway. We recall spending some time on one of these boats with another couple and we found it to be comfortable, light and airy."

L.O.A. 25' - 5'  
L.W.L. 21' - 8'  
Beam 7' - 0'  
Draft (C.B. up) 2' - 4"  
S.A. 266 sq. ft.  
Disp. 3900 lbs.



## Mystic Seaport Ship Modelers

Bob Andrie, leader of the MSSM group suggests, "Join us in the John Gardner Boat Shop during the season if you have any ideas on displays, etc that we can include. Also, my wife has graciously offered to fix up our web-site (<http://www.mssm.wildlifeofct.com/>) so if you have any especially nice photos of your models that you'd like to have posted please send them to me, along with a caption including the ship name, whether it is a kit, modified kit or scratch built, static or RC. Where did they get the plans, etc. And your name if you want it included, or specify not.

I'd like to get a wide variety of models by type, skill level, etc up there so that people find our site searching the web for whatever kind of ship model."

This photo is of Bob and his latest Pinky Schooner, beautiful work.



## Mystic Built, Ships and Shipyards of the Mystic River Connecticut

Member Sharon Brown let us know that at the Jibboom Club in March at the New London Maritime Museum, historian Bill Peterson discussed the revised, expanded and reissued edition of his 1989 book *Mystic Built*. For 135 years, from 1784 to 1919, yards along the six mile tidal stretch of Connecticut's Mystic River launched well over 1,400 vessels. In ports around the world "Mystic Built" became synonymous with the quality and beauty of Noank and Mystic vessels. In 1989 this book was chosen for the prestigious John Lyman Award as "best book published in American maritime history."



Welcome to the John Gardner Chapter of the Traditional Small Craft Association. Visit us at the Community Boat House, Building #36, UCONN Avery Point, 1084 Shennecossett Rd, Groton, Connecticut. Meetings will resume as feasible rowing and sailing gatherings occur during the upcoming three seasons with special programs and visits planned throughout the year. All are welcome.

[www.facebook.com/JGTSCA](http://www.facebook.com/JGTSCA)  
<http://www.jgtscanet.org>

## John Gardner Traditional Small Craft Association

### Small Craft Workshop

at WoodenBoat Show

Friday, June 24, 9am–Sunday, June 26, 4pm  
Waterfront Boathouse, Mystic Seaport

The Small Craft Workshop will be held in conjunction with the WoodenBoat Show at Mystic Seaport. We will be planning rowing and sailing events, educational sessions and other activities for small craft enthusiasts. The Small Craft Hall is planned to be open for Workshop participants as well as WoodenBoat Show attendees. For more information contact Bill Rutherford at [smallcrafter@gmail.com](mailto:smallcrafter@gmail.com). We are already looking forward to a fantastic weekend celebrating wooden boats! Remember, your Workshop wrist band provides entry to all WB Show activities and presentations for all three days.



## Escape to the Cape

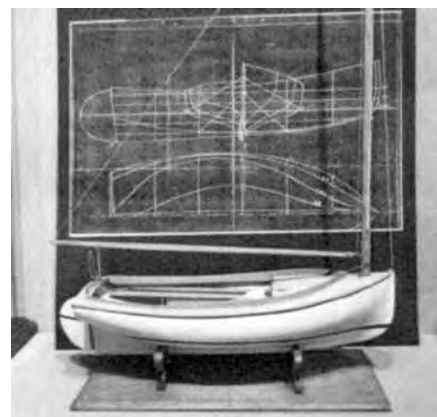
By John Hacunda

Becalmed in the February doldrums. The cheer of the holiday lights has faded behind our transom and the prospect of warming seas and summer festivities still lies somewhere ahead on the horizon. When New England winter has us yoyoing between a blizzard dumping over a foot of snow one week, followed by a spring like thaw with temperatures arcing into the 50s, sometimes a change of scenery is in order.

A short drive from the Rhode Island coast and over the canal bridge lies Cape Cod, its mighty arm jutting out into the Atlantic, slumbering while it, too, awaits the onslaught of the summer tourist season. It may be quiet on the Cape now, but there are still boatyards to explore in search of that "perfect boat," hearty clam chowder savor and the wonderful Cape Cod Maritime Museum to visit.

The Cape Cod Maritime Museum located in Hyannis, Massachusetts, contains an engaging collection of exhibits and artifacts celebrating the Cape's maritime heritage. The museum provides educational programs, rowing opportunities, and boat building courses.

The Wenaumet Kitten is a 13'6" catboat first designed in 1901 by Reuben Bigelow of Pocasset, Massachusetts. The first Kitten was built in 1935 by Reuben's son Cecil of R. Bigelow & Co. The Wenaumet Bluffs Yacht Club of Pocasset has been racing its fleet of Kittens since 1942. This model was built by George Jenkins of Pocasset in about 1947 as a 15-year-old boy.



The Quest for Cod presents the changes to the fishery out of Provincetown over the past 200 years. From wooden sailing boats to steam powered vessels and modern diesel trawlers, there have been many changes to harvesting, processing and the preservation of the fishery.



A Beetle Cat under restoration in the museum's boat building workshop. The Beetle Cat is an American sailing dinghy that was first built in 1921. It is a smaller adaption of the traditional Cape Cod catboat originally intended for fishing in shallow waters.



Bruce Colvin is the Boatwright & Facilities Manager at the museum. Bruce is very friendly and happy to share his knowledge and love of wooden boat building with all who visit.



My spirits were duly restored from my winter getaway. I felt confident that I could weather the remaining days of winter that Punxsutawney Phil has sentenced us to. Soon spring would arrive along with the prospect of another fun season of boating and outdoor activities.



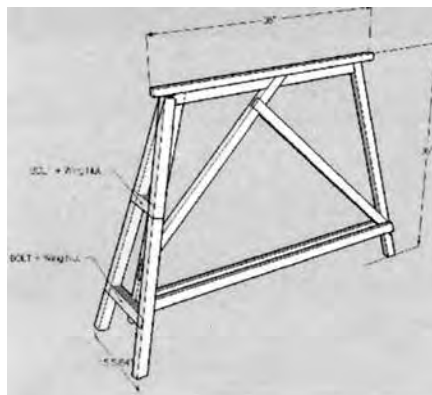
Learn more about the Cape Cod Maritime Museum at [www.capecodmaritimemuseum.org](http://www.capecodmaritimemuseum.org) The museum also has an ongoing Lecture Series which are available for viewing at <https://www.facebook.com/CapeCodMaritimeMuseum/videos/>.

The Cape Cod Maritime Museum at [capecodmaritimemuseum.org](http://capecodmaritimemuseum.org) also hosts the Cape Cod Chapter of the Traditional Small Craft Association (CCTSCA). Their main project is rehabilitating an original 24 1/2' Race Point Surf Boat that was donated to them by the Cape Cod National Seashore. Recently they replaced the keel. See their montage of photos at <https://www.capecodmaritimemuseum.org/surfboat-restoration>.

Among the volunteers is Arey's Pond Boatyard's Owner/Designer/Builder Tony Davis. If you happen out Barnstable way let CCTSCA's Bill Stirling know at [billstirling08@gmail.com](mailto:billstirling08@gmail.com) and ask him about his replica Breck Marshall catboat *Harbinger*. Bill and his wife Shelly often attend our John Gardner Small Craft Workshops with their beautiful 13 Doug Hylan Peapod.

## Avery Point Community Boathouse

Brian Cooper has been busy building one of his collapsible sawhorses for the AP Boathouse like the one he uses at our JG Small Craft Workshops to hold his work while he carves Greenland kayak paddles. He starts with a sketch up diagram which shows the long vertical section held in place by a detachable "A" frame leg. He then goes to his favorite lumber source, free pallet wood, and cuts lap joints with a router, adds spacers, nuts and bolts.



The next photo shows the assembled sawhorse, kayak paddle horse, whatever you want to call it, standing on its own in the middle of our AP Boathouse floor. The long, low horizontal piece is for holding down with your foot while carving away with a spokeshave.



## Mystic Seaport Boat Livery Shop

Things are flying along as we hit our stride this winter. We have half a dozen completed boats in under the Claggett Boat Shed ready to enter the Livery, three boats in the Livery Shop, two boats and lots of oars in the JG Boatshop and at least one boat in

the Shipyard Paint Shop. New this year is a recently acquired 12' Beachcomber-Alpha Dory which will be fun to sail.



*Morsel* (foreground) and *Raven* in the Livery Shop.



The Beachcomber-Alfa with fresh topsides.



Three Williams-Mystic students assist.

## Bill Armitage's Driveway Shop

Bill has been busy in his new digs down in Delaware. Here is his latest, a comeapart one person rowing boat. Note his foldable sawhorses, multipurpose. We hope to hear of him being sighted rowing on the beautiful nearby Rancocas Creek.



## From the Side Deck

March was a frustrating month. Getting our boats in the water seemed far, far away. We did, however, launch a boat at the Seaport Livery on an unseasonably warm Saturday morning. It is a good thing we immediately brought it back to the Boat Shed. It snowed the next day.

So what to do? Got in some shop time and planned for summer, spring rows, summer trips, the John Gardner Small Craft Workshop. This year's theme will be "It's All about the Boats." In the works are a series of shop events, routine work sessions for dory maintenance and perhaps even some new projects. Our Community Boathouse remains an excellent place to open the doors, gather on the Side Deck and meet in person.

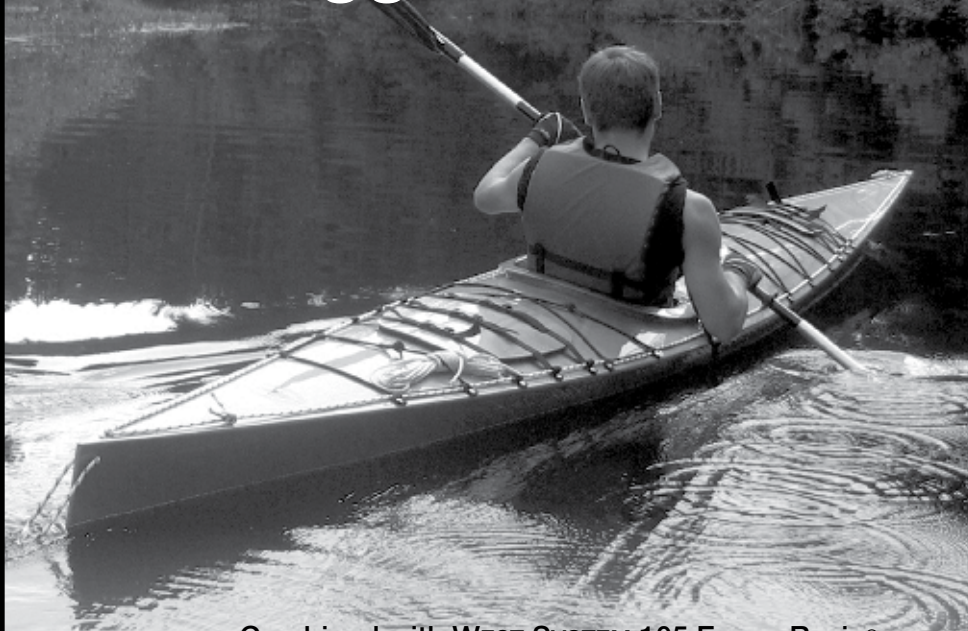


## New Art at the J. Russell Jinishian Gallery

For example, this view of the schooner *Stephen Taber* off Curtis Island Light, Camden, Maine, by Neal Hughes, oil on canvas, 18"x24", \$10,500. Thanks to Russ for sharing this with us. You can also visit his gallery virtually at [www.jrusselljinishiangallery.com](http://www.jrusselljinishiangallery.com).



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# FRANK LESLIE'S POPULAR MONTHLY.

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## CANAL-BOAT LIFE, AND THE COAL TRAFFIC

By Thomas Murphy

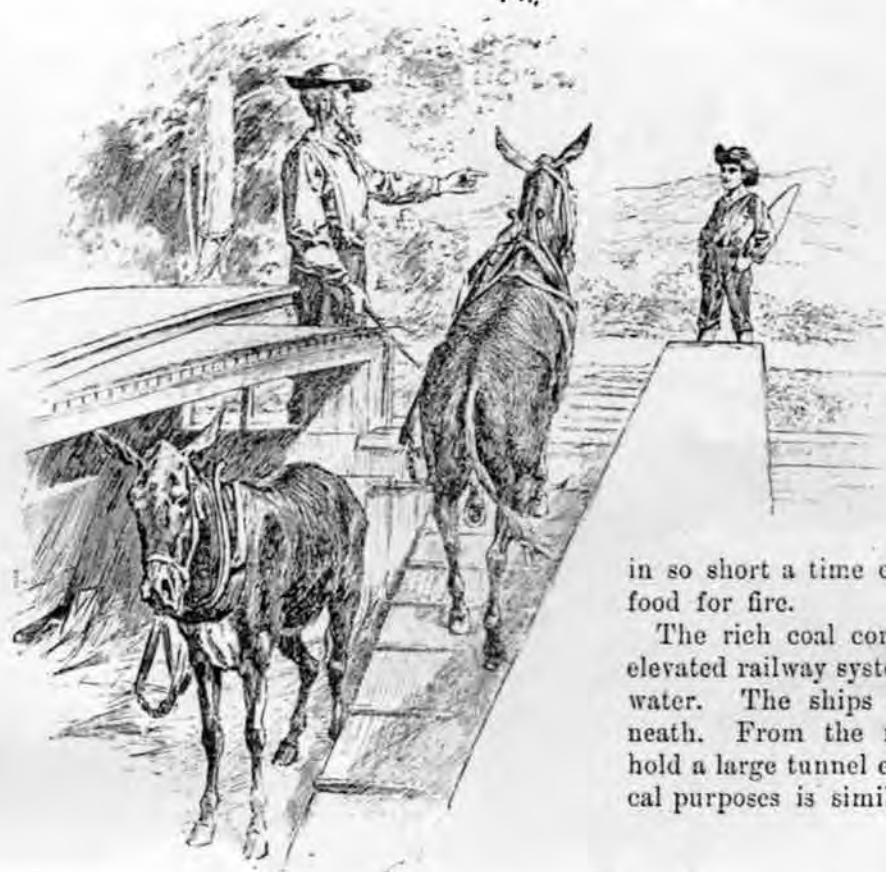
STANDING on the extreme end of Pier No. 7, at an elevation of fifty feet above the water, in the midst of the coal docks of Jersey City, a magnificent view is obtained of the North River, as well as of the busiest and most imposing portion of the city of New York.

Stretching inland, as far as the eye can reach, is a glorious sheet of water resembling a lake, inclosed apparently on every side by wooded hills, which rise with a gentle, undulating, receding slope from its glassy surface, now glistening in the golden light of the early dawn. Opposite are the outlines of the great city, an ill-defined, shapeless mass of buildings, the dull and monotonous uniformity of which is relieved here and there by some colossal pile, gilded dome, tapering church spire or cloud-capped tower which springs up sharply against the summer sky. As the eye slowly wanders down along that populous left bank of the river, momentarily resting upon some object of surpassing interest, many buildings of note are visible, and may be easily recognized: the gigantic pillars of Brooklyn Bridge, the City Hall, the *Times* Building, the lofty *World* cupola, the Post Office, Equitable Building, old St. Paul's and Trinity churches, the Washington Building and several other imposing and picturesque edifices are to be readily distinguished. A panorama of the docks is also afforded, with the huge ocean-going steamers—leviathans, the building or handling of which a quarter of a century ago would have been regarded as an impossibility. Anchored in midstream is a stately war ship of the new White Squadron. Merchantmen, with their lofty masts, symmetrical crossyards and bewildering profusion of ropes and cordage, gracefully repose on the placid waters;

whilst yachts, pleasure boats, steam launches, fishing craft, and almost every other species of marine invention, establish the Empire City's claim to a foremost place among the great seaports of the world.

Turning from the harbor, and from the seductive glimpses of the far-away ocean, and looking back toward Jersey City Heights, a different and less inviting prospect greets the eye. A piece of land, almost square, containing about two hundred acres, dull, flat, uninteresting, destitute of trees or vegetation of any kind—the immense depot, in fact, for the plant employed in conveying to New York the coals required for her countless furnaces—is outspread in all its ugliness. Here, every day throughout the year, a strange and unique sight may be seen. Thousands of wagons are drawn up in parallel lines, and each full to overflowing with that precious black combustible without which a nation can never be great, rich or powerful. This grimy and grewsome region, extending from the Hoboken Canal to Pavonia Avenue, and from the North River to Provost Street, contains a series of docks, numbered respectively 5, 6, 7, 8, 9, 10, into which the vast output of the coal fields of Pennsylvania is unceasingly poured, thence to be shipped to all parts of the United States in schooners, barges and canal boats specially constructed with a view to this particular traffic. Some of the schooners are really splendid vessels—four-masters, with long, deep, broad hulls, indicating great carrying capacity; and in combination with their remarkable strength and solidity a degree of trimness and smartness is perceptible well calculated to convince the beholder that, while for them the fiercest storms have no terrors, they are equally

## CANAL-BOAT LIFE, AND THE COAL TRAFFIC.



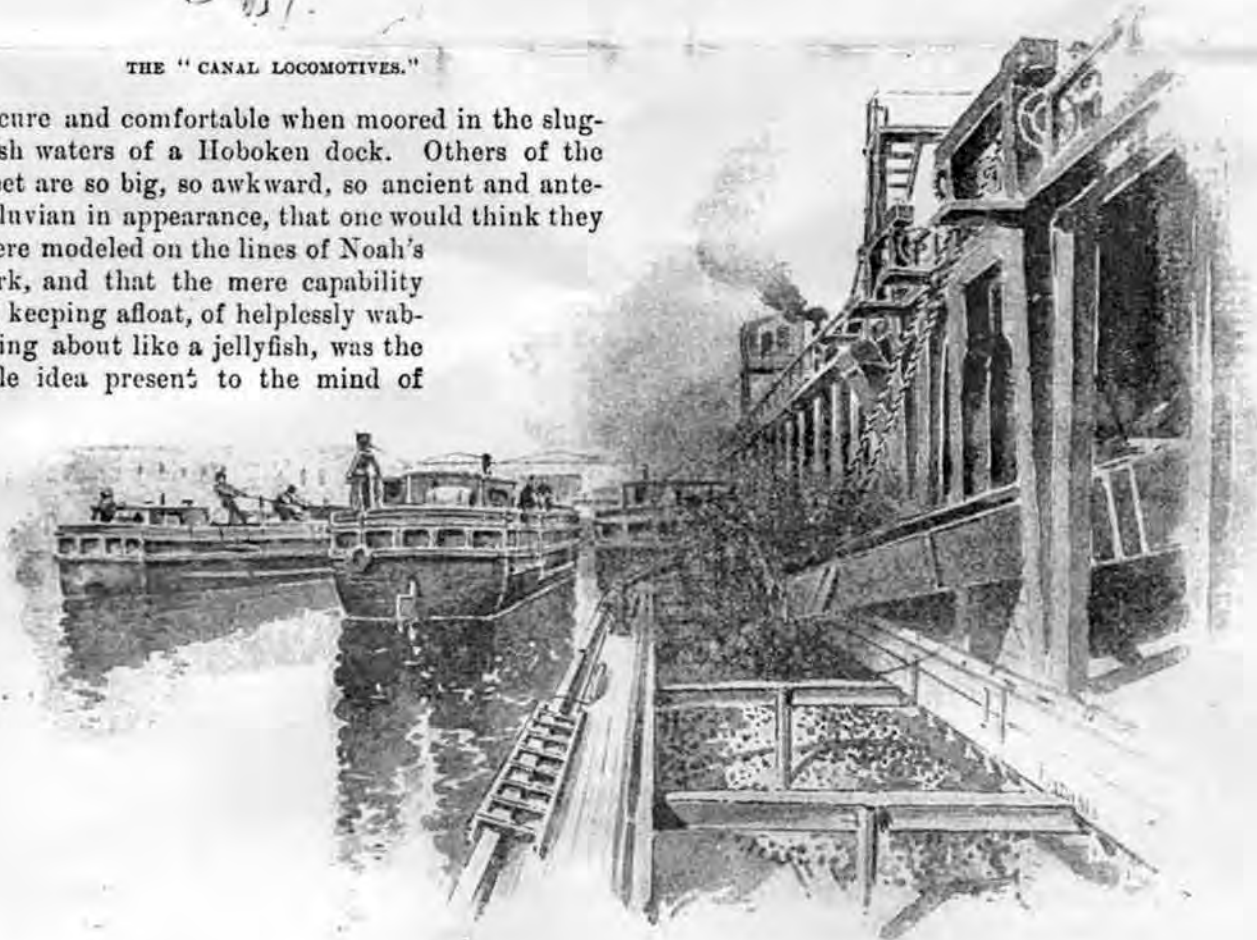
their constructors. With their big black hulls and three short, stumpy sticks, which cannot possibly be useful and are far from ornamental, they look like monstrous marine bogies. I have often stood upon the dock and watched these unwieldy gluttons as they swallowed some 3,600 tons of coal each, without difficulty, in a meal lasting some four hours. Not only skillful but exceedingly adroit

must be the caterers who in so short a time can supply such a quantity of food for fire.

The rich coal corporations have an admirable elevated railway system some fifty feet above the water. The ships are moored directly underneath. From the roadway or platform to the hold a large tunnel extends, which for all practical purposes is similar to the hopper of a mill.

THE "CANAL LOCOMOTIVES."

secure and comfortable when moored in the sluggish waters of a Hoboken dock. Others of the fleet are so big, so awkward, so ancient and antediluvian in appearance, that one would think they were modeled on the lines of Noah's Ark, and that the mere capability of keeping afloat, of helplessly wabbling about like a jellyfish, was the sole idea present to the mind of



AT THE HOBOKEN COAL DOCKS.

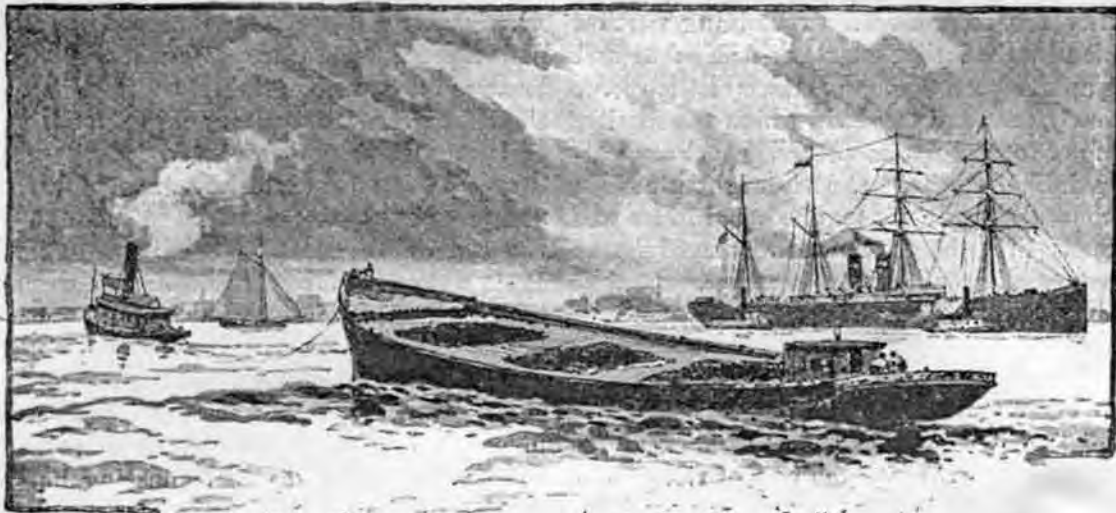
## CANAL-BOAT LIFE, AND THE COAL TRAFFIC.

The trucks or wagons, each carrying from thirty to forty tons of coal, are brought along. As soon as the first one comes over the mouth of the tunnel a few bolts are quickly withdrawn, the bottom—which is made to open in the centre—falls down and outward, and, with a dense cloud of black dust, a rush and a roar, the contents descend in an avalanche to the hold of the vessel, some sixty feet below. The empty wagon having been closed, is forced ahead; those coming after are each in turn unloaded in the same expeditious way. A train of fifty or sixty wagons is emptied, and sent back to the pits for another load, literally “while you wait.”



THE CANALLER'S DAUGHTER.

My object is not so much to describe the means by which capital and science distribute the utilitarian product which the earth so plentifully yields, and any temporary cessation of which would completely paralyze the industrial world, as to briefly depict the everyday or home life of



CLIPPER HULL SERVING AS A COAL BARGE.

## CANAL-BOAT LIFE, AND THE COAL TRAFFIC.

a very numerous and worthy class of people who from year to year are engaged in the transportation of coal, sometimes traveling thousands of miles in pursuit of their peculiar calling.

A visit to the coal docks of Jersey City will give some idea of the enormous number of men, women and children whose home is a canal boat, and who never leave it unless to buy provisions or to deliver the cargo to the consignees; who may be regarded, in a sense, as amphibious, as they are born on the water, live on the water, marry on the water, and wind up their somewhat tame and uneventful careers by dying on the water—although in no case are their bodies consigned to the element to which during life they cling with such persistency. Of a house, with its cool, comfortable parlors, light, airy, well-ventilated bedrooms, cozy kitchen and spacious garden, they know nothing. They have merely heard and read of such things, and from the deck of the canal boat, as she is slowly dragged through placid water ways, they catch occasional glimpses of real, stationary houses, with terraces and fountains and blooming gardens, of which their own few sickly plants, set out in dilapidated flowerpots and cracked teacups, constitute a poor imitation.

It is not, however, to be imagined that a canal boat, although obviously less commodious and convenient than a house, is altogether an unpleasant place of residence. No doubt everything is on a small and rather crowded scale, but order, regularity, cleanliness, and, above all, the healthy surroundings of the life one is constrained to lead, atone for the disadvantages.

Take the *Bounding Bessie* as a type of her class. Her length is 96 feet; depth, 9½ feet; width, 18 feet. Three-fourths of her length is simply a huge coal bunker, in which about 300 tons of that commodity are stored. The remaining portion is occupied by the living quarters—the cabin and sleeping apartments. There is a cozy little room, scrupulously neat and clean, in which the family, consisting of four or five members, gather at meal-times; a dollhouse kitchen, with bright utensils; then a concealed spring is touched, and lo! a bed is magically brought to view, the very sight of whose snowy pillows invites to slumber. Behind mysterious partitions are unsuspected nooks and crannies, all of which are utilized with mathematical economy of space for the general accommodation. Then there is a house for the dog, from which he fiercely emerges to snarl or bark at all intruders; and a stable for the pair of vicious old mules whose teeth and heels are always ready to greet friend and foe alike. A clothesline can be rigged up at a moment's notice to dry the fam-

ily washing. In fact, all that pertains to a house on land may be found in the floating domicile, in a concentrated form.

What queer and fanciful names are bestowed by the owners on these huge, lumbering hulks, which move with the tantalizing deliberation of a snail, and ludicrously fail to fulfill the idea which their cognomens suggest! Unless convinced by actual observation, one would be inclined to think that the *Bounding Bessie* derived her name from the peculiarly light, airy and fantastic manner in which she navigated the deep-blue waters of the Sound. Not at all! A more clumsy, cumbrous, ungainly piece of marine architecture it would be difficult to find than poor *Bessie*. There is not a bound, a hop or a skip in her whole composition. Her movements are painfully slow. In fact, it requires the pressure exercised by a powerful steam tug, or the frantic efforts of a brace of Spanish mules lashed into fury by a pitiless driver, to induce her to budge at all; and even then her progress, in point of reluctance, rivals that of the sloth. Not so, however, thinks her captain, commanding his crew of one, as he proudly paces the deck, wearing long rubber boots and a sou'wester, for all the world like a Jack tar; chewing a big quid of tobacco, and every now and then emitting from his mouth a small cataract of dark-colored fluid; whilst he gleefully gives vent to his pleasurable emotions by such observations as, "*Bessie* is the gal that can do it. She is the lass that can lick them all." There seems to be a perennial spring of affection in the human heart which is constantly bubbling up and finding an outlet in some direction or other, and in no way is this more strongly evidenced than by the terms of endearment in which rough and reckless men will speak of the homely objects with which they are thrown in daily association, whether animate or inanimate. This feeling no doubt prompts the name which the "canaller" bestows upon his craft. Hence the *Saucy Sallies*, the *Black-eyed Susans* and the *Laughing Tillies* which may be found in every port.

One day my attention was drawn to two names conspicuously printed in large white letters on the stern of a canal boat—*Johnnie and Jennie*. Here was a bit of romance. Jennie was a village belle in humble circumstances. Johnnie was her beau. They got married, and invested their joint savings in a boat, and they are now as happy as the day is long. Johnnie has rigged up a nice hammock under an awning, and here, when the day's work is over, as their floating home is securely towed along, Jennie gracefully reclines, and whiles away the time either in reading, building castles in the air, or listening to her devoted

husband as in hopeful language he sketches his future plans. What more healthy and happy life can a married couple lead? Isolated from the world with its perpetual worry and jarring cares, breathing the pure air of heaven, finding pleasant variety in every change of scene, existence with them glides smoothly and calmly along, secure from the shoals and quicksands, raging tempests and sunken rocks which so often shatter the hopes of those who intrust their fortunes to more pretentious craft.

Sometimes a stale old bachelor on the weary side of fifty, by way of consolation in his solitary wretchedness, and influenced by the not unnatural ambition of perpetuating his patronymic in some shape or form, bestows it on the bulky craft which he commands. Hence such names as the *John Brown* and *Richard Roe* are by no means infrequent. These lone mariners, in whose hearts the springs of human affection might reasonably be supposed to have dried up, look after their floating hobbies with the tenderness and solicitude which a father shows toward a favorite child. They invariably refer to them in language interspersed with endearing terms, and the anxiety of the fond mother to keep the shoes and clothes of her prattling tot free from dirt and danger is not more earnest than that manifested by the rough and primitive "cap" to have his barge always neat and trim. It is a legitimate inclination. This great lumbering boat is not merely a necessity of life, but a small gold mine, to him. The position of "cap" is by no means an unimportant or poorly paying one. This is evidenced by the fact that, simple and ungainly as those shapeless hulks appear, in point of construction they cost all the way from \$3,500 to \$4,500. Thus, with a cargo the average value of which may be set down at \$2,000, a canal boat represents an amount of property with the care of which no man would be intrusted if he were not thoroughly responsible. His salary, certainly, does not err on the side of extravagance, being only \$50 per month; still, with a comfortable cabin, affording ample accommodation not only for himself, but for his wife and children, plenty of firing, etc., he can manage to get along very well. The actual work to be performed is neither irksome nor disagreeable. In fact, it amounts simply to exercise. His boat is loaded for him. He has, of course, to superintend the operation, and see that the cargo is properly trimmed. He requires little nautical skill, or, if any at all, of the simplest and most rudimentary character. With the manipulation of an intricate and puzzling combination of ropes and sails or the running of machinery he has nothing to do. Whenever he is called upon to make

one of his periodical trips either to Albany or to any of the towns and cities lying in the vicinity of Long Island Sound, instead of consulting maps and charts, and entering into elaborate calculations as to changes immediate or prospective in the tides, winds and weather, he simply betakes himself to the office of one of the many tug or towing companies, and ascertains when a steamer is about to proceed in the desired direction. His name, destination and other necessary particulars are all duly recorded, and upon an appointed day and at a fixed hour he is taken in tow, in company with some sixty or more boats, and amid cheers and hurrahs, the clapping of hands, the laughter of women and the crowing of babies, the enormous flotilla, looking like a huge, irregular raft, starts on its cruise.

It is an interesting and a pleasant sight to watch the little tug as she puffs, snorts and strains in her efforts to drag along sometimes as many as a hundred boats, all closely linked together. Those concerned in the enterprise are animated by the same hopes, the same worthy ambition, viz., the desire to earn an honest living and acquire a competency for old age.

When Commerce spreads her snowy sails, and her winged messengers wend their trackless course through the ocean's plain, the sight is striking, magnificent, and cannot fail to impress the imagination. But for genuine, homely, old-fashioned interest, commend me to the vast armada of canal boats, with their miscellaneous freights, in which women and children conspicuously figure, and which during the summer months may be seen trailing their silent way up the Hudson or through the sparkling waters of the Sound, bent upon invading quiet, industrious towns, not with the hideous and blood-curdling blare of trumpets—or steam whistles—but with the beneficent offerings of peace and the varied products of human labor.

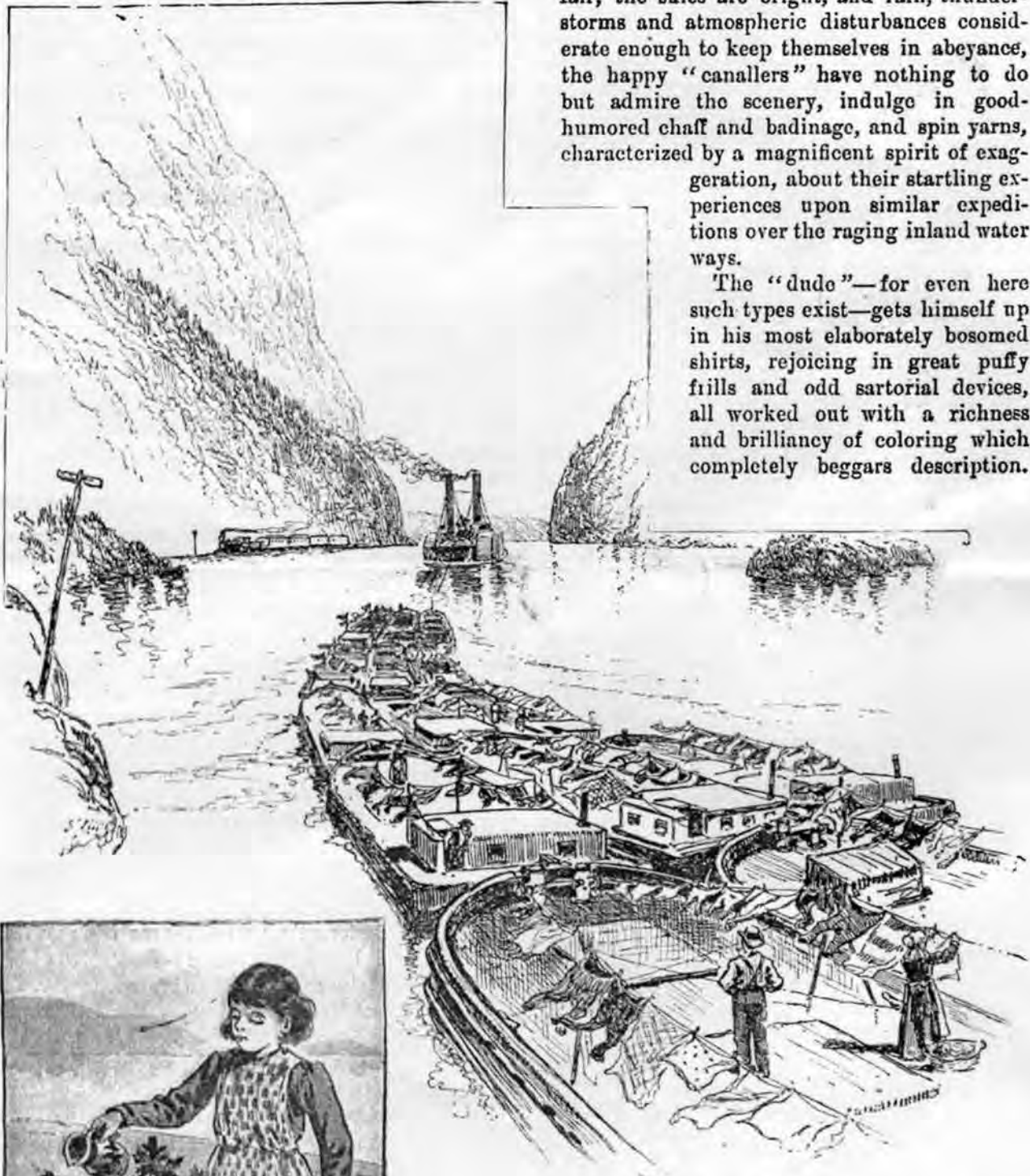
What a glorious time the denizens of these fat, lubberly old boats must have!—boats to which clings a certain aroma of age and antiquity, for the canal boat is no newfangled modern invention, but rather a link which binds us with the vanished but still glorious and historic past, when mailclad warriors and gentle dames did not scorn its tranquil motion, and viewed with admiration, not unmingled with awe, the rude barbaric splendor of its ornamentation. Yes, a good and pleasant time—and long may they live to enjoy it!—have the fine, healthy, picturesque population which find on our canals a summer home. For them no postman coming around every morning with his shrill whistle, or newsboy's cry of "Extra!" No tax collector with his mechanical

## CANAL-BOAT LIFE, AND THE COAL TRAFFIC.

smile and chilling representation of the absolute necessity of the prompt settlement of some public rate. The unwelcome emissaries dispatched by butchers, bakers and grocers to remind the

dilatory customers of their indebtedness are unknown. Life passes on from day to day with a most refreshing freedom from gnawing care, and the only subject which can afford ground for anxiety is the weather. As long as the wind is fair, the skies are bright, and rain, thunderstorms and atmospheric disturbances considerate enough to keep themselves in abeyance, the happy "canallers" have nothing to do but admire the scenery, indulge in good-humored chaff and badinage, and spin yarns, characterized by a magnificent spirit of exaggeration, about their startling experiences upon similar expeditions over the raging inland water ways.

The "dudo"—for even here such types exist—gets himself up in his most elaborately bosomed shirts, rejoicing in great puffy frills and odd sartorial devices, all worked out with a richness and brilliancy of coloring which completely beggars description.



WASHDAY ON A CANAL-BOAT TOW.

Around his neck he coils a gaudy handkerchief, and arrays himself generally in as killing a fashion as the circumstances of his position will permit. It is not to be imagined that he goes to all this trouble without a definite

A FLOWER GARDEN.

## CANAL-BOAT LIFE, AND THE COAL TRAFFIC.

object. Even here there are conquests to be made and girls to be dazzled, and true to his idiosyncrasies, the Adonis of the canal is heroically prepared. Yes, on board these unwieldy hulks there are girls—not just such as one is in the habit of seeing on Broadway or Fifth Avenue, but Nature's daughters, whose attractions are real, and not to any great extent artificial; who owe nothing to the milliner, hairdresser or druggist; whose complexions are the genuine and inimitable color-

short notice indeed. But then, all the surroundings, moral, physical and scenic, are conducive to happy results of this kind; sociable, gregarious, pleasure-loving people, in the full bloom and vigor of youth, are thrown somewhat promiscuously together on the waters of the blue sea, or the bosom of some noble river or wide-expanding lake, with nothing in view but the glorious freedom of nature. It is not to be wondered at if, under such conditions, the tender passion should

assert itself, and that the voyage is considered dull and uneventful upon which the nuptial knot, amid the usual festivities, has not been successfully tied.

When a boat reaches her destination she is cast off from the general flotilla, whilst the air is rent by the rousing cheers and hearty expres-



THE CAPTAIN'S QUARTERS.

ing of simple diet, early rising and pure air; whose luxuriant wealth of hair does not contain a single fictitious or doubtful tress, and the matchless symmetry of whose figures is not the result of any spurious aids. As they swiftly pace the deck with sure and firm tread, their eyes eagerly wandering over the silver stream, or darting sly and approving glances at their demonstrative admirers, they look the personification, if not of refined female loveliness, at least of health and rustic beauty. Many a tender scene is enacted on board the floating homes of the light-hearted and merry "canallers." Attachments spring up, vows are plighted and marriages celebrated upon very

sions of "Good luck and God speed" from those who remain behind. The captain, having duly delivered his cargo, at once endeavors to procure another to bring back to New York. Corn, potatoes, or any of the staple products of the place, will be gladly received. When the capacity of his boat is fairly exhausted he seeks another tug bound for the city, "hitches on," and begins his return voyage, which practically is an exact counterpart of his outcoming one: The same class of

## CANAL-BOAT LIFE, AND THE COAL TRAFFIC.

people, the same though ever-varying and beautiful sky, the same boundless wastes of water, the same glorious freedom. No wonder the hardy "canallers," by their tanned and ruddy complexions, and sinewy, stalwart forms and never-failing

good humor, are living proofs of the advantages of a life spent in close association with nature, where man's handicraft is confined to the lumbering boat upon which they peacefully and pleasantly glide through a useful existence.



ABOVE: The Erie Canal boat *Orlean Felts*, from Durhamville New York, lies rafted up with a crowd of other vessels waiting for a return cargo. Her captain poses at the tiller while his family finds shade under an awning rigged over the stern.

LEFT: Coenties Slip on Manhattan's lower east side was a winter berth for dozens of canal boats.

BELOW: The tugboat *Coe F. Young* of the Cornell Steamboat Company rounds the Battery and streams up the North River with three canal boats in tow.



*Pictures courtesy of Bill McKelvey.*





Most of the frames are in and also the cants at the bow.



Volunteers shaping a part of a frame.



Trippe.



Bow and bowsprit.

Deck.



## The BMC and Long Shed

By Greg Grundtisch

WOW! What a difference! It was early March when the lovely and talented Naomi and I visited the Buffalo Maritime Center and the Long Shed. This was the first time since early summer 2021. At that time there was only a 74 keel and some frame parts being cut out and soaked in a wood preservative. Also, at that time there was a group of volunteers (myself included) to start the frame building process. As it turned out there were many more volunteers than work available for them at the time. There was also a limit of machines and tools available to accommodate the overflow of volunteer help waiting in the wings.

Now on this day in early March we were there to take some updated photos and learn of the progress made since our last visit so many months ago. The crew on this day was all busy and most of the frames and cants were bolted on to the keel with a few remaining to be installed toward the stern.

We then left the Long Shed and drove to the Buffalo Maritime Center. There we found some of the members of the Center working on the Buffalo Whaler and the *Trippe*. Much progress has been made on the *Trippe*, it does look very good and much time and work has gone into it and it looks like a summer launch is a real possibility.



Trippe deck looking aft.

The Buffalo Whaler has come a long way, too, from the last time we were at the Center. Dick Weissen and crew have made great strides in this build and it looks like there may be a launch of this boat in the not too distant future as well.



Buffalo Wailer.

The Center still has ongoing programs with the Buffalo Public schools and its Hand to Hand program for students. As usual I always suggest that if you or anyone you know would like to visit the BMC, or would like to work on any of the boats in progress or help with various other projects (don't forget the Canal Boat at the Long Shed), be sure to contact the BMC's website or call Brian at the Maritime Center, [buffalomaritimecenter.org](http://buffalomaritimecenter.org). Summertime is just around the corner!



Inside the frames looking aft.



Outside frames looking forward.



Stern and rudder and post being finished.



The Scajaquada, the BMC's flagship having needed upgrades to the interior.

Trippe Cockpit nearing completion.



# Messers are the Best

By Greg Grundtisch  
Grundt198@roadrunner.com

This magazine has been a huge life changing experience for me and the lovely and talented Naomi. Dramatically life changing. The change began when I discovered this magazine about 25 years ago on a magazine rack at one of the tourist pavilions on Baltimore's Inner Harbor. I was looking for something to read that evening in my motel room.

I found, folded in half, a thin black and white magazine that was stuck between the regular size magazines. It looked out of place. Being boat related I became curious and tried to determine the contents by peeling back a few pages that were sealed and folded. I could only see a few pages of the contents, but I found it interesting enough to buy it and take it to my room for further review. What a revelation!

After opening it and reading the contents I was shocked to learn that the pages were full of real folks with real lives, doing real things with real boats in real time. These were everyday people, some were professionals in the boating trades and businesses, but most were boating enthusiasts, amateur self taught boat builders or restorers, boating adventurers, camping and cruising boaters and all others that just had a love and passion for all things boat related. In other words, folks that just wanna go Messing About in Boats.

It opened my eyes to other possibilities for my interest in wooden boats and boat building and my very limited knowledge of it at the time. I simply loved wooden sailboats and rowboats but could not afford to own one at the time, or had the knowledge or cash to build one, even a very simple one.

That all changed that fateful evening in Baltimore when I looked at the boats for sale on the back pages of this magazine. There were boats and gear for sale at prices that were dramatically different than the ones I had previously looked at in magazines with glossy covers and pages. I was heartened to learn that there was hope for owning a boat of wood that did not require an enormous outlay of cash that I did not have.

It was on these pages that I learned that it was possible to own a wooden boat at a sensible cost. It was possible for an amateur to build a boat, albeit of plywood and lumber yard stock. Maybe these were not a fit for glossy pages but acceptable for us non professional types who just wanted to be on the water and learn as much as we could about owning, building, repairing, restoring, of our boats.

Early on in *MAIB* I was reading and living vicariously the doings of those who have been engaged in the noble pursuit of boats and boating in its many forms and variations. Reading of others' non professional projects led me to believe I could overcome my inexperience and lack of knowledge and try building a simple rowboat. That I did. My first build was an 8' plywood rowboat for my then 9-year-old son.

This also led me to one of my first submissions to this magazine. Those have been nothing but fun and joy over the years for Naomi and I.

With the knowledge I gained from building that first boat, a lot of the mystery vanished and I went on to build several more little rowboats and a couple kit boats. Those projects, when sold, gave me a little extra pocket money to begin purchasing better tools with power cords attached. Maybe I was a little over confident as I bought a 25' wooden Friendship Sloop shortly thereafter.

It is for the information gleaned, and knowledge gained, from 25 plus years of reading the doings of the Messers in these glorious pages, that Naomi and I want to thank you all. Thank you all for being so generous with your experience, talent, knowledge and helpfulness. It is this camaraderie of like minded, "out of the mainstream" people who are found in no other place, that we so very much want to acknowledge and thank for your contribution to our life changing experience(s).

These also include those Messers who are no longer here with us today but brought so much to these pages. I would like to name them all but there are so many that fear I may inadvertently leave someone out. They have taught me much then, as the Messers do now. There are many intangible things that I learned from the Messers that I have no proper words to express, but know that you all, in one way or another have been, and still are, very much appreciated.

We want to thank Bob and Jane Hicks for the work they put in to make this magazine the glorious publication it has been. The work that goes into writing and publishing a magazine is not lost on us. Thank you both so very much for your encouragement and generosity to Naomi and I and, very likely, many others. The story of your family and businesses past and present that you have written of has been a source of encouragement, education and inspiration to us. We occasionally wonder what we would be doing had I not found this magazine on that newsstand so many years ago.

*Messing About in Boats* has made our lives so much more enjoyable, pleasurable and fulfilling. It has been for us so much more than just a "boat hobby." Our lives have been changed for the better, so much better by you both and the Messers. We owe you a debt of gratitude, a debt that cannot be paid but forever owed. As you stated to me a little while back, "it's been a great ride." It damn sure was! Life changing!

Robb White once ended a letter to me with three simple words, "Joy to you!" Only three words, but they stuck with me as very thoughtful. I don't know if there any other three words that can be as kind and caring as those. But they did make me feel very good. And so, to any and all Messers, if Naomi and I can ever be of help or assistance, we are glad to do so.

Joy to you ALL!

## Where Have All the Wood Boats Gone?

By Greg Grundtisch

Has anyone noticed the lack of wooden boats for sale? Where did they all go? In every boating publication or classified ad that I can find, there is a very noticeable lack of boats for sale, and wooden boats are becoming rare as hens' teeth. There is the occasional Old Town canoe and some strip built wooden kayaks or canoes, but most offerings of that design are of space age plastic or fiberglass. The same for sailboats or rowboats.

It seems as though there is a lot of thin air about and they seem to have disappeared into it. Can they all have just gone to the compost heap or is there a secret location where wooden (and other) boats go to hide? There was a time when the classified ads of this publication once had multiple pages of boats for sale, and the same for *Woodenboat* magazine, *Good Old Boat* magazine and websites like craigslist, eBay, the Catboat Association and the Friendship Sloop Society, among others.

In the past I've mentioned the shrinking population demographic of those engaged in the noble pursuit of owning, maintaining, restoring or building of wooden boats of any type. They can't all be gone! Can they? The people may be gone or going in different directions with other hobbies or pursuits as time and age become a consideration, but where did their boats go? The aging baby boomers and those who preceded them, all with a modicum of disposable income to afford such pursuits and interests, appear to have left and seemingly have taken their boats with them. But to where?

It is a mystery to me as to how this occurred, and so very quickly. The Trump Virus shutdown and the ebb and flow of the "surges and vari-

ants" may have contributed to some giving up on the hobby, but others like me used that time to build a boat or restore an existing one or two. There also seems to be a large pile of "free government money" available to a lot of people. The housing and automobile (especially pickup trucks) market is booming, so it would seem as though money is not the driving factor for boat ownership. The boats have to be somewhere!

I promised the lovely and talented Naomi that I would not take on any more boat projects until the long overdue home repair and improvement projects got finished. Most now are complete and I began looking for a sailboat (gaff rigged) of traditional design, preferably of wood, to add to the existing fleet of three catboats. It was then I became aware of this disappearance of wooden boats and a large reduction of other boats available for sale.

Does anyone know the answer to this? If so, please let me (us) know. It seems like someday a "cache of boats" may be discovered hidden away somewhere and a golden opportunity may present itself for affordable boat(s) ownership. Perhaps a glut in the used boat market may become available and an affordable opportunity to own one of these elusive vessels becomes available to some that could not afford it in years past. They have to be somewhere and now is a good time to find them. In the meantime, I will keep on the hunt for that perfect project boat. The lovely and talented Naomi would like another Friendship sloop or a small schooner. I'll try not to disappoint her.



## Time and Tide and the Rehabilitation of the *Sylvina W. Beal*

### Blog Post Number 12 - *Messing About in Boats*

By Harold Burnham

Bob Hicks approached me as he was putting together his last issue of *Messing About in Boats* and showed me the layout he had done covering the rehabilitation of the *Sylvina W. Beal*. He mentioned that he wanted to leave his readers looking ahead and that he thought that the *Beal* was a worthy project for them to follow going forward.

While I am honored that Bob chose to highlight the *Beal* in his last issue and I respect his wish to keep folks looking ahead, I hope he will let me digress for just a few paragraphs to speak about the significance of this remarkable magazine for me these past 40 years.

When Bob started publishing *Messing About in Boats* back in 1983 I was a young teenager. At that time I was often seen riding my bike through the Story Shipyard to my grandmother's house where our family kept our boats and did our boat building proj-

ects. I was quite pleased when, after a few years, Bob took notice of what I was doing and referred to me as "The Boy Who Saved Beetle Cats from the Fire." Now, living in the shipyard and looking back, I am grateful for his many musings about our family's antics building, repairing and operating wooden boats in the pages of his magazine.

While I could go on and on, I will just mention one of my favorite articles. It was the one in which Bob covered the launching of *Chief*, an old Marbleheader that we purchased from the chief of police and rehabilitated into our family power boat. In addition to the amazing photographs he took, Bob said of my father in his article, "Charles Burnham is not one who believes in over engineering and he delights in an aura of uncertainty." I do not think anyone ever better portrayed his essence in words.

Getting back to the *Beal*, I will say I hope you enjoy our preservation plan which is featured on the following pages. It was a lot of fun to write and despite the mumbo jumbo, there is a lot in there. One thing for certain is that Mary Kay and I have our work cut out for us. Those who know me, though, know that it is likely I will either rehabilitate that boat or die trying. I very much appreciate that at 92 Bob has faith in us and wants to leave his readers looking ahead at what we will be doing. I hope I can still be as optimistic and forward thinking as he is should I be lucky enough to reach his age.

Finally, I would like to let the loyal subscribers of *Messing About in Boats* know that from time to time they can still enjoy learning about what is going on with the *Beal* from our blog, "Time and Tide and the Rehabilitation of the *Sylvina W. Beal*."

## Follow the *Sylvana W. Beal* into Her Future

Now Posted on Our Website: [burnhamboatbuilding.com](http://burnhamboatbuilding.com).





## Schooner *Sylvina W. Beal*

Built in 1911 by Frank C. Adams in East Boothbay, Maine, for Charles Henry Beal, the *Sylvina W. Beal* is the oldest existing auxiliary knockabout fishing schooner in North America and one of two known existing Maine built fishing schooners.

Over her long life the *Beal* has proven to be a worthy vessel, completing over 108 years of active commercial service as a fishing vessel, a sardine carrier and a windjammer.

As stewards of this historic vessel, our aim is to have her listed on the National Historic Register and rehabilitate her according to the Secretary of the Interior's Standards for Ship and Vessel Preservation Projects for future use as a commercial charter, education and research vessel operating out of her new homeport of Gloucester, Massachusetts.

It is our hope that, like the other vessels we have built and operated, the *Sylvina W. Beal* will help keep our rich maritime heritage and culture alive and present on Cape Ann.



### Plan for Preservation Treatment of *Sylvina W. Beal*

#### Draft Copy

Burnham Boat Building & Design  
Phone (978)-491-7666, Email haburnham@gmail.com  
Preface to the Plan

With the *Sylvina W. Beal*, Mary Kay and I see an opportunity to save a landmark vessel along with the past she so well represents, to practice what we have learned about historic preservation and stewardship and to help keep the culture of traditional shipbuilding alive for one more generation of school kids in Essex. When we are through we are hopeful that she will survive as a commercially viable passenger, research and training vessel and be able to pay for herself and her upkeep for many years to come.

On other preservation projects I worked on I became familiar with the Secretary of the Interior's Standards for Historic Vessel Preservation Projects. I have come to appreciate the requirement of a written preservation plan and feel many of the projects I worked on would have benefited from the time taken to do such a plan before the work started. Developing a written plan is a very worthwhile endeavor and sharing drafts of the plans is of enormous value, especially if a number of individuals or organizations are involved as concerns and issues are often unearthed and addressed in black and white before the real work starts. The following is my second draft.

While the *Sylvina W. Beal* will remain a privately owned commercial vessel, we intend to involve several educational non profits and the community throughout the process of the vessel's rehabilitation and eventual operation. So we don't get too far off track we have listed the mission statement of the Gloucester Maritime Heritage Center and the Essex Shipbuilding Museum as well as the exact requirements from page eight of the Secretary of the Interior's Standards for Historic Vessel Preservation Projects for a plan for preservation treatment.

#### March 2020 Mission Statements

The Mission of the Essex Historical Society and Shipbuilding Museum is to provide a center for education, preservation and study of traditional Essex shipbuilding and the community that supported it.

The Mission of Maritime Gloucester is to inspire students and visitors to value marine science, maritime heritage and environmental stewardship through hands on education and experiences.

#### The Secretary of the Interior's Standards for Historic Vessel Preservation Projects (SHVPP)

Every sound historic vessel Preservation Project should begin with a plan, a well thought out, detailed, written plan for the preservation treatment that addresses and takes into account the following:

1. The historic significance of the vessel and the degree of historic integrity it possesses.

2. The availability of information that might be required for preservation and restoration treatment such as original construction changes made during the life of the vessel, etc.

3. The physical condition of the vessel, as determined by a competent surveyor.

4. The environment in which the vessel is to be preserved and the projected effect of that environment on the vessel.

5. The intended use of the vessel and the projected effect of that use on the historic integrity of the vessel.

6. The work required implementing the proposed treatment and the sequence in which the work will be performed.

7. The availability of suitable materials, equipment and technology to successfully carry out the project.

8. The availability of competent personnel with the requisite skills and expertise to perform the work.

9. The availability of a suitable site for carrying out the proposed treatment.

10. The cost of the proposed treatment and the source and availability of funding to complete the work.

#### The Plan

This plan consists of ten sections that address the specific elements of the Secretary's Standards. They are as follows:

1. The historic significance of the vessel and the degree of historic integrity it possesses.

In the notice of her launch on July 6, 1911, the *Boothbay Register* mentioned that the *Sylvina W. Beal* for sardine fishing, has water (tight) compartments, is fine in her lines, is nicely fitted up and really would pass for a pleasure craft. At the time the *Sylvina W. Beal* was not special or even unique. She had only taken six weeks to build and she was the second vessel (the first being *Helen McColl*) built on the same or a similar model by renowned ship builder Frank C. Adams in East Boothbay, Maine. Today the *Sylvina W. Beal* is a rare surviving example of a vessel type that is significant to the history of the United States.

As a fishing schooner, the *Sylvina W. Beal* represents an industry that dates back to the days prior to European settlement and a type of vessel that dominated that industry from colonial days. Of the thousands of fishing schooners built all over the northeastern United States she is one of only ten that we know of that are still afloat. These ten fishing schooners include the *Lettie G. Howard*, built at Essex, Massachusetts, in 1893, the *Maggie S. Myers*, reportedly built at Bridgeton, New Jersey, in 1893, the *Ernestina Morrissey*, built at Essex, Massachusetts, in 1894, the *Mary E.*, built at Bath, Maine, in 1907, the *Sylvina W. Beal*, built at East Boothbay, Maine, in 1911, the *L.A. Dunton*, built at Essex, Massa-

chusetts, in 1922, the *Adventure*, built at Essex, Massachusetts, in 1926, the *J&E Riggan*, built at Dorchester, New Jersey, in 1927, the *A.J. Meerwald*, built at Bay Shore, New Jersey, in 1928 and the *American Eagle* built at Gloucester, Massachusetts, in 1930.

Of these, the *Sylvina W. Beal* is one of only two Maine built fishing schooners, the other being the *Mary E.* and the oldest of the only two knockabout fishing schooners, the other being *Adventure*. The *Sylvina W. Beal* is the only surviving fishing schooner built in East Boothbay and she is the only surviving example schooner purpose built for the sardine fishery. The *Sylvina W. Beal* also unique amongst all the others in that she is the only one not listed on the National Historic Register.

Not wanting to be neglectful of our neighbors at the Essex Shipbuilding Museum, we must mention one other surviving fishing schooner and that is the *Evilina M. Goulart*, which also deserves its place on the National Historic Register. While no longer afloat, this vessel is preserved out of the water at the Essex Shipbuilding Museum immediately adjacent to our yard where we will be rehabilitating the *Sylvina W. Beal*. Being preserved ashore in the place where she was built, the *Goulart* still contains the majority of her original historic fabric and has been a useful source of study for those whom have rehabilitated the majority of other schooners and will no doubt prove useful while we are rehabilitating the *Sylvina W. Beal*.

There is a lot of information available about the Charles Henry Beal, the herring fishery, sardines, and sardine carriers that should be further researched and included in the application for National Historic Landmark status but are not as pertinent to this document that deals largely with the vessel's preservation.

For the purpose of the plan it suffices to say that the 1912 list of Merchant Vessels has the *Sylvina W. Beal* as a fishing vessel with an 11 person crew. While our research is ongoing, this would suggest an early career as a seiner. In 1917 the *Sylvina W. Beal* was purchased by Seacoast Canning and the Merchant Vessel List from that time has her as a cargo boat with a crew of two, suggesting she had been converted to a full time carrier, a capacity she remained in until 1980.

In 1981 the *Sylvina W. Beal*'s rig was restored and she was rehabilitated into a working windjammer carrying passengers on multi day trips. Eventually, being small enough so she was easy to handle and large enough to carry more than 49 passengers, the *Sylvina W. Beal* found her niche as a day charter boat, a career she excelled at. In 2013, after 102 years of commercial service, time finally caught up to the *Sylvina W. Beal* and her maintenance costs were exceeding her earning capacity and renewal of her USCG Certificate of Inspection was not pursued. We purchased the *Sylvina W. Beal* in the fall of 2018 from Captain Stephen Pagels who knew us and wanted to put the boat in good hands.

#### A) Integrity of Location

As an active seagoing vessel the *Sylvina W. Beal* will be constantly changing location as she always has and, with any luck, always will. The *Sylvina W. Beal* was built for the herring fishery in eastern Maine and spent many years working for the Seacoast Canning Company out of Portland. As a windjammer she worked out of Maine, Connecticut, Nantucket and sailed as far as Venezuela.

Now the *Sylvina W. Beal*'s homeport is Gloucester. This is entirely fitting as Gloucester is renowned for its fishing history and the *Sylvina W. Beal* will help to tell Gloucester's story as well as her own. Moreover, she will be rehabilitated in Essex, Massachusetts, and her rehabilitation will be part of Essex's story, Essex will be part of hers.

One of the ways I came to love and own the *Sylvina W. Beal* was working on and off for 11 years as the owner's representative on the Essex built National Historic Landmark fishing schooner *Ernestina Morrissey* while she was undergoing a rehabilitation similar to what we intend to do with the *Sylvina W. Beal*. Working in Boothbay was a very positive experience and now that area has come to feel like a second home. I am grateful for the way they took care of the *Ernestina Morrissey* and I look forward to repaying the favor with the *Sylvina W. Beal*.

While working on the *Ernestina Morrissey* I met some very fine shipwrights and we shared information, ideas and learned a great deal from each other. I also got to know the people from that area and a little of that area's history. Many times I made the trek back and forth under sail and found it a short easy run in most conditions with easy approaches on both ends. Thus I came to appreciate first hand how the sailing routes connected Maine and Massachusetts long before trains and interstate highways. Until 1820 Maine was part of Massachusetts and shares fishing grounds, fishing vessels and shipbuilding technology and the coastal culture in these areas is not only similar, but in many ways the same.

Even the names are the same. When the *Sylvina W. Beal* was built there were Burnhams in Boothbay, Adams in Essex and Beals in Gloucester. Essex boats were fishing out of Maine and Maine boats fishing out of Gloucester. We could go on and on about how the places, the vessels and the people are connected and I am sure we will learn more and the *Sylvina W. Beal* will help teach us.

One vessel we will mention is Captain Ben Pine's *Elizabeth Howard*, known as the White Ghost of the North Atlantic (American Fisherman) and one of Gloucester's most famous racing fishing schooners. The reason we mention her is that she was actually built by Frank C. Adams at East Boothbay several years after he built the *Sylvina W. Beal*.

Going forward there are many people in the Boothbay region who know this history and are happy to see the *Sylvina W. Beal* being rehabilitated. Some have been encouraging us to regularly visit the area with the *Sylvina W. Beal* when we are through, offering us incentives in the way of dockage and business. While the *Sylvina W. Beal* will be homeported out of Gloucester, we see a future incarnation for her acting as a floating ambassador between Massachusetts and Maine and look forward to spending time with her on the Maine coast.

#### B) Integrity of Design

The *Sylvina W. Beal* is an early auxiliary knockabout Herring Boat fishing schooner and her design evolved from traditional methods that date back to colonial days and we continue to practice today. These methods developed over time to meet the current needs of the fisheries, available materials and the fashion of their day. For the most part boats were built with heavy double sawn oak frames, planked with oak and were trunnel fastened. They were schooner rigged and ranged in size from small day boats up to larger offshore vessels.

Like the other fishing schooners that are still sailing, in order to stay relevant the *Sylvina W. Beal*'s design evolved over her long careers in both the fishing and passenger business. And, like those other boats, her hull form has also been susceptible to strains of hogging, sagging, panting and racking. As we and others have done to some of the other landmark fishing schooners, we will continue the *Sylvina W. Beal*'s evolution of design so that she will be able to meet United States Coast Guard regulations and the demands of the niche she is being rehabilitated to fit. At the same time we will retain or restore many of her original design features as both an early auxiliary



knockabout fishing schooner and a herring boat. We will use the same heavy double sawn framing and trunnel fastening techniques she was built with. She will retain her small heart shaped elliptical bent raking transom, heavy guardrails, springy sheer, sharp knockabout bow, hand crank windlass, worm gear steering and a self tending schooner rig. Her detailed moldings, fine trim, elegant coves, carvings and filigree will be restored and while adapted slightly to meet current demands and regulations she will look much as she did in her early career as a herring boat fishing schooner.

### C) Integrity of Setting

The integrity of the *Sylvina W. Beal*'s setting, like the integrity of her location, will continue to change depending on where she is, as it always has. Yes, the fishing industry and working waterfronts in our coastal towns and cities have changed, but the land and sea around them are the same and the *Sylvina W. Beal* and the other remaining active fishing schooners are parts of the unchanged landscape that serve as a reminder of what once was an important part of our culture and heritage. At the interfaces between land, sea and sky the *Sylvina W. Beal*'s passengers and crew will come to appreciate the design qualities, which made her and vessels like her so able and special. At the same time it is hoped that she and vessels like her will help bring attention to the fragile changing underwater ecosystems that supported her initial construction and long career in the fisheries that are currently under threat and deeply damaged.

### D) Integrity of Material

In order to remain seaworthy, the material in any active seagoing vessel, particularly those made of wood, needs by its nature to be periodically renewed and replaced. Currently, as far as the vessel's historic fabric is concerned, it appears the *Sylvina W. Beal* still contains a lot of original historic fabric including her keel, keelson, framing, planking, clamps and stringers.

Unfortunately she is no longer seaworthy and in order for her to regain that important aspect of her preservation all of this will have to be rehabilitated. Through this process we will make some minor changes to the structure and hull form to meet current regulations and demands as we have done with other National Historic Landmark fishing schooners. However, we understand the importance of documenting the existing historic fabric in as much detail as possible and learning all we can from it so that in the future others will benefit from what we learn. One advantage to how comprehensive the job ahead will be is that doing it will allow access to areas and construction details that would not be possible during a less comprehensive rehabilitation. While renewing the fabric we will be using many of the original techniques and for the most part the same species of woods used in the vessel originally.

### E) Integrity of Workmanship

While of different generations, Frank C. Adams and I both have a lineage of shipbuilding in our families and grew up in places where the culture of craftsmanship was in many ways the same. Having studied the boat for over a year now, I have come to appreciate the integrity of workmanship originally used on the vessel. As a National Heritage Fellow Master Shipwright, a craftsman and an artist, I will do all I can to maintain the same level of integrity Frank C. Adams used in building the *Sylvina W. Beal* in the hope that she will continue to survive.

At the same time I would mention that the work we intend to do to the *Sylvina W. Beal* is not only about preserving the vessel but also the culture and craftsmanship of fishing schooner construction in New England. The art of shipbuilding is learned through experience and observation. In Essex there are younger people than I, some at least as if not more capable than myself at most aspects of wooden shipbuilding. Unfortunately, none have yet had the opportunity to demonstrate that skill on a large scale project in their own name. Part of the appeal of this project for me is that doing it will allow me to use what I have learned and give the next generation another chance to experience and observe the necessary skills. Looking ahead I am hopeful that their opportunity will come and they will be able to keep this traditional art form going long after I am no longer able.

### F) Integrity of Feeling

From the paintings of Fitz Henry Lane and other artists through the black and white photos of the late 19th and early 20th century, fishing schooners have been front and center in how coastal New England has been depicted. A careful study of these will reveal that embodied in the *Sylvina W. Beal* are many design features that these vessels possessed and in some cases the *Sylvina W. Beal* is in them herself. There was a reason that artists and photographers so often chose schooners as their subjects and that is the vessels were truly iconic.

Once rehabilitated the *Sylvina W. Beal*'s fine lines and historic characteristics will serve as an important reminder of the role schooners like her played in fishing as well as of fishing's important role in our maritime heritage.

As important as how people feel about the *Sylvina W. Beal* is that they will actually be able to feel her move and interact with the wind, and water, waves and tides. There is no better way to convey what makes a fishing schooner significant than to take people out on them and let them experience what it was like to be on one of these vessels underway. Letting folks feel the vessel surging through the waves, straining to the wind, the kick of the wheel, the weight of all the gear and the way that the schooner balances all these forces and does her master's bidding gives them an appreciation of these ships they just can't get dockside. The feeling is really a lot of the reason we do this.

### G) Integrity of Association

Fishing was one of America's first industries and it was one of the reasons the Dorchester Company originally settled in Gloucester in 1623. From the mid 19th through the mid 20th centuries, Gloucester was known as one of the most important fishing ports in the western hemisphere. The fisherman's statue on the boulevard in Gloucester is surrounded by the names of thousands of fishermen who were lost from that port over the centuries and the families of those men associate themselves with the industry and the vessels that represent it in general and in particular the fishing schooner.

Having been built as a fishing schooner and being a veteran of almost 70 years in the fishery, the *Sylvina W. Beal* earned the honor of representing the fisheries of the Gulf of Maine and there are few places where fishing schooners are more honored than in Gloucester, Massachusetts.

While the *Sylvina W. Beal*'s historic significance is not only in what she is and has done but in the hearts and minds of all those who know her. Her historic integrity lies within the hands of her stewards and those who rehabilitate her, document her and interpret what we have learned and how we feel about her to others. In the long run, if we can keep her off the rocks, how well we do these will become as much a part of her historical significance as what she has done thus far.

2. The availability of information that might be required for preservation and restoration treatment such as original construction changes made during the life of the vessel, etc.

The *Sylvina W. Beal* has changed a lot over the years. Fortunately, her original characteristics and the changes made to her over time can be documented through historic photographs, written descriptions of her, measured drawings and in the minds of those who made or witnessed those changes.

We still have a lot to learn about the vessel's history and there are many individuals who have documented her and are offering their work and their assistance, there are also likely many others we have yet to meet who also have a lot to offer. As far as the rehabilitation is concerned we feel we have all the resources we need to do a good job with this.

3. The physical condition of the vessel, as determined by a competent surveyor.

The only part of the *Sylvina W. Beal* that needs a lot of work at this point is the hull. Luckily, however, we are experts with this type of work and are willing, ready and able to comprehensively and thoroughly rehabilitate the entire hull structure.

There is a lot of useable past left on the *Sylvina W. Beal*, the vessel's engine, shaft, prop, steering gear, windlass, spars, blocks, iron work, standing rigging and ballast keel all appear in serviceable condition and using these will not only provide authenticity but save a great deal of time and money over buying these items or building them anew.

4. The environment in which the vessel is to be preserved and the projected effect of that environment on the vessel.

The environment in which the vessel will be preserved is the same one that it was built for and has survived in for the past 108 years, that is the ocean. Of course, this is a harsh environment and it will continue to affect the vessel harshly. As before, she will need to be handled carefully and need constant maintenance as well as regular haulouts and work. With any luck it is our hope that she will earn enough money after her rehabilitation so that we, and her subsequent owners, will be justified in paying for all of this and keeping her in good condition.

5. The intended use of the vessel and the projected effect of that use on the historic integrity of the vessel.

One thing that should be remembered about sardine carriers in particular and all working vessels in general is that change seems to be the only constant. On fishing boats and carriers waterlines are arbitrary as a vessel's draft and freeboard change constantly depending on the load. Over the years these vessels were cut in half, dragged out and lengthened, they were cut down to their sheer lines, had freeboard added and throughout their working lives were constantly having their power plants and sail configurations changed to meet whatever the current demands were at the time.

As mentioned above, after this extensive rehabilitation the *Sylvina W. Beal* will go back into a business she has excelled at for 40 years, that of carrying commercial passengers. At the same time it is

also our hope to use her for education and marine research. As such she will not only need to meet the demands of these uses but the current regulations of the United States Coast Guard which require a certain amount of headroom, high rails and ample stability. Nevertheless, it is our intent to keep or restore most of the vessel's historic characteristics including her stem profile, the shape of her bow, the heart shaped tumble home stern and small transom, the original deck layout with small hatches and, of course, the heavy guard rails and all of the beads, coves and filigree in her bulwarks cabins and topsides.

While the comprehensiveness of the job ahead would frighten some people, we see the process as giving us the opportunity to retain and restore many of the *Sylvina W. Beal*'s historic characteristics while meeting the requirements and demands of the Coast Guard and the industry by making minor changes to the hull form which otherwise could not be made. When the rehabilitation is complete the *Sylvina W. Beal* will look very much like she did steaming or sailing out to catch or load fish, however, she will be carrying the 20 tons of ballast that was added in 1980 down low to help her meet stability regulations and have higher rails for safety.

One often overlooked aspect of historic vessels is the present. If one is trying to preserve a historic battlefield, for example, chances are the battle ended long ago and what remains are the characteristics of the land and remnants of the battle. When preserving a vessel, especially a wooden one that operates at sea, it should be remembered that the sea is as harsh as it has ever been and the preservation process is not stagnant but a continuous battle. Over time the process itself becomes part of the vessel's history and, in many cases, is no less significant than the original fabric or any particular part of the vessel or its history. We understand and embrace this aspect and are enjoying the part we are playing in this vessel's history and are hopefully laying good groundwork for those whom, if we are successful, will take over when we are through. At the same time we are documenting what we learned from the vessel's original fabric so that future generations will be able to benefit from those lessons and, should they desire, restore what we have changed.

6. The work required implementing the proposed treatment and sequencing in which the work will be performed.

The first step in this rehabilitation was stabilization. This meant bringing the vessel down from Maine to the Gloucester Maritime Heritage Center. Hauling her on their railway and removing the engine, systems, interior and ballast. Eventually we launched her and brought her around to our shipyard in Essex where she is now stabilized at our dock marsh.

With her safely there we are currently gathering capital, materials, working with the Coast Guard, planning and preparing for the work ahead. It is our hope in the next few months to remove the masts windlass and steering gear and go over all the gear and systems so that they will be ready to be reinstalled when we finish the work on the hull. With this done we will remove the vessel's ceiling, bulwarks, deck, transom and as much of the weight from the vessel as possible so that we can haul her up onto our launching ways.

When all is ready and we have the rite tied we will haul the *Sylvina W. Beal* and replace her keel, centerline structure, framing and planking as necessary to fair her lines and overall shape. Once her hull is complete we will deck her over, put on her new bulwarks, trimmings, as well as paint her and eventually launch her. We will then

pull her back to the dock marsh where we will fit out her rig, systems, interior and ballast before putting her into operation as a passenger, research and educational vessel out of Gloucester where we hope to keep her preserved for the foreseeable future.

7. The availability of suitable materials, equipment and technology to successfully carry out the project.

The shipbuilding industry in Essex, Massachusetts, dates back to the early 17th century and, as mentioned above, shares its culture and technology with East Boothbay, Maine, where the *Sylvina W. Beal* was built. In recent years I have been involved with the rehabilitation of several Essex built fishing schooners and wrote the plan for as well as overseeing that of the 1894 Essex built *Ernestina Morrissey* in Boothbay Harbor, Maine. Beyond this we have built five vessels of similar construction to the *Sylvina W. Beal* and we have all the equipment and sources for the material, much of which is locally cut white oak, white pine and locust that we mill on site.

8. The availability of competent personnel with the requisite skills and expertise to perform the work. A good friend once told me that it is better to have friends than money.

In 2010, with about half of the material on hand and no customer for a new vessel on the horizon, I started construction on the Schooner *Ardelle* not quite knowing how I would finish her but hoping my friends, family and community would help out. As they had on other vessels I built and worked on, they all showed up and we completed the vessel in just under a calendar year. Since then the *Ardelle* has done quite well doing in many ways what we want to do with the *Beal* and everyone who worked on her has enjoyed sailing her both for profit and for fun all along our coast. Once again we are counting on our family, friends and community.

9. The availability of a suitable site for carrying out the proposed treatment. The shipyard where Mary Kay and I live is in many ways like a family farm and we are the family farmers. We don't own the place but we pour our hearts and souls into it and in return, the rest of the family is happy to see us here working and keeping it going and everyone in the family is well aware I have dragged home another stray.

10. The cost of the proposed treatment and the source and availability of funding to complete the work.

Based on other projects we have done, and as we count on our friends' labor, we estimate the complete cost of the *Sylvina W. Beal*'s rehabilitation will run in the range of \$300K. For other projects we have worked on we raised money by selling tickets and charters to folks who had faith that we would finish, wanted us to be successful and wanted to go sailing on the finished product. We also got some seed money from artist grants and apprenticeship programs from the Mass Cultural Council. At this point, 18 months before we officially start the rehabilitation, we are developing plans for the Coast Guard, detailed cost estimates and our funding plan. We are grateful to have raised a little more than 10% of the funds, donated logs are arriving in our shipyard and we have purchased most of the bronze we will use for the project.

Like other boats we have built we expect that after the rehabilitation is complete the *Sylvina W. Beal* will pay for her operation and long term yearly maintenance through charter fees and ticket sales. When we get them we will attach the business plans with excerpts from Pennant Enterprises, Capt William Leathers and Capt K.D. Dench, all of whom have expressed interest in chartering the vessel once she is rehabilitated

## Support the Rehabilitation of the Sylvina W. Beal

Beyond the physical work we will also need capital to pay for material. One of the ways we are hoping to gather this is to offer sailing opportunities in the future in exchange for your faith and support now.

**Ways you can give and what we can offer when and if we get the *Beal* sailing again:**

Buy one or more trunnel tickets, \$50ea.  
Good for one public sail ticket.

Support the fastening of a plank, \$500. Receive a citation stating which plank you fastened plus 12 trunnel tickets.

Become a plank owner, \$2,500. Receive a plaque stating which plank you helped support plus a certificate for a half day charter for the maximum capacity of the vessel (our hope is 75 persons).

Support a streak of planks, \$5,000. Receive a half model of the *Beal* carved by master shipwright Harold Burnham and one overnight or two half day charters for the *Beal*'s maximum capacity.

Support the keelson, rudder, spars, etc.  
For larger donations we are happy to discuss options for overnight charters, multi day charters, sponsorship of education trips under sail, or what have you.

**If you are interested please contact Harold Burnham, (978)-491-7666  
Thank you for your consideration**





## Meandering the Texas Coast

By Michael Beebe

Last Sunday I went north a ways to pick up a Mirror. Not the kind one hangs on the wall hoping he'll be declared the fairest of all. If I filled my house with mirrors I still wouldn't stand a lick of a chance of being declared fit for anything.

The Mirror of this treatise is of the floating nature. Designed by Jack Holt in the early '60s for the *Daily Mirror* newspaper across the pond (the Atlantic) it has, I think, outsold/built more than any of the others over the years.

Last Saturday, while surfing the net (craigslist sailboats) a nice looking Mirror dinghy popped up just an hour before and it seemed I was first to respond. Nice looking is a relative term, the accompanying photos showed the damage neglect had done. Well, can you imagine the shape this one is in with an asking price of \$50 when fair to middling can cost close to \$1,500 or better. Yep, it's a fixer upper all right.

I've wanted one for several years but in the neighborhood there were none to be found. This one became available in Austin. Heck, right down the street, a three-and-a-half hour long street.

Last night the local temperature dipped into the 30s. I left at 5:40 this morning to pick

### The Fifty Dollar Mirror

up the Mirror sailing dinghy. About 45 minutes into the trip I'm still cold and think what's with the heater? Well, it decided to quit. Wearing my knit hat covering my ears, as well as gloves, I've got a Long John top on with a tee shirt and a nice jacket on top of that.

The truck's thermometer, reading the outside temperature, is hitting 21°. I consider turning around for all of five seconds, it's cold. With the sun the temperatures should soon start climbing but at the moment I'm getting colder. I pull over on the side of the road hoping I can find a blanket or something piled high on the aft seat of the extended cab.

I found the something, more Long John's. I'd bought a pair from Academy and forgot about them. They were buried in the jump seat area. On the bottoms went and the cold was held at bay.

Two hours later in Austin it was in the mid to upper 30s. Not bad at all, sun was out, it was going to be a nice day.

The Mirror was as expected, the seller, an honest fellow, showed the damage with pics posted. The dinghy had belonged to his

grandfather and passed to him when the old guy died. This Mirror came from England. Bought used and shipped here in the early '90s. All the rigging, yard, boom, sails, daggerboard, rudder and tiller came with it, as well as a launching dolly.

The boat will take some work, putting it mildly. I've already done some searching on the net these past few days and, from the looks of it, there are far worse examples restored to former glory. It should be a kick in the pants.

The round trip took a bit under nine hours, including lunch at In-N-Out Burger. I bought an extra one for Linda, giving it to her first thing when I got home. She heated it up in the microwave and it was gone lickity split. I sat in the EZ chair, took an hour nap with a blanket pulled over me.

The wind was still a bit nippy, I found, after going outside to find the wife, she was working in the garden. The Mirror Dinghy was still in back of the truck. I went to bed a little later, telling myself it'll still be there in the morning, waiting. Waiting for her new keeper to get her bottom wet again.

I'm looking forward to it as well. Hope springs eternal!

The Mirror is a popular sailing dinghy with more than 70,000 built. The Mirror was named after the *Daily Mirror*, a UK newspaper with a largely working class distribution. The Mirror was from the start promoted as an affordable boat and, as a design, it has done a great deal to make dinghy sailing accessible to a wide audience.

The Mirror was designed by Jack Holt and TV do it yourself expert Barry Bucknell in 1962. It employed a novel construction method at that time where sheets of marine plywood are held together with copper stitching and fibreglass tape. This is called tack and tape or stitch and glue construction. Buoyancy is provided by four independent integral chambers rather than by bags.

It was originally designed to be built with simple tools and little experience and this meant that the design was quite simple. For example, the characteristic pram bow reduces the need for the more complicated curved wooden panels and joinery needed for a pointed bow and a daggerboard is used instead of a hinged centreboard. The result is a robust, versatile and fairly light boat that can be easily maintained and repaired and can also be launched into the water very quickly from storage or transport. Although most experienced sailors would carry a paddle rather than oars, if necessary, it rows well. If the transom is strengthened, an outboard motor can be used for propulsion.

### The Mirror Dinghy



The original rig was a gunter rig, but in 2006 the class rules were changed to allow a single mast and an alloy boom. Although a Bermudan sloop rig has now been introduced for the Mirror, the original gunter rig (with a gaff that effectively doubles the height of the mast) meant that all the spars could be packed inside the hull for easy storage or transportation. This same space saving is still available with the Bermudan rig by using an optional two piece aluminium mast.

Mirrors can be sailed without a jib by moving the mast into an optional forward step and moving the shroud attachment points forward. However, in this configuration it can be difficult to tack so it would mainly be used to depower the boat for beginners. Most single handers retain the mast in the standard position and handle the jib as well, because of the Mirror's small size this is quite manageable.

Mirror class rules permit the use of a spinnaker. This may also be used by single handers as well, although flying a main, jib and spinnaker single handed sounds complex, it is quite manageable with a bit of practice.

Mainsail controls permitted by the class are downhaul (Cunningham), outhaul and kicking strap (vang). The jib tack fixing may also be adjustable while sailing allowing changes in jib luff tension and tack height.

The Mirror is light and stable enough to be sailed safely by two young teenagers or two adults. It is an excellent boat for children

or teenagers learning sailing for the first time.

Richard Creagh-Osborne commented in the *Dinghy Yearbook 1964* (pub. Adlard Coles) that the Mirror "was one of the two best one design dinghies drawn by Jack Holt, the other being the Heron." Initially the design met with a considerable degree of scepticism from the established boating fraternity due to its unconventional design and construction (actually pioneered by Ken Little for canoe construction) but Creagh-Osborne and Beecher Moore were two of the highly respected pundits of the dinghy scene who were far sighted enough to see the value of the design, and immediately supported it.

Within a few years its dramatically lower cost (only just over half the cost of the Heron or Gull) and massive promotion by the *Daily Mirror* transformed the boat into the most popular two man dinghy in terms of sales per annum worldwide. This was sadly relatively short lived and the imposition of 25% VAT in the late 1970s on boats killed the dinghy market and the sales of the Mirror. It never really recovered and, by the time the economy improved, its franchise of practical post war kit builders had been replaced by kids who had little understanding of the most basic woodworking skills and even less interest. It remains popular but not to the extent and enthusiasm that fostered the book *Mirrormania* in 1976.

Although in the racing world Mirrors are associated with youths and beginners, as a cruising/pleasure boat they are very practical for adults, even experienced and veteran sailors where modern racing dinghies are not practical. Compared to racing dinghies which tend to have low gunwales, are a wet ride, capsize easily and cannot be rowed or motored, the Mirror is more like a traditional boat with relative comfort inside the cockpit, plenty of room for stowage and both the crew and gear remain dry in light winds.

In heavy winds the hull form is very stable and this makes it very reliable for the more adventurous cruiser, knowing that capsize is less likely than racing boats of comparable size. Its small size and light weight means it is easy to handle, launch and recover, transport, tow and store on land. It can be launched and recovered by hand from inhospitable places where cars and tractors are unable to go (eg, deep mud estuaries, large beaches with gentle gradients, etc), which gives it an advantage over bigger dinghies.

Its ability to take oars and an engine means that the cruising dinghy sailor can be self sufficient without relying on rescue boats in case of problems with the sails or rigging. With the right knowledge and equipment, Mirrors are suitable for cruising on rivers, lakes and coastal waters, solo or in groups. Mainly used for day sailing but sometimes for multi day passages with boom tents allowing camping on the boat or camping gear stowed to be used for camping ashore.

In bad weather Mirrors remain well behaved and have inspired confidence in their owners. Their seaworthiness is excellent for their size.

Crew 2  
Draft 2'4"  
Hull Weight 100lbs  
LOA 10'10"  
LWL 9'8"  
Beam 4'7"  
Mainsail Area 50sf  
Jib/Genoa Area 20sf  
Spinnaker Area 47sf

## Summer Scenes are Comin'

Jenna Arrives

Art by Kate Wells



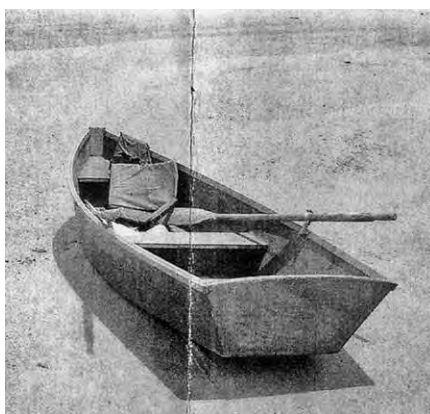
Tranquility

Art by Roger Rodibaugh



Uncle John's Skiff

Photo from Ed Romny



The Fleet's In

Drone Photo from Harvey Petersiel



Coggin Camp

From *Canoe Sailor*



COGGIN CAMP

Built upon a rock it stands—  
The Coggin Camp—  
Solid as Friendship's sturdy grip.  
When hand clasps hand and eye meets  
eye,  
And understanding fills the soul.

In front, a solitary pine,  
Stark sentinel, ancient of days,  
Rugged, weather-beaten, grim and hard,  
Yet river breezes lift its branches  
And sing sweet hymns of peace and love.

Behind, the trail, smooth travelled,  
Worn rocks, pressed by feet of many  
friends.

Few pass; many tarry for the cheer therein.  
When God made Sugar Island  
He chose the spot for Coggin Camp.

Year after year the lanterns flicker,  
Paled by the Queen of the night,  
The waters ripple; the lone loon laughs  
And brings the only note of sadness  
Ever known in Coggin camp.

'Tis said Gan's lights will always burn.  
Dave and Fred and Bird and Ted,  
Gan's lights are but tiny spots;  
Ours the flames of long abiding love  
That flare till Sugar is no more.

Sugar Island  
Aug. 24, 1921.



This is me and my latest boat. I call it a 20' Whale boat and, like all of them, I just do them for fun. This one was given away before I even started with no guarantee of completion time or what the hell it would look like. It's kind of like a giant 20' Whitehall. Underneath the glass is a layer of 2" foam. The mold for this one is an actual 16' Whitehall underneath all this. I had the hull and no one wanted it so I added 6" of foam "frames," 2' to the front and back and 6" to the sheer height so it's 12" wider, 4' longer and 8" higher. I'll figure what goes inside later.



Here's Brad with a smile on his face in spite of the fact that he just realized that he had a bunch of grinding on the 19' Big Ben Garvey hull. It is a hull that I made years ago and gave to Howard, who made a fishing boat, and now Brad is going to make a small houseboat which means taking it back down to a bare hull again and figuring out what to put back inside. He needed to lift the front up to let the wash water run out and noticed an electric winch hanging in the rafters right over the boat.



## From the Tiki Hut

By Dave Lucas

Most of you know that I've been contributing stories and pictures in my "View From The Tiki Hut" about the carrying on from around our shop here in Florida to this magazine for the last dozen or so years and have been a great fan and supporter of this magazine and Bob Hicks, its publisher.

Well, like all of us, Bob is getting a little long in the tooth (92) and the cost of publishing has gone through the roof, so these pictures and stories you see from the Tiki Hut here in this month's issue will be the last ever because this will be the last issue. It took a man with a good sense of humor to put up with the horse crap style of writing that I put out. We'll miss you, Bob.

### A Farewell Look Around



Richard here is starting on a Ninigret hull. Several have come out of the shop and they've proven to be good hulls that will go at a reasonable speed on a small motor (30hp), at 22' long they cut through the water slick as a whistle. Both Simon and I can attest to that. Richard was making a big party barge but passed that hull along to Jerry to hopefully make a houseboat with the hull.



This is our mast tree that has somehow accumulated a bunch of long masts over the years. There were eight of them and I only know where two came from, things seem to grow around here. Lonnie came and got some last week and since Rex and Cathy are about finished with their Wharram cat hulls, I asked if he needed some so he came and loaded up. Here he is cutting one in half to fit his trailer.





I needed to lower the trailer for *Princess Ann* and tried all kind s of things which I didn't like until I stumbled across these small wheels. They are not the standard 8" you see on all small trailers, these are heavy duty 10" wheels with a high load rating.



Keep in Touch with Us  
Lucas Boatworks and Happy Hour Club  
Skipjack@tampabay.rr.com

Lastly, this is where I live and the shop is located right at that dock, right in the middle of the fastest county in the nation. It truly is spectacular here and the big oak trees seem to talk to us and tell us to relax and enjoy life, which we surely do.

Kerry and Kevin are our resident artists. They add a little culture to the place but I'm beginning to notice some slipping into the ways of the "Hut" in them. Kev is a study in smaller is better, he loves to zip all over the river in a 12' jon boat with a 3hp outboard. He always shows up with a big grin on his face.



These two are Howard's *Malahini* and 16' Big Ben Garvey. I saw some pictures on the Florida West Coast Trailer Sailors' site of a beautiful finished one to show him.



## Behold Princess Anne

When we pull into a waterfront restaurant and everyone takes our picture, it's always the same two questions, how old is it and where did I get it? This design came from Glen-L, believe it or not. It's their Harbor Master design, probably the only non plywood boat in their huge collection. I used their plan to make the hull and my imagination for the rest of it, 15 cup holders and padded wicker seats. She's 23' long and handles rough water surprisingly well.



# Building the Doug Hylan Designed “Oonagh” 11’8” Sailing Pram

By Richard Honan

## Dynel and Epoxy Resin

Well, another successful day at the Honan Boat Building and Chili Company. Today was about laying down a layer of 5oz Dynel cloth and Total Boat 2:1 epoxy resin on the bottom plank and chine plank. This combination of Dynel cloth and epoxy will offer a lot of abrasion resistance when the boat gets pulled up on a rocky beach. This process is similar to applying fiberglass cloth and epoxy, but offers more protection.

Thankfully, my good friend Joe Zambella offered to give me a hand with this project. This also gives Joe and I a good opportunity to catch up on family, solutions to world problems, medical issues, grandkids, wives and bad knees. It's time well spent. We started by laying the piece of 54" wide Dynel fabric the entire length of the hull. The 5oz Dynel laid down very well. It was easy to smooth out any wrinkles. We trimmed off the excess fabric and put down a piece of 2" wide masking tape just below the Dynel to protect the planed bevel edge for the next plank.

We mixed an initial 18oz batch of Total Boat 2:1 epoxy with the slow hardener and proceeded to pour and squeegee the epoxy into the fabric. One major difference between fiberglass cloth and Dynel is the Dynel cloth soaks up the epoxy like a sponge. We used three 18oz batches plus one 9oz batch for a total of 54oz.

Joe's previous experience applying fiberglass cloth and epoxy paid a big dividend. Other than the fact that I'm better looking, we were both on the same skill level. Later on in the afternoon and early evening I was able to roll on two coats of epoxy resin to fill in the weave on the Dynel fabric. Hopefully tomorrow I can roll on one last coat of epoxy.





## January 16 With the Fabulous Brewin Brothers, Dave and Gus

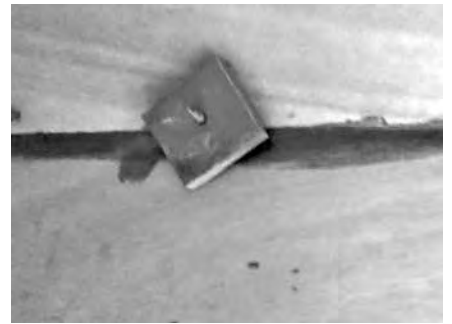
Another Sunday funday of boat building with my two buddies, Dave and Gus Brewin. Single digit temps and the remnants of last week's snowstorm couldn't stop them from their weekly journey from Marblehead to Winthrop. Dave and I go back about 15 years to when we met at the annual Hull Snow Row on Boston's South Shore. He has built or restored several boats and he shares my love of ocean rowing. His brother Gus is a jack of all trades and loves to be part of this boat building process.

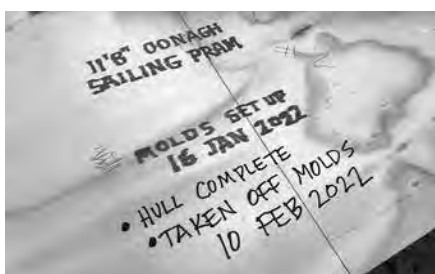
Gus arrives at my shop every Sunday morning already wearing his well worn work apron. We share a lot of stories about growing up in Irish families, boiled potatoes, peas and dark mystery meat. We all grew up with four brothers and two sisters each. Today's fact, the three of us have been married to our wives for a total of almost 150 years!

Today's goal was to apply epoxy and fasten the sheer plank onto "Oonagh," my Doug Hylan-designed 11'8" sailing pram. I mixed up the epoxy which Gus and Dave applied to the sheer plank and the previously beveled chine plank. I mixed up a second batch of epoxy and added some silica and micro fibers to make a paste with the consistency of ketchup. This was applied to both sides of the joint.

We proceeded to position the sheer plank in place. Since this plank is only 1/4" thick, I only used temporary fasteners to hold it in place until the epoxy adhesive fully cured. I use drywall screws with fender washers. Where I was trying to pull the two planks together, I used small squares of 1/4" thick PVC as temporary clamps. Epoxy will not adhere to PVC which makes these squares easily removed once the epoxy cured.

Another successful day of boat building at the Honan Boat Building and Chowder Company!





## Off the Molds

Well, "Oonagh" is off the molds! Twenty-five days since we set up the molds and the basic hull is complete. At 11'8"x5'0", it's a little larger than I envisioned. As someone who has previously built four 7'8"x4'0" Nutshell Prams, this looks like a US Navy Landing Craft.

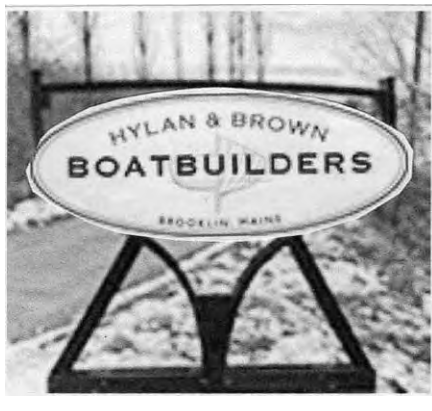
After we lifted it off the molds and placed it on the floor, I proceeded to break down the molds and the strongback. A lot of prior work went into cutting out the molds and building the strongback. Hopefully they will be used again to produce a few more "Oonaghs."

Next up, I will be constructing and installing the seats, storage compartments and the watertight flotation chambers, rub rails, inwales, along with the mast step and mast.



## From the Designer, Doug Hylan

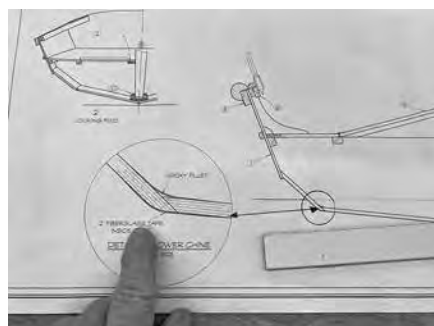
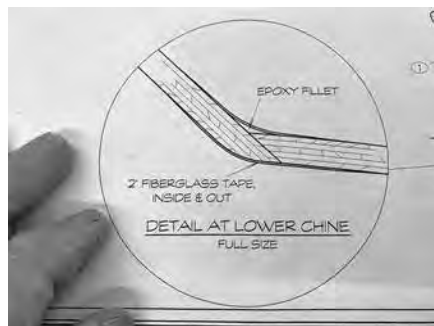
Exceptionally seaworthy, this design achieves the trifecta of rowing, towing and sailing and doing all three remarkably well. She also motors along quite nicely with a small outboard motor. And she's steady as a church when stepping into her from the mothership. With oversized gunwale guard wrapped around her rails, she cozies up nicely alongside without causing dings or rashes.



## Lapstrake Joints

Another day at the Honan Boat Building and Tomato Canning Company. I was again joined by the Brewin Brothers, Gus and Dave, as we laid down some fiberglass tape and epoxy over the interior lapstrake joints. Not quite as satisfying as installing a couple of planks, but a very important part of the building process. This layer of fiberglass tape and epoxy adds structural integrity and stiffness to the hull. Plus, it gives the three of us a chance to exchange stories about growing up in a large Irish family. Who got in the most trouble or got caught the most times.

Next week we'll install the rub rails and lower guards to the gunnel or sheer plank.





## Attaching Upper and Lower Guards

Yesterday, at the Honan Boat Building and Clam Shucking Shack, we attached the upper and lower guards (rub rails). The upper guard adds structural stiffness and also acts to protect the hull as a buffer or bumper. The upper guard or rub rail will also have a foam filled cushion attached to it to protect whatever boat might be tied up beside it.

The lower half round guard is more for looks. It makes the boat look more streamlined, as if a 11'8" blunt end pram can ever look streamlined. Installing these two pieces involves lots of hands and lots of clamps. I was fortunate enough to once again have the assistance of the two Brewin Brothers, Gus and Dave. As we worked today, it gave us an opportunity to exchange information on trying to understand women. With almost 150 years of marriage amongst the three us, we still didn't have any good answers.

I'm trying to use wood that is either on hand in the shop or locally available. Other than the plywood, I plan on using fir or spruce available at any local lumberyard. The upper guard or rub rail is just a piece cut from a knot free 2"x4" from Home Depot. The lower smaller guard was made from some vertical grain fir flooring that I had hanging around the shop. Less expensive and less weight. The quarter knees, which will be made from a nice piece of 1 1/8" thick, straight grained fir that Jay Kelly gave me before he moved to the Azores.

The two guards were epoxied and mechanically fastened with screws. The upper guard was somewhat of a beast to bend into place at the bow. I had Gus holding the boat down as David used all of his strength to lift and bend the larger upper guard into place, so that I could clamp and fasten it. I actually used large fender washers and 1 1/2" drywall screws as extra holding power until the epoxy cured.

All and all, it was a very successful day. Also, after listening to Dave and Gus, the verdict is in and Gus got in the most trouble growing up.





## Installing the Inwales

The first week of March, I spent a couple of days installing the inwales ("a ridge of planking along the rail or gunnel of a wooden boat") on my Doug Hylan designed 11'8" sailing pram. Having previously built a dozen other small wooden boats, installing the two piece inwale was pretty straightforward until I read Doug Hylan's comment about the inner piece was slightly smaller in height than the outer piece. I was puzzled until I read his explanation that it would make it easier to lift the boat. My fingers would have a small recessed slot along the inside of the gunnel to better grip and help lift the boat. What a neat little detail! I learn something new every day.



## Fabricating Quarter Knees

Years ago, I learned how frustrating it is to make the quarter knees on a small dinghy or pram. Each one of the four quarter knees is different and each quarter knee is a complicated set of angles. My first attempt at making a quarter knee resulted in me throwing away the first nine attempts into the firewood box. A couple of years, and three boats later, I came up with the idea of making mockups using cardboard and rigid foam (sign foam). I could even use the rigid pink insulation foam that they sell at Home Depot. The rigid foam is easy to cut and shape and it is extremely inexpensive compared to wasting a piece or several pieces of mahogany.

I needed three things, cardboard or 1/4" thick lauan plywood, the actual piece of wood that will become the knees. I was using a piece of 1 1/8" thick fir. I also needed a piece of rigid foam of the same thickness as the wood.

This is probably an over thought out, time consuming process of fabricating quarter knees but it is a very satisfying bit of woodworking. I started initially making cardboard templates using small homemade bevel gauges to record angles, transferring the angles to the band saw table, using the band saw to cut the angles into the rigid foam mockups, truing up the angles on the disc sander and then transferring all of that information to the actual piece of wood.

I fabricated all four quarter knees for my 11'8" sailing pram without having to throw a single &%%\$#\$@^\*@\$ mistake in the firewood box. If it's worth doing, it's worth doing right!







## Installing Quarter Knees and Inwales

It's Sunday funday at the Honan Boat Building and Bottle Redemption Center. Today we installed our recently fabricated Douglas fir quarter knees. While fabricating the quarter knees, this semi old salt learned he has to pay more attention to wood grain orientation. I swallowed my pride and learned something new. Pete Culler is one of our favorite authors, he mused that boat building was simply about correcting one mistake after another, with the biggest mistake being to have begun in the first place.

My two boat building buddies, Dave and Gus Brewin, arrived right on time and we got right to work. Gus started mixing the Total-Boat 2:1 epoxy and hardener while Dave and I set up the drill with the right bit for the pilot holes while I set up the driver with the correct Phillips tip. As soon as we installed the first two quarter knees, Gus followed behind epoxying the 1/2" diameter mahogany bungs in the countersunk holes. The three of us make a good team, all the while telling stories about growing up in large Irish families. We did have to correct a couple of more mistakes of which I don't need to share the details.

Following the installation of the quarter knees, we installed the inner or the first of our closed two part inwales. "Wale" is an Old English word that means "ridge" or "rib." It seems to have taken on its nautical inflection, "a ridge of planking along the rail of a ship." It became a "gunwale" as soon as there were guns to mount there, round about the 14th century. Down the ages the suffix "wale" came to be attached to various bits of wood around the top edge of a boat. There are outwales (also known as "rubrails") and inwales. These are not to be confused with whales which swim in the ocean with the fish.

Finally, it was time for Captain Lucky to come aboard and give the unfinished hull the thumbs up or down. He was very serious and commented there was too much talking. All and all, it was a successful and rewarding day!



Festool, the company in Germany noted for their very high quality line of power tools, has been making a clever power tool for doing floating tenon joinery, also known as loose tenon joinery. They call their system a Domino Joiner as the floating tenon that is the heart of the system is about the size and shape of a domino.

The Domino tool is interesting. It is a very complicated contraption, sort of a combination of a Biscuit Cutter, an Oscillating Multi Tool and a Router all wedged together to produce an accurate mortise with one quick plunge into the wood. Super easy, it sounds too good to be true.



Photo: Festool USA

The Festool DF 700 with available accessories.

Festool makes two models of the Domino cutter, the DF 500 for light duty work and, for the busy production shop, the DF 700 is the way to go. It is easy to see that Festool spent a bucketful of Euros developing this tool which they are trying to get back, one machine at a time. They hold the patent on the system and it will be quite a while before other manufacturers such as DeWalt, Porter Cable and Harbor Freight come up with similar units so, if you want one now, Festool is the only game in town.

At first glance it appears that this might be a handy tool to have in a canoe shop such as ours where we seem to make a lot of canoe seats, all of which require strong joints at their four corners.

Most older canoes all have dowelled joints, which are acceptable but not as strong as a mortise and tenon joint. The dowelled joint requires a drilling jig of some sort. There are several available at the woodworking stores. My experience trying to make a good dowelled joint has always been bad, it is difficult at best to get the dowelled joints lined up perfectly. Some low end canoes show up from time to time with lap joints, these are usually broken and not worth duplicating.

Here at the canoe shop, we have been using a mortising machine and making the tenons on the table saw with a shop made fixture to make traditional mortise and tenon joints. As near as I can see these are the strongest joints possible. The work goes smoothly but there is a fair amount of set up time involved and it looks like the Festool Domino system could be a real time saver. The floating tenons are almost as strong as a traditional mortise and tenon joint.

The DF 500 comes with a 5mm cutting bit in a nice box. Other bits available for the DF 500 are 4mm, 6mm, 8mm and 10mm. To make canoe seats we would need the 6mm or the 8mm bit, an additional purchase. For those who are not happy with metrics, 6 mm is close to 1/4".

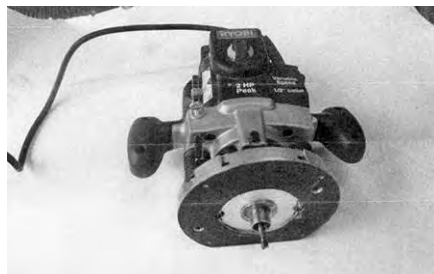
## Jigs, Fixtures and New Tools for the Canoe Shop

By Steve Lapey  
Stevens Canoe Shop  
Groveland, Massachusetts  
stevenscanoe@gmail.com

The better machine, the DF 700, is much larger and heavier, obviously made for more serious work. This unit comes with a 12mm bit and it is in a very nice box with an assortment of premade dominos in various sizes along with a few accessories. Other bits are available for the DF 700, 8mm, 10mm, 12mm and 14mm sizes. The bits for the DF 500 are not interchangeable with the DF 700 and vice versa.

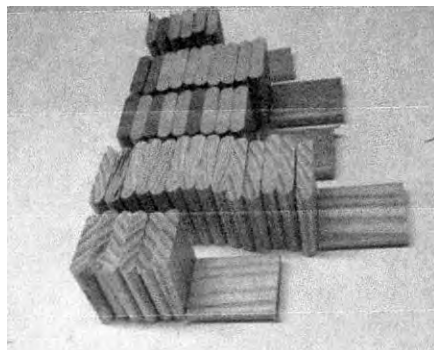
The DF 500 lists for \$980, the DF 700 is available on Amazon for \$1525 with free shipping. Obviously we are not going to be seeing a Festool Domino Cutter here at the canoe shop very soon.

However, the idea of a floating tenon joint is intriguing and, with a little experimentation, we have come up with an alternative method of cutting the same mortises almost as quickly as the Festool machine with a shop-made fixture and the plunge router that we have had for many years. An off the shelf 1/4" straight bit works just fine for 3/4" or 13/16" stock. Some seats get made with 7/8" stock; their mortises can be made with a 5/16" bit. The general rule of thumb when making mortise and tenon joints to make the thickness of the tenon one-third of the thickness of the wood.



The plunge router with a 3/4" brass bushing which will fit snugly in the guide slot of the base.

The Domino style tenons are easy enough to make. Just run some hardwood such as ash through the planer to 1/4" or 5/16", rip the wood to the desired width and round over the edges with the appropriate round-over bit at the router table, then cut the tenons to length (usually 1" or 1 1/2") and life is good.



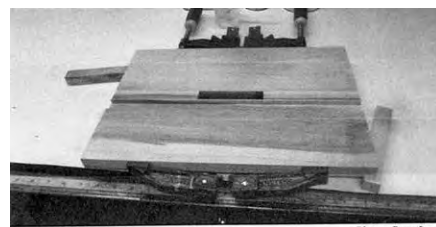
I have made a couple of seat frames with the floating tenons and am in the process of

torture testing them. If I can get any one of these joints to fail, I will report on that. So far so good, nothing has broken yet.

Here are a couple of photos of the Stevens DS 600 floating tenon mortising jig. The slot in the fixture is for a 3/4" brass bushing which guides the router bit in a straight line, the end stops are adjustable and determine the length of the cut.



The finished jig clamped to the work bench, ready to cut the first mortise.



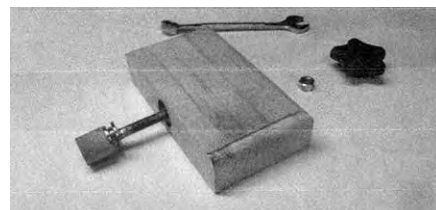
Gluing up the base of the DS 600, I used hard maple for this jig.



Glued and clamped. The upright piece needs to be exactly square to the base.

The longer pieces for the seat rails are clamped horizontally in the fixture, the same clamp is used to hold the shorter stiles in place vertically for their cuts.

The clamping device was made up from five pieces of 3/4" maple glued together to form a solid block, a 1" hole was drilled on one side to a depth of 2", a 1/2" bit was used to continue the hole the rest of the way through the wood. A short piece of 1" dowel stock serves as a clamping piston which is forced out by a 3/8" 16 carriage bolt with a star knob for easy turning. A T-nut at the base of the 1" hole forces the piston out as the bolt is turned.



The clamping device is screwed to the underside of the base with four #8x2" wood screws. I didn't glue it to the base as it may need maintenance in the future.

I was going to make a Festool grade clamping device using a foot pedal, a master cylinder and a modified front brake caliper from an F-350 but I resisted, just trying to keep things simple. Actually, the screw clamp is quick and easy to use, there is no need for anything fancier.

The fixture has been made to accept up to  $\frac{7}{8}$ " stock in widths up to 2". To use  $\frac{3}{4}$ " or  $\frac{13}{16}$ " stock a simple  $\frac{1}{16}$ " or  $\frac{1}{32}$ " shim is placed between the work and the fixture to get the mortise somewhere near to the center of the wood. In a perfect world the mortises would be in the exact center of the board, however, perfection, especially here, is somewhat elusive.

What we have done is create a fixture that duplicates the cuts in both the rail and the stile exactly the same distance from the edge of the board. As long as every cut is made with the face of the board against the body of the fixture, when the tenons are inserted in the mortises the joints line up perfectly.

With the previous system using the mortising machine it was very difficult and time consuming to get the mortises spotted in the center of each board as they needed to be. The tenons, because of the way their fixture worked, were always exactly centered. The length of each mortise is easily adjustable using the wood blocks and star knobs.



The adjustable guide blocks limit the travel of the router.

The horizontal rails are clamped in place centered under the guide slot. The rail is marked where the center of the mortise will be, that mark is lined up with a mark on the side of the guide slot.

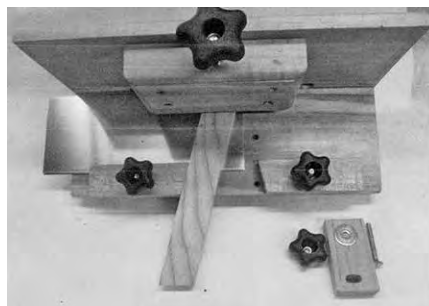
The vertical stiles are clamped in place while pressed against the lower adjustable guide block, located beneath the base. This block will need to be adjusted for various sizes of stiles so I have used  $\frac{1}{4}$ " 20 carriage bolts with star knobs.

In setting up the fixture, the center of the stile is lined up with that same mark in the guide slot used for the rails. Once the setup is correct the stiles can be done one after the other without any further measuring or marking.

The flexibility of this simple fixture is a nice feature. While most canoe seats are simple rectangles, some are odd shaped, such as the trapezoid stern seats used by Rushton and some others.

If you have a fleet of Rushton Indian Girls and some of them need new stern seats, this is the fixture for you! The rails for the Rushton seats are prepared in the same manner as a regular seat, however, the stiles must be cut with a 13.5° angle at each end and the floating tenon will have to be mortised into that angled end. To do this, simply replace the adjustable guide block with the two

Rushton Adaptors, clamp the stiles in place and cut the mortises with the router. It takes less time to do it than it does to describe it.



The DS 600 with the Rushton Adaptors clamped in place set up to cut the mortises in the Rushton stiles. We need two adaptors as the face of each stile has to be against the jig, there is a left and a right. This is also a better view of the clamping device showing how it is screwed to the bottom of the base. The aluminum plate is the  $\frac{1}{16}$ " shim for the  $\frac{3}{4}$ " thick stile.



A completed Rushton stern seat, ready to be fitted to the canoe.

The whole idea of presenting this fixture is to demonstrate that sometimes a simple shop-made gadget can do the work of expensive equipment that most of us can't justify purchasing. Don't let the high price of the Festool Domino system keep you from using this simplified method of making the floating mortise and tenon joints for your canoe seats.

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*Walkabout* is still hooked up, from a successful sortie up our ice hill and over to the heretofore frozen-in Priest River ramp. I think this day can be officially called "break-up day!" We managed to get in a couple more break-in hours on Suzi the Younger while dodging ice floes and bergy bits swirling by in the couple knot current. Generally it was a gloomy, penetrating rain and cold day. But I'll log it in as a harbinger of better.

The poor boat is still awaiting fairing and paint over the aft additions, just as soon as that pox and bi-ax gets warm enough to get over being tacky. By working in some pretty harrowing conditions over this Winter Building Season, I think we have run out of winter

## The View from Almost Canada by Dan Rogers

### Fast Cruise Tonight

just as we have run out of major projects on the TODO board.

I've been rereading a dog eared copy of *Two Years Before the Mast*. Seems I'm up

to Dana's account of his second rounding of Cape Horn amid weeks long gales and endless ice fields. Seemed appropriate to read that few chapters while aboard *Walkabout*, still sitting several inches of ice higher than the driveway.

Yeah, I know, it is likely cheating to have a diesel furnace, a desk and swivel chair and abundant LED lighting while reading about an 1836 rounding of Cape Horn in the dead of winter aboard a short handed, full rigged merchantman. But then, nobody was out doing what we were doing today, except us.

Anyway, we've started our season looking forward to many new adventures. May all of you enjoy the same.



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# A Tale of Three Traditional Boats

Reprinted from *Dinghy Cruising*  
Journal of the Dinghy Cruising Association UK

~ Mike Morris

This is the first of three articles I hope to write, about living with versions of three traditional indigenous boat types over the last 20 years: an Irish Currach, a Shetland Yole and a wood-canvas canoe. All are fitted out as sail and oar/paddle craft, and while none meet any strict criteria as cruising dinghies, Journal readers may find my experiences and observations to be of interest.

## Part 1: The Irish Currach

As most DCA members will know, the currach is a traditional Irish craft constructed with a wooden frame covered by a waterproof membrane. Until the last couple of hundred years, the membrane was of cow hide, but tarred canvas has proved to be a highly effective replacement.

The origin of these vessels is very ancient. They are part of a family which included the coracle, kayak and the umiak. As seagoing craft they are thought to pre-date the wooden boat, and currachs capable of carrying several people and stock animals were probably used in the Mesolithic period for the original colonisation of Ireland after the last ice age.

The modern variation of this tradition (perhaps recognisable from the 18th century on) is a very different beast from the heavy ocean-going vessels of the past. It is very light and sits high in the water. The reason for its popularity wasn't a lack of material for building wooden boats. They were simply the best type for the purpose, which was to enable sea harvesting, transport and communication for the small and scattered communities along the coast and islands of the west and northwest seaboard of Ireland. They were cheap to build, and unlike equivalent-sized wooden boats, could easily be launched without a slipway or quay. They would be carried to the water and launched into the waves. After use they would be taken onto the shingle, inverted, and tied down with ropes weighted with stones.

There are numerous local types, their size and shape partly determined by the local sea conditions and the



use they were designed for. Roles included inshore fishing, lobstering, transport between islands and to the mainland, and as some older DCA members may have experienced, tenders to the Aran ferry before the dock was constructed. They can take considerable loads, including freight, fish, and cattle on occasion, but when heavily laden they lose their seaworthiness.



Some are still used as workboats, usually with outboard motors fitted (sometimes in a well), and can be seen on the beaches of the west coast, especially in the area of the Aran isles. Currach racing using sleek boats with low freeboard is still carried out in Ireland and especially the US and there are several clubs devoted to competition. There is also an upsurge of interest in their use as recreational boats.

The early large currachs were sailed as well as rowed or paddled, as were modern types which sometimes used a dipping lugsail for long reaches. However, by the second half of the 20th century currach sailing seems to have been supplanted by the use of outboard motors.

All photographs on this page were taken at Coniston Water





I bought my vessel from Meitheal Mara (Fruits of the Sea) in Cork, a trust dedicated to celebrating the traditions and skills of building and using the currach. My boat is a Naomhog (pronounced Nair-vogue) meaning 'canoe'. These are from West Kerry (Dingle peninsula), and are particularly associated with the Blasket Islands.

They are reputedly the most elegant and seaworthy of the genre. They are usually 3/4-handers but mine is a stubbier 2-hander, being 16ft long, with a beam of 4ft, and weight of about 145 lbs/65 kg. She is car-toppable in theory, but requires two strong (and tall) adults to lift her on and off, and so I had a dinghy trailer modified with a bespoke steel frame and slings, which enables me to launch and retrieve her single-handed, although help is always welcome on steep and rough slipways.

What is she like in use? There are a number of things to be aware of: although the frame itself is extremely resilient, you have to try to avoid scratches or scuffs on the skin. The main issue I encountered was rubbing caused by the trailer cradle, but this was soon minimised by using wide slings lined with old carpet. One might think that beaching her on shingle or stones would be a major problem, but while you do have to be careful, this hasn't been much of a problem. Skin repairs are relatively easy, simply done by glueing on a patch and tarring it over. Re-skinning is entirely practical, and can prolong the boat's life almost indefinitely. However, on the west coast of Ireland the skeletons of abandoned currachs can sometimes be seen lying near the beaches, where the skin has rotted and the decay process is unavoidable. I believe that in hard working use, the life of a currach was about 10 years. Because I've been able



At Hilbre Island, off The Wirral

to store mine in the garage, repair and maintenance over the last 20 years of pretty frequent use has been minimal. I oil the frame with linseed oil or Danish oil and recoat the skin every couple of years.

Her original coat was of tar, but because of the practical difficulties of using this I've used a variety of bitumen roofing primers. So far I've found the best to be a coating designed for metal canal barges. Amazingly, the skin remained completely watertight for over 10 years, with wear on the bottom of the hull eventually requiring a patch about 3 x 4 ft, which has returned her to peak condition.

She is really a sail and oar boat with the emphasis on 'oar', rather than a cruising dinghy. One drawback, especially to those not used to it, is that she is very unstable when getting in and out and when shifting weight in the boat. As she has no keel and is light and rides high on the water, she is skittish in currents and even light winds when lightly laden. While this feature enables great manoeuvrability in skilled hands, in rough seas it can be a problem for the leisure user. This initial instability contrasts with her secondary stability.



On the shingle at Coniston

Fairly recently I did a capsize test on Coniston without buoyancy. I had to stand on one gunwale and, heeling her towards a 90-degree angle, pull hard on the other gunwale before I could persuade her to go over. She settled on her side, half in and half above the water and was relatively easy to right and bale out, but this was in calm shallow water, and of course things would be very different in real sailing conditions.

Apart from the tarred skin, the thing most people comment on are the oars. These don't have a flaring blade, but are merely long, squared and tapered wooden poles. Thus is a deliberate design feature, reducing crabbing in rough weather, and in practice they are remarkably effective. An issue for some people is that in order to increase leverage the handles cross in the middle, sometimes leading to scuffing and bruising of hands and missed strokes. To avoid this, I made a

Mike & Myra Morris. Note the 'cross-over' oars position



Rowing double-handed, showing the distinctive oars. The rudder is being used as a skeg to help tracking

pair of short-handled oars so anyone can have a go. She is remarkably easy to row single-handed in calm conditions even with three adult passengers, and with two competent oarsmen on the thwarts she really eats up the distance.



As you can imagine, the inherent features of the design make her difficult to handle under sail, but I did attempt to fit her out as best I could. She came with a traditional heavy canvas ochre dipping lugsail, but I found tacking her impractical on the River Dee and the Lakes, as the reaches were too short. So I had her refitted by Solway Dory (the canoe sailing specialists based outside Cartmel), with a 44 sq ft balanced lugsail, and a properly designed throw-over leeboard and rudder (traditionally a steering oar over the stern or side was used). Hessian-covered polystyrene blocks tucked under the seats were used as buoyancy, and plastic water containers or other weights were used as ballast to reduce heeling.

So how does she handle with all these modifications? In the hands of a capable and experienced dinghy sailor I think she would be all right, but I found her difficult and frustrating except on open water in perfect conditions. Given the latter, the throw-over leeboard (attached by a rope centrally fixed to the forward

thwart) is thrilling to use; as it locks in position the rope goes as tight as a guitar string and the boat begins to sing. However, it was more common for me to miss tacks, heel over precariously, or get blown sideways.

My most memorable outing was to Hilbre Island from Meols. I managed to get there mainly under sail but the return against the wind was too much for me, with a tow from John Hughes in his catamaran eventually proving necessary.

Several years ago I decided to strip her back to rowing only, and she has given good service up and down the river Dee, and transporting grandchildren, etc., on Derwentwater and over to Peel Island on Coniston. I also bought a Seagull long-shaft 40-plus built in 1959/60 which, when it starts, complements her perfectly (if noisily). With advice and some supplies from John Williams at Saving Old Seagulls, I have learned how to clean and adjust the plug, carburettor, etc. (she will work in a 20:1 mixture of petrol and biodegradable vegetable oil).

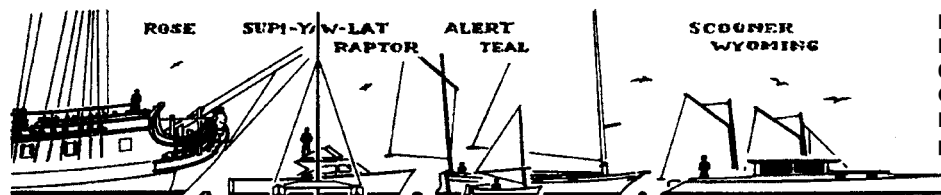
To my knowledge there are very few other currachs in use on the British mainland. Anyone interested in learning more or even building their own boat might usefully watch the various videos on YouTube, perhaps the best being Hands: Currach Makers, an excellent three-part documentary. Another evocative watch is Colin Stafford Johnson's marvellous series 'Wild Ireland' which features him rowing with basking sharks in idyllic waters off the west coast in a brand-new clone of my boat. The classic text on currachs is James Hornell's 'The Currachs of Ireland' (1938), but this can be hard to track down. The Meitheal Mara website is a mine of information as is 'The Irish Currach Folk' by Richard MacCullach (1992), Wolfhound Press.

Next time I will write about my Arctic Tern, a glued lapstrake plywood version of the traditional Shetland Yole double-ender designed by Iain Oughtred. *MM*

(Below) 'Launching the Curragh' by Paul Henry, 1910-11  
The artist lived on Achill Island for almost a decade with his wife Grace. They painted Achill & Connemara landscapes and portraits



To read about the author's 2<sup>nd</sup> and 3<sup>rd</sup> choices in coming issues of *Dinghy Cruising*, go to [dinghycruising.org.uk](http://dinghycruising.org.uk) to order a subscription to this wonderful quarterly small boat club publication.



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## Phil Bolger & Friends on Design

### Design Column #565 in *MAIB*

For this final issue of *MAIB* we take a look at two aspects of our presence on these pages, a unique opportunity adding up to apparently the longest such in the history of boat magazine publishing:

#### Across Three Decades of *MAIB*

A look back over 30 years of this office sharing boat designs, concept studies and related ideas in *MAIB* with folks who were, of course, talking about Bolger Boats in *MAIB* since well before then, all made possible for the full four decades of *MAIB* by the team at the heart of *MAIB*, Bob, wife Jane and daughter Roberta

Early on in their collaboration, Phil apparently suggested to Bob Hicks that his archive of completed designs, plus stacks of studies, might not run dry anytime soon should they agree on a regular Bolger on Design installment in each issue of *MAIB*, then on a biweekly schedule with 26 issues per year.

Some uninitiated observers might have speculated that either Bolger was pessimistic about the future of the magazine or that Hicks liked a sporting challenge, eager to see how long Bolger could keep this up.

Of course, both knew that Bolger's archive was indeed big enough to keep such an ongoing publication schedule going with no risk of repetitions for literally quite a few decades, likely an unrivaled track record anywhere any time for both any editor and any designer in the world of boat magazine publishing, big language around a collaboration in a small magazine, but true!

Glossy magazine editors, some familiar with Bolger's work and publishing track record since his first piece in the March 1948 issue of the mainstream monthly *The Rudder*, apparently could never quite see the value in this conceptual diversity and the value of such an extended commitment to one Design Office discussing its work on such dense sequence without going stale, boring or even predictable. (The rare exception was the *Small Boat Journal* in which Phil offered some 80 consecutive pieces.)

And yet, that very diversity of ideas around boating has been the essence of this collaboration here, with Bob always seeking, finding and offering an ever changing mix of voices out of the boating universe often overlooked by the hard edged, commercial, PR-driven editorial mindset too prevalent and with Phil freely picking through the still growing (!) archive to see what might be a nice piece for the next issue, both doing this many hundreds of times and with nobody to interfere.

So it may be best to go back to *MAIB* Vol 34, #2 of June 2016, in our Design Column #500, to revisit that discussion of this diversity of designs, conceptual approaches, outcomes, things learned perhaps. No need to repeat that more comprehensive perspective than possible here in this final installment of our column.

Amongst the 565 Design Columns out of this office here in Gloucester, Massachusetts,

we find indeed 428 pieces on numbered boat designs, including a few on respective modifications, revisits of several over these many years, even detailed accounts on designing and then building, like the 26-part series on building #681 SACPAS-3, and shorter series on other folks' building to our designs. And that means that far beyond 200 additional designs never got exposed here in *MAIB* after all, suggesting a projected publication schedule of at least another ten years on top of these 31 years so far, and that at a monthly format, that is. So Phil's projection about how long his archive might support a regular presence in *MAIB* was not remotely optimistic, but rather casually relaxed, at ease.

Out of these 565 articles, there were 38 pieces on Concept Studies/Sketches by Phil, or that Phil and I had done, for me to then add another 57 such pursuing layout variations on a range of hull geometries I found interesting to explore, since in sizes reasonably achievable for a home builder or a small commercial shop.

Finally, in those 565 pieces we find over a dozen Sailing Rig discussions out of the book *103-Rigs*, pieces on trailer handling on launching ramps, or on trailer repairs, reminiscences on Phil himself, Dynamite Payson, Peter and Maggie Duff, 23 installments on what has gone wrong in the fishing industry we have long tried to see enter the 21st century between advanced concept studies, policy suggestions, technical legal analyses and policy solutions, observations on Pumpkin Boats, wild Mega Yacht Studies, one on large transparencies as part of a boat's stability, such as in #496 Birdwatcher, and few more odds and ends.

There were several episodes of Bob Hicks pinch hitting by rerunning older pieces by Bolger when I simply was not fit to do much of anything, particularly after Phil's death on May 24, 2009. Shocked himself by Phil's departure, Bob found the strength to fill the gap in *MAIB* when I was flat on my back, could barely get to the mailbox or run errands, with the regular *MAIB* schedule soon becoming a steadying source to draw growing strength from again, in addition to being a welcome distraction from possibly getting too self centeredly lost.

And there was a lot of good in Phil's, and later our, work to draw from to continue adding ours to the chorus of voices in *MAIB* to eventually add up to well over 140 pieces beyond and without Phil by my

side. Bob's, Jane's and Roberta's patience, understanding and flexibility were essential in our shared efforts to continue integrating Phil's work and my thoughts and deeds into *MAIB*'s production.

Of course, looking closer at what has added up to a substantial body of design thoughts in this magazine, some of the more corporate editors would have gagged on certain topics out of this office, such as the mixture of design and politics around the fisheries issue, likely even my extensive discussion of my building that 39-footer despite the former reflecting the fate of the working waterfront we all depend on one way or the other and the latter showing how one reasonably serious project was pulled through successfully against a range of odds, just as many builders have their own share of challenges while trying to get their boat done.

Advertising accountants certainly would have pushed the editor to compress everything and likely everybody's contributions, perhaps squeezing the story's life and nuances out of it as well. Some stories simply take time to tell.

Good thing that not everyone is attention deficit added or in a perpetual rush even when relaxing reading about our sweet shared pastime of boating, building boats, caring for them. Messing about in boats may, if not ought to, indeed touch on all that diversity with legitimacy, or so Bob and Phil, and later Bob and I thought.

Never perfectly predictable topic sequences from this address, hopefully for the most part as lively as Bob's far reaching pulling in of so many voices reporting on big ship matters, Coast Guard concerns, vignettes that may shiver your timbers, cruising accounts, tall tales or just retrieving articles from way back or from faraway, all one way or the other part of the spectrum. Libertarian Phil might have called Bob one himself, with Bob Hicks' non doctrinaire, open minded, greedy appetite to find more and different angles on what has drawn us all to the universe of *MAIB*.

On the economics for Publisher Bob Hicks, Phil might be a tad impatient about those who in recent years ultimately did not feel like paying for an annual subscription for what ten fancy cups of coffees are worth to quite a few who will promptly hit the can a couple of hours later while you'd barely have gotten through the first pages of *MAIB* instead.

I would argue that *MAIB*'s black and white print should have been seen by now as its own brand of quaint, perhaps a retro cool reflection of New England sober tight-wad philosophy where you'd add the colors and your 3D depth perception at will in your own mind as you are drawn into yet another story, a design discussion, news about Grey Ships, ads for odd and elegant boats. Vinyl records are in vogue again in some quarters but neither Bob nor we contributors to the magazine seem to have been hipster enough to effectively have spread the gospel that, for instance, a yellow framed cover page is all you need for that issue with a rich world of peoples' pursuits around boats awaiting inside, all the way perhaps to seeing why Ratty and Moley became such well known immortals.

So what is left to offer from this address here is the idea to wrap up this historic sequence of 565 design columns by this one office with a final installment, a Big One!

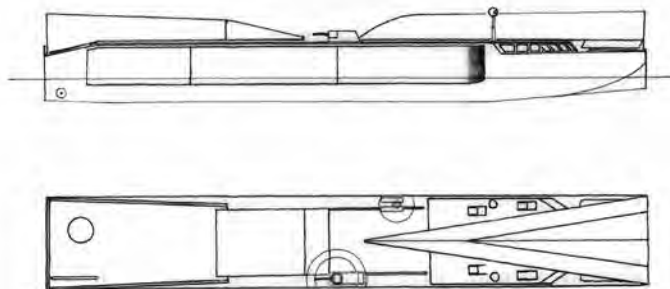


Phil and I enjoying our 1997 collaboration Lily, an electric launch designed for the home builder using off the shelf components for the power system.

## The LCU-F Project (Landing Craft Utility Folding)

266'x22'x4'6" x 450 Tons  
1,200hp Diesels (2) x 19Knots x 1,500 Mile Range

In light of *MAIB*'s status, we decided to say farewell with something quite spectacular by discussing a most serious design project to conclude this unprecedentedly deep and wide arc of discussions on the full spectrum our design work.

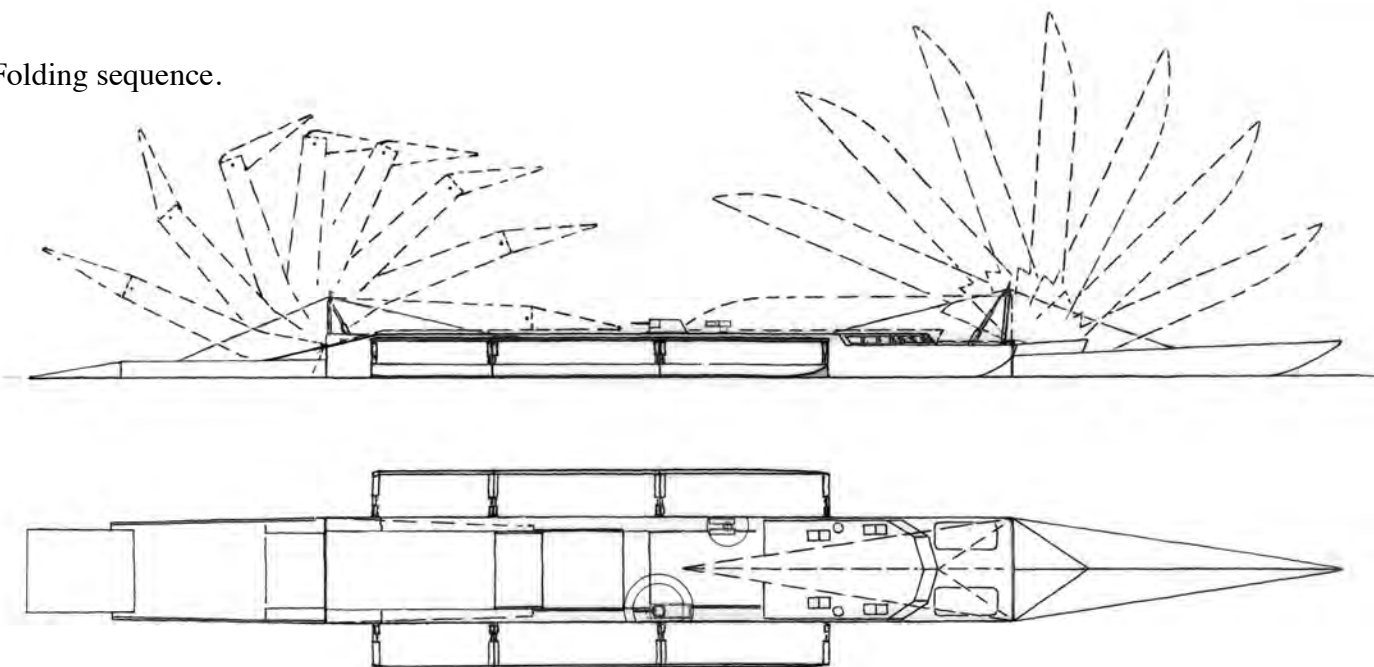


This account of a particular design exercise is indeed well outside what most folks think of our typical work. Long assumed by me and Editor Bob Hicks to eventually be part of the discussion here in *MAIB*, but then repeatedly delayed for various reasons, let's finally look at Phil Bolger & Friends' largest and most far reaching design project in decades, LCU-F, as in Landing Craft Utility-Folding, a project initiated by and then designed for the US Navy (no kidding)!

Only another warship, Design #225, 24-gun three-masted Frigate Replica *HMS Rose*, drawn to be promptly built in the late 1960s, would be in a similar displacement category, a similar size category at 450 tons of weight afloat initially on paper, now after 50 years closer to 500 tons of weight as she remains alive and well afloat at the Maritime Museum of San Diego.

Here in *MAIB* she was discussed most recently in the March 2017 issue in Design Column #509, with a visit of her the obvious thing to do because of business near her in fact directly related to LCU-F.

Folding sequence.



## **Phil Bolger & Friends Invited to USMC Base Camp Pendleton**

After LCU-F had resulted in visits to several naval bases and an East Coast USMC base, Phil Bolger & Friends had been invited to US Marine Corps Base Camp Pendleton, an hour north of San Diego, to display this design project as part of the largest gathering in 30 some years around the Marine Corps' core competency of Amphibious Assault. In what was called an ANT-X (Advanced Naval Technology Exercise) some 120 projects had been invited, with small and large concepts, gadgets, full ship-to-shore design projects like LCU-F, supporting software packages, exotic things like camouflaged mini submarines, aerial, land and water drones and so on.

Represented there were concepts generated out of the 25,000 folks strong universe of USN and USMC warfighting laboratories with designers, engineers and specialist (including 2,000 PhDs), along with outside thinking out of academia like Johns Hopkins University and, of course, the industry on every level with invitees ranging from the largest players like Northrop/Grumman, BAE System, General Dynamics, all the way to Phil Bolger & Friends of Gloucester, Massachusetts.

Once invited, there was little limitations to take up room in buildings and tents around their "Combat Town" right near Red Beach, resulting, in our case, in a gentle arc of some 25' of displays around LCU-F herself technically, and then the implications for tactics and even strategy of amphibious assault that would open up should she be developed towards fleet integration.

And no, there was no "kids table" for little outfits like this office, particularly since LCU-F remains, to date, one of the few proposals presented there to actually bring the dark arts and exceedingly dangerous but at times badly necessary science of amphibious assault into the 21st century by offering the unprecedented capability to initiate this maneuver from at least 200nm offshore or Over-the-Horizon-200 (OTH-200). While the Event Catalogue has been categorized as Unclassified, I have not seen it online and won't ladle it out here either.

### **NAVSEA's Unexpected Inquiry**

Since long before Phil drew me into his universe in the early '90s, Phil had been asked periodically by a number of US Navy labs for input on a range of naval challenges. USN seems to have eyes and ears open to find potentially useful partners in their ever ongoing pursuits to maintain a sharp conceptual edge to address various strategic and tactical demands in the service of this Super Power. Phil Bolger had been on that Rolodex for decades. But he could never really talk about these episodes. This time would be no different for both of us for many years to come.

This story began in the early 2000s when folks out of NAVSEA (Naval Sea Systems Command) in Washington, DC, had the idea to ask us "how would you haul two M1A "Abrams" Main Battle Tanks at 20knots over 200nm?"

Now, you should wonder why anybody in the heart of ship designing, force planning, project management and strategy development for the world's largest, most powerful navy would want to ask folks like us a question as far reaching as that? Producing a plausible response with a viable concept could have serious consequences for the core competency of the US Marine Corps, since at that point in time, over 18 years ago, the ship-to-

shore modalities had not evolved much across decades. Some folks at NAVSEA clearly had concerns. And we soon learned why.

### **Amphibious Ships and Amphibious Assault**

The Navy's well deck equipped amphibious ships (called Amphibs), ships with internal drydocks which are fully floodable through massive ballast tanks, range from LSDs at 16,000 tons over LPDs at 25,000 tons to flat top LHDs at over 40,000 tons. In recent two decades or more one of each would be assembled in a three ship squadron called an Amphibious Ready Group (ARG) with long legs for ocean crossings and thus good for global deployment, capable of speeds of well beyond 20knots.

Each ARG typically carries one Marine Expeditionary Unit (MEU) of around 2,200 Marines, a mix of M1A tanks, LAV 8x8s and AAV-7 tracked and floating armored personnel carriers, MTVR trucks, various sizes of JLTV and HMMWV 4x4s, plus towed artillery pieces and lots more logistics assets to support this fighting force, plus AH-1 and UH-1 attack and utility helicopters, SH-60 medium helos and big CH-53 heavy lift helos, plus subsonic AV-8 Harrier-II jump jets plus now Mach-1.5-capable STOVL F-35Bs. LHDs are de facto light aircraft carriers, bigger than some well known types in World War II.

Once in the theater, the ARG was projected to be literally within view from shore (!), sometimes further out, to then deploy 11knot 134'x29'x7' 1,400hp twin screw LCU-1610 class beaching ferry types going back and forth each hauling some 140 tons of wheeled, tracked and walking combat assets out on the open deck, assisted by 88'x47' 35-40knot Landing Craft Air Cushion (LCAC) going back and forth but able to cross over tidal flats, open sands, across flooded marshland, independent of tidal channels.

These, however, were limited in weight carrying capacity to around 60 tons, were extraordinarily noisy and very visible with massive clouds of spray, along with being very fuel hungry, burning some 16,000hp to lift one tank, limiting their range. You could see why some at NAVSEA were looking for better ways of getting this dangerous work done, dangerous during WWII and more or less implausible in the early 21st century. Adversaries would have come to know this, too.

### **The One Liner to Trigger Far Reaching Concepts**

But being two now, we digested that NAVSEA question, "how would you haul two M1A "Abrams" Main-Battle Tanks at 20knots over 200nm?" A pregnant question, indeed, as we immediately recognized that this simple sounding one liner question was full of very serious implications. NAVSEA was looking for a robust conceptual and thus tactical departure from the then state-of-the-art that had not improved much for several decades in both speed and distances to be routinely covered.

Hauling two M1A tanks or equivalent weight at 20knots meant going to war over one dusk-to-dawn cycle to cover the 200 nautical miles in darkness to arrive before dawn, even in the age of drones and satellites such considerations still matter in many theaters. Coming in from 200nm out meant coming in from international waters, allowing for plausible deniability loitering or passing through those waters before the assault is suddenly initiated.

And proposing to put the ARG this far out from shore was borne of the grow-

ing concerns over increasingly powerful shore defenses, from extended range barrel artillery, dumb missile barrages, to guided Coastal Defense ballistic and cruise missiles. Even just an average modern tank gun may have a possibly far greater danger zone than ever before, such as those smooth bore 120mm cannons by Rheinmetall and their equivalents that throw plain tungsten rods, travelling dozens of miles on a good day and with a lot of luck hitting something painfully, a something which a 40,000 ton LHD broad-side just 12 miles out might offer a fair bit of.

By the time we were done with our first version of LCU-F, we had put three M1A tanks aboard, not that an assault would want to put these many eggs into this one basket except that it could and might need to. We had her travel at 19+ knots with 2,400hp Diesels and offered around 1500nm of standard built in range to allow odd dog legged courses to confuse reconnaissance of the defenders and to build into her enough margin for various other eventualities.

Being able to haul over 200 tons of combat load would also offer installing a dedicated tank farm kit between her steel hull structure uprights for over 55,000gals of JP-8 fuel for her to become an impromptu combat tanker to loiter near shore to on demand feed pipelines for tanks, trucks, have helos return for refueling or just near double at sea the regular range of four loaded LCU-F, if a fifth one was just such a combat tanker, thinking here of the distances between far flung islands of the West Pacific.

### **Studying the Concept's Drawings Unorthodox Geometries for Advanced Capabilities**

LCU-F's hull geometry offers a very different approach to landing craft layout and operations, a hard reality disturbing some and at least disorienting others towards firm determination of incredulity, while others yet may begin to grasp her and the cascading positive consequence for this characteristic Marine Corps maneuver.

The line art shown here is of an earlier stage of LCU-F's evolution, with later developments only touched on below but not shown. Suffice it to share that she got more smarts, more power, more range, greater carrying capacity, better structure, a touch more speed, improved four bunk quarters (hot bunked during war) plus CO's private quarters, better drive train layout and a robust self defense suite.

To start out, we would go for lean hull proportion to get to near 20knots with 2,400hp. And guided by LSD-41's unique 440' long well deck at 50' well deck width, we took the largest conceptual leap away from traditional LCU design in order to get as many LCU-F's into this eight ship class as possible.

So we concentrated combat cargo in a 105'x14'x12.5' cargo bay, crew and propulsion ahead of that, with fuel integrated along much of her structure. And this allowed for mostly empty bow and stern modules, consisting mostly of just their structural weight with not even folks intended inside.

And here it gets challenging for some. We treated both bow and stern as empty hull fairings to get towards the 20kts speed and the 200+tons load carrying capacity. But then we hinged these two empty hull fairing structures up on deck of what now would be called the main hull. Between four segment hydraulic rams and lots of cable winches (one 1.25" steel cable may offer 100,000lbs of breaking

strength) for lifting and pulling these fairings volumes against the main hull, all to be powered by just a fraction of those Diesel horses as we proposed to move these empty hull sections across 180° of rotation to rest upside down on top of the main hull.

A major factor in LCU-Fs design was the maximum internal height of the Amphib classes' well deck. And that amounted to a hard upper limit on the total height of the folded LCU-F to still be able to power in and out of the mother ship. This accounts for the low freeboard stern module (actually as high as the conventional LCU-1610s) and the cut down and upwards angled bow profile and breakwater to face long swells and steeper waves.

And thus a 266' long 21+knots (max) capable displacement speed mega kayak hull geometry with a lean 12.3:1 length-to-beam ratio becomes a lumpy, slow lumbering freaky sight of just 143' in length on 22' beam by at least that high. And, as you see coming, the point was that this unusual geometry would allow six such folded up 143'x22' LCU-F (folding!) hulls inside the 440'x50' well deck of one LSD-41 with moderate fendering all around, a substantial increase in the ARG-MEU's combat power, quite apart from this heavy lift landing craft offering seven more knots.

Lots of folks got flustered by this folding idea, eventually soothed some by recognizing the importance of her foldout stabilizers on demand extending her beam from 22' to 42' for this process of rotating all those tons of bow and stern structure this high up and down again, without LCU-F rolling over, saved by several dozens of tons of stabilizing buoyancy in those wide apart sponsons, with even the option of moving each side separately to counter sudden cross swells. And, of course, you'd rotate only one module at a time, with perhaps the bow even split in half. Once done, you'd retract these sponsons to have the leanest hull shape again for both speed and range.

Typically this process would take place right behind the Amphib's stern gate as she steamed at headway speed with the 86' wide hull for LSD-41 and wider for the other Amphibs, producing a smooth patch of sea for this short process.

And there sure would be sea states when folding and unfolding would indeed be a bad idea. However, well deck operations on, e.g., 16,000 tons LSD-41, would mean letting 10,000+-tons of ocean water flood first

her ballast tanks and eventually the well deck down to 10' draft aft at the stern gate and 6' at the forward end. And that usually is done at sea states no greater than 3.5.

Some have taken issue with the perceived complexity of the two pivoting hull modules and the extending side sponsons. But even when you add steering, flush thrusters and prop drive retraction, would she compare alright with the overall number of hydraulics circuits of the average construction backhoe, with individual system elements simply being only much bigger. And at 2,400hp we have enough power to drive a lot of high volume hydraulic pumps for rams and potent winch motors.

#### Sharp Edged Simplicity

Since it was always clear to us that she'd have to fit two side by side inside the Amphibs and thus be a mega kayak shape to get both speed and carrying capacity, she'd have to have a de facto wave piercing bow, meaning also that there would be no chance of any of the traditional drive through deck arrangement that traditionally allowed daisy chaining LCUs to become causeways, bridges, very long ferries.

Therefore, her tracked and wheeled cargo are backed into her either at a base, down the Amphib's steel beach inside the well deck or out of the drying out well deck over the Amphib's stern gate on to LCU-Fs stern ramp. Self parking car technology has made that thought an easy technical proposition even with a sharp edged 70ton Main Battle Tank. In return, heading out going to war, every driver and weapon system is headed the correct direction.

Overall, the hull shape is utter simplicity being square in her mid section, with just a limited curve in her bottom profile upwards towards her bow and the stern, with the bow module itself a simple cylindrical expansion to get a decent bow action without forcing needless steel shaping complication in this already extraordinarily lean hull geometry. This approach allows rapid initial construction primarily in steel and later fairly easy field repairs in the Amphib's drydock should she return with her bow or stern badly mangled, or an ugly alarming dent in her mid section.

Yes, that bow is very much related to that of design #615, the 19'6"x1'11" kayak "Diamond" with her distinctive flat sided bow, there mirrored in her stern as well, but with her bottom being a simple rolled up ply sheet shape to form that bow. On LCU-F the main hull is so full of machinery and peo-

ple spaces forward, that this plain shape will have to do on her lean proportions.

#### COTS Drive Train

So, how to power this odd folded over lump in and out of the well deck? We started with two big Diesels (as shown) and eventually arrived at an all Diesel electric four generator sets system architecture to simplify powering all sorts of duties aboard.

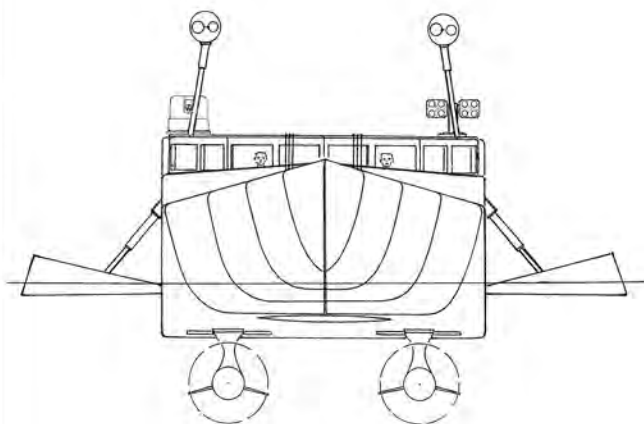
To drive her, we use commercial off the shelf (COTS) technology with COTS a preferred term around the Pentagon for obvious fiscal and reliability reasons, and find well proven so called pump jets, flush mounted propulsors, related in principle to your average electric bilge pump, drawing in water from below to eject it through nozzles at any angle downwards in any controllable direction around 360°.

Quite inefficient as main propulsion, but needing just another 1.5'-2' of water under her bottom to allow full control of the folded LCU-F inside the well deck, or later in a shelving tidal stream where propellers are impossible. And that means that 6' of water would be adequate to produce more than headway speed with a full 200+-tons load draft of 4.5'. (Benjamin Franklin would have perspectives on barge shapes performing in shallow waters.) Here we specified a big unit up front in the main hull and modest one aft, with the big one possibly good for up to 9knots of fully loaded progress in water too thin for props.

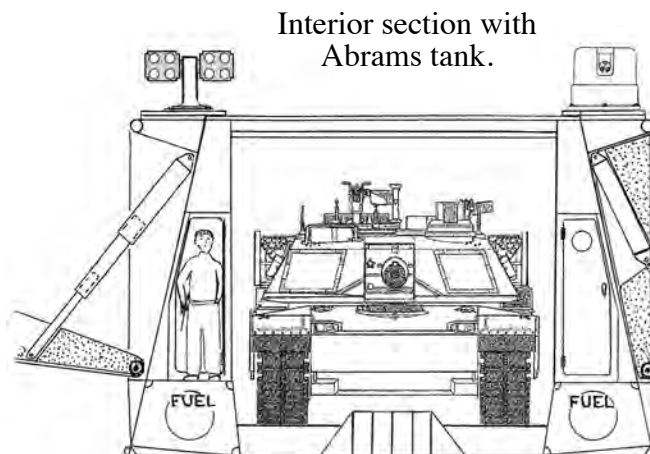
For regular operation, two COTS 360° steerable propeller drives offer us good efficiencies via Diesels in water depths from 12' on down to get beyond 19 knots, with the type here allowing the retraction of the drive leg upwards through 90° to allow an absolutely flush hull bottom for LCU-Fs sitting on the Amphib's steel well deck sole, or briefly on some beach war has been brought to by landing tanks, armored infantry vehicles etc, or squatting exposed on the tidal flats having misjudged the cycle and hoping to not get found and shot up. And yes, we'd have single or twin centerboards in that stern module to aid in her tracking without any rudders or skegs below.

#### Helos Carried Aboard A Landing Craft Utility?

Helo minded folks will immediately raise their concerns that combat laden AH-1 Cobras or UH-1 Hueys or MH-60 Seahawks simply won't have the range to cover the distance of 200nm from the ARG to the shore and still be effective over the theater, never



Head on with stabilizers out.



mind go back. Hence the obvious option of leveraging her stern section that already has to allow rolling over it that 70-ton M1A Abrams tank backing into her, or headed out, perhaps with gun firing, going to war.

So planting much lighter helos from AH-6 Little Bird over AH-1 and UH-1 to mid-size MH60s here is obvious, riding to shore on LCU-F most of the way to only burn fuel as tactics suggest, such as taking off nearing the shore to initiate distinctive noises, visuals, kinetic effects of an amphibious assault. And once that idea has sunk in, that stern deck can later on serve as a refueling, rearming and rearming point for any helo as long as it can land on that stern. Lots of tactical and logistic opportunities opening up here.

#### **Reasonably Armed to Run Solo**

Running from Over the Horizon 200nm (OTH-200) solo, or at best in the company of other LCU-Fs, you really need much more self defenses than a couple of pintle mounted 50cal machine guns and a locker of Stinger man portable surface-to-air missiles. After all, there would be no corvettes or frigates escorting her to offer defenses with destroyers nowadays high priced missile magnets so close to the adversary's coast.

As shown here, we first went for the 20mm triple barrel Gatling gun familiar from the AH-1 COBRA gunship and added a quad launcher of Stingers. However, with LCU-F really needing gun range and punch, with gun system weight irrelevant aboard this 450+ tons LCU, we migrated to two 30mm cannon turrets still swinging the gun barrel 220° BUT then also the whole ammo magazine as the target is tracked for a full 360° swivel of the cannon, 30mm nowadays allows for projectiles with integrated proximity fuses against drone swarms, cruise missiles, drone boat swarms, etc.

Then we added a second quad Stinger launcher and then sistered these two missile mounts with two launch rails each for a total of four AIM-9X SIDEWINDERS to extend the air defense bubble over her from the Stinger's 2+ miles to AIM-9X's 15+ miles. Extra missile projectiles and cannon ammo would be stored in hardened on deck canisters, with 200lb Sidewinder requiring three folks to manage.

Nearing shore the two cannon turrets would offer reasonable coverage ahead and along LCU-F's sides against small craft, drones, then vehicles on land, with even double supersonic Sidewinder actually having been shot surface-to-surface on a few occasions. And, of course, we'd have some of the weapons on tracked and wheeled combat vehicles inside her emerging to help sweep the beach.

#### **Stealth?**

That comes primarily from her low silhouette of 11'-12' air draft in profile, the option of exhausting on demand her Diesels below the waterline, her least head on visuals from both her narrow beam and a lean bow wave. Some have even argued to apply radar wave absorbing or scattering layers over sections of her above water shape.

The other definition of her relative stealth comes from the fact that you may see the LCU-F but cannot tell what she actually carries inside, making targeting prioritizing a bit more difficult, particularly via advanced cruise missiles defenders may be limited on. And that assumes that her helos aloft had not already leveraged earlier reconnoitering to target such missile launchers.

#### **Multiplying the ARG's Reach**

By the time we were done working through all these opportunities and challenges, the ARG quoted earlier would bring up to ten 19knots x 200tons cargo LCU-F into the theater with two LCU-F plus one LCAC in the LHD, two LCU-F in the LPD, and six (!) LCU-F in the LSD-41, making this the smallest amphib the most valuable carrier of ship-to-shore capabilities of the ARG.

In stark contrast, the traditional wider, shorter and much slower 12kts x 140-tons LCU-1610 geometries from the 1960s would only allow one each per LHD, LPD and three per LSD-41 or half of the badly needed overall number of hulls, carrying just 700 tons max versus 2,000+tons. Never mind the total additional running time towards shore at 11-12kts, the return, then the second wave, etc. So, to use big words, LCU-F could be a significant, in fact a major, paradigm shifting system in support of USMC's core competency. NAVSEA had been proven wise to poke at us with that one liner.

#### **Amphibious Assault with LCU-F**

Finally, here one sequence using her to initiate key elements of a USMC amphibious assault, range Assault-Lighter, she rides globally inside the amphib to where she's needed.

It seems to take 30 minutes to flood down an LSD-41, but the two rearmost flooded up LCU-Fs can leave well before the full ten draft at the after end has been achieved.

Then the unfolding process of LCU-F in the lee of the amphib Mothership.

Next she'd receive her helo to settle on the stern deck.

And now she'd extend upwards those telescoping camera, range finding and radar heads for navigation and maintaining situational awareness, with these playing a role in self defense guidance as well.

Depending upon particular tactics she'd be taking off or awaits the other nine LCU-Fs to get ready to run towards shore.

Depending upon shore topography and known radar installations for instance, LCU-F will slow down and take a 90° turn. This may be most likely point for the helo to take off towards shore to begin the attack.

LCU-F takes another 90° turn and starts stern first now with the ramp some 45° up running to shore and near her forward maximum velocity.

With the helo off the stern deck, wheeled and tracked assets can emerge out of the cargo bay to train their weapons on the approaching shoreline.

She'd approach the beach with all defensive and offensive systems concentrated at least 180° around her, plus her air-space, to slow down, and then usually retract her propeller drives to proceed the last hundreds of yards under flush thrusters until she hits the beach on a hull draft of some 4'6" fully loaded with just enough water likely left for the seaward most thruster still having enough water to keep her straight and not broach as her vehicles and Marines head out on to the beach.

Placing the Ground Combat Elements on the beach after the 11-12+ hours approach from OTH-200 should be a matter of just a few minutes of them accelerating out of the cargo bay, up and over the stern deck and down the stern ramp, headed inland without stopping to either take up landing zone protective positions, or straight deeper inland.

With the standard ARG quoted, these ten LCU-F could land at ten different sites

to divert adversaries defenses, a challenge of prioritizing these as all that combat power arrives in identical looking LCU-F, that cargo covered until the last moment, giving no indication of what is actually coming where, unlike the old LCUs and the LCACs open deck geometries.

Much lighter now, and already facing with the bow seawards, LCU-F opens up and heads out at flank speed, staying fully alert on her self defenses against alerted defenders air and land assets. She might run an unpredictable zigzag course to make barrel and tube artillery aiming at her increasingly challenging as she adds distance to the shore.

Hopefully back intact at the ARG 10-12 hours later, she retracts the prop drives again, enters the flooded well deck stern ramp first under flush thrusters to shove the ramp up on the amphib's steel beach ready to immediately accept the second wave of wheeled and tracked combat and logistics assets, while her fuel gets topped off, likely her crew swapped out, self defenses replenished.

#### **Multi Purpose to Serve for Decades**

Obvious additional uses could be using her as an inter theater troop transport, a MASH equivalent staying inshore but just out of tank gun and artillery range, always moving as she accepts casualties flown in, treats and then passes them on offshore to the hospital facilities of the ARG, a MAR-SOC base (Marines Special Operations Command sea base) with perhaps two helos distributed between stern and that second helo spot over her bridge, plus an 11m combat craft on a trailer rack internally but pulled on to the stern for launching and towing about, lots of room aboard LCU-F for operators and more systems, fuel, munitions, stuff, the 55,000gals combat tanker option mentioned earlier; the option of bringing inshore fire support by using GMLRS/HIMARS single 2x3 or two 2x3 missile launchers to throw several hundred 9" or dozens of 24" diameter guided missiles at the adversary with plenty of room in her cargo bay to stack launch pods to feed the launcher, elevated on scissor jacks to fire above a gas tight deck seal, before dumping the empty launch pods, and retraction to get another reload.

These mission packages are all based on roll-in modules and kits to rapidly convert any standard LCU-F to whichever function is required.

#### **Amphib Space Efficiencies**

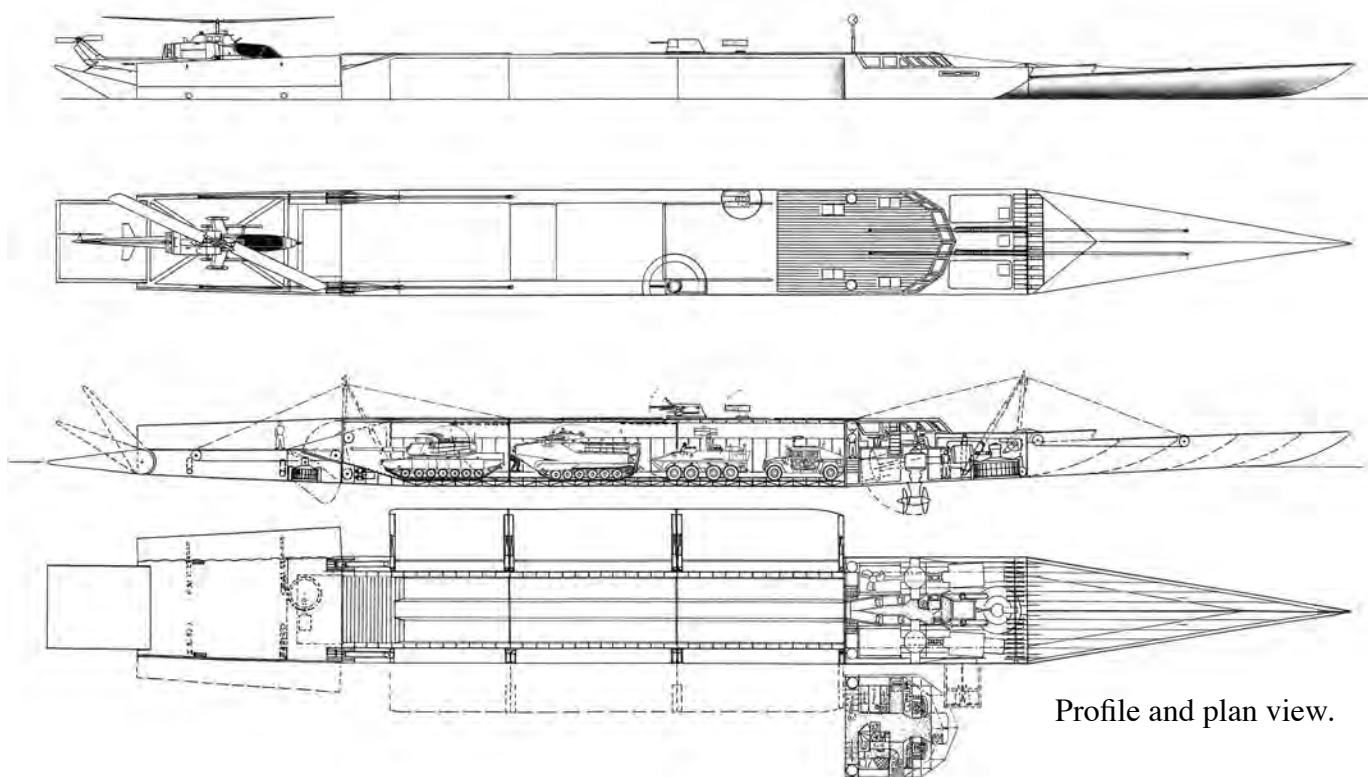
Finally, it would be typical to pre load tracked and wheeled combat assets at a home base before LCU-F folds herself into that compact shape to then enter and sit up to six deep in the well deck of an LSD-41, each on an umbilical cord, always ready to go as a standard assault combat group.

With vehicles always stored in each LCU-F, that leaves room on the Amphib for more such to park elsewhere in the ship, unlike the older LCUs and LCAC, which are typically parked empty in the well deck.

On a smooth patch of sea far offshore, you could actually reshuffle loads and functions by emptying the well deck and then taking the unfolded LCU-F stern ramps over the Amphib's tailgate to move vehicles and mission modules around at will.

#### **So, What Has Happened?**

A lot of ups and downs have happened with different folks in this massive USN/USMC organization treating her differently, from immediate grasp of her potential to



Profile and plan view.

enhance the Navy's capabilities to substantially boost the Marine Corps' purpose and prompt rushes to move the project along to staunch not invented here opposition going quite far to stop progress. We sure tried hard, but...

Of course you can't stop. Phil would be dead for four years before I finally got her before the public via the top level naval glossy around the world's most powerful navy, *The Proceedings of the US Naval Institute* with the July 2013 issue on pages pp60-64, joined by two upper mid level naval officers explicitly lending their reputation to this project, a potent combination of designers and these coauthors.

That alerted certain innovation centric folks at USMC in Quantico to study her (remarkably so she'd apparently never been shared with them via USN internal channels), to quickly insist on meeting her and me more up close, with both of us passing muster, to then see them take her much further up the hierarchy well into the head of the Commandant of the Marine Corps, Gen James Amos, as you can see on YouTube under the February 2014 video "What the Sea-Service Leaders Want" between 12:20 and 19:45, and then CMC Amos explicitly discussing her in his June 2014 *Proceedings* piece, "Bridging the Connector Gap" (open to access without pay wall). So a four star general made it a point to discuss PB&F's LCU-F before the world with a forward leaning positive attitude, even apparent intrigue.

Then his four year was up as scheduled a few months later, and likely under the not

invented here resistance, things went quiet again until more productive folks within USMC produced that invitation to the ANTX at Camp Pendleton early 2017. One of the players behind the scenes at USMC spoke of the "Long Game."

Later that year, in *Proceedings*, the need was stated for a "Fighting Connector," reflected already in the substantial weapons upgrades to LCU-F as well.

Then the impact of dark personal disruptive distractions on this end here.

Eventually early indications of a new USMC doctrine EABO emerged in 2018, actually disposing of tanks altogether deemed too heavy and hard to carry around (certainly without LCU-F), except that a medium speed now 20knots 200+tons 1800 miles assault lighter, a 21st cCentury LCU, remains vital under EABO, fit to connect an amphib to almost any beach, or one beach to another during West Pacific Island Hopping, along with Littoral Sea Control and even more ambitious concepts towards breaching A2/AD, as in rolling back the defender's system of Anti Access/Area Denial of their waters. Lots to be learned via EABO documents available online, straight on the USMC home page.

So, during yet another roller coaster experience around LCU-F, it looks like she may not be dead, particularly with China flexing muscles in the West Pacific. And tragic mostly land war dramatics in the Ukraine offer a lot of lessons all around and even for the evolving USMC amphibious

EABO thinking.

You'll be able to find out one way or the other what may be happening to likely our most important single project. Curiously, across several generations back, while plenty served as volunteers and draftees, with not everyone coming back, we appear to have had no Marines in our families.

I do wish that well before May 24, 2009, Phil had been able to draw sustenance from seeing her being recognized all the way up to the boss of the Marine Corps. As some may remember, I did inscribe her on his headstone summer of 2009 in fine grained granite, to scale, behind a number of his designs, including *Rose*, with that AH-1 helo on LCU-F's stern, visible under the bow sprit of *Rose*, with only Phil in his Light Dory ahead of the bow of LCU-F.

In summary, on the one hand, LCU-F could indeed be of relevance to national defense. On the other hand, as reflected in 565 design columns here in *MAIB*, this body of collaborative work between PB&F and *MAIB* on less impressive seeming projects has added up to its own massive meaning, as Bolger's work and its exposure well beyond his books here through *MAIB* has amounted to its own 30+/- years of momentum, messing with folks' minds and hearts, inspiring some, challenging others, getting many on the water, issue after issue for 565 cycles.

Unarguably, this has been a good thing to do, on the record, in durable paper format, ink on paper, black on white.

I wrote to the Editor in June or July 2006, suggesting a now and then column of information and ideas based on my some 50 years of messing about in boats. In my letter I mentioned that my wife and I, in the first six years of marriage, had nine boats. The Editor found the column idea and the boat sequence both interesting. When we started putting the material together for this first column, my wife and I discovered that we had ten boats in the first six years of our marriage, not counting the one I was building when we got married or the one lost when the boat builder went bankrupt.

I offered an article for possible publication and it was published in the August 1, 2006 issue. That was the beginning of "From the Lee Rail" that has continued as a column in the subsequent issues until this final one (with a couple of lapses). It has been a fun endeavor! The choice of the column's name comes from the tradition of the captain standing on the weather rail while others kept to the lee rail unless summoned. Since the Editor was the "captain" and I was one of the crew, I thought it to be an appropriate title for my column. That said, here is my final offering for your consideration.

While a non electronic diesel engine has its own quirks, most keep running as long as there is fuel, air and the cooling system works. At least the Perkins and the Westerbeke diesels I have owned did. Once started, they ran. Such is not the case with a gasoline engine. Yes, the engine needs fuel, air and cooling. But it also needs the "spark" to ignite the fuel vapor in the cylinders. Without the electrical connection working properly, the engine will not start and, once started, will not run properly. Starting the engine and keeping it running requires the battery, starter and electrical system to be in good shape.

Way back when, we had a 16' boat with a 165hp inboard/outboard engine. One time on the water when we were coming back from race committee activities, the engine simply quit and would not restart. One of the participants in the sailboat race came by, threw me a line and started towing the boat back to the harbor. After about 20 minutes of being a floating anchor to their vessel, I tried the engine and it started. I gave them back their tow line and headed for the harbor.



## From the Lee Rail

By C. Henry Depew

At the entrance, the engine quit again. While waiting for the boat to get to me, I tried the engine and it started and ran. We got to the float before it died again. I was talking about the problem at the post race party when one of our members, who was a mechanic, suggested I replace the coil as the symptoms were those of a coil failure. I replaced the coil and all was well. The problem was the coil was overheating, an internal connection opened and there was no "spark" to the spark plugs.

Another problem with engines that need the "spark" is the electrical connection between the battery and the rest of the electronics. In this case, the engine would not turn over. The connections to the battery and starter were tight and the battery tested "good," but when the key was turned, all I heard was a "click." This particular setup had two wires to the negative post of the battery. One was the ground wire to the engine/frame and the other was a ground for those items not grounded to the engine/frame. The smaller wire was not making a good connection. Once I had taken things apart, cleaned the connections and put it back together, all worked nicely.

A boat's electrical system has no "frame" to ground electrical items. It is all a two wire system with the positive and negative wires going from the switch/fuse panel to all the electronic items. Even so, the ground connection on all of the devices is essential for that item to work properly.

If you tow your boat, you sometimes need to get to the winch mounted on the trailer after the trailer is back in the water. Most trailer tongues are a bit narrow for one to walk on and the ramp is usually quite slippery underfoot. One solution for getting to the winch is a 2"x8" on the tongue with U-bolts holding it in place. The problem with

this approach is that at least once a year the U-bolts have to be removed and cleaned and the trailer tongue checked for damage and otherwise cared for to keep it in shape.

Another approach is the use of the 2"x8" with 2"x2"s on the bottom of the 2"x8" that slips down and "grips" the tongue. The 2"x8" provides adequate footing and the 2"x2"s keep the 2"x8" stable (you can use 2"x4"s if you want added security). In this case, the "ramp" to the winch is removed and stored in the boat when towing and is available at the launch ramp when needed.

For most of the years I have been sailing I had a "boat bag" that went with me. In the bag were sailing gloves, a wind speed indicator, some small line, duct and electrical tape rolls, a rigger's knife, an emergency VHF antenna, rope fids, whipping line, waterproof matches (the old kitchen kind) and assorted items that might be useful on the water when on another person's boat. Over the years the contents of the bag came in handy from time to time. I happily never needed the emergency VHF antenna or the matches.

Lithium-ion batteries can be a fire danger. Another shipboard fire was reported where the batteries involved produced a hotter fire, noxious gasses from the combustion and could only be extinguished with specialized dry chemicals. You might want to carefully consider using such a battery on board your boat.

Coming offshore (or in the river) near you may be a floating nuclear power plant. One was built and operated in the Panama Canal Zone (the Sturgis) between 1968 and 1976 (February 2022, *Maritime Reporter and Engineering News*, p57). According to the article "Floating Nuclear Power" 76 conventional power plants are floating around today providing drinking water and electricity to remote areas. The next step is to use the idea of floating nuclear power plants to produce non fossil fuels that can be shipped to onland storage facilities.

While I have been in some form of boating since my teens, my favorite is a sailboat in a light breeze. I simply sit back and enjoy the time on the water. I hope that each of you continue to find the time, no matter your boating interest, to go out and enjoy your time on the water!

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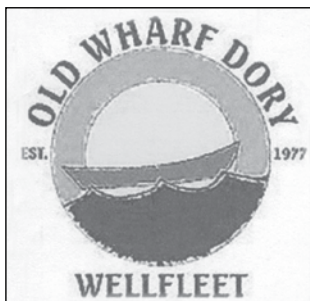


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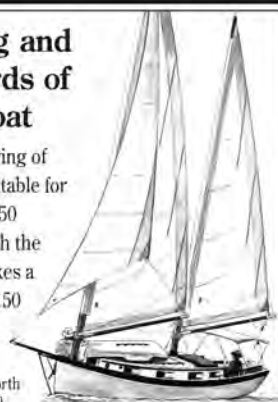
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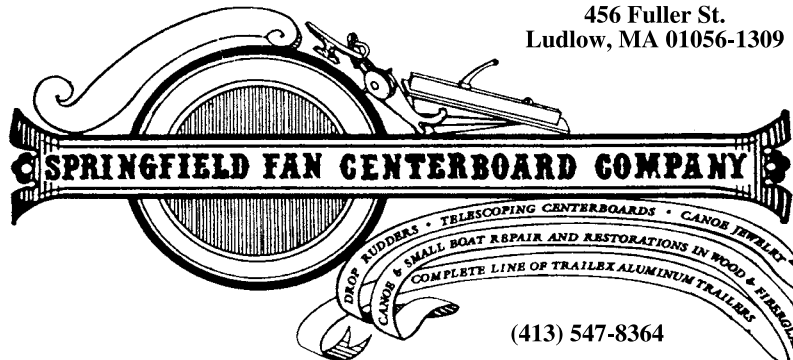
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A one-time charge of \$8 will be made for any photograph included with any ad. For return of photo following publication, include a self-addressed stamped envelope.

Non-subscribers and commercial businesses may purchase classified ads at 25¢ per word per issue. To assure accuracy, please type or print your ad copy clearly.

Mail to Boats, 29 Burley St, Wenham, MA 01984, or e-mail to maib.office@gmail.com. No telephone ads please.

**14' Vintage Folbot Solo Kayak**, non-folding model, original fabric hull on wooden stringers in d cond. Will need some small repairs, replacement of small fractured foredeck beam, patching of 6" tear in hypalon hull, replacement of one wooden paddle blade which is delaminating. \$375 firm. Cannot ship, must pick up. BOB HICKS, Wenham, MA, (978) 774-0906, maib.office@gmail.com

## BOATS WANTED

condition. I'm starting a museum of sort for these traditional Norwegian boats. I have the experience to care and repair faerings, so any condition is fine. BRUCE, (860) 977-0334, northfaering@gmail.com

## GEAR FOR SALE



**Misc Hardwood Offcuts**, useful for finish detail parts. Pictured from left: Planed 1-1/4" oak 60" & 1-1/4" mahogany 60" table leaves; 2"x4"x54" used yellow pine beam; 12"x48" 1" oak. Assorted lengths/widths 1" rough sawn oak. \$50 firm for lot only, will not separate. Cannot ship, must be picked up. BOB HICKS, Wenham, MA, (978) 774-0906, maib.office@gmail.com

**16' Aluminum Mast & 14' Boom**, like new cond w/fittings, suitable for small sailing dinghy, originally fitted to sailing inflatable. \$100 firm. Photos by email on request. Cannot ship, must be picked up. BOB HICKS, Wenham, MA, (978) 774-0906, maib.office@gmail.com

There is nothing— absolutely nothing—  
half so much worth doing



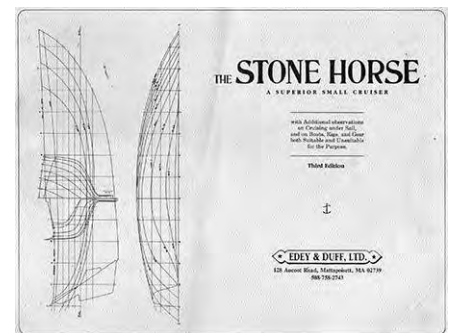
as simply messing about in boats.

## Famous Quotation & Illustration from The Wind in the Willows

Join us in expressing Ratty's sentiment to the world. Tee Shirts, Long Sleeve Tees, Sweatshirts, and Tote Bags. Order on-line or by mail. Visit [www.messingabout.com](http://www.messingabout.com) for more info or to print an order form.

THE DESIGN WORKS, 9101 Eton Rd, Silver Spring, MD 20901 (301) 589-9391 (voice mail only)

## BOOKS & PLANS FOR SALE



**The Stone Horse**, original Edey & Duff 24 page 8-1/2"x11" wide format handbook about their fiberglass version of this classic keel sloop that I collected (the handbook, not the boat!) at the Newport Boat Show in early 1980s. Perfect condition, printed in brown on matt surface beige heavyweight paper quality, contains in addition to full details of boat, topics on cruising under sail, rigs, gear both suitable and unsuitable for the purpose. Contains 6 design drawings and 11 large photographs of the boat in action. \$25 postpaid for this collectible for anyone who appreciates this Edey & Duff creation. BOB HICKS, Wenham, MA, (978) 774-0906, maib.office@gmail.com



**Small Boat Journals**, Vol 1 Nos 1-12 (No 4 missing), Vol 2 Nos 1-3. Original 11"x11" wide format, exc cond, 14 issues @ \$5ea. = \$70 firm for lot only, plus shipping/mailling. Will not separate. Weight 7 pounds. BOB HICKS, Wenham, MA, (978) 774-0906, maib.office@gmail.com

# Shiver Me Timbers *By: Robert L. Summers*

*It's a wonderful game we play...*





*So Keep on "Messing About in Boats!"*

# messing about in **BOATS**

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## ADIRONDACK GUIDE BOAT

[www.adirondack-guide-boat.com](http://www.adirondack-guide-boat.com)

6821 Rt 7, N Ferrisburgh VT 05473

(802) 425-3926

[guideboat@agbboats.com](mailto:guideboat@agbboats.com)

So, this is to be the last issue of Messing About in Boats....EVER. I thought this would be a hard ad to write...turns out it is nothing of the sort. Summing up a wonderful relationship is easy. Summing up a difficult relationship, not so easy.

Here I'll tell you a little story that not even Bob Hicks knows. Part of the reason we were such steadfast advertisers on the back cover of his magazine was.....It was such prime boating real estate, we didn't want anyone else to have that space. Here are some of my favorite photos from over the years.



Perhaps the most amusing story from our relationship with MAIB was the man who swept into our booth at the Miami Boat Show. When he came into our booth, he picked up a copy of MAIB, just to see what was on the back cover. He was the national sales manager for the largest breast implant manufacturer in the world and he was telling his sales managers to be more like this little company, always working, always thinking, always pursuing quality. My ad consisted of a photo of a pair of breasts about to be implanted. Fare well to you all, you particularly, Bob Hicks, it has always been a pleasure working with you.