

FISHING BLUEFIN TUNA • A POCKET CRUISER • ARCH DAVIS DESIGNS

WoodenBoat

THE MAGAZINE FOR WOODEN BOAT OWNERS, BUILDERS, AND DESIGNERS



FAST PIECE OF FURNITURE: A New Classic Iceboat
 Aboard a Glass-Cabin Launch
 How to Build a Plywood Daysailer


www.woodenboat.com

JANUARY/FEBRUARY 2014
 NUMBER 236

\$6.95
 \$7.95 in Canada
 £3.95 in U.K.

The Epifanes Look

Epifanes Yacht Coatings: in an unsurpassed palette of colors and seven varnish formulas that define exquisite brightwork worldwide. Our new custom blended, two-part polyurethane is available in 450 unique colors. Brushed, rolled, or sprayed, Epifanes polyurethane delivers a durable, mirror-like finish with tenacious resistance to abrasion. Available in high-gloss or satin at your local chandlery. Or visit us online at www.epifanes.com.



EPIFANES® 
Yacht Coatings

AALSMEER, HOLLAND ■ THOMASTON, MAINE ■ ABERDEEN, HONG KONG

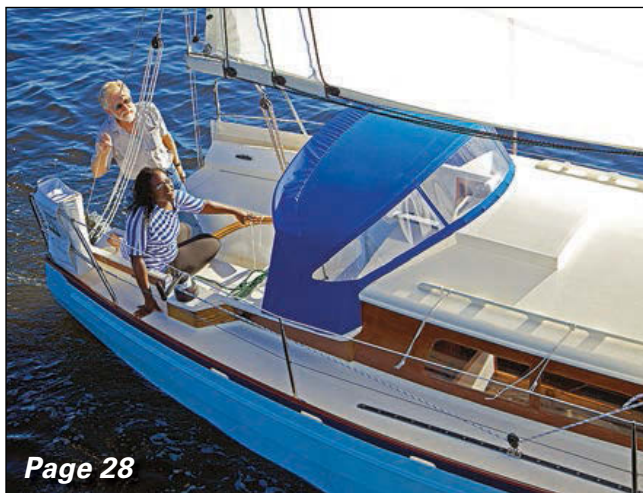
FOLLOW US  



Join us in the Florida Keys

January 27 - February 2, 2014
for the Key West Classic Regatta. The regatta features classic sailing vessels in multiple races, as well as parties, music, storytelling, and nautical fun in the sun. Historic tall ships, modern wooden and replica vessels, and those who appreciate them are welcome. For more information, and to register, visit:

keywestclassicregatta.com



Page 28

FEATURES

28 The Designs of Arch Davis

Classic forms for the contemporary builder *Robert W. Stephens*

38 FETCH

Adapting a small daysailer for cruising *Tom Jackson*

46 The Lives of a Cat

CONJURER and her succession of saviors *Skye Davis*

54 FAST PIECE OF FURNITURE

From Cold War Estonia to Maine's cold winter *Bill Buchholz*



Page 38

60 Aged in Wood

How SAWDUST became the legacy of three boatbuilding generations

F. Marshall Bauer



Page 84

66 Aboard EVERGLADES

A contemporary glass-cabin launch

Maria Simpson



Page 72

72 How to Build Phoenix III, Part 1

A versatile, easy-to-build 15-footer

Ross Lillistone

84 TACOMA

How an American tuna clipper changed the face of Australian fishing

Bruce Stannard



DEPARTMENTS

5 Editor's Page

Connection and Collaboration

6 Letters

13 Fo'c's'le

Beware of the Butt Joint *David Kasanof*

15 Currents

edited by Tom Jackson

80 Designs

Pleustal: A cruiser for thin water

Robert W. Stephens

94 Wood Technology

Contorted Timbers
Shape the Boat

Richard Jagels

96 Launchings... and Relaunchings

Robin Jettinghoff

103 The WoodenBoat Review

- Two Films of Passion *Matthew P. Murphy*
- *Epoxy Basics* *John Brooks*
- Books Received

136 Save a Classic

BACCARAT: A swift
keel cutter

Maynard Bray

READER SERVICES

104 How to Reach Us

110 Vintage Boats and Services

112 Boatbrokers

114 Boatbuilders

121 Kits and Plans

125 Raftings

127 Classified

135 Index to Advertisers

TEAR-OUT SUPPLEMENT Pages 16/17

Getting Started in Boats

Towing for the Yachtsman

Andy Chase

Cover: On Maine's Chickawaukie Pond, Bill Buchholz gets a running start with his Monotype XV iceboat. He built the boat to a design that originated in Estonia before World War II.

Page 54

*Photograph by
Alison Langley*



WoodenBoat (ISSN 0095-067X) is published bimonthly in January, March, May, July, September, and November in Brooklin, Maine, by WoodenBoat Publications, Inc., Jonathan A. Wilson, Chairman. Subscription offices are at **P.O. Box 16958, North Hollywood, CA 91615-6958; 1-800-877-5284** for U.S. and Canada. Overseas: 1-818-487-2084.

Subscription rate is \$32.00 for one year (6 issues) in the U.S. and its possessions. Canadian subscription rate is \$37.00, U.S. funds. Surface rate overseas is \$45.00, U.S. funds per year. Periodical postage paid at Brooklin, ME 04616 and additional mailing offices. In Canada, periodical postage paid at Toronto, Ontario (Canadian periodical Agreement No. 40612608, GST Registration No. R127081008).

U.S. Postmaster: Please send Change of Address (form 3579) to P.O. Box 16958, North Hollywood, CA 91615-6958

Canada Postmaster: Pitney Bowes, P.O. Box 25542, London, ON, N6C 6B2, Canada.

WoodenBoat Magazine's
**Maritime Tour of
England and Scotland**

National Maritime Museum, London



Join us for two incredible weeks exploring the finest maritime attractions in the United Kingdom. Our tour will depart New York City's JFK airport on the evening of Monday, June 16, and guests will gather in London the following evening for a welcome dinner. From there, we'll embark on an exploration of museums, vessels, cities, waterways, and towns for two unforgettable weeks. The trip's highlights include:

**JUNE
16-29
2014**

- The National Maritime Museum in Greenwich
- The newly restored clipper ship CUTTY SARK
- The Royal Observatory
- The Historic Dockyard in Portsmouth
- The Steamboat Museum at Lake Windermere
- The Scottish Traditional Boat Festival at Portsoy, Scotland
- The renowned National Small Boat Collection in Falmouth

**For information, including a complete itinerary, please visit
www.woodenboat.com**

**To book your space or to request further details contact Linda at
Borton Overseas, 1-800-843-0602, ext 112; linda@bortonoverseas.com**



Brought to you by WoodenBoat



WoodenBoat

41 WoodenBoat Lane • P.O. Box 78
Brooklin, ME 04616-0078
tel. 207-359-4651 • fax 207-359-8920
email: woodenboat@woodenboat.com
website: www.woodenboat.com

PUBLISHER Carl Cramer

EDITORIAL

Editor Matthew P. Murphy
Senior Editor Tom Jackson
Assistant Editor Robin Jettinghoff
Technical Editor Maynard Bray
Boat Design Editor Mike O'Brien
Contributing Editors Jenny Bennett,
Harry Bryan, Greg Rössel
Copy Editor Jane Crossen

ART & PRODUCTION

Art Director Olga Lange
Advertising Art Director Blythe Heepe
Associate Art Director Phil Schirmer

CIRCULATION

Director Richard Wasowicz
Associates Lorna Grant, Pat Hutchinson

ADVERTISING

Director Todd Richardson
Manager Laura Sherman
Sales Administrator Whitney Thurston
Classified Wendy E. Sewall
Sales Associates
EAST COAST & MIDWEST:
Ray Clark, 401-247-4922; rgclark@cox.net
NEW ENGLAND: John K. Hanson, Jr.,
207-594-8622; john@maineboats.com
WEST COAST AND WESTERN CANADA:
Ted Pike, 360-385-2309; brisa@olympus.net
INTERNATIONAL: 207-359-4651;
advertising@woodenboat.com
WOODENBOAT MARKETPLACE:
Tina Dunne, tina.dunne@woodenboat.com

RESEARCH

Director Patricia J. Lown
Associate Rosemary Poole

BUSINESS

Office Manager Tina Stephens
Staff Accountant Jackie Fuller
Associate Roxanne Sherman
Reception Heidi Gommio

THE WOODENBOAT STORE

www.woodenboatstore.com
1-800-273-SHIP (7447); fax 207-359-2058
Catalog Manager Ann Neuhauser
Associates Jody Allen, Elaine Hutchinson,
Chet Staples

WOODENBOAT BOOKS

www.woodenboatbooks.com
Book Publisher Scot Bell

WOODENBOAT SCHOOL

Director Rich Hilsinger
Business Manager Kim Patten

WEBSITE

Manager Greg Summers

Chairman & Editor-in-Chief Jonathan A. Wilson
President and General Manager James E. Miller

Copyright 2014 by WoodenBoat Publications, Inc.
All rights reserved. No part of this publication may be
reprinted without written permission from the publisher.
CONTRIBUTIONS: Address all editorial communica-
tions to **Editor, WoodenBoat, P.O. Box 78, Brooklin,
ME 04616-0078.** *WoodenBoat* is a largely reader-written
magazine. Care is taken with unsolicited contributions,
but we are not responsible for damage or loss.
PRINTED IN U.S.A.

Connection and Collaboration

For more than 50 years, the iceboat type that appears on the cover of this issue lay hidden from most of the world. The design, called the Monotype XV, had been drawn in Estonia in 1932, and its popularity had spread among the countries fringing the Baltic Sea before World War II. With the closing of the Iron Curtain, the boat and its drawings fell into obscurity. Bill Buchholz explains all of this beginning on page 54 with a story of inspiration and odyssey that led him to build his Monotype XV iceboat, **FAST PIECE OF FURNITURE**.

On the other side of the planet, at the same time the Monotype fell into obscurity, three talented and resourceful brothers in Australia were beginning the unlikely construction of a massive vessel that would change the fishing industry in their area. In 1944, 26-year-old Bill Haldane had written to the Western Boat Building Company in Tacoma, Washington, to order plans for a new state-of-the-art fishing boat. He waited three long months just for his letter to be delivered. The delivery of that letter, and the plans that followed in the reply, catalyzed the construction project in Port Fairy, Victoria. It would take many years to build the boat, and another several to fine-tune its fishing gear in collaboration with a pair of American tuna fishing experts—brothers who traveled to Australia to work with the Haldanes. Bruce Stannard tells this rare story of tenacity and technology transfer in his article beginning on page 84.

The Haldane brothers' experience in obtaining plans and information stands in sharp contrast to that of Bill Buchholz, who learned of the Monotype XV on the Internet, made his connections there, downloaded his plans from the class's website (www.monotype-xv.org), and built his boat with this readily available information. Likewise, Ross Lillistone used the marvel of easy global communication when he wrote his article on Phoenix III, a versatile 15' daysailer whose construction is detailed in this issue—and two subsequent ones—beginning on page 72. Ross took an uncommon approach to the illustration for this series, soliciting photographs from builders on three different continents and wrapping them together into a cohesive whole.

It's tempting at times to think that the allure of shiny new technology is eclipsing interest in the time-honored skills of good, old-fashioned wooden boat building. But when you consider the effort required to move information around the planet just a half century ago, as compared with today, and then read the story of the creation of an 80-year-old iceboat design that was nearly lost to the Cold War, it's clear that there's unprecedented potential for connection and collaboration—even in the world of traditional boats.



LETTERS

Why Not Hydraulic?

Dear *WoodenBoat*,

David Gillespie expended an enormous effort on repowering the launch VAGABOND with an electric motor. Why didn't he think of hydraulic powering? This requires installing a fast-turning diesel engine, such as a four-cylinder used in pickup trucks, somewhere in the boat. That engine turns a hydraulic pump that runs a motor that turns the propeller shaft. The rpms can be adapted to the big propeller, switching from forward to neutral, and reverse is equally simple as with the electric system, and all the external power it depends on is from diesel oil—which has to be taken on anyhow for that small electric motor that was installed.

Hydraulic systems require an oil reservoir, which could be built into the space now taken up by the batteries. They need a cooling device for the oil and the engine, which now must be present anyway to run the "emergency" diesel. All parts are off-the-shelf except perhaps the oil reservoir, which might have to be custom made. Marine engines

originally used in small trucks are easily available.

This combination, in my judgment, would have come out much cheaper and would be more failure-proof. There's no need to buy expensive new batteries after a few years, and hydraulic systems are long-lived. I would have loved to have contributed to building such a system.

Frank Sarnighausen
Itirapina, State of
São Paulo, Brazil

David Gillespie replies:

The biggest problem in the VAGABOND repower was lack of space. The space was 23" wide and 16" high (off the engine beds). There was no small diesel that would fit the boat, and, unless the diesel needed for the hydro pump was very small, it would not fit. There would be a requirement for a generator to power the rest of the boat, so that space would have been lost anyway. Would a hydraulic system have been possible? Maybe. But I did not want to have a diesel engine running all the time. And I did not

spend much time looking into this idea, and would have loved to talk with Mr. Sarnighausen earlier in the process—but I did not know him. His idea is a good one, which I may try in the next project.

BOUNTY Revisited

I am a graduate of Maine Maritime Academy, and was there when Andy Chase arrived. I had three classes with him then. His article on the sinking of the BOUNTY (WB No. 233) was thought-provoking and interesting. I was a veteran of military service before MMA, and his comments were applicable to that experience, also.

Lester W. Jacobs
Fletcher Tech Com College
Houma, Louisiana

Dear *WoodenBoat*,

I was quite impressed by Capt. Chase's piece on the BOUNTY. Analysis of such events and the review of methods for sound decision making are priceless. I find this style of article helps breed the introspection necessary for us to look at our personal decision-making techniques with

— From the *WoodenBoat* Forum —

The Nomans Land Boat

FAR & AWAY

Jack Dillon: WB No. 235 features Tom Jackson's boat FAR & AWAY on the cover, and a great article entitled "Wood in the Rigging."

Hal Lavers: What a sweet double-ender. Anybody know who the designer is? Did Tom Jackson design her?

Tom Jackson: FAR & AWAY's hull is faithful to the No Mans Land boat Chapelle documented from a Beetle builder's model. It's from Plate 63 in *American Small Sailing Craft*. It is a lines-only drawing, and the original boat was probably intended for light basket construction, using $\frac{3}{8}$ " lapstrake planking. I used $\frac{1}{2}$ ". I built it right-side up over molds, then installed sawn, joggled frames, Scandinavian style, which was a bit like fitting 56 breathhooks. The coaming arrangement, together with the half-deck layout and the mast partners and mast gate, are from Bristol Bay sailing gillnetters. The

athwartships floorboards were inspired by Swedish practice. The dipping-lug mainsail was inspired by French practices, and I used the excellent *Chasse-Marée* sailmaking book for many of the sailmaking techniques.

The rig is unusual, mainly because of the dipping lug sail. In practice, I sail with the mainsail as a standing lug most often, especially when short-tacking or when sailing solo. On long boards, I'll dip the sail and take the tack to the stemhead, which is a great gain in power. Some consider the ketch rig a heresy. I actually like having both sails in my field of vision. I like having the mizzen sheet right in front of me, especially because this rig involves a lot of sheeting.

Gareth: FAR & AWAY is a great example of a deceptively slippery boat.

Tom Jackson: The boat has proved quite fast—surprisingly fast. But it takes some getting used to. My wife has

become quite a good helmsperson, and she has come to trust the boat quite a lot, although she does not like heavy weather. We sail fairly conservatively. She handles the helm, and I handle the rig. I also really enjoy sailing solo, and I have a little bit different sheeting setup in that case, with the sheet coming across the cockpit to a keel cleat on the windward side. So, the tiller, mainsheet, and mizzen sheet are all very close at hand. In a double-ender, mizzen sheeting is problematic. I like a good, solid tiller, and the mizzen has the advantage of not needing a boomkin, or an offset, or a big swoopy tiller or a push-pull arrangement. I entirely like the way the setup works. Downside: my crew has been in open mutiny about the mainsheets whipping around. You get used to that; mostly it's about knowing where to put yourself and when.

Read the complete thread at
www.woodenboat.com.

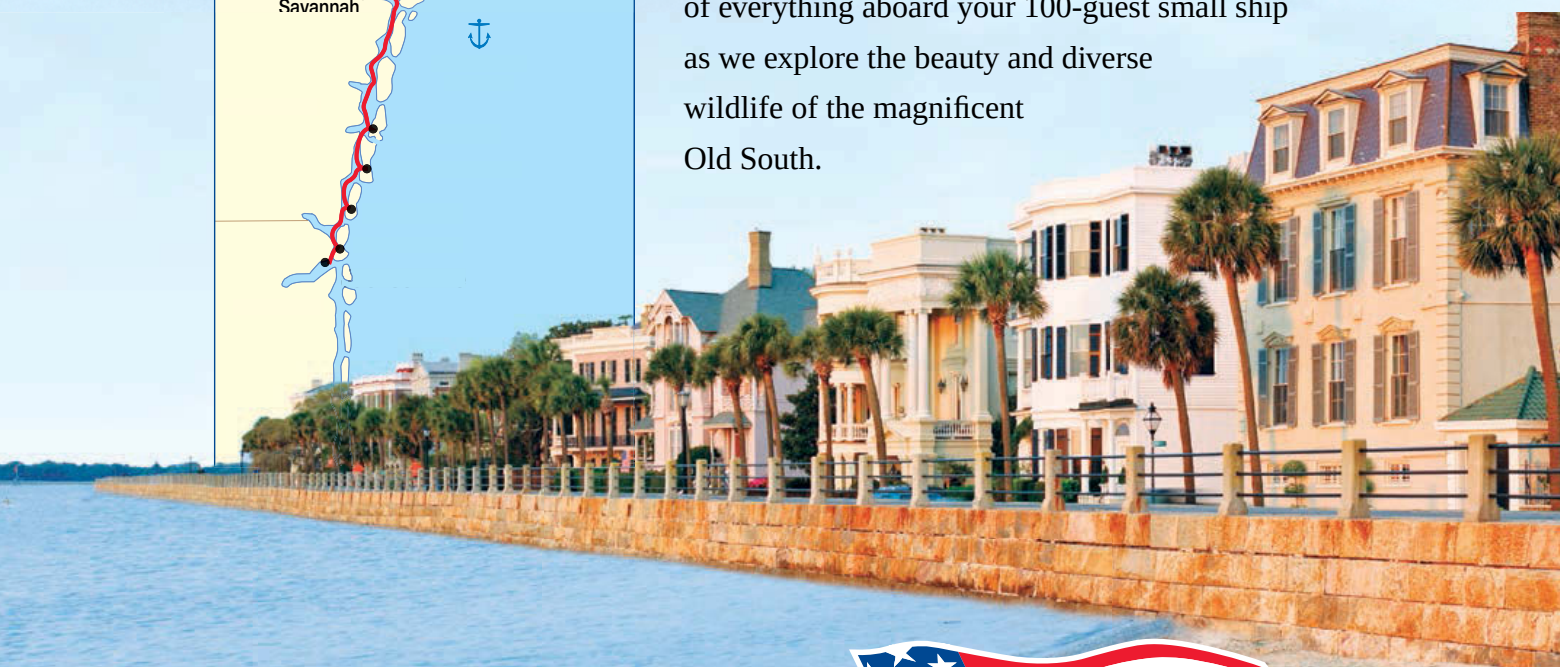


INTRACOASTAL WATERWAY

Southern Charm



The historic cities of the Southeast United States are linked by a network of rivers and bays known as the Intracoastal Waterway. Experience Southern charm at its finest on an 8-day cruise to the iconic cities of Charleston, Savannah, and Jekyll Island. You will receive the finest of everything aboard your 100-guest small ship as we explore the beauty and diverse wildlife of the magnificent Old South.



Toll-free

1-866-229-3807

Call for a free brochure. Open 7 days a week

www.americancruiselines.com



Small Ship Cruising Done Perfectly™

scrutiny. I would like to see more articles that help us improve our seamanship. Well done.

Tris Tarantino
via e-mail

Getting Started: Knives

Dear *WoodenBoat*,

I enjoyed reading your *Getting Started in Boats* on knives. On GAZELA (www.gazela.org) we do not use folders; the lock could break at a most incon-

venient time. And we always have a lanyard fastening the knife to us; a knife falling from aloft is serious.

Michael Carlsson
via e-mail

Dear Editor,

Regarding *Getting Started in Boats* in the November/December issue: I realize the picture on page 2 was to illustrate a possible use of a knife. However, there were several things lacking in the presentation,

or which could have been noted in the caption in the effort to keep the picture clear.

1. The crew does not have on PFDs or safety lines, nor are jacklines present.

2. The captain of the boat should have told people what to do. The scene looks like a mad rush to do something. I usually sail with my wife, so do not have crew problems. If I have other crew, I keep them in the cockpit to help or if necessary make sure they have a PFD and know what to do before they go forward.

3. Cutting the starboard sheet might not be smart. If the crew goes over the rail, how do you know he will remain connected to the boat? Better to get the sheet under control by a person in the cockpit, pull him back, lie on top of him, or get a wrap around a stanchion, before he goes over.

4. I do not like to sail with heavy clothes on, particularly dungarees or similar construction-type clothes. When it is cold I layer similar to skiing. In warm weather I like to sail with bright orange shorts on. A body in bright orange is a lot easier to find than one with dressy blue or brown pants.

Tom Jackson and crew appear to be wearing inflatable PFDs in the cover picture. That is quite a boat, it really looks good.

Bill Hill
via e-mail

Erratum

In the article "Ironwoods" in WB No. 235, the provenance of two hardwoods was misstated. Bull oak (*Allocastrum luehmannii*) is from Australia, and greenheart (*Ocotea rodiei*) is from South America.

FOR YOUR SAFETY

Working in a boatshop requires certain considerations to ensure your safety and health. We urge you to exercise caution throughout the process. Before using a power or hand tool with which you are unfamiliar, consult operating instructions. Before using any toxic material, consult the Material Safety Data Sheet for that substance. Above all, protect yourself from improper use that may lead to permanent injury or death.

—Eds

THE Apprenticeship
est.1972

TRADITIONAL BOATBUILDING AND SEAMANSHIP

NEW One Year Program

APPRENTICESHIP

NEW A New Program for New Boatbuilders
CORE | Concepts of Wooden Boatbuilding
Now enrolling for September—May 2014/15
Application deadline April 15

ADVANCED | New Construction & Restoration
Apprentice to Master Builders
Application deadline March 01

INTENSIVE | 12 Weeks
WORKSHOPS | Year-Round

643 Main Street, Rockland, ME 04841

Call Today! (207) 594-1800 www.apprenticeship.org

Visit
nwmartime.org
for more
information!

Come Visit Us!

- ⚓ Day-long Boating Skills Intensives
- ⚓ Week-long boat building classes
- ⚓ Largest Wooden Boat Festival on West Coast
- ⚓ Classic Mariners & Shipwrights regattas
- ⚓ Learn-to-sail youth programs
- ⚓ US Sailing Keelboat certification classes
- ⚓ Radar & Navigation classes in state-of-the-art Pilot House
- ⚓ Beautiful waterfront facility in historic Victorian seaport

Port Townsend, Washington



Photo by Mark Saran



Fairing compounds
Laminating compounds



 **east system**™
EPOXY

Tri-Tex 
CO. INC.

1-800-363-2660
www.tritex.com



WE WEAVE AND WAVE TOGETHER

NEW YORK
BOAT SHOW

— ★ ★ ★ —
*Italian design, USA strip planking
and Indian Made*



A virtuous example of team work with the involvement of the leading countries in the pleasure boats sector and emerging nations. Under the auspices of the Ministry of Economic Development, the project is based on the work of Italy's UCINA and Confindustria Nautica, and Chantier de Pondicherry in India, for construction of an Italian-designed boat, employing the American strip-planking system, with products and accessories from the two countries, in collaboration with Politecnico di Milano and Indian Institute of Technology Madras (IITM).

The prototype was on display at the major international boat shows this past autumn (Genoa Boat Show - Italy, Fort Lauderdale Boat Show - Florida), and will be on display at the New York Boat Show, January 1-5, and also during the key boating sector events in India in 2014.



Ministry of Economic Development of Italy



CONFINDUSTRIA NAUTICA
Italian Marine Industry Association



Though the nautical enterprises of Italy and the U.S. continue to be world leaders in the sector, it is still essential that they increase their presence in new markets and that the industry further expand in developing countries like India. Such an expansion would provide an opportunity for subcontracting and would allow for an increased focus on Made in Italy and its high-quality products. The contraction of Western markets and competition from developing countries provides the premise for initiating new partnerships between both American and Italian institutions and companies, especially given that the United States continues to be the world's number one market in leisure boating. Hence the project promoted by the Ministry for Economic Development (MiSE). The ministry has appointed UCINA Confindustria Nautica to construct the prototype for an Italian-designed vessel, built using the American strip-planking system and equipped with products and accessories from both countries, at India's Chantier de Pondicherry. The prototype will then be showcased at the most important nautical trade shows in America as a prime example of collaboration between developed and developing countries. It will also be showcased at relevant Indian trade shows in order to stimulate interest in Italian design and Western quality. The prototype's strong points are tied to the fact that its production does not create competition between Italian and American companies, which build on different scales and use different materials, and that the production is feasible and attractive to the niche market of American wooden vessels as an example of collaboration between countries active in the nautical world. The project will be promoted in collaboration with IBEX and *Professional BoatBuilder*, an American publication and the event co-organizer for the main U.S. trade show in the nautical supplies and accessories sector and the wooden vessel sector. Specifically, IBEX will promote this initiative via industry publications and prominent visibility at the industry's most important trade shows. This collaboration between Italy and the United States aims to facilitate access to the American market and, more importantly, to third-party markets, starting of course with India.

Pietro Celi, general manager of MiSE: "We are very proud to contribute with a public investment to this project that finds its value and strength in the collaboration among all the partners involved. Italy and the United States, the major international players in the nautical industry, decided to approach together, among the other markets, the promising Indian one, with a shared product that matches the best of our expertise: Italian design, American technology, and Indian manufacturing. Moreover, Italy and the U.S. are not only skilled to maintain and expand their market shares in the international competition, we have a plus: the common nautical passion. One of the aims of this project is also to spread this message and 'wave together' with the nautical industry of newcomer countries."

Anton Francesco Albertoni, the president of UCINA Confindustria Nautica, expressed his satisfaction with the project, stressing the importance of the American market for the Italian nautical industry and, consequently the value of such a collaboration. "According to the data provided by the National Marine Manufacturers Association," he explained, "the North American nautical industry is growing. Last year's recovery started with outboard motor boats, while this year is showing positive signs in cabin cruisers of up to 18 meters in length. These are comforting indications, primarily because the American market is the third commercial outlet for the Italian nautical industry. After all," he emphasized, "according to the Global Order Book, published annually by *ShowBoats International* magazine, Italian companies are first among the top twenty manufacturers in the world. For us this initiative is a breath of fresh air, which encourages us to be optimistic about the sector's future and the growth of the industry."

The general coordinator of the project, professor Pier Federico Calari of the Politecnico di Milano, DATSU department, considers the experience "not only a positive one, but also one that has to have a further development of the particular technologies applied for the construction of lightweight hulls, within the important context of international scientific exchange." He would also like to express the great appreciation for the project team, composed entirely from young designers and collaborators, as follows: architects Dan Andresan and Carola Gentilini, structural engineers Marta Giangreco and Dario Barbieri.

Professor Anantha Subramanian, Department of Ocean Engineering, IIT Madras: "At the Indian Institute of Technology Madras, we see this international collaborative development to have great value for the future. The fairly complex time-consuming construction process based on an original American construction technique, the Italian design and the Indian effort in meticulously creating the boat is indeed a unique achievement. The construction uses red cedar wood in veneer and other forms and epoxy resin, finally resulting in a fine finish product, strongly resistant to deterioration in the marine environment, relatively light weight and conserving valuable timber. This has been a good, challenging project, and we look forward to future developments with highly mutual benefits."

Carl Cramer, publisher of *Professional BoatBuilder* and *WoodenBoat* magazines: "This project is very welcome in the U.S., as it represents a global development of the players and opportunities to enjoy the water in a wooden boat."

The initial presentation of the project to the United States took place at the Fort Lauderdale Boat Show in Florida at the Italian Pavilion. Following this, the model will be displayed from January 1-5 in the MiSE-UCINA Confindustria Nautica space at the New York Boat Show. In terms of the Indian market, the model will subsequently be displayed at the 2013 and/or 2014 Mumbai Show, or other relevant nautical events in India. The project will also have adequate exposure in Italy, with particular focus on its launch and conclusion. Specifically, the project's prototype was displayed at Genoa's International Boat Show in October. The Ligurian Boat Show is further testimony to the desire, on the part of MiSE-UCINA Confindustria Nautica, to give visibility to this significant collaboration by taking advantage of an important international platform.

WoodenBoat Magazine's 2014
Small Boats

COMING
TO A NEWSSTAND NEAR YOU
(and to the WoodenBoat Store)

NOVEMBER 26

Only available for a limited time.
Order a copy of *Small Boats* at
www.woodenboatstore.com
or call 1-800-273-7447 and we can ship it to you



Beware of the Butt Joint

by David Kasanof

Ceiling planking has its advantages. It strengthens the hull, gives the interior a finished look, and keeps bilge-water out of your lockers. It has its disadvantages, too: It hides stuff—which is actually good if you're an 80-lb Weimaraner. Aboard *CONTENT* we had two of these highly intelligent creatures. When I say intelligent, I mean that if one of them had suddenly begun to speak to me in understandable English, I would have been startled but not amazed.

I know you're dying to know what kind of stuff two large dogs would want to hide behind a boat's interior planking. Based on what we found—bones, food scraps, candy wrappers—it looked to us like they were bringing back anything they could steal from the garbage cans and dumpsters around the boatyard. It ended up on our boat, behind the ceiling. They knew we frowned on thievery, so they hid the proceeds of their looting capers until they could enjoy their booty at leisure. Our ceiling stopped short of the forepeak, and our master criminals probably found an opening there. At any rate, that's where I found most of the beef bones. The melon rings and hard-boiled eggs eventually showed up on the bilge pump strainer.

I can't be sure how these animals were able to hide this stuff and then recover it, because I was never able to catch them in the act. In addition, I do not have a clue, to this day, of the solution of the Great Cherry Pie Mystery.

It began one morning in the anchorage in Block Island just a morning's sail east of Long Island's Montauk Point. We were anchored there and enjoying the morning when a Boston Whaler came alongside with pastries for sale. We bought a whole cherry pie, promising to return the aluminum plate in which it had been baked. Secure in the knowledge that the dogs were on deck, I went below, grabbed our favorite china plate, returned on deck, transferred the pie to it, and returned the aluminum

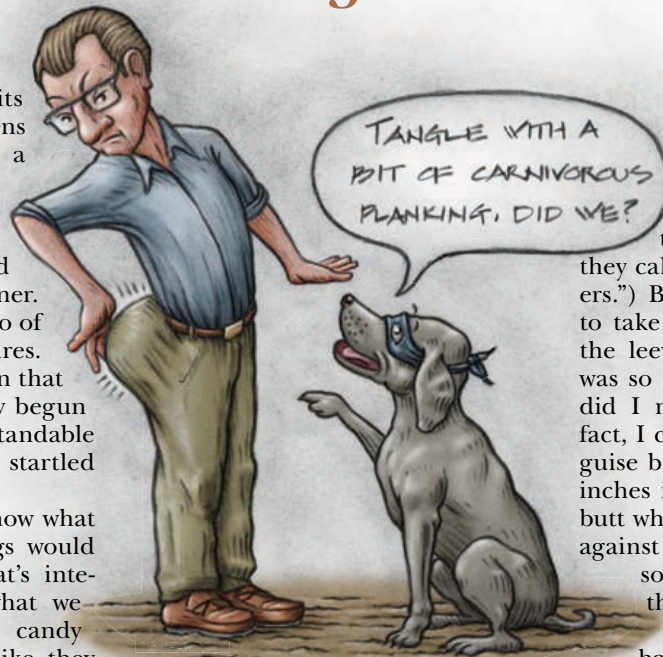


plate. Then I took the pie below and put it on the counter in our galley. I was confident that the dogs were still on deck, so I went back up topside for some additional morning relaxation. After all, the dogs were still on.... Oh my God! Where are the dogs!?

I dove down through the main hatch just in time to see the two culprits, crouched in the engineroom, licking cherry-pie slobber from their muzzles. Obviously, they had teleported themselves below and hidden in the engineroom before I put the pie in the galley. But what had they done with the plate? Even when we looked with a mirror and flashlight, we could not find where they must have hidden that plate behind the ceiling. Not then. Not ever. They couldn't have thrown it overboard and we never found it below. Apparently ceiling provides a better hiding place than anyone might imagine.

Despite this disadvantage, I want to stress another function of ceiling that one overlooks at one's peril. If that sounds like an exaggeration, dear friends, just give ear to my sad tale, which I preface with a warning: If you intend to sleep in the fo'c's'le of an old wooden boat with no ceiling in that area, keep your butt away from the planking. I learned this decades ago on a tired old 60' schooner on which I had agreed to serve as one of

the deck apes. That boat was a true floating gymnasium—gaff-rigged on both masts and carrying a 15' bowsprit. (The old-timers know what they were talking about when they called these things “widow makers.”) By the end of my watch I had to take the windward bunk because the leeward one was full of gear. I was so tired that I didn't mind. Nor did I mind the lack of ceiling. In fact, I considered it a blessing in disguise because it gave me a few extra inches into which I could wedge my butt while bracing myself by pushing against a pile of sail bags. I know it sounds uncomfortable, but in those days I was easy to please.

I must have drifted into a half-asleep state when I became foggishly aware that we were coming about. I also became aware of a slightly stinging sensation in my nether region; the sensation grew less and less slight as the old hooker made her stately turn onto the other tack. The pain seemed to pulse in time with the plunging of the bow into the oncoming waves.

Suddenly, I realized what had happened and that realization brought me fully awake. On the previous tack the windward shrouds had pulled the planks apart so as to open the seams enough to allow a pinch of my rear to enter that enlarged seam. I tried to pull free but it was no dice. I was being bitten in the ass by a 75-year-old schooner. To make matters worse, the skipper seemed atypically obtuse and even a little hard of hearing when I tried to make him understand that it was imperative that we go about again so that the windward seams would reopen and set me free. Perhaps his grasp of the situation would have been quicker if he hadn't been laughing so hard. When he did release me, I had a blister the size of a weather balloon and spent the rest of the cruise standing up.

The incident gave me an increased respect for ceiling planking. In addition to its aesthetic and utilitarian virtues, ceiling protects the unwary from carnivorous hull planking. 

DIY HOW-TO DVDS

Available Exclusively at www.sailrite.com



There is a ship in every bottle!

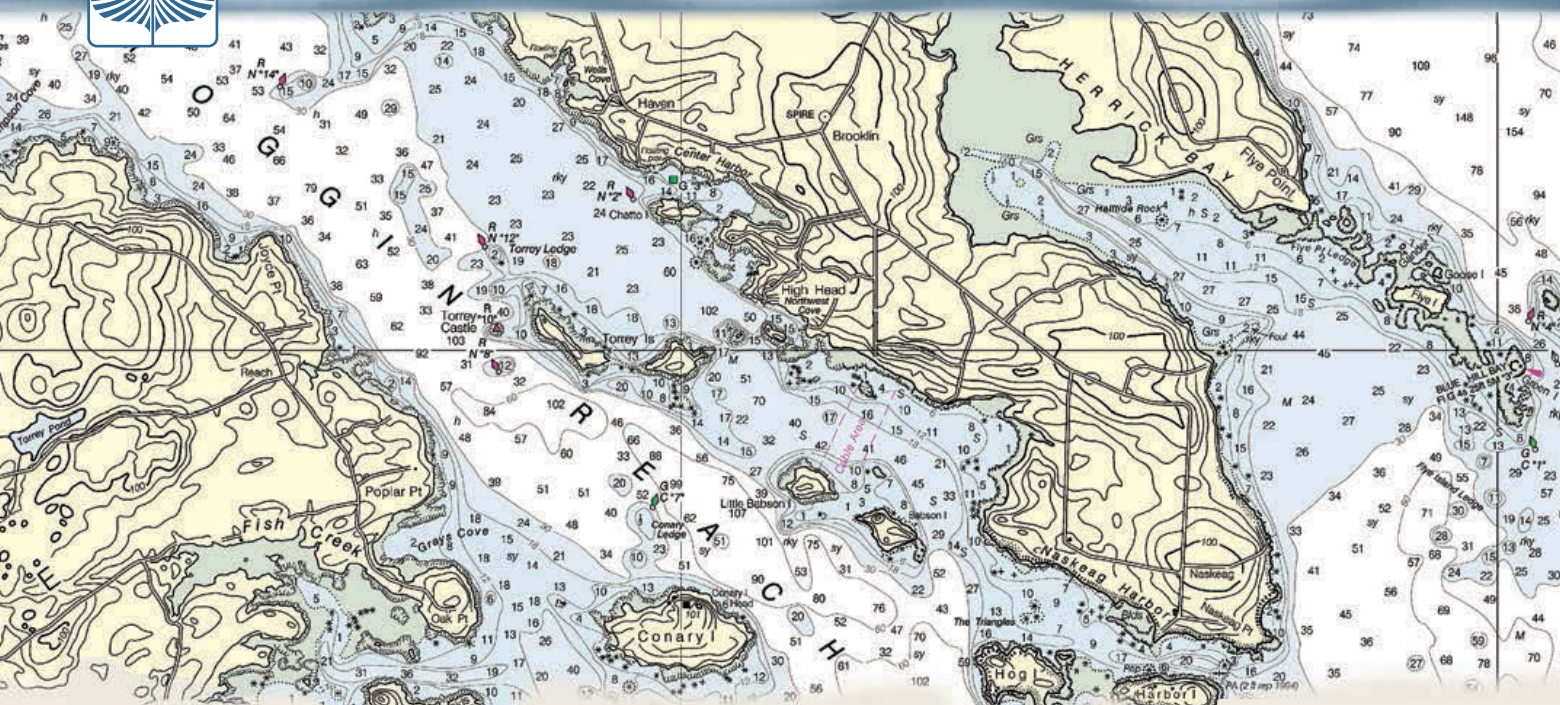


System Three laminating resins, high performance adhesives and fairing putties represent years of research, providing you with the most reliable, easiest to use epoxy products in the industry.

Pinguino Sport 13' photo courtesy of Pygmy Boats Inc.

SYSTEMTHREE

Helping You Put It All Together
systemthree.com



For generations, U.S. mariners have looked to charts printed by the Federal government, but that era ends soon. The representative chart shown here—the waters off WoodenBoat’s headquarters in Maine—was printed from a downloaded PDF file.

NOAA

End of an era in chart making

by Tom Jackson

There is something endlessly satisfying about rolling out a new chart. It’s an invitation to explore, tempered by caution in the details. Little wonder that mariners let out something of a collective moan when the **U.S. National Oceanic and Atmospheric Administration** announced in fall 2013 that **lithographic printing of its navigational charts**—a tradition that dates back to 1862—will end this April. NOAA put the changes down to declining demand, gains in electronic and print-on-demand charts, and “federal budget realities.”

It’s not the end of the world. Commercial mariners are still required to carry paper charts, which will be with us in one form or another at least as long as those rules hold. Most prudent navigators, whether commercial or recreational, have the good sense to back up whatever electronic system they’re using with traditional tools, all of which are useless without paper charts. NOAA lately has been experimenting with a variety of new ideas, some of which are very interesting. Booklet Charts for small-boat users,

for example, show some promise. Last year, NOAA announced a nautical chart app for Android tablets, and the idea may resurface again. Downloadable PDF charts are available as an experiment for a limited time, and they also may reappear. Downloadable electronic charts have long been available for various navigation systems used on large boats. For printed charts, NOAA will nudge customers toward commercial vendors who will print them to order.

Most yacht skippers these days wouldn’t be caught dead without a high-end navigation system. I crewed on a racing yacht that had screen displays not only for the helmsman but also on both sides of the binnacle, with another at the navigation station below, where Internet access allowed, among other things, three-dimensional modeling of the Gulf Stream in real time. In one surreal moment, in a dense fog under power, I noticed from the helm that every face was buried in a computer screen. One of the technical sessions at IBEX (International BoatBuilders’ Exhibition) a couple of years ago was also an eye-opener, showing how close we are to wireless integration of marine electronics—and the ability to manage an entire motoryacht from the foredeck using a smartphone. But electronic systems can fail, or the guy who really knows how to use it all can be out of commission. I

know from direct evidence that a phone can slip out of a shirt pocket and drown in bilgewater. In a knockdown or a full capsized, precious systems might be just a little too “precious.”

For navigating the old way, by preference or as backup, commercial chart book providers (such as Maptech, www.maptech.com) will continue their publications unabated. Chartbooks can often be a practical choice and more convenient than large NOAA charts. Individual fold-up charts cover popular cruising grounds succinctly, often on both sides of water-resistant paper, which ends up also being cheaper than a succession of traditional charts.

For the most accurate paper charts, print-on-demand seems logical. NOAA’s argument is that such charts are always the most up-to-date. But it also could mean ordering charts well ahead of departure, not swinging by the marine supply store when the need becomes apparent or after the dog rips up a favorite chart. More people will probably leave the dock without them.

Strangely, NOAA’s website steers buyers to only two providers, or “NOAA-certified printers,” in the entire United States: OceanGrafix and East View Geospatial, both based in Minnesota. It’s also a bit bizarre that NOAA’s announcement completely blindsided maritime professionals. Here in Maine, Hamilton

Marine, which is an excellent chandlery, knew nothing of the pending change until NOAA's press releases went out. Phil Dion, who handles charts and navigation electronics in the firm's Searsport headquarters, said the company as of November hadn't had time to analyze what the change would mean for them. "We're still up in the air about it, and we haven't had time to digest it," he said. One option he mentioned was investing in a large-format printer of the store's own. These NOAA charts, created with public financing, are absolutely in the public domain. There has always been a public-private symbiosis, with the goal of disseminating accurate charts as widely as possible. Anybody should be able to print them.

Meanwhile, NOAA's other options are worth a look. During the 2013 season, I gave the new Booklet Charts a try. I found them useful for close-up views—supplementing my handheld GPS. But the pages have to be kept dry, which can be difficult on an open boat. The binder itself has to be weather-proof. Unlike typical chartbooks, not all of the pages have compass roses. But what is really missing in the Booklet Chart, just as in any small handheld GPS display and many chartbooks, is the big picture. Something more is essential. When planning a long crossing or strategizing routes based on wind and weather, the traditional NOAA charts covering a larger area really shine. The new PDF charts—and I downloaded quite a load of them while they were available—can help. They can be

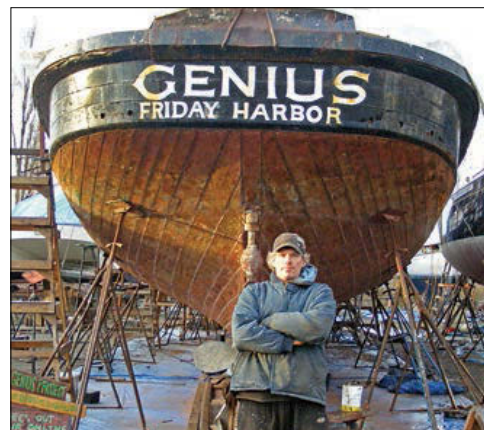
examined on the computer or cropped and printed for use. But the files are large and the process is cumbersome. I often plan my routes at home, then transfer information to tighter-focus charts for use on the boat, and for that there is no substitute for a real chart. Even if I have a chartbook, I usually take folded-up charts along.

Paper charts, of course, have a long and honored tradition. The charts and coastal views made during Capt. James Cook's Pacific explorations in the 1700s were so well done that they were still in use during World War II, often as the only charts available. Chart making on that level is an art form. In a fine bit of irony, one of the best ways to view historic paper charts today is—where else?—online. Browse the David Rumsey Map Collection (www.davidrumsey.com) in California or the Osher Map Library (www.oshermaps.org) in Maine for a feast of maps, from the fabulous to the outright fraudulent. Each one is an insight into the maker's conception of the universe, or at least a corner of it.

The conception of the universe that I regret is the one in which faces are all glued to computer screens. Without practice, the instincts of watchfulness and listening intently are poorly honed, and valuable skills can wither. In our conception of the universe, we are blips on a screen. We always know precisely where we are and too often have lost any clear concept of why we've come there.

Around the yards

■ "The **Antique Boat Museum of Clayton, New York**, is midway through the **restoration** of the iconic **runabout PARDON ME** at **Brooklin Boat Yard** in Maine," Doug Adkins writes after visiting the project from Seattle, Washington. "Designed by John Hacker and built by the Hutchinson Boat Works in 1947, the perfectly proportioned, massive 48' triple-cockpit is powered by her original, newly rebuilt 1,350-hp Packard 4M-2500 V-12 supercharged engine. Originally fitted in sets of three to World War II PT boats, the engine has been completely restored by renowned engine rebuilder Bob Mishko of Rocky Summit Performance in Bean Station, Tennessee. Brooklin Boat Yard has been entrusted with rebuilding the mahogany bottom and selected frames. For that task, she has been turned upside-down after the removal of her engine



JASON CROSBY

GENIUS, a 68' purse-seiner built in 1920, is being brought back to life by Jason Crosby, whose family owned the boat for 70 years. The work is being done at the Port of Port Townsend, Washington.

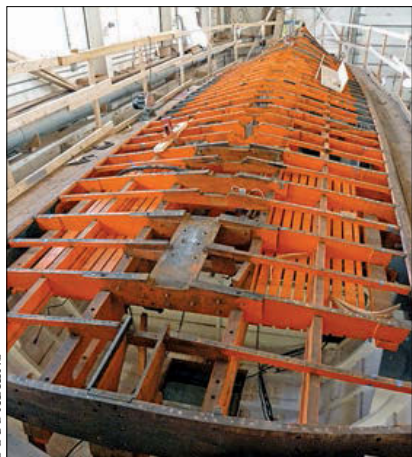
and portions of a remarkable interior, which includes a galley, enclosed head, and bunks for four—remember, this is the world's biggest runabout.

"After much discussion between the museum and Brooklin Boat Yard concerning the best way to restore her originally double-planked bottom, she was rebuilt with three layers of $\frac{3}{16}$ " sipo, an African mahogany. The first layer was screwed to the frames and the top two layers set in epoxy. Todd Skoog, head carpenter on the project, says he is delighted with the strength restored to the 66-year-old hull and her prospects of exceeding 60-knot speeds once again.

"Her engine was reinstalled by Brooklin Boat Yard in November, and sea trials will be held in Maine. She will be ready for her formal relaunching next spring in Clayton and will be an active centerpiece for the museum's 50th anniversary Antique Boat Show in August."

Antique Boat Museum, 750 Mary St., Clayton, NY 13624; 315-686-4104; www.abm.org. Brooklin Boat Yard, 44 Center Harbor Rd., Brooklin, ME 04616; 207-359-2236; www.brooklinboatyard.com.

■ The **fishing vessel GENIUS**, long familiar among Puget Sound's purse-seining fleet, has been **hauled out** at the **Port of Port Townsend, Washington**, for significant **restoration** work. The boat, built in 1920 at the Skansie Ship Building Company in Gig Harbor (see WB No. 204), was purchased by **Skansie descendant Jason Crosby** for \$3,010 at auction in Friday Harbor in the San Juan Islands. Crosby grew up in the San Juans, where he and his twin brother, Christopher, starting fishing aboard GENIUS at age 12. "The boat was



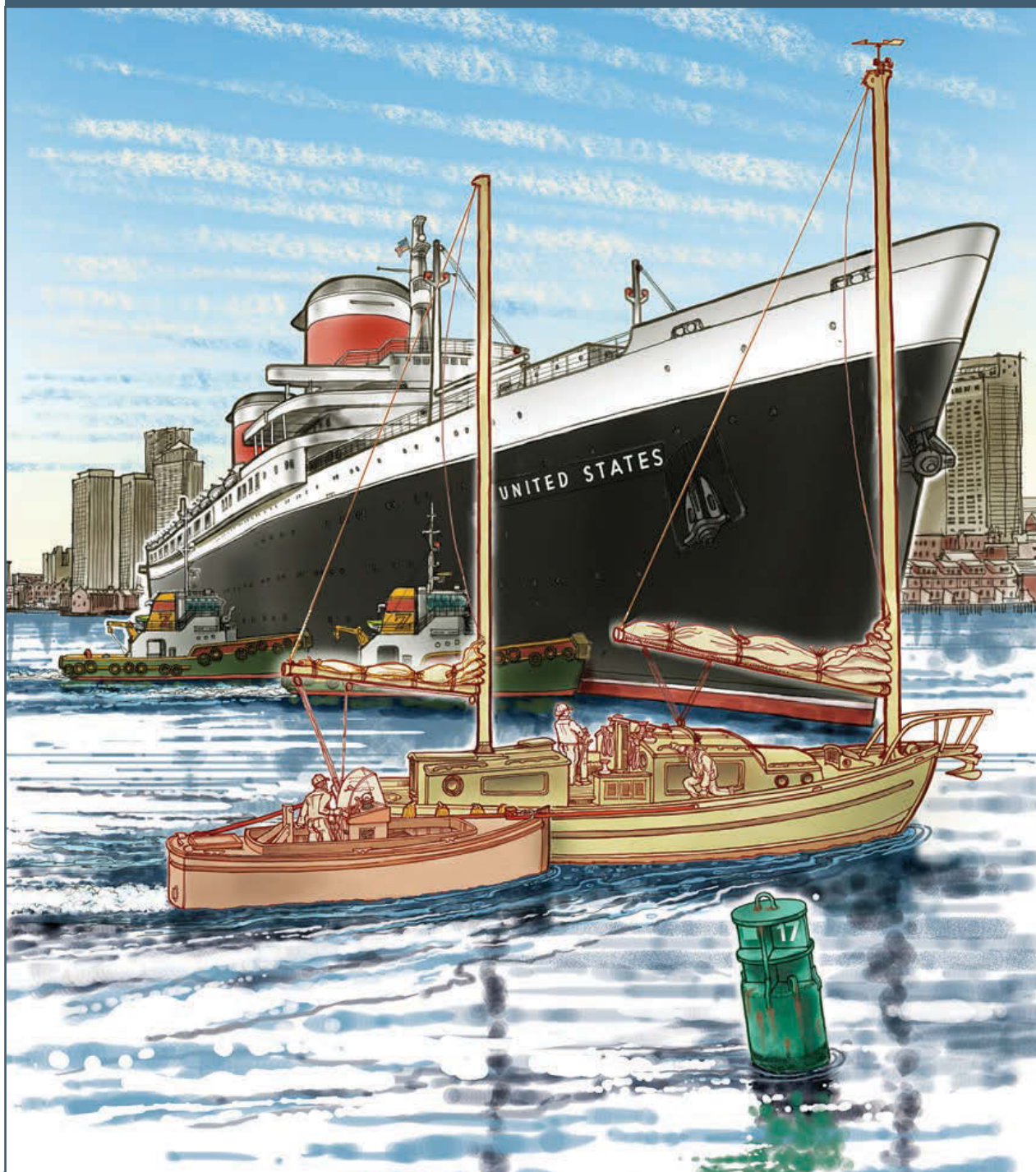
DOUG ADKINS

PARDON ME, a 1947 John Hacker-designed 48' runabout, is being rebuilt at Brooklin Boat Yard in Maine for the Antique Boat Museum of Clayton, New York. The V-12 Packard engine, rebuilt by Bob Mishko of Rocky Summit Performance in Tennessee, was reinstalled in November 2013.

GETTING STARTED IN BOATS



from the Editors of WoodenBoat Magazine

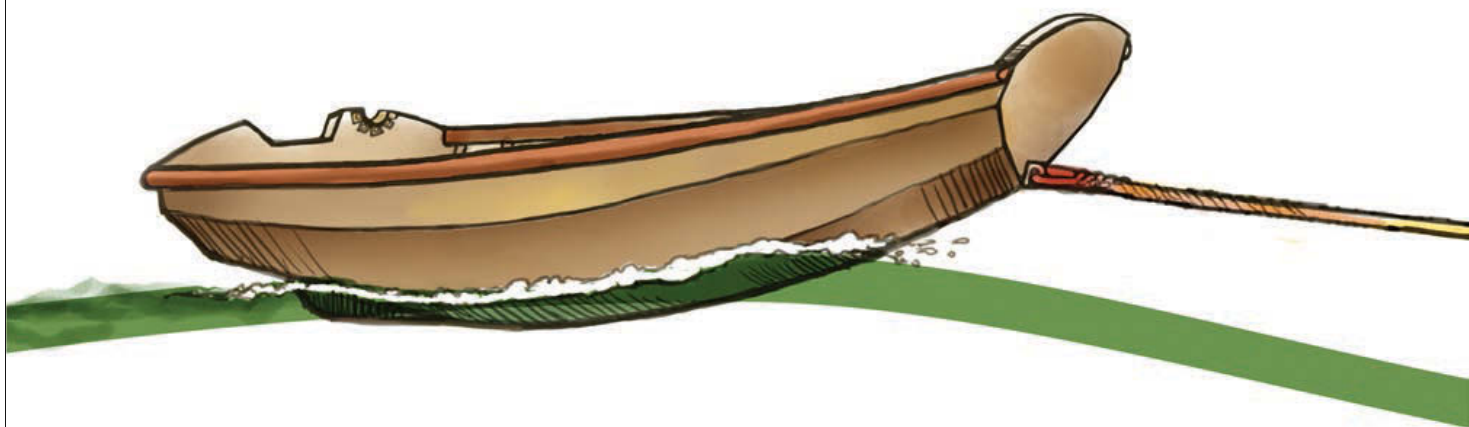


Volume 44

Towing for the Yachtsman

— TOWING FOR THE YACHTSMAN —

by Andy Chase
Illustrations by Jan Adkins



On the following pages, we'll examine the fundamentals of towing a boat. Most cruisers, whether power or sail, have a dinghy. If it can't be carried on deck, that dinghy must be towed, and towing requires a bit of care and understanding or you can end up with it swamped or capsized and lose your nice oars, life jackets, and fuel cans. On the other hand, you might also find yourself having to tow your larger boat. This might be from the dock to the mooring or perhaps from the mooring to the boatyard after an engine failure. You may also come across a fellow mariner needing a tow. Whatever the reason, this is

a project that can go very badly if not done right. For one thing, in a crowded anchorage there are plenty of obstacles, some of which are very expensive, and a towed boat doesn't always follow obediently where you lead it. A boat under tow doesn't usually stop when you want it to either, but as with most things, a little practice before the skill is needed will help a lot.

This primer on towing should get you across the harbor with a relatively small boat (say, less than 40'). If you need to tow a longer distance, or tow a larger boat, you'll need a good deal more than what we can provide in this space.

WOODENBOAT PUBLICATIONS, INC.

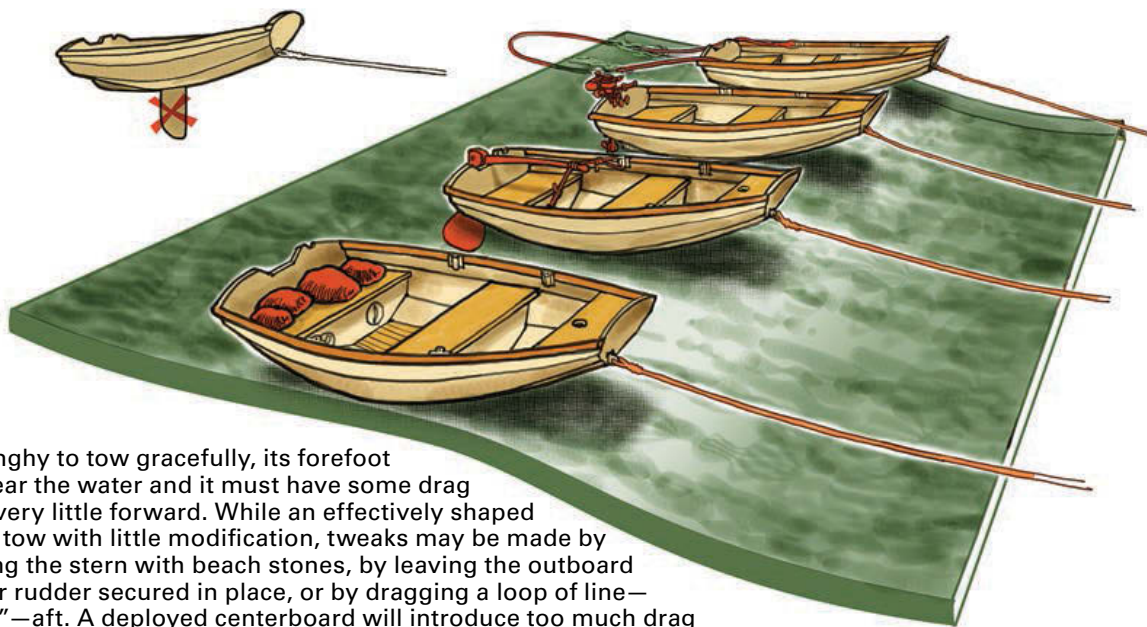
P.O. Box 78 (41 WoodenBoat Ln.), Brooklin, ME 04616 • Tel. 207-359-4651

www.woodenboatstore.com/category/getting_started

Subscribe to *WoodenBoat Magazine*: 1-800-877-5284 (U.S. and Canada)

1-818-487-2084 (Overseas)

TOWING A DINGHY



For a dinghy to tow gracefully, its forefoot must clear the water and it must have some drag aft and very little forward. While an effectively shaped hull will tow with little modification, tweaks may be made by ballasting the stern with beach stones, by leaving the outboard motor or rudder secured in place, or by dragging a loop of line—a “warp”—aft. A deployed centerboard will introduce too much drag forward, causing the boat to veer off.

The basic goal of towing any boat is to get more resistance aft than forward so it will follow in a straight line. If there is more resistance forward than aft, the bow of the towed boat (we’ll just call it a dinghy here, but it would apply to any towed object) will “dig in” and cause the dinghy to take a zigzag course. That might be annoying at best, but it could become severe enough to cause the dinghy to swamp or capsize. This is why you must put a tail on a kite to stabilize it. You need drag aft.

How do you get more drag aft? There are many ways, and here are some:

- Any method that will lift the bow out of the water, such as attaching the towline to a fitting near the waterline and pulling the dinghy up close, thereby lifting the bow further out of the water.
- Placing some weight, such as beach stones, in the stern, causing the same result (bow up, stern down).
- If your dinghy has a relatively flat bottom forward and a skeg aft, it should tow fine without modification.
- If you have a sailing dinghy with no skeg, you can secure the rudder amidships. (Leaving it unsecured will actually work, too, but it will work better if secured.) A sailing dinghy should have its centerboard raised; otherwise it will create drag too far forward.
- The same effect can be accomplished in an outboard-powered dinghy by leaving the motor down, though it will create more drag.

With the dinghy properly trimmed for towing, adjust the length of the towline so the boat is riding just up the back side of the stern wave, with the bow over the crest. If the dinghy can slide down the wave’s face, it is likely to sheer off in a direction of its choosing and potentially capsize when the line fetches up.

And finally, if you have a boat in tow that is just plain ornery and doesn’t want to follow along, trail a bight (a loop) of line (dockline or whatever) behind it. In storm sailing this is called “towing a warp,” and is in fact exactly like putting a tail on a kite.

TOWING A BOAT ACROSS A HARBOR

Your first decision should be whether to pull or push. Most tugboat operators will push their tow in confined waters in order to achieve the best maneuverability. They'll then switch to towing on a short hawser for the run out the channel, then lengthen out to a very long towline for the offshore run. If you are moving your powerless boat across a crowded harbor, you will likewise be better off pushing her, and we'll get to how to do that shortly. If the harbor is wide open with only a few obstacles, it will be simpler to tow her on a fairly short line. This will allow you some maneuverability, though not enough for close quarters.

Preparing the Towboat

Tugboats have very long, obstacle-free aft decks and their towing bitts are located well forward of the rudder. This allows the tug to turn even when there is a great strain on the towline. If you connect your towline to the stern of your boat (anywhere near or aft of the rudder) you will have difficulty turning, since the towline will restrict your stern from swinging. By towing from well forward of the rudder, the rudder can still swing the towboat's stern regardless of the direction of pull of the towline. If your towboat has an outboard motor, this may be awkward since the towline must pass above the motor. In that case you can station someone aft to help pass the towline over the motor when necessary. On a small outboard-powered boat or even a rowboat, you can tie the towline to the middle thwart. Get all obstructions clear of the towline and have someone standing by to clear any snags.

Preparing the Boat to Be Towed

Your primary goal is to get the center of drag sufficiently aft, and you can accomplish this by several means. If the center of drag is too far forward, the bow will dig in and the boat will veer from side to side, like the dinghy described on the previous page. If the center of drag is adequately aft, the boat will follow where the tugboat leads it.

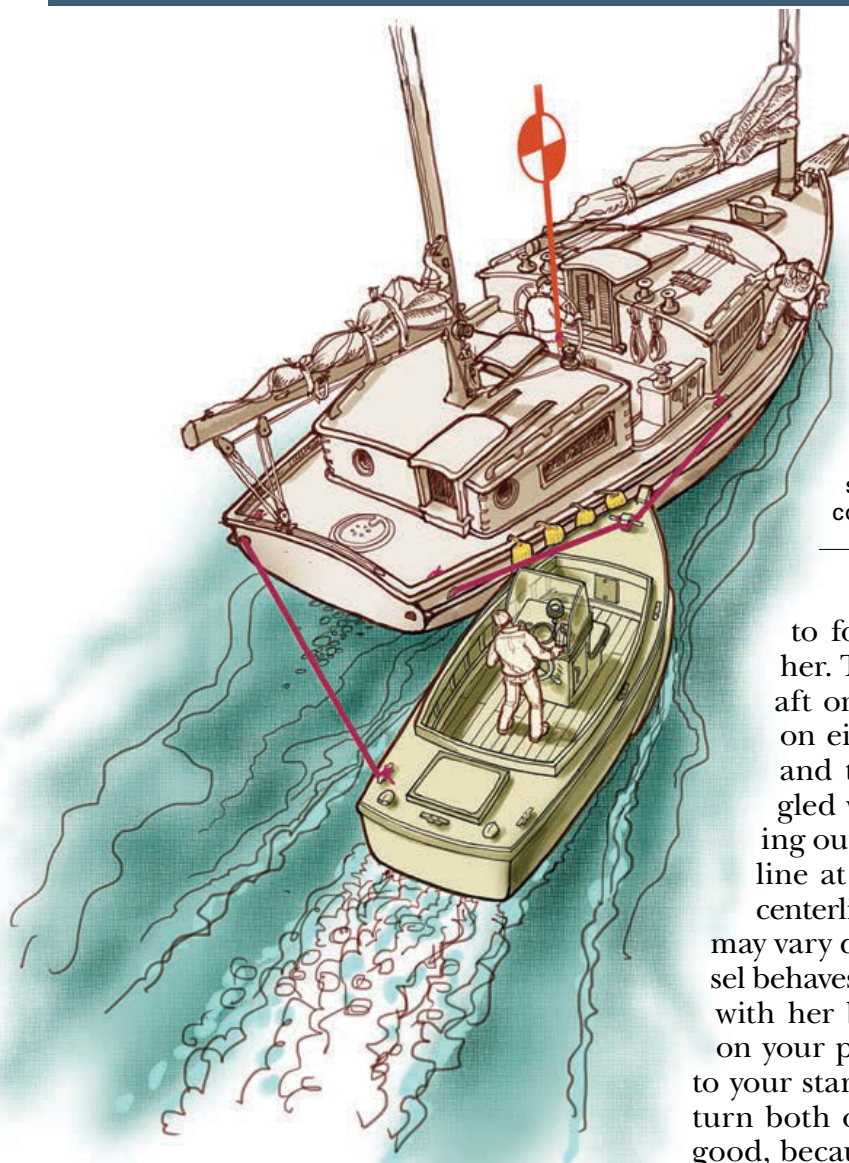
If you can, put a person onboard the towed boat to steer. Although the most effective, this solution is not always practical. If you can't provide a helmsman, you may need to experiment a little. Try towing with the rudder secured amidships, then with it left free, to see which is more effective. In the former case she will tow straighter, in the latter she should be easier to turn. If she's a centerboarder, raise the board to move the center of drag aft. If she has a deep forefoot and her bow digs in and she veers, there may not be much you can do about it except ballast her down by the stern a bit.

Once underway, take the advice of Capt. Sam Teel, ship-handling instructor at Maine Maritime Academy: "Go slow, think ahead, and be patient." Those are good rules to tow by. And remember that when you slow down, the towed vessel may catch up to, and even pass you if you're not careful. Then things can get really ugly—for instance, if the towline becomes fouled around your propeller. If there is current (or wind), it will affect the towed vessel more and more as you slow down. Anticipate.

In the end, if she doesn't tow well—meaning straight—you should probably abandon this idea and get rigged up for pushing instead.

No matter what the towing vessel is, if the point of attachment of the towline (x) is well ahead of the rudder, the boat can be steered effectively. In all of the scenarios we see here, if the tow point were moved aft to the location of the rudder, the movement of the stern—and thus the ability of the boat to be steered—would be restricted by the drag of the tow.

TOWING BY PUSHING “ON THE HIP”



In situations that require precise maneuverability, a boat should be hip-towed. The towing vessel should be secured so it does not move relative to the tow, and it should be set at an angle to the tow to compensate for drag.

to force you to simply pivot around her. The solution is to get yourself way aft on her quarter (near to the stern on either the port or starboard side), and then get your towboat's bow angled well inward and your stern sticking out. You want your towboat's centerline at a 10- to 15-degree angle to the centerline of the towed vessel. (This angle may vary depending on how the towed vessel behaves.) Now you are pushing the vessel with her bow crossing your bow. If she is on your port side, her bow will be angled to your starboard, and she will be trying to turn both of you to your starboard. This is good, because if you were parallel to her all you could do is turn to port (given her drag on your port side). Now you can turn her either way. You will be pushing her partially sideways, but at least you have control. In fact, you have so much control that you can maneuver through a crowded mooring field, or land her nicely at almost any dock, given some practice.

The most controllable way to tow another vessel, whether it is a sailboat, motorboat, barge, or floating dock, is to push it. Tugboats do this all the time, and while some are equipped to push their barges directly in front of them, it is more common for them to lash alongside the vessel or object being towed in a configuration referred to as “on the hip.”

Imagine lashing your towboat parallel to the side of another vessel, and picture what would happen when you throttle up (or reverse). You won't be going anywhere but around in circles. The towed vessel will create enough drag on one side of your towboat

The trick to making this work is getting the two boats tied up tight. You will do this with three lines: a bow line, a spring line, and a stern line. To secure these, pull up along your chosen side, well aft. How far aft will be determined by the shape of the towed vessel. You'll need a reasonably flat surface

to lie alongside, so don't get back under an overhanging stern. Place some good fenders between the two vessels.

Run a spring line from well forward on your "tug" to well aft on the "tow." This line will be taking most of the load, so make sure it goes to a stout cleat or bitt. Try to employ a line with low stretch, like a heavy double braid. Don't be afraid to oversize this line; the thicker it is, the less stretch it will have.

Now run out a bow line from your tug to the tow, angled slightly forward. Pull this line tight enough so the bow of the tug angles in a little more than the target 10 to 15 degrees, and secure it.

Finally run a line from your stern to the tow's stern and tension it (your stern may stick out past the stern of the tow, but that's fine). Put all your weight into this stern line, even using the engine of the tug to help, perhaps. The idea here is to get it as tight as humanly possible, as by doing so you are also tightening the other two lines and compressing the fenders. This should flatten your angle back to the target. When a real tugboat does this, she uses a burst of engine ahead and takes up on an extremely powerful winch aft, making all three lines sound like they are nearing their breaking points. But the more rigid the connection, the better the control you'll have. The slightest slack will show up immediately when you start to maneuver.

Depending on the exact leads of the three lines, you might choose to add another spring line running opposite to the one described above, to handle the strain of backing down, but in most situations three lines will suffice.

Maneuvering

Once you are securely connected to your "tow," you'll need to think of the two boats (tug and tow) as one vessel. If you are pulling your tow off the dock, you may find it is easier to pull her off in reverse than to

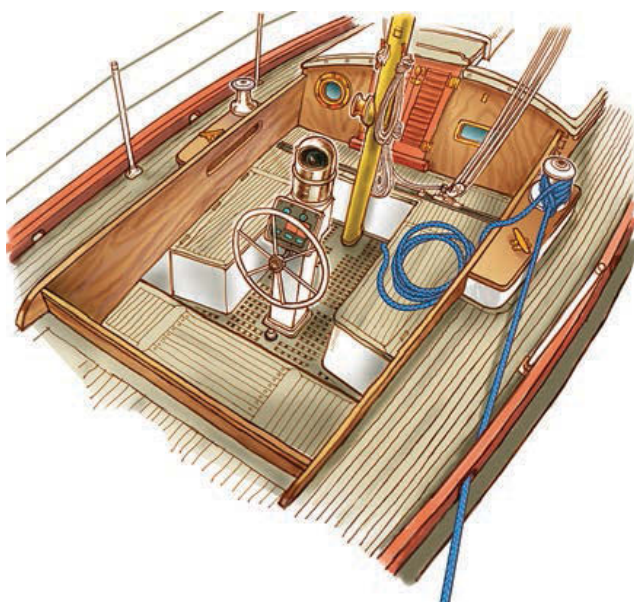
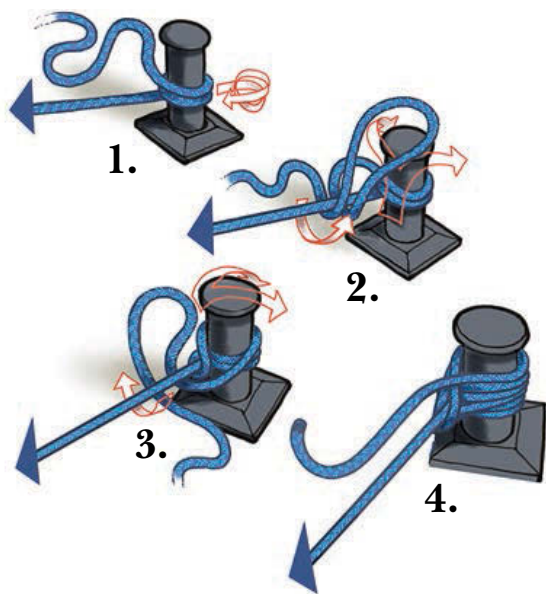
try to push ahead. To do so, start by leading a spring line aft from the boat's bow to the dock and giving your towboat a brief kick ahead with your rudder hard over toward the dock. This will swing your stern out into the stream. Then you can back out diagonally until you are far enough away to turn in the direction you want to go. Alternatively, you could hold a forward-leading spring line on the stern and pull on the tow by backing down. This will spring your bow out into the stream and you can steam away ahead.

When approaching a dock, again consider using a spring line to help land. If you gently land her bow and then secure a spring line leading aft to the dock, you can power ahead gently with your rudder hard over away from the dock, which will bring your stern in and alongside. Again, the opposite will also work: After landing the bow, lead a spring line forward from the stern to the dock and then pull gently astern against it, which will pull your stern into the dock.

It is important to remember that you are handling a vessel with the combined length and weight (and thus momentum) of both vessels. This can work for you. When approaching a dock at about a 45-degree angle, you can start backing slowly on your tug, while the momentum of your tow continues forward, causing the combined tug and tow to pivot. Because your propeller is offset so far from the centerline of the tow, you'll have quite a lot of turning power, so use it sparingly.

You'll be amazed at how much control you have after you get used to it. Don't be surprised if you find out right away that you need to tighten that stern line even more than you thought, since all lines stretch and fenders compress. Look at all the lines for chafe or bad leads that might bend a stanchion or scar the varnish. Check for fenders that aren't doing their job. Vigilance is key. And again: Go slow, think ahead, and be patient.

THE TUGBOAT HITCH



Tugboats typically have a large set of steel bitts at the bow and heavy, long lines for connecting to their tows. This combination makes it difficult to tie conventional knots or bays. The solution is to use what is known as a tugboat hitch, which allows you to secure a large line to a post without having to find the end of the line. It is secure, won't slip under extreme strain, and is always easy to untie, even with a load on it. It can be tied around a single post (such as a samson post), around a double set of bitts, or around virtually anything else. But its utility is not limited to big commercial work: A recreational sailor can use this knot to secure a line that's been wound around a winch or windlass drum and hove taut, and it's very useful for tying a mooring line to your boat or connecting a towline from another.

To describe how to tie any knot, we need a little vocabulary. There will be a standing part, a running part, a bitter end, and a bight. In this case, the standing part will be the part of the line coming

from the other boat, approaching the bitt. It may or may not have a strain on it. The running part is the part in your hand that will make the knot. The bitter end is just that—the very end of the line you are working with (as opposed to the end that is aboard the other boat). A bight is formed when you grab a line somewhere in the middle and use it, doubled, as if it were the bitter end. You can tie any knot using a bight instead of the bitter end.

To tie the tugboat hitch, start by (1) taking a few turns around the bitt, post, drum, or whatever you are using. (2) Next, grab a bight of the running part and pass it under the standing part. Take this bight out from under the standing part, form a loop, and drop it over the bitt. Snug it up by pulling on the running part. (3) For more security, repeat this process with a second bight. (4) That's it. It is simple and secure, and will not jam. The first two (or more) turns around the bitt will enable you to control the line as you undo the hitch under strain.



Getting Started in Boats is dedicated to those who are new to boats and boatbuilding. Please tear out and pass along your copy to someone you know who will be interested.

Earlier volumes of *Getting Started* are available in past issues of *WoodenBoat*, and as PDF (electronic) files, from The WoodenBoat Store, www.woodenboatstore.com

THE BOATBUILDING AND ROWING CHALLENGE

Presented by *WoodenBoat* magazine

WoodenBoat's Boatbuilding & Rowing Challenge (BARC) is a grassroots effort to involve communities and, in our specific case, high school programs, in the team-building aspects of boatbuilding and then competitively rowing one specific boat: Iain Oughtred's 22', 330 pound St. Ayles Skiff, with a crew of four rowers and one helmsperson (coxswain).

NORTH AMERICAN CHAMPIONSHIP JUNE 27-29, 2014
at the **WoodenBoat Show, Mystic, CT**

For further information: www.woodenboat.com/BARC or www.cnc-marine-hewesco.com



CHRIS PERKINS



PETER NISBET

Creating The Ship's Half Model...



Since 1790 the half-hull has been used to study hull design. Today it has become a possession to be cherished a lifetime.

For further details please visit our web site.

When the artistry becomes the mastery of form.

Half-Hull Classics



9214 15th NW
Seattle, WA 98117
(206) 789-3713
www.halfhull.com

WWW.WESTLAWN.EDU

"38 ft Cutter" • Ted Brewer • Westlawn Alumnus



LEARN BOAT DESIGN
AT WESTLAWN

- Trained more practicing boat designers than any other school
- Over 80 years of distance-learning education
- READ OUR FREE ONLINE JOURNAL



Accredited by the Royal Institution of Naval Architects



Accredited member DETC.

ABYC

Not-for-profit educational affiliate of the American Boat & Yacht Council.



Westlawn Institute of Marine Technology • 16 Deep Cove Rd, Suite W • Eastport, ME 04631
PH: 207.853.6600 • EMAIL: info@westlawn.edu

in my family for 70 years and got sold out about 15 years ago," Crosby writes. "I grew up on the boat and fished salmon for seven years on the **GENIUS**." His uncle, Gerald Crosby, owned the boat since the 1940s. The boat had undergone a reframing and refastening project during the previous owner's conversion for pleasure use. Ten years later, in 2008, she was for sale again, and by 2010 she was up for auction, much deteriorated. With professional help from Clint Thompson, Crosby has replaced additional frames forward along with numerous hull planks. The long list of projects includes remodeling the fo'c's'le and galley, replacing deck planking and recaulking, upgrading electronics and power, new hydraulics controls, and repainting, among other things. Crosby, who intends to restore the boat to fishing condition, is planning a film about the project. A crowdfunding campaign is under way to support the restoration, and a spring 2014 relaunching is anticipated.

See www.ageniusproject.com for more information.

■ **HOLGER DANSKE**, a double-ended 42'6" ketch from Aage Nielsen's board



PHILIP MYER

HOLGER DANSKE, a 42'6" ketch designed by Aage Nielsen, is undergoing cosmetic restoration in Tasmania under her new owners for her upcoming 50th anniversary.

built in 1964 by Walsted's Baadervaerft in Thuro, Denmark (see WB No. 133), has been **hailed out** for a thorough cosmetic overhaul at **Kettering Marina** south of Hobart, Tasmania. In August

2012, Philip Myer and Joy Phillips bought the boat, which is now homeported in Kettering. "**Dean Marks Boatbuilding** of Port Huon is restoring varnish on the trunk cabin, coamings, hatches, and masts so she is in top shape for her 50th birthday next year," Myer reports. It is the boat's first haulout since a thorough going-over at Walsted's in 1997.

Dean Marks Boatbuilding, +61 03-62971432 or dean.marks@bigpond.com.

■ A new organization has formed in **Turkey** to advance the cause of the nation's **wooden boat building industry**. A press release states that **Kayik Group** combines members from manufacturing, design, and engineering to draw on the wooden boat building traditions of various regions of Turkey—which has coastlines on the Black Sea, the Sea of Marmara, the Aegean Sea, and the Mediterranean Sea. "The skills and expertise garnered over centuries and handed down from father to son and through craftsmen's guilds have been transformed by modern technology in the last 30 years," the organization stated. The objective of Kayik is to emphasize "the importance of wood as a yacht-building material"

GREAT LAKES BOAT BUILDING SCHOOL

Here today.



Class of 2013



CLASSIC WOODWORKING
TRADITIONAL & COMPOSITE
WOODEN BOAT BUILDING PROGRAMS
YACHT JOINERY

A job tomorrow.



Chad Buras
and Brock Tyner

"I took the full 2-year program and it was outstanding. I credit GLBBS for being where I am today, working for one of the leading custom boat builders in the world." **Brock Tyner, Class of 2012**

"The staff was wonderful and went out of their way to help me from enrollment to graduation. The instructors were amazing and passed along a wealth of knowledge and skills needed to fulfill my dream of working for one of the preeminent wooden boat builders in the world." **Chad Buras, Class of 2013**

"Excellent instruction fosters excellent students and GLBBS delivers on both, graduating the kind of students we look to hire."
Steve Van Dam, Van Dam Custom Boats

LES CHENEAU ISLANDS, MICHIGAN 906.484.1081

WWW.GLBBS.ORG



Above—VIM (ex-OWL) is a 1957 lobster yacht nearing the end of a thoroughgoing upgrade at Artisan Boatworks in Rockport, Maine.

Left—New electronics, installed to a low profile to retain the boat's original character, involved getting Timo Foster into tight spaces.

COURTESY OF ARTISAN BOATWORKS

and to “promote Turkey’s unique craftsmanship and accumulation of expertise” internationally. Standardization, certification programs, consulting on wooden boat purchases or restorations, historical research, and maintaining archives are among the goals.

For more information, see www.kayikturkiye.com, which has an English version.

■ **Artisan Boatworks** in **Rockport, Maine**, has been restoring OWL, a 36’ mahogany-planked lobster yacht built in 1957 by the Newbert & Wallace Shipyard in Thomaston, Maine. The hull reconstruction has involved a complete reframing, using 60 laminated frames, with her exterior brought to a high degree of finish. The boat now has a sound-insulated working deck, new diesel and water tanks, a redesigned interior, and cutting-edge mechanical and electrical

systems, mostly hidden from view to maintain a vintage appearance. Renamed **VIM**, she will debut at the March 14–16 Maine Boatbuilders Show before heading to her new home in Newport, Rhode Island.

Artisan Boatworks, 410 Main St., Rockport, ME 04856; 207-236-4231; www.artisanboatworks.com.

■ “The **Spaulding Wooden Boat Center** and the **Arques School of Traditional Boatbuilding** have been making good progress toward their goal of **launching FREDa next year**,” Sharon White writes from Sausalito, California. “Several big projects are complete: a new lead keel was poured in a project that attracted the interest of the entire Sausalito boatbuilding community, and is now bolted in place. The cockpit and companionway are complete, as well as most of the interior. FREDa has a new engine and tanks, with some work yet to be done to hook all of this up and get it running. New standing rigging has been spliced, served, and leathered. Her spars were repaired by a team of skilled volunteers last winter and are varnished, painted, and ready to go back into service. **Major projects pending** include trim

Natural beauty.

Use WEST SYSTEM 105 Epoxy Resin® and 207 Special Clear Hardener™ for a natural wood finish.
westsystem.com



SCOTT WALL



The Spaulding Wooden Boat Center in Sausalito, California, is heading into the home stretch on restoring and relaunching the 1885 sloop FREDa, with work by the Arques School of Traditional Boatbuilding.

and minor cabinetry in the interior, repairs to the trunk cabin and decks, fairing and finishing the hull, running rigging, electrical work, and of course finish painting inside and out. As in all boat projects, lots of details remain, and we are gearing up for a busy and productive winter. At this point our main obstacle is obtaining the necessary funding to have this important vessel sailing on San Francisco Bay again. We are anxious to have her take an active part in our Youth and Community Sails Programs."

For more information, see the Spaulding Wooden Boat Center website, www.spauldingcenter.org.

org. A crowdfunding site has been established at www.razoo.com/story/Get-Freda-Afloat.

Offcuts

"Creating a link between the past and the present was my inspiration in building a **Maine peapod** with **150-year-old wood** from buildings my family owns," Nicholas Cole writes. He was 17 when he built the boat—his second—and today he's 19, stationed in Southwest Harbor, Maine, with the U.S. Coast Guard. He was 16 when he

built his first boat, and he is thinking about what boat to build next. "My family has owned a dry bean elevator, **King Cole Bean Company**, in Avon, New York, south of Rochester, for three generations. In 1946, my great-grandfather, Harold 'King' Cole, purchased a mill that dated to the 1800s, and later he acquired two more mills built in the same period. The mills were in operation until 1991, when they were superseded by a more modern and efficient system in nearby York. The three mills have deep ties to the rich history of Avon and are very important to the community. Unfortunately, they are deteriorating, and their state has brought us to a crossroads: we face the challenge of deciding whether to restore them or take them down, and we are trying to find a way to repurpose them and save them. I decided, in the meantime, to build a Maine peapod exclusively **using wood recovered from the three buildings** as a way of preserving the rich history these mills represent and their ties to my community.

"I started building the peapod during the summer of 2011, as I was going into my senior year of high school. My

"The Rite of Spring"

THE MAINE BOATBUILDERS SHOW

52 FORE STREET • PORTLAND, MAINE 04101
RIDAY AND SATURDAY & 10 - 4 ON SUNDAY

March 14, 15 & 16, 2014

Buy
tickets on
Facebook
or at
PortlandCompany.com



presented by: PORTLAND YACHT SERVICES
207-774-1067

Bill Sisson, *Soundings* magazine—

"Not a Tupperware party by any means."

—Located on the Portland Waterfront off of Commercial Street—
Look for the shuttle busses along Commercial Street.

For more information and sign-up for show updates at:

www.portlandcompany.com

Traditional Bronze Shell Blocks With modern ball bearings.

The ultimate in elegance and performance.

Manufactured
from original
Herreshoff designs
under license
from the Hart
Nautical
Collections.
Our hardware
is used today
for restorations
at the Herreshoff
Marine Museum.

For a free
catalog contact:

See "Review" *WoodenBoat* #130

J.M. Reineck & Son

9 Willow Street, Hull, MA 02045

Ph: 781-925-3312 Fax 781-925-8984

<http://www.BronzeBlocks.com>

E-Mail: JMRandSon@aol.com

PHOTO: Benjamin Mendonça

COURTESY OF NICHOLAS COLE



Left—At the age of 17, Nicholas Cole did a fine job of building a traditionally crafted Maine peapod, using wood recovered from three historic buildings (above) in upstate New York that are still in his family.

plan was to build it using wood from all three mill buildings, plus pieces saved from an old warehouse that we had to take down some years ago. I started out by constructing the strongback and the forms, using store-bought lumber since the forms wouldn't actually be part of the boat. Next came the forward and after stems, both made from an ash workbench that was in what we call the 'black turtle soup' building,

where black beans were processed and polished.

"All three mills and the warehouse were post-and-beam constructed. The wood for the peapod's keel, longitudinals, and planking was milled (thanks to Tim Stapley of York) from posts that were roughly 10"×10", recovered from the warehouse. I believe the wood was hemlock, but the peapod has such a variety of woods that it was hard to keep

track of them all. For the keel and the longitudinals, I used boards ¾" thick milled from the posts. I had very little trouble with the straight keel, but the longitudinals and planks were a very different story. After a century and a half, the posts were very dry and thus very stubborn in bending.

"After several frustrating weeks, a planked hull emerged. Breasthooks were next, made from wood from the same bench used for the stems. Soon after, I installed the seat beams with the last of the wood from the warehouse posts. At this point, I was nervous about the strength of a hull made from such brittle planking, so I consulted Tim Wahl, an experienced boatbuilder in my area. He suggested saturating the wood with penetrating epoxy, so I used three coats inside and outside, followed by three coats of straight epoxy. After this, I had no doubts in the strength of my peapod.

"I decided to varnish the entire interior, to show the character of all the wood used. After varnishing, the last big project was to install the seats, drawing on many varieties of wood from all three buildings. The side seats posed the biggest problem, because they were

DO YOU WANT YOUR OWN COPY?



Professional BoatBuilder is the only magazine in the world edited for professional boatbuilders, designers, repairers, and surveyors.

If you are one of these professionals you may qualify for a free subscription. For more information, write or fax us (on your company letterhead), or go to www.proboat.com.

If you have been receiving *Professional BoatBuilder* and need to change your address, or if you prefer to receive the magazine at your home address, go to our website or photocopy the mailing label on the magazine and send it to us with your new address.

Professional BoatBuilder
P.O. Box 78 • Brooklin, ME 04616
F: 207-359-8920 • www.proboat.com

Make a Living – Craft a Life!



**NORTHWEST
SCHOOL of WOODEN
BOAT BUILDING**

ACCSC
Accrediting Commission of Career Schools and Colleges

Our School is accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC) & Approved for Veterans' Educational Benefits

Beautiful Waterfront Campus
Located on Port Townsend Bay

Earn a 12 Month AOS degree
9 Month Diploma
Sailmaking & Rigging Certificate
Financial Aid May Be Available

Call today: 360-385-4948 | info@nwboatschool.org

www.nwboatschool.org

11½" wide. But I was able to recover a beam stored in the loft of the feed mill building that was 15" wide. I believe it was willow. After milling, the resulting board was long enough to get both side seats out of it. For all but the center piece of the after seat, I used part of a hardwood board—I'm not sure what the species was—that I found in the black turtle soup building. The middle piece of the stern seat, the middle thwart, and the forward thwart are of poplar, from a piece I found in the first mill building my great-grandfather purchased. The board was about 23" wide, 5' long, and ¾" thick. I varnished all of the thwarts and seat pieces and secured them to the seat beams. I painted the hull exterior with the King Cole colors—beige and red—and finished off the work by stenciling 'King Cole Bean Co.' on the side, along with 'Avon, N.Y.'

"One hundred fifty years of history went into the building of this peapod. At times, I asked myself why I had ever started the boat. In the end, it worked out well, and I am glad that I followed through, no matter how frustrated I got at times. The project has inspired me to look deeper into the past and develop a stronger bond with these

three buildings, which have shaped so much of my family's history."

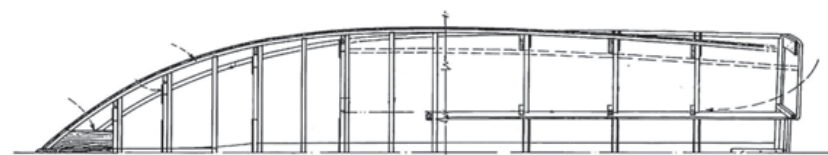
The 1864 composite-built British clipper ship **CITY OF ADELAIDE** was put on a barge and shipped out of England on October 21, bound for Australia. The ship had been on the brink of destruction (see Currents, WB No. 211) as it decayed while under the ownership of the Scottish Maritime Museum. An organization called Clipper Ship City of Adelaide Ltd. was formed in Australia to bring the ship to Adelaide as a tourist attraction. The ship is well known to the country, having made 23 voyages to Australia carrying immigrants and supplies. Meanwhile, a spirited group called Sunderland City of Adelaide Recovery Foundation (www.cityofadelaide1864.co.uk) formed in the economically distressed English town where the ship was built, tried to steer the ship their way. SCARF leader Peter Maddison occupied the hulk, Greenpeace-style, to prevent its destruction earlier and continued to work valiantly to keep the ship in England—and was still trying to get her back even after she reached Dordrecht, Holland, on October 24. English ministerial authorities, however, long

before awarded the ship to the Australian group. In Holland, the clipper was being readied for the voyage to Adelaide aboard a heavy-lift vessel.

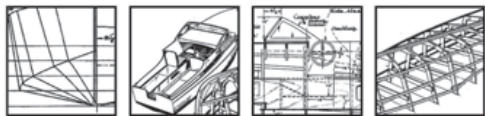
"The schedule, remarkably, is accelerating," Peter Roberts writes from Adelaide. "The CITY OF ADELAIDE was originally expected to be in South Australia between February and April. Now the second week of January is looming." The intention, he said, was to preserve the ship's original material, as has been done with archaeological finds. One role model has been the EDWIN FOX, an 1853 British merchantman preserved in Picton, New Zealand. "Preserving the ship keeps alive the opportunity for telling the tale of the ship, crew, and passengers for generations to come," Roberts wrote. "Progressive restoration might be undertaken should there be sufficient public and corporate support to do so. Some representative cabins, deckhouse, or stub masts might be in the future—but there are no substantial goals in that regard. We can wait and see what the future brings, now that the clipper has a future."

An estimated 250,000 Australians are descended from those who arrived aboard her. "Migrants would arrive at

Talk directly with the builder of your next boat



THE BOATBUILDERS SHOW



on Cape Cod

February 7-9, 2014

Resort & Conference Center at Hyannis
35 Scudder Ave., Hyannis, MA

Presented by



For details & updates visit —

www.boatcapecod.org
bridge@boatcapecod.org



Boatbuilders Show
on Cape Cod



for further information
www.barkleysoundoar.com

tel. 250-752-5115
toll free 877-752-5156
3073 Van Horne Road
Qualicum Beach, BC
Canada V9K 1X3

COURTESY OF CLIPPER SHIP CITY OF ADELAIDE LTD.



The clipper ship CITY OF ADELAIDE arrived in Dordrecht, Holland, October 24, 2013, for transshipment via heavy-lift ship to Australia, where she will be preserved and exhibited.

Semaphore, near Port Adelaide, and then disperse around the countryside," Roberts wrote. "For example, my ancestors migrated from Cornwall on the clipper in 1873 and went to work in the Moonta copper mines. There are many direct stories, which afford the opportunity to tell much about the history of our state and link with other tourist destinations intrastate."

Clipper Ship City of Adelaide Ltd., P.O. Box 535, Kent Town, SA 5071, Australia; +61-(0)-419-773-332; www.cityofadelaide.org.au.

BlueJacket Shipcrafters, which has been supplying model ships, kits, and accessories since 1905, has a new owner, Nic Damuck, who bought the company, based in Searsport, Maine, from Jeff and Suzie Marger. Damuck is a

lifelong modelmaker with long involvement with the Connecticut Marine Model Society, the Nautical Research Guild, and other modeling organizations. *BlueJacket Shipcrafters, 160 E. Main St., Searsport, ME 04974; 207-548-9970; www.bluejacketinc.com.*

"I spent this summer in **Takamatsu, Japan**, building a 20' traditional fishing boat as part of the **Setouchi Festivale**, a large international arts festival featuring the work of over 200 artists from 24 countries," contributor Douglas Brooks writes from Vermont. "This event featured an amazing array of art installations, mainly on seven islands in the Seto Inland Sea. In Takamatsu, a concurrent summer festival called Bengal Island took place, featuring Bengali craftspeople, along with dancers and musicians. I was there to work with Takashi Tsuda, an 84-year-old boatbuilder from Naoshima Island. My plan was to do what I had done with five other boatbuilders in Japan since 1996: work alongside them in order to document their designs and techniques. Unfortunately, last spring Tsuda's health took a turn for the worse and he had to resign from the project. The Festivale

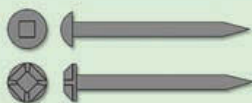


255 North Lincoln Avenue
Lebanon, PA 17046

Phone: (717) 270-2700
Fax: (717) 270-2702

ON THE WEB AT:
www.keystonespikes.com

BOAT/DOCK SPIKES



32 years as the country's largest producer of boat spikes in both plain and hot dipped galvanized steel. We pride ourselves on providing the highest quality specialty products available in today's market.



Do you know...

...if you're as protected as you think you are?

...if you are getting the most out of your insurance dollars?

Heritage Marine Insurance understands exactly what you need to protect your boat. Compare your policy features to those in our exclusive Classic Coverage ProgramSM and find out.

Does your policy include:

● Pollution/Fuel Spill limit of \$854,400 in addition to Liability limit?	✓ Yes
● Salvage charges to protect against further loss in addition to Hull coverage?	✓ Yes
● Coverage for resulting damage in many cases after mechanical breakdown or latent defects?	✓ Yes
● Boat Show & Demonstration Coverage that is automatically included?	✓ Yes
● Watercraft Liability limits to meet your needs, among the highest amounts available?	✓ Yes
● No charge for marinas as additional insureds?	✓ Yes
● Marine specialists adjusting any claims you may have?	✓ Yes
● Only experienced marine agents, classic boat enthusiasts just like you, managing your insurance?	✓ Yes
● Special Discounts for ACBS and CYA Members?	✓ Yes

All of this plus many other valuable protections you should expect from your classic boat specialist.

Don't guess. Contact Heritage Marine Insurance for answers!

Your source for expertise, service and tailored coverage for your classic boat:



HERITAGE MARINE INSURANCE
P.O. Box 188, Mystic, CT 06355
1-800-959-3047 phone 1-860-572-5919 fax
www.heritagemarineinsurance.com

Program available exclusively through:



© 2014 Insurance policies issued by ACE. Recreational Marine Insurance are underwritten by the insurance companies of ACE Group.

DOUGLAS BROOKS (BOTH)



Left—Douglas Brooks took the *yuloh*, a type of sculling oar, after the launching of a 20' traditional Japanese fishing boat built during the summer Setouchi Festival.

Far left—At the same event, two boatbuilders from Bangladesh who work with an organization striving to preserve traditional boatbuilding showed their skills by finishing off a *noukka* from their country.

2014 CALENDAR OF WOODEN BOATS®



PHOTOGRAPHS BY BENJAMIN MENDLOWITZ

Benjamin Mendlowitz creates yet another stunner of a wall calendar. Amongst the dozen images is the cover shot of an 1895 Gil Smith catboat, an Abaco racing sloop, an oyster dredger, plus *Tarheel*, a 32' runabout, *Aimee Leone*, the 37' pilot cutter, a modified Buzzard's Bay 18 sloop, a Noank schooner, and more. And to top it all off, the always enlightening captions by Maynard Bray. Opens to 12" x 24".

The WoodenBoat STORE

PO Box 78, Brooklin, ME 04616

Calendar of Wooden Boats
Item #800-214 \$16.95
(plus shipping)

To Order: Call Toll-Free
1.800.273.SHIP (7447)



Order On-line today at www.woodenboatstore.com

organizers asked me to build the boat, and they moved the venue from Naoshima to Bengal Island. Koji Matano, an avid wood-and-canvas canoe builder who was invaluable making arrangements for the project, and I invited Takumi Suzuki and his wife Yoshiko to join the project as my students. Suzuki had studied canoe building with Matano, and also taken one of Jerry Stelmok's canoe-building classes at WoodenBoat School in Brooklin, Maine, but he had never before built a traditional Japanese boat.

"Our boat was built from lines provided by the Seto Nai Kai Museum of a **20' fishing boat of the 1950s** from the Seto region. We planked with boat with cedar, and the stem and beams were cypress. We were fortunate enough to get traditional boat nails donated to us by Tengu Shibafuji, an enthusiastic amateur boatbuilder and student of traditional boatbuilding.

"We were very fortunate to get to know a **pair of Bengali shipwrights** who were also building a boat in the Festival. They brought their *noukka*, or dinghy, partially assembled from Bangladesh and proceeded to take it apart and rebuild it for visitors. The boat was built entirely from jackfruit (*Artocarpus heterophyllus*), with closely spaced sawn frames and carvel planking. The hull is double-ended with a high stern and fastened inside and out with small clenched nails, closely spaced, crossing the plank seams. The nails are sheared from soft sheet steel, and after cutting a shallow mortise across the seam one end of the nail is driven slightly into the plank, then bent over and driven into the other end of the mortise.

"The two Bengali shipwrights work as part of a fledgling organization in Bangladesh trying to save traditional boatbuilding by developing a commercial shipyard where wooden vessels can be built for the tourist trade. The organization is an offshoot of Friendship, a hospital ship serving rural Bangladesh (see www.friendship-bd.org) and Contic, the organization that operates traditional sailing tourist boats (www.contic.org).

net). The two shipwrights had previously demonstrated Bengali boatbuilding in Luxembourg and Paris.

"A rapport quickly developed between our two teams, as we invited one another to cross the festival grounds and take part in key phases of our respective projects. I invited the Bengalis to participate in our keel-laying ceremony, and they invited us to offer a Shinto prayer at the launching of their boat, which took place three weeks before our launching. Sadly, the two shipwrights left as soon as their boat was finished, but the Bengali musicians and other craftspeople did attend our launch, and we were all proud to call them friends."

For more information about the festival, and about Douglas Brooks's boatbuilding, see his website, www.douglasbrooksboatbuilding.com.

Across the bar

■ **Kenny Coombs**, 63, October 5, St. Johns, Antigua. Although he died while visiting England, Mr. Coombs was most closely associated with Antigua, where he was the founder of the Antigua Classic Yacht Regatta (see WB Nos. 150 and 227). The regatta had its first run in 1988 with seven participating boats, and today it attracts as many as 60 classic yachts each April. The regatta is known for grand yachts, among them many Fifes and Herreshoffs, from around the world, but it also brings in island-built Carriacou sloops and pioneered the "Spirit of Tradition" class within yacht racing. Coombs served as the regatta chairman from 1988 through 2013. He was a professional yacht captain, often at the helm of large sailing yachts in Caribbean and Mediterranean classic regattas, and his pallbearers were all yacht captains. His contributions to yachting will be saluted during the 2014 regatta, set for April 17–22.

■ **Stan Bishoprick**, 76, October 25, 2013, Washougal, Washington. Mr. Bishoprick was a man with drive and many passionate interests, one of which was sailing classic yachts. He studied forestry and business at Oregon State University in the late 1950s and early 1960s, and went on to found Exterior Wood Inc., in Washougal in 1977, supplying outdoor treated lumber for construction and fencing. Meanwhile, he met his future wife, Nancy McCracken, when both sang in *Aida* while graduate students at the Eastman School of Music in Rochester, New York, in the 1960s, and he maintained his musical interest throughout

his life. He founded Windy Ridge Farm to train and breed thoroughbred racehorses, and his later interests included natural healing and raising Angus beef cattle. In 1994, he founded Legendary Yachts in Washougal, where the first project was the construction of his own 72' ketch *RADIANCE*, built to L. Francis Herreshoff's design for TICONDEROGA. His interest in boats had started much earlier, when he was a teenager helping his father build a

52-footer, also to a Herreshoff design. Legendary Yachts went on to build a succession of sailing yachts, all to the Herreshoff designs that Mr. Bishoprick greatly admired. He led *RADIANCE* in a three-year family voyage, joining the fleet of the Eggemoggin Reach Regatta and Antigua Race Week, among others, and the boat was shown at the Port Townsend Wooden Boat Festival. The company continues with his son-in-law, Will Pollard, at the helm. 

HVMAINE HAMILTON MARINE

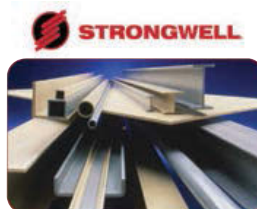
GREAT PRICES GREAT STUFF

FREE CATALOG!

800-639-2715 hamiltonmarine.com

Structural Shapes & Plates

Lightweight, UV and corrosion-resistant, non-magnetic. High strength, low maintenance. Available in more than 100 shapes.



Coosa Structural Panels

High-density polyurethane foam, reinforced with layers of fiberglass. Lightweight, non-rotting, an excellent wood replacement.



SAFPLANK™ Composite Planking

A high strength system of fiberglass planks designed to interlock and form a continuous solid surface. Use as temporary flooring, dock surfacing, roofing walkways & more!



Caulking Cotton 1 lb \$17.99

List 22.50

MAS-CC

Order# 121852



Caulking Irons

Polished blade with black Japanned shank.

Size	Order#	SELL
00	126222	20.99
1	126223	26.99



Le Tonkinois Varnish

An all-natural, environmentally friendly tung oil & linseed oil based varnish. Deep, rich finish is strong and durable.



Type	Order#	Litre	Order#	2.5 Litre
Original	729008	34.99	740560	63.99
Gloss	164366	34.99	740503	63.99

Owatrol Marine Oil

Replaces Penetrol!

Highly penetrating, air-drying oil. Drives out moisture, stops rust, prevents paint from peeling. Use alone or add to paint.



Size	Order#	SELL
1 Liter	731922	28.49
5 Liter	731921	114.99

EPIFANES Premium Varnish

Extremely high solids content and a perfect balance of UV inhibitors. 1000 ml.



Type	Order#	SELL
Clear	109982	34.99
Woodfinish (No Sand)	110044	40.99

EPIFANES Yacht Enamels

Expertly formulated from the finest raw materials for the best flowing and covering properties possible.



Typographical errors are unintentional and subject to correction.



WOODENBOAT SCHOOL

2014 Schedule at a Glance

MAY		JUNE				JULY			
18-24 / 25-31		1-7	8-14	15-21	22-28	29-5	6-12	13-19	20-26
ALUMNI WORK WEEK	ALUMNI WORK WEEK	Fundamentals of Boatbuilding with Greg Rösse		Fundamentals of Boatbuilding with Wade Smith		Fundamentals of Boatbuilding with Greg Rösse		Sparmaking with Jeremy Gage	Fundamentals of with
		Making Friends with Your Marine Diesel Engine with Jon Bardo	Fine Strip-Planked Boat Construction with Nick Schade	Build Your Own Annapolis Wherry with Geoff Kerr	Build Your Own Greenland-Style Kayak with Mark Kaufman	Traditional Wood-and-Canvas Canoe Construction with Rollin Thurlow	Building the Caledonia Yawl with Geoff Kerr		Build Your Own Stitch-and-Glue Kayak with Eric Schade
		Glued-Lapstrake Plywood Construction with John Brooks	Introduction to Boatbuilding with Bill Thomas	Boatbuilder's Hand Tools with Harry Bryan	Build Your Own Plank Constructed Pond Yachts with Thom McLaughlin	Traditional and Modern Oarmaking with Clint Chase	Building a Nordic Pram with F. Jay Smith	Building Half Models with Mark Sutherland	Building the with
				Blacksmithing for Boatbuilders with Doug Wilson	Lofting with Greg Rösse	Vintage Pond Yachts Part II with Thom McLaughlin	Seascape/Landscape in Watercolor with Paul Trowbridge	Carving Waterfowl with Jerry Cumbo	Elements of Boat Design with John Brooks
				Coastwise Navigation with Jane Ahlfeld	Elements of Sailing with Jane Ahlfeld & Annie Nixon		Elements of Sailing with Jane Ahlfeld & Annie Nixon	Elements of Sailing for Women with Jane Ahlfeld & Sue LaVoie	Elements of Sailing with Martin Gardner & Sue LaVoie
							Skills of Coastal Seamanship with Andy Oldman	Craft of Sail on MISTY with Queene Foster	Sailing Traditional Daysailers & Beach Cruisers with Al Fletcher & Mike O'Brien
								Elements of Coastal Kayaking with Bill Thomas	Craft of Sail on TAMMY NORIE with Joel Rowland
									Coastal Cruising Seamanship on ABIGAIL with Hans Vierthaler



Can't make it to Brooklin, Maine?

Try our courses at Chesapeake Light Craft Shop in Annapolis, Maryland:

We're very excited to be working with John Harris and the good folks at CHESAPEAKE LIGHT CRAFT in Annapolis, Maryland, and, once again, to be able to offer courses at their excellent facility.

- MARCH 24-29 BUILD YOUR OWN ANNAPOLIS WHERRY**
With Geoff Kerr
- APRIL 7-12 BUILD YOUR OWN NORTHEASTER DORY**
With David Fawley
- APRIL 14-19 BUILD YOUR OWN SASSAFRAS CANOE**
With Bill Cave
- MAY 5-10 BUILD YOUR OWN STITCH-AND-GLUE KAYAK**
With Eric Schade



ACCESS TO EXPERIENCE

The finest instructors available and a beautiful location on the coast of Maine make WoodenBoat School an exciting learning experience for amateurs and professionals alike. This season, our 34th, we are offering over 90 one- and two-week courses in various facets of boatbuilding, as well as, seamanship and related crafts.

AUGUST					SEPTEMBER			
27 – 2	3 – 9	10 – 16	17 – 23	24 – 30	31 – 6	7 – 13	14 – 20	21 – 27
Boatbuilding Warren Barker	FAMILY WEEK	Building a Sharpie Skiff with Thad Danielson	Traditional Lapstrake Construction with Geoff Burke		Advanced Fundamentals of Boatbuilding with Greg Rössel		Fundamentals of Boatbuilding with Wade Smith	
Build Your Own Fox Canoe with Bill Thomas		Build Your Own Jimmy Skiff with David Fawley	Introduction to Cold- Molded Construction with Mike Moros	Stitch-and-Glue Boatbuilding with John Harris	Fine Strip-Planked Boat Construction with Nick Schade	Build Your Own Northeast Dory with David Fawley	Runabout Repair & Restoration with Gary Lowell	
Penobscot 13 Arch Davis	Build Your Own DragonFlyer with John Brooks	Build Your Own Mastermyr Tool Chest with Don Weber	Introduction to Boatbuilding with John Karbott	Woodcarving with Reed Hayden	Introduction to Boatbuilding with Bill Thomas	Building the 16’ Gardner Semi-Dory with Walt Ansel	Finishing Out Small Boats with John Brooks	Building Half Models with Eric Dow
Metalworking for the Boat- builder & Woodworker with Erica Moody	Build Your Own Chuckanut Kayak with Dave Gentry	Painting the Downeast Coast in Oils with Jerry Rose	The Art of Woodcuts with Gene Shaw	Lofting with Greg Rössel	Coastal Maine in Watercolor with Amy Hosa	Marine Photography with Jon Strout & Jane Peterson	Introduction to Canvas Work with Ann Brayton	
Rigging with Myles Thurlow	Learn to Sail with Jane Ahlfeld & Gretchen Snyder	Introduction to Small Boat Racing with Dave Gentry and Milo Stanley	Bronze Casting for Boatbuilders with Michael Saari	Wooden Boat Restoration Methods with Walt Ansel		Sea Sense Under Sail with Havilah Hawkins		
Elements of Sailing II with Martin Gardner & David Bill	Craft of Sail on BELFORD GRAY with David Bill	The Catboat with Martin Gardner	Elements of Sailing with Martin Gardner & Robin Lincoln	Elements of Sailing II with Jane Ahlfeld & Eric Blake	Open Boat Cruising with Geoff Kerr			
Sailing Downeast with Andy Oldman		Craft of Sail on MISTY with Queene Foster	Craft of Sail on ABIGAIL with Hans Vierthaler	Craft of Sail on MISTY with Queene Foster	Sea Sense Under Sail with Havilah Hawkins			
Tallship Sailing and Seamanship with Capt. Barry King & Jane Ahlfeld		Coastal Touring & Camping with Bill Thomas	Elements of Coastal Kayaking (over 40) with Mike O’Brien		Coastal Cruising Seamanship on ABIGAIL with Hans Vierthaler			
		Cruising through the Watches on ABIGAIL with Hans Vierthaler			Advanced Coastal Kayaking with Stan Wass			

For additional information

Check our website for our entire 2014 program:
www.woodenboat.com

or call Kim or Rich at **207-359-4651**

To order a complete course catalog, call toll-free

1-800-273-SHIP (7447)

WOODENBOAT SCHOOL

P.O. Box 78, Brooklin, Maine 04616-0078

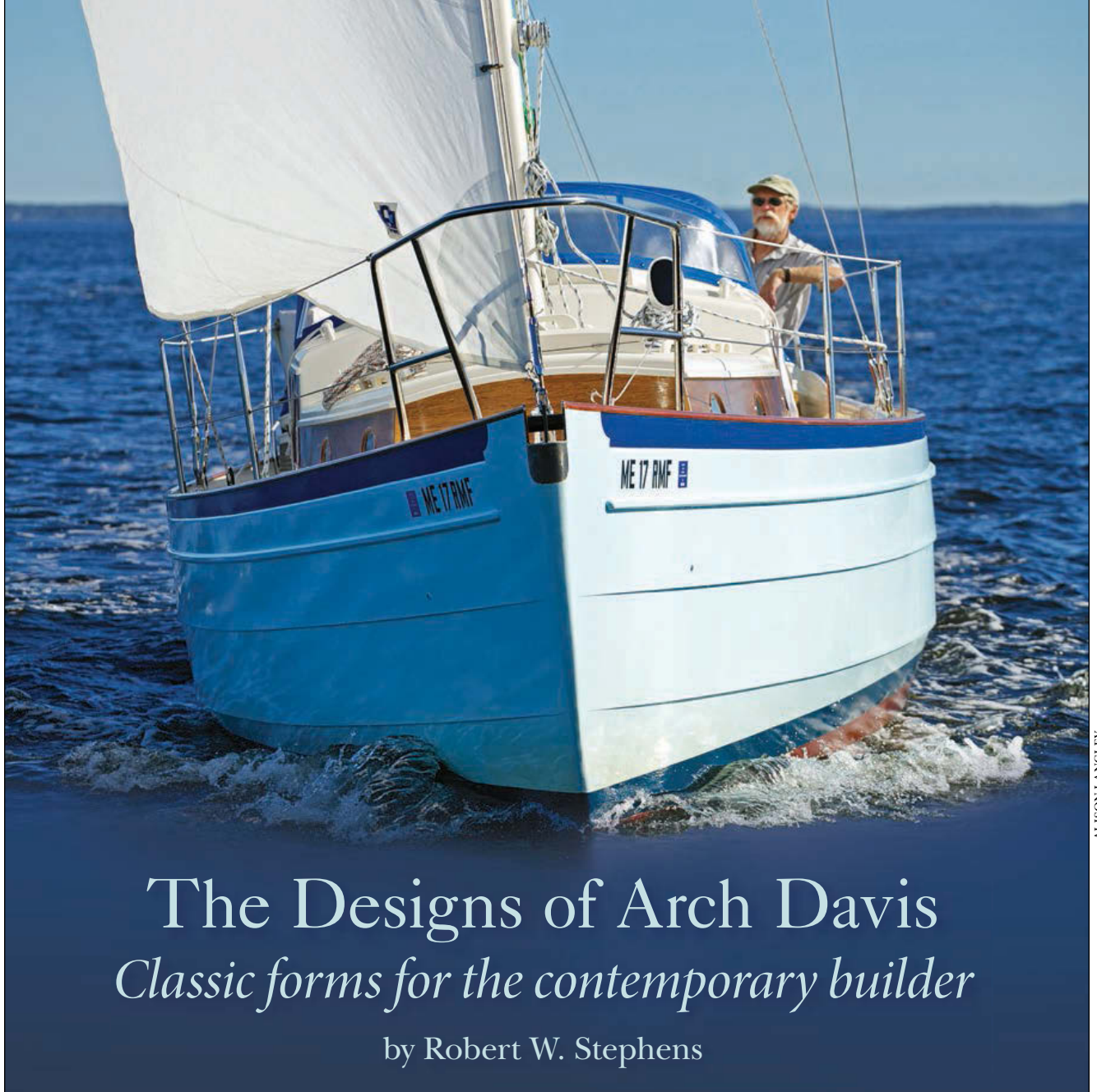


SEPT. 15-20 BUILD YOUR OWN ANNAPOLIS WHERRY
With Geoff Kerr

SEPT. 22-27 BUILD YOUR OWN SKERRY DAYSAILER
With David Fawley

OCT. 13-18 BUILD YOUR OWN PETREL/PETREL PLAY
With Nick Schade

OCT. 20-25 BUILD YOUR OWN NORTHEASTER DORY
With David Fawley



ALISON LANGLEY

The Designs of Arch Davis

Classic forms for the contemporary builder

by Robert W. Stephens

As I first pulled into Arch Davis's driveway, the ambience of his place struck me as quite unlike the typical Maine boatbuilder's shop. I'm a veteran of this sort of visit, having launched my own career in the early 1980s by banging on doors until someone would hire me despite my lack of skills. As a builder and designer, I've made many a boatyard pilgrimage over the years. The approaches to these places vary from bushwhacking your way down rutted dirt roads to a shingled shop mostly hidden by unruly stacks of live-edge lumber, to a genteel swing into a monumentally large yard with a real parking lot, a business sign, and even insulation and heat in the shops.

Arch's operation is not like these. He does business

in a compact, neatly manicured home just a mile outside of Belfast, Maine, set slightly back off a suburban road. The first impression is of familial comfort and pride: nicely tended shrubs and flower beds, a tidy lawn, basketball hoop, small attached garage, and paved driveway. There were no stacks of wood or boatbuilding debris in evidence when Arch casually greeted me at the kitchen door and invited me upstairs to his office. As he explained in his broad Kiwi accent, maintained despite decades of travel and 20 years in the United States, he splits his time between office and shop.

Settled in the office space, I realized that Arch has shaped his family's home with the same careful intent that shows in his designs. The space is a loft open to

Above—Designer-builder Arch Davis, a native New Zealander living in Maine, has spent the past 20 years developing plans for a good-looking boat meant for amateur construction. Here he enjoys an outing aboard GRACE EILEEN (see page 30), a 30-footer he designed and built for himself. Contact him at Arch Davis Design, 37 Doak Rd., Belfast, ME 04915; 207-930-9873; www.archdavisdesign.com.



GRACE EILEEN's tidy, symmetrical cabin includes a galley that spans the width of the boat, and a narrow passage for safe and easy work in a seaway.

the living room below, so he can stay in touch with family while corresponding with his customers. Under the eaves, lit by skylights and sheathed with wood paneling, the room feels warm, cozy, and spacious all at once. Surrounded by hand-built flat files of plans and large-scale boat models, we talked about his life and travels.

Arch's manner is both quiet and effusive—an unusual juxtaposition, and a pleasant one. He's frank and unassuming as he talks matter-of-factly about how he found himself selling stock boat plans and kits half-way around the world from his place of birth. He is compact in stature and wiry at 69 years of age, and his eyes sparkle in a face framed by a full beard and curly white hair as he recounts his school days in New Zealand.

Arch grew up in the 1950s and '60s in Whangarei, a town of about 12,000 at that time, up the coast from the big city of Auckland. As with seemingly everyone in New Zealand, boats were a natural part of his childhood, and he spent time knocking around in sailboats on the bay. At age 17 he headed to the University of Auckland to study classical piano, keeping expenses low and the fun factor high by sharing a liveaboard with a high-school friend. "Rex sold his 16' boat, and we pooled our slender resources to buy a 22' Bluebird, a plywood sloop...a poorly built, neglected little thing, from which we were constantly excising rotten chunks of wood. However, we sailed her quite adventurously, and had some memorable adventures in her."

Classical piano, however, wasn't going so well. After three years of "less than successful study," Arch took a break from school and went to work at a boatshop. "New Zealand was at full employment in those days," he told me, "and anyone could get a job. If you walked down the streets with your hands in your pockets, you'd get three offers." Arch found himself working for Jim Young, an innovative designer and builder specializing in lightweight cold-molded construction. Showing a talent for drawing, Arch landed in Young's drafting office. After two years he was ready to go back to complete his studies, finishing with a degree in psychology, then taking a teaching job in middle school.

But the boats and the liveaboard lifestyle had set their hook, and he found himself in 1972 leaving his steady job for a simpler, lower-impact life, cruising the coast and earning a living making engravings and selling prints. To supplement this income he would take short-term work building or repairing boats, at yards or solo. The transitory nature of the work fit well with his mobile life—he could earn good money on a project, then move on with no commitments.

In 1979 Arch extended his wandering to Europe, traveling light by bicycle and staying in youth hostels when not visiting family in Germany. It was in a hostel in Spain the following year where he met Amy Fradel, the American woman who would eventually lure him to the U.S. After several years of the longest of long-distance

GRACE EILEEN



GRACE EILEEN Particulars

LOA	30'
LWL	25'5"
Beam	9'3"
Draft	5'
Displacement	7,000 lbs
Sail area	425 sq ft

After two decades of designing small rowing- and-sailing skiffs and power craft, Arch Davis returned to larger cruising sailboats. GRACE EILEEN blends his construction experience in smaller craft with his liveaboard experience in New Zealand. At 30' long, she's a light-displacement sloop of only 7,000 lbs. She's built like a big skiff, with 12mm plywood planks over frames and stringers, just as in Arch's smaller boats. Massive laminated floor timbers help secure the fin keel and lead ballast to the hull.

Arch has drawn a profile that perfectly captures the style of cruising boats of the mid-20th century, while delivering modern comfort and convenience. GRACE EILEEN's coach roof and doghouse are elegantly proportioned, providing standing headroom where it's needed, in the galley and at the foot of the companionway. Symmetry rules below, conveying a sense of calm and order. The roomy galley spans both sides under the doghouse. A snug saloon is forward under the coach roof, with the head in the forepeak. Dual quarter berths round out the accommodations. The result is an airy interior with elbowroom galore for a 30-footer.

On deck, the cockpit is open to a sugar-scoop

boarding platform, which is tremendously convenient and instantly self-bailing. It's nothing short of remarkable that Arch can pull off such a modern detail without compromising the retro style of the boat—but it really works. The sweep of her sheer and planks, the simple detail of rubrails and cabin trunk trim, the careful shaping of windows: she's a cohesive whole.

GRACE EILEEN's three-quarter rig contains plenty of sail to help her slip along in all but the lightest breezes. When even that fails, a small outboard can get you home—although Arch's boat is equipped with a yuloh-style sweep and sculling notch on the sugar scoop. An inboard engine is allowed for in the plans, nestled beneath the cockpit and between the quarter berths.

With her simple construction, light weight, and roomy interior, GRACE EILEEN makes a fantastic cruiser for a family to explore the coast. She's able enough to handle seriously squally weather, although her light weight and relatively small capacity for stores will limit any long-distance crossings, and her scantlings will feel delicate offshore. On the plus side, the same light weight makes trailering to a distant destination a real option for extending her cruising range.

—RWS

relationships, and several extended visits by each partner to the other's home country, the two were wed in Auckland in 1983.

Shortly thereafter, Arch confessed with a wry smile, "I did a very stupid thing." Amy had returned to the States, and Arch had sold his 32' boat-home and had money burning a hole in his pocket, so he did what any builder would. He "bought a pile of timber." Next he designed a boat to suit the timber, a serious cruising boat eventually christened MARISA, Amy's middle name (see sidebar, page 35). Christening would have to wait, though, through the extended building process. Over the next ten years, punctuated by two-year sojourns with Amy in the U.S., Arch completed his labor of love, persevering even though each time he left New Zealand he needed

to dismantle the temporary shop, only to reassemble it on his return. "I built and knocked down that silly roof four times," he said.

During his time in the U.S., Arch was earning a living while Amy pursued her career in medicine. He built canoes and repaired Chris-Crafts in Minnesota; built custom cabinets in North Carolina, where he also created his first stock boat, the ACE 14 performance day-sailer. After a move to Maine in 1988, he wrote articles and sketched design concepts for *National Fisherman* magazine.

In 1994, Arch finally completed and launched MARISA, and the family (Arch, Amy, and three-year-old son Jack) spent several months living and cruising aboard her in New Zealand before being driven to



Light weight and ample sail area allow GRACE EILEEN to ghost along in the lightest of breezes. When the wind fails altogether, the options include an outboard motor or a Chinese sculling oar called a yuloh (see WB No. 101).

a harsh decision. “I had dreams of sailing her to the U.S., but reality intervened, and I sold her, which I have regretted ever since, although GRACE EILEEN (see sidebar) makes a great consolation prize.” MARISA went to a cruising couple, and Arch has had the bittersweet privilege of staying in touch to learn what a great boat she has been for them.

Back in Maine and boatless, Arch was eager to get his family on the water again, so he worked up a simple but elegant little sailing-rowing skiff with a classic look and of straightforward construction using modern materials. Realizing the advantages of using good-quality marine plywood and epoxy glue, Arch simplified the construction by backing each lap with a substantial stringer. This delivered several plusses, all of which made the process more accessible to the amateur builder: The stringers allowed the boat to be “lined off” before planking began, so the builder would know how good she looked before cutting up good plywood; the laps were well supported, which eased the beveling process; and fastenings could be driven directly into the stringer instead of being installed temporarily and their holes plugged with putty after they’d been withdrawn. The Penobscot 14 was an instant hit following the publication of a three-part “How to Build” article in *WoodenBoat* (see Nos. 138–140), and Arch was able to commit himself “full-time” to his own boatbuilding and design business.

Arch places “full-time” in quotations, because he recognizes that one of the biggest benefits of his chosen career is the freedom it gives him to set his own

schedule and do the things he wants to when he wants to—like building his own house, working with his two children in the boatshop, or helping out with community projects like the rowing gig built on the waterfront in his adopted town of Belfast a few years ago. Arch told me his secret to happiness is “Change—you’re not doing the same thing all the time!” When he has had enough of correspondence each morning, he leaves his office and moves out to his shop where he might put together a kit for one of his many stock designs, or hang a plank on a Penobscot 13 (the latest addition to his Penobscot line, which also includes a 17 as well as the original 14; see sidebar), or build a set of spars. Or he might mess around with a new design concept.

Arch’s designing begins on paper, drawing lines and construction details the old-fashioned way, with drafting tools and pencil. Following his initial pencil sketch, he will often build a large-scale model, at say 3” to the foot—big enough to really see the fairness of the plank lines and prove the construction method. He allows, though, that building the model is often a bigger challenge than building the real thing. While driving a well-placed screw might suffice to hold pieces together at full scale, ingenuity must be applied at quarter scale. During the model-building phase, he may adjust the sweep of the stringers for easier assembly or a sweeter look, or he may discover that he can eliminate some structure and thus simplify the build.

While ease of construction is something Arch is always striving for, it’s not his primary goal. He

Arch Davis and daughter Grace aboard GRACE EILEEN. Grace worked with her father for the entire construction of this boat, and several others.

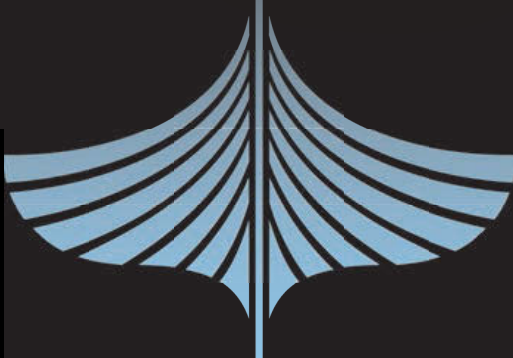


WoodenBoat

THE MAGAZINE FOR WOODEN BOAT OWNERS, BUILDERS, AND DESIGNERS



Whether you are
rebuilding, repairing or
starting from scratch,
WoodenBoat Magazine
will be there to offer
advice, instruction, and
encouragement.

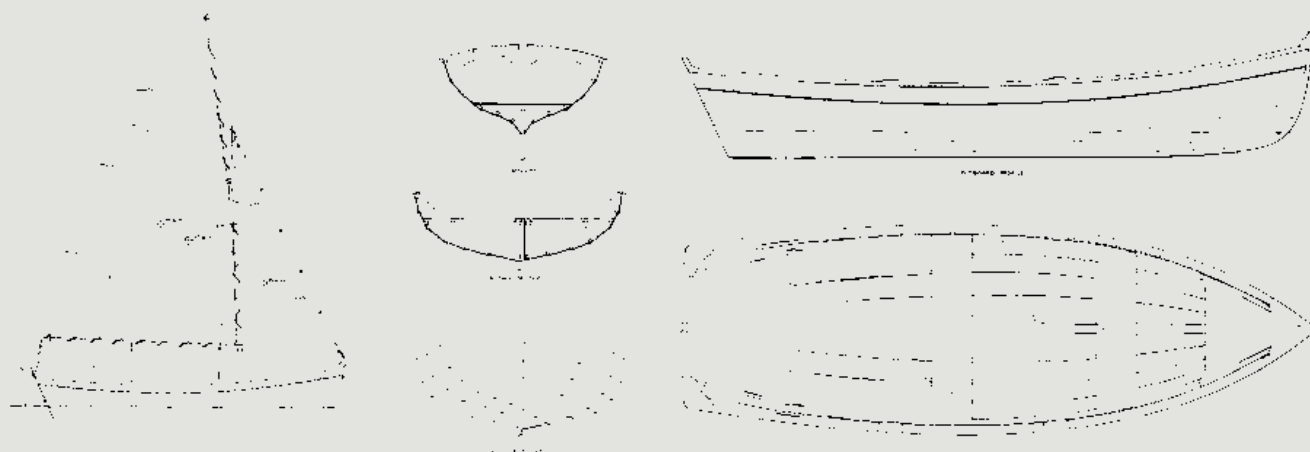


Subscribe today

1-800-877-5284

www.woodenboat.com

The Penobscot Series: 14, 17, and 13



The Penobscot 14 is the centerpiece of Arch's portfolio; she was the first of his designs to "make it big," and has been his best seller since the mid-1990s. It's easy to see why. She has the graceful lines of a classic Whitehall, a traditional working boat of the 19th century renowned for seakeeping and easy rowing. But Arch's signature modifications for contemporary construction have resulted in a boat that goes together easily, is robust enough for a family to use, is lighter-weight and more maneuverable, and stays tight on a trailer.

Three sailing-rig options allow configuring the boat to suit your needs and style: sprit rig for the true traditionalist who'll row more than sail, lug rig for a European flair, and gunter rig with jib for those who'll value sailing over rowing.

Inspired by customers who kept asking for a larger, more able boat, Arch developed the Penobscot 17—longer, proportionally leaner, roomy enough for camp-cruising. The extra length also provides an opportunity to play with even more rig options, including ketch and schooner—true little ships. Like all his boats, full flotation is provided for safety and confidence.

Arch is always striving for simpler construction



COURTESY OF ARCH DAVIS

while upholding his standards of beauty and utility, and he proudly showed me some details on the prototype of the latest member of the Penobscot line, the 13, which maintains the attractive appearance and good performance of the 14 while being even easier for the amateur to build through a few simple changes in construction.

—RWS

recognizes that even a small skiff can represent a big investment for his customers in terms of time, money, and emotional commitment. For an amateur builder to continue investing months or years of valuable leisure time, the boat must inspire. So while Arch is constantly working to make building his boats easier and more straightforward, it's never at the expense of their good looks. Some distinctive touches that are signature Arch Davis details:

- **CAPPED GUNWALES**—Inwale and gunwale are covered with sawn hardwood, giving a finished appearance and adding substantial stiffness to an open boat.

- **HALF-ROUND RUBRAIL**—Arch places a nicely proportioned protective rail along the lower edge of the sheerstrake. This calls greater attention to the graceful

sweep of the sheerstrake, introduces a strong shadow line, and protects the vulnerable plywood edge from abuse around floating docks and other boats.

- **SHEER DETAILS AT BOW AND STERN**—At each end of the sheerstrake, thin wood panels are applied to the strake, creating shapely details and a sense of "heft." Sweeping ogees add a traditional flair, whether painted a contrasting paint color, or left to let the shadow speak for itself. The rubrail conceals the additional thickness of material, leaving only a sense of handmade elegance.

From the Penobscot 14, Arch's line of designs for the home builder has expanded to include an array of rowing-sailing skiffs as well as several powerboats for clamp-on outboard motors. He offers kits for several of his designs, developing production techniques in

his compact shop behind his house that allow him to produce hull plank panels and other components with rapid repeatability without sacrificing hand-built craftsmanship. These kits ease the building process for clients who lack time or confidence to start from scratch. He also builds spars to order for his boats, and provides hard-to-find supplies like glue, fastenings, and even sails. He's created a business that really eases the anxieties of a first-time builder by assuring his customers that he'll be there for them when they run into difficulties. And he has minimized those difficulties by developing comprehensive instruction booklets, written in his characteristically self-deprecating and encouraging

style, and thorough how-to videos for several of his designs.

Arch's latest design brings him full circle, back to the kind of boats he was drawing in New Zealand: a practical, graceful cruising boat, capable of caring for a family during an extended coastal cruise. GRACE EILEEN (see sidebar) is a 30' sloop launched from Arch's shop in 2012 after several years of construction. His teenage daughter Grace worked alongside her father throughout the project. While the two enjoy sailing together aboard her, there's wistfulness in both of their faces as they recall the time building her.

Two Powerboats

The Bay Pilot 18



COURTESY OF ARCH DAVIS (BOTH)

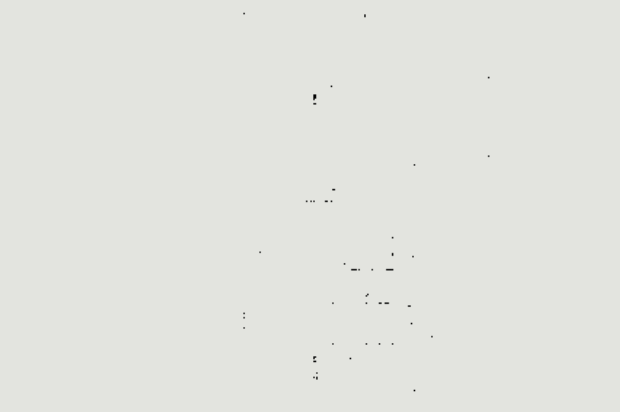


These two powerboats show the breadth of Arch's talent to draw a simple, good-looking boat. More utilitarian than his elegant rowing-sailing skiffs, they are still striking to look at, and sensible to build and to own.

The Jiffy-V 22 is an uncommonly good-looking small Maine lobsterboat. For a boat that's under about 25', it's really hard to draw a good-looking pilothouse with full standing headroom, and there are legions of quick-and-dirty fishing boats all along the coast to prove this. Arch has beaten the odds with the Jiffy-V 22.

The Bay Pilot 18 is more versatile in her layout, offering three configurations. Less conventional in appearance, she uses lapstrake-plywood planking in the topsides over a V bottom. The lapstrake planking will be a bit easier for a builder working solo, as each plank is smaller and easier to handle than a big sheet of

Jiffy-V22



plywood. The plank lines also add distinctive shadows and help to mask a proportionally higher freeboard. The raised-deck configuration offers real cruising accommodations in a tiny trailerable cruiser. A tumble-home top plank and a break in the sheer recall the burly boats responsible for putting pilots aboard ships at the mouths of large harbors.

Both boats share a bottom construction in which frames and bulkheads are notched for closely spaced plywood longitudinal girders; the bottom planking is applied over this "egg-crate" structure for outstanding rigidity. The self-bailing cockpit sole lands on top of the girders, without need of additional framing. A shallow V bottom delivers good deadrise in the forefoot for cutting through a chop without pounding, and a seven-degree V at the transom gives the boat fuel-sipping economy with a moderate-sized outboard motor.

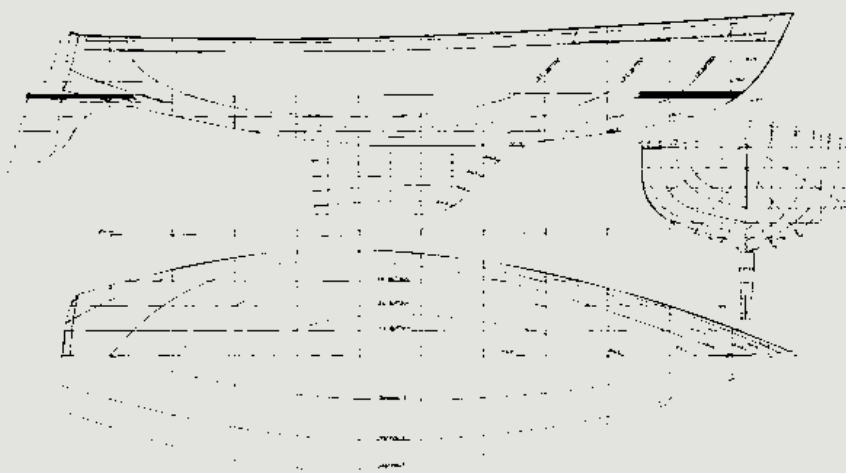
—RWS

As Arch looks back on his career to date, he muses about the choices he's made and the turns he's taken. He recognizes it's been a path without big financial rewards, and he's struggled over the years to keep the household in sound shape. But he also recognizes the rewards he has accrued, some intangible, and some very tangible, like a beautiful cruising boat built with his own hands and a family that has shared in its creation. He sees with uncommon clarity how his chosen path has, at the expense of monetary wealth, afforded him the chance to spend each day as he wishes. He's built things of lasting value: his home, his boat, and a business with thousands of customers. He's had more flexibility than

most fathers to spend time with his children on *their* schedule rather than that of his workplace. And he's had a career of constant variety and inspiration.

As he considers the state of the industry, he expresses concern for where today's youth is heading. He recalls his own adolescence, where within his New Zealand neighborhood of eight or ten blocks there were at least as many boats under construction by amateur builders. He remembers the inspiration these projects provided, the sense of empowerment conferred by seeing ordinary folks building things with their hands every day. He fears this is missing for today's young people. More and more he fears that society views something like

MARISA



MARISA Particulars

LOA	37'2"
LWL	31'3"
Beam	10'7"
Draft	5'7½"
Displacement	15,000 lbs
Sail area	622 sq ft

MARISA is a light-displacement cold-molded sloop in the style of British designers Laurent Giles, Angus Primrose, and John Guzzwell. Distinctive touches link her to this school: the long coach roof with low doghouse; the larger doghouse windows; the long waterline, reverse transom, and short spoon bow; the compact rig.

Her construction relies on massive laminated floor timbers through the middle of the boat, and good support to the planking by glued-in-place interior components. A small, well-protected cockpit and a forward well deck provide good security for serious offshore cruising. Her outboard rudder is robust and simple.

The layout shows experience gained during Arch's

years of living aboard a variety of boats while cruising the New Zealand coast. With a small cockpit placed well aft, Marisa has lots of room for a snug accommodation. The U-shaped galley is well lit by the doghouse windows and benefits from the air of the companionway. Good sea berths abound: two quarter berths on either side of the cockpit (one of them suitable for a couple when in harbor), a pilot berth outboard of the saloon settees, and even a forward stateroom located near enough to amidships for tolerable motion in most conditions. The forward head will be a challenge to use when smashing into a head sea, but it's by far the most private location, and avoids breaking up the interior with a walled-off cube in its middle.

—RWS



COURTESY OF ARCH DAVIS

boatbuilding as out of reach for “normal” folks, and thus we’ll be afraid to try our hands at challenges like that. He worries that without the confidence imbued by trying something such as this, and seeing that success is possible, we will forget how to reach for things beyond our grasp.

One of Arch’s continuing dreams is to work with like-minded people to collectively inspire a community to pull together and create together. He has worked with local youth boatbuilding efforts, but as yet has not found a community that has gelled to create that sense of enduring inspiration. Through his customers, and the experience of his own children, he has seen how the act of putting your hands and mind to work creating an object of lasting beauty and utility can be a transforming experience for individuals. He would like to find a way to extend that transforming experience to a community, to inspire people to put down their smartphones, pick up hand tools, and build something together.

Will this vision ever happen? With Arch Davis’s understated charm and simple enthusiasm, I wouldn’t bet against it. 

Bob Stephens is a partner and designer at Stephens Waring Yacht Design of Belfast, Maine (a neighbor of Arch’s). Having tried his hand long ago at designing small boats for amateur builders, he appreciates Arch’s success in this challenging field.

Sand Dollar

The 11’ Sand Dollar is Arch’s entry-level boat, but she doesn’t skimp on his signature good looks. Her simplicity of construction demands complexity of design. As Arch says, “Small craft are not the easiest to draw if they are to look really well. With the constraints of a flat bottom, and sides that are straight in section, the difficulties increase.”

Following his usual method of designing, Arch used a quarter-scale model to confirm that his design was practical and pretty before building full size, proving the sweep of key lines like sheer and planking, and testing construction ideas. The model demonstrated how the stringers that back up the sheerstrakes could work wonderfully as seat risers, and allow the thwarts to be fitted before planking. The model also highlighted where changes were required, as in the all-important sheerline, which needed adjustment before the boat passed Arch’s rigorous scrutiny.

The fine-tuned result is one of the finest-looking flat-bottomed skiffs you’re likely to see. The sheer exhibits just the right sauciness, the stem features a gentle curve full of character, the transom is nicely raked—but not so much as to prevent her from accepting a small outboard motor. Fine touches abound. For example, instead of being simple thwarts, the bow and

WoodenBoat’s Maritime Tours presents *Sail Antigua Classics* April 16-22, 2014



Join the crew of the 1928, 88’ Baglietto ketch *SINCERITY* for six incredible days at the Antigua Classic Yacht Regatta. This world-renowned event is a meeting ground for some of the finest sailing yachts from Europe and North America. Your time at the event will include a practice race, the four days of the regatta, and an end-of-racing onboard dinner.

The tour’s many highlights include:

- Lunch served onboard daily
- Two gourmet dinners served on deck
- Daily post-race cocktails and hors d’oeuvres
- A discussion of the Caribbean’s legendary Carriacou sloops, featuring the photography of Alison Langley and Alexis Andrews.

Participants will spend each night ashore, in their choice of one of several lodging options.

For further details, please visit www.woodenboat.com or call 207-359-4651.



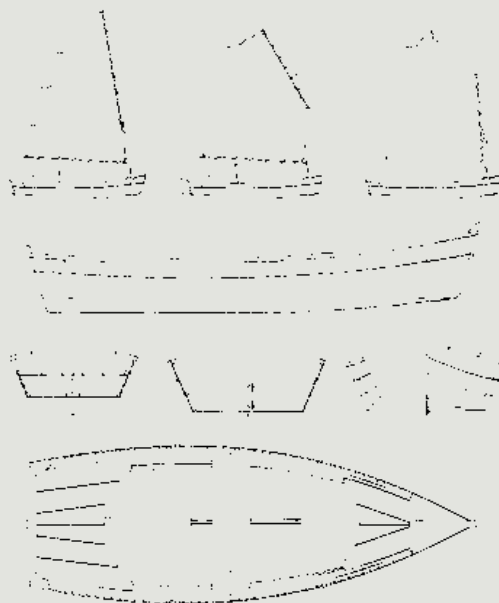
stern seats are made of tapered fore-and-aft planks, nicely curved on their front and rear edges. They're not much more time-consuming to build than the simpler option, especially since they are built into the setup before the planking is installed so can be made large and later planed to the stringer's edge.

As with all of Arch's boats, Sand Dollar is built in traditional skiff style, upside down over a building jig consisting of a strongback and several simple temporary frames. While many skiffs are built without a jig, Arch believes strongly that the jig is an important part of making the process easier and more accessible. It provides a secure and stable basis for bending the various pieces into shape. (Without a jig, boatbuilding can become more like wrestling a boa constrictor as we struggle to make springy pieces come together in mid-air, and we can never be quite sure we have it right and that the boat won't exhibit some horrible twist.) Arch is thinking of the builder's future as well: "Some kind of a jig or strongback is an essential part of building bigger, more elaborate craft, and I dared hope that some builders who choose the Sand Dollar as their first project would go on to put the skills they have learned to use in other boats." If so, Sand Dollar will make a mighty fine tender.

—RWS



COURTESY OF ARCH DAVIS



WoodenBoat
THE MAGAZINE FOR WOODENBOAT BUILDERS AND DESIGNERS

COMMUNITY FORUM BOATBUILDING & WORKING RESOURCES WOODENBOAT MAGAZINE

Community

Boat Launchings

Share Us the Wooden Boat YOU'RE BUILDING - It's free to do so. And of course your boat must be wooden. If you'd like to also submit it to the magazine, please email launchings@woodenboat.com.

Search Launchings

	JOANIE Alaska Bay, Hailu, Australia Launching Date: 06/16/2014	Designer: David Payne Builder: Doreen Martin LOA: 17'
	AMOS MOSES paddle Ogeechee River (Waynesboro, GA) Launching Date: 06/07/2014	Designer: Jeff Robbins Builder: Jeff Robbins LOA: 12'
	Canoe Launching Date: 06/16/2014	Builder: Fred's team at WoodenBoat Behind Aug 2014. Finishing by Bob LOA: 10'
	Two Kayaks Pawnee, WI, Wisconsin, WI Launching Date: 06/16/2014	Designer: Chesapeake Light Craft Builder: Joe Shiner LOA: 17'

NEW on
WoodenBoat.com

Launchings Online

[www.woodenboat.com/
boat-launchings](http://www.woodenboat.com/boat-launchings)

Become a WoodenBoat.com community member today, for free.

TWO RESINS. THREE HARDENERS. ONE NON-BLUSHING SYSTEM.



Our trusted 2 to 1 **NON-BLUSHING** epoxy system consists of two resins and three hardeners, that allows custom controlled working times with no Amine Blush. Whether you work fast, slow or somewhere in between, we have the formula for your project. MAS Epoxy is great for beginners and loved by professionals.



facebook.com/masproducts

Strong. Simple. Sure

Visit masepoxy.com or call 1-800-755-8568

FETCH

Adapting a small daysailer for cruising

by Tom Jackson

For solo cruising, Kees Prins of Port Townsend, Washington, converted an Iain Oughtred-designed Fulmar, 16'8" LOA, to make the boat fully decked with a small trunk cabin protecting spartan accommodations



TOM JACKSON

One glance at a racing yacht alongside a cruising yacht tells a clear story of wildly different priorities. A similar divergence is perceptible among small craft and seems to be widening as adherents of adventure cruising turn away from the long-dominant quest for speed.

One such sailor is Kees Prins of Port Townsend, Washington, whose boat design work in recent years has focused on cruising sailboats of glued-lapstrake plywood construction for light weight and trailability. His largest boat of this type was the 23'6" LOA Townsend Tern (see *Small Boats 2011*). He designed and built that boat for clients who had specific goals in mind, but in 2012—after a couple of life changes, as the phrase goes—Prins began looking at boat prospects for a different kind of client: himself. He was looking

for a just-right blend of characteristics for setting out on the classic American road trip, nautical edition. He wanted to simplify. He would be footloose, living out of a van on the open road to the next cruising grounds then out of the boat on the open water.

"That's kind of my interest, to have these pocket cruisers that you can voyage in," Prins said. "That's definitely my personal mindset, where I want to go. So far, I haven't done a lot, because I've always been working. This is my big escape. I like going from A to B to C, rather than making all these return trips to the same dock. I got tired of daysailing. It was always the same bay, always the same direction, and there's so little time to take longer trips."

For this plan, the realities of time and money imposed their usual constraints. During the year of



Glued-lapstrake construction keeps the boat light for trailering to distant cruising grounds. A removable gallows frame aft, and a bracket at the tabernacle, holds the mast and spars. Builder Kees Prins sailed the Great Lakes, the Maine Coast, and Cape Breton before returning to Port Townsend, Washington.

his wanderings, he designed a new boat while teaching at the Great Lakes Boat Building School in Cedarville, Michigan. The design was Loon, a 23' double-ender (see WB No. 235) that was nearly as long as the Townsend Tern but much lighter. For a while he was seriously tempted to build it. But he stopped short. "It takes so many man-hours to do that, and last June instead of being done with school and ready to cruise I would have to keep working on the boat another six months at least. I would have eaten up all my savings. I would have been back to square one. How much is it worth to get that extra comfort?"

His inspiration for Loon was his direct experience with a much smaller cruising boat. Back in Port Townsend, he had confronted similar questions about priorities. But in that case, the boat itself imposed limitations. He had bought an Iain Oughtred 18-footer, a Fulmar design, from a friend, and for him the boat became a puzzle that he began to look at with fresh eyes.

The Fulmar was nicely built in Seattle of mahogany plywood. But a fast, planing daysailer was hardly what Prins had in mind. For his new solo adventure, the objectives were clear: the boat must be easily trailerable, easily launched, quick to set up, a very good sailer, safe, and able to accept a minimalist cabin, an auxiliary outboard motor, and enough gear for a week or two of cruising. The only criteria the Fulmar fully met were those for good sailing and trailerability. But adapting the existing boat might just be feasible, and the many hours and much money saved would translate directly into sailing time.

So Prins decided to take this glued-lapstrake, plywood, transom-sterned, fast daysailer and transform it into FETCH, a fully decked cruising sailboat with a permanent cabin, an outboard auxiliary, many cruising

fittings, and a comparatively conservative rig with a sliding-gunter main, a jib, and a sprit-boomed mizzen. Little would be left of the original Fulmar concept, other than the shape of the hull itself.

The Lessons of Experience

It's not at all unusual for someone contemplating building a boat to settle on a design and then right away set about changing almost everything about it. Such additions can often be inadvisable, best left to the designer himself or at least someone with design experience. It is also unusual for alterations to earn the original creator's respect—but that nevertheless seems to be the case with Prins's adaptation. He has developed conversion plans for a version of his boat that even Oughtred has endorsed as a supplement to his own original lines and construction plans for those looking for this type of micro-cruiser.

Like a lot of sailors, Prins has firm views, shaped by his experience and outlook, about what makes a good boat. In developing the Townsend Tern and other designs, he worked directly with clients to discern what they wanted and find ways to make it all work. Design experience and listening to what others think is itself a valid teacher, but time at sea is another.

Prins especially recalls capsizing during heavy weather at Raid Scotland years ago, in a light plywood boat with a standing-lug rig. The experience stayed with him. "It was in Loch Ness, with a lot of wind, and big waves," he said. "We were just about dead-downwind. The yard was forward of the mast, and up there the forces were to windward, and down low the forces were to leeward. We went over to leeward, real slow. If I had had a proper response—which is a little counterintuitive—I would have sheeted *in* during the gusts." But normally, depowering calls for sheeting out, and that's what



ROSEMARY WYMAN

Prins found that sailing just with the sliding-gunter mainsail and jib worked best most of the time, leaving the mizzen ashore.

Right—The original Fulmar’s low foredeck became an anchor well, accessed by a hatch in the new flush deck. **Below right**—A crowded afterdeck has a lazarette, a fuel tank lashed in place in the motor well, a mizzen maststep to starboard, an outboard motor to port, a tiller working the rudder through paired armatures, lines held by cam cleat for raising and lowering the rudder, and an adjustable rope traveler for the mainsheet.

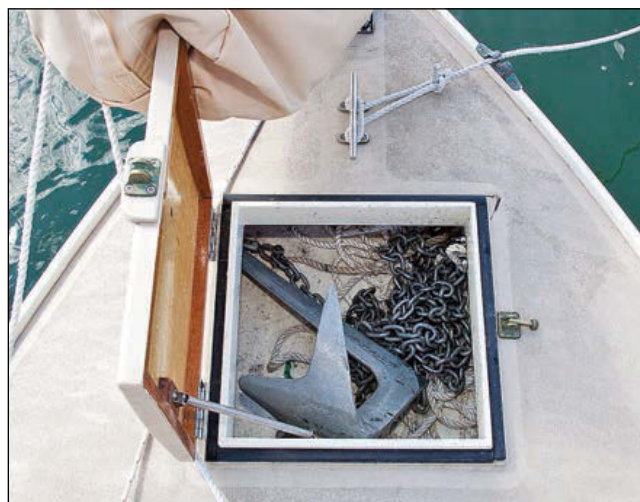
he did. The boat was on the edge of a “death roll,” careening wildly first to one side and then the other with increasing severity. Sheeting out only made things worse. “By sheeting out, the yard turned more forward, and pushed us *more* to windward. So there we went, in the water. Not good. My wife got almost hypothermic.” This was an organized event, so help came in time. But the long-ago episode taught Prins a lot of lessons.

His flotation chambers had screw-in hatches on their vertical bulkheads, but they leaked, reducing the boat’s effective flotation. Much worse, water gushing in through the open-topped centerboard trunk overwhelmed his ability to bail. The boat reached floating equilibrium with her gunwales just above the surface and the centerboard trunk well below it. One person could get aboard, but when both tried the boat rolled again. “Capsize is no fun,” Prins said. “You hear so many people say, ‘Ah, it’s a wooden boat, she’ll float.’ And I say, ‘Yeah, yeah, but you’ll die next to it.’ They don’t understand what the hell I’m talking about. If that happens and you’re by yourself out there, with your family, people could die.” The prospect should humble any solo sailor.

Unlike racing dinghy sailors who came up through the ranks in the latest, hottest, one-design fleet, people who build their own boats rarely capsize them deliberately. Although self-rescue is lesson No. 1 in dinghy racing, it tends to be a lesson recreational sailors take on the fly. Those who cruise extensively in small craft, and who have either capsized or come close to it, learn the hard way to prepare for a likelihood, not a possibility. Sailing without company and in cold waters elevates the risk. In each phase of his conversion, Prins kept all of these thoughts in mind.

Using Plywood

For a long time, Prins has been working in plywood construction. He has a varied background in sailing, extending back to his youth in Holland, in a variety of boats and materials. “I don’t know when that plywood affinity started,” he said. “I think it was probably driven by my customers. They don’t come to me for a traditional boat. Who orders a traditional-built boat? On the West Coast, it barely happens at all. I’m in the small-boat realm, and they’re all in plywood so you can put it out in the yard, you can put a tarp over the boat, and it’s fine. It’s lighter, and it’s very strong for its weight.” For a trailered boat, too, plywood planking means the boat doesn’t have to spend time in the water to “take up” until the leaking stops. The boat can be launched, sailed immediately, and retrieved, and the cycle can



ROSEMARY WYMAN (BOTH)

repeat as frequently as desired without any regard to the shrinking and swelling cycle. “In Port Townsend,” Prins said, “nobody keeps a boat at a mooring. The boats are at the dock, and it’s quite expensive,” so leaving a boat on a trailer significantly cuts costs.

The Fulmar that Prins had bought was well built, planked with $\frac{3}{8}$ " mahogany plywood. It had a low deck forward, over a watertight flotation compartment, which he converted into an anchor well accessed by a deck hatch. The decked flotation chamber aft became the basis for the lazarette and outboard motor recess. He used plywood bulkheads and frames, epoxy-filleted to the hull, to add new structure, strengthening the hull where necessary and keeping it as light as he dared.

He used $\frac{1}{4}$ " okoume plywood for the decks and cockpit seats, well supported by numerous slender spruce beams. The cabin roof is made up of two layers of $\frac{1}{4}$ " okoume, and the house sides and cockpit sole are $\frac{3}{8}$ ". “It was a bit of an exercise for me to go light,” he said. All the surfaces are sheathed in fiberglass cloth set in epoxy, with ground walnut shells added to the deck paint for a nonskid surface. The conversion added enough weight that the boat no longer can be considered a planing hull, and it raised the load waterline by about an inch and a half.

Plywood-epoxy construction has revolutionized the

design of small cruising boats. Minimal structure and light weight have made adequate interior volume much more feasible for boats that can be launched from a trailer and towed by an ordinary vehicle, opening up a whole new world. In one of life's sweet ironies, such boats are usually used more often than their expensive larger counterparts and are capable of venturing much farther: in one year, Prins sailed Puget Sound, the Great Lakes, the Maine coast, Cape Breton, and more.

Cabin or Tent?

As far as Prins was concerned, the accommodations decision was never in question. The boat would have a cabin of small stature, cleverly arranged for the best use of space.

A cabin on such a small boat often can be about as commodious as the average coffin. Standing headroom is impossible. The impulse to increase interior volume for comfort has to be balanced against functionality on deck, and good appearance isn't entirely aesthetic—it is a result of getting that balance right, with a proper sense of proportion. A well-designed cabin looks like it grew there.

"I always had a desire for a cabin, a place to crawl into and a place to keep all my stuff dry, without having to stuff it all in bags. You can do it in an open boat, but you have to mess with a tent of some sort. You arrive somewhere in the rain, and you have to deal with this tent, and everything's wet in there. I just love being in the cabin, and reading, going to bed. If it blows, it's just so cozy in there, and it can rain like hell. I love that sense of protection, and a tent gives you that only partly."

Interior layout choices were few. Prins chose to use conventional V-berths forward, as opposed to the only other viable option of quarter berths with legroom extending under the spaces formed by the cockpit side seats. The legroom for the V-berths extends under the anchor well forward.

Comfortable seating in such a small cabin is problematic. His solution was to make the aft end of each V-berth hinged. This section flips up to reveal a low, contoured seat, and the raised section forms the seat back. You sit facing aft, with your feet in a small well between the seat and the companionway. The capped centerboard trunk happens to be at a level making the seats something like side-by-side armchairs, with a surface flat enough to set a mug on. Theoretically, the boat can accommodate two—but they'd better be very good friends. This boat is better envisioned as solo-sized for a cruise of much duration, with the spare bunk used for gear stowage.

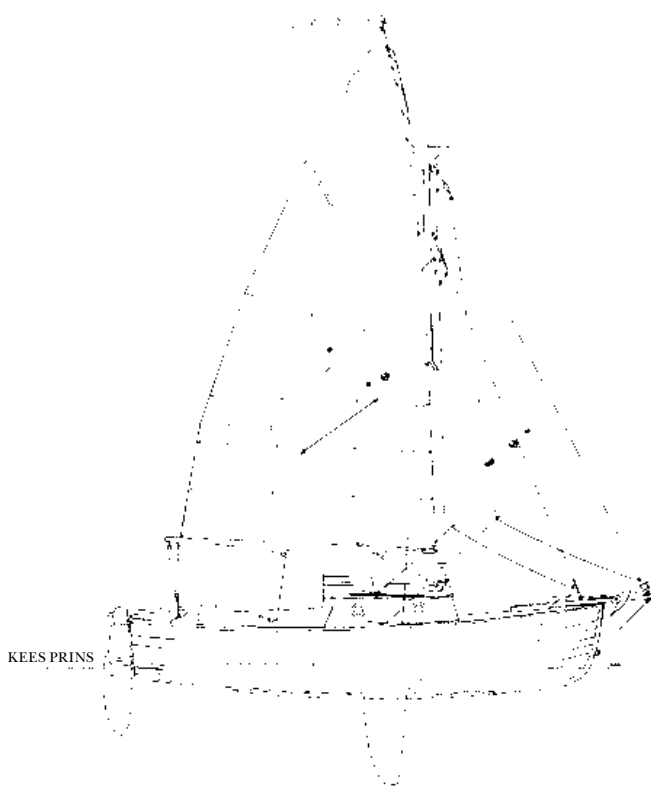
By placing the seats alongside the centerline, Prins took full advantage of the greatest height of the coach roof's camber. If they had been farther outboard, as in facing athwartships, the cabin sides would have required greater height. "So, that kept the house 6" lower, which is the difference between an ugly house and a decent house," Prins said. "That's kind of the essence of this FETCH, in terms of the interior, that whole seating arrangement."

Horizontal longitudinal plywood stringers installed on each side double as shelves for at-hand items, a success from Townsend Tern that Prins incorporated into FETCH. There is no galley—if he cooks, he sets up his stove in the cockpit. The interior space is tight: "This is kind of verging on being too tight," he says. "I can sleep okay, but getting in and out of my bag is like a fight. For cruising, the human comfort in this cabin is so small that you say, 'Can't this be better?' But, as soon as you make it bigger, better, then you're hauling more weight behind you [while trailering], and launching is harder." More sophisticated equipment in the galley, lighting, and so on, adds not only to weight but to cost.

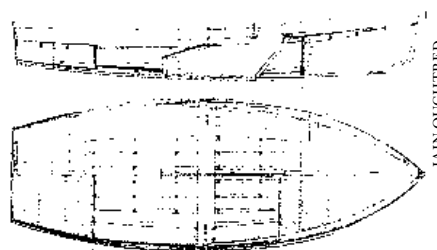
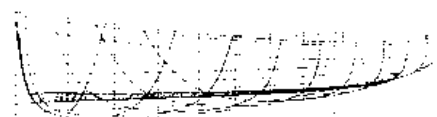
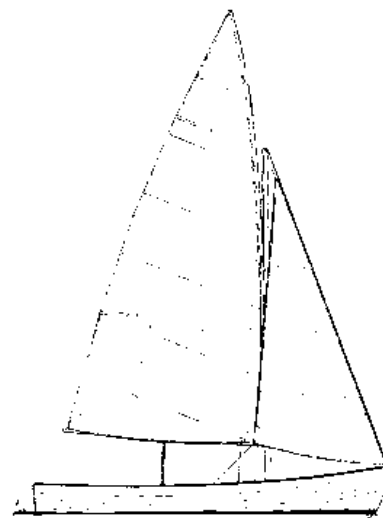
For a design client in Australia, however, he has developed a "FarFetch" conversion for Fulmar, and it is this version for which his plans are available. The boat is the

Left—a contoured seat bottom faces aft in the cabin, with the centerboard trunk cap serving as a rudimentary table and a shelf outboard holding commonly used items. **Below**—One seat is installed on each side of the centerboard trunk, and when the seat backs are hinged down, they form a V-berth platform.





For FETCH, Prins devised a sliding gunter mainsail of smaller square-footage than Iain Oughtred's original Fulmar (right). A single jib, with a sprit-boomed mizzen, completed the rig. For his "FarFetch" revision (above), Prins made the hull 10" wider than Oughtred's original open daysailer. He also made the cabin larger than FETCH's, enlarged the cabin, omitted the mizzen altogether, and called for two small headsails, the outer one roller-furled, for better sail-reduction options in high wind. He is marketing plans for the FarFetch conversion in conjunction with Oughtred's original plans.



same hull length but adapts Oughtred's lines plan to widen the hull by 10", which provides room enough to make the trunk cabin 6" longer, 3" taller, and 5" wider, a significant gain of volume. He has revised and finalized the plans, based on his direct experience with FETCH.

That gain in interior volume is fairly modest, resisting the ever-present temptation for more accommodation space. At some point, comfort aboard becomes a liability on the road. "Trailerable" doesn't mean necessarily that you can launch it," Prins said. "The Townsend Tern was very comfortable inside, but it's a bit of a beast behind a car. You need quite a good vehicle, because it's 8' wide, 3,500 lbs," not including the weight of the trailer itself. "Loon will weigh 1,500. This FETCH is 1,200, which is quite easy—I can wheel it around at home. For me, Townsend Tern would be too big, a little too much boat. This FETCH is like my minimum comfort in my maximum boat, pricewise and what I want to haul around."

The conversion required a close look at every function, not just for ease of use but also for safety. That centerboard trunk cap, for example, is far more than a convenient surface. In the Fulmar design, the centerboard's upper forward corner comes to a point

extending out of the slot, allowing the attachment of a lanyard for adjustment and a shock cord for tensioning, a typical setup for racing dinghies to permit fine adjustments of the centerboard's angle. The slot can, in certain conditions, allow water to splash into the boat, however. And in a full capsize, that water flow can become a torrent. In Prins's reconfiguration, any water from the trunk would be splashing into the dry living space. So he reconfigured the centerboard's profile, ballasted it with 30 lbs of lead, raised the trunk sides and ends by about 2", and installed a watertight cap. The lanyard now runs from the centerboard to a turning block built into the inside of the trunk, then aft through a hole in the trunk's aft end to be secured at a winch on the forward end of the cockpit footwell.

Prins also kept water out of the cabin by resisting the temptation to build lockers under the cockpit seats, accessible from above via hinged lids. He reasoned that a small watertight lazarette under the short after deck would provide storage for necessary sailing gear, so side storage lockers weren't necessary—plus, those lids can leak and promote rot. Worse, in a full capsize, they can leak or flip open inadvertently, downflooding the stowage area. That can be a serious flotation issue in a small

boat, and in this case it would open the possibility of downflooding the cabin as well. “Self-rescue is important,” Prins says. “This boat has buoyancy in the lazarette, but it doesn’t have separate buoyancy in the cabin. My cabin *is* buoyancy.” Keeping the water out is imperative. Instead, Prins made the cockpit seats watertight to the exterior, and they are accessed only through the cabin itself. He stores gear in plastic totes in those compartments, using lanyards to slide them out as needed. A portable toilet, too, stores there and can be hauled out for use.

Prins also gave the boat a relatively conservative sail plan, with a sliding-gunter mainsail equal to the single-reefed mainsail in one of Oughtred’s original sail plans, with a jib hanked to the forestay and a small sprit-boomed mizzen offset to starboard.

The Lessons of Use

When the work was finished, Prins headed east. He wintered over in Michigan, teaching and then voyaging in the North Channel of Lake Huron. He arrived in Brooklin, Maine, in August 2013, just in time to sail in company (loosely) for four days to the Small Reach Regatta, sail as crew for three days in the event (in which cabin boats don’t qualify), then sail back for two more days—a total of nine days living aboard. When last seen, he was starting his drive to Cape Breton, after which he returned to Port Townsend.

Even for a large boat, voyages of a week or more put a premium on thoughtful planning and organization. Especially for a solo sailor, the way a boat is set up and outfitted has everything to do with comfort and safety on the water—and those concepts are directly interrelated. A boat that is hard labor to sail or chronically overpowered can leave a person exhausted at the



ROSEMARY WYMAN

A swivel-based mainsheet turning block, with the sheet held by a quick-release cam cleat, is mounted on an athwartships beam in the cockpit. At anchor, the beam can be removed quickly, by releasing a barrel-bolt latch as shown.

end of the day, and fatigue contributes to error. In his revisions for FarFetch, Prins dropped the mizzen and called for two headsails, the outer one roller-furling. “That whole thing about being nervous all the time about being overpowered, it takes a lot of the fun away,” Prins said. “If it wasn’t an issue, when the wind

kicked up, I would be more relaxed.” He has a storm jib on FETCH, but “if I get caught out in the middle, going to a storm jib is difficult.” The time to set it is before leaving the anchorage.

The mizzen, too, provided some lessons. “When the wind picks up, it becomes weather helm, and so I have to take it away. It’s kind of hard to reach. I have to step on the aft deck. I just take the snotter loose and roll it up, but still, the boat is bouncing and you have to roll it up and secure it, and by the time you’re done with it, all kinds of things can happen. So after months and months of sailing with it, I thought, ‘Let’s just leave it off.’ Right now, it’s tied to the side of my camper. So far it’s been great. I haven’t missed it at all.” His Loon design also has a mizzen, which in the larger boat he feels might work better for sailing on just the jib and mizzen in high winds. In FarFetch, he did away with the mizzen entirely.

He used to keep the mizzen set close-hauled to keep the boat’s head to wind while reefing. Without it, he finds that having the helm secured hard to leeward and the jib sheeted in hard works better. “When you use the mizzen to reef, or point into the wind, you start to drift backwards. By the time you’re done, you’ve lost a lot of height”—meaning progress to windward—“and if you’re trying to get around something, now you have to make that up.” With the jib, the boat holds its course. “It takes me a minute, and I’m reefed. When it’s done, I go sit down, I pull in my mainsheet, and the boat accelerates. I haven’t lost any height.”

His sliding-gunter mainsail reefs very easily. The throat and peak halyards follow fairleads to cam cleats at the aft corner of the cabin roof. By opening the companionway hatch, he can step forward far enough to slip



ROSEMARY WYMAN

Key running rigging—including halyards and jib sheets—are led to cam cleats on the aft corner of the coach roof. When reefing, a hook at the main gooseneck fitting is within easy reach by opening the sliding hatch and standing on the centerboard trunk cap.

Right—At the tiller head, a steering arm made of commonly available materials links through a transom aperture to a matching arm on the rudderhead. **Far right**—In use, two lines led to cam cleats on the afterdeck raise and lower the kick-up rudder.



ROSEMARY WYMAN (BOTH)

the luff ring onto a hook at the gooseneck. The leech line leads well forward on the boom, in easy reach, and he can get away with making off just a single reef nettle. With three reefs in the main and a storm jib set, he can carry sail much longer in a wind that's building.

The cockpit itself has a fairly small footwell, to minimize its water volume, and therefore weight, in a capsize. Its sole is sloped slightly forward to direct water to drains that make the cockpit self-bailing, which is handy not only under way but also when the boat is at a mooring or on its trailer during rainy drives. Designed to keep crew weight comparatively far forward, the cockpit location counters the far-aft weight of the outboard motor and fuel tank. The mainsheet reeves through a block set on a beam that runs across the footwell, but the beam

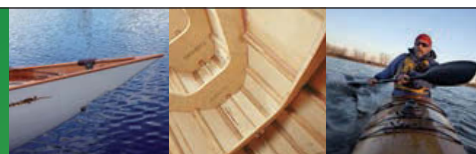
can be easily removed to free up space in the cockpit while at anchor. Prins also added 200 lbs of inside lead ballast—and to determine where to put it, he outfitted the boat, took the helm, and then had a 200-lb friend move forward until the boat's fore-and-aft trim looked right to another person watching from the dock. The ballast ended up clustered adjacent to the mast.

With the outboard motor within easy reach to port, and an offset mizzenmast to starboard, Prins found he could not use the Fulmar's original long tiller. There was a lot happening on that afterdeck. Instead, he

Joubert marine ply



www.joubert-group.com



Contact

Concannon Lumber / Wolstenholme
2060 Broadway Suite 320 - Boulder CO 80302
303-530-0435 - phone - 303-530-3742 - fax
www.wolstenholme.com

JOUBERT
PLYWOOD

U.S. BELLS
WWW.USBELLS.COM

WIND
& DOOR
BELLS

56 WEST BAY RD
PO Box 73
PROSPECT HARBOR, MAINE 04669
866-963-7184

GAMBELL & HUNTER
SAILMAKERS

Sails
and
Rigging

16 Limerock St. Camden Maine 04843
(207) 236-3561 www.gambellandhunter.net

rigged a short tiller forward of the outboard motor recess. A stainless-steel rod links a steering arm off the tiller to a matching steering arm off the rudderhead. The arrangement not only keeps the after well clear, it also keeps the helm responsive with minimal athwartships movement in crew weight and without the use of a tiller extension.

For ease in setting up the rig, Prins steps the mainmast on a tabernacle, where it's held by two simple bolts. He can raise the mast easily himself, using the tabernacle bolts to hold it while he attaches the quick-setting forestay. When striking the rig, the mast is supported by a removable gallows aft. He disconnects the boom at the gooseneck but keeps the mainsail attached, rolls the mizzen on its mast, and stows both alongside the mast to be supported by the gallows aft and a bracket forward.

Long voyages thoroughly shake down every kind of system, from sailing to navigation to shelter to personal hygiene. The boat, more than ever, becomes an expression of the skipper's preferences and his way of doing things. The design and construction ideas are tested, altered, and often improved upon with use, with safety and function always in mind.

Comparing Notes

As Prins and I arrived serendipitously in the same harbor on the sail back from the Small Reach Regatta, we

shared observations about solo cruising tactics, and the conversation continued in subsequent days. It occurred to me as we talked that we had taken completely opposite approaches. He has a cabin, I use a tent. His boat is plywood-epoxy, mine is traditionally constructed. He has an outboard, I use oars. His rig has many modern conveniences, mine has none. Yet time, use, and personal preferences have led each of us to devise strategies that work. During a fine day of sailing on the home stretch to Brooklin, our boats seemed strangely compatible, both in speed and handling. We had developed similar ideas on our hand-held GPS and radio, and we compared notes on a dozen things, equally valid, forged in experience and based on our own unique outlooks. In another place, at another time, facing different circumstances, either of us might well have made choices similar to the other's.

As with all boats, FETCH's design, construction, and use were like three strands of a rope, wound into one another, all pulling equally. 

Tom Jackson is WoodenBoat's senior editor.

Plans for Fulmar are available from Iain Oughtred, Struan Cottage, Bearnisdale, Isle of Skye, Scotland, IV51 9NS; 011-44-1470-532-732 or iain.oughtred@gmail.com. FarFetch conversion plans, which can be used for new boats or interpreted for an existing Fulmar, are available from Kees Prins; contact him at 420 Shika Rd., Port Townsend, WA 98368 or keesprins@gmail.com.

TOP NOTCH FASTENERS

The Highest Quality Fasteners ♦ Many Years of Fastener Experience

Top Notch will fill your fastener needs, whether it's high corrosion, or just those hard to find items.

Contact us today

and start experiencing the quality of our fasteners, the outstanding service we offer and the value you receive for your money.



Most of our Fasteners are Domestically Made.

- Silicon Bronze-Inconel-Monel-Stainless-Chrome, and many other alloys.
- Sizes from #0 to 3" in Diameter
- Lengths from 1/16" to 50"
- Bolts, Screws, Nuts, and Washers

75 Navaho Ave, Suite 5, Mankato, MN 56001 T: 800 992-5151 F: 608 876-6337
Email: fasteners@tnfasteners.com ♦ Website: tnfasteners.com



wooden boat rescue foundation

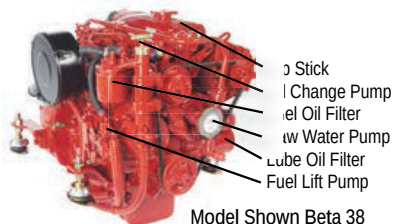
An organization dedicated to the wishing for, researching of, locating, saving, placing, learning about and dreaming of wooden boats.

All boats are free.

www.woodenboatrescue.org

Offering Wooden Boat Restoration Classes

BETAMARINE



Model Shown Beta 38

SMOOTHER...QUIETER

Our engines idle smoother and quieter because of our high inertia flywheel. This is one of the many Beta Marine exclusive features that make our diesel engines easier to live with.

Engineered to be serviced easily.

- Beta Marine Superb Propulsion Engines using Kubota Diesel
- From 14 to 150 HP including our famous Atomic 4 replacements
- Also available: Marine generators up to 30kW

BETAMARINE

(877) 227-2473

Phone (252) 249-2473

www.betamarinenc.com

e-mail: info@betamarinenc.com

P.O. Box 5 Arapahoe, NC 28510



PETER MCGOWAN

THE LIVES OF A CAT *CONJURER and her succession of saviors*

by Skye Davis

A 28' catboat built by Horace Manley Crosby, one of the acknowledged masters of catboat design and construction, slipped into the waters of Cape Cod for the first time in May 1909. It was the beginning of a varied life for one of the Crosby Brothers' many creations, continuing the legacy they started in the 19th century by perfecting their own variation on a boat type that is an undisputed American original, immediately recognizable by its large, single, gaff-rigged sail and wide, alluring hull. More than a century later, CONJURER continues to exercise her magic.

The thought of saving an aging catboat from the scrap heap may appear crazy to some. The boat came to Arey's Pond Boat Yard, which is run by my father, Tony Davis, in Orleans, Massachusetts, for its most recent restoration, which he describes as an effort to preserve a significant example of America's maritime heritage. "It is astonishing," he once told me, "to see what the Crosbys

could accomplish without design software, testing tanks, and the other tools we have. There is a lot to learn from studying this boat."

The work is being done for Fred Villars, the latest owner to fall under CONJURER's spell. Villars grew up in Philadelphia but fell in love with catboats during his childhood summers on Cape Cod in the 1960s. "My reaction was that of many who see these boats for the first time," he said. "Whether at a mooring or under sail, the sight of the huge white sail, and white hull set against the blue sky and blue water, stops you in your tracks. There is something mesmerizing and dream-like about them." Villars scoured countless advertisements looking for an original wooden catboat but was disappointed to find them in very rough shape. "One of them was literally a 'barn find,' an original Crosby cat stored for years in a barn," he said. "Unfortunately, close inspection showed that she was too far gone to

Above—Relaunched in her home waters of Cape Cod in autumn 2013, CONJURER is a 28' LOA, 1909 Crosby catboat. First used to convey guests to a hunting and fishing resort on Pasque Island, off Cape Cod, she has had a varied career but at key times has had caring owners.



Left—CONJURER's enormous cockpit first accommodated resort guests, and the same spaciousness later made the boat attractive to scallop and oyster fishermen. Since at least 1961, she has comfortably carried pleasure sailors. **Middle left**—Rather than gaff jaws, the catboat's boom gooseneck fitting attaches to a metal bracket mounted on the broad plank bowsprit. **Lower left**—Once cut back to accommodate an engine, the centerboard trunk has been restored to its original configuration in the latest restoration at Arey's Pond Boat Yard on Cape Cod.



grounded on a sandbar. After floating off with the rising tide and being taken in tow to the boatyard, CONJURER was the picture of defeat. "She was still in her heart a grand and magnificent lady, but in reality a worn-out, decrepit, 100-year-old crone," Villars said.

"She looked shipshape but tired from the sea swells yanking at her mast and forefoot," said Davis, one of the few awaiting her arrival at the boatyard. Davis met with Villars to devise a plan. With pumps keeping her afloat at her Arey's Pond moorage, she spent the winter in the water, protected by a de-icing system. During that time, it became apparent that she still had a lot of exposed, bleeding iron fastenings and deteriorating, exposed wood. She was hauled, painted, and surveyed again. She sailed briefly during the 2009 season, but the following winter she was hauled out once more to have her deadwood replaced and her centerboard trunk rebuilt. After she was opened up, as is often the case, more needs were discovered. The project turned into a reconstruction that lasted four years, ending in 2013.



PETER MCGOWAN (ALL)

sail or repair." He had become discouraged by the time CONJURER came up for sale in 2006. Months passed before he contacted the owner, Peter Baker.

Baker had been a loving owner of the boat for 20 years, sailing her out of Center Harbor in Brooklin, Maine. He and his brother, Chris, maintained the boat themselves, and their passion for her was responsible for, among other things, a significant reconstruction in the 1980s. Villars arranged a thorough survey and inspection, after which he felt that he had found the right seller and the right boat. A deal was made.

In the summer of 2007, Baker made his last voyage aboard CONJURER, delivering her on her own bottom from Brooklin to Pleasant Bay on Cape Cod. That season, Villars took CONJURER out for the first time, only to find more disappointment. The steering quadrant, weakened from the delivery trip, failed, and the boat

CONJURER began her career in the service of the Pasque Island Fishing and Hunting Club on one of the Elizabeth Islands of Massachusetts. She was commissioned by the club's owner and founder, Clarence King, an adventurer and explorer who was a friend of many of Boston's elite, among them writer Henry Adams. The club's various buildings included a sleeping lodge, clubhouse, dining room, and kitchen. Affluent striped-bass fishermen arrived by rail at New Bedford, where CONJURER met them to ferry them out to Robinsons Hole and Pasque Island. Among the club's well-heeled guests, reportedly, was Teddy Roosevelt.

The Great Depression took a heavy toll on the club, ultimately forcing it to disband. In 1931, the Forbes family bought Pasque Island, along with the club complex. By then, other assets—including the lovely catboat—had already been sold off. Jeb Barrington, a late-1960s owner of CONJURER, recounted meeting a fisherman from Martha's Vineyard who told him that he owned CONJURER in 1933 and used her for scallop fishing. Such a use would have been common for catboats, along with oyster harvesting, since their large cockpits were perfect for handling tongs and buckets and their hulls were stable enough to drag dredging gear.

Barrington's account of his conversation is the last known record of CONJURER until June 14, 1961, when

owner Robert Sanborn filed documentation papers on her. Sanborn moored her in one of Martha's Vineyard's harbors, and for navigating the notorious currents around the Elizabeth Islands and Nantucket Sound, he removed the aft half of the centerboard trunk and filled in the slot in the keel under it, all to make room for a large six-cylinder Graymarine engine. During the early phases of the most recent reconstruction, Davis's crew found evidence of Sanborn's alterations: The forward half of the centerboard trunk was original, but the after half, restored after Sanborn's ownership, had been replaced with oak planks and mahogany cleats to tie the pieces together. Baker had recalled making the same observation: "The front half of the centerboard trunk, mostly in the cabin, I'm quite sure was planked with pine, which appeared to be hand-planed and edge-splined with a similar wood," he said. "The lower part of the trunk had a table built on top with folding pine leaves on each side of the trunk—classic Crosby. The leaves when raised were held up by hand-forged iron brackets which swung out under the leaves."

After Sanborn, the boat next went to Graeme Elliott, on April 12, 1963. He had her for only two years before selling her to Paul's Boat Livery, operated by Paul Morris on Nantucket. His fleet of daysailers included spacious catboats that were chartered during the summer and used for oystering and scalloping in the off-season. In May 1968, Barrington acquired CONJURER from Paul Morris. According to Baker, Barrington should be credited with saving her from imminent demise.

It appears that Morris abandoned CONJURER in a marsh. Nantucket local Charles Sayle checked on her periodically, noting that she needed garboards as well as other work. Barrington undertook the challenge and got her floating again. It was Barrington's work that had been done—and done well—to restore the original centerboard profile, as found by the Arey's Pond crew. Barrington also removed an on-deck fuel tank and the Graymarine, which he replaced with an Acadia one-cylinder engine that was closer to the size of CONJURER's original engine.

Barrington, in turn, sold CONJURER to Robert Grosvenor of New York City on June 19, 1972, thus beginning CONJURER's career as a pleasure craft. At that time, she still had her Egyptian cotton sail, with narrow vertical panels and three reefs. Despite Barrington's care, the boat was leaking badly, as Grosvenor discovered on his voyage to New York City. But for years, the boat was launched each May and hauled out each October at a small boatyard in the Bronx that catered to wooden sailboats, with improvements made to CONJURER each year. After the bulk of the work was completed, Grosvenor arranged a mooring close to the city and began hauling her each year at a boatyard in Pelham, in Westchester County. For a decade, the family sailed CONJURER, venturing as far as Newport, down

the East River, around Staten Island, and up the Hudson River to Albany. Grosvenor's children grew up sailing the boat and have continued to be avid sailors. "My family and friends who enjoyed the boat for so long are happy to know that she is in such good hands," he said. "CONJURER played a large part in my life."

Years later, Baker's brother, Chris, met a boatbuilder at Brooklin Boat Yard in Brooklin, Maine, who had worked on CONJURER in Pelham during Grosvenor's ownership and described using 1¼"-thick mahogany planks to replace the original garboards, which make a difficult and pronounced twist at the stem. Grosvenor had a new sail made by a City Island sail loft, too. This same Caralon sail, made around 1980, is still in use. Grosvenor also had the Acadia "one-lunger" replaced with a Universal Unimite gas engine, with a 2:1 reduction gear turning out 70 hp.

On May 24, 1982, Grosvenor sold CONJURER to Joe Hliva of Pemberwick, Connecticut. Hliva recalled that his offer was way under the asking price, but with no other offers coming in, Grosvenor relented.

The boat was under Hliva's ownership when Baker first encountered her in the fall of 1985. The weather was still warm, and Peter, along with his brother, Chris, took his sailing canoe for an outing. They set out from Greenwich Cove at Todds Point, near their childhood home. During the sail, Chris had to luff up sharply to avoid colliding with a large boat, and after the confusion passed he looked back to see what he believed to be a Crosby catboat. He sailed alongside to inquire, and the man aboard confirmed Chris's hunch. He invited the pair aboard for a chat, also mentioning that he had just decided to sell the boat. "Upon stepping aboard, I knew she was the boat I'd dreamed of sailing," Peter said. The brothers made arrangements to return for a better look.

The transfer occurred the next day. Peter immediately got to work tuning up the Unimite engine. Chris moved a bandsaw aboard to rebuild the transom and steering gear. "We could see she needed more work," Peter said, "but in the spring of 1986 she was sturdy enough to sail downeast from Greenwich to Brooklin," where their family summer home is located. "It took about two weeks and was a great cruise. CONJURER exceeded my expectations as a good seaboat, handling well under engine and sail with a good, even motion."



In this 1967 photo, CONJURER lay at her mooring on Nantucket Island, where she was used in a daysailing livery operated by Paul Morris.

YVES A. FEDER



Catboats are renowned for their vast accommodations, and CONJURER is no exception. Never lavishly appointed, her cabin suits the boat perfectly.

Sailing out of Center Harbor, the home of Brooklin Boat Yard and a fleet of classic wooden yachts, it didn't take long for her to be noticed and recognized as a rare classic. That summer, Benjamin Mendlowitz photographed her for his annual *Calendar of Wooden Boats*. By 1990, the brothers had moved into a former Odd Fellows Hall, which they used as a warehouse, gallery, and summer home. The three-story building stands at the head of Center Harbor Road, a short walk to the boatyard, from which it was a short row to CONJURER's mooring. They had many fond memories associated with the boat. Peter proposed to Melissa, who became his wife, during a moonlight cruise to Isle au Haut. CONJURER had a key role in weddings over the years, and funerary ashes have been scattered over the waters from her after deck. The boat had become part of the family.

"After careful inspection, Chris and I realized that the deadwood was originally constructed with shaft-logs for a propeller shaft," Peter said. "CONJURER was most likely one of the early Crosby cats to be built with an engine." Originally, the only other conveniences belowdeck were a coal stove and a head. The head had been removed sometime before the Bakers acquired CONJURER, probably around the time holding-tank regulations started to be enforced in Long Island Sound and around the Cape.

In 1986, the Bakers hauled out the boat on an old slipway at York Island, off Isle au Haut, among the outermost islands of Jericho Bay. "We found lumber and blocking on the island to get CONJURER high and dry, and then built a boathouse framework mostly of driftwood," Peter recalled. "The entire thing was covered with a very heavy canvas tarp which provided very good shelter when it was tied down. For the next two

years, using a bandsaw and hand tools, we sistered and replaced the 2×2 oak frames as well as sheerstrakes, sheer clamps, the entire deck and its framework, and the mast partners, and we rebuilt the Unimite gas engine." They used Honduras mahogany for hull planks as needed and deck planks, and selected white oak for structural pieces. "We stayed in a 10'×20' cabin at Petes Point at the harbor entrance while our work proceeded, mostly in warmer weather. For Chris and me, it was a great place to live and work, with help when needed from friends and visitors. It was surprising the number of fishing boats and yachts that would visit and moor in the harbor—there was always someone new to meet and visit."

In fall 1989, CONJURER went back in the water looking like a new boat. She stayed on a mooring off York Island for nearly a month while gear was stowed aboard and the hull took up. The engine wasn't quite ready for installation, so on a warm October day the Bakers towed her north using Chris's old outboard powerboat. "Way out in the middle of Jericho Bay," Chris said, "it seemed we were slowing down. After checking the bilge, we found it was filling with water." The source of the leak became quickly obvious: water was pouring in through a hole in the aft end of the centerboard trunk that was meant to receive the bilge pump outflow hose; the water came in only while the boat was under way, not when it was stationary at the mooring. Peter plugged the hole, then he and Chris used 5-gallon buckets to quickly bail the bilge. They towed the boat into Bridges Point Boatyard in Brooklin, where the Unimite was waiting. CONJURER was soon put to bed for the winter, awaiting a spring commissioning.

Almost a decade later, in October 1998, they had CONJURER hauled for the winter and set up adjacent



COURTESY CHRIS BAKER

Peter W. Baker owned CONJURER for 20 years, during which several rounds of intensive restoration and maintenance work were completed while the boat was homeported in Brooklin, Maine.

to the Odd Fellows Hall, where Chris was living. The boat, originally used for hauling hunting dogs, camping and fishing gear, and personal goods to Pasque Island, had never had bunks or much else for accommodations. But this was about to change, as there was a Herreshoff ketch being rebuilt nearby, and its bunks, lockers, and coal stove were being removed. The brothers saw an opportunity to give these items a new home. "There was a heavy shelf built in place of the head on the port side against the bulkhead, and we had set up a very old coal heating stove from a Nova Scotia schooner that I'd found," Chris said. "It was great for heat, but not ideal for cooking. The replacement was designed for cooking and had a nice-sized oven. It worked well for baking bread. We installed a nice teak galley locker on the starboard side against the bulkhead, which included a stainless-steel sink with an ornate water pump and drain with a through-hull fitting. Forward of this we installed a nice, wide bunk," with ample stowage lockers underneath. "A matching bunk went in on the port side forward of the cookstove. Both bunks tapered going forward to allow access forward around the maststep, which was a great catch-all, particularly for firewood."

Fine materials coupled with simple design suited the catboat's style, while adding some class and comfort below. Chris, skilled at finishwork, completed most of the project himself while the boat was outside the building, just a few steps from his front porch. He set up his workbench in the storefront-style front room. CONJURER attracted a lot of attention that winter, and people often stopped to look her over. One man from Martha's Vineyard told Chris that if she had fished commercially it couldn't have been for very long, because dragging was hard on the boats. His father had an oyster business at the eastern end of Long Island that used a fleet of catboats, mostly Crosbys, which they would use to drag for oysters downwind under sail, culling the catch on deck. Then the crew would motor upwind to start another drag downwind. At the time, he said, it

wasn't unusual to find big catboats like CONJURER in the oyster fleet, because they had more power downwind than an engine could provide. Another visitor had a relative who had written a book about the years his family had owned and sailed a Crosby catboat.

CONJURER was relaunched the following May. "We found her more suitable for cruising, as well as an inviting place for a quiet afternoon nap while on the mooring in Center Harbor." By the following year's haulout, 2003–04, Chris had purchased an old Masonic hall in nearby Sedgwick, so the boat was set up next to his new building, under a temporary shelter. "We went to work removing the stem, which was difficult as the original 1 1/4" cypress planking was impossible to bend out of the way after removing the fastenings. We had to cut some of the plank ends to remove the stem, which had to be taken out in pieces. What we found was that CONJURER must have sustained a collision, probably with a wharf, as a large, carefully crafted graving piece had been put in where the fracture had occurred."

The gripe, which connects the lower end of the nearly vertical stem to the forward end of the nearly horizontal keel, was next to be removed. They also replaced the maststep—a critical piece, especially in a catboat, which is subjected to great stress because of the boat's large sail. Using white oak to match the original pieces, Chris shaped the new stem, gripe, and maststep. The mast step proved particularly difficult, as it was a heavy piece, almost sculptural, that had to be fitted to several other components, and reference lines



MAYNARD BRAY

Peter Baker and his brother, Chris, who first encountered the big catboat in 1985, hauled the boat out at York Island, Maine, in 1986, under a driftwood-and-tarp shed, to complete an extensive reconstruction of the hull.

Right top—The latest round of restoration, under Frederick Villars's ownership, has included a wide array of projects, including steam-bending coamings and cabin sides to a form before installation, with Arey's Pond Boat Yard proprietor Tony Davis leading the work. **Second right**—The centerboard trunk was completely rebuilt to its original configuration, and a new cockpit sole was installed over new beams. **Third right**—What turned into a four-year project started with the reconstruction of a rotting deadwood and sternpost. As things were opened up, more issues were encountered. **Bottom right**—The completion of the new deadwood and sternpost marked the first milestone, but years would pass until the boat sailed again late in the 2013 season.

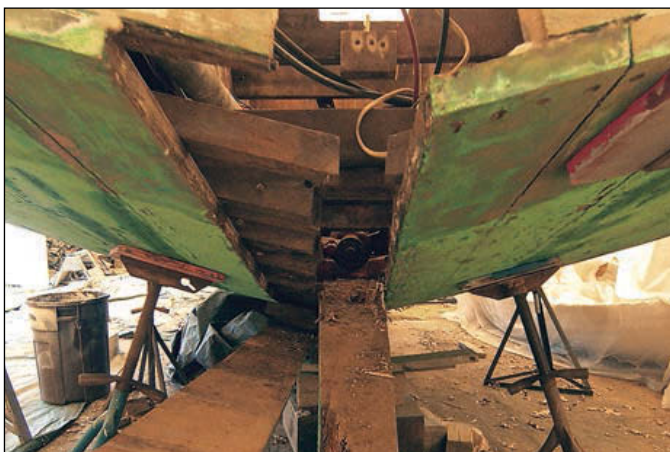


were difficult to establish. The project, including a bit of replanking at the bow after the new stem went in, took nearly all winter. Peter rejoined the work in time for sanding, scraping, painting, and varnishing CONJURER to get her ready for the 2004 season. "This was the part I was good at and enjoyed completing myself. I think Chris was tired of the job and needed a break from our old catboat for a while."

By the 2004–05 haulout, still more work was needed. Five forward frames per side, numerous butt blocks, and some planking needed replacement. Peter and Chris replaced planks with 1¼"-thick white cedar, using stainless-steel fastenings, as they had in their previous replanking. The forward portions of the garboards that had been installed in the 1960s also needed to be replaced, using white oak this time and replacing their galvanized fastenings with stainless-steel. That year's haulout involved the last major work that the Baker brothers did on CONJURER; by 2007, Peter had sold her to Villars.

With such an old wooden hull, there was sure to be more work to do, however. When Tony Davis and his crew at Arey's Pond hauled out CONJURER, they first focused on the deadwood and sternpost. "Removing the 100-year-old sternpost was a glimpse into what lay ahead," Davis said. "Leslie Gouveia, a graduate of International Yacht Restoration School who had worked here for six years, did most of the work on her own. All of the deadwood was replaced and a new transom built," during which other problems became evident. "It was time to tackle the centerboard trunk, too," he said, and so out it came, replaced with a new one of Spanish cedar.

"We made an effort to use as little epoxy and plywood as possible, building her to the same scantlings and methods as the Crosby yard. Much of CONJURER's structure was exposed. As the work was getting done, the boat was drying out. The dry cabin sides and sole were aching to be replaced, and the interior now looked worn out. It was decided to continue and rebuild the cabin, decks, and cockpit, everything from framing to seats and steering quadrant—all on a very tight budget. We took the 104-year-old steering quadrant to Edson Marine. They confirmed that they had made the original and replaced it. The last major jobs were to strip



COURTESY OF AREY'S POND BOATYARD (ALL)



Left—At 28', CONJURER is a large catboat, even by the standards of her builder, the famous Horace Manley Crosby. With shallow draft and ample capacity, such boats were a part of everyday life in Cape Cod waters at the turn of the last century.

Opposite page—With her sweeping sheerline, powerful rig, and spacious cockpit, it's little wonder that CONJURER's classic form has captivated a succession of owners.

the bottom and topsides, install new garboard planks, recaulk, refasten, install a new stern deck and coaming, new cabin sides and cabin top, and new canvas on the deck and cabin top. Finally, the diesel was rebuilt, and we installed a new fuel tank, prop, and shaft."

Thanks to people like Fred Villars, Peter Baker, and the owners who came before, an original 1909 Crosby catboat, with much of her original hull and all of her original fittings intact, will sail the waters of Cape Cod as if it were still 1909. She will no doubt become part of yet one more family, and perhaps others to follow. With luck, hard work—and maybe a little bit of magic—CONJURER is nowhere near her final act. 

Skye Davis grew up on Cape Cod in Massachusetts and has been rowing and sailing wooden boats since early childhood. She is a graduate of Wheaton College in Norton, Massachusetts, and is currently living in New York City working for film director Minos Papas.


**THE CENTER FOR
WOODEN
BOATS**

THE FUTURE THE CAMPAIGN



The Center for Wooden Boats champions hands-on learning for people of all ages and offers unique experiences on the water.

Founded over 37 years ago, CWB is now bursting at the seams. As programs grow to meet demand it is critical to secure more space.

By supporting this campaign, you join the community in building a stronger future for programs that change lives, one boat at a time.

TO LEARN MORE OR DONATE:
WWW.CWB.ORG/CAMPAIGN

FREE E-Newsletter!

1. Go to
woodenboat.com



2. Click

*Stay in touch
with ALL we do!*

SILICON BRONZE

C.D.A. Alloy 655

• SHEET & PLATE	• ROUND ROD
• SQUARE ROD	• ROUND TUBING
• WELDING ROD	• FLAT BAR
• SQUARE TUBING	

**EXCELLENT FOR
BOAT REPAIR, KEEL FRAMES,
RIBS, AND CHAIN PLATES**

Fabrication Properties	Rating
Corrosion Resistance	Excellent
Capacity for being cold worked	Excellent
Capacity for being hot formed	Excellent
Suitability for being joined by:	
Brazing	Excellent
Oxyacetylene welding	Good
Gas shielded arc welding	Excellent
Resistance welding	Excellent
Hot forgeability rating	40

ATLAS METAL SALES
 1900 W 12th Ave. • Denver, Colorado 80204
 800-662-0143 • 303-623-0143
 Fax: 1-303-623-3034
 E-Mail: jsimms@atlasmetal.com
 Website: www.atlasmetal.com



PETER MCGOWAN

**Hard-to-find Tools.
Easy to Find.**

 SHELTER INSTITUTE
  SHELTER DESIGN BUILD
  SHELTER TOOLS
  SHELTER REALTY

Think. Build. Live
 207.442.7938 www.shelterinstitute.com

**BUILD AND SAIL THE
SCAMP POCKET CRUISER**
with John Welsford and Howard Rice

March 31–April 11 & August 11–22, 2014
 at the Northwest Maritime Center
 in Port Townsend, WA

**NORTHWEST
SCHOOL of WOODEN
BOAT BUILDING**

Photo Courtesy: Small Craft Advisor Magazine

Learn more about John Welsford and the Scamp in the March/April 2012 issue of *WoodenBoat*. Howard Rice is the famed small boat adventurer and Cape Horn solo sailor. For more information or to register, please contact the School at 360-385-4948 or e-mail us at summer2014@nwboatschool.org

The Northwest School of Wooden Boatbuilding is hosting several short workshops in 2014. Check out our web site for additional classes.

WWW.NWBOAT SCHOOL.ORG  /NWBoatSchool /NorthwestMaritimeCenter



FAST PIECE OF FURNITURE

From Cold War Estonia to Maine's cold winter

by Bill Buchholz

Photographs by Alison Langley

Iceboaters tend to be generous people. Aside from a big plate of smooth ice, the one thing they want most is to share their experience with others. Such was the mindset of the European Class Association of the Monotype ice yacht with the approach of the 2007 European Championships in Sweden. The European Monotype sailors have long dreamt of getting the class active in the United States, so they posted a small note on a popular American iceboating website announcing that they would provide, to the first American team to apply, food, drink, lodging, and a race-ready boat. The offer was too good for me to refuse, so I corralled an iceboating buddy to join me in signing up. But we were too late. A couple of stern-steerer sailors from the Midwest, Erich Schloemer and Mike Peters, had already booked their flight.

To deal with my disappointment, I decided to build one of these boats. For here was something unique to Maine's frozen lakes: twin cockpits, an intriguing history, and a very cool steering wheel.

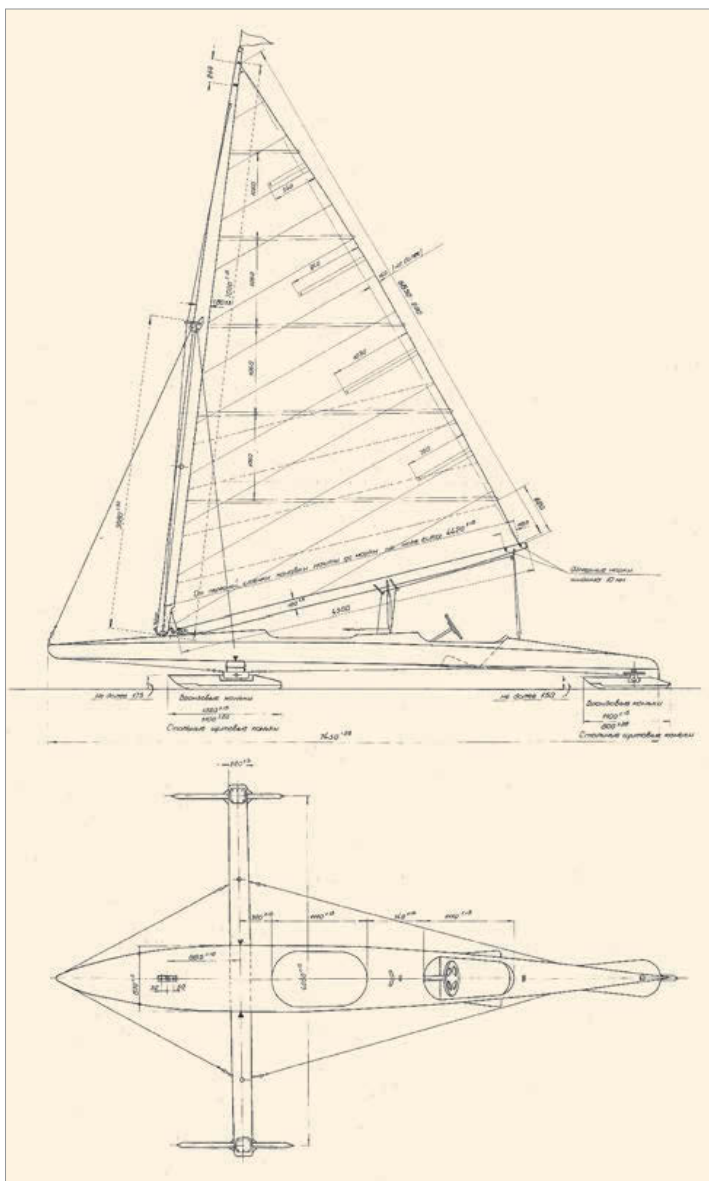
For over 50 years, the Monotype XV, named for its 15 square meters of sail, lay hidden behind the Iron Curtain. Eric von Holst, a German sailor

living in Estonia, designed the boat in 1932, and it was a very successful one-design racing class in the years leading up to World War II. Von Holst competed in the 1936 Olympics in the Star class and was instrumental in organizing the European Ice Sailing Union in 1925. There were at least eight European Championships held in the Monotype XV class before the war.

With the closing of the Iron Curtain after the war, the class fell into obscurity in Western Europe but continued to thrive in the Soviet Union. All boats were state property, and many Monotype XVs were built and raced. They didn't always receive proper maintenance, but competition was lively and wrecked boats were always repaired at the state's expense. Estonia, on the broad shallow bays of the Baltic Sea, was the nexus of the sport. Because it's nearly fresh, the Baltic often freezes as smooth as a lake.

During the Soviet era, Velo Jurjo and Igor Bolshakof worked in the Tallinn Shipyards building tugs, fishing boats, and Olympic and one-design sailboats for the Soviet sailing teams. They also built iceboats—Velo building his first Monotype XV in 1959. And he's been building them ever since. With the fall of the Soviet Union in 1989 and the opening of the Eastern

Above— On Maine's frozen Chickawaukie Pond, author Bill Buchholz sails his recently christened iceboat, FAST PIECE OF FURNITURE. The boat is built to a design that lay hidden behind the Iron Curtain for more than 50 years.



Above—The sport of iceboating requires patience and flexibility, as ideal conditions are rare but rewarding. **Inset**—The spokes of the steering wheel are made from a book-matched red oak crook. **Left**—The plans for the “Mono XV” are beautifully drawn and annotated in Russian. They are available online at www.monotype-xv.org.

Bloc countries, the “Mono XV” began trickling back to the West. Swedish and Dutch sailors bought old Russian and Polish boats, and a few sailors commissioned new boats from Velo to be built in newly independent Estonia, and also from Bolshakov in St. Petersburg, Russia. National and European Championship Regattas were organized, and a class association, IM-XVIRA, was formed.

Velo is a ferocious competitor, having won the European championships a number of times. Class rules have changed very little since the beginning, but Velo enjoys pushing the limits within those rules and has developed a hollow, strip-built runner plank that has proven to be very fast while still class-legal. Composite reinforcement is strictly prohibited, so the challenge is to maximize the structural and flexural qualities of wood alone. Now in his 70s, Velo has lived to see his country become independent, his childhood home returned to his family, and his passion for the Monotype spread throughout Europe and now to the United States.

Two things about the Monotype XV hooked me when I first encountered it: the Barney Oldfield steering wheel and the drawings, which are beautifully detailed, dimensioned in metric, and written in Russian. How could I not build to such exotic plans? The Maine iceboating season had just ended, and that’s the traditional time to begin building a new iceboat. I started with the wheel, steering gear, and some bulkheads, since I find it’s most efficient to build all the parts first, no matter what sort of boat it is. It’s no fun trying to work around a completed hull while building a mast, for example.

When the time came to actually set up the boat and build its fuselage, I realized just how big the thing was—more than 23’ long. I got cold feet and quietly put all the parts away.

That was 2007. But this past spring the bug bit again, and bit hard, thanks to the Internet. There was a video, taken from the helmsman’s vantage point, of a wonderful iceboat outing on a lake in Sweden. The action



Unless they are properly secured, iceboats will sail off by themselves and not stop until they reach the far shore. With a stern-steerer, the rear runner is set square to the boat to serve as a parking brake.

of the steering wheel in conjunction with hauling on the sheet, waving to other boats, and long easy jibes down the lake with a few tight passages through narrow straits all in full sunshine just did me in. There might have been some seasonal withdrawal symptoms at play, too. I took the steering wheel I'd made earlier down from the wall, dusted it off, and gave it another coat of varnish just to get started.

Most iceboats are still built with classic 1950s construction: bulkheads, stringers, and skin. It's a delightful method in which to work, as there are lots of rolling bevells and not too much glue, and high-quality spruce is one of the basic materials. I just had to see this design in the flesh and feel how it would be to sail such a classic.

A pair of aluminum ladders laid end-to-end on three sawhorses, decked with $\frac{1}{2}$ " plywood, and leveled makes an excellent building table, and I used such a setup for this project. Because the bottom of Monotype is flat, its panel can be set right on the table, with centerline and stations marked on it and the bulkheads set up. I scarfed the four stringers to full length from shorter stock, sprung them around the bulkheads, and planked the sides in $\frac{1}{4}$ " plywood. Then I faired the top edge of the sheer stringer and installed the deck.

I built the deck of $\frac{1}{8}$ " okoume plywood with a veneer of makore vacuum-bagged to it before attaching it to the boat. Makore, commonly known as African cherry, is a highly figured hardwood of rich gold and pink hues that would inspire the new boat's name. Getting such thin plywood to lay uniformly on the sheer clamp, without fastenings, is a tricky operation. The secret to a good fit is to cut the deck plywood at least $\frac{3}{4}$ " oversize all the way around, and then fasten a nice, fair batten to the top face of the overhang so the batten clears the

side of the fuselage. Clamps can then be applied to the batten, giving uniform pressure all along the joint. Nails are also an option: On a fuselage like this one, a closely spaced row of polished copper heads would be pleasing to the eye.

Since this was to be a bright-finished boat, before gluing I masked the top edge of the side plank to avoid staining and to give a clean, uniform glue line.

When the glue was cured and the clamps were off, I trimmed away the overhanging deck material with a drawknife followed by a plane—with a piece of tape covering the lower corner of its iron to protect the sides of the fuselage.

When it came time for the rig, I was alerted to an old Yankee-class iceboat languishing in a trailer behind a barn in nearby Thomaston. Our Chickawaukie Iceboat Club (www.iceboat.me) had been trying without luck to find someone who would buy, fix, and sail the boat. An inspection revealed that the mast was within an inch of being class legal for the Mono, and the runner plank, though not hollow like Velo Jurjo's, would also be a perfect fit. The old Yankee was in an enclosed trailer into which the Monotype fuselage would also fit—which was



The steering wheel pivots up and down to ease entry into the cockpit and to haul on the sheet.



The runners, stiffened with aluminum angle cheeks, are mounted in pillow-block bearings so that even in a steep hike they are free to articulate.

important, because a trailer is an iceboat's off-season home. I made a deal with the owner and towed it home. Obtaining these parts expedited the project, and it meant I'd be ready to sail during the coming winter. All I needed now was a sail.

My wife and I are part of a large extended family that spends summers in a sprawling compound in the Finnish archipelago. We have a small cabin there to which we've been going every summer for decades. It's about a hundred miles due north by sea from western Estonia, where Velo has his shop. In the summer of 2012, with the nearly complete iceboat at home in my shop in Maine, I made a circuitous land journey from Finland to visit Velo and learn what I could about this iceboat design.

For our visit, Velo had prepared his plank-building jig and a pile of milled lumber to give me a tutorial on exactly how to build the hollow plank, which I'm now doing. Most iceboat runner planks are simply built of three or four laminates of solid spruce, with perhaps some ash mixed in to toughen the finished piece. It's basically a big wooden leaf spring. But the oval, tapered, hollow, strip-built plank is truly exotic, and Velo spent two days going over the monotype's every detail with me, all through a very capable interpreter named Tiina Motuste. It helped that she, too, sailed iceboats.

At the end of our time together, as we were having coffee while waiting for the bus, Velo asked if I had a sail. I told him I did not. He said there was a guy who had just commissioned a new one, as he didn't do very well in last season's racing. Then he leaned in a bit closer and whispered that he would try to get me this man's old one.

Later that month when I was back in Finland, the day before our family's flight back to the United States, Tiina delivered the 14'-long roll of a fully battened iceboat sail to the ferry terminal in Helsinki. I didn't appreciate just how tough and dedicated she was until

There is a critical difference between the Monotype and a modern iceboat: The Mono is a stern-steerer. That means it has a single rear runner that turns and steers the boat, and two runners mounted forward on opposite ends of the runner plank.

Early iceboats evolved at the dawn of the 19th century when the Dutch simply mounted a single runner on the bottom of a sailboat's rudder and placed an athwartship plank up forward for the remaining runners and to provide anchor points for the standing rigging. From this evolved the classic stern-steerer, an arrangement popular through the 1800s and immortalized in vintage Currier & Ives etchings. But stern-steerers have serious performance limitations that were overcome with the bow-steerer, which by the late 1930s had become ubiquitous. Stern-steerers suffer from what's called a "flicker," in which the steering runner loses its grip on the ice and the boat goes into a terrific spin. In a classic iceboat, in which the crew is perched upon a flat deck (albeit with elegant button-tufted cushions), bodies are launched onto the ice as if from a sling. The skipper is especially vulnerable because he's farthest aft and gets the best dose of centrifugal force.

In the Monotype and other early fuselage-style iceboats such as those designed by W. Starling Burgess and L. Francis Herreshoff (see WB No. 182), the crew is somewhat contained so they tend to stay with the boat in a flicker, but the centrifugal force is still tremendous, and one's eyeballs still rattle enough to create an exciting circular blur. But here was a stern-steerer resurrected from obscurity and now the second-most-popular racing class in Europe. How bad could its handling be? Not bad at all, it turned out. On a fine January day last winter at Chickawaukie Pond, my wife, Kalla, christened the new boat FAST PIECE OF FURNITURE. While the name alludes to the boat's finish, it comes from a reference to loose and easy women in the 1920s. While FAST PIECE OF FURNITURE might not be loose and easy, she certainly can be demanding, and she imposes a price



Setting up and taking down are big parts of the sport, so the simpler the rigging, the sooner a boat is underway. FAST PIECE OF FURNITURE's sheet is stored on the boom, and it's just a matter of securing two snapshackles to the fuselage to reeve the hauling parts.

And then there's the flicker. The first time I experienced one, I didn't know what was happening. Had we hit something? Did the steering runner fall off? There was enough time during my circumnavigation of the bow to ask these questions, but before I could come up with an answer the boat had found her footing and was gently gaining way as if nothing had happened. Off we went again.

I've since learned to control the flicker as you would in a car: Steer into the slide. But "hiking"—the lifting of the windward runner, in iceboating parlance—is a different story. In soft-water sailing, the instinct is to head up when the boat is pressed too far, so that pressure on the sail is reduced, the boat stands up, and all is well. But on an iceboat it's just the opposite: The correct tactic is to bear away to reduce the apparent wind. Things then quiet down as the boat speed drops to the true wind speed. So when the windward runner begins to fly too high, the temptation, learned from our summertime instincts, is to head up. But by falling off just a little you can fly the runner for as long as your nerve allows, or set it down gently by falling off more.

on her pleasure. The price is the classic iceboater's formula for time budgeting: 50 percent spent building and repairing boats, 40 percent spent discussing iceboating with others (including those who have no interest; try this at a cocktail party if you'd like to have some alone time), 5 percent spent scouting for sailable ice, and the remaining 5 percent spent actually sailing.

It's difficult to describe how it feels to sail an iceboat, because there is nothing else to compare it to. The speed is best described as "raw," since it isn't the product of noisy internal combustion. The most dramatic sensual stimuli are the low-frequency sound of the wind and the pounding vibration of the runners. It's a strange sensation in our contemporary world in which most of the noise is high frequency: the beeping of electronics and seat-belt warnings, car alarms and alarm clocks, and backup warnings on commercial vehicles. But on an iceboat, all one hears is a deep, slow rumble combined with the near highway speed of a car.

Passengers in the Monotype's forward cockpit generally face aft so they can earn their passage by tending the sheet. This gives the skipper the opportunity to see the grins that invariably freeze on their faces. The effect of sheeting an iceboat is immediate: sheet harder, go faster. As the speed increases, the apparent wind also increases and moves forward, so you sheet in some more, flattening the sail to reduce drag, and go faster again. It's an intoxicating feedback loop. The most common comment is, "Wow! I had no idea this was so much fun!"



Iceboats need a big push to get started. When racing, the best sprinters usually get the best start.



A well-balanced iceboat will track with hands off the wheel and, yes, the ice really does go by in a blur.

There is also traffic to consider. My friends and I sail in groups of 10 to 20 boats, and sometimes more. Knowing and observing the rules of the road is critical when sailing at 40 to 50 miles an hour. It's easier when racing, because then everyone knows where the other boats are going, so implementing rules is easy. But in addition to racing and sailing in groups on small lakes, we also tour and explore large lakes on which staying together as a group is important. It's a challenge when

boats of different speeds sail together, but the hope is that the slow guys improve their boats and sailing skills while the fast guys learn patience. Typically, one keeps the boat behind in close view. The lead boats stop when there are navigational questions, or hazards.

After all the shop time, talking time, logistical preparation, and predawn departures, all's that's left are miles and miles of clear ice, and sailing buddies all around. When you haul in the sheet, that 95 percent of non-sailing time quickly vanishes in the slipstream and you are 100 percent iceboating.

FAST PIECE OF FURNITURE is, first and foremost, a raceboat, and would like nothing more than to line up at the start with a dozen others of her type. But it's a challenge to maintain the sport of iceboating even with small boats that are easy to build and simple to store. The time budget outlined above, and the required flexibility of schedule, make the sport a hard one to commit to. But the rewards are unique.

Just as there will always be enthusiasm for classic Gar Wood or Hacker runabouts, I suspect that a timeless iceboat will always tug at the heartstrings of a few intrepid hard-water sailors like me. Why? Because it's simply fun to go fast in a classic beauty. Will more boats of the Monotype XV class be built in the United States? That, dear reader, is up to you. 🏠

Monotypes never reef or rig a storm sail. Movable lead ballast is generally shipped in the case of strong winds; just how much to carry is a closely guarded secret. But lifting a runner, or "hiking," can be fun. It's just one step away from flying.



Bill Buchholz runs Apache Boatworks (www.apacheboatworks.com) in Camden, Maine, where, in addition to iceboats, he builds and repairs soft-water boats and yachts.

For more information about the Monotype XV, visit www.monotype-xv.org.



Aged in Wood

How SAWDUST became the legacy of three boatbuilding generations

by F. Marshall Bauer
Photographs by Peter McGowan

In June 1980, Carroll Borden, a 52-year-old Haverhill, Massachusetts, firefighter, poured the lead ballast keel for a 25' yawl. The boat, designed by Fenwick Williams, was to have been the culmination of a lifetime of building and sailing fine wooden boats. As a young boy, Borden had heard the call of the sea while watching a neighbor build a small boat. His father told the smitten lad he would get his own boat as soon as he learned to swim, so Borden spent a summer in the late 1920s working to meet this challenge in Rye Harbor, New Hampshire. This was how he obtained a 12' sailing skiff—his first boat—on graduating from eighth grade.

More boats followed. In the late 1940s he built a sloop-rigged daysailer to plans by Fred Goeller published in *The Rudder* magazine, and hauled that boat

to Groton, Connecticut, where he was stationed in the Coast Guard. In 1954, he began work on *TRADE WINDS*, a 26' sloop designed by Sam Crocker. He completed that boat over the course of a year, and sailed it on the Ipswich Bay in northern Massachusetts. Its 3½' draft turned out to be a limitation for that region, so in 1961, with an eye toward shallower-draft sailing, Borden began building a 33' Herreshoff Meadowlark. With leeboards in lieu of a centerboard, this sharpie ketch drew only a foot. Known simply as "The Meadowlark," the new boat became the Borden family's cruiser. Carroll's son Eric recalls those days fondly, saying, "I didn't know what the other kids were talking about in the fall when they said they went to Hampton Beach and Salisbury Beach. I grew up on a boat.



We used to go beaching on sandbars at low tide.”

Anticipating retirement and thinking of a more capable cruising boat, Borden sold the Meadowlark in 1977 and started gathering wood for yet another boat. He cut pine from his own land, bought four locust trees from a neighbor for \$20, and obtained yellow pine from demolished General Electric buildings in Lynn, Massachusetts.

Anyone who's gone through the formative stages of building a wooden boat knows the value of intuition and the surprising nature of serendipity, both of which next descended on Carroll Borden. His father, also named Carroll, then an assistant fire chief of Haverhill as well as a master carpenter, served as both mentor and partner in Borden boatbuilding projects. Both father and son were familiar with the work of Fenwick

Facing page—The Fenwick Williams–designed yawl *SAWDUST* represents the combined energy of three generations of the Borden family of Haverhill, Massachusetts. Here she's sailing her home waters of Ipswich Bay. **Left**—Carroll Borden began building *SAWDUST* in 1980, but the project was put on hold when he retired to a larger cruising boat, which he's shown aboard here circa 1992. **Below**—In the mid-1980s, a nearly completed *SAWDUST* was moved out of Carroll Borden's shop in Haverhill to another location a quarter of a mile away.

Williams (see sidebar), a former John Alden designer who, under his own shingle, was known for his affordable adaptations of classic workboats—particularly catboats and yawls. While reading *The Rudder* magazine, Carroll saw a Crocker design similar to his original 26-footer, *TRADE WINDS*. The clipper-bowed yawl, Crocker design No. 241, was a big sister to Crocker's well-known Sallee Rover design, and it seemed right for him. But his instinct told him it needed a larger sail plan. So in March 1978, right after a legendary blizzard had clobbered Massachusetts, he went to see Williams in Marblehead about drawing a new sail plan for the Crocker design.

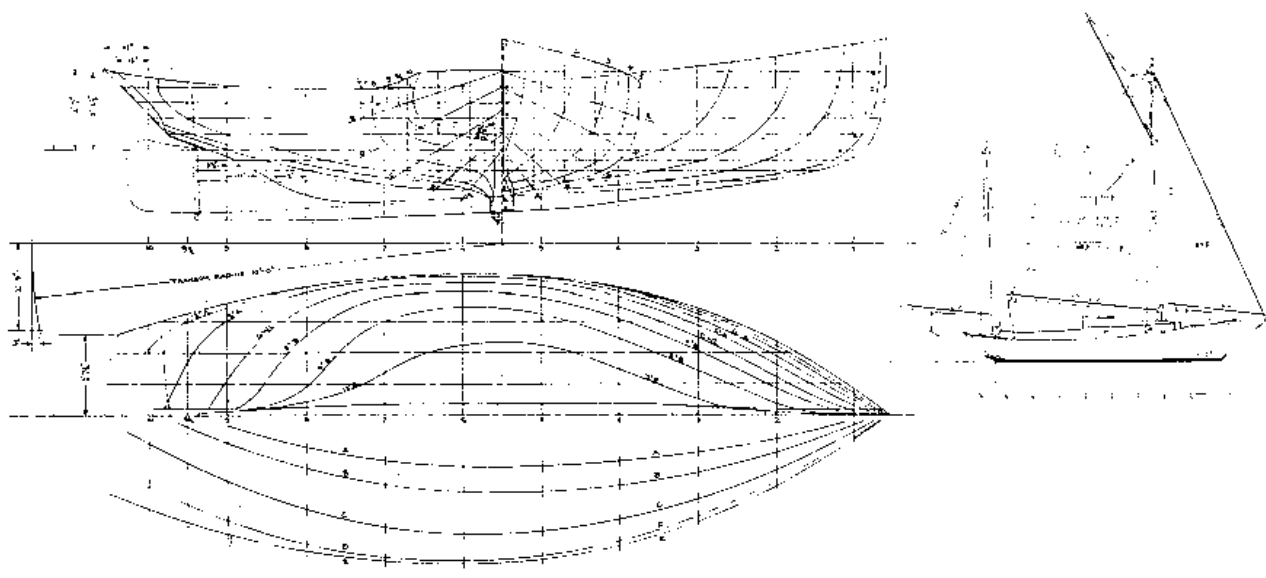
Williams considered the proposal but instead of sending Borden a drawing, he sent him a letter proposing an entirely new design created especially for this builder, featuring a plumb stem, gaff main, and a yawl rig. Borden couldn't refuse, and the following June he went back to Marblehead, picked up the drawings, began lofting, and poured the keel. With his solid record of quickly completing ambitious construction projects, he would never have imagined that it would



BORDEN FAMILY ARCHIVES (THIS PAGE)

FENWICK WILLIAMS:

Unruffled and Beating the Odds



Despite an eye malady that left his vision severely impaired since boyhood, designer Fenwick Williams rose to become one of the great draftsmen of his day. He worked for the legendary John Alden before hanging out his own shingle, and was actively designing into the 1980s. His drawings of SAWDUST are shown here.

I never saw Fenwick Williams shaken, upset, or angry, even though he had every reason to be frustrated. From an early age, his passions were boats and sailing, but by the age of 15 he was so near-sighted that he had to read a book with his nose pressed to the page. Today, he would be considered legally blind. Fenwick left high school in his sophomore year and never went back to formal education.

Rejecting the prescription glasses he had been given because he believed they were aggravating his condition, he adopted a lifelong practice of eye exercises. Far from considering himself handicapped, he began drawing and painting boats—all kinds of boats.

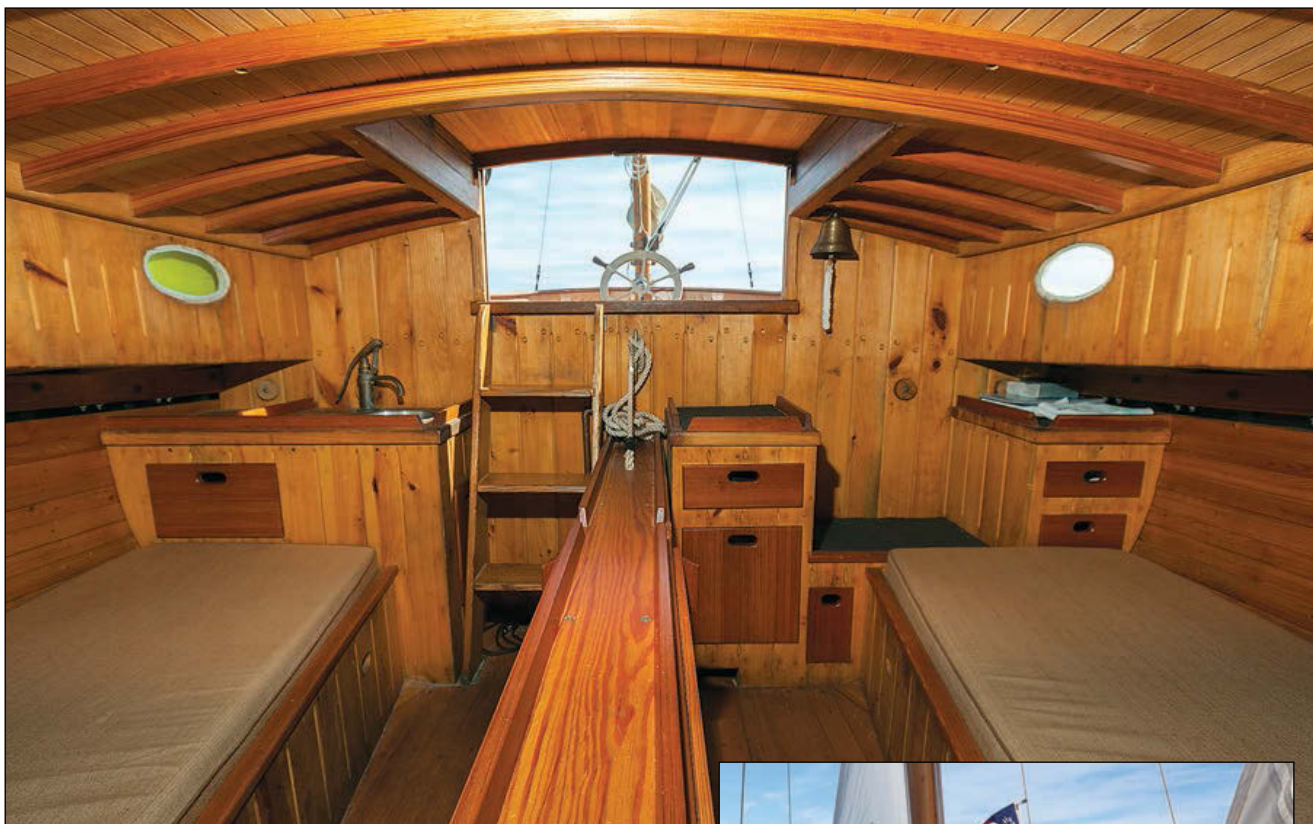
At the age of 22, after a series of short-term jobs, Fenwick stood in the office of Boston naval architect John G. Alden. The nation was on the threshold of the Great Depression and jobs were scarce. But Alden, a compulsive sketcher himself, saw something in Williams's work and offered him a job.

So without glasses, head to the drawing board, a

man with only two years of high-school education and an incurable addiction to boats set to work amid the most legendary designers of the day. The results were startling. In the words of Alden, "Williams is one draftsman I can give a job and be fully confident that the result will be exactly as I want."

In 1931, at the height of the Depression, Williams left Alden to join Murray Peterson in Marblehead. They concentrated on developing affordable boat designs for niche markets. It was during this period that Williams blossomed into his own style of designing wholesome, economical, and beautiful sailboats. He became best known for his catboats, but characteristically, he joked about this association with friends: "It is extremely distressing and embarrassing to me to be known primarily as a catboat designer. It is somewhat as if a building architect found himself advertised as one who designed very nice one-car garages and not much else...."

He had, indeed, designed more than catboats. He filled an 82-year lifetime with schooners, yawls, cutters, and ketches from 18' to 52'. One might say he had 20-20 visualization. —FMB



Above—SAWDUST's tidy cabin offers snug comfort for cruising, and includes ample bunks, a galley, and a centerboard-mounted table. **Right**—The boat's capacious cockpit can carry three generations of Bordens. Eric extended the designed shaft of the wheel to allow a comfortable seat at the helm.

take 30 years before his son Eric would eventually finish and launch the boat.

By 1980, Carroll Borden had started work on the new yawl in a shop near his house, which stood on 14 acres of woodland in Haverhill. His son Eric helped him lay the boat's backbone in the fall of 1981, but Eric's job as a pipefitter soon became so demanding that he had to stop. He'd still make frequent visits to watch progress, often bringing his son, also named Eric.

"One of my earliest memories of the boat was walking into the shop with my dad while my grandfather was working—I must have been about four or five at the time," the younger Eric recalls. "The keel had been laid, and not much else, no ribs or anything, just a line of wood and lead running down the center of the shop. I asked my grandfather what he was making. He replied, 'SAWDUST.'"

Progress then became almost painfully slow. Three years later Carroll was still planking. By 1984 he was beginning to work on the interior. But the need for a family boat suddenly gained new urgency when he retired in 1986. Borden realized he needed something bigger than this boat that he'd spent four years building. The ex-fireman with saltwater in his veins dreamed



of living on the water throughout the summer, then going south winters. What came next was totally unexpected and completely shocking to everyone who knew him: Carroll Borden bought a 35' fiberglass Seabreeze yawl and went sailing, putting an end to his wooden boat building. The construction project was moved out of the shop and enclosed in a plastic covered shed.

Christened ELIZABETH for his wife (the real Lizzie Borden was a distant relative), the Bordens' new cruising

Eric Borden (left) initially helped his father with the yawl's construction in 1980, but professional obligations drew him away from the job. When his father died in 2008, he was inspired to finish the project. His son (right), also named Eric, contributed much to the work, as did other family members.

boat took the family to Cape Cod, the Elizabeth Islands, and Maine. The Seabreeze was roomy enough for all the Bordens including grandchildren. At times, they would have three boats in the water: Carroll and Elizabeth on the Seabreeze, brother Matt in his Wianno (or later a Sailmaster 26), and son Eric and his wife Dorothy with their three children—Eric M., Ashley, and Jeffrey—in a 21' sailing dory and later an O'Day 23.

When Carroll Borden died in March 2008, his son felt a strong urge to keep alive the memory of his father's wooden boat project. Although Eric could hear his dad saying, "Why don't you just cut it up and get rid of it?" he imagined telling him, "You put so much work into it—let's finish it."

The hull was complete and even the deck, cabin, coach roof, and cockpit were in place. A little work would finish the interior. She was in like-new condition. All the wood had been thoroughly soaked with a mix of kerosene and linseed oil, and the joints were sealed with roofing tar. Then in his 50s, Eric spent most of the next summer "just sitting on the boat and touching every piece of wood." His bond with the yawl was at a high point. After 15 years of visits to the boat with his father, discussing how to get her in the water, he knew what to do. "Whether I wanted to or not...it was just something that had to be done. I had to finish it."

Eric's son asked him what he was going to name the boat. The answer was instantaneous: "SAWDUST." They shared a knowing smile. Eric went to Manchester to consult with Skip Crocker, great-grandson of yacht designer Sam Crocker. Crocker suggested that he talk to boatbuilder Harold Burnham in Essex. He did.

That fall, Burnham came to Haverhill to look at the boat. With characteristic intensity he said to Eric, "Are you crazy? Somebody has to see and use this boat. You can't keep this in a shed for another 30 years." That was the clincher. In October 2009, Eric trucked SAWDUST to Burnham's barn.

It is somehow appropriate that SAWDUST—now the product of three generations of Bordens—was completed and launched at the yard of a family that has operated shipyards in Essex since 1819. Eric installed an Edson steering system and a 12-hp Westerbeke diesel engine. To make sure that the engine would fit, he constructed a mockup of it that Burnham calls "absolutely beautiful." Burnham is keeping it for future use.

The next step was rigging, and once again, a surprise was in store. In 1932, Fenwick Williams designed a little gem of a 24' double-ended yawl, the most famous rendition of which was built in 1980 under the supervision of Arthur Brendze at the Arundel Shipyard in Kennebunkport. This boat's name, ANNIE, has since become associated with the design. Years before his decision to rebuild



SAWDUST, Eric had found a classified ad in *WoodenBoat* offering for free the carcass of another Annie in need of repair. The idea of getting such a classic for free was too much for Eric to resist, so he had her shipped to Haverhill from Enfield, Connecticut.

Now, under the pressure of time to get SAWDUST in the water, Eric took a serious look at her sail plan and compared it to Annie's. Both were yawls. Both were gaff rigged. SAWDUST's sail area was slightly larger, but the difference was not significant. With Harold Burnham's encouragement, he restored the old Annie's masts and spars. The sails were in excellent condition.

At this point, SAWDUST became a true hybrid: a Fenwick Williams—modified Sam Crocker design with rigging from an Annie yawl. "If you see it from the stern, all you think of is Crocker," says Borden. "When you get to the bow and the sail plan, you figure it's a Fenwick Williams design."

On Monday, June 21, 2010, the lead story on Harold Burnham's blog, *Boat Building with Burnham*, read:

SAWDUST Splashes in Picture Perfect Time

Eric Borden and his whole family were on hand to watch the yawl "SAWDUST" hit the water around 6 p.m. on Saturday evening this past weekend. It was a beautiful sight to see and their late father Carroll N. Borden, who originally built but never actually sailed on the boat, would have been very proud. It was a lovely and emotional moment for the family when Eric's sister christened the boat with champagne and then off SAWDUST went down the rails. The family, along with Harold, took the boat for a little river cruise as the sun set. They will have some absolutely awesome sailing days ahead. Congratulations!"

Burnham has high praise for SAWDUST's construction. "He started with a Crocker and he wound up with a Fenwick Williams. You know, the old designers would draw a boat and then the builders would have their way with it, but every line on that boat is just gorgeous. It's just nicely laid out—and really well put together. I could say I don't know of any boat I've ever seen that's better put together than that one. The seams were so tight that I had to buy a special saw to open them up for caulking."

Asked if there are any advantages to the combination



SAWDUST sails on Ipswich Bay in 2013, 34 years after her keel was laid and four years after her launching.

Crocker-Williams design, Burnham says, “I don’t think of the designers so much, it’s just a really nice boat. I’m sure you could argue the nuances of who influenced it, but I’m certain that the Bordens had enough sense to know what they wanted, and build the boat they wanted, and build it the way they wanted to.

“When I come up the river and look at it on the mooring, it’s just a work of art. Not overly fussy—not like it’s loaded with brightwork or varnish—it’s got enough on it so that it’s nice, but it’s not a boat that’s difficult to maintain.”

Tied up to a dock or under sail, SAWDUST presents both stability and nimbleness that reflect Carroll Borden’s skill as a craftsman. When you step into the cockpit, you sense an innate firmness, almost as if the boat were on a cradle. She combines the convenience of a daysailer with enough comfort for weekend cruising. There’s uncommon buoyancy for a 25’ boat, and the characteristic Fenwick Williams hollow entrance reduces pitching in a head sea. Surprisingly for a boat with such good seakeeping ability, with the centerboard up SAWDUST draws only 27”.

Before the advent of self-steering and GPS, the yawl rig was a favorite for circumnavigators because of its ability to hold a course by trimming sails. While the jib tends to pull the bow off the wind, the mizzen, stepped aft of the rudderpost, exerts pressure the other way. With the sails trimmed properly, a yawl can be made to sail without constant attention to the helm. When

the need arises to quickly reduce sail, the mainsail can simply be lowered and the boat will remain balanced under jib and mizzen. With some pride, Eric will tell you, “The harder it blows, the better I go. When it starts blowing around 15 to 20, everybody’s reefing down and heading home—that’s when this boat just thrives.”

Harold Burnham describes the Borden heritage this way: “Eric Borden has tools and equipment that go back to his father and grandfather. When I went up to his shop, I was thinking I’d see an amateur shop. He’s got everything I’ve got—and most of it sharper. All three of them have been able to run careers that don’t exist today—you don’t take a job and stay with it for 40 years.... To me that’s one of the problems today. People just don’t have the time.”

SAWDUST is the legacy of a family whose members respect each other and were inspired to find the time for boatbuilding. Nothing says this more eloquently than Eric’s description of the boat he finished and launched: “She was totally hand-made. Even the nuts and bolts that hold this boat together were cast in a foundry, then drilled and tapped by hand. My mother backed every one of the beryllium copper rivets. My sister fiberglassed the decks, and my grandfather made all the blocks for the rigging.”

F. Marshall Bauer is a screenwriter and producer, and wooden-boat enthusiast. He has owned two Fenwick Williams designed boats: an 18’ catboat and the 24’ yawl ANNIE. Now retired, he continues to write from his home in Marblehead, Massachusetts.

Aboard EVERGLADES



A contemporary glass-cabin launch

by Maria Simpson
Photographs by Benjamin Mendlowitz

The week before Labor Day, the 42' glass-cabin launch EVERGLADES rests at the dock of the Seal Harbor Yacht Club at Maine's Mount Desert Island. The place is busy with club members setting out on their last cruises before packing up and heading south for the winter. The boat's Edwardian profile looks unusual against the Maine backdrop of granite, lobsterboats, and sailing yachts.

Ann and Michael Matheson, who own EVERGLADES, seem to know every person who passes them, and they share friendly exchanges and banter across her deck. Someone shouts out, "Hey, nice boat!" And Mike yells back, "Thanks, I'll pay you later!"

Joel White designed EVERGLADES specifically for Mike and Ann. Before building this boat, the Mathesons had restored at least half a dozen antique powerboats in their own small shop in North Carolina. Michael met Joel at WoodenBoat School, a place he jokingly refers to as "the only school I ever graduated from." He took a vacuum-bagging class, and afterward approached Joel about commissioning a design.

Mike describes Joel, who died in 1997, as an excellent listener. He and Ann sent him images from old *Yachting* magazines of classic glass-cabin launches, a type frequently seen cruising in the Florida Everglades in the early 20th century. However, the Mathesons realized that these boats were designed for lakes and

protected waters, and they wanted to be able to travel farther afield.

"Joel really got it the first time," Mike said. The designer gave the new craft a wider beam than would have been typical to increase stability and to increase cabin space. The original glass-cabin launches also had a single big engine in the center of the boat, so Joel conceived of a twin-screw arrangement, with two Yanmar diesels tucked under the aft-cabin bunks—a space that would have been unused otherwise. This rearrangement freed up significant cabin space.

The boat draws just 3', which is perfect for the waters around the Matheson's North Carolina home. The twin propellers are protected from damage by sturdy struts.

Bruce Mierke built EVERGLADES over a seven-year period. He has worked as a boatbuilder for the Mathesons for 27 years, and until 2000 he split his time between his own boatshop in Jacksonville, Florida, during the winter, and restoring antique wooden powerboats for Mike in North Carolina in the summers. He spent six summers on EVERGLADES and then moved to North Carolina full-time to finish her. He estimates that it took him a total of 8,000 hours to build her, which is much less than what Joel originally estimated. He describes building EVERGLADES as a once-in-a-lifetime experience, and joins the Mathesons every year for a couple of weeks of cruising.

"This boat could have been called FRIENDSHIP," says Ann. "Everyone that worked on the boat already was or became a good friend during construction."

Construction Methods

EVERGLADES's hull is cold-molded, beginning with strip-planking of juniper followed by three layers of $\frac{1}{8}$ " veneer, and finally sheathed with a layer of cloth. The cabin sides are constructed of foam-filled honeycomb sandwiched between two layers of 5mm plywood, and covered with $\frac{1}{4}$ " mahogany veneer inside and out. It was laminated in place, so Bruce could more easily form the curve of the cabin's forward end and roof. It is a lightweight structure and keeps the boat extremely well insulated. "She's built like a Thermos bottle," Bruce says. Ann also added insulating plastic to the backs of the curtains. "We can draw the curtains and come back to the boat at night, and it will still be the same temperature," Ann says.



Designing for Stability

When Joel first began sketching plans for EVERGLADES, he was adapting designs of other classic launches that were developed for use in protected waters such as the Florida Everglades, the Thousand Islands, and Lake Champlain. However, those boats were very shallow and narrow, and had heavy superstructure that made them prone to rolling. Because Mike and Ann had set their sights on cruising more open water, Joel took steps to make the new design more stable. He originally drew her with a 9' beam, but expanded it to 10'. The lightweight cabin described earlier also helps reduce the roll.



Curved Windows

According to Bruce Mierke, the windows were "the biggest head-scratcher." It took him three months to build them. "There are 13 windows, and none of them are square or quite the same," he says. The deck and cabintop both have camber, so in order to keep the stiles between the windows looking right, he had to taper each window slightly—between $\frac{3}{8}$ " and $\frac{3}{4}$ " at the top. He finished their edges with a high-density plastic so that the glass would not stick to the varnish. The forward end of the cabin is curved and raked slightly aft, which further complicated the geometry. "It took some fiddling to marry the forward part of the cabinhouse to the sides, considering all the angles involved," Bruce says.



The Pilothouse

The pilothouse is bright and comfortable, with all controls and gauges within easy reach of the helm. Passengers can sit on the port-side bench seat and enjoy the view through the curved forward windows. Two tidy electrical panels occupy the bulkhead behind the helm, one for the 12-volt system and one for the 120. There is heat and air conditioning throughout, but carefully concealed from view. To meet the power needs of units such as the refrigerator-freezer and microwave, the boat has a Northern Lights generator tucked under the foredeck behind a bulkhead, but with ample room around it for service.

Window Detail

There are roll-down windows for the helm station. A turn of the crank operates a screw mechanism hidden in the casing below the window that raises or lowers the glass. This type of window was often found in classic cars, trolleys, and trains. But these mechanisms are hard to come by now, and usually must be refurbished or completely fabricated from scratch. Mike bought his units secondhand. In fact, he spent years collecting hardware for EVERGLADES, and now jokes, "I always bring my screwdriver to the New York Yacht Club."

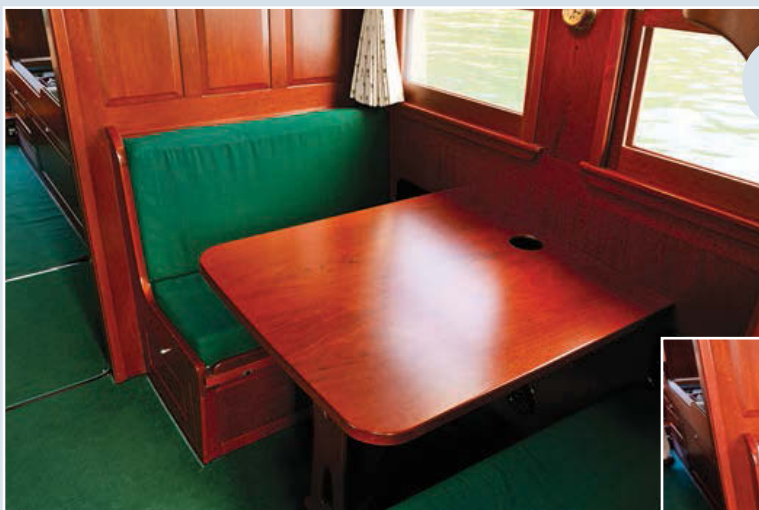


Saloon Paneling

Before he built EVERGLADES, Mike had secured four big Honduras mahogany boards, each measuring approximately 2" x 48" x 15', and held on to them for 20 years, waiting for the right project. Although it broke his heart to cut into those magnificent pieces, he knew the wood would be perfect for EVERGLADES after they were milled to the proper dimensions. He used one board for each compartment, which meant that Bruce could match color and grain perfectly. Bruce finished the interior with an Interlux paste stain and Epifanes rubbed-effect varnish. When Joel designed the boat, he provided only a basic layout for the interior. Bruce figured out the rest, sketching his ideas on legal pads to share with the Mathesons. "We filled three or four legal pads with sketches and tacked them on corkboards in the shop," Bruce says.

Galley

The compact, efficient galley was designed for comfortable cruising, and is equipped with a microwave, combination refrigerator-freezer, sink, and stove with an oven. Storage is located under the dinette seats, in cupboards, and under the countertop. The storage lockers above the counters have doors that open and then slide into recesses to prevent bumped heads on their sharp corners.



Convertible Dinette

The dinette easily converts to a roomy bunk by dropping the tabletop to cleats that are level with the seats. There is also an insulated tube in the tabletop that can be used to keep wine cool or flowers fresh.



Head

Between the stateroom and galley lies the head, split into separate toilet and shower areas. In this photo, we are looking across the passageway into the shower. Each space is relatively small, so in order to gain more room, the doors can be swung outward to close off the passageway, creating a large, athwartship changing room. Making the doors work in both directions was especially challenging. In contrast to the mahogany paneling of the rest of the boat, the head is bright-finished cypress with mahogany trim.



Detail of Cupboards

Throughout the boat are touches that reflect the boat's and Mike's Florida roots. One example is the palm trees on the glass crystal cabinet, a detail that was hand painted for the Mathesons by Bobby Bant.

Aft Cabin

Almost every detail aboard EVERGLADES reminds the Mathesons of someone who worked on her or contributed some item or story. In the aft cabin, the camelhair blankets belonged to Mike's grandfather, and Mike remembers sleeping under those same blankets as a child aboard his parents' boat. The bunks are extra wide for comfort, and Mike and Ann especially like that they can see out the windows even while lying down. "At night you can stare at the stars, or in the morning you can observe nature from the comfort of your bunk," Ann says. Looking aft we see the cockpit through the open doorway. The seats have watertight storage beneath them where an outboard motor and gas can safely be stored. The curved cockpit echoes EVERGLADES's elegant fantail stern.



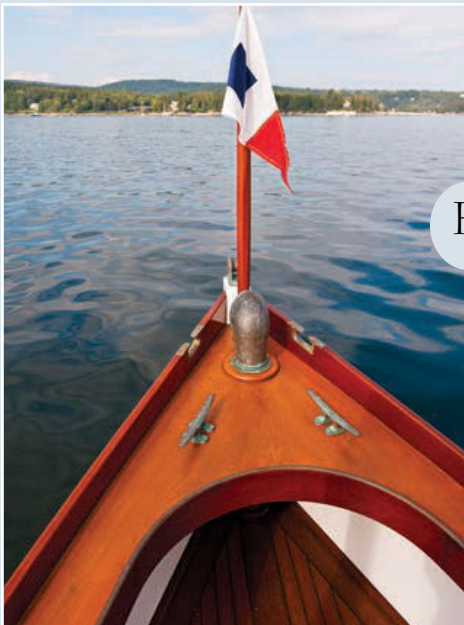
Port Engine Compartment

EVERGLADES's comfortable cruising interior would not have been possible without the pair of compact diesel engines. Compared to the centerline location of the early glass-cabin launch engines, her twin screws make EVERGLADES both more maneuverable and more roomy. The two Yanmar 39-hp diesels are tucked under the aft stateroom bunks, and the port bunk also has a built-in toolbox with all the tools one might need for tinkering. The side panels can also be removed to gain further access. The engines are quiet and efficient, burning fuel at a rate of 1.2 gallons per hour.



Dinghies and Boom Lift

Bruce Mierke also built two small boats for EVERGLADES: PALMETTO, a glued-lapstrake plywood dinghy, and BUG, a 10' Wee Lassie strip-planked double-paddle canoe. The dinghies are stowed on the cabintop, with BUG nestled inside PALMETTO and a custom cover over both to keep water out. Two people can easily lift and launch the dinghy using the boom to hoist and maneuver the boat over the side.

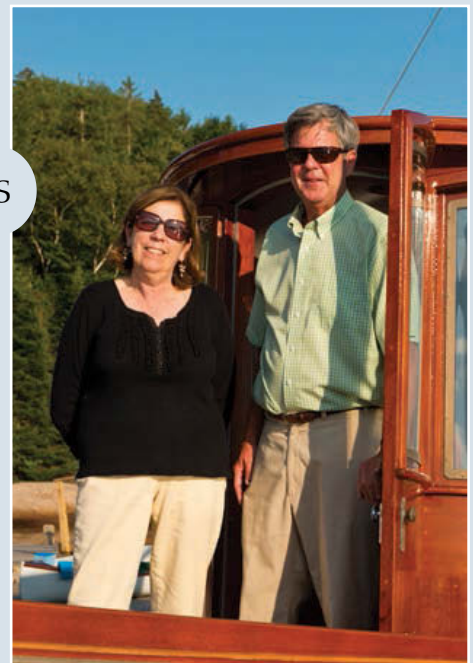


Forward Deck

The Mathesons fly the Seal Harbor Yacht Club burgee from the bow of EVERGLADES as they explore the waters around Mount Desert Island. The small forward deck is perfect for sightseeing or for handing off docklines.

The Mathesons

Ann and Mike have been preserving wooden boats for most of their lives. Ann is a former president of the Antique and Classic Boat Society, and they are both still very active in the organization. They always have one boat project underway in their North Carolina shop. But as much as they like restoring boats, they also like to use them, taking advantage of EVERGLADES's shallow draft and nosing up southern creeks and rivers. "EVERGLADES is perfect for those quiet places up in the marshes," Ann says. Mike comes from a sailing family and has fond memories of cruising in Maine with his parents. Last summer was the first season the Mathesons brought EVERGLADES to Maine, and they look forward to doing it again next year. As Mike puts it, "We just enjoy going."



Maria Simpson is a regular contributor to WoodenBoat.



PAUL HERNES

How to Build Phoenix III

PART 1

A versatile, easy-to-build 15-footer

by Ross Lillistone

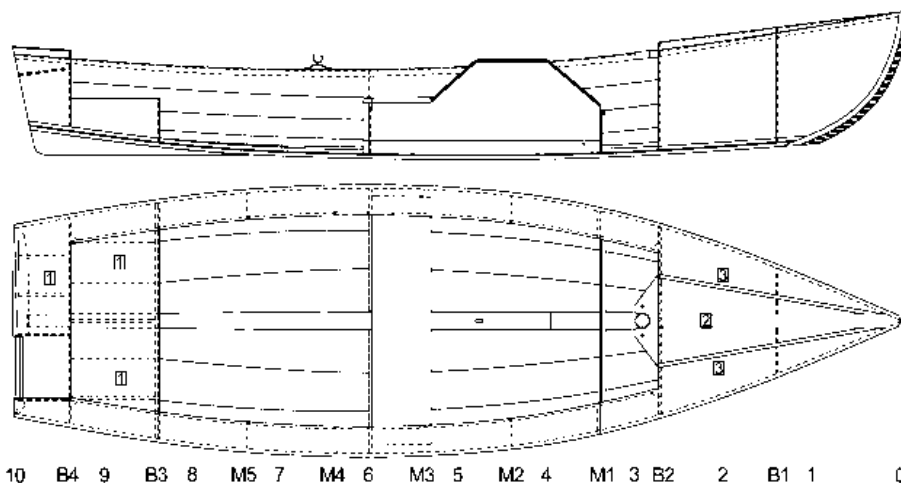
Some years ago, I designed a beach cruiser for Paul Hernes of Caloundra, in Queensland, Australia. Paul wanted a boat that would perform well under sail, oars, and a very small outboard motor. He was also keen to try his hand at a round-bilged, glued-lapstrake hull.

For many years before this request, I had been agonizing over what I would consider to be the optimum dimensions for a boat that could be used for serious beach-cruising but also suitable for casual daysailing. Such a boat usually would be cruised solo but occasionally with two. Good performance under oars was a high priority, so I envisioned a fairly slim boat with a fine entry for a good motion in head seas. My inclinations were in line with Paul's, and the

final design for his boat was 15' LOA, with a beam of 4'6" to the inside of planking and a draft of about 6" (4.57m x 1.37m x 15.24cm). Paul's boat, which is shown in the photo above, proved exceptionally successful.

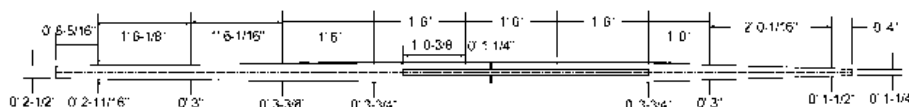
The design—named Phoenix III in honor of a boat from my family's past—sails well, has proved able under oars, and easily carries her outboard motor. The interior layout works extremely well. The boat's light weight makes it easy to launch from a trailer. The plans now include several rig variations, all of which use a common mast partner and step. Such versatility has made the design a popular one, and the original boat now has many sisters sailing the waters of the world. Plus, with only five planks per side, the boat is simple to build using glued-lapstrake plywood construction.

Above—Glued-lapstrake plywood construction makes the author's Phoenix III design easy to build. The 15' LOA boat handles well under sail, but when the wind fails the oars move her nicely—and a small outboard motor can also be fitted.

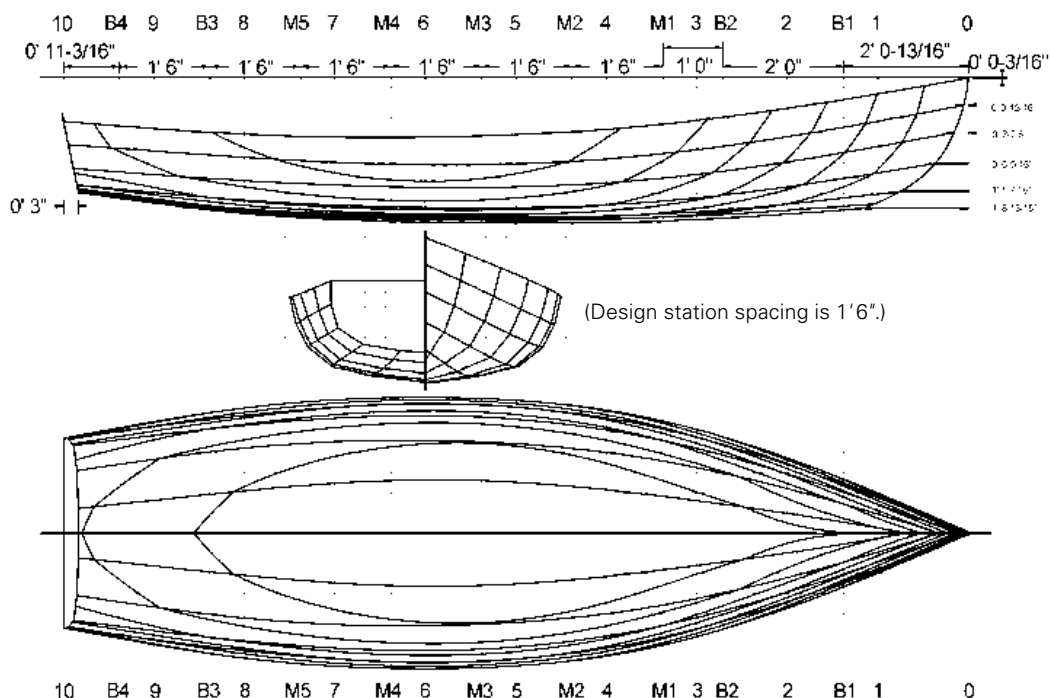


Notes (referring to boxed numerals above):

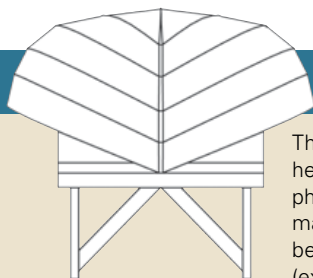
- 1—Aft deck and sternsheets are installed over longitudinal framing, as described in this series' forthcoming Section 4: Finishing the Interior.
 - 2—The kingplank is of $2\frac{5}{8}$ " x $\frac{3}{4}$ " stock, also described in Section 4.
 - 3—Additional $1\frac{1}{2}$ " x $\frac{3}{4}$ " longitudinal carlins to support the foredeck sides are optional, but recommended. Like the kingplank, they are notched into bulkhead No. 1 and its deckbeam. At bulkhead No. 2, they notch into the deckbeam only.
- (In the station lines shown in the plans, numerals standing alone indicate design stations. Numerals with "M" indicate mold stations; those with "B" indicate bulkhead stations.)*



Keelson expansion: Starting with $3\frac{3}{4}$ " x $\frac{3}{4}$ " (95mm x 19mm) stock, shape the keelson as shown, leaving the aft end long. The measurements shown will accommodate the curvature, or rocker, of the hull. Mark the slot profile on the interior, but cut the slot only after the planking is completed and the boat is turned right-side up.



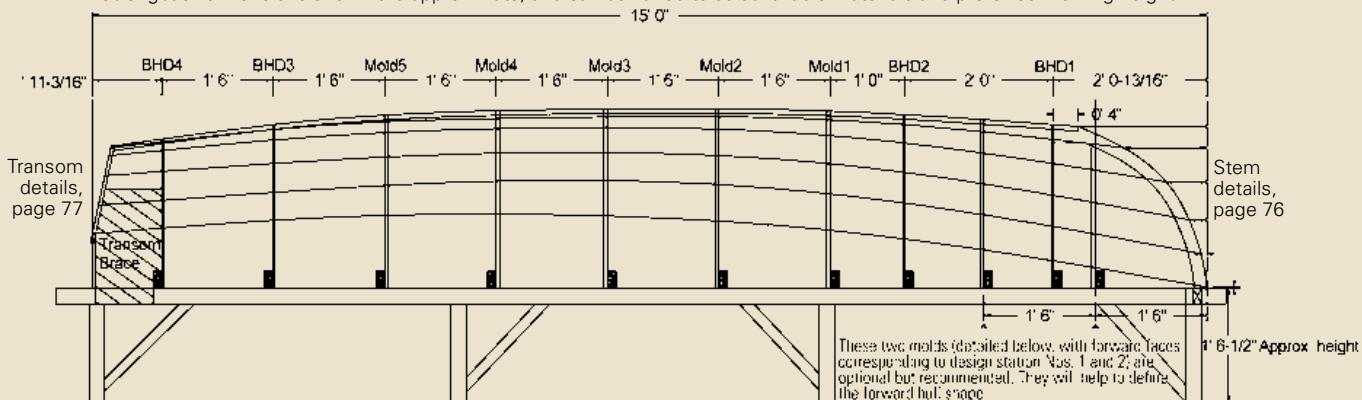
Top—The inboard elevation and plan view (top) show “the big picture” of the boat’s straightforward building method. Individual components are shown in greater detail elsewhere in the plans. **Above**—The lines plan gives a good overall view of the hull shape. Because the individual molds and bulkheads are dimensioned in detail (see page 75), no lofting is required to build the boat.



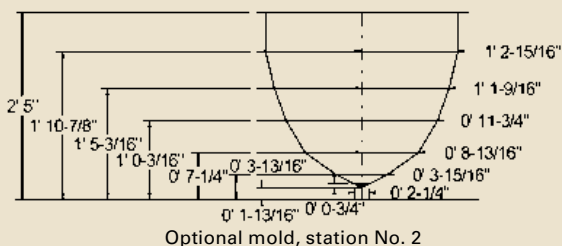
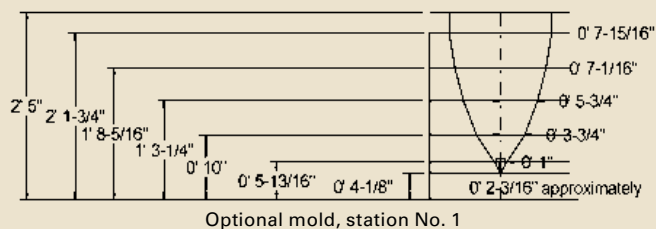
1. SETUP

The strongback can be made from a variety of materials, as long as it ends up level, straight, and strong. The height can also be altered, but access to the interior to clean up epoxy will be needed. The builders whose photographs appear in these pages used several different methods of strongback construction. Suitable materials include 2x4 (38mm x 75mm) house framing studs. Deeper side beams of about 6" (150mm) work better to prevent sagging, and laminated beams work well for the purpose. All of the bulkheads and molds (except for two optional molds shown below) are shown in detail on page 75.

Strongback dimensions shown are approximate, and can be varied to suit available materials and preferred working height.



Important: Mount bulkheads and molds carefully. For bulkheads Nos. 1 and 2 and molds Nos. 1, 2, and 3, the forward faces line up with the corresponding station lines on the strongback. For molds Nos. 4 and 5 and bulkheads Nos. 3 and 4, the aft faces align with station lines. Note the corresponding alignment of strongback crosspieces. This alignment eliminates any need to bevel the bulkheads or molds.



JONATHAN McNALLY

Strongback Construction

Hours spent making a solid strongback will save much time later. For a typical ladder-frame strongback, I use laminated floor-joist I-beams, which are cheap, lightweight, and extremely stiff. For legs, cross pieces, and bracing, common 2x4 house studs work well. Within the dimensions shown on the drawing (see top of this page), you can use your own judgment about how to build it. The version pictured here consists primarily

of a long, straight plywood box, an excellent choice because it is dimensionally stable and resists twisting.

Whatever method you use, make the strongback strong, straight, and level. Variations show up in photos throughout this article, which draws from three Phoenix III builders: Jonathan McNally, who lives in Maine and whose strongback is shown in Photo 1; Vincent Drane, of New Zealand; and Byron Bennett, of Australia.

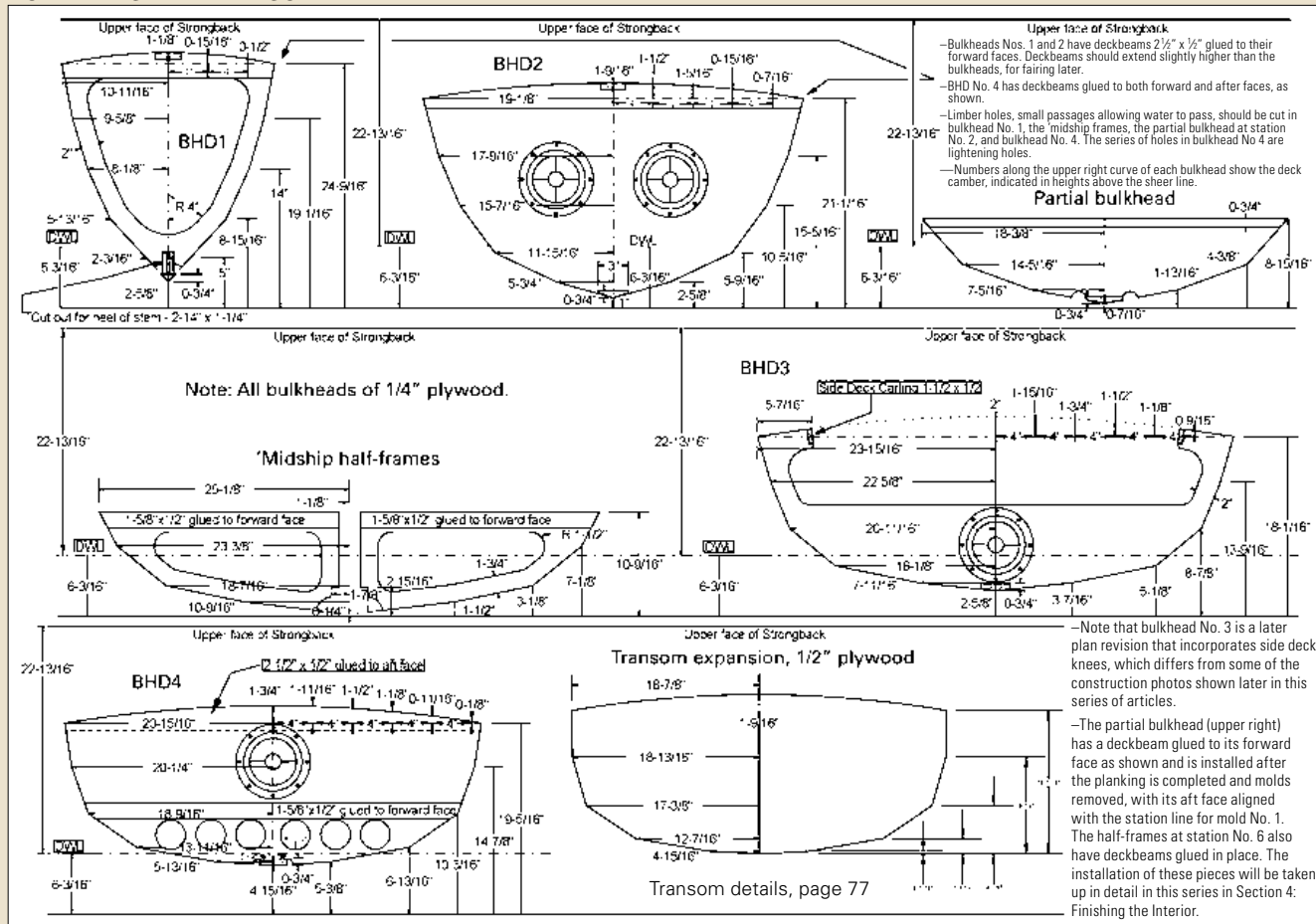


VINCENT DRANE

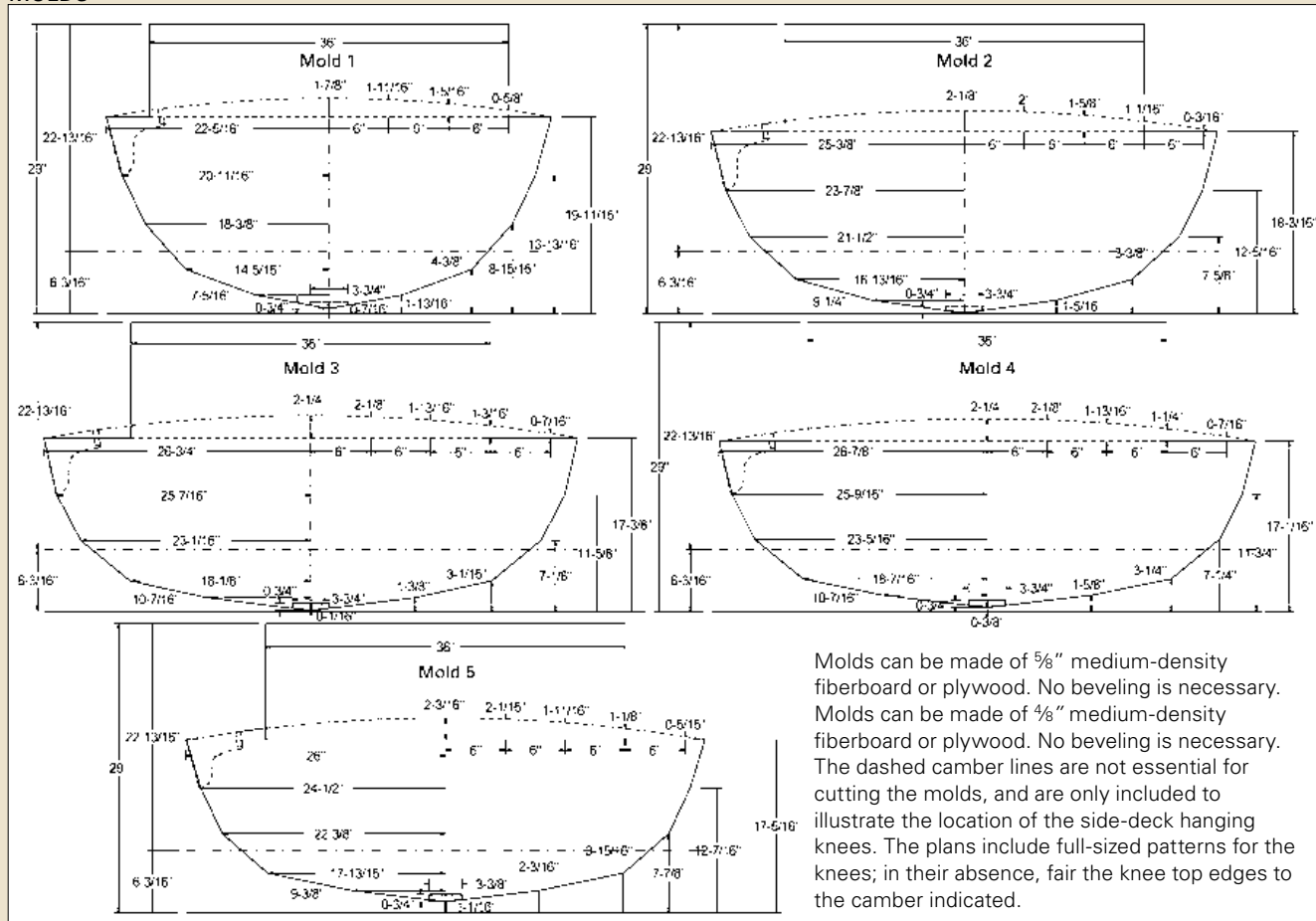
Laying Out Molds and Bulkheads

Full-sized paper patterns can shrink and expand with humidity variations, so for accuracy in making molds

BULKHEADS AND TRANSON



MOLDS





provide positive flotation during a capsize. If you vary the hatch size or type, take pains to assure that they are watertight.

Setting Up Molds and Bulkheads

With the strongback straight and level, both fore-and-aft and side-to-side, the molds and bulkheads can be set up.

An accurate centerline reference is essential. I normally run a string line the full length of the strongback, just underneath the cross spalls on the molds and bulkheads. Mark the mold locations (as shown in the drawing on page 74) accurately and make them square to the centerline. As shown in photo 3A, Byron simply screwed his molds to 2×4 crosspieces. Jonathan elevated his molds using blocks (photo 3B) so

that the centerline string, which is visible in the photo, could run under the molds for accurate centering.

My preferred method for attaching molds and bulkheads to the strongback is to use right-angle brackets, as shown in Jonathan's photo (above left, inset). These are secure yet can be shimmed as required to adjust the final heights and locations of the molds.

The molds must be perfectly level and plumb. Be sure, also, to position each mold and bulkhead so that its correct face (as shown in the plans) is aligned with the station line as marked on the strongback. Forward of amidships, the forward face lines up with the station lines; aft of amidships, the aft face lines up.

Making and Setting the Stem

The inner stem is a simple lamination of five layers of 1/4" (6mm) plywood on the flat (photo 4A), and it does not require any bending of material. The shape is marked

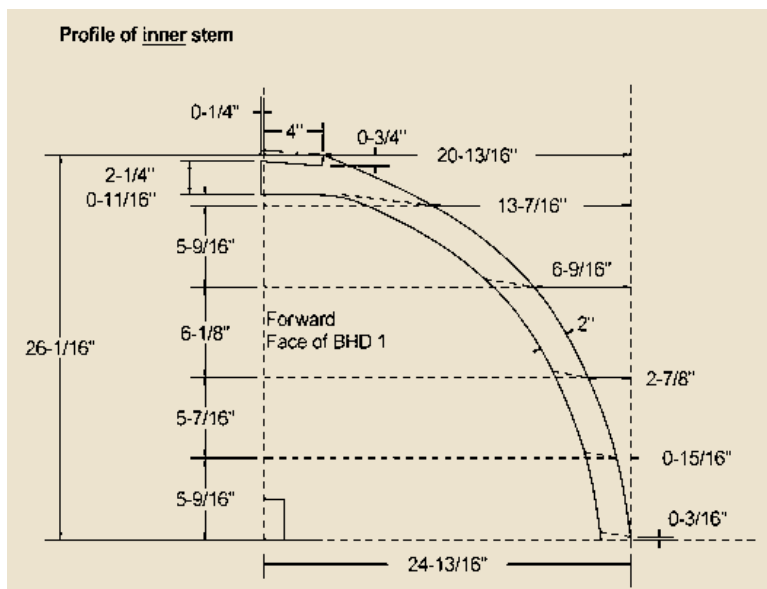
and bulkheads I prefer to provide dimensioned drawings of components (shown on page 75), with no lofting required. These measurements, taken from a computer-aided drafting program, are displayed as x and y coordinates, referenced to the centerline and a baseline (as fully illustrated in the plan sheet covering frames, bulkheads, and molds). The heights of the molds and bulkheads are all referenced to a common datum, which in this case is the designed waterline (DWL). All of the mold and bulkhead drawings show the distance from the DWL to the strongback and from the DWL to the previously mentioned baseline. Note that the bulkheads have deckbeams alongside their top edges, glued with epoxy.

Here, and in all subsequent descriptions through this series, the technique for epoxy-gluing pieces together should be to prime the surfaces with mixed, but unthickened, epoxy first; then, thicken the epoxy with adhesive fillers and apply it to one side before final installation. This technique is used often.

After the layouts are completed, the pieces must be cut out accurately. Their edges need only be square, not beveled.

I make molds out of medium-density fiberboard (MDF) and extend each of them down to the line representing the top of the strongback. For plywood bulkheads, which differ from molds by being permanent parts of the boat, I suggest attaching temporary legs, with a cross spall spanning them. Use your imagination in choosing a system—all that matters is that the component be accurately and firmly located above the strongback.

As shown in photographs throughout this series, individual builders often vary the design of the hatches in the bulkheads. Be aware that the hatches shown in the design are intended to be waterproof, since the areas they cover





VINCENT DRANE



BYRON BENNETT

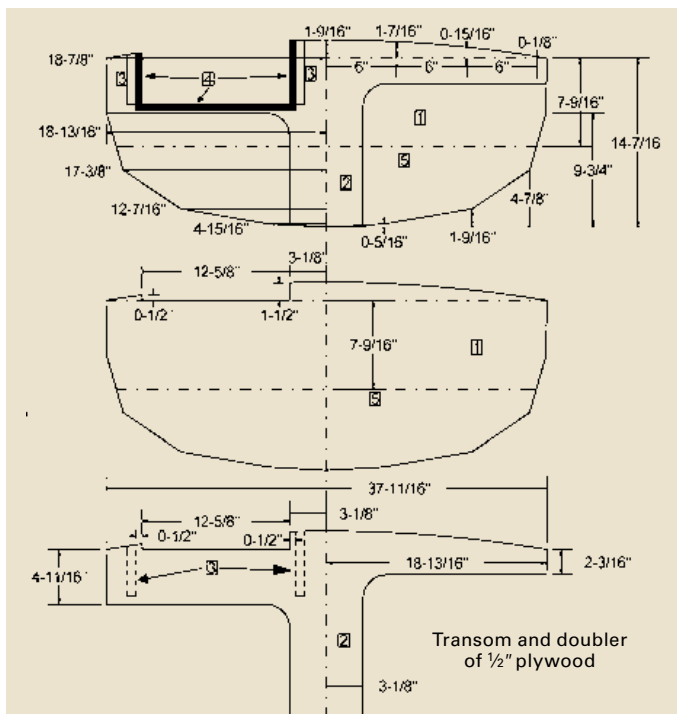
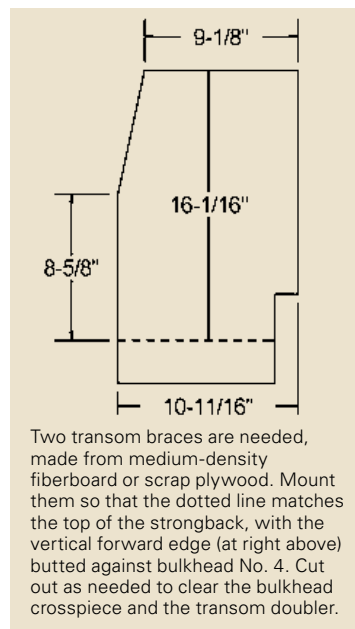
in exactly the same way as the molds and bulkheads. Don't bother with the bevels at this stage. Erect the inner stem with its head resting on the forward part of the strongback and its heel fitted to a cutout in bulkhead No. 1 as illustrated in the plans (photo 4B). Take careful note of the positioning of the inner stem in the drawings (page 75).

Setting Up the Transom

The plans detail dimensions for two simple braces that hold the transom in position at the correct height and rake. Normally, this positioning is tricky, but these

braces make it easy. In photo 5, one of the two MDF braces is visible. Note that the aft edge of each brace must be notched to clear the crosspieces and framing on the inside face of the transom.

The transom edge, like the bulkheads, is simply cut square, relieving the builder of the tricky process of cutting compound bevels on its edges. The planking will contact only the outer corner of the transom. This is no cause for worry, since the gap will be filled with thickened epoxy when the hull is being planked. After the planking is completed and the hull turned upright, this joint will be further reinforced with a large-radius epoxy fillet and double-bias 'glass tape, making it exceptionally strong.



Notes (referring to boxed numerals above):
 1—Transom expanded (true shape of section as laid down).
 2—Transom plywood doubler (glued to transom's inside face).
 3—Cleats $\frac{3}{4}$ " x $\frac{3}{4}$ " glued to forward face of transom to carry the $\frac{1}{2}$ " plywood sides of the outboard well (to be described further in Section 4: Finishing the Interior).
 4—Profile of the outboard well, also to be described in Section 4.
 5—Line on inside transom face to coincide with the top edge of the strongback transom braces, shown in the next drawing.



BYRON BENNETT



VINCENT DRANE

Fairing the Entire Building Jig

If the strongback, molds, and bulkheads have been accurately made and properly set up, very little adjustment should be needed to fair the building jig. Sight along the centerlines marked on each of the stations (photo 6) to make sure they are aligned. Use a good-quality spirit level to check the molds both horizontally and vertically. Double-check the heights. Use a plumb bob to confirm that the stem is vertical. Once the positions are verified, brace all components firmly.

Despite your best efforts, minor adjustments will be required. Trust your eyes to be the final arbiter, and bend battens of various lengths over the setup, tacking or stapling them in place. Spend plenty of time viewing the setup from various angles and distances.

A Word about Safety

Many of the materials used in boat construction are considered toxic. Wood dust, for example, is classified as a carcinogen. Equip yourself with a high-quality dual-cartridge respirator with cartridges rated for organic vapors. I use my respirators whenever dust, solvent vapors, or powdered epoxy additives are present.

Purchase plenty of disposable gloves. I buy a half dozen boxes of a hundred at a time, and will frequently change gloves four or five times in a session of work.

I understand that a long list of warnings can be tedious, but this advice is based on years of experience—mine and that of many others. Look after your body, so that you can live to enjoy using the boat for many years! —RL



JONATHAN McNALLY

Fitting the Keelson

The keelson is made from solid wood, $3\frac{3}{4}'' \times \frac{3}{4}''$ (95mm $\times$ 19mm), as detailed in the plans (page 73), and it fits into the heel of the stem (photo 7). First, bevel the aft end of the keelson to fit neatly against the inner face of the transom (visible in photo 5). There is no need for a traditional transom knee, because the epoxy bonding of the planking to the transom and to the keelson results in a strong and unified structure. However, to make the keelson easier to position during construction, you may prefer to notch the transom and simply run the keelson past the transom's after face to be trimmed later. Photo 5 shows Byron's choice of butting the keelson to the transom and supporting it with a plywood cleat.

It is a good idea, before installation, to round-over the corners of the keelson that will be visible from inside the boat.

At the forward end, fit the keelson to the notch in the after end of the stem and epoxy it in place. The pieces shown (photo 7) have been beveled, which is the next step.

Beveling the Keelson

Glued-lapstrake construction involves a lot of beveling, which can seem intimidating to anyone attempting it for the first time. Don't be too afraid of making mistakes, because epoxy readily fills any gaps.



ROSS LILLISTONE



VINCENT DRANE
9

With the right setup, however, it is easy to get perfect “rolling” bevels every time. The trick is to modify a standard low-angle block plane, as shown in photo 8. I drill holes in the sides of a plane to allow a short length of smooth metal rod to slide through easily. The holes must be carefully located so that the distance from the bottom of the rod to the bottom of the plane’s sole equals the thickness of the lining-off battens you are using. (I use 11mm battens, a little less than $\frac{1}{2}$ ”; whatever dimension you choose, be consistent.) In use, the rod rides on the batten that coincides with the outer edge of the plank, automatically setting the correct angle for the plane.

Continue beveling the keelson until its outer edges corners are flush with the molds and bulkheads. The bevels will meet at or very near the centerline, but don’t worry if there are minor variations.

Beveling the Stem

I use a spokeshave and block plane to bevel the stem. Mark two lines on the forward face of the stem, each $\frac{1}{4}$ ” (6mm) outboard of the centerline. The wood is cut away until it reaches the marked lines, resulting in the face of the stem being $\frac{1}{2}$ ” wide (12mm).

The angle of bevel on the stem varies considerably from top to bottom. Patience and a good eye are required. Bend battens or thin sheet material around the first two bulkheads and forward to the stem; this will allow you to gauge the necessary angle. As with the keelson bevel, minor errors are of no concern since thickened epoxy will fill any gaps.

With the stem and keelson beveled, the setup is complete and you are ready for planking, which will be taken up in Section 2: Planking. 

Although efforts have been taken to assure that a full-scale boat can be built from the information presented in these pages, the editors strongly suggest that full plans sets be purchased from the designer. Phoenix III plans, which include a 60-page illustrated manual and are printed in either imperial or metric

measurements, are available from Ross Lillistone, P.O. Box 152, Esk, QLD 4312, Australia. The designer may also be contacted directly at r.lillistone@gmail.com. For additional information, see his website, www.baysiderwoodenboats.com.au.

Series Notes

RECOMMENDED READING

For ideas on glued-lapstrake boatbuilding methods, see *Clinker Plywood Boatbuilding Manual* by Iain Oughtred, *Ultralight Boatbuilding* by Tom Hill, and *How to Build Glued-Lapstrake Wooden Boats* by John Brooks and Ruth Ann Hill. All are available from the WoodenBoat Store, www.woodenboat.com.

MATERIALS

All plywood must be marine grade. In the United States and many other countries, British Standard 1088 is recognized; in Australia and New Zealand, the standard is AS/NZ2272. Check the standards for your country. For the construction described here, five sheets of $\frac{1}{4}$ ” (6mm) marine plywood are needed. This thickness is minimum; thicker is acceptable, within reason, and at least one builder has used $\frac{3}{8}$ ” (9mm) with success. In addition, one sheet of $\frac{1}{2}$ ” (12mm) marine plywood is needed. For deckbeams, keelson, outer keel, stem laminations, and other wooden pieces Douglas-fir, or a comparable alternative, would be a good choice. The $\frac{3}{4}$ ” (19mm) thicknesses are commonly available in lumberyards. Lengths and widths vary; consult the plans for details in each case.

Marine plywood of $\frac{3}{4}$ ” thickness (18mm) is specified for the rudder blade and filler, but these may be glued up from two pieces of $\frac{1}{2}$ ” (12mm) or three pieces of $\frac{1}{4}$ ” (6mm).

The quantity of epoxy resin required is about a gallon, with hardener to match, plus adhesive and filleting additives. This volume will vary considerably depending on the builder; be prepared to purchase more as required.

The choice of wood for the spars is left to the builder, but I would recommend Douglas-fir, hoop pine (in Australia), or spruce. Be careful with spruce, because it can be a bit too flexible unless you get very good-quality material. The lengths are specified in the plans and later in this series. Note that the full set of plans also includes standing lugsail and Bermudan knockabout rig alternatives.

Fittings can be purchased or made. The rig is simple, and many people choose to make their own fittings (see WB No. 235, for example), which are described for the spritsail-sloop rig in Section 7: Rigging and Rig Fittings. With a suitable sewing machine, the sails, too, could be made by the builder, or sail plans could be presented to a qualified sailmaker. Some companies produce sailmaking kits; see www.sailrite.com for one such alternative.

Braided Dacron rope can be used for most of the rigging: $\frac{1}{4}$ ” or $\frac{3}{8}$ ” (6mm or 8mm) for the main halyard and downhaul, $\frac{3}{8}$ ” (10mm) for the main and jib sheets. Low-stretch $\frac{1}{4}$ ” (6mm) Spectra would be a good choice for the jib halyard and the snorter. Sail lacing is commonly available as $\frac{1}{8}$ ” (3mm) Venetian blind cord.



Pleustal

A cruiser for thin water

Design by
David Arnold

Commentary
by Robert W.
Stephens

Pleustal Particulars

LOA	33'3"
LWL	28'7"
Beam	9'2"
Draft	
cb up	1'2"
cb down	6'9"
Displacement	7,296 lbs
Sail area	497 sq ft



David Arnold grew up messing about in boats in Florida, where he fell in love with the state's shallows, barrier islands, mangrove swamps, and coral reefs. Years of cruising the "Big Bend" region of her west coast, where the peninsula meets the panhandle, have highlighted for him the virtues of shallow draft. "The rule of thumb is one foot of added depth for every mile off the coastline," he tells us. "Even with a foot of draft, it's entirely possible to run aground or hit a rock a mile or two offshore—I can confirm this from many firsthand incidents compiled over the years!"

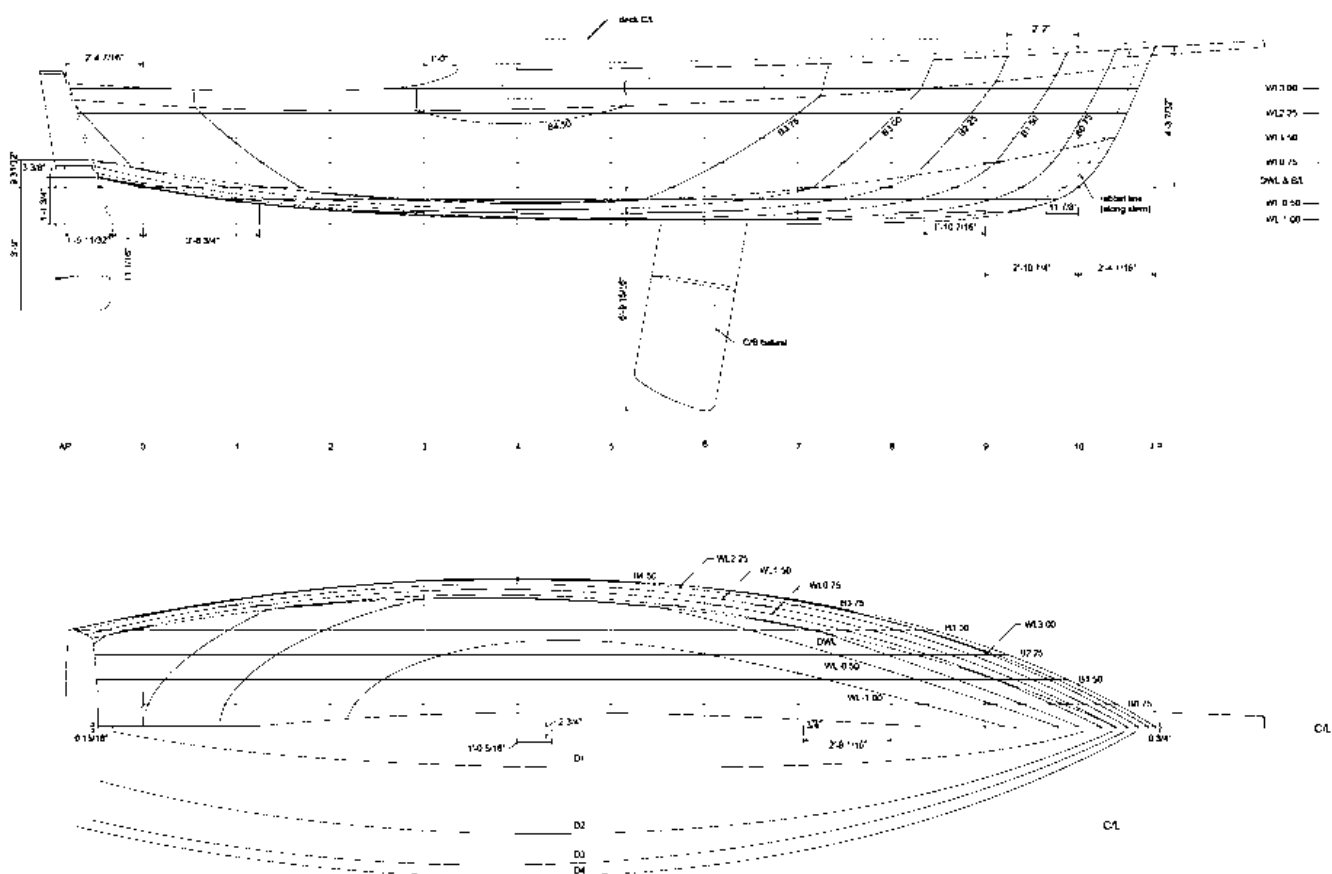
The challenges of cruising such waters, as well as the desire to poke

into narrow, winding creeks and swamps, informed his dream cruiser. Pleustal is a coastal cruising ketch intended to float in not much more than a heavy dew, sustain a couple for a week or two at a stretch, welcome additional guests for brief periods, and safely manage an offshore passage now and again, when more distant waters like the Dry Tortugas (about 60 miles west of Key West) or the Bahamas beckon. No mean feat—and let's throw into the mix the idea that we'd like her to be built by a small crew of amateurs—like Arnold and his wife!

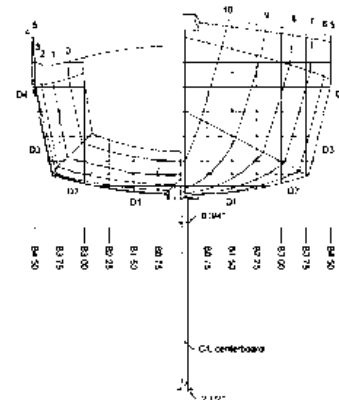
Arnold has attacked this daunting list of requirements by artfully combining elements seen in a number

of designs through the years, choosing carefully from the same palette dipped into by such talents as Commodore Ralph Munro, L. Francis Herreshoff, and Philip C. Bolger, mixing judiciously to create his own tone and style. Pleustal is attractive, straightforward of construction, and able-bodied, and while she reminds us of other boats of years past, she is her own creature.

Pleustal's hull owes much to Munro's groundbreaking work in shallow-draft cruising safety—the Commodore was the first to study and prove the concept that a light, shallow craft could be at least as seaworthy as a deep, heavily ballasted boat, if carefully designed. In the



When designing Pleustal's shoal-draft hull, David Arnold visited the classic work of Ralph Munro, L. Francis Herreshoff, and Philip C. Bolger. He then went on to create his own distinctive theme.

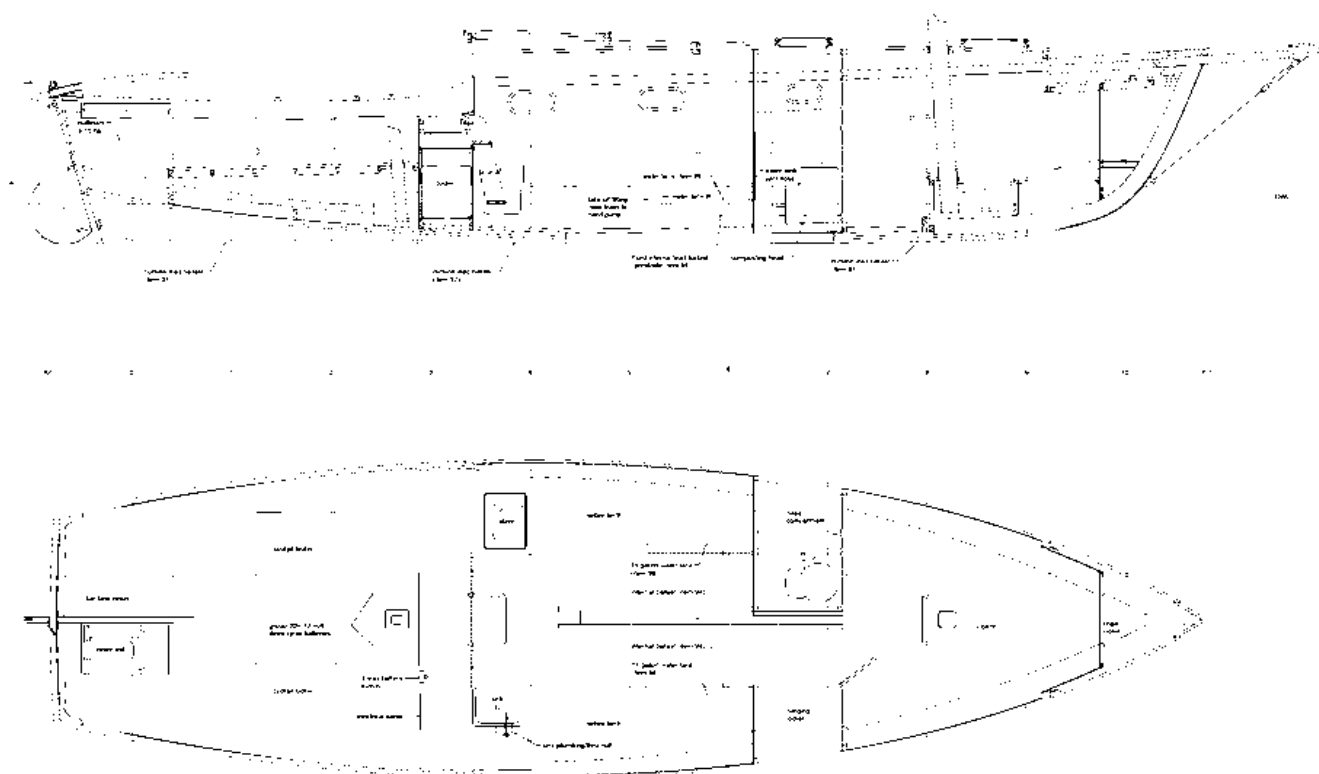


late 19th and early 20th century, he combined light displacement, generous freeboard—usually achieved by the use of a raised deck, as in Pleustal's case—and moderately sized but carefully placed ballast in boats of extremely little draft and exceptional ultimate stability. Typical sailboats of that era were either easily capsized non-ballasted “skimming dishes” or deep, narrow, low-freeboard “lead mines”; a vitriolic campaign was waged for years in the yachting press by adherents of each camp, while Munro proved both camps wrong with his Presto: roomier, drier, and more buoyant than the lead mines, and self-righting

unlike the skimming-dishes. Pleustal is a direct descendant of the Presto type.

The classic Presto type would have been built plank-on-frame, with flaring topsides and rather slack rounded bilges. To ease the task of an amateur builder, Arnold has elected to employ hard chines and an arc-bottom shape. L. Francis Herreshoff employed a similar technique with his beloved Meadowlark, a boat of similar size, shape, and mission. Pleustal shows important differences, though, in both shape and construction, which widen her abilities and make her easier to build in today's world and longer lasting, too.

Herreshoff's Meadowlark features a true arc-bottom, with constant-radius bottom framing dictating a gently rockered keel and a hard knuckle at the bottom of the stem. This shape facilitates carvel or double-carvel planking, as the planks can be straight (or nearly so), and easy to join and caulk. It's also a pretty speedy shape, at least in flat



The raised-deck configuration provides good space on deck and below. It also contributes to Pleustal's surprisingly high ultimate stability.

water. Pleustal shows a more shapely bottom, especially in the forefoot, where Arnold has sharply tightened the curvature of the bottom to give it a sharper entry. There'll likely be a small sacrifice in boat speed in smooth water, but in any sea the bow will be much less prone to uncomfortable, speed-robbing pounding, a trait perfectly in keeping with Pleustal's ambitions of farther horizons.

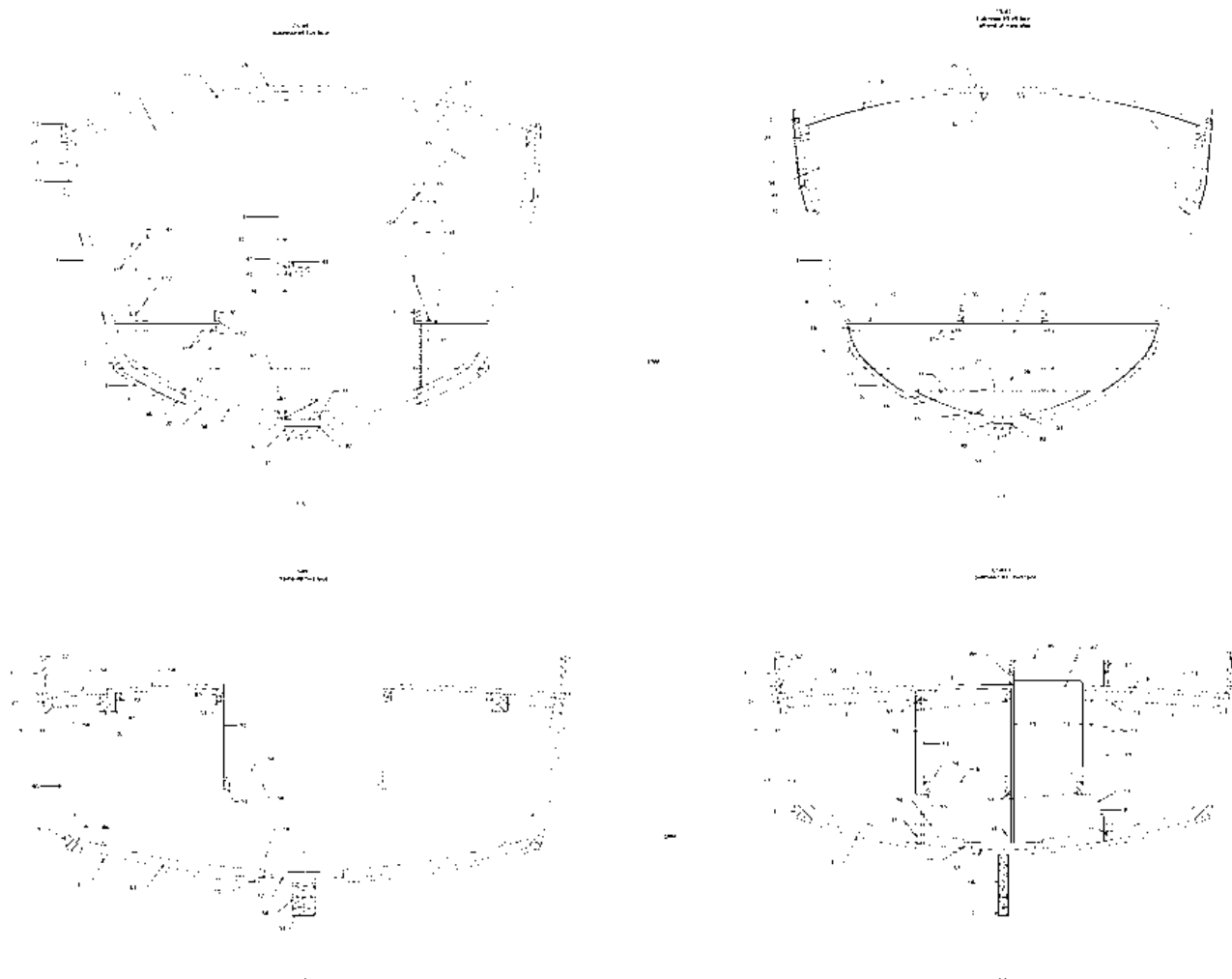
Arnold handles the more complex bottom shape by leaning on some developments in materials that have occurred since Meadowlark's time. He calls for the hull to be strip-planked, then sheathed with fiberglass cloth and epoxy. While tedious and messy, the method has a crucial advantage for the short-handed amateur: any one piece of wood is easily handled by a single person, and each component is small enough to be

installed in a short time period—say, bang on a plank after the evening commute and before a late dinner. Arnold suggests the boat might be built right-side up, inside female station molds. I'm not sure I'd try it that way—I find trying to force a plank inside something is more of a challenge than wrapping it around outside something. But his method would allow most of the structure and interior to be completed without disturbing the setup by rolling the boat.

To maximize interior space and headroom, Arnold has eliminated permanent framing for much of the interior. He's replaced its structure by adding substantial diagonal cold-molded sheathing in the areas without framing—primarily the hull bottom in the central part of the accommodation, and the hull

topsides in way of the berths. Thickness in the bottom is increased from the standard $\frac{7}{8}$ " cedar strip planking to those strips plus $1\frac{1}{8}$ " of alternating layers of plywood, for a total thickness of about 2", while the topsides are beefed up by the addition of two layers of double-diagonal cedar, to a total thickness of $1\frac{3}{8}$ ".

While frameless construction gives a nice clean interior surface and quite a bit more room, it's not without its issues. Headroom is gained by using the inner surface of the hull bottom as a gently curving cabin sole. This solution will require constant vigilance to be livable. Even the slightest water leak, whether down the mast wires or through a skylight or porthole, will need instant sponging, or it will become a puddle on the saloon sole. There's no place to locate a bilge pump, and no sump to



These sections describe a clean structure. We'll strip-plank this hull, and then sheathe it with fiberglass cloth set in epoxy. The designer suggests that we build the boat right-side up, inside female station molds.

collect water—before an automatic pump can begin picking up the water, we'll be wading around with our ankles wet.

The raised deck is a great solution, delivering at once a roomy flush deck, lots of interior room, a simple and sturdy structure, and surprising ultimate stability. Even with only 1,400 lbs of lead ballast (in a simple straight shoe on the skeg), Pleustal's high center of buoyancy when on her beam ends results in positive stability well past a 90-degree knockdown. Arnold calculates her point of vanishing stability to be at 101 degrees, and 127 degrees when her wooden masts are included in the equation.

With her generous freeboard and a shape that will respond well to running off before a gale, I would feel just fine about taking the jump across a hundred miles of open water.

Pleustal's ketch rig is a good match with the hull—it looks right and is easy to manage for a cruising couple. Her flattish hull means a pretty high proportion of wetted surface to sail area—she won't be at her best in light air. And a ketch is never the most weatherly of boats, especially a light and shallow one. But we're cruising—we need not be in a hurry if the wind's not blowing or isn't in our favor. And when we do get a fresh breeze off our quarter, the flat

bottom and a mizzen staysail will make up for lost time.

David Arnold tells us, "The design's name comes from marine biology, 'Pleustal' being an ecological division between the sea surface and atmosphere, where organisms drift on the sea surface." What a perfect description of life aboard this engaging cruiser, shallow enough so we need not worry much about what's beneath the surface.

Bob Stephens is a principal at Stephens Waring Yacht Design, in Belfast, Maine.

Plans from David Arnold, 8328 Driftwood Dr., Weeki Wachee, FL 34607.

TACOMA



How an American tuna clipper changed the face of Australian fishing

by Bruce Stannard

In 1944, Bill Haldane, a 26-year-old Australian boat-builder and fisherman and the eldest son of the lighthouse keeper at Port Fairy on Victoria's Bass Strait coast, pecked away at an old upright typewriter composing the first of many letters destined to go by sea to Tacoma, Washington. Written on behalf of the Haldane family and addressed to Hervey Petrich, chairman of the Western Boat Building Company, the letter took three hazardous months to be delivered to the far side of the world.

Founded by the Petrich family in Tacoma in 1917, the Western Boat Building Company was highly regarded for a succession of smart, safe, and seaworthy fishing vessels. In 1937 their 122nd boat was the 71' WESTERN FLYER, the seiner immortalized in the journal of science, philosophy, and adventure that became John Steinbeck's *The Log from the Sea of Cortez*. After the Japanese invasion of Pearl Harbor, the company ramped up around-the-clock production, building scores of wooden-hulled minesweepers, patrol boats,

ALL PHOTOS COURTESY OF THE HALDANE FAMILY ARCHIVE

Top—The fishing vessel TACOMA, launched in 1952, was the first purpose-built tuna boat in Australia. Her design was by the Western Boat Building Company in Tacoma, Washington, and she was built by three enterprising Australian brothers who ranged in age from 25 to 31 years. She's shown here in 1971 rigged as a shrimp trawler. **Above**—While TACOMA was originally built for purse seining, she soon converted to pole fishing. In this method, fish are attracted by chumming the water with bait fish. They are then drawn to polished barbless hooks slung from bamboo poles, and hauled aboard. Here we see Bill Haldane and his brother Hugh in 1956, alongside the Bellamy twins (see sidebar, page 92).

The Haldane brothers hand-selected TACOMA's timbers and spent more than seven years on her construction. Here they are adzing the mast, with Bill's three-year-old son Ross observing. Bill was very skilled with the adze; brother Hughie's left hand had only two fingers, the result of a childhood accident while playing with explosive detonators.



sub-chasers, and tugs. In 1943 they built six 114' coastal freighters for the U.S. Army and, in 1944, completed 19 fast patrol boats for the Navy. The tide of war had turned decisively in the Allies' favor that year as the U.S. Navy routed Japanese forces throughout the Pacific while, in the Atlantic, devastating losses were inflicted upon Germany's destroyers and U-boats. In Europe the Red Army drove the Nazis out of Soviet Russia and the Allies stormed the beaches of Normandy.

Bill Haldane and his brothers, Hughie and Alan, were visionaries and idealists who looked beyond the appalling carnage of war to a time of peace when the world's population would be crying out to be fed. Their ambition was to tap the teeming and apparently

inexhaustible riches of the ocean, and their dream was to build a boat big enough to catch fish on an industrial scale. Bill's correspondence with the Western Boat Building Company was the beginning of a construction process that would eventually pave the way for the multi-million-dollar seafood industry now based at Port Lincoln, South Australia.

The Western Boat Building Company had developed precisely the right style of vessel for the Haldanes: a powerful purse seiner known as a tuna clipper. The brothers had seen a striking black-and-white photograph of the splendid 80' WESTERN EXPLORER on the cover of *Pacific Fisherman*, and in the same magazine an advertisement offering for sale the lines of Western Boat Building's big purse seiners, and they decided this was the way to go. Bill wrote his letter to Hervey Petrich, enclosed a check for \$500, and requested the lines of an 84-footer designed to carry a catch of 120 tons.

Hervey Petrich, the son of Dalmatian immigrants, may well have been taken aback by the young Australians' bold and direct approach, but he probably also sensed that they were kindred spirits, Aussies who shared his energy and unshakable conviction that the sea's resources were part of mankind's domain, pre-ordained to be exploited for his benefit. Neither Petrich nor the Haldane brothers could have had any inkling that, in the span of only eight decades, our overfished seas would be in ecological meltdown, plundered to the point of exhaustion by what the distinguished oceanographer Sylvia Earle has called "the greatest environmental tragedy of our time: the relentless, wholesale extraction of ocean wildlife" (see sidebar, page 90).

Petrich was keen to encourage the Haldane brothers but reluctant to sell plans. In his reply he generously



Brothers Roger and Clyde Haldane, with their uncle Hugh in the middle, pole a 110-lb southern bluefin. When TACOMA was launched, southern bluefin brought only a fraction of the price of shark. Through the vessel's 52-year career, the tuna fishery grew into a multi-million-dollar market with Japan.

enclosed a complete set of very detailed plans and a note explaining that there would be no charge. "Perhaps," he wrote, "you will be in a position to do something for us one day."

Hervey Petrich retained the Haldane family's check but never cashed it.

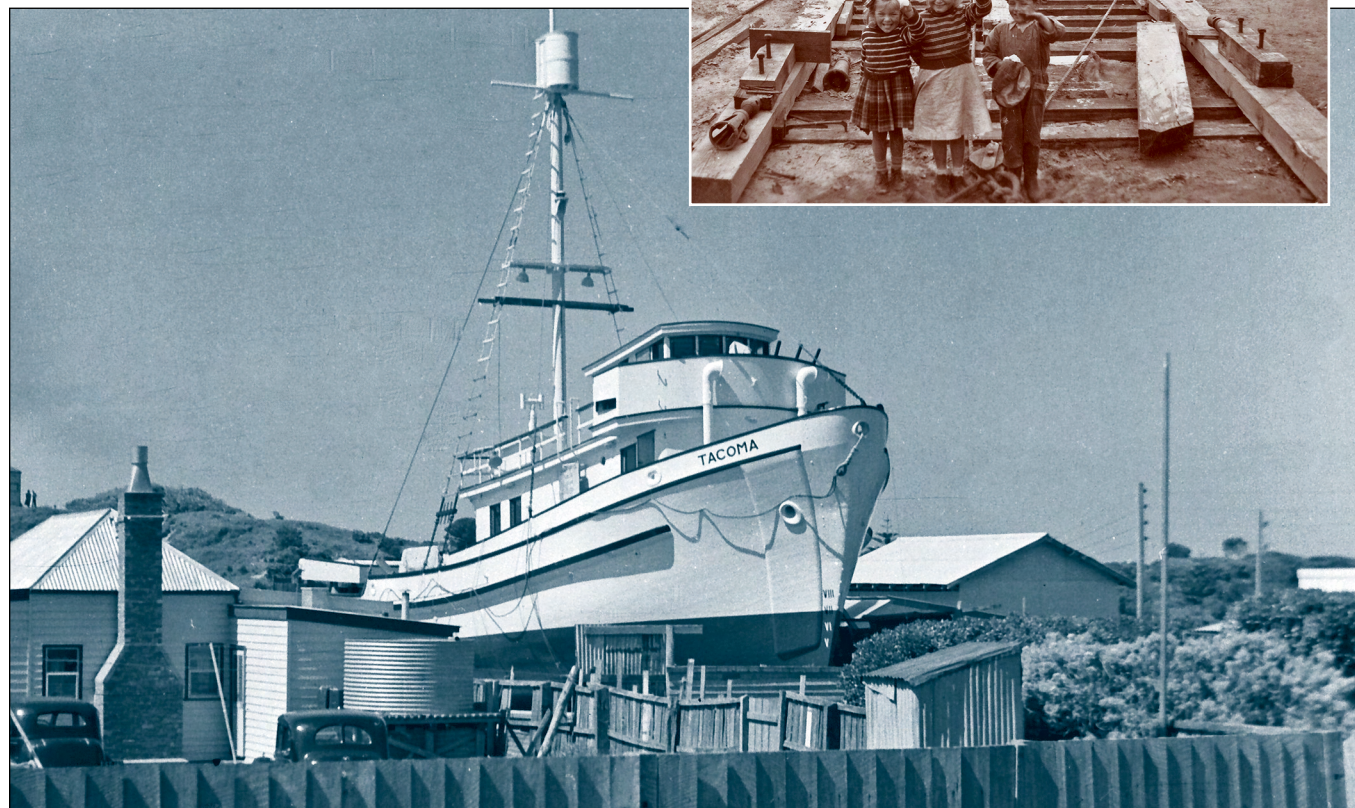
In Port Fairy, a tiny hamlet on the Bass Strait coast of western Victoria, the five Haldane children, three boys and two girls, lived with their parents in the lighthouse keeper's cottage on Griffith Island, a kelp-fringed, black basalt outcrop at the mouth of the River Moyne and facing the full force of the Southern Ocean. Bill, the eldest son, was a skilled carpenter, and the younger boys, Hughie and Alan, were fishermen. At the turn of the 20th century the boys' father, Hugh Haldane, a Scottish shipwright, had already served his time at the A & J Inglis yard on the Clyde. There he helped to build the handsome paddle-wheeler WEEROONA in which he sailed as ship's carpenter on her 1910 maiden voyage to Port Phillip Bay.

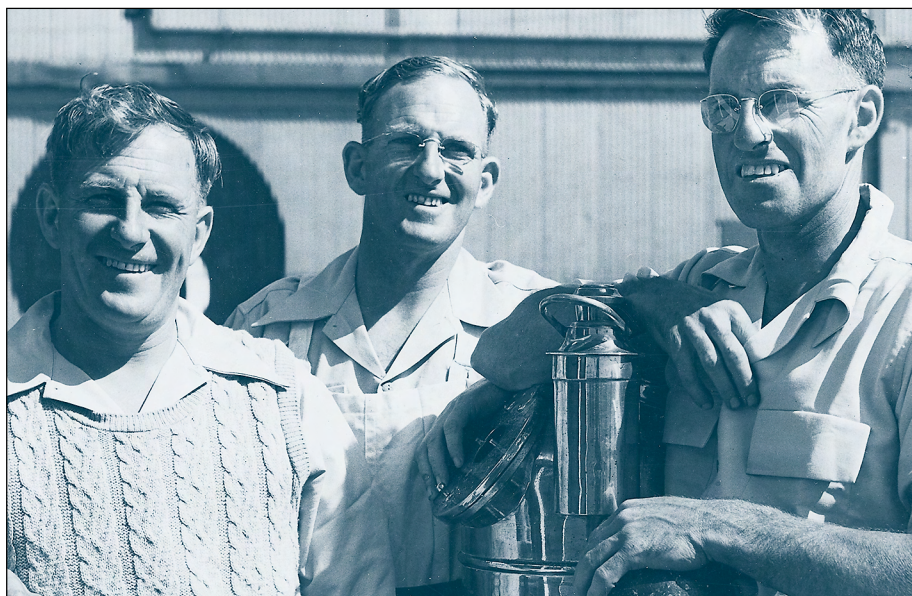
Hugh left the ship in Melbourne, worked briefly for the Harbor Trust, and finally settled at Port Fairy where he became harbor master and lighthouse keeper—twin posts in which he served from 1929 to 1951. Both of

Hugh Haldane's brothers were shipwrights: his younger brother, Billy, emigrated to the U.S. to work at the Graves Yacht Yard in Marblehead, Massachusetts, while the older brother, James, went to the Whyalla Shipyards in South Australia. Once he was established, Hugh brought his 19-year-old fiancée Rebecca Hamilton out from Scotland.

Hughie and Alan Haldane had been fishermen from their early teens, and Hughie first braved the treacherous coastal waters around Port Fairy in PETREL, an open 24' cuta boat with a loose-footed standing lugsail. Using handlines, the brothers caught barracouta and gummy shark, which were then the staples in Melbourne's ubiquitous fried fish and chip shops. Bill Haldane joined them in fishing when the Great Depression put an end to his construction career. Using only rudimentary hand tools, he and his brothers worked with their father to build two 40' cutters, AMARYLLIS and DOLPHIN, on Griffith Island. These smacks, the former gaff rigged and the latter Bermudan, were fitted with wet wells and were designed for shark fishing, and each took two years to build; AMARYLLIS, the first, was launched in 1934. They were the first boats in Victoria to be powered by diesel engines, and also the first with wheelhouses.

Below—In 1951, TACOMA, with her building shed dismantled, sits ready for her November launching that year. **Right**—Sisters Rhonda and Rhoena with cousin Ross the day after launching. The ways are weighted to prevent them from floating with the rising tide; they lead through a hand-dug slipway, with the newly launched TACOMA snug in her berth at the other end.





The brothers Haldane (from left): Hughie, Alan, and Bill, with TACOMA's binnacle in 1952.

The Haldane boys worked as a close-knit team. They were doing well, but believed they could do much better if they had a substantially bigger vessel. Poring over the Western Boat Building Company's ad in *Pacific Fisherman*, they hit upon the idea of building the 150-ton TACOMA, which remains the biggest vessel ever built at Port Fairy. With youthful enthusiasm, the brothers figured they could complete her in just four years. But perhaps there was a touch of naïveté back then, for they had very little capital and not much in the way of income from their part-time fishing.

The first task was to obtain hardwood logs from the Otway Ranges in southwestern Victoria. All three boys journeyed there together and with the aid of men from the Armstrong Mill, they selected six of the tallest, straightest bluegums in the old-growth forest. With so many mill workers away at war, it was six months before a steam train was able to haul the enormous logs, weighing a total of 25 tons, to Port Fairy. The logs were about 70' long, with the biggest measuring 3' at the butt and weighing eight tons. They were so heavy that no crane in Port Fairy was able to lift them. Using block-and-tackles and old crab winches, the Haldanes carefully coaxed the logs off a flatbed freight car and rolled them on to jinkers and trucks to be hauled down to the family's vacant waterfront land on the west bank of the River Moyne. There, under their father's guidance, the boys set to work squaring up the logs using only the time-honored broadaxe and adze along with a hefty cross-cut saw.

Bill Haldane specified the finest timbers for TACOMA, and to ensure that he obtained nothing but the best, he cut a quiet little deal with his supplier, the manager of Millar's Timber Company in South Melbourne. Every now and then he sent the manager a 60-lb bag of freshly caught live crayfish (rock lobsters). The result was that the finest-quality clear-grained, quarter-sawn Douglas-fir was set aside, chalk-marked "TACOMA." Bill Haldane carefully recorded every detail of the ship's construction in a blue-lined notebook. It is among many thousands of documents now digitized in the TACOMA archives,

which include all correspondence relating to the vessel's 52 years of operation.

In his construction book, Bill Haldane recorded the massive dimensions of the bluegum keel (68'12"×12"), the keelson (64'14"×16"), the jarrah planking below the waterline (6"×2¼"), and the topside planking of Oregon pine—aka Douglas-fir (2,000 board feet, 6"×2¼"). The frames were steam-bent 3½"×3" spotted gum on 10" centers, and the fastenings included thousands of galvanized steel spikes.

TACOMA was incredibly strong—so strong that, according to Bill Haldane's son, Ross, his father and brothers saw no need to insure her. "Having built the boat with their own hands," he said, "they had absolute faith in her. They went to sea in her and they expected her to carry them safely home again."

The Western Boat Building Company's larger tuna clippers were lavishly fitted out with the latest conveniences. Some vessels with Italian and Portuguese crews were even fitted with their own chapels and religious shrines. TACOMA followed their lead with pale pink Queensland maple and beautiful blond French-polished silky oak in the 12-berth crew's quarters, and in the galley where meals were prepared on a cream-enameled coke-fired AGA stove—the classic slow-combustion cooker normally associated with well-appointed British country homes. The non-religious Haldanes had no need for an onboard chapel, but for practical reasons they did ban the use of alcohol and tobacco at sea.

After the war the Haldane boys were forced to concede that they would need financial help to finish the boat, but in the immediate postwar years bank funds were tight and the Victorian state government turned a deaf ear to pleas for support. Australia's biggest bank, the Commonwealth, refused because of "the experimental nature of the venture." Australia's federal government said no because it saw "no defense value in the boat." Frank Moorhouse, the chief fisheries officer in the South Australian state government, was one of the few who knew of the work being done by purse seiners on America's northwest coast. In that light, he saw the potential in TACOMA and recommended that the South Australian government loan £20,000 to finish the boat.

At that stage Australia, the island continent with one of the world's longest coastlines, was importing more than half its seafood. Some saw its waters as a marine desert. But in the mid-1940s Australia's peak scientific body, the Commonwealth

TACOMA arrives at Adelaide in January 1952. She'd left Port Fairy two days earlier with all of the Haldane family and their belongings—and arrived with a litter of kittens born aboard during the trip.

Scientific and Industrial Research Organization (CSIRO), proved otherwise when one of its researchers, Stanley Fowler, flew over the clear, cobalt waters of the Great Australian Bight and looked down on an astonishing spectacle as vast shoals of tuna, mackerel, and pilchards made the surface boil. The southern bluefin tuna were migrating east-bound across the Bight from their Indian Ocean spawning grounds, southeast of Java, to the Tasman Sea. With masterful understatement Fowler described his discovery as “a significant untapped pelagic resource.” When the Haldane boys heard of this discovery, it ignited their tuna fever.

The Haldanes' loan was duly approved on September 7, 1948, but it came with a raft of conditions including the stipulation that, on completion, TACOMA and the three Haldane families would have to be based 700 miles to the west of Port Fairy at Port Lincoln, a sleepy country town of 5,000 at the foot of South Australia's Eyre Peninsula, and used to catch pelagic species such as garfish, pilchards, and tommy ruffs, which would be processed in South Australia. The vessel was also to be used for fisheries research. The Haldanes had no choice but to accept. They had no sooner done so when the Victorian government stepped in with a belated attempt to keep TACOMA in her home waters. But that bid came too late.

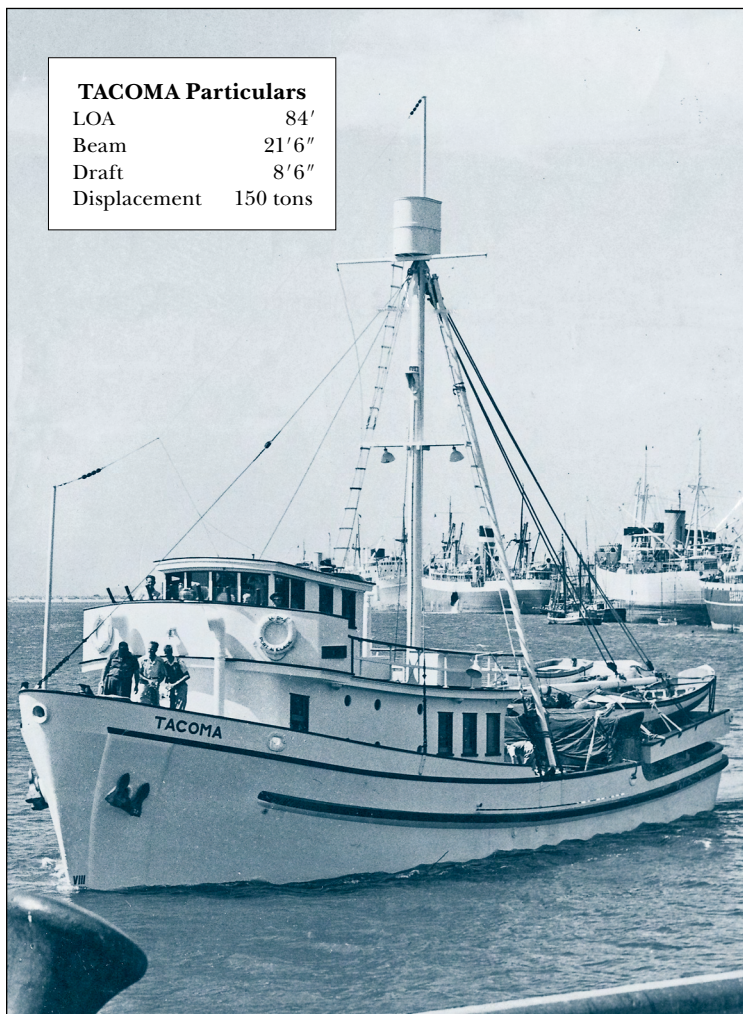
The loan meant that the Haldane boys could now afford to work on TACOMA full time. Although they finished construction early in September 1951, seven-and-a-half years after beginning, the boys had to spend the following two months digging, by hand, a 53' channel sloping from the stern of the vessel down to the river. This meant shoveling 200 tons of sand and demolishing a bluestone seawall before they had the pleasure of watching saltwater wash over the hardwood planks of their makeshift slipway.

At high water, 3:30 a.m. on November 5, 1951, their mother, Rebecca, broke a bottle of Port Lincoln seawater over TACOMA's stem, sending her down tallow-greased ways and into the River Moyne. Loading aboard the possessions of the three families took the better part of a month. The furniture was stored below in the hold, while three Haldane-family boats made the trip on the net turntable aft. Also aboard were nine bicycles, the family's German Shepherd watchdog, Wolf, and a gray Manx cat with a powder-puff stump of a tail. The cat was to deliver a litter of six kittens as TACOMA steamed west toward Adelaide.

TACOMA's log for Sunday, January 6, 1952, betrays no hint of the excitement the nine adults and seven children must have felt as they cast off their docklines

TACOMA Particulars

LOA	84'
Beam	21'6"
Draft	8'6"
Displacement	150 tons



and slipped quietly away from their hometown. Skipper Bill Haldane simply wrote: “Left Port Fairy for Adelaide 6pm. Wind south west with moderate seas.” TACOMA was powered by a massive four-cylinder Atlas Imperial salvaged from a U.S. Navy barge that had seen active duty in the Pacific war. The 240-hp, 275-rpm diesel was built in Oakland, California in the 1940s. It weighed 19 tons and was so big that it had to be disassembled, taken aboard in pieces, and then reassembled in the engineroom. Although the Atlas was huge for its power, it sent TACOMA chugging along at a steady 8.5 knots. She arrived at Port Adelaide in 48 hours.

TACOMA left for Port Lincoln 10 days later and arrived there on January 18 to a mixed reception from the local fishermen, many of whom had never set eyes on a vessel of her size and power. Most of them fished for shark, which was then fetching around 13 pence per pound. Few bothered with tuna, worth only six cents per pound. The local fishermen, who worked with handlines from a ragtag fleet of boats, were worried that the ultra-modern TACOMA, equipped with an echo-sounder, a diesel-powered Northern Dragger winch, and a cotton-mesh net capable of catching 200 tons at a haul, would soon scoop all the fish from the sea, leaving none for them.

They need not have worried, for early on things did not go smoothly for the Haldanes. They were unfamiliar



Above—Australian salmon netted from a Bondi-type surfboat (aka “banana boat”) are loaded aboard TACOMA by Clyde Haldane and crew. **Left**—Cousins Robin, Roger, and Andrew triple-poling in the mid-1960s. Tuna poling is often likened to sheep shearing: A good Australian shearer averages 200 per day, and success is more about technique than muscle. **Left, bottom**—Local tommy roughs (aka “Australian herring”) were caught during hard times and sold smoked in local hotels.



with the heavy, experimental cotton net, and their initial efforts with it produced little more than holes—damage that cost them six weeks and that had to be repaired at their own expense. They tried fishing with troll lines but had little success. On one occasion they steamed 190 miles southeast to Kangaroo Island where they caught only 40 scattered individual tuna. After four days at sea they came home and sold the meager haul to the cannery for just £50. The Haldanes’ financial resources were at a low ebb. Bill Haldane wrote to Hervey Petrich, “After 25 years in this business we are now worse off than we have ever been.”

On Wednesday, February 25, 1953, TACOMA’s luck

began to change when, off the northern end of Boston Bay, she ran her purse seine around a small school of tuna. In two shots they hauled 14 tons of tuna onboard, the first southern bluefin ever to be captured in Australian waters using a purse seine. They also seined 20 tons of Australian salmon just outside the bay. Their triumphal return to Port Lincoln was short-lived when they found that the local cannery lacked the capacity to process all the catch. Half their haul of tuna had to be buried by a bulldozer.

The three Haldane brothers and their families were each provided with newly built state-government rental housing in Port Lincoln, and they soon fitted well into the local community. But, in TACOMA’s first four years of operation, they struggled to pay the interest on their government loan. The boys paid themselves a meager £5 a week, which was scarcely enough to put food on the table, let alone pay for the boat’s maintenance. They very nearly went broke. The Haldane women grew the family’s fruit and vegetables and earned money teaching in the local schools. By sticking together they managed to scrape by.

Twenty years would pass before the technique of purse seining, for which TACOMA was designed, was deemed a success in Australia. The Haldanes didn’t stick with seining for that long, though; instead, they switched to bamboo poling. Bill Haldane had read about this method of fishing and its success in the U.S. tuna fishery. He wrote dozens of letters to South Australian Premier Tom Playford pleading for the government’s assistance in bringing experienced American tuna fishermen to Port Lincoln to demonstrate the technique. Finally, in 1956, the Jangaard brothers, Chris and Sven, flew from San Diego to show them how it was done.

The Sad State of Southern Bluefin Tuna

Like the northern bluefin tuna fisheries in the Atlantic and Pacific Oceans, the lamentable history of the southern bluefin is characterized by the worst aspects of industrial-scale overfishing. Insatiable demand from Japan has resulted in fish stocks plummeting to an estimated 5 percent of the virgin biomass. Australian analysts now use independent scientific evidence to back their claims that tuna stocks are recovering. On the other hand, marine conservationists and industry critics are concerned that the predicted recovery may never happen.

In 1985, Australia, Japan, and New Zealand agreed to restrict their catches through voluntary quotas, but the continuing fall in stocks saw Japanese and Australian quotas slashed by 67 percent in 1990. By 1992, 60 percent of the Australian industry was in receivership with most of the remainder under bank control. An Australian government investigation in 2006 discovered that since 1984, Japanese fishermen, acting with the knowledge and acquiescence of scientists and government, had illegally caught over 100,000 tons of southern bluefin tuna. The public humiliation following that embarrassing disclosure saw Japan punished with a further severe cut in its quota. In 2010 the global quota was again reduced by 20 percent—from 11,810 tons to 9,449 tons. Thanks to rigorous controls, the Australian quota is now on the increase.

At Port Lincoln, the fishery has pioneered the farming of wild-caught tuna. Pre-spawning three-, four-, and five-year-old tuna are caught in purse seines which are very slowly towed to holding cages anchored some 20 miles offshore. These 30- to 60-lb juveniles are fed live bait, mostly locally caught pilchards, for three or four months until they grow to between 60 lbs and 120 lbs. Although critics say the removal of so many pre-spawning juveniles is bound to have a significant negative impact on the species' ability to recover, the Australian Fisheries Management Authority insists that it is on-track for a 20% recovery by the year 2035.

With a feed conversion ratio of 14:1 (14 kilos of pilchards are needed to create one kilo of tuna), some 60,000 tons of pilchards are required to feed the captive tuna each year. Half the pilchards are caught in South Australian waters and the remainder are shipped frozen from California. Thus some 4,500 tons of wild-caught tuna become around 9,000 tons of fattened tuna, which are ready for harvesting in July each year.



A young fisherman-farmer with a southern bluefin for the Japanese market. The population of this magnificent species is estimated to have dropped to 5 percent of its 1960s biomass. Some researchers predict a substantial recovery over the next few decades, but an insatiable demand keeps the fish's value high and the resulting pressure from international fleets intense.

The harvest-ready tuna are so docile and sluggish that divers are easily able to hold them by the gills and gently steer them toward conveyor belts that lift them out of the water to be killed and flash-frozen.

In late June each year, two Japanese factory ships berth in Port Lincoln where, for six weeks using their own generators for power, they freeze and store 2,000 tons each. The frozen tuna is then shipped direct to Japan. Around 96 percent of Australia's southern bluefin ends up in Tokyo's wholesale Tsukjii Market, the world's biggest, where it is worth around \$50 million a year. There, Japanese buyers routinely pay \$100,000 for a single tuna, whose value more than doubles by the time it ends up in restaurants as finely sliced sashimi. —BS

Six months before their arrival, the Jangaards sent plans for TACOMA's conversion from a purse seiner to a pole boat. These included detailed drawings of plywood bait tanks, steel fishing racks, and the fishing poles and other gear required. The bamboo poles were 12' long and topped by 3' of hempen line which was spliced to a 3' wire trace ending in a strange barbed squid-shaped hook surrounded by a tuft of fluffy white feathers from a bantam rooster. The heel of the pole fitted snugly into a stout leather pouch slung around the fisherman's waist.

According to Alan Haldane's boatbuilder son, Andy, the Jangaards were pleasantly surprised to find a boat so familiar to them. "They did mention after some time that TACOMA didn't creak as much as the boats back home," he said. "They were very practical, hands-on guys. Their idea of a stability test was to load the boat with gear, plus bait and water, open her up to full-speed, and then throw the wheel hard over. TACOMA stayed upright, so I guess she passed the test."

According to Andy Haldane, their biggest test was to catch live bait. "In the Pacific all live bait was caught during the daylight hours," he said, "but off Port Lincoln they had to adapt to night baiting with lights to attract the fish. This proved difficult, and the early lights even included oil-soaked rags set alight. These techniques proved useless and until bright 240-volt lights were used, baiting was always problematical."

The Jangaard brothers were experienced fishermen and extremely generous in sharing their knowledge. They explained how live bait like pilchards could quickly send tuna into a feeding frenzy once it was tossed into the sea as chum. On their recommendation, the specified bait tanks were installed on TACOMA's afterdeck and 30 tons of crushed ice was stored in the hold. They taught TACOMA's crew how to use the tuna's aggressive forward momentum—speeds of up to 30 miles per hour—to help lift the charging fish onboard. Steel racks rigged over the stern put the fishermen close to the water and reduced the effort needed to lift the poled fish. With no safety gear other than a hard-hat, no flotation devices, and no tethering lifelines, the

poling fishermen relied entirely on their sea legs and their agility—which were fallible (see sidebar page 92).

On Thursday March 15, 1956, South Australian Premier Playford went for a 36-hour trip in TACOMA during which he poled one very large tuna. The Jangaard brothers outdid him, though, poling 25 tons of tuna that day. TACOMA's decks were piled high with pounding, blood-spattered fish. The first of the South Australian tuna booms was underway.

During their three months in Port Lincoln, the Jangaard brothers caught 93 tons of tuna. Their shared experience greatly accelerated the development of the South Australian tuna fishery, but in their final report written for the South Australian government, they issued a timely warning that this was a relatively small fishery which would need careful management. "A good little fishery for ten boats," they called it. The government ignored their warning, and the result was an open slaughter. By the time the Jangaard brothers flew home, word of their success saw a host of fishermen eager to cash in on the boom.

Port Lincoln, hitherto known as a grain region and called "Sleepy Town," soon had the anything-goes look of a frontier town in the grip of gold fever. A ramshackle fleet of more than 30 boats peppered the blue waters of Boston Bay, poling over 100 tons of tuna a week. In the early 1960s TACOMA's crew established their own record catch, poling 40 tons of tuna in four frenzied hours. With the local cannery's capacity at only a little more than 20 tons a week, much of the catch had to be iced and shipped to canneries in Adelaide, 156 miles to the east.

As more and more boats joined the tuna rush, the catch went up at an exponential rate, helped by the 13 light aircraft that were chartered to fly west, deep into the Great Australian Bight, where they could spot and report the progress of the east-bound tuna schools. A seasonal pattern became established in which boats, including TACOMA, worked the east coast from Eden to Sydney from September to December and worked in the Great Australian Bight from January to May.

In 1968, the year that marked the first big crash, the tuna catch suddenly plummeted to 1,700 tons. With too many boats and too few tuna, many of the blow-in boats quit Port Lincoln to take part in the new northern Australian prawn boom. The Haldane brothers came



TACOMA with Haldane cousins Andrew and Ross at the Boston Marine slip Port Lincoln preparing for the 2,500 mile round trip to the 2011 Australian Wooden Boat Festival in Hobart, Tasmania. TACOMA retired from active fishing in 2003. Her bow has just been refastened with 4" silicon-bronze screws.

The Cruel Sea



The Bellamy twins, Jack (left) and Keith, in 1956.

The identical Bellamy twins, Keith and Jack, were Port Fairy schoolboys when the Haldane brothers started TACOMA's construction in the 1940s. During the seven-and-a-half-years it took to build her, the boys dashed home from school each day to make themselves useful at the Moyne River shipyard which was just a few doors up from their home. Keith eventually served an apprenticeship as a baker while Jack became a butcher, but deep down the inseparable twins always knew they would end up as fishermen.

When TACOMA left for Port Lincoln in 1952, the 17-year-old Bellamy boys went with her as members of her crew. They lived onboard, Jack in the top bunk aft on the starboard side and Keith in the bunk below. Keith was the ship's cook and in the slow-combustion AGA he baked crusty fresh bread and served up a steady stream of wholesome 1950s food: meat and three vegetables with trifle or pudding for dessert.

The lives of the Bellamy twins revolved around fishing and this boat. They both became expert tuna polers and always fished in tandem. On one trip, Jack and Keith, with four others, set the world's poling record when they hauled 40 tons of tuna aboard TACOMA in just four-and-a-half hours, a rate that saw one fish flung aboard every four seconds. The biggest was more than 80 lbs. "There were so many fish onboard," Jack recalled, "that every time she rolled, some of them went over, but nobody wanted to get off the poles to put them away. All we wanted to do was fish, fish, fish."

In February 1959, TACOMA was fishing south of Coffin Bay, and the Bellamy boys were working

side-by-side as usual, double-poling from the racks outboard on the starboard side aft. Neither of them wore safety harnesses. The crystal-clear cobalt blue sea was calm, the day fine and sunny with a light southeasterly sea breeze. A big tuna, perhaps 50 or 60 lbs, came up under the boat and leapt at their lure. The sudden impact caught Keith off balance and he fell overboard, still clutching his bamboo pole. He held on for dear life and was, for a few moments, towed astern as TACOMA moved ahead at perhaps three knots. High up in the wheelhouse skipper Bill Haldane remained unaware of the drama at the stern. Off the starboard bow he had spotted a ripple of tuna. He turned toward it and increased speed. Keith Bellamy's combination gray rubber seaboots and bib-and-brace overalls filled with water and

dragged him under. The chinstrap fastening his helmet was choking him. In a few brief moments he lost consciousness, released his grip on the pole, and raised both arms above his head—the classic reflex action of a drowning man. Slowly he began to slip away.

When Bill Haldane realized what was happening he put the boat hard about, but by the time they completed the circle Keith was sinking. Bill scrambled down the ship's ladder to the afterdeck, stripped off, and dived overboard. Although he was a powerful swimmer, he failed to reach the stricken fisherman. Bill's son, Ross, says the whole thing took less than three minutes. "By the time my father dived in and swam down," he said, "it was already too late. Out there the water is crystal clear and deep blue. You can see into the huge depths, so everyone on deck saw Keith slipping away. Keith's death had an impact not only on my father, but the whole family. All seamen know that once you lose your nerve, you're never the same. I think that day my father lost his nerve. He was never the bold young sailor again. He was a broken man. Overnight he became an old man of the sea."

Jack Bellamy bears no grudges. "When you've been so close to someone, when you've shared so much, when that suddenly ends, you're in shock," he said, "a state of disbelief. I sat down by the bait box and just stared at the water for a few hours. A kind of numbness set in when I realized Keith was lost. Then you just accept: he's not coming back. That's part of life at sea. That's the chance you take when you go fishing." —BS



TACOMA is now the centerpiece of the TACOMA Preservation Society in Port Lincoln. Here she is ready for her annual late-summer tuna-poling trip during the southern bluefin migration through the Great Australian Bight.

to regard South Australia's high-risk tuna fishery as a basket case, and in 1968 they turned their attention toward the nascent Spencer Gulf prawn fishery, a local industry that was, from its inception, tightly managed by the Port Lincoln fishermen themselves. TACOMA was given an extensive refit for prawn trawling, with onboard refrigeration, double-rigged booms, and a new engine—a 500-hp Danish-built Grenaa diesel, half the size of the old Atlas but with twice the power.

While prawning may have been regarded as dull factory fishing as compared with fighting wild tuna, it did deliver a much-needed steady income. Two generations of the Haldane family kept TACOMA busy in what is today regarded as the world's most sustainable prawn fishery.

In 2003, after a fishing career spanning 52 years, TACOMA was retired. Her replacement, the 72' steel-hulled prawn trawler ATLAS, was designed by boat-builders Andy Haldane and his cousin, Rob. TACOMA is now on the Australian Register of Historic Vessels, and is based in Port Lincoln under the care of the TACOMA Preservation Society, where she serves as a museum ship.

It is a rare thing for the fate of any town to be so inextricably linked to the working life of a single boat, but that is precisely the case for Port Lincoln. TACOMA pioneered the lucrative tuna industry in this town, which

as a result is now one of the wealthiest in Australia.

Ross Haldane, Bill's son, is keen to preserve his family's legacy, and serves as president of the TACOMA Preservation Society (www.TACOMA.org.au). Members of the Haldane family endowed the vessel and gifted her to the Society, a community-based organization whose volunteers keep her in working order. She now goes to sea twice a year with 12 guests who pay \$1,500 each for the privilege of a weeklong cruise on which they are licensed to catch six southern bluefin tuna and enjoy the ambience aboard a genuine old-style tuna clipper.

Unlike John Steinbeck's WESTERN FLYER, which has sunk twice in recent years and now lies on the hard, encrusted in dried weed and barnacles in Port Townsend, Washington, TACOMA is kept in immaculate condition. Everything about this vessel—the homey smell of the AGA cooker; the unmistakable odor of masculinity in the crew's quarters; the paper charts, brass dividers, cedar parallel rules, and the late Bill Haldane's smudged spectacles in the pilothouse—are exactly as they were when her working crew last stepped ashore. On the Port Lincoln waterfront, where huge steel purse seiners and prawning boats lie cheek-by-jowl, TACOMA's white-painted wooden hull still turns heads with her striking good looks and extraordinary story. 

Bruce Stannard is a regular contributor to WoodenBoat.



Contorted Timbers Shape the Boat

by Richard Jagels



RICHARD JAGELS (ALL)

Photo 1—The contorted branches of this Scots pine are the result of an earlier infestation of pine weevils. The natural curves may be tempting for boatbuilding uses, but the compression wood found on the lower side of the branch is a serious defect. **Photo 2**—A cross-section of compression wood, which forms in curved stems like the ones shown in photo 1, is typically reddish in color and has wide growth rings. It is comparatively weak and shrinks and swells longitudinally, making it useless for boatbuilding. **Photo 3**—Many examples of natural growth are highly valued in boatbuilding; for example, hardwood branching that produces equal arms is ideal for breasthooks.

Sweep, curves, and angles define a boat. Before thin laminations and composite construction—or even before extensive steam-bending—boatbuilders relied on natural shapes produced in the forest. I recall several years ago visiting the museum in Stockholm, Sweden, where the recovered hull of the warship VASA is displayed. Foundering and sinking in 1628 on her maiden voyage within sight of the crowds on shore, she was raised in 1961, and has undergone conservation ever since. Although VASA herself was regally imposing, what caught my attention was a museum side display that documented the elaborate, detailed plans contrived to obtain all the natural trunk and branch shapes from nearby or distant forests—an enterprise involving hundreds of men armed with patterns who scoured the woods, marking, cutting, and hauling variously contorted timbers destined for key components of VASA. Very little, if any, steam-bending was involved in the 16th- and 17th-century European ships. Natural crooks—or compass timbers—provided the shapes needed.

For sweeping or gentle curves, dry planks—or better still, green planks—can be coaxed into position. For greater curves, steam-bending of solid wood

or built-up laminated strips are now employed. But sharp angles are still best dealt with using the shapes nature produces in living trees.

Sources of Crooks

Plant biologists describe two fundamental controlling responses for tree stems and branches: first, a tendency to grow toward light (phototropism) and, second, a negative response to gravity (negative geotropism). The main tree stem responds primarily to a negative geotropism while branches respond phototropically. Together, this produces a main, upright stem with lateral branches that maximize the ability of leaves to intercept light.

However, this basic tree form can be modified by natural events such as shading by other trees or damage by wind or ice, or predation by insects. Add to this human intervention, and it is evident that a tree's shape can be dramatically changed. Pruning of fruit trees, pollarding, coppicing, and severe topping or pruning of roadside trees for utility line clearance all modify branching patterns and may produce unusual shapes—some of which can be useful for boatbuilders.

Pruning is the cutting of dead or

living branches. Pollarding is the practice of cutting upper branches back to the trunk to encourage a dense growth of new shoots, and coppicing involves cutting back to near ground level for the same reason. Pollarding and coppicing are not practiced much in the United States, and the practices have disappeared in much of Europe. But fruit trees such as apple, pear, and peach are often vigorously pruned to enhance fruit production and improve air circulation in the crown, thus reducing insect and disease problems. Also, since fruit trees have a finite productive life, they are periodically replaced. Both annual prunings and freshly felled trees can be useful sources of wood for breasthooks, quarter knees, thwart knees, cabin hooks, and even old-style boom goosenecks. In his *Building Classic Small Craft*, John Gardner comments, "In the past, the finest light tenders often had their knees made from apple limb crooks." If you have access to orchard prunings, the advice still holds.

Roots, particularly of conifers like tamarack (*Larix laricina*) and spruce (*Picea* sp.), have been traditional sources of wood for knees, stems, and ribs for Adirondack guideboats and

other small rowing and sailing craft. Grubbing out roots, especially from rocky soil where the best shapes can be found, is, to say the least, not a pleasant job. Chainsaws will likely be dulled, and heavy come-alongs or some kind of motive power will be needed to release the stump from its earthbound hold. Because of the tendency to avoid this huge investment of labor, laminated frames are now the norm. Tamarack (hackmatack) crooks were commercially available for many years from a fellow here in Maine; unfortunately he passed over the bar several years ago. However, land clearing for development is sometimes an opportunity to scrounge some stumps with attached roots. Hosed down to remove mineral soil, these can be chainsawed to produce variously shaped crooks.

Reaction Wood

The main trunk of a tree growing at right angles to the earth's surface on level ground is perfectly balanced for tensile and compressive forces. However, leaning stems and all branches are out of balance and, therefore, produce a *reaction wood* to compensate for asymmetric loading. In broad-leaved hardwoods, the reaction wood is called *tension wood* and occurs on the upper side of a leaning stem or branch. In coniferous softwoods the reaction wood occurs on the lower side and is called *compression wood*. Of the two abnormal woods, compression wood is, by far, the more serious defect. It is weaker than normal wood and shrinks and swells *longitudinally* with moisture changes. It should be avoided for boatbuilding. **Photo 1** shows some tempting crook timber in a Scots pine (*Pinus sylvestris*) tree that developed as a result of pine weevil damage. However, **photo 2** reveals a cross-section from a similar curved stem that is loaded with compression wood, making this kind of crook timber a poor candidate for boatbuilding.

Fortunately, compression wood is absent in conifer roots. Thus, crooks for boatbuilding should be selected from either hardwood branches or conifer roots (see Wood Technology in WB No. 40 for more details on reaction wood).

Tension wood in hardwoods doesn't have a major effect on strength or dimensional changes; in any case, crook wood is normally selected from the lower side of a branch where tension wood is absent. A dichotomous division that produces two equal branches (**photo 3**) often produces the best material for breasthooks, while horizontal branches off the main trunk

are ideal for many kinds of knees. Open-grown trees will have larger branches, and these will be closer to the ground compared to forest-grown trees. Most crook wood, which originates from the outer growth layers of stem and branch, will be all sapwood, so regardless of wood species it should be treated to lessen decay hazard.

As I travel about, either in the woods or along the highway, I often keep an

eye out for potential crook material to collect. I toss the finds on my wood pile, out of the weather, and let them dry until I find a suitable use. 

Dr. Richard Jagels is an emeritus professor of forest biology at the University of Maine, Orono. Please send correspondence to Dr. Jagels by mail to the care of WoodenBoat, or via e-mail to Assistant Editor Robin Jettinghoff, robin@woodenboat.com.

Meet the Readers of WoodenBoat



Jerry Bohannon has been a wooden-boat owner, and a *WoodenBoat* reader, for a long time. Back in 1978, he purchased an Owens Cutter named FALCON—a pedigreed and smart-sailing 40-footer in need of structural attention. The magazine had just published an article on the then-new idea of sheathing old hulls in wood veneers. That caught Jerry's eye. He called the magazine's office and talked the idea over with technical editor Maynard Bray, and then proceeded with the job. Bent Jespersen did the work in British Columbia, and Bray wrote a detailed article about the process for WB No. 61. Jerry couldn't have been happier with the stunning result, which gave him many years of fine sailing.

"The magazine for me is a resource," says Jerry, who sold FALCON in 1990 and purchased his current boat, the 36' wooden Grand Banks trawler VIRGINIA CARY. "I called the magazine and got a great response. *WoodenBoat* gives me great ideas, and when I have a problem, I have a source for answers.

**WoodenBoat. Your source for answers.
Subscribe today.**

WoodenBoat

Call 1-800-877-5284

If outside of the U.S. or Canada, call 1-818-487-2084

www.woodenboat.com



LAUNCHINGS

Edited by Robin Jettinghoff

These pages, along with the Boat Launchings section of www.woodenboat.com, are dedicated to sharing recently launched wooden boats built or restored by our readers. If you've launched such a boat within the past year, please write us at Launchings, WoodenBoat, P.O. Box 78, Brooklin, ME 04616 or email us at launchings@woodenboat.com.

Please include the following information: (1) the boat's length and beam; (2) the name of its design class or type; (3) the names of the designer, builder, owner, and photographer; (4) your mailing address along with an email address or phone number; (5) the port or place of intended use; (6) date of launching; and (7) a few sentences describing the construction or restoration. We prefer digital jpeg images at 300 dpi. Please send no more than five photographs and enclose a SASE if you want anything returned.

Below—The Lewes Historical Society Wooden Boat Crew of Lewes, Delaware, builds several Bevins Skiff kits through the year for their annual Family Boat Building Weekend held in June. In 2013, eight teams—Buckley, Campbell, Daffern, DiSabatino, Edgell, Rosenberg, Taney, and the Society's Wooden Boat Crew—each constructed one of these kits, launching it Sunday afternoon. The Society had support from many sponsors and volunteers.



COURTESY OF LEWES HISTORICAL SOCIETY



LILI HALL

Left—LARRY N MARIE is an Adirondack guideboat built by Don Hall of Edmonds, Washington. The 13' cedar-stripped boat is the first boat Don has built. The frames are of laminated spruce and the seats are cherry. Don will be rowing it on Puget Sound and other waters near his home. He purchased the kit from Steve Kaulback, Adirondack Guide Boat, www.adirondack-guide-boat.com.

Below—Using offsets from Willets Ansel's book, *The Whaleboat* (available from www.woodenboatstore.com), Craig Hohm built this epoxy-lapstrake version of the Charles Beetle whaleboat on display at the Mariners' Museum in Newport News, Virginia. The 28'5" KEUKA WHALER is a community rowing and sailing boat for Craig's town of Penn Yan, New York. Craig added the ketch rig to make the boat more versatile.



SUE HOLM



SHELLY DUNFORD

Above—This 17'2" Cirrus Greenland stitch-and-glue kayak was built with mahogany and ribbed poplar, by Ben Bienvenu of St. Martinville, Louisiana. He added trim in cherry and Spanish cedar and strengthened the high-stress areas on the deck, coaming, and hull with carbon fiber. The hatches are sealed with rare earth magnets. Ben named his kayak PASSE PARTOUT, or "passes everywhere." Contact the designer, Vaclav Stejskal, at www.oneoceankayaks.com.



Above—After 40 years as a family doctor, John Gremer built this 25' lug-rigged schooner as a retirement project. He was inspired by Phil Bolger's St. Valery design in WB No. 157. The schooner's hull is built of okume plywood, the interior of Honduras mahogany, and exterior trim of teak. The spars are Douglas-fir and the sails were sewn by HT Sails. John sails SARABAND in Chesapeake Bay.



Above—Under direction from Eliot Spalding, Alex Hadden took the lines from Vinnie Cavanaugh's MARIAH WILLO and, from them, built JUDY SUE. She is a 36' lobsterboat traditionally built of cedar on oak with bronze fastenings. Powered by a 265-hp Yanmar, she cruises easily at 14 knots and will make 20 knots wide open. Contact Alex at haddenboat@gmail.com for more information.

Below—The Lee family frequently sail their 1964, 32' sloop, LILO, in Puget Sound and beyond. Needing a suitable dinghy that would fit on deck, they chose an 11' Spindrift nesting dinghy designed by Graham Byrnes (www.bandbyachtdesigns.com). With their two daughters, ages seven and nine, they built the plywood SPLIT PEA in just a few months. The family recently set out on a year-long cruise.



Below—Seeking a tender for their Friendship sloop, BLACK STAR, Ted Walsh and Judy Heininger of Conway, New Hampshire, built the 16' FEE-FIE. An Iain Oughtred Penny Fee design, FEE-FIE is built with glued plywood over a white oak backbone. Her transom and seats are of Spanish cedar. Contact Iain Oughtred at iain.oughtred@gmail.com.



Below—On Star Island in New Hampshire, Marshall Frye and Johnny Kadlik built a 12' traditional dory over the summer of 2012. They started with free plans from the Internet that they decided weren't particularly good, but found real help from John Gardner's *The Dory Book* (available at www.woodenboatstore.com). The oak frames and pine planks on JOLLY BEGGAR's hull are fastened with copper rivets and bronze screws.



Below—The Peeler Skiff is a new kit designed by John Harris of Chesapeake Light Craft (www.clcboats.com). Bob Meyer of Bloomingdale, Georgia, built this 15'2" Peeler named LILAH last winter. Bob reports that it was an easy construction, since the kit parts fit together perfectly. Bob uses LILAH, powered by a 15-hp outboard, for fishing on Lake Sinclair and the Georgia coast near his home.



LATRELLE MEYER

Below—Having already built three Iain Oughtred-designed boats himself, Mikhail Markov of Klamila, Finland, asked Bert Van Baar, who ran the De Bootbouwschool, in Uitgeest, Netherlands, to build the latest one. This glued-lap-plywood craft is a 21'7" version of the Wee Seal, a new design called Kotik. Launched last July, WHITE FANG has since participated in Raid Finland. Contact Iain Oughtred at iain.oughtred@gmail.com.



PHOTO BY KONRAD PYZEL



JULIE GELDARD

Above—Gilbert Ford of Bilambil, Australia, is the proud owner of BRIGHT EYES, a George Stadel-designed 26' schooner recently launched in Moreton Bay, near Brisbane. Underground Boats (www.undergroundboats.com.au) spent four years on the project. She is built of Indonesian amora, with a teak deck and masts of hoop pine. A Yanmar two-cylinder provides auxiliary power. Order plans from www.woodenboatstore.com.



PETER KURKI

Above—John Olsen and Larry Heckner established their new boatyard, the Masonboro Skiff Company, in Wilmington, North Carolina, with the construction of a Macomber 15. They built this Westport River skiff, designed by Scott Gifford, from cypress, white oak, and sapele, all fastened with silicon-bronze. Contact John and Larry at www.masonboroskiffcompany.com for completed boats. Email Scott for plans at boatnut4@verizon.net.



JOHN BRICE

Above—William Atkin designed his 14'10" Sprite flat-bottomed skiff in 1953. This year, brewer and beekeeper John Brice built his own Sprite from catalpa and sassafras with a walnut transom. He used epoxy to fasten BRUZNBS together, omitting metal fastenings except in the rails and seats. John also made the oars from sassafras. Plans are available at www.atkinboatplans.com.



KATLYN ARMAND, J'ADORE PHOTOGRAPHY



Left—Keith Dupuy recently rescued this 14' cypress dugout pirogue, cut from a tree over 800 years old. With ratcheting straps and temporary bulkheads, Keith worked the 100-year-old cracked and split hull back to its original shape. Next he filled the cracks with epoxied strips of cypress, then coated the boat in epoxy. Keith and his fiancé, Amy Normand, enjoy paddling the pirogue in Spring Bayou, in Marksville, Louisiana.

Below—MYSTEREED is a 1955 Old Town lapstrake runabout recently restored by Reed Feuster of Manasquan, New Jersey. Reed found her rotting away in a boatyard in Mantoloking, New Jersey, and spent 20 months on her repair. The 15' MYSTEREED is powered by a 1946, 5-hp Johnson Sea-Horse outboard that Reed also restored. Contact Reed at reedfeuster@gmail.com.

REED FEUSTER



Below—Mary Ann and Rob Roark of Harpswell, Maine, relaunched their 33' sloop MOONBEAM last summer after a four-year restoration. They replaced some of the copper rivets holding her mahogany planking to her oak frames. They also renewed the canvas-covered deck, wiring and plumbing systems, and much of the interior of the Robert Clarke-designed sloop. The Roarks plan to explore the Maine coast with MOONBEAM.

COURTESY OF THE ROARK FAMILY



RIAN McNAMARA

Above—Wanting to fit a 7' sofa and an easy chair onto a 40' trawler of his own design, Bill McNamara cut SHUNDA in half and added 8' to her length. Bill spent 16 months on this project, fitting a "get-home" 30-hp diesel in the hull as well. Reporting no change in the boat's performance, Bill is spending his retirement cruising between the Caribbean and Ontario, Canada.

Hints for taking good photos of your boat:

1. Pictures need to be at 300 dpi or larger to be printed in the magazine. Send no more than five unretouched jpgs. We also accept transparencies and high-quality prints.
2. Clean the boat. Stow fenders and extraneous gear below. Properly ship or stow oars, and give the sails a good harbor furl if you're at anchor.
3. Schedule the photo session for early, or late, in the day to take advantage of low-angle sunlight. Avoid shooting at high noon and on overcast days.
4. Be certain that the horizon appears level in your viewfinder.
5. Keep the background simple and scenic. On a flat page, objects in the middle distance can appear to become part of your boat. Take care that it doesn't sprout trees, flagpoles, smokestacks, or additional masts and crew members.
6. Take many photos, and send us no more than five. Include some action shots and some of the boat at rest. Pictures in a vertical format are also welcome.

We enjoy learning of your work—it affirms the vitality of the wooden boat community. Unfortunately, a lack of space prevents our publishing all the material submitted. If you wish to have your photos returned, please include a SASE.



NEWEST PRINT BOOKS

The Wianno Senior Story

Another very thorough job by author/historian Stan Grayson about this 100+ year old class. 248 pp., hardcover, #300-821 **\$49.95**

International One Design

Celebrates the 75th anniversary of this elegant class in this large-format book with many lush photos. 208 pp., hardcover, #300-807 **\$65.00**

Workboats of Core Sound

Photographic treat of these hard-working boats of the Carolinas. 166 pp., hardcover, #300-815 **\$35.00**

Great American Schooner Yachts

In-depth look at these boats via drawings as well as current and historical photos. 230 pp., hardcover, #300-800 **\$49.95**

Working Sail

The revival of the traditional pilot cutters of the UK, particularly Cornwall, as told by one who was in large part responsible for the revival. Beautifully produced book. 240 pp., hardcover, #300-801 **\$70.00**

Deer Isle's Undefeated America's Cup Crews

Packed with historical photos, the crews from this small island (near WoodenBoat offices) were a force to be reckoned with. 176 pp., softcover, #300-814 **\$19.95**

Boys in the Boat

Good read, described as "Chariots of Fire, with oars" it's the story of the 1936 quest for Olympic gold. 432 pp., hardcover, #300-808 **\$28.95**

Gear List of the Golden Moon

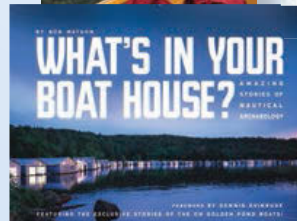
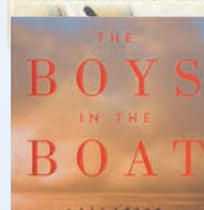
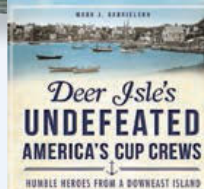
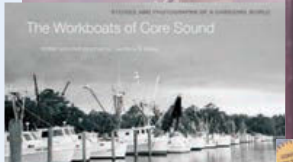
Travel from Alaska to Seattle under row and sail means planning well. Although anyone can make lists, this is a story well told. 84 pp., softcover, #300-822 **\$16.00**

What's in Your Boat House?

Subtitled "Amazing Stories of Nautical Archaeology", you'll read about discoveries, special finds, and boats brought back from the brink. 104 pp., softcover, #300-820 **\$21.95**

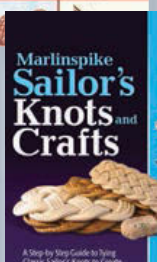
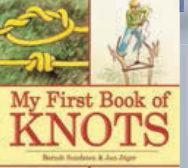
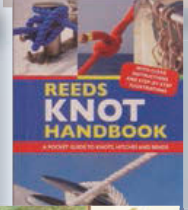
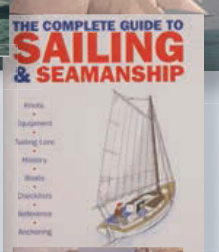
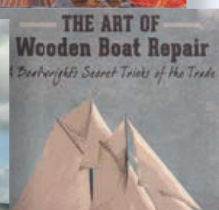
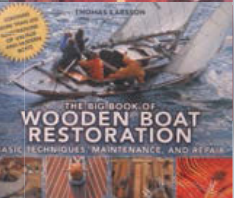
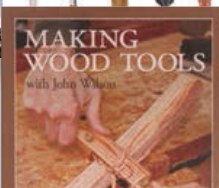
The Wianno Senior Story

A Century on Nantucket Sound
Stan Grayson
Foreword by Caroline Hordwell III



Why We Make Things and Why It Matters

The Education of a Craftsman
PETER KORN



Why We Make Things and Why it Matters

A hands-on craftsman explores why one finds satisfaction from making things. 16 pp., hardcover, #300-823 **\$24.95**

Making Wood Tools

A well executed book packed full of tips and advice on making your own tools, as well as sharpening them. 14 pp., hardcover, #300-805 **\$39.95**

Mastering Hand Tool Techniques

A handsome book clearly explains how to get the most from your tools. 44 pp., softcover, #300-810 **\$19.95**

The Big Book of Wooden Boat Restoration

The book focuses on techniques, maintenance, and repair, as well as having a section on purchasing a wooden boat. 240 pp., hardcover, #300-803 **\$24.95**

The Art of Wooden Boat Repair

Over forty years of experience shine through by highly regarded Allen Rube. 184 pp., softcover, #300-809 **\$19.95**

Complete Guide to Sailing and Seamanship

A blend of captivating sea stories and essential, basic instructional methods for anyone wanting to sail. Topped-off with Sam Manning drawings. 19 pp., softcover, #300-806 **\$16.95**

Reeds Knot Handbook

This is a handy little book, packed with color photos and illustrations of knots, hitches, and bends. Pocket-sized at 4" x 5.25", and wallet-friendly priced. 128 pp., softcover, #300-816 **\$9.95**

My First Book of Knots

Attention holding drawings of knots, in their "setting", from old-time ships to modern marinas, campgrounds and tree forts, the old wild west, and more. 45 pp., hardcover, #300-811 **\$12.95**

Marlinspike Sailor's Knots /Crafts

Entitled "A Step-by-Step Guide to Tying Classic Sailor's Knots to Eat, Adorn, and Show Off." The black and white photos are greatly enhanced by drawings to explain the steps. 102 pp., softcover, #300-819 **\$8.00**

Download these PDF files instantly... no waiting for the post office to deliver. Choose from over 500 of our digital publications.

The WoodenBoat STORE



www.woodenboatstore.com

Mail Order Since 1975 • Web Orders Since 1994

WoodenBoat

Each digital issue of the magazine is a full color PDF file, true to the original. Choose from any of the 230+ back issues. **\$3.95 to \$6.95 (Flash drive, all back issues \$160)**

Professional BoatBuilder

It's *the* trade magazine in the industry, and we have all issues available. Select from over 140+ magazines. **\$5.95 AND... you can now download 1-90, or 91 thru current, for \$80.00 each**

Maritime Life & Traditions

This joint venture between Le Chasse Maree in France, and WoodenBoat in the US resulted in *Maritime Life*, which was published for nine years. We have *all 34* issues as digipubs. **\$3.95 or download all 34 issues \$50.00**

The WoodenBoat Index

Our up-to-date Index is oh-so handy to use. Keyword search, or peruse the pages just as you would a print book. And, after you download, you can use even if you're not on-line. We've made it so price-friendly, you won't mind updating every twice in awhile. Covers 1974's first issue through "current." 300+ pages **\$1.95**

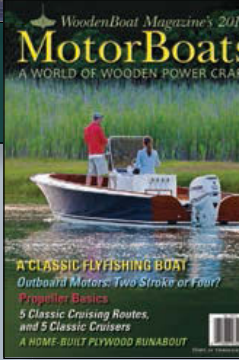
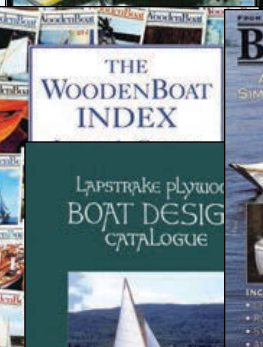
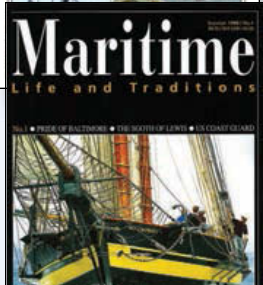
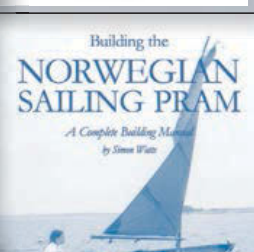
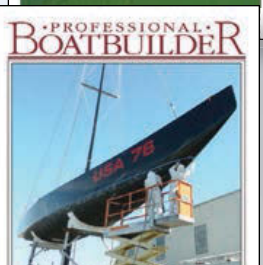
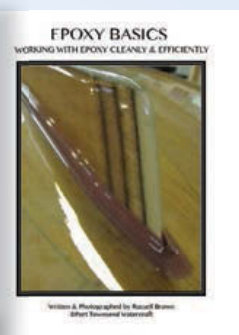
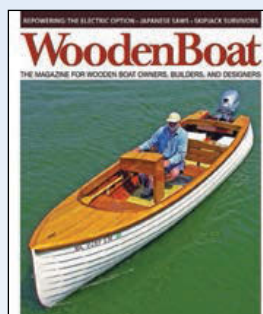
Lapstrake Plywood Boat Design Catalogue

Study plans for 40+ of Iain Oughtred designs. The print version has not been available for several years. **\$9.95**

Getting Started in Boats

Popular series of 8-page inserts bound into *WoodenBoat* magazine. They cover a wide variety of topics, and are especially helpful to those new to the world of boating. There are now over forty issues in the series. **\$1.95 each**

Or, we also have 1-20 or 21-40 as group downloads, for \$35 each



Epoxy Basics

Intituled "Working with Epoxy Cleanly & Efficiently." If you thought you could do a better job with your epoxy work, you'll no doubt find more than enough information in these 42 pages to help out. The focus is on gluing, filleting, well as glassing and coating. The tips and techniques are from Russell Brown, a person with experience at doing this type of thing in a very tidy fashion. Several folks have taken the time to write to us, saying this is one of the best pieces they've read on the topic. Not exactly faint praise. **\$5.99**

Building Plans from Simon Watts

Choose from several proven designs. You can print-out the plans. Includes instruction books. **\$30.00**

Build a Boat

Kind of a pre-cursor to the successful *Small Boats*. It features three boats: Martha's Tender, a strip canoe, and the Gloucester Dory. **\$3.95**

Small Boats

This special annual hits the newsstand in November, and sells-out quickly. Published since 2007 by WoodenBoat, it always features an awesome mix of wooden boats. We now have eight issues. **\$3.95 or \$6.95**

MotorBoats magazine

Annual, first published 2012, the 2013 edition is also now available. That's a Van Dam diff on the handsome cover of the 2013 issue. **\$6.95**

Order Digitals via www.woodenboatstore.com

The Wooden Boat STORE



www.woodenboatstore.com

Mail Order Since 1975 • Web Orders Since 1994

Rigger's Bags

Handy way to carry shop or g
6"x12.5"x 8.5" tall. Ringed with

Regular: #840-003 **\$29.95**

Leather trimmed: 840-003L **\$33.95**

Tote Bags

tural color canvas trimmed in blue,
shoulder-strap length handles, and
outside pocket dressed-up with the
Wooden Boat logo embroidered in red
thread. "Built" in North Carolina.

Medium: 6"x12"x13.5" tall

840-008 **\$29.95**

Large: 8"x17"x17" tall

840-007 **\$42.95**

Tool Roll-ups

deal for chisels, screwdrivers, and
pecial tool sets. 22 tool slots plus
ee pouches to toss bits and
obles. Measures 14.5" x 26.5"

\$9.95

Water Buckets

for not marking your deck, folks u
not only for water, but holding to
and as quickie coolers. Top rim is i
to stay open.

al. #840-013 **\$11.95**

l. #840-014 **\$14.95**

. (long strap) #840-015 **\$15.95**

Rigger's Apron

tom-built apron has proven itself for
ears. Made of heavy canvas duck, it has
pockets, and adjustable shoulder straps
iss-cross over your back so no weight
your neck. #550-003 **\$24.95**

Tool Baskets

very pleased to offer these rugged tool
made of heavyweight canvas, rein-
by rivets, super-duty bridle leather
s, and extra layered bottoms. The interior
nd spacious, the exterior ringed with
ts of various widths. "Built" in North
a. Measures approximately 6" deep x
e x 11.5" tall.

Canvas #840-005 **\$89.00**

Canvas #840-006 **\$135.00**



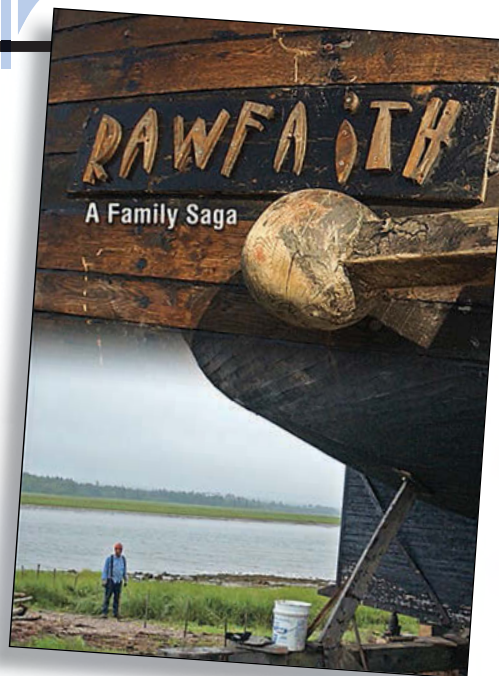
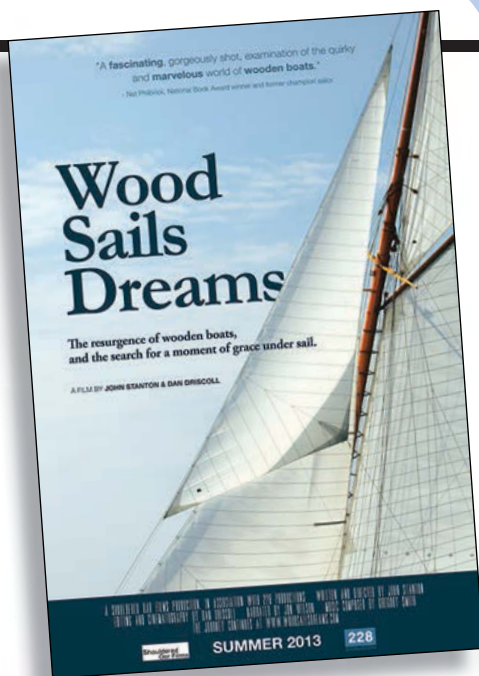
Waxed

Shipping is Calculated When You Order

Bag Road, PO Box 78, Brooklin, Maine 04616 USA

WoodenBoat REVIEW

PRODUCTS • BOOKS • VIDEOS • STUFF



Two Films of Passion

Wood Sails Dreams, written, directed, and produced by John Stanton, Shouldered Oar Films, www.shoulderedoarfilms.net. 56 minutes; \$19.95. Available from *The WoodenBoat Store*, www.woodenboatstore.com.

RAW FAITH, directed by Gregory Roscoe. Seaworthy Productions, www.rawfaithmovie.com. DVD \$18; high-definition downloads \$12.99

Reviewed by Matthew P. Murphy

Why does wooden boat building matter? Steve White, proprietor of Brooklin Boat Yard in Brooklin, Maine, answers that question in an interview in the new film, *Wood Sails Dreams*, when he acknowledges that many observers might see the profession as insignificant when it's compared with so much else in the world. White, who has employed hundreds of boatbuilders over the years, has a unique perspective on the personalities drawn to the field. They are "truly

engaged and passionate," he says. "That's the kind of people we want to have in the world."

White is one of many wooden boat luminaries interviewed in the film, which chronicles the revival of wooden yachts in the Northeast since the early 1970s. Nantucket's annual Opera House Cup serves as a backdrop against which is set the story of a ragtag fleet of tired old yachts that, over four decades, have become highly valued, high-priced, and highly restored objects.

Binding it all together is the narration of Jon Wilson, founding editor of this magazine, who still speaks in tones of absolute amazement at the level to which classic yachting has risen in four decades. One observer notes that the early Opera House skippers were "beatniks, hippies, or trust fund guys. The one thing they had in common was that they loved their boats." The racing then, unlike now, was more for the camaraderie than for the Cup—a silver wine cooler pulled from service at the restaurant for which the regatta is named.

The lineup of interviewees in the film is a veritable



HOW TO REACH US

TO ORDER FROM OUR STORE:

To order back issues, books, plans, model kits, clothing, or our catalog, call The WoodenBoat Store, Toll-Free, Monday through Friday, 8:00 a.m. to 6:00 p.m. EST (Saturdays, 9:00 a.m. to 5:00 p.m. EST.)

1-800-273-SHIP (7447) (U.S. & CANADA)

207-359-4647 (Overseas)

24-Hour FAX 207-359-2058

Internet: <http://www.woodenboatstore.com>

Email: wbstore@woodenboat.com

ON-LINE SUBSCRIPTION SERVICES:

Internet: <http://www.woodenboat.com>

At www.woodenboat.com follow the link to WoodenBoat Subscriptions to order, give a gift, renew, change address, or check your subscription status (payment, expiration date).

TO ORDER A SUBSCRIPTION:

To order a subscription (new, renewal, gift) call Toll-Free, Monday through Friday, 5:00 a.m. to 5:00 p.m., PT:

1-800-877-5284 (U.S. and Canada)

1-818-487-2084 (Overseas)

Internet: <http://www.woodenboat.com>

WoodenBoat is now available in digital format. Go to www.woodenboat.com

TO CALL ABOUT YOUR SUBSCRIPTION:

If you have a question about your subscription, an address change, or a missing or damaged issue, call Toll-Free, Monday through Friday, 5:00 a.m. to 5:00 p.m., PT:

1-800-877-5284 (U.S. & CANADA)

1-818-487-2084 (Overseas)

TO CHANGE YOUR ADDRESS:

Either call **1-800-877-5284** or write to our subscription department (address below) **AS SOON AS YOU KNOW YOUR NEW ADDRESS**. Please don't depend on your post office to notify us. Please give us your *old* address as well as your new when you notify us, and the date your new address becomes effective.

TO CALL OUR EDITORIAL, ADVERTISING, AND BOAT SCHOOL OFFICES:

Monday through Thursday, 8:00 a.m. to 5:30 p.m., EST:

207-359-4651; FAX 207-359-8920

TO WRITE:

For subscriptions:

WoodenBoat
Subscription Dept.
P.O. Box 16958
N. Hollywood, CA 91615-6958

For anything else:

WoodenBoat
P.O. Box 78, 41 WoodenBoat Lane
Brooklin, ME 04616
<woodenboat@woodenboat.com>

OVERSEAS SUBSCRIPTION OFFICES:

Australia and New Zealand

Boat Books
31 Albany Street
Crows Nest 2065 NSW
Australia
Telephone: (02) 9439 1133
Fax: (02) 9439 8517 · Email: boatbook@boatbooks-aust.com.au
Website: www.boatbooks-aust.com.au

	Australia Dollars	New Zealand Dollars
1 yr	\$55.00	\$57.50
2 yrs	\$110.00	\$115.00
3 yrs	\$150.00	\$156.82

Europe

Evecom bv
Postbox 19
9216 ZH Oudega (Sm)
The Netherlands
Telephone: (0) 512 371999
Email: WB@evecom.nl
Website: www.evecom.eu

	Holland/Germany	United Kingdom
1 yr	EUR 39.50	GBP 35.50
2 yrs	EUR 75.00	GBP 66.00
3 yrs	EUR 107.50	GBP 96.50

(CE tax included)

WOODENBOAT REVIEW

Who's Who of the pioneers of the classic yachting movement. And they each have a story that could fill a feature-length film itself. There's Bob Tiedemann, who at the time of his death in 2006 had built a small navy of classic yachts that included the 12-Meters GLEAM and NORTHERN LIGHT. Tiedemann pulled NORTHERN LIGHT from the bottom of Lake Michigan and reunited her with her original hardware after purchasing it from ignominious display in a Michigan bar. GLEAM was only slightly better off when he found her in New Jersey.

Another 12-Meter devotee, George Hill, purchased the Rhodes-designed WEATHERLY on the West Coast and sailed her home, through the Panama Canal, on a wing and a prayer. She was damaged in a Travelift accident en route (as was the operator), but survived (as did the operator) and today sails as part of a fleet of thoroughbred Twelves operating in the charter trade from Newport, Rhode Island.

Nat Benjamin and Ross Gannon speak eloquently of their now-legendary beachfront boatbuilding shop on the island of Martha's Vineyard. Gary Gregory speaks of his 12-Meter, VALIANT, and his friendship with her designer Olin Stephens, who likened the Opera House Cup and other classic yacht regattas to the bygone days of yachting. The iconic 72' ketch TICONDEROGA makes an appearance, as does the Buzzards Bay 30 QUAKERESS, the New York 50 SPARTAN, the W-class sloop WILD HORSES, and the Alden schooner WHEN AND IF.

Why should we care about these boats? Steve White, as noted earlier, finds the work rich and rewarding—and the practitioners passionate and engaged. Jon Wilson ques-



tions whether the average American really understands the depth of genius that went into the creation of these boats, and thinks they deserve the same level of reverence as architectural icons.

Bill Sauerbrey, boat-builder of Wareham's Beetle, Inc., has devoted his professional life to the craft, and notes how builders learn to trust their eye. Who could argue with any of this?

But my four-year-old son may have brought some wisdom to the answer, too, when he walked through the room while I was watching the film. In one particularly breathtaking scene, SPARTAN was charging along under a press of sail, her crew lined up on the weather rail. "Why aren't they wearing helmets on that boat?" he asked, the memory of the AMERICA's Cup videos I'd shown him a few weeks before still fresh in his mind. The world is changing, and changing quickly, and we forget, at our own peril, the beauty and practicality of what was.

I think of *Wood Sails Dreams* not as a documentary but rather as visual poetry—an impressionistic film that reveals not so much the deep histories of classic yachts themselves, but instead the histories of the passionate people who saved them.

Alas, passion can run amok. Greg Roscoe's new film, *RAW FAITH*, is an exploration of the humanity behind an epic failure. The film opens with soft, grainy footage of a galleon—or galleonish vessel—of all things, wallowing in a seaway, with a Coast Guard helicopter hovering nearby. It then flashes back to an idyllically crisp Maine day, with the same vessel plodding along the spruce-clad coast, a perky acoustic guitar riff playing in the background.

One can only wonder what Roscoe anticipated when he began this film project, for the construction of that galleon, *RAW FAITH*, began back in 1999 and Roscoe, when he began paying attention to it a few years later, could not have had an inkling of what would unfold over the next decade.

The controversy began early. *RAW FAITH*'s construction was of pallet-grade oak—short lengths of it laminated in roofing tar and spiked together with galvanized nails. George McKay, whose vision brought the ship to life Downeast in Addison, Maine, began it with the intention of taking wheelchair-bound people on sailing adventures. His inspiration was his daughter, Elizabeth, who suffers from the connective tissue disorder Marfan's Syndrome, and is herself wheelchair bound. Early in the film, McKay announces that he's never built anything in his life, and had had no inclination to sail until this time. "I checked out a dozen books from the Maine State Library to learn how to do this," he proudly announced in a scene shot during construction.

He derides formal education as a waste of money for many students, and a title block in the film notes that he had become a successful designer of electrical hardware with only a high-school education. Early on, he built a community around the building project, and its quasi-religious theme brought funding. His family—sons Aaron, Tom, and Robert, daughter Elizabeth, and wife Joanne—bought into it early on. "My biggest fear," said Aaron, "was the toll it was going to take on the family." He later noted, with unintended lyricism, that his father "kept working faster and faster, and no one is in synch with him."

And take its toll, it did. George had sold the family house to finance the project, which was a full-time obsession for the family, for a while. But one by one they departed. Aaron went to Rutgers. Elizabeth, who announced that she actually had no interest in sailing, moved into a community in Virginia. Joann moved near her daughter. Tom moved into a camper behind a manufacturing facility in Bangor before venturing out in his own small sailboat. And Rob, who'd grown up smeared in roofing tar and pounding spikes, stood by his father, spending several winters in the confines of the now-launched vessel before breaking the gravity of it in his early 20s.





Traditional Products for Shipwrights and Riggers

Since the age of sail, chandleries have supplied ships in port with everything needed to sail across the seas or complete their upcoming refit. With its good anchorage at the entrance of the Puget Sound, the Port Townsend waterfront has been home to a number of chandleries since it was founded in 1851. In the same tradition the Wooden Boat Chandlery offers traditional fittings, rope and marine products for shipwrights, riggers, and boat builders of all stripes.

TOWNSEND BLOCKS™
Strength and Beauty Combined!

Wood shell blocks crafted in a traditional design. Available in singles, doubles and triples in a range of sizes.

Purveyor of Quality Products for the Marine Trade

Bronze Hardware
Copper Nails
Tufnol Blocks
Hemp & Traditional Rope including Posh, Double-Braid, and Hempex
Oakum, Pine Tar

Distributor for Davey & Company
Shipmate Stoves • Langman Rope
Fasco Fastener • E.S. Sorensen




Tarred Marline
Ports & Lights
Shipwright tools made by USA craftsmen including caulking mallets, reefing hooks

FREE SHIPPING with your first \$250 order.

VOLUME DISCOUNTS
1.855.556.1535
www.woodenboatchandlery.org

STRONG



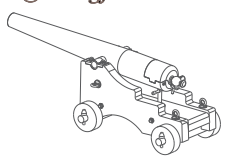
FIRE ARMS CO
NEW HAVEN CONN USA



Strong Saluting Cannons:
J Muller (4, 8, 10 ga), 21 Inch Strong (8, 10), Sundancer (10 ga) and Herreshoff (10ga), clockwise from upper left.

Call or email us today to order your saluting cannon.

203 283-1826
www.strongfirearms.com
sales@strongfirearms.com



NATHANIEL S. WILSON

SAILMAKER

EAST BOOTHBAY, MAINE

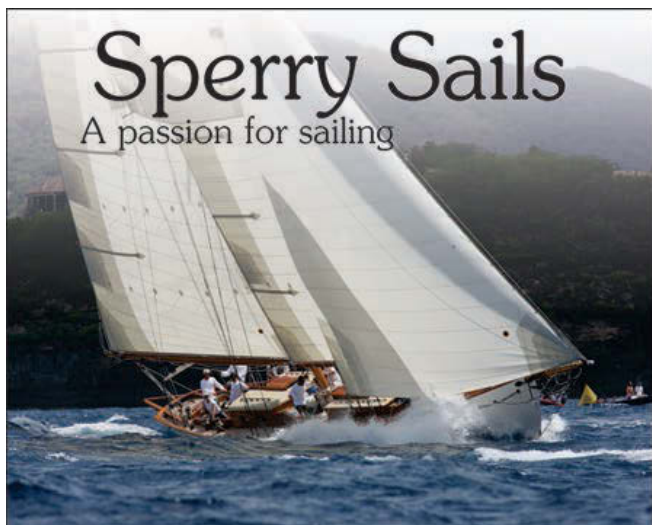
Yacht Sails



Rigging

BUILDERS OF HIGH-QUALITY HAND-FINISHED SAILS
Full-service sail and rigging loft

P.O. Box 71, Lincoln St., East Boothbay, Maine 04544
(207) 633-5071



Sperry Sails

A passion for sailing

Hand Made Sails for Hand Made Boats

Trusted Quality, Exceptional Service, Made in the USA
 "New England's Favorite Sailmaker Since 1976"

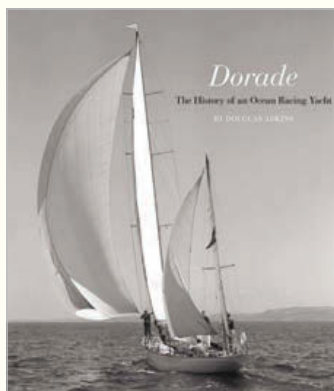


508.748.2581
 www.sperrysails.com
 11 Marconi Lane, Marion, MA 02738

EXCLUSIVE LIMITED EDITION

Dorade The History of an Ocean Racing Yacht by Douglas D. Adkins

has garnered praise from critics as diverse as
WoodenBoat and the *Wall Street Journal*.



The trade edition has long since sold out and the Exclusive Limited Edition of 250 copies is nearly sold as well. However, a few copies of the signed and numbered Limited Edition remain at the original price of \$250 plus \$15.00 shipping and handling (in the US only.) Washington State residents should

add sales tax of \$23.75. To purchase send payment by check or money order, including shipping and applicable tax, to:



THE CAPSTAN PRESS

1200 Fifth Avenue, Suite 1725
 Seattle, WA 98101

Please link to www.DoradeHistory.com to learn more.

RAW FAITH was, by 2006, stuck in Rockland Harbor (Maine) after being towed there by the Coast Guard upon dismasting en route to New Jersey. A second dismasting followed, and on the heels of this came a "captain of the port order" requiring certain deficiencies to be remedied before the boat could sail.

The vessel eventually went to Portland, Maine, where McKay enjoyed the sympathies of yard and marina owner Phineas Sprague. But the Portland waterfront bureaucracy was not nearly as lenient, and McKay, for reasons that aren't clear, saw Boston as his salvation. He sailed there, and later found a temporary berth in nearby Salem to take advantage of the city's legendary Halloween tourism. Overstaying his welcome there, Bermuda, despite its tight immigration policies, became his next inexplicable goal. He departed in December, with one crewman and a gale forecast.

This story, of course, is familiar to many readers of this magazine. There was a long thread about it on *WoodenBoat's* online Forum. "Hubris," "stubbornness," and "ignorance" are some of the words associated with the tones of those posts. And indeed, it's hard to defend such a derailed and vague ambition as the RAW FAITH project. But Roscoe does a masterful job of capturing McKay's humanity and vulnerability—both in words and in visuals. In one particularly poignant scene, when a son has just decided to leave him, the camera lingers for just a moment longer than it seems it should, as if it is anticipating something. McKay has just spoken of his disappointment, and is now quiet. He sniffs. Seconds pass. And then he wipes his eye.

It was likewise hard to not feel some emotion when the fuzzy, barely visible Gumby suit-clad figure of George McKay dropped to the water from the sterncastle of RAW FAITH, the sea raging and a Coast Guard helicopter hovering overhead to extract him from the decade-long nightmare of his own making. 

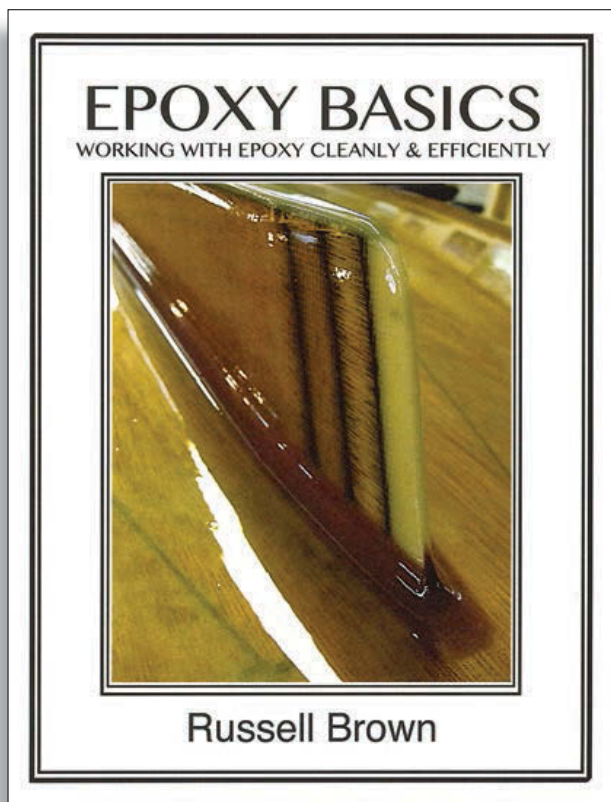
Matthew P. Murphy is editor of WoodenBoat.

Epoxy Basics

Epoxy Basics, by Russell Brown. Port Townsend Watercraft, P.O. Box 1875, Port Townsend, WA 98368; www.ptwatercraft.com. 42 pp., Printed book, \$18.95; Digital download, \$5.99. Available from *The WoodenBoat Store*, www.woodenboatstore.com.

Reviewed by John Brooks

Epoxy has become as essential in most boatbuilding shops as hand planes, bandsaws, and paint. No matter what kind of boat is under construction or what material it is being built of, you're likely to find jugs of the stuff somewhere in the shop. Knowing



how to properly use it has become as important a skill in building a boat as knowing what a fair curve is or how to drive screws.

Access to thorough and accurate information on how to use epoxy is essential to successful boatbuilding, whether the project is a megayacht or a kayak kit. This is particularly true for the home builder. In a professional shop, information is shared among builders all the time. For the amateur learning while building, books often serve as the main source of information and the place to go (quickly, in the case of epoxy) for experienced help. So those who write for the home builder must be particularly vigilant and kind.

As I thumbed through Russell Brown's new booklet, *Epoxy Basics* (published in both traditional paper and digital format), it was clear from the numerous photographs that he does very nice work with epoxy and knows what he is talking about. His main focus is on stitch-and-glue and similar designs that require fillets, sheathing in fiberglass cloth, and clear-coating. Reading through the book, I found many tips and techniques that are helpful and useful, some even for seasoned pros.

Brown clearly has his own preferred methods, some of which vary from my own. For example, he primarily uses a roller to wet out fiberglass cloth, while I prefer a squeegee; he uses flat filleting sticks with curved tips, while I prefer to use short lengths of dowel or pipe. Still, Brown's techniques for fiberglassing and coating boats are efficient, effective, and tidy; his recommendation to use a heat gun to thin epoxy for flowing was a new approach for me. His carefully shop-made

Buy Online



R&W

TRADITIONAL RIGGING
AND OUTFITTING



Supplier of

Davey & Co

Bronze Hardware

Ording Wooden Blocks

Hempex, Posh, Vintage

Synthetic and

Natural Hemp Rope

1.866.577.5505 • New Bedford, MA • www.RWrope.com

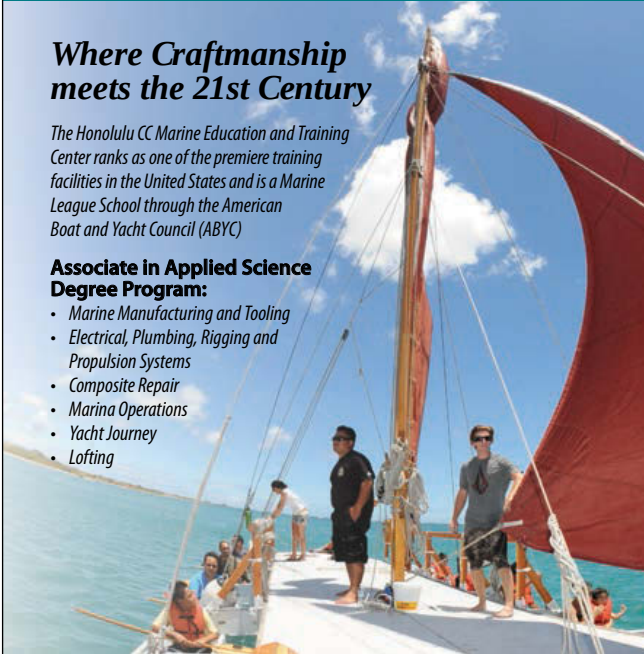
Marine Education and Training Center

Where Craftsmanship meets the 21st Century

The Honolulu CC Marine Education and Training Center ranks as one of the premiere training facilities in the United States and is a Marine League School through the American Boat and Yacht Council (ABYC)

Associate in Applied Science Degree Program:

- Marine Manufacturing and Tooling
- Electrical, Plumbing, Rigging and Propulsion Systems
- Composite Repair
- Marina Operations
- Yacht Journey
- Lofting



UNIVERSITY of HAWAII
HONOLULU
COMMUNITY COLLEGE

10 Sand Island Parkway
Honolulu, Hawai'i 96819
Phone: 808-832-3682

<http://tech.honolulu.hawaii.edu/marr>

CC FASTENERS

RELIABLE QUALITY FASTENERS

BOLTS — Our Silicon Bronze Carriage Bolts and Slotted Flat Head Machine Bolts are domestic made from 655 alloy, all full body, cut thread, partially threaded for that tight seal.

SCREWS — Our Silicon Bronze wood screws are full body, cut thread for that tight seal. Domestic made wood screws are available.

Material:

Silicon Bronze 651, 655	Stainless 304, 316
Monel 400, K500	Brass
Inconel 600, 625	Chrome Plated



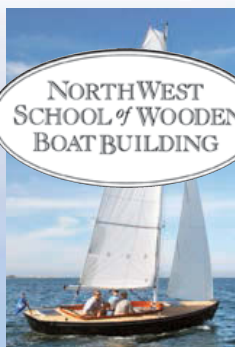
T: 800-315-8808

T: 716-873-2640

F: 716-873-2651

Online Store: www.ccfasteners.comEmail: ccfast@localnet.com

High Performance Marine Wood Coatings

855-423-8009 — www.bristolfinish.com — info@lalandii.com

The Northwest School of Wooden Boatbuilding is located on Washington's Olympic Peninsula. We're celebrating our 33rd year in 2014!

We teach adult students a wide range of traditional and modern boatbuilding skills, and build both commissioned and speculative boats for sale.

We are proud to introduce the first boat in the **SENTINEL-24 CLASS** designed by Stephens Waring Yacht Design of Belfast, Maine (www.stephenswaring.com). **AZULITA** is a distinctive, fun, and high performance sloop with more than a touch of historic grace.

Contact the School for a current price for the boat or for commissioning the next boat in the series. You can find us on the web at www.nwboatschool.org. Reach us by e-mail at info@nwboatschool.org, or by phone at 360-385-4948.



filleting sticks have their tips honed to a precise edge for crisp tooling of thickened epoxy. Clearly, his methods work just fine, as shown in the excellent workmanship in the booklet's many photographs.

Speaking of which: Those photographs were useably sharp in the printed book and in the digital version on some computers, but they had resolution problems on my iPad. The publisher is reportedly addressing this, and expects that future digital editions will feature images that render well on all platforms, giving a good clear view of the excellent epoxy workmanship shown. It would be ideal if these also can be enlarged on all platforms for close inspection of details—one of the great advantages of an e-book.

I deeply appreciate Brown's emphasis on working cleanly, for it takes ten times longer to clean up epoxy when it is cured hard than while it is still wet. Brown cuts roller covers barely bigger than what he is gluing so epoxy doesn't end up slathered everywhere. His shop-made "sharpened chisel sticks" clean up every bit of epoxy residue—so much so that it appears as if he doesn't need to use alcohol and rags for a final cleanup. He uses modified Ziploc-style bags to apply a bead of thickened epoxy cake-decorator style, exactly where he wants it and in just the amount he needs, and no more. And the photo series showing the technique for filling those bags is illuminating. Learn to use the methods shown in this booklet, and you won't go wrong.

As I read through *Epoxy Basics* for the first time, I kept wondering if Brown was going to address the safety issues of working with epoxy, which are serious and important. They appeared at the book's end. Likewise, some tools and techniques that appear early in the book are not explained until much later; this happens with the aforementioned squeeze bags and nifty chisel sticks, and with the handy shop-trimmed brushes that Brown uses. I'd have liked to see such tools explained up front, before they're put to use, but a thorough reading of the book will ultimately reveal these details. Perhaps another round of refinement will make an even more useful future volume.

Although this book is called *Epoxy Basics*, it is not comprehensive. Brown, for example, emphasizes the need to carefully meter and mix the two parts of epoxy, but I wish he'd explained, in layman's terms, the chemical reason why this is critical. And I wish he'd offered specific advice on *how* to do it, rather than simply calling attention to commercially available metering pumps and graduated cylinders. Understanding exactly how, and why, epoxy behaves the way it does and the importance of doing (and not doing) certain things are the keys to working safely and efficiently. *Epoxy Basics* is a deliberately compact, shop-friendly guide, 42 pages long. Taken together with other works on the subject, such as the Gougeon Brothers' now-classic lengthy tome *The Gougeon Brothers on Boat Construction*, *Epoxy Basics* offers the valuable perspective of a true epoxy craftsman, on some of the most common operations with epoxy. Brown does us a great service in telling us about his successful methods. *Epoxy Basics* is a fine companion and a useful addition to the boatshop bookshelf. 

John Brooks designs and builds boats in Brooklin, Maine.

Port Townsend Watercraft has just released a four-page addendum to this book covering the tricky work of fiberglassing corners and edges.

BOOKS RECEIVED

Thursday's Storm: The August Gale of 1927, by Darrell Duke. Flanker Press, P.O. Box 2522, Station C, St. John's, NL, A1C 6K1, Canada. 248 pp., paperback, \$19.95. ISBN: 978-1-77117-274-5. *After a hurricane resulted in a devastating tragedy for the people of Placentia Bay, the community united to keep their town alive.*

Old Sea Dogs of Tasmania: Stories and Photographs from the Southern Seas, by Andrew Wilson. Sunny South Publishing, www.oldseadogs.com.au. 240 pp, hard-bound, AU\$49.95. ISBN: 978-0-9806355-0-8. *A volume of striking black-and-white photographs by Andrew Wilson, enhanced with stories of the waters, boats, and sailors of Tasmania.*

Views from the Yardarm and Cockpit, by David. D. Allyn. Sunstone Press, P.O. Box 2321, Santa Fe, NM 87504-2321, www.sunstonepress.com. 410 pp., paperback, \$39.95, ISBN: 978-0-86534-923-0. *Two books in one: Yardarm describes the author's time aboard Irving and Exy Johnson's brigantine YANKEE as it made its final world voyage, while Cockpit describes his 65 years flying vintage aircraft.*

***Gear List of the GOLDEN MOON**, by Dick Callahan. Harbor Seal Press, 3321 Foster Ave., Juneau, AK 99801. 84 pp., paperback, \$16.00. ISBN: 978-0-9788953-3-4. *The subtitle is "What to Pack for Coastal Travel in an Open Boat with Notes on Anchoring, Hazards, Money, and Other Helpful Things," and it's based on experience gained on a rowing and sailing voyage from Seattle to Alaska in an 18' dory.*

PUFFIN's Log, by Jocelyn M. Greenaway. Delfryn Publications, Delfryn, Borth y Gest, Porthmadog, North Wales LL49 9TW, U.K.; www.delfrynpublications.co.uk. 112 pp., paperback, £10. ISBN: 978-0-9561469-0-8. *When Jocelyn Greenaway and her husband took their three children voyaging around Britain and Holland in their 22' sloop PUFFIN in the 1950s, she kept detailed accounts of their travels; her daughter gathered those writings into this book, which reads a bit like Swallows and Amazons.*

East Coast Oysters and a Few Whelks: Photographs from West Mersea and Whitstable, by Mervyn Maggs. Jardine Press, Ltd, 20 St. Johns Rd. Wivenhoe, Colchester, Essex CO7 9DR, U.K. 42 pp., paperback, £12. ISBN: 978-0-9565495-6-3. *Black-and-white photographs of the mudflats and shellfish of England's east coast, and the human impact upon them.*

Ship Models, Math Models & Yacht Design: Math Model & Cyber-Sail Your Own Design, by David E. Martin. Sail Tech Press, P.O. Box 3391, Farmington Hills, MI 48333; www.sailtechpress.com. 304 pp., hardbound, \$85.00 ISBN: 978-0-9860245-0-4. *Encourages readers to explore computer-aided yacht design; enclosed CD includes programs for development of lines and sail plans.*

*Available from The WoodenBoat Store, www.woodenboatstore.com



- ▼ OVAL HEAD BRASS CANOE TACKS
- ▼ RING THREAD SILICON BRONZE NAILS
- ▼ COPPER CLOUT NAILS
- ▼ COPPER CANOE NAILS
- ▼ BRASS ESCUTCHEON PINS

Canadian Tack and Nail (2003) Ltd.

431 Dundas St., Cambridge,
Ontario N1R 5R5 CANADA
Phone 519-622-0400
Fax 519-621-2098
www.canadiantackandnail.ca
E-mail canadiantackandnail@bellnet.ca



SINCE 1870

US ROUTE 1
PO BOX 628
ROCKPORT, MAINE 04856

T 207 236 3549
F 207 236 3560
BOHNELL@MIDCOAST.COM

NEW on
WoodenBoat.com

Photos & Videos Gallery
www.woodenboat.com/photo-video-gallery

Become a WoodenBoat.com community member today, for free.



VINTAGE BOATS and SERVICES



You are invited to attend the
2014 ACBS Annual Meeting and International Boat Show



September 17 - 20, 2014
Skaneateles, New York
To learn more, visit acbs.org

**Reproductions of the finest
watercraft ever produced.**



Traditional construction with modern materials. Exact detailing in all aspects, steering wheels, controls, instrumentation, etc. Small family shop ensures superb quality control. No fluff, no dreams, just beautiful, faithfully reproduced boats at an attractive price. Many models from 20 to 30 feet.

Fish Bros
MARINE SERVICE

6 Newcomb Street, Queensbury, NY 12804
518-798-4769 • fishbros@msn.com
www.fishcustomboats.com

Now
taking
orders
for
delivery
in 2014

Wooden Boat Financing



CALL NOW! **APPLY TODAY!**
1-800-USA-1965 | JJBEST.com

CUSTOM 3D SIGNS

**CUSTOMIZE
WITH
YOUR NAME,
BOAT STYLE
& TRANSOM!**



INDOOR/OUTDOOR

THEGRAPHIXGARAGE.COM

Woodies Restorations

Restorers of Fine Vintage Watercraft



Antique and Classic Boat Restorations
Consultation, Sales and Service

Home of the Building Memories Experience!
Custom Canvas and Vinyl Upholstery Solutions

On Beautiful Lake Cumberland
653 Lakeway Drive | Russell Springs, KY 42642

www.woodiesrestorations.com
270-866-2628 (BOAT) | 270-866-3998 (VINYL)



Available: Ventnor K-Class Raceboat

MORIN BOATS



Available: Miss Crude - Gold Cup Hisso V8



Available: Lockpat II - 1931 40' Hacker Custom Runabout V12 Packard 2025 cu.in.



Available: 1996 GarWood 33' Replica



Available: 1930 Hacker-Craft 30' Triple Cockpit



Available: Chris-Craft 26' Special Racer



Available: 1929 Chris-Craft Upswept



Available: 1932 GarWood 25' Triple

Since 1971, we have offered complete restorations of vintage runabouts and new boat construction. We have been selected by top boat collectors around the world to restore and maintain some of the most sought-after boats in existence. For those interested in buying or selling rare and collectible runabouts and race boats, we now offer a brokerage service.

Check our website for a complete list of vintage boats and engines

989-686-7353

www.morinboats.com

morinboats@yahoo.com

BOATBROKERS



FREE E-Newsletter!

1. Go to www.woodenboat.com
2. Click

Stay in
touch
with **AL**
we do!



BROOKLIN BOAT YARD



CUSTOM BUILDING ★ DESIGN ★ RESTORATION ★ BROKERAGE



2009, Gannon & Benjamin Sloop, 29'
Nat Benjamin Design
Located: NE Harbor, ME. Asking: \$165,000



1999, Center Harbor 35, 35'
Built by Brooklin Boat Yard
Located: Brooklin, ME. Asking: \$145,000



1972, Robert Rich Cruiser, 34'
Excellent condition
Located: MA. Asking: \$47,500



1946, Sam Crocker Yawl, 36'
Complete Restoration 2002-03
Located: ME. **Reduced Asking \$75,000**



2010, W-Class 37, 37'
Built by Brooklin Boat Yard
Located: FL and RI. Asking: \$599,000



**2010, Sparkman & Stephens
NY32, 45'**
Asking: € 390,000 EU



1996, Herreshoff Buzzards Bay 25, 33'
Built by Brooklin Boat Yard
Located: Mystic, CT. Asking: \$159,000



2003, Gannon & Benjamin Sloop, 28'
Nat Benjamin Design
Located: Martha's Vineyard. Asking: \$59,900

1996, Tripp/DeDood 1-Tonner, 37' (ME) Asking \$55,000
1971, Crocker Ketch, 36' (MA) Asking \$88,000

1967, S&S Molich Sloop, 36' (FR) Asking \$115,000
1948, Aage Nielsen Sloop, 18' (ME) Asking \$12,000

2006, Haven 12 1/2 w/trailer (ME) Asking \$32,000
1990, Goeller Tender w/trailer (ME) Asking \$7,500

SERVICE

207-359-2236
johnd@brooklinboatyard.com

NEW CONSTRUCTION, DESIGN & RESTORATION

207-359-2236
swhite@brooklinboatyard.com

BROKERAGE

207-359-2193
brokerage@brooklinboatyard.com

P.O. Box 143, Center Harbor • Brooklin, ME 04616 USA • www.brooklinboatyard.com



NEW on WoodenBoat.com

Bonus Content

www.woodenboat.com/bonus-content

Become a WoodenBoat.com community member today, for free.

CONCORDIA

COMPANY

Concordia Boatyard

- Highest Quality Work
- Excellent Work Spaces & Clean Indoor Sheds
- 14 Acre Facility
- 155 Moorings in Padanaram Harbor

Concordia Yacht Sales

- Showroom Quality Storage Spaces
- Moorings In Padanaram Harbor

Concordia Yawl

- 103 Built From 1938 To 1966
- Designed Sold & Commissioned By Concordia Company



Photo By: Benjamin Mendlowitz

WINNIE OF BOURNE

1952 39' Concordia Yawl (# 11 of 103)
Full restoration completed in 1996. Pristine boat. Every detail attended to. Well equipped for racing. Custom double forward to port.

\$195,000

www.concordiaboats.com
300 Gulf Road South Dartmouth, MA • Phone: (508) 999-1381

FOR SALE: One of a kind, topsail schooner
Designed by Murray G. Peterson and built by Elmer Collemer of Camden, Maine in 1964



Restored to like new by Farrins Boatshop in 1999 including 27HP Yanmar diesel. LOA 29', LWL 23', Beam 9'4", Draft 4'8". Cedar planking on oak frames with teak deck and mahogany joinerwork. Owner has cruised coast of Maine, Nova Scotia and Newfoundland each summer since 2000. Full survey completed November 2013. Price \$75,000. Brochure available from Peterson Associates, Inc., P. O. Box 836, Brunswick, Maine 04011, 207-644-8100, peterston@lincoln.midcoast.com

METINIC YACHT BROKERS

124 Horseshoe Cove Rd., Harborside, Maine 04642 • 207-326-4411
—Located at Seal Cove Boatyard—



GLORY
Rob 35, Cheoy Lee built, 1963. New Yanmar engine, nearly new sails, good condition.
\$39,500



JAVA
Concordia 39, Hull No. 1, rebuilt as new in 2003. Owner has to let water into the bilges to keep them sweet.
\$165,000

36' Al Mason cold-molded custom. Very well built. Very good condition. \$42,500

BOATBUILDERS

FEATURED BOATBUILDER



PHALAROPE, Concordia 39 Yawl. Replaced the deck covering and toerails.

Seal Cove Boatyard Harborside, Maine

Seal Cove Boatyard has been owned by the Vaughn Family since 1936. They have gained a reputation for being efficient, resourceful, and for creative solutions that also meet a high aesthetic standard.

Seal Cove Boatyard specializes in systems, mechanics, carpentry, traditional finishes, spray finishes, rigging, brokering, and storage. With over 200 boats in storage ranging from 14 to 57 feet, their clients demand a broad spectrum of craftsmanship from this prestigious yard.

www.sealcoveboatyard.com

BILLINGS DIESEL & MARINE

STONINGTON, MAINE
WWW.BILLINGSMARINE.COM
207-367-2328



W-CLASS W.37

The W-Class Yacht Company builds fast and elegant boats that race hard and consistently win within the “*Spirit of Tradition*” class in Classic Yacht Regattas. Summers in New England or the Western Mediterranean. Winters in the Caribbean.

For over 15 years the W-Class Yachts have competed and won in all of the major Classic Yacht Regattas in the “*Spirit of Tradition*” class.

In New England:

*The Tiedemann Classics, Newport, RI
Eggemoggin Reach Regatta, Brooklin, ME
Corinthian YC Classics, Marblehead, MA
Opera House Cup, Nantucket, MA
MoY/TYRS Classics, Newport, RI*

In the Caribbean:

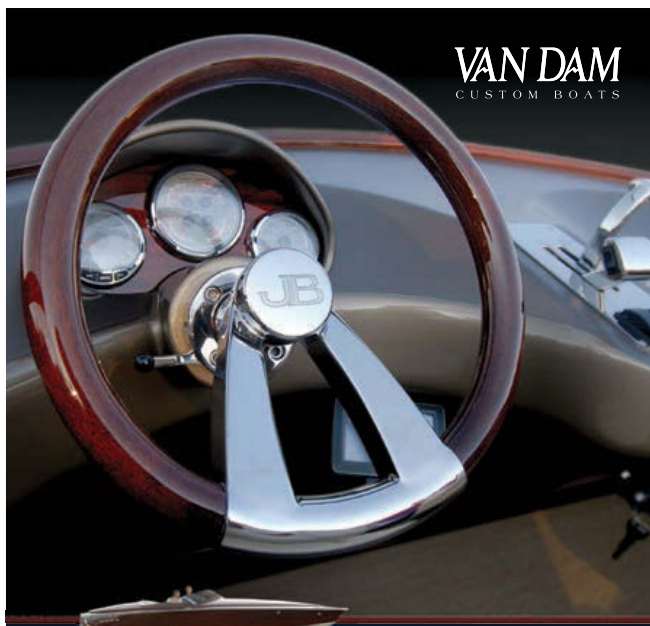
Antigua Classic Yacht Regatta, Antigua

In the Western Med:

*Les Regates Imperiales, Corsica, France
Les Voiles d'Antibes, France
Argentario Sailing Week, Tuscany, Italy
Conde de Barcelona, Palma de Mallorca
Copa del Rey, Mahon, Spain
Veteran Boat Rally, Porto Cervo, Sardinia
Vela d'Epoca, Imperia, Italy
Regates Royales, Cannes, France
Les Voiles de St. Tropez, France*

The W-Class W.37 “Race Horse” is now seriously for sale. The newest of the cold-molded wood W-Class Racing Yachts. She'll be in Florida this winter. Let us help you plan your own victory tour. Or we can build you a brand new W.37 in Downeast Maine, USA. Either way “Yachting is the Winner”™ and you will be a winner too!

**Contact Donald Tofias, yacht developer, at 617-901-5242.
www.w-class.com**

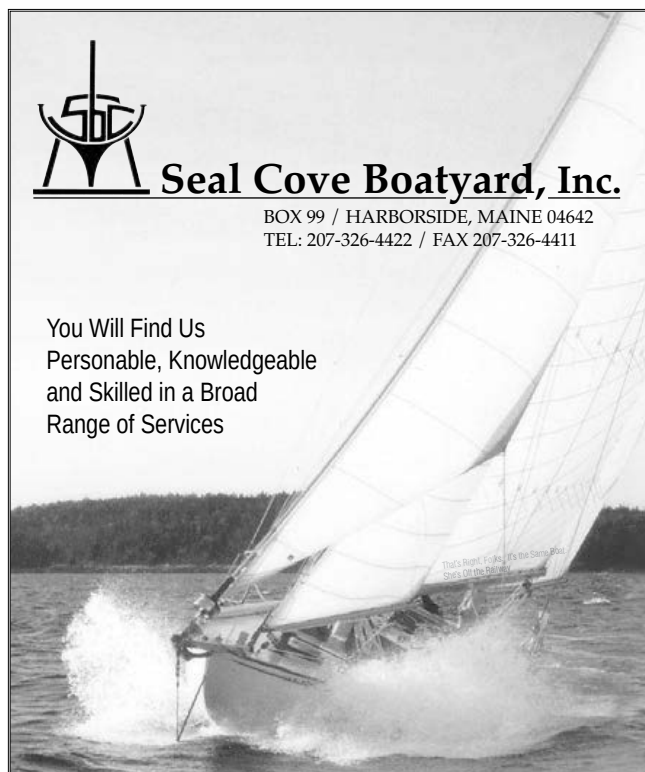


VAN DAM
CUSTOM BOATS

Every Detail in a Custom Van Dam is Handcrafted to be as Unique as its Owner.

~ Unlike Any Other ~

www.vandamboats.com



 **Seal Cove Boatyard, Inc.**
BOX 99 / HARBORSIDE, MAINE 04642
TEL: 207-326-4422 / FAX 207-326-4411

You Will Find Us
Personable, Knowledgeable
and Skilled in a Broad
Range of Services

DESPERATE LARK - Herreshoff, 1903.
In Our Care for Over 40 Years

E-mail: sealcoveboatyard@gmail.com • www.sealcoveboatyard.com

The Goal — Bring new people to wooden boats!

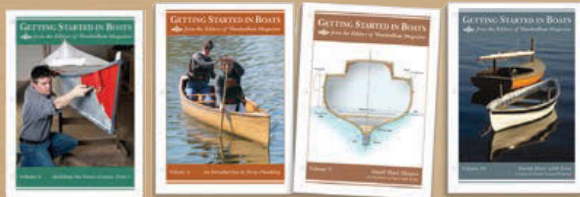
The Solution —

GETTING STARTED IN BOATS, a removable supplement included in every issue of *WoodenBoat*.

This publication is produced for the absolute beginner; for your family, friends, and neighbors, members of local community groups, colleagues at work — the people you know who should be *inspired* into boats and boating.

Share your passion!

To download previous issues of *Getting Started* that you might have missed, please visit www.woodenboatstore.com.



WoodenBoat Publications
41 WoodenBoat Lane, Brooklin, ME 04616
207-359-4651 • www.woodenboat.com



Rumery's Boat Yard

Biddeford, Maine 04005
(207)282-0408
www.rumerys.com

*A full service boatyard
Heated storage, custom construction
Repairs & restoration of wooden &
composite boats to 60 feet*



*Elegant & fast – no wake
Your choice of deck and cabin layout*

Rumery's 38

P E N D L E T O N
Y A C H T • Y A R D N



Rebuilders of Classic Yachts
525 Pendleton Point Rd. • Islesboro, ME 04848
(207) 734-6728 • www.pendletonyachtyard.com
www.quicksilvermaine.com

Laughing Loon
Custom Canoes & Kayaks

Boats • Paddles • Plans • Kits • Classes
Building Instruction Books & Videos



Disko Bay
Greenland style

Dark Star
Baidarka style

LaughingLoon.com

On Portage Bay since 1927

JENSEN Motorboat Corp.

1417 NE Boat St.
Seattle, WA 98105



Phone: 206-632-7888
e-mail: slo-mo-shun@qwestoffice.net

- Hull & cabin repair, refit & restoration
- Electrical & systems repair & installation
- Interior joinery & custom cabinetry
- Mast & rigging installation & repair
- Complete painting & varnish work
- Structural & finish woodworking
- Fiberglass & gel coat repair
- Welding & metal fabrication



ADIRONDACK GUIDE BOAT

www.adirondack-guide-boat.com

"One pull on the long graceful oars and it all came back. It was like dancing again with a long lost love"

Willem Lange, *Guideboat Memories*

Cedar Guideboats * Cedar Guideboat Kits
Kevlar Guideboats * Vermont Fishing Dorries
Vermont Packboats



Free DVD
on request

6821 RT 7, N Ferrisburgh, VT 05473
802-425-3926 * guideboat@together.net

Like us on Facebook: www.facebook.com/guideboat1

BOATBUILDERS



32' Noank Schooner Restoration

Beetle Cat® Boat Shop

Traditional wooden boat building and restoration
from skiffs to 50' power and sailboats.

Sole Builder of the Beetle Cat Boat



Beetle Cat — Celebrating 91 Years



New 12' Onset Island Skiff

WE OFFER

- New Boats • Used Boats
- Storage • Parts
- Repairs • Maintenance

BEETLE, INC.

3 Thatcher Lane
Wareham, MA 02571
Tel 508.295.8585
Fax 508.295.8949

www.beetlecat.com



CROCKER'S BOAT YARD, INC.

Celebrating 65 Years

Offering a full range of services since 1946.
Storage available for this winter.

Register your Crocker Design at
www.CrockersBoatYard.com

Manchester, Massachusetts • 888-332-6004

Gannon and Benjamin
EST. 1980

classic
plank on frame construction...
traditional
enduring craftsmanship

WWW.GANNONANDBENJAMIN.COM
VINEYARD HAVEN, MA. 02568
(508) 693-4658

**Wooden it be
Wonderful to Own a
Woodwind Yacht!**

Our master craftsmen are
dedicated to exceptional
quality workmanship on
fine wooden watercraft.

We love wooden boats...and it shows!

Woodwind Yachts Inc.
Wooden Boat Restoration, Repairs, Building and Refinishing
3986 Hwy 7A, Nestleton, Ont. L0B 1L0
www.woodwindyachts.com **905-986-9663**



BSW STONINGTON BOAT WORKS, LLC
 Builders of fine, custom wooden boats in Stonington, Connecticut
www.stoningtonboatworks.com
 860-535-0332



Recently completed
 Phase 1, 2, & 3
 S/V Adventuress
 Centennial Restoration

**HAVEN
 BOATWORKS, LLC**
 PORT TOWNSEND, WA

A Full Service Boatyard
 Specializing in the Repair and
 Restoration of Wooden Boats

P.O. Box 1430
 305 8th Street, Port Townsend, WA 98368
 (360) 385-5727
www.havenboatworks.com

Photo courtesy of www.soundexp.org

HISTORIC CRAFTSMANSHIP



RESTORING AND CONSTRUCTING
 HISTORIC AND CLASSIC WOODEN BOATS

www.tumblehomeboats.com
 518.623.5050

REUBEN SMITH'S
TUMBLEHOME
 BOATSHOP

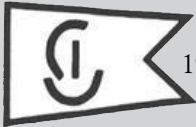
HISTORIC CRAFTSMANSHIP 

6,000 Sq Ft Boatshop • Route 28, Southern Adirondacks



**CUTTS & CASE
 SHIPYARD**
 a full-service boatyard

DESIGNERS & BUILDERS
 OF
 FINE WOODEN YACHTS

SINCE  1927

P.O. BOX 9
 TOWN CREEK
 OXFORD, MD 21654
 410-226-5416
www.cuttssandcase.com
info@cuttssandcase.com



**EDGECOMB
 BOAT WORKS**

RESTORATION
 AND PRESERVATION OF
 ANTIQUE AND CLASSIC
 WOODEN BOATS

207.882.5038
EDGECOMBBOTWORKS.NET



**NEW on
 WoodenBoat.com**

**Build
 This Boat!**

www.woodenboat.com/build-boat

Become a WoodenBoat.com community member today, for free.

AREY'S POND BOAT YARD

Est. 1954 and Celebrating our 60th Year



Preserving the Past as we Build for the Future

Arey's Pond Boat Yard is looking for investors for our 29' Catboat. Please contact us for more details.

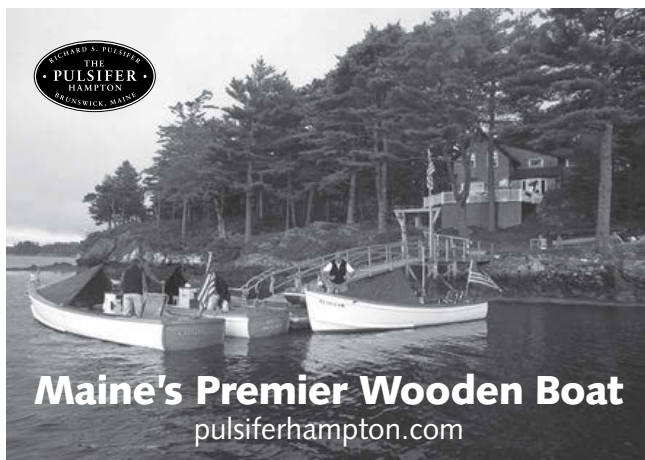
Charter, cruise or race your 29' Cat in the *Spirit of Tradition* class.

APBY is a full service boat yard for sailboats and powerboats 45' and under. Inside, outside storage and mooring rental, outboard and inboard motors.

P.O. Box 222 • 45 Arey's Lane
So. Orleans, MA 02662
info@areyspondboatyard.com
areyspondboatyard.com
508-255-0994



APBY 29' Catboat

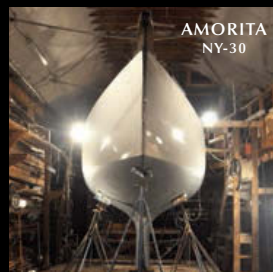


Maine's Premier Wooden Boat pulsiferhampton.com

MP&G L C WOOD BOATBUILDING YACHT RESTORATION

RECENTLY COMPLETED
Cabin, rig and rudder work on
N.Y. 32 SALT

CURRENT PROJECTS
Restoration of
Buzzard's Bay 25 MINK #733
Restoration of
Buzzard's Bay 15 MARIBEE #731
Structural work on
Watch Hill 15 VIKING #885



SallyAnne Santos

929 FLANDERS ROAD, MYSTIC CT 06355
TEL 860-572-7710 www.mpgboats.com

Traditional Boat, LLC

Give your wooden boat the care she deserves

Our specialty is wooden boat construction, restoration and repair.

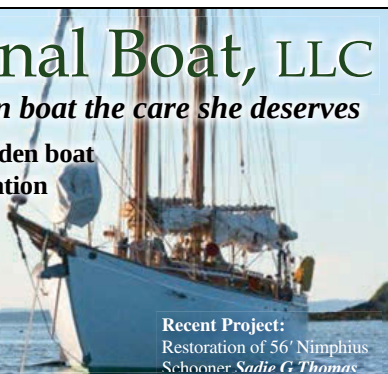
We are a full service wooden boat yard.

Our reasonable rates (\$38/hr) make it all possible.

Recent Project:
Restoration of 56' Nimphius
Schooner *Sadie G. Thomas*

www.mainetraditionalboat.com

ABYC Certified Marine Systems (207) 322-0157 Unity, Maine



The Carpenter's Boat Shop

A non-profit, community-based wooden boat building apprentice program

• Monhegan
Island Skiffs

• Peapods and Dorries

Order now for next season!

www.carpentersboatshop.org 207/677-2614
Building boats, Nurturing lives, Helping others



Wooden Boatbuilding and Restoration on Maryland's Eastern Shore



Restoration of Vintage Elgin Runabout

(410) 479-0050 • choptankboatworks.com



Choptank
Boatworks

Boat Schools

List Your Programs With Our Online Service

WoodenBoat has launched a free listing program for boat schools. Simply go to www.woodenboat.com/boatschools and follow the instructions in the FAQ.

Readers are welcome to join the site at any time to search for programs of interest to them.

WoodenBoat Publications
41 WoodenBoat Lane, Brooklin, Maine 04616
207-359-4651 www.woodenboat.com

KITS & PLANS



CHESAPEAKE LIGHT CRAFT
THE BEST BOATS YOU CAN BUILD™



Build one of our 90 award-winning boat kits, like this Shearwater Sport Kayak. More than 22,000 CLC boat kits sold since 1991!

CLCBOATS.COM or 410-267-0137 FOR A FREE CATALOG AND MUCH MORE!

- The most complete kit at the lowest price - free catalog
- Producers of kits since 1955
- Comprehensive 150-page manual



- Kits supplied with top quality components
- BS1088 Okoume Mahogany Marine Plywood
 - Precision pre-cut panels using CNC technology
 - Our exclusive QuickLock Connector System
 - Epoxy Resin - hardener with UV-inhibitors

*Waters Dancing
Boat Kit Company*

Stitch-and-Glue Sea Kayak Kits

- Singles - 10 Models
- Doubles - Duet 16, Trillium 21

Stitch-and-Glue Canoe Kits

- Explorer 16, Single 15
- North Lakes 19 Freighter

**Kits available
in Canada
and USA**

6316 - 106 Street, Edmonton, Alberta, Canada T6H 2V3 Phone (780) 437-4919

www.watersdancing.com

FiberglassSupply.com

Materials:

- Vacuum Bagging Supplies
- Epoxies
 - System Three®
 - WEST System®
 - MAS® Epoxies
- Reinforcements
 - Fiberglass Cloths
 - Carbon Fiber
 - Aramids
- See our Full Catalog Online



Kits and Plans:

- 11' Hollow Wooden Stand Up Paddleboard, Kit Only
- 18' Hollow Wooden Unlimited Paddleboard, Kit or Plans
- Surfboard Frame Kits for Strip Plank Surfboard Building
- And More!!!

Check us out at:
www.fiberglasssupply.com

Burlington, Washington - www.fiberglasssupply.com - Toll Free 877.493.5333 - Fax 360.757.8284

Sam Devlin's "Stitch-and-Glue" boat designs bring together the beauty of wood and the durability of composites. An already easy construction method is made easier with the help of Devlin's *Wooden Boat Building* book and *Wooden Boat Building* video.



"Dunlin 22"

We offer a full line of plans: dinghies, daysailers, pocket cruisers, motorsailers, powerboats 8-45 ft.



www.DevlinBoat.com

Devlin Designing Boatbuilders
3010 37th Ave., SW
Tumwater, WA 98512
Phone: (360) 866-0164



noah's

We are The Boatbuilders Depot!

- Over 25 Different Epoxies
- Fiberglass, Carbon & Kevlar Selection Second to None
- Stitch & Glue Boat Kits
- Paint & Varnish
- 45 Types & Sizes of Marine Plywood



Cedar Strips kits based on the designs of



Green Valley
Boat Works

TEL: (800) 524-7517 FAX: (800) 894-1783

Free Catalog Available

WEB: www.noahsmarine.com

Email: noahs@noahsmarine.com

PARKER MARINE ENTERPRISES

COMPOSITE WOOD/EPOXY BOATBUILDING
PRAGMATIC WOODENBOAT RESTORATION
STOCK PLANS & CUSTOM DESIGNS

COMMUTER 36 II



EXUMA 55



Catalogue of Cruising Sail.....\$40
Catalogue of Sharpies.....\$35
Catalogue of Power Boats.....\$30
Catalogue of Small Craft.....\$25
The New Cold-Molded Boatbuilding..\$25
The Sharpie Book.....\$27
The Voyages of Fishers Hornpipe.....\$35

PO BOX 651429 VERO BEACH FL 32965

www.parker-marine.com

info@parker-marine.com

Postage included -- Overseas Add \$9.50 -- We Accept PayPal on our WebSite



SEA BRIGHT 14

Dreams DO Come True With Glen-L Designs

- 300 Exceptional Boat Designs
- Row/Power/Sail - 6-ft. to 55-ft.
- Epoxy & boatbuilding supplies
- Underwater & Deck Hardware

Full-sized patterns & detailed phase-by-phase instructions enable *anyone* to fulfill their dreams.

Special Offer

- 288-page Book of Boat Designs
 - Free Dinghy Plans
 - Free Supplies Brochure
 - \$9.95 Coupon off first order
- Send just \$9.95 to address below

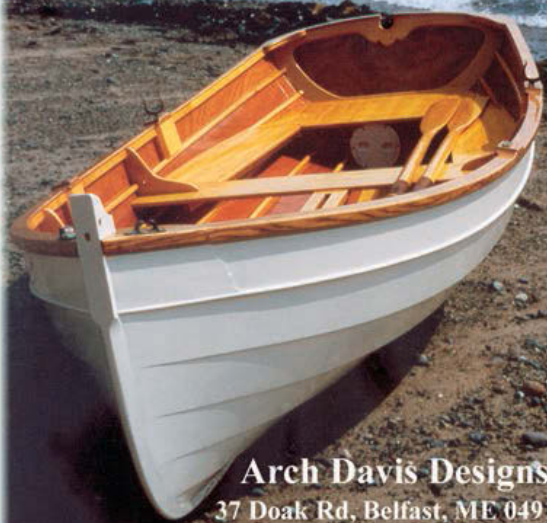


Glen-L Marine • 9152 Rosecrans Avenue/WB
Bellflower, CA 90706

888-700-5007 • Glen-L.com/WB



In 1996, the appearance of the Penobscot 14 set new standards of completeness and detail in plans for the home builder. We continue to work to offer the best free advisory service, with DVDs, kits, sails, epoxy resin, and other items, for this and our other designs. Please visit our website, or call for details.



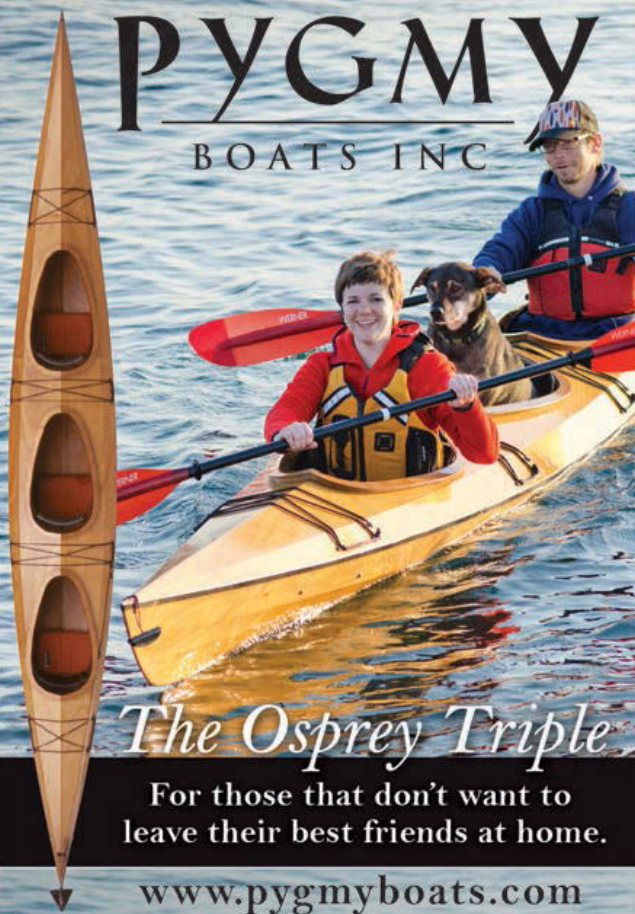
Arch Davis Designs

37 Doak Rd, Belfast, ME 04915

207-930-9873

www.archdavisdesigns.com

PYGMY
BOATS INC



The Osprey Triple

For those that don't want to
leave their best friends at home.

www.pygmyboats.com

KITS & PLANS

New: CNC kits available from
www.ClintChaseBoatBuilder.com

Easy to build
appealing
plans and kits
for home
builders and
boatyards.



www.vivierboats.com



UGHTRED
Skiff Kits for
St. Ayles Racing
scottishcoastalrowing.org



**HEWES &
COMPANY**

Blue Hill, Maine

PRICING & ORDERING: gardner@hewesco.com
1-207-460-1178 • www.cnc-marine-hewesco.com

**CUILLEMOT
KAYAKS**



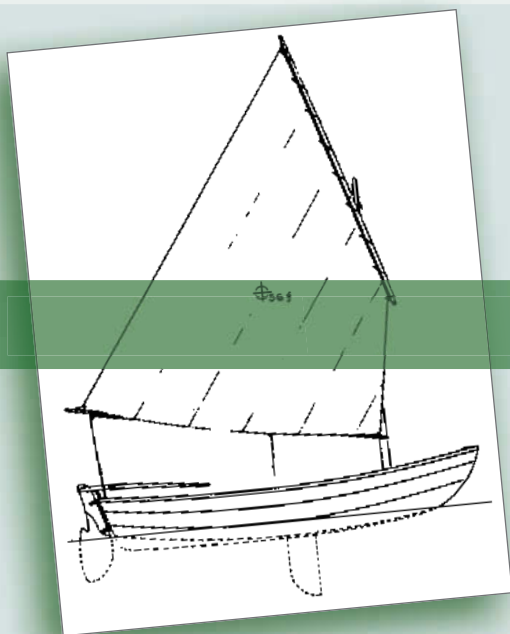
BUILD YOUR OWN BOAT
PLANS, INSTRUCTIONS, CLASSES
WWW.KAYAKPLANS.COM

T37s Racing at Seattle Yacht Club
over 1800 T37s sailing today



www.modelsailboat.com

Tippecanoe Boats
the finest wooden model sailboats



WELCOME TO WOODENBOAT'S DIRECTORY OF BOAT PLANS & KITS

www.woodenboat.com/boatplansandkits

Our newest web service is **FREE** to designers and readers alike. If you are a designer, you may upload details of your plans and kits. Simply go to the website noted above, and follow the upload instructions at "Frequently Asked Questions" on the left-hand side. You must have full ownership of these plans and kits.

We hope to include as many boats as possible, and boats of all hull materials.

WoodenBoat

PO Box 78 • Brooklin, ME 04616

207-359-4651

www.woodenboat.com

Another service for you, from **WoodenBoat.**

RAFTINGS



**Jonesport
Nautical
Antiques**



1-800-996-5655

Order online at

www.nauticalantiques.com



**Weekly Waterfront
VACATION RENTALS**
Mid Coast & Down East, Maine

Several listings in WoodenBoat's vicinity

(207) 374-3500

www.vacationcottages.com

rentals@vacationcottages.com

PO Box 1600

Blue Hill, ME 04614



**VACATION
COTTAGES**



**Aurora
Sails &
Canvas**

Full service sail and canvas loft. Outfitting your boat both inside and out. Highest quality design, workmanship and friendly service.

255 Molyneux Road, Camden, ME 04843 • 207-230-0288



ZEPHYRWERKS
CUSTOM
SHEAVES & ROLLERS



www.zephyrwerks.com • edlouchard@gmail.com • 360-385-2720



Welcome to

ISLAND FALLS CANOE

"Real Canoes, Built Right"

Experience the grace and beauty of a custom-built wood and canvas canoe.

www.islandfallscanoe.com



NATURE'S HEAD
Self-Contained Composting Toilet

Better. By Design.

- ◆ US Coast Guard Approved
- ◆ Compact
- ◆ No Odor
- ◆ Self-Contained
- ◆ Urine Diverting
- ◆ Exceptional Holding Capacity
- ◆ All Stainless Steel Hardware



251-295-3043
NaturesHead.net



PAUL ROLLINS
BOAT BUILDER

2 Scotland Bridge Road
York, Maine 03909

**Celebrating 35 Years
of Boat Building & Restoration**

207-351-7609 www.paulrollinsboatbuilder.com

Commodore Telltale Compass



Our Commodore Telltale Compass gives you an eye on the boat's heading, even from your bunk.

617-482-8460

See online at
www.robertwhite.com

Robert E. White Instruments, Inc.
Top Quality Weather & Nautical Instruments Since 1961

Drop anchor...

YOUR AD HERE

\$300/issue

(with one-year (6x) contract)

\$350/issue

(individually)

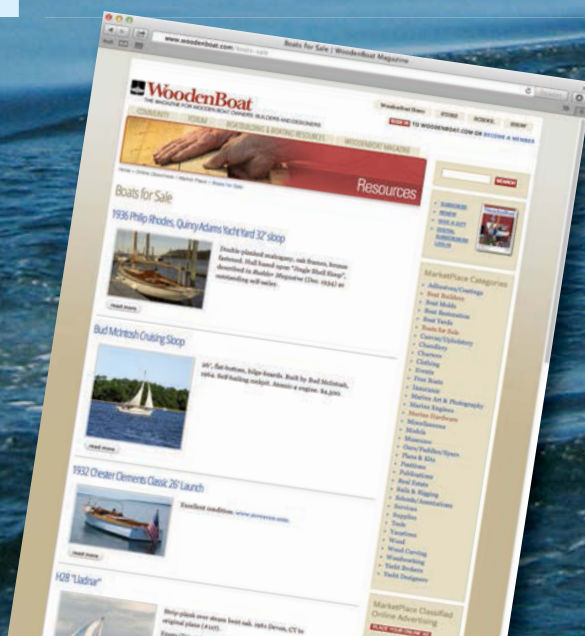
Email classified@woodenboat.com,
or call 207-359-7714

DON'T MISS THE BOAT

**Complement your print ad
with a listing in our Online
MarketPlace Classifieds!**

Easy, Affordable, Effective!

**Contact Tina for details:
tina.dunne@woodenboat.com
www.woodenboat.com**



CLASSIFIED

To place a Classified Ad: visit our website www.woodenboat.com; email classified@woodenboat.com; or call our Classified Ad Manager at (207) 359-7714.

Deadline for the March/April issue: January 6, 2014

Boatbuilding Shops



S.N. SMITH & SON, BOATWRIGHT/ timber framer. Annual maintenance, restoration, and building to 45'. Our goal is to make wooden boat ownership predictable and enjoyable. P.O. Box 724, Eastham, MA 02642, 978-290-3957, www.snsmithandson.com.

SATTER'S RESTORATION—Traditional wooden canoes, and boats restored. Quality woodwork, brightwork, repairs. Branchville, NJ, 973-948-5242, www.sattersrestoration.com.

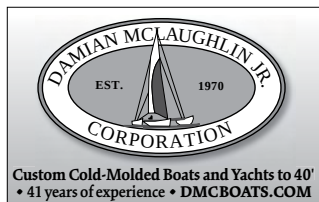


THE DORYSHOP—CUSTOM-BUILT small boats and Lunenburg dories since 1917. Oars and paddles too. Call 902-640-3005 or visit www.doryshop.com.

JOHN M. KARBOTT BOATBUILDING. Custom wooden boat building and repair. Lobsterboat styles a specialty. Wooden Boat School instructor. Member Massachusetts Marine Trades Association. 789 Rocky Hill Rd, Plymouth, MA 02360. Phone/fax 508-224-3709, www.by-the-sea.com/karbottboatbuilding.



VINTAGE CRAFT BOATS, BUILT by Classic Restoration and Supply—All our runabouts are cold-molded, using white oak for the framework, and 1/2" African mahogany for the planking, giving our boats low maintenance for years to come. Our models include the 19' Custom (pictured), the 23' Custom, and the 25' Sportsman. All use chrome-plated bronze hardware, and period-correct gauges and interiors. Show-quality restorations are also available, from runabouts to cruisers, complete or partial. 215-805-4933 or at www.vintagewatercraft.com.



HADDEN BOAT CO.—WOODEN boat construction and repair to any size; sail and power. 11 Tibbetts Lane, Georgetown, ME 04548, 207-371-2662, www.haddenboat.com.

LOWELL BOATS—COMPLETE wooden boat restoration services and marine surveying. GARY LOWELL, Greensboro, NC, 336-274-0892, www.lowell.to/boats.

MIAMI, FORT LAUDERDALE, Florida Keys—30+ years experience building, repairing, and restoring boats. Quality workmanship, with composite construction expertise. References. Call 305-634-4263, 305-498-1049, rmiller35@bellsouth.net, www.millermarinesystems.com.

REPAIR, RESTORATION, STORAGE, and Surveys. Low overhead and low rates, 35 years experience. MICHAEL WARR BOATWORKS, Stonington, ME, 207-367-2360.

Charters



SAIL MAINE ABOARD MAINE'S oldest windjammer, "Lewis R. French." Enjoy great sailing, lobsters, new friends, and fresh air (no smoking). Sailing from Camden, three-, four-, and six-day cruises with only 22 guests, May–October. Capt. Garth Wells, P.O. Box 992 W, Camden, ME 04843. 800-469-4635, www.schoonerfrench.com.

Clothing

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



as simply messing about in boats.

RATTY'S CELEBRATED QUOTATION with original illustrations featured on our shirts and bags. 301-589-9391, www.MessingAbout.com.



Education & Training



THE SCHOLARSHIPWRIGHTS OF Rockland seeks apprentices to construct a Hampton boat using traditional building methods of salt-water farmers, live as a community in Nobleboro, Maine, and write a publication. Begins March 15, 2014. Lance Lee, 207-596-7390, www.scholarshipwrights.org.

NAVTECH MARINE SURVEYORS' Course—Surveying recreational/commercial vessels. U.S. Surveyors Association, Master Marine Surveyor program. FL, 800-245-4425.



Wooden Boat SCHOOL

One- and Two-week courses in Boatbuilding, Seamanship, and Related Crafts

June–September

—Offsite winter courses also offered—

For a complete catalog:

Wooden Boat School, P.O. Box 78, Brooklin, ME 04616, Tel: 207-359-4651 or view the online catalog at www.woodenboat.com

Events



Wooden Boat Show



June 27-29, 2014 • Mystic, CT
www.thewoodenboatshow.com

Marine Art

celebrated marine artist



Jack L. Gray.

limited edition prints
sketches & originals

jacklgray.ca
1 902 634 4699

Marine Engines

REBUILT CHRIS-CRAFT 6-cylinder engines: K, KL, KBL, KFL, KLC, M, ML, MBL, MCL. Assorted V8s. Mitch LaPointe's, www.classicboat.com. 952-471-3300.

HERCULES ENGINE PARTS

Model M, ML, MBL, K, KL

HERCULES PROPELLERS, ETC.

Business Hours: M-F 8:30-4:30 EST

Phone: 740-745-1475

Fax: 740-745-2475

Models

WWW.MODELBOAT.COM HAS decorative sailing models and precision kits and tools. This is the best place for high quality model ships.



OUR FRIENDSHIP SLOOP MODELS are accurate replicas of the elegant, seaworthy crafts built in Friendship, Maine. Based on a 1900 design, our kits are available in two sizes. Both kits are plank on bulkhead, and contain many laser-cut parts. BlueJacket Shipcrafters, 160 E. Main St., Searsport, ME 04974. 1-800-448-5567, www.bluejacketinc.com.

TIPPECANOE



SMALL SAILBOATS

THE FINEST Wooden Pond Sailers. Free brochure: 1-800-206-0006. www.modelsailboat.com.

ELEGANT SCALE MODELS. Individually handcrafted custom scale model boats. JEAN PRECKEL, www.preckelboats.com, 304-432-7202.

Molds

HULL MOLDS?

Are they taking up valuable shop space? Can't bear to burn them after all of that careful work? Would you like to sell them to another builder? If so, advertise them in our classified advertising section, Molds for Sale! Please visit our website, or contact Wendy for more information.



WoodenBoat Classifieds
classified@woodenboat.com
www.woodenboat.com

Plans & Kits



SNOWSHOE 12—A fast, straight tracking solo canoe with great performance. Weight: 13 lbs. Capacity: 175-190 lbs. Monfort Associates. 207-882-5504, www.gaboats.com.

CATALOG OF 40 SIMPLE PLYWOOD boats, \$4. JIM MICHALAK, 118 E. Randle, Lebanon, IL 62254. www.jimsboats.com.

LEARN HOW TO BUILD your own cedar-stripped boat. Plans for dinghies, canoes, row, sail, paddle, outboard. www.compumarine.com. AZ, 520-604-6700.



28 DESIGNS IN OUR \$12 BROCHURE—Boats 10-16'. S&H: \$4 U.S., and Canada; \$10 overseas. Ken Swan, P.O. Box 6647, San Jose, CA 95150. 408-300-1903, www.swanboatdesign.com.



8' DINGHY FROM NEW ZEALAND—Teach yourself boat-building, and learn to sail. Easy-build plywood. Hundreds of boats in 25 countries. Sails fast with one or two kids or an adult. All details at www.firebug.co.nz.

Jordan Wood Boats

541-867-3141

www.jordanwoodboats.com

Distinctive Boat Designs

Meticulously Developed and Drawn
For the Amateur Builder



CRADLE BOAT
BABY TENDER

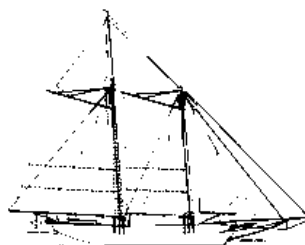


BEACH CRUISER
FOOTLOOSE

BOAT KITS—PLANS—PATTERNS. World's best selection of 200+ designs on our web site. Boatbuilding supplies—easy-to-use 50/50 epoxy resins/glues, fasteners, and much more. Free supplies catalog. Clark Craft, 716-873-2640, www.clarkcraft.com.



ATKIN ILLUSTRATED CATALOG—135 pages, with more than 300 Atkin designs. Famed Atkin double-enders, rowing/sailing dinghies, houseboats, and more. \$15 U.S. and Canada (\$22 US for overseas orders). Payment: U.S. dollars payable through a U.S. bank. ATKIN BOAT PLANS, P.O. Box 3005WB, Noroton, CT 06820. apatkin@aol.com, www.atkinboatplans.com.



SMITHSONIAN INSTITUTION Plans from the National Watercraft Collection, H.I. Chapelle drawings, Historic American Merchant Marine Survey, etc. Send \$20 check to Smithsonian Institution for 250-page catalog to: Smithsonian Ship Plans, P.O. Box 37012, NMAH-5004/MRC 628, Washington, DC 20013-7012. www.americanhistory.si.edu/csr/shipplan.htm.

Glen-L.com

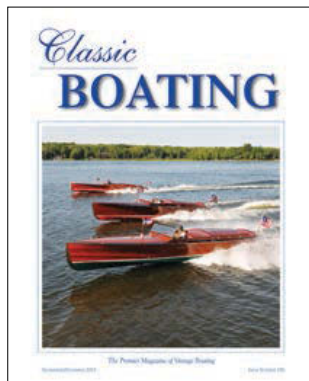
- Boat Plans
- Epoxies
- Raptor® Products
- Underwater Hardware
- Bronze Fastenings
- Steering
- Deck Hardware
- much more...

SUPPLIES & HARDWARE FOR building a boat or outfitting an existing one. Competitive prices, friendly service. Glen-L Marine, 888-700-5007. www.Glen-L.com/WBC (online catalogs).

Positions

WOODENBOAT SCHOOL STAFF—Currently accepting resumes from individuals interested in joining our 2014 staff. Shop, waterfront, and kitchen positions available. Season extends from May to early October. Looking for individuals with experience, dedication, strong people skills, and enthusiasm. EOE. Contact: Director, WoodenBoat School, P.O. Box 78, Brooklin, ME 04616 or school@woodenboat.com.

Publications



CLASSIC BOATING MAGAZINE—The most popular and complete publication on antique and classic boats. Subscription \$28, Canada \$36 USD, overseas \$78. Samples \$5, Canada \$7.50, overseas \$12.50. **CLASSIC BOATING**, 280-D Lac La Belle Dr., Oconomowoc, WI 53066. www.classicboatmagazine.net.

PROFESSIONAL BOATBUILDER
The magazine for those working in design, construction, and repair.

Subscriptions
One year (6 issues) \$55.95 (US)
Canada: \$52 (US funds) (airmail)
Overseas: \$68 (US funds) (airmail)

Patty Hutchinson
P.O. Box 78, Brooklin, ME 04616-0078
207-359-4651 • Fax: 207-359-8920
www.proboat.com

Real Estate



COTTAGE NEAR WOODENBOAT School—Now taking 2014 reservations. There is a lot less snow in the summer. One-bedroom cottage, suitable for two, \$500/week. Brooklin, ME. Contact todderichardson@gmail.com.



TARPON HOUSE—A CARIBBEAN dream property with 120' of ocean front is now for sale on the island of Utila, Bay Islands, Honduras. Have a look at: tarponhouse.blogspot.com or contact danaholmberg@gmail.com for more info.

MAINE BOAT-SHOP ON 14 ACRES—All three-phase stationary machines. Good well, steam boiler, greenhouse. Storage for at least 12 boats. Surveyed. Good opportunity for co-op. Owner financing a possibility. For more info, desc@roadrunner.com.

Sails



JASPER & BAILEY SAILMAKERS. Established 1972. Offshore, one-design, and traditional sails. Sail repairs, recuts, conversions, washing and storage. Used-sail brokers. 64 Halsey St., P.O. Box 852, Newport, RI 02840; 401-847-8796. www.jasperandbailey.com.



WWW.DABBLERSAILS.COM—Traditional small-craft sails. P.O. Box 235, Wicomico Church, VA, 22579. Ph/fax 804-580-8723, dab@crosslink.net.

DOUGLAS FOWLERS SAILMAKER—Highest-quality, full-seam curved sails since 1977. Traditional sails a specialty. White, colors, and Egyptian Dacron in stock. 1182 East Shore Dr., Ithaca, NY 14850. 607-277-0041, dfowlersails@gmail.com.

Services

YACHT SURVEYOR
Wooden Boat
Construction Background
James M. Curry
— Member SAMS • AMS —
5 Pleasant Hill Lane • Clinton, CT 06413
(860) 669-3119 • FAX (860) 664-9396

HAVE TOOLS WILL TRAVEL. Wooden boat builder will build, rebuild, or repair your project on site or in my shop. \$25/hour. VT, 802-365-7823.

Spars

FINELY CRAFTED WOODEN SPARS; hollow or solid. Any type of construction. ELK SPARS, 577 Norway Drive, Bar Harbor, ME, 04609, 207-288-9045.

THOMSON WOOD SPARS—Maker of fine wood products. Masts, booms, clubs, gaffs, custom furniture, and woodworking. 508-317-3944, thomsonwoodspars@hotmail.com.

dwyermast.com

- Masts • Hardware
- Booms • Rigging

Dwyer Aluminum Mast Company
203-484-0419

SHAW & TENNEY, Orono, Maine—Traditionally handcrafted spruce masts and spars since 1858. 1-800-240-4867, www.shawandtenney.com.

Supplies

BLOXYGEN SAVES LEFTOVER Finishes. Just spray, seal, and store. www.bloxygen.com, 888-810-8311.

VACUUM-BAGGING SUPPLIES—Fiberglass cloth, epoxy resins, water-based LPU paints, and more. Technical support and fast service. www.fiberglasssupply.com or toll free: 877-493-5333.

Composite fasteners for:

- Strip Planing
- Cold Molding
- Fiberglass Layup
- Foam Core Joining
- Vacuum Infusion
- RTM

RAPTOR

STAPLES • NAILS • BRADS

- ✓ Completely non-metal
- ✓ No need to remove
- ✓ Sawable, sandable, planeable, stainable
- ✓ No galvanic corrosion/electrolysis
- ✓ Bonds with thermoset resins

www.raptornails.com info@raptornails.com
P (512) 255-8525 F (512) 255-8709

STOCKHOLM TAR. Genuine kiln-burnt pine tar. It's the Real Stuff. American Rope & Tar, 1-877-965-1800 or tarsmell.com.

MAST HOOPS • Mast Hoop Fasteners • Parrel Rods • Wood Cleats • Wood Shell Blocks • Custom Bronze Hardware

Pert Lowell Co., Inc.
Lane's End
Newbury, MA 01951
(978) 462-7409

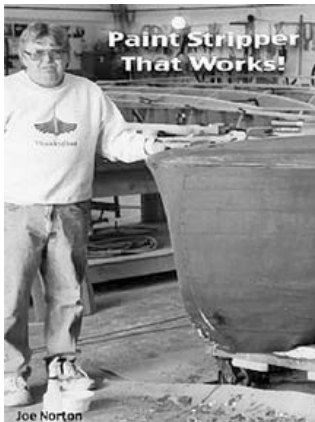
CEDAR-STRIP BOAT-BUILDING Supplies—Long ash for rails, strips, epoxy, seats. Or get a complete kit. Check out the website, www.newfound.com or call 603-744-6872. The Newfound Woodworks, Inc., Bristol, NH 03222.

noahs
Epoxies, Fiberglass, Varnish & Much Much More
(800) 524-7517
www.noahsmarine.com



BRONZE CAM CLEAT with plastic ball bearings and 1½" fastening center distance. **BRONZE WING-TIP NAVIGATION LIGHTS** with glass globe. Side mount, stern and steaming. For our free catalog, contact us at J.M. Reineck & Son, 781-925-3312, JMRandSon@aol.com.

Supplies continued



THIS 20' CHRIS-CRAFT WAS stripped in four man-hours. Environmentally friendly paint stripper. For more information, call 800-726-4319. E-mail us at sales@starten.com, or visit our website, www.starten.com.

LeTONKINOIS. ALL-NATURAL varnish. Centuries-old formula. Long-lasting, beautiful finish. Extremely user-friendly. American Rope & Tar, 877-965-1800 or tarsmell.com.



ROPE FOR OLD SHIPS—Spunflex (previously Roblon). Durable, U.V. treated, acid and alkali resistant. Check www.shipsofwood.com.

TRADITIONAL BOAT SUPPLIES for traditional boats. Take a look at www.tradboats.com.

MODERN MANILA. New Leoflex-X. The latest rope technology. Looks great, works hard. American Rope & Tar, 1-877-965-1800 or tarsmell.com.

EXCEPTIONAL BRONZE and Chrome Hardware—Windshield brackets; navigational lighting; Tuf-nol and ash blocks; fastenings, roves, and rivets; repair, building, and kit materials; oars, paddles, and rowing accessories; decals, apparel, and traditional giftware. www.tendercraftboats.com. Toll-free phone: 800-588-4682.

COPPER FASTENERS and riveting tools, Norwegian and English boat nails, roves/rivets, rose and flathead, clench, threaded, decoration, and more. 50+ sizes and types, 1/8" to 6". Your leading source since 1987. FAERING DESIGN, Dept. W, P.O. Box 322, East Middlebury, VT 05740, 1-800-505-8692, faering@together.net, www.faeringdesigninc.com.

FLAGSTAFFS
Traditional Styling
Ash · Mahogany · Teak
Non-Fouling Bungee Flagstuffs

SHROUD ROLLERS
Ash · Teak · Mahogany
Please Send or call for Catalog

BETE-FLEMING, INC.
Box 906, Winterset, IA 52739
888-758-4996
www.bete-fleming.com

CLASSICBOATCONNECTION.COM—Your one-stop source for all your classic boat restoration needs. Call 507-344-8024, or e-mail mail@classicboatconnection.com for free catalog.

Boat Builder Central

- ★ Marine plywood
- ★ Epoxies/paint
- ★ Fiberglass
- ★ System Three
- ★ Much more!

boatbuildercentral.com
Free How To's and Help Files
best prices, same day shipping
772-770-1225

CANOE HARDWARE: 1/8", 1/16", 3/16" canoe tacks; 3/8" oval brass stembands; clenching irons; 3/16" bronze carriage bolts; canoe plans; clear white cedar. Catalog \$1. NORTHWOODS CANOE CO., 336 Range Rd., Atkinson, ME 04426. Order, phone 888-564-2710, fax 207-564-3667.



THE ORIGINAL SINCE 2001. The smallest composting toilet in the world! EOS, P.O. Box 5, Mount Vernon, OH 43050. www.airheadtoilet.com, 740-392-3642.

HAVEN 12 1/2 complete high-quality bronze hardware sets. See our display ad elsewhere in the issue. For our free catalog, contact us at J.M. Reineck & Son, 781-925-3312, JMRandSon@aol.com.

CANVAS FOR DECKS and CANOES. Natural, untreated. No. 10, 15-oz., 96", \$20/yard; 84", 16.75/yard, 72", \$13.75/yard; 60", \$10.75/yard. Minimum 5 yards, prepaid only. Fabric Works, 148 Pine St., Waltham, MA 02453, 781-642-8558.



EPOXY-PLUS MARINE EPOXY, \$69/gal. with hardener; Epoxy Glue and Putty. Premium products at direct pricing. No-blush, flexible, easy-to-use 1:1 mix. Free Catalog. Clark Craft, 716-873-2640, www.clarkcraft.com.



SOFT COTTON FENDERS and classic knotwork. For catalog, send SASE to: THE KNOTTED LINE, 9908 168th Ave. N.E., Redmond, WA 98052-3122, call 425-885-2457. www.theknottedline.com.

TARRED HEMP MARLINE. Several styles; hanks, balls, spools. American Rope & Tar, 1-877-965-1800 or tarsmell.com.



STARS AND STRIPES PENNANTS—Authentic historical design exquisitely handcrafted in the most durable fabrics. 4', 6', 8' and 12' sizes in stock, other sizes and designs by custom order. Custom design and fabrication is our specialty. Also in stock, all sizes U.S., state, foreign, historical, marine, and decorative flags, banners, pennants, and accessories. 77 Forest St., New Bedford, MA 02740. 508-996-6006, www.brewerbanner.com.

SUNBRELLA/MARINE FABRICS—Supplies for canvas-work, and boat interiors. FREE catalog. Beacon Fabric & Notions, www.beaconfabric.com, 800-713-8157.

Tools



PUZZLE JOINT JIG—SAVE TIME and energy, do the "Puzzle Joint" with any handheld router. Fast and easy. Similar to a dovetail jig. \$75.00 + shipping, guaranteed. Call at 805-207-7448, or email to fishbonesupply@gmail.com, www.fishbonesupply.com.

FeatherBow®

NEW Magnetic Featherbow

Mag-Featherbow \$41.95
FeatherBow® \$29.95
FeatherBow® Jr. \$17.95

Build your own Strip Built Boat
FeatherBow.com • (860) 209-5786

MACHINERY AND KEEL—Shipbuilding machinery: shipsaw, -L. Power 36"; table saw-16" Tannewitz; thickness planer-24" Oliver Model 299; \$8,500. Keel timber: purpleheart, 12 x 12 x 50, aged: \$5,900. All f.o.b. Bradshaw, MD 21087. Allen C. Rawl, LLC, allenrawl@shipsofwood.com.

BANTAM AIR HAMMER Boat Riveting Kit

- Designed for Copper Rivets
- Cuts Riveting Time up to 70%
- Superior Pneumatic

800-521-2282
www.superiorpneumatic.com



THREE-SPINDLE CLAMP—DON'T let your reach exceed your grasp! Large, three-spindle clamp solves many work-holding problems. 5" x 16 1/2" capacity. Custom sizes available. Call 970-433-6032, or email jpwoodruff@netzero.net.

Vacation

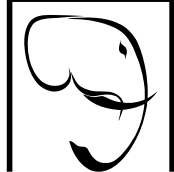
SYDNEY, AUSTRALIA—Unique and friendly. Clean, and comfortable one-bedroom apartment in suburban Sydney, close to harbor, city, and all amenities. Tastefully decorated, modern kitchen, bathroom and sitting room. Minimum four days. Email Kerry at ketrollope@bigpond.com, or phone +61-2-9555-1494.

THE BROOKLIN INN—Year-round lodging, fine dining, Irish Pub. Modern interpretations of classic Maine dishes. Always organic/local. Winter Getaway: \$155/DO, dinner, breakfast, room, November–May. Summer rate: \$125/DO (plus dinner). brooklininn.com, ME, 207-359-2777.

Wanted

OLD WOODWORKER LOOKING for wooden boat to restore. Call old Lou, 513-310-2052.

Wood



**NEWPORT
NAUTICAL
TIMBERS**

"Wood Sawn for Better Boatbuilders"
White Oak • Atlantic White Cedar • Cypress
Longleaf Yellow Pine • Sitka Spruce
401-253-8247 NewportNauticalTimbers.com

RARE WOODS—Ebony, boxwood, rosewood, satinwood, tulipwood, boatbuilding woods, +120 others. 207-364-1073, info@rarewoodsusa.com, www.rarewoodsusa.com.

2,500 BF OLD GROWTH HEART Cypress—All clear, 13" and wider. 8-16', heavy to 16'. White cedar, longleaf yellow pine, old growth Douglas fir, western red cedar, Sitka spruce. 352-474-7200, steve.tillman@cox.net.

CEDAR BOAT PLANKING—Live edge. Select and mill run. Clear spruce rough, full 2". Tweedie Lumber, 207-568-3632, bruce@tweedie.com.

BOULTER PLYWOOD—Marine plywood 4'×8' to 16', 5'×10' to 20'—1/8" to 1" okoume, sapele, meranti, teak, ash, khaya, teak and holly, teak and rubber. Lumber—Sitka spruce, teak, mahogany, green oak, ash, cypress, fir, Spanish and red cedar, teak decking—lengths up to 20'. Milling services. Nationwide delivery. www.boulterplywood.com, 888-4BOULTER.

 **noah's**
BS1088, BS6566 Marine Plywood
Meranti, Okoume & Teak
20' Philippine Mahogany
(800) 524-7517
www.noahsmarine.com

SLOW-GROWING, OLD-GROWTH white oak (*Quercus alba*), up to 50' long and 42" wide. Longleaf pine (*Pinus palustris*) out to 50' long. Old-growth white pine, 22'-28'. Black locust, American elm, and larch. **NEW ENGLAND NAVAL TIMBERS**, CT, 860-480-3402.

L.L. JOHNSON LUMBER MFG. CO.
& JOHNSON'S WORKBENCH
**YOUR #1
MARINE LUMBER
RESOURCE**
MAHOGANY, TEAK, OAK, ASH, CEDAR,
SPRUCE, FIR, CHINE & KEEL STOCK,
MARINE PLYWOOD AND MORE!
ANY OF OUR 3 LOCATIONS:
CHARLOTTE, MI
GRAND RAPIDS, MI
SOUTH BEND, IN

P.O. Box 278
563 N. COCHRAN AVE.
CHARLOTTE, MI 48813
800-292-5937
WWW.THEWORKBENCH.COM

ATLANTIC WHITE CEDAR—Wide 12"-16", canoe strips, 2"x stock teak, new or reclaimed; utility fencing. 203-245-1781 or armsters@yahoo.com.

WWW.DIAMONDTEAK.COM—True teak wood. Planing, sanding available. Quarter-sawn teak for decking; tongue-and-groove; veneer; custom work. Also mahogany and Spanish cedar. Highest quality. We ship worldwide. 215-453-2196, info@diamondteak.com.

BLACK LOCUST LUMBER and found curves. Cut to your specifications. Band-sawn. 4/4, 6/4, 8/4, and bigger. ablacklocustconnection.com, 413-624-0242.

PLANKING STOCK IN LENGTHS to 32'—angelique, silver balli, wana, angelique timbers. Call for quotes. Gannon and Benjamin, 508-693-4658.

TEAK LUMBER FROM \$7.50/bf, and teak decking from \$0.99/lf. Call ASI, 800-677-1614 or e-mail your requirements to rogerstevens@asi.com.

TEAK, MAHOGANY, PADAUK, purpleheart, white oak, teak decking, starboard. Complete molding mill-work facilities. Marine plywood. Custom swim platforms. **SOUTH JERSEY LUMBERMAN'S INC.**, 6268 Holly St., Mays Landing, NJ 08330. 609-965-1411. www.sjlumbermans.com.

Boats For Sale

FREE CLASSIFIED WRITING GUIDE

Tips on writing a 'Boats for Sale' ad, and how to prepare for questions from potential buyers. For a copy, call Wendy, 207-359-7714 or email classified@woodenboat.com.



2000 REDWING, 18'6"—CUSTOM-built in New Bedford, MA. Mercury 15-hp, four-stroke outboard, special shop-made trailer. Top deck, extra mahogany on framework, cockpit, and stern. Little use, good condition. \$9,800. 413-531-3444.



THE WEST POINT SKIFF—Three models: 16', 18', and 20'. See our website www.westpointskiff.com, for more info. 207-389-2468.



"SUVA," 1925 STAYSAIL SCHOONER designed by Ted Geary. A gorgeous and sound classic yacht. Burmese teak. \$159,000. Financing available. Port Townsend, 360-643-3840. See specs www.schoonersuva.com. Email schoonersuva@gmail.com.



16' LOWELL'S BOAT SHOP SAILboat—Traditionally built 1987, a classic in excellent condition. Trailer, Shaw & Tenney oars, full set of sails, 90cc Mercury Sailpower outboard, full custom canvas cover. \$6,500 firm. MA, wmcullom@earthlink.net.



"SUMORIA," 1929 CUSTOM 60' William Atkin motoryacht—Full details at www.sumoria.com. Serious inquiries only. Minimum \$25,000.



33' FRIENDSHIP SLOOP—45' LOA, c.1900, Wilbur Morse-built "Blackjack." Carvel cedar on oak frame, replanked 2001. Full iron-shoe exterior ballast, mahogany trunk cabin/cockpit, Edson worm-gear/wheel steering. Gaff-rigged, spruce spars, Dacron sails (main, staysail, jib). Needs restoration. \$13,500 or best offer, RI. 401-441-7606, wkm@cox.net.



1953, 27' SHEPHERD—Completely rebuilt in 2006. Chrysler M47Ss, freshwater cooled, bronze-rubber impeller water pumps, electronic ignition. Low hours since rebuild. Varnish stripped, recoated, 15 coats hi-gloss. Hardware rechromed. Bimini top enclosure, isinglass panels. Full boat storage cover. Jupiter, FL, \$118,750. Doug, 954-303-4349, gdougieg@aol.com, www.photobucket.com/babalu_photoshoot.

Boats For Sale

continued



1939 HACKERCRAFT 19. THIS IS a winner! Original to factory hardware, rebuilt engine, steering, four factory options. Very complete. Needs varnish and upholstery. \$29,900. With or without engine, trailer. Pictures, video. 704-588-4372.



1928 LAKE UNION "DREAMBOAT"—Restored to excellent condition (mechanical and structural). 86-hp Isuzu (400 hrs). Garman nav. plotter. VHF radio. New wiring/fixtures/water system throughout. This rare, classic yacht is the true Dreamboat from Lake Union Dry Dock; a beautiful part of history. Motivated seller asking \$67,000. Details at www.our-sunshineboats.com. Call Bill, 206-445-2099.



"WINFIELD LASH," 2000 ATKIN Schooner, 38'—Handsone vessel with unique features. Survey available. David Jones Yachts, 207-236-7048, classics@midcoast.com.



16' WHITEHALL—Double-planked on oak. Built 1979. New spritsail, new trailer, and new boat cover. Immaculate. John Gardner design. Seattle. \$9,000. grantdull@gmail.com.

26' ELDREDGE-McINNIS SLOOP—Cedar on oak, bronze-fastened, lead keel. Universal diesel with less than 100 hours. Great condition. Located in Mystic, CT. Illness forces sale. Call 201-438-2758, leave message or email psvw60@aol.com for more information.



"BLUE GOOSE," 28' CATBOAT—6' bowsprit, 4' rudder, 12' beam, 4' draft. Built 1928 by Brown, Taunton, MA, with no centerboard, 6' headroom, oak frames, cedar planking. Rebuilt 1992, Pease Brothers, Chatham. 50-hp BMW diesel, new 1992. Fully found, ready to sail. Beaufort, NC. \$34,500. Tom Harper, harpoon1@bellsouth.net, 336-227-1153.



"AMERICAN EAGLE," 1930 Gloucester Schooner, 125'—CGI 56-day, 28 overnight. National Historic Landmark. \$750,000. David Jones Yachts, 207-236-7048, classics@midcoast.com.



GRAND BANKS 1973, 32' SEDAN. Lake St. Clair, Michigan. Needs wood repairs, refinishing and sweat equity for a great cruising boat. Excellent equipment. \$21,500. Call Tony Peot 920-746-6236.

BIMINI BONEFISHER CUSTOM Wood Flats Boat/Runabout—Hull #19, 16'. Mercury 2011 40-hp four-stroke with under 12 hours, with extended warranty purchased. Trailer is custom with chrome rims and spare tire. Asking \$29,999 or best offer. Call JC at 786-508-2224.



UDERS 16, "GOD'S POCKET"—26' LOA, 4' draft, excellent condition. Originally 1950s Northeast Harbor fleet #12. Mahogany hull completely restored, bottom fiberglassed, 2013. New keel-bolts. Spruce spars. Jib, genoa, 2010 main, boom tent, seat cushions, two pipe berths. Located in Southwest Harbor, ME. \$20,000. 207-244-7697, jsnider@midmaine.com.



ASSEMBLED SCAMP KIT—EPOXY-coated. Rudder and centerboard built. 200 hours invested. Ready for you to paint/varnish, rig, and sail away. \$7,200. HookedOnWoodenBoats.com/SCAMPForSale. 425-319-7800.



36' MAYS CRAFT, 1998, BUILT BY Mayea Boat and Aeroplane Works—All wood/epoxy. A modern classic. Mercury power, low hours, and in exceptional condition. See more at www.galatiyachts.com, and call Rob at 248-881-7124.

1946 HINCKLEY 21, 28.5' x 8' x 4.5'—Exterior restoration 2011. New sails 2011. All original except for engine and toilet. Sleeps three. Yanmar 3GM30F. Airhead toilet. Located in CT. Call Rob, 914-393-0295.



"PENTIMENTO," 2005 CHUCK Paine Sloop, 26'—Electric inboard engine, sleeps two, trailer. Sailaway condition. \$75,000. David Jones Yachts, 207-236-7048, classics@midcoast.com.

36' HINCKLEY YAWL, 1954—25-hp rebuilt Westerbeke diesel. New main sail and cover, bottom 'glassed. Photos available. \$9,500. 410-957-1011.

ROZINANTE—L. FRANCIS Herreshoff's design No. 98, 28' light-displacement canoe-yawl. New traditional construction by professional shop. Please call for details and specifications. 860-535-0332, www.stoningtonboatworks.com.



"PROTEUS," 1929 ELCO HARDTOP Commuter, 50'—Very well-kept with stunning interior. \$185,000. David Jones Yachts, 207-236-7048, classics@midcoast.com.

GAFF-RIGGED 42 x 12 x 5.5 Schooner—Fir on oak. Colvin-design, 40-hp Yanmar diesel. Launched 2005. \$49,000 or best offer. 360-697-3367.



UDERS 16, RECENT RENOVATION—New deck, new sails, AwlGrip flag blue hull 2013; original wooden spar; custom bronze, removable engine mount; 6-hp Mercury four-stroke engine; B&G speed and depth; new autohelm tiller, autopilot. Sleek, fast, and beautiful. \$19,500. Jim, 914-213-1028 or fischer112@hotmail.com.



ICONIC 1932 STEPHENS 55' motor yacht—Total rebuild 2009. New engines, genset, electronics, mechanical, electrical, etc. Lying Seattle area. Price negotiable. See photos, history, complete details, and contact information at www.seadog.yachtflyers.com.



2009, 11 3/4" ASA THOMSON SKIFF—A 1927 classic built to modern, professional standards. Copper/bronze fastened, fine condition. \$1,300. Marshfield, MA. 781-834-2979.

2004, 26' SEABIRD YAWL with 10-hp Yanmar diesel—Excellent condition, with trailer. Stored inside at Eric Dow Boat Shop, Brooklin, ME. \$10,000 negotiable. Call 201-569-3787.



1940 CHRIS-CRAFT 22' SEDAN—With modern power V8 Crusader 350 engine. MBBW premium restoration. Completely restored from the keel up, including new 3M-5200 no soak bottom with new chines, keel, stem, frames, knees, frame tie, okume inner bottom, solid African outer bottom, new mahogany hull sides—all attached with 3M-5200. New linoleum flooring, show quality paint and varnish, modern classic gauges, restored steering wheel, new chrome, new German hartz cloth tan canvas top, new head liner, leather upholstery, cabin top cover, matching MBBW Classic Trail custom, inboard trailer. Total my cost \$85,000. Bid wanted—motivated seller. 860-671-0846.



41' CUSTOM SPARKMAN & STEPHENS BERMDA CUTTER—Beautiful yacht with amazing history, in perfect condition. Full professional renovation completed in 2006. Ready for day cruise or racing. On Lake Ontario since 1947. 905-891-8207, slavek@northlakesyachting.com.



"RETTA," 2008 TOPSAIL FRIENDSHIP, 24'—Designed and built by David Westphal. \$35,000. David Jones Yachts, 207-236-7048, classics@midcoast.com.

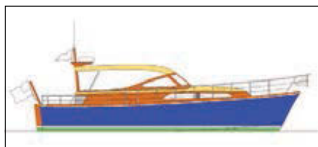


2008, 34' TRADITIONAL GAFF-RIG Yawl—Very handsome Thomas Gillmer Blue Moon design, crafted in Maine. Bronze fastened cedar on oak frames. 23' LOD, 8'6" beam, 4' draft, teak cockpit and foredeck, two large berths, marine head with holding tank, water tank, 14-hp Yanmar, Garmin, depth. Cutts & Case maintained, properly stored for the season in Oxford, MD. \$39,900. 609-876-9507, markscott15010@gmail.com.



38' LUDERS 24, 1947—38 x 24 x 6 x 5, laminated mahogany, new Sitka mast plus aluminum, good sails, totally rebuilt. \$95,000. cutwater@earthlink.net, 516-639-1033.

SWIFTY 14 SHELL BOATS DESIGN 14 x 7—Excellent example of this beamy, responsive, traditionally rigged daysailer. Red sail. Central Kentucky. \$1,950, darnold423@gmail.com.



UNFINISHED, PROFESSIONALLY built 35.5' 'xpress' cruiser—Hull, bulkheads, frames, and cabin sides completed. Approximately 95% of all materials; various foundry parts; including machinery and running gear available; with engineering data and drawings included. Not a project for amateurs. For detailed information, 859-266-6903, seacoyacht@yahoo.com.

KEN SWAN-DESIGN, LITTLE GEM rowboat—Kirby paint, two oarlock positions, bronze oarlocks, Shaw & Tenney oars with leathers. Shorelander galvanized trailer dolly, custom cover, trolling motor, sail rig. Lawrence, Kansas, make offer. 785-864-3287 csull@ku.edu.



"ARGONAUT II," EDSON SCHOCK 73' canoe stern—Built in 1922 for a Canadian logging company. Very heavily built with extensive upgrades. Sleeps nine, two heads, one shower. In Seattle, in freshwater, has Jones Act Exemption. <http://argoleeb.wix.com/argonaut-ii-for-sale>. Call 206-313-0223.



"ZAIDA," 1937 ALDEN CUTTER, 60'—Strong pedigree and worthy candidate for some needed work. \$139,000. David Jones Yachts, 207-236-7048, classics@midcoast.com.



30' ELDRED-COOPER CUSTOM runabout, 2009—White cedar planking, varnished teak trim, V-berth forward with a Porta-Potti, four-cycle Yanmar diesel. Very well built and maintained. \$185,000, Ballentine's Boat Shop, MA, Amy_bbs@cape.com, 508-563-2800.



1957 CHRIS-CRAFT 18' SEA SKIFF lapstrake utility—New cushions, folding top and side curtains. Original 95-hp K engine, runs strong. Hull in excellent condition, and ready to go, with custom cover, and tandem trailer. \$9,000. 905-727-8671 or johnscooper@yahoo.ca.



18 1/2' EEL—WILLIAM GARDEN-design; Gordon Swift built (2000). Gunter-rigged yawl. Needs a younger captain. \$5,000. 941-964-2049, ldhammond@ymail.com.



DOUBLE OR SINGLE SCULL AND KAYAK—Versatile and beautiful. Pictures available. Location southeast Virginia. Contact Mike at 757-775-7696, or micjohcor@gmail.com.

Boats For Free

1967, 45' MATTHEWS—Last of company's famed wooden vessels. Twin Detroit diesel 8V-53s. Restored in 1997. Storm damage to upper deck. Seniors must let go. Louisiana, 985-640-8674.

1947, 34' CHRIS-CRAFT—Has had some work done; three-axle trailer. Most hardware, no motors. NY, 607-216-7355.

Want Boats? We've got more!

See BOATBROKERS in this issue...

...and the online MarketPlace 'Boats for Sale' listings at woodenboat.com/boats-sale

WoodenBoat Classified Order Form

Please circle the issue(s) in which you wish this ad to appear. Example Mar/Apr is one issue.

NOTE: Ads received after the deadline may be placed in the following issue

Issue Date —	Mar/Apr	May/June	July/Aug	Sept/Oct	Nov/Dec	Jan/Feb
Deadline —	Jan 6, '14	Mar 5, '14	May 5, '14	Jul 7, '14	Sept 5, '14	Nov 5, '14

- ◆ Boats advertised for sale must have wooden hulls.
- ◆ One boat per ad. Limit: One photo per ad.
- ◆ "BOATS FOR FREE" ads are FREE!
- ◆ All classified ads are prepaid.

- ◆ Counted as one word = phone and fax number, email or web address. All else: a word is a word. WoodenBoat does not use abbreviations such as OBO, FWC, etc. Please spell out.
- ◆ Please print clearly—WoodenBoat is not responsible for errors due to illegible copy.

TEXT: (20 word minimum or \$55.00)

Suggested Category _____

1 _____	2 _____	3 _____	4 _____
5 _____	6 _____	7 _____	8 _____
9 _____	10 _____	11 _____	12 _____
13 _____	14 _____	15 _____	16 _____
17 _____	18 _____	19 _____	20 _____
21 _____	22 _____	23 _____	24 _____
25 _____	26 _____	27 _____	28 _____
29 _____	30 _____	31 _____	32 _____
33 _____	34 _____	35 _____	36 _____
37 _____	38 _____	39 _____	40 _____
41 _____	42 _____	... Attach sheet for additional words ...	

WORD COUNT _____ x \$2.75 = \$ _____ + Photo (\$75) = \$ _____ = \$ _____ **TOTAL**

(20 words minimum = \$55.00 /issue)

(Payment must be in U.S. funds drawn on a U.S. bank).

Date _____

NAME _____

Address _____

Telephone _____ Email _____

PAYMENT METHOD

☐ Check ☐ Money Order ☐ MC / VISA / AMEX / DISCOVER # _____ Exp. Date _____

Signature _____

RATES EXPIRE NOVEMBER 5, 2014

classified@woodenboat.com ◆ Tel: 207-359-7714

INDEX TO ADVERTISERS

ADHESIVES & COATINGS

Bristol Finish	www.bristolfinish.com	108
Endurance Technologies/ MAS Epoxies	www.masepoxy.com/challenge	37
Epifanes North America	www.epifanes.com	Cover II
Interlux	www.yachtpaint.com	Cover IV
System Three Resins, Inc.	www.systemthree.com	14
Tri-Texco Inc.	www.tritex.com	9
West System Inc.	www.westsystem.com	19

BOATBUILDERS

Adirondack Guide Boat	www.adirondack-guide-boat.com	117
Arey's Pond Boatyard	www.areyspondboatyard.com	120
Beetle, Inc.	www.beetlecat.com	118
Billings Diesel	www.billingsmarine.com	114
Carpenter's Boat Shop	www.carpentersboatshop.org	120
Choptank Boatworks	www.choptankboatworks.com	120
Crocker's Boat Yard, Inc.	www.crockersboatyard.com	118
Cutts & Case	www.cuttsandcase.com	119
Edgecomb Boat Works	www.edgecombboatworks.net	119
Fish Brothers Marine Service	www.fishcustomboats.com	110
Gannon & Benjamin	www.gannonandbenjamin.com	118
Haven Boatworks, LLC	www.havenboatworks.com	119
Jensen MotorBoat Company	www.jensenmotorboat.com	117
Laughing Loon	www.laughingloon.com	117
MP&G, L.L.C.	www.mpgboats.com	120
Pendleton Yacht Yard	www.pendletonyachtyard.com	117
Reuben Smith's Tumblehome Boats	www.tumblehomeboats.com	119
Richard S. Pulsifer, Boatbuilder	www.pulsiferhampton.com	120
Rumery's Boat Yard	www.rumerys.com	117
Seal Cove Boatyard	www.sealcoveboatyard.com	114, 116
Stonington Boat Works, LLC	www.stoningtonboatworks.com	119
Traditional Boat, LLC	www.mainetraditionalboat.com	120
Van Dam Custom Boats	www.vandamboats.com	116
W-Class Yacht Company, LLC	www.w-class.com	115
Woodie's Restorations	www.woodiesrestorations.com	111
Woodwind Yachts	www.woodwindyachts.com	118

BROKERS

Brooklin Boat Yard	www.brooklinboatyard.com	112
Concordia Yacht Sales	www.concordiaboats.com	113
Metinic Yacht Brokers	www.meticinyachts.com	113
Morin Boats	www.morinboats.com	111
Peterson Associates	www.petersonassociates.com	113
S/V Mistral	www.mistral-yacht.com	112

EVENTS

Boatbuilders Show on Cape Cod	www.boatcapecod.org	22
Boatbuilding & Rowing Challenge	www.woodenboat.com/barc	17
Key West Classic Regatta	www.keywestclassicregatta.com	1
Maine Boatbuilders Show	www.portlandcompany.com	20
Ucina Confindustria Nautica	www.ucinacnautica.com	10-11
WoodenBoat Show	www.thewoodenboatshow.com	Cover III
Sail Antigua Classics	www.woodenboat.com	36
Maritime Tour of England and Scotland	www.woodenboat.com	4

HARDWARE & ACCESSORIES

Atlas Metal Sales	www.atlasmetal.com	52
Barkley Sound Oar & Paddle Ltd.	www.barkleysoundoar.com	22
Canadian Tack and Nail	www.canadiantackandnail.com	109
CC Fasteners	www.ccfasteners.com	108
Hamilton Marine	www.hamiltonmarine.com	25
J.M. Reineck & Son	www.bronzeblocks.com	20
Keystone Spike Corporation	www.keystonespikes.com	23
R&W Traditional Rigging & Outfitting	www.rwrope.com	107

Top Notch Fasteners	www.tnfasteners.com	45
Wooden Boat Chandlery	www.shop.woodenboat.org	105

INSURANCE

Heritage Marine Insurance	www.heritagemarineinsurance.com	23
-------------------------------------	---	----

KITS & PLANS

Arch Davis Design	www.archdavisdesigns.com	123
Chesapeake Light Craft, LLC	www.clcboats.com	121
Devlin Designs	www.devlinboat.com	122
Directory of Boat Kits and Plans	www.woodenboat.com	124
Fiberglass Supply	www.fiberglasssupply.com	122
Francois Vivier Architecte Naval	www.vivierboats.com	124
Glen-L Marine	www.glen-l.com	123
Guillemot Kayaks	www.kayakplans.com	124
Hewes & Co.	www.cnc-marine-hewesco.com	124
Noah's	www.noahsmarine.com	122
Parker Marine Enterprises	www.parker-marine.com	123
Pygmy Boats Inc.	www.pygmyboats.com	123
Tippecanoe Boats, Ltd.	www.modelsailboat.com	124
Waters Dancing	www.watersdancing.com	122

LUMBER

Wolstenholme International	www.joubert-group.com	44
--------------------------------------	---------------------------------	----

PRINTS & PUBLICATIONS

<i>Calendar of Wooden Boats</i>	www.woodenboatstore.com	24
<i>Dorade</i>	www.doradehistory.com	106
<i>Getting Started In Boats</i>	www.woodenboat.com	116
<i>Professional BoatBuilder</i> Subscription	www.proboat.com	21
<i>Small Boats</i>	www.woodenboat.com	12
<i>WoodenBoat E-Newsletter</i>	www.woodenboat.com	52
<i>WoodenBoat Subscriptions</i>	www.woodenboat.com	32

SAILS

E.S. Bohndell & Co.	www.esbohndell.com	109
Gambell & Hunter	www.gambellandhunter.net	44
Nathaniel S. Wilson, Sailmaker	www.nathanielwilson.com	105
Sailrite Enterprises	www.sailrite.com	14
Sperry Sails, Inc.	www.sperrysails.com	106

SCHOOLS & ASSOCIATIONS

Antique & Classic Boat Society	www.acbs.org	110
The Apprenticeshop	www.apprenticeshop.org	8
Center for Wooden Boats	www.cwb.org	52
Directory of Boat Schools	www.woodenboat.com	120
Great Lakes Boat Building School	www.glbbs.org	18
HCC METC	tech.honolulu.hawaii.edu/marr	107
Northwest Maritime Center	www.nwmaritime.org	9
Northwest School of Wooden Boatbuilding	www.nwboatschool.org	21, 53, 108
Westlawn Institute of Marine Technology	www.westlawn.edu	17
WoodenBoat School	www.woodenboat.com	26-27

TOOLS

Shelter Institute	www.shelterinstitute.com	53
-----------------------------	------------------------------------	----

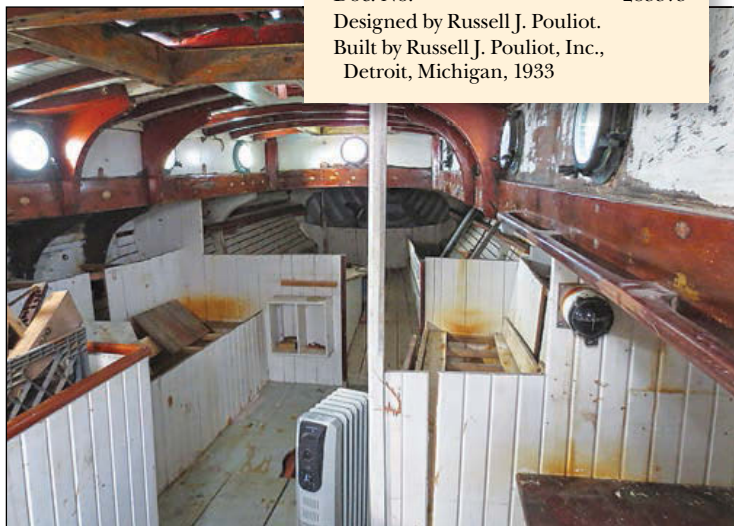
MISCELLANEOUS

American Cruise Lines	www.americancruiselines.com	7
Beta Marine US Ltd.	www.betamarinencc.com	45
J.J. Best Banc	www.jjbest.com	110
Half-Hull Classics	www.halfhull.com	17
Strong Fire Arms	www.strongfirearms.com	105
The Graphix Garage	www.thegraphixgarage.com	110
U.S. Bells	www.usbells.com	44
Wooden Boat Rescue Foundation	www.woodenboatrescue.org	45
WoodenBoat Store	www.woodenboatstore.com	100-102



BACCARAT

A swift keel cutter



MAYNARD BRAY (BOTH)

BACCARAT Particulars

LOA	46' 4"
LWL	33' 3"
Beam	11'
Draft	6'
Doc. No.	283375
Designed by Russell J. Pouliot.	
Built by Russell J. Pouliot, Inc.,	
Detroit, Michigan, 1933	

For nearly 40 years, Skip Green sailed BACCARAT all summer long from his home on the Maine coast. He kept her in good shape while he could, but his recent death means she needs a new owner to look after her and bring her back to her former glory.

Launched in 1933 into Detroit's St. Clair River from the designer's boatyard, BACCARAT proved fast right from the beginning. In her first year, she won the 235-mile Port Huron-Mackinac Race and repeated this same win for the next three years. In between, she got her first taste of salt water and to everyone's surprise took Class B honors in the 1934 Bermuda Race. Not bad for this young seat-of-the-pants designer and the boat he built named BACCARAT, because its performance was considered a gamble.

Russell Pouliot's father, Joseph, also built boats, but this eldest son was a sailor and knew about racing—before age 30 having won the same race from Port Huron to Mackinac Island in his own boat BERNIDA, a George Owen-designed R-class sloop. BACCARAT, in fact, looks a little like a big R-boat: slim and low, with generous overhangs and a big rig.

Around World War II, BACCARAT moved permanently from fresh water to salt—home-ported first in City Island, then for many years on Buzzards Bay. Skip Green and his then-wife, Lucy McCarthy, acquired BACCARAT in Mattapoisett in 1975. After a few years sailing and living aboard, they parked her ashore in Brooks, Maine, which is a few miles inland from Belfast. They were partway through a structural, leak-fixing refit when Anne and I met them through Joel White, whom they'd enlisted to help guide the repair. In the late 1980s when the boat was once again in commission, we often sailed our own yawl AIDA

in company with this big, swift engineless sloop.

Skip Green's life took many turns, but BACCARAT remained always at its core. He sailed her often, and frequently all by himself. She's big for singlehanded, but despite Skip's poor vision (he read a chart with a magnifying glass and could see buoys only with binoculars), he managed a solo cruise to Nova Scotia one summer without incident. How he loved that boat!

Skip's repair and maintenance has always been of a utilitarian variety; he did everything himself without boatyard assistance but not to high-end yacht standards. Strength and performance were what he sought—along with a passably decent appearance. In recent years, his failing health put an end to all of it, and for the past three years, BACCARAT has lived ashore under a temporary shed where she's begun to dry out. Skip Green kept this love of his life going for as long as he was able, but now that he's gone (Skip died in October 2013), the boat needs another owner with the same good sense and energy to patch her up and get her in commission again.

BACCARAT is still in Maine, located next to Skip's shop at the north end of Islesboro—a ferry ride from Lincolnville Beach, then a drive. To learn more or to arrange for an inspection, contact Karen Betts by email at klbetts@gwi.net.

Maynard Bray is WoodenBoat's technical editor.

Send candidates for Save a Classic to Maynard Bray, WoodenBoat, P.O. Box 78, Brooklin, ME 04616.

THE 23RD ANNUAL WoodenBoat Show

One Admission Price
Something for every wooden boat enthusiast!



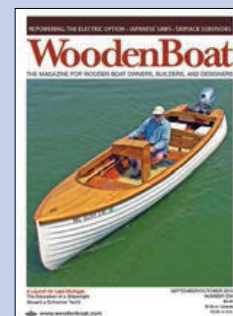
- ☀ Expert Skill Demonstrations ☀ Family BoatBuilding ☀ Skua Racing ☀ I Built It Myself Reader-Built Boats
- ☀ *New!* Design-Build Competition ☀ Mystic Seaport's 19th Century Seafaring Village
- ☀ In-Water and On-Land Boat Displays ☀ Boatbuilding & Rowing Championship
- ☀ Marine Accessories, Books, Art, Tools, Kits, and so much more!



WoodenBoat



Join the Celebration!
WoodenBoat Magazine's 40th Anniversary
At The WoodenBoat Show
Mystic Seaport, Mystic, CT, June 27-29, 2014
www.TheWoodenBoatShow.com for information and tickets.



 **Interlux**[®]

Our World is Water

Generations of boaters can't be wrong

Passing down the lessons from years of experience is invaluable. Technique, discipline and a trust in the right materials are essential for great results you can be proud of.

But taking a leap of faith to a different product can be the hardest part.

With over 100 years experience in the science of boat care, our varnishes have been specially formulated to provide the best treatments available for your boat. So that leap of faith is really just one small step - towards the fantastic finish and high level of protection you demand.

Whether traditional tung oil varnish, urethane alkyd or extended performance with two-part polyurethane, we have a range of options. Contact us today or visit www.yachtpaint.com

Apply the Interlux heritage to the whole of your boat. No matter how big or small. Interlux Varnish – be more than proud.



Find us on
Facebook

**AkzoNobel**