

CARBONICS

Advanced Composite Engineering & Manufacturing for Marine & Industrial Applications



GOETZ MARINE TECHNOLOGY PRODUCT BULLETIN • NUMBER FOURTEEN WINTER 2000

SWAN 68 "Y2K" GETS NEW GMT SPAR

Earlier this year Goetz Marine Technology shipped a complete carbon rig package to Nautor's Swan for a new 68 footer. As with most of GMT's projects the spar had numerous custom features. The center cockpit sloop was built with the ultimate dual purpose life in mind. For its racing career, intermediate modulus carbon pre-preg was used to maximize its performance around a race course. All components were made in carbon and many of its cruising components were made to be easily removed for racing.

Aesthetics played an equal role in the design and construction of the spar. Perhaps the most striking feature of this rig package was the custom Park Avenue styled boom. The sculptured elegance of the boom's design sparked an envious reaction from the captain and crew on a sistership lying alongside.

Two months later, just 45 seconds into their first race, disaster struck. A fifty footer sailing in the class behind Y2K was headed to the start line and accidentally passed too close beneath the Swan. The subsequent locking of rigs left both boats dismasted and 14 people in the water. Fortunately, no one was hurt. The owner quickly got over his disappointment. He challenged GMT

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Photo: Beisy Coakley

Recently launched SONNY, Dieter Empacher designed 70 foot cutter was built by Brooklin Boat Yard with spars built by GMT.

OPTIMIZING THE BOOM: AN ONGOING TREND FOR THE NEW MILLENNIUM

These days, in the custom composite spars business we are seeing a continuing trend toward boom optimization. Where once, the boom simply held the mainsail, it now provides cockpit lighting, sail handling and flaking, awning support and stowage and a significant architec-

tural element to a yacht.

The largest improvement in aluminum booms came by building them out of carbon fiber. Carbon booms are much lighter. This improves sailing performance and safety when gybing. A side benefit of carbon is that the boom looks great for years thereby reducing maintenance.

The single handed crowd popularized the use of carbon or alloy racks to serve as foundations for lazy jacks. Positioned on the boom at in-

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GMT REPORT FROM NORTHERN EUROPE

Christian Gnass and Sailtec GmbH have been quite busy promoting the GMT name and our carbon spars. GMT displayed at the Dusseldorf Boat Show earlier this year for the first time. Sailtec had its display at the Hamburg Boat Show in October and will share a booth with GMT at the METS show in Amsterdam in November. GMT will also be on the Sailtec stand again at Boot Dusseldorf in January of 2001. GMT through Sailtec has supplied a pair of double tapered spinnaker poles for a classic twelve meter recently restored at the world renowned Walsted's yard in Denmark and will soon begin designing the complete rig package for a 48 foot Judel/Vrolijk day sailor. These are just a few of the many projects Christian has in the works, spreading the word about GMT carbon.

GMT NEWS

As usual, GMT sparred and rudder-equipped boats were on the starting line for the 2000 Newport to Bermuda Race. ARIEL (Swan 47), JACQUELINE IV (Hinckley 42), QUADRILLE (Martin 43), WINDWALKER (Hood 60), and ARION (Alden 54) finished respectably in their classes. Mark Ellman won his class in the double handed spinnaker division (for at least the second time) in NEXT BOAT (Morris 36).

This past summer saw the launching of some impressive new boats equipped with GMT spars. SONNY was christened amid scattered showers at Steve White's Brooklin Boat Yard. This beautiful cold molded seventy footer boasts an 85 foot carbon stick and composite boom with hydraulically operated furling. Following shakedown and sail trials between Brooklin and

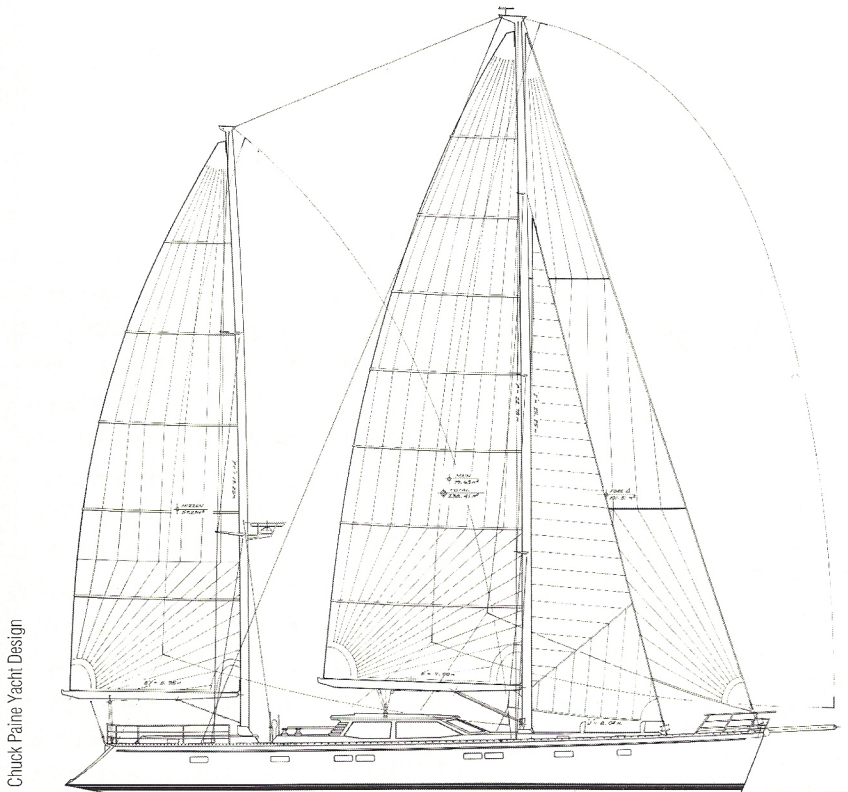
Newport, she won her class in the 238 mile Vineyard Race. The crew reported boat speeds over 10 knots (with generally light winds for most of the race) and was kept in great race condition with air conditioning, ice cream and hot showers. FIREFLY, Morris 45 designed by Chuck Paine (see photo next page) was launched in late July and features a triple spreader 15/16 fractional rig with all carbon components and hydraulic mast jack for easy rig tuning. Just two weeks "out of the box" owner Patrick Wilmerding won his class handily at DownEast Race Week. Hinckley 42 BLUEBELL retrofit her rig for in-mast furling with Rusty Bradford and crew at Hinckley Service. GMT supplied a new 12 ft. taller carbon mast for OLYMPIAN, a 1913 Herreshoff P Class boat for a Great Lakes owner. Watch for story and photos of this unique refit in the next issue of CARBONICS. We recently shipped an all carbon race mast and rudder for JELIK, 77 ft. ULDB based in Hong Kong. The rudder is very deep but extremely thin. GMT constructed it in computer carved female tooling for precise shape and weight control. The mast and rudder are part of an extensive modification undertaken by her owner.

GMT has just gone on line. Our new web site's address is:

www.gmtcomposites.com

Check it out! You will find great pictures of our marine, medical and aviation products. There's a section on carbon spar maintenance as well as response forms to get more information on all our products. Our new email addresses:

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David Schwartz david@gmtcomposites.com
John Gagnon john@gmtcomposites.com



Chuck Paine Yacht Design

80 ft. Paine designed ketch FRUITION currently underway at Kanter Yachts. GMT will soon begin construction of all spars in pre-preg carbon.

NEW PROJECTS

As we prepare for the winter building season we continue to be quite busy with a variety of interesting and exacting projects. Recently completed is a spar package for a 62 foot Paine designed cruiser being finished at Kanter Yachts in St. Thomas, Ontario. Later this winter GMT will begin construction of spars for FRUITION, an 80 ft. Paine designed blue water cruising ketch (see sailplan page 2) for an experienced world cruiser. GMT was awarded contracts to supply the first carbon spar packages for two new Alden 54 foot sloops presently under construction at the Portsmouth, RI boatbuilding facility. One will feature a tall rig triple spreader spar with aluminum in-boom furling system. The other will be equipped with a carbon Stoway mast system electrically operated from the cockpit. The new Morris 486 and another new 46 will be fitted with GMT spars slated for early Spring 2001 launchings. For Sailtec (story p.2) GMT will begin work on the carbon spars for the Judel /Vrolijk 48 building at Thomas Lutje's yard in Hamburg, Germany. The rig will feature a hydraulically operated composite furling boom equipped with rolled sun awnings.

GMT has just received the order for the carbon Stoway mast and boom for a Hood designed 63 ft. pilot house sloop underway at Lyman-Morse Boatbuilding Company. More on this big sister to WINDWALKER in the next CARBONICS.

Other Special Projects components include a set of carbon davits for a 70 ft. power boat building at Lyman-Morse Boatbuilding company, a carbon passerelle built for Delta Marine and a similar smaller passerelle being built for a 62' Nordhavn trawler.

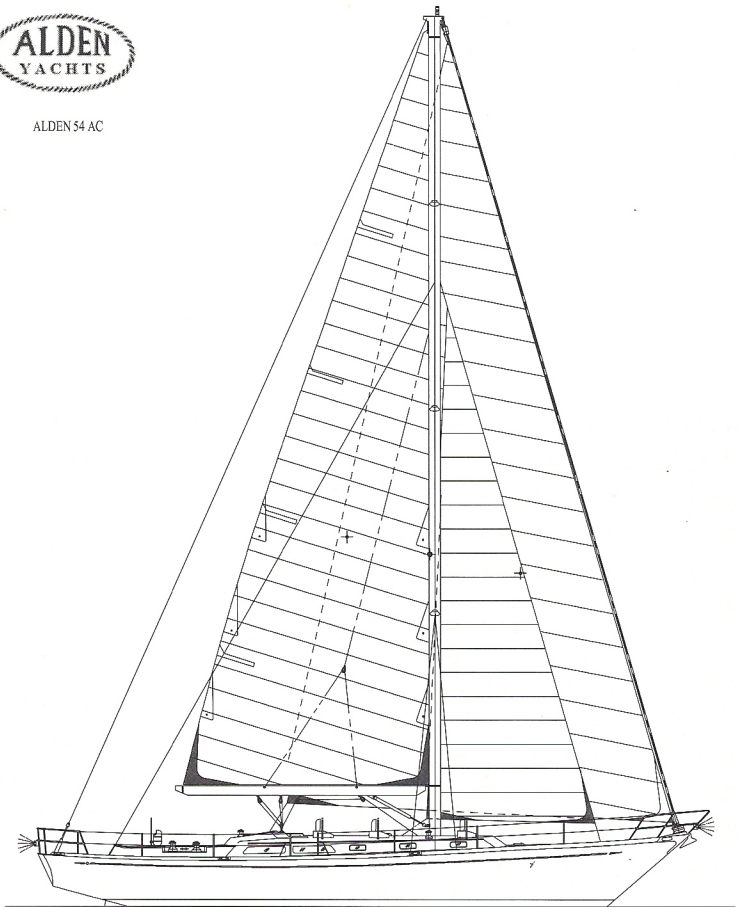


Photo: Art Paine

FIREFLY under spinnaker during sea trials off Morris Yachts' Bass Harbor waterfront facility. The Chuck Paine 45 footer bested her class in Downeast Race Week.



ALDEN 54 AC



Alden Yachts

One of two new Alden 54 footers under construction in Portsmouth, RI. GMT will deliver the first set of spars late in 2000.

Photo: East Bay Newspaper



GMT's longest spar yet, 124 ft. B&R rigged mast for the Rivolta 90 leaves the paint shop. The spar is scheduled to join the boat in December, 2000.

BOOMS

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tervals, the racks provide a wider base for the mainsail to drop into and remain during reefing exercises. This was a must for short handed sailing. Cruising sailors saw the benefits and have been quick to add this option.

A further development of this is the resurgence of the Park Avenue boom. First seen on many of the J Class America's Cup yachts in the early years of the last century, this boom has many varieties which contribute to the overall aesthetics of a yacht. The wide top (as much as 36 inches for one under construction in our shop for a 90 footer) offers a spacious base for dropping a large mainsail while allowing the spar builder to incorporate other features during construction. The down side of this boom is that it's a heavier and more costly boom to build than a conventional section.

Another optional boom for custom and semi-custom boats in the 50 foot plus range is one that reefs and furls your mainsail for you! Available in aluminum and compos-

ite, these systems allow you to maintain reasonable mainsail area and shape while adding the ease of sail handling through the furling operation. These systems provide an alternative to in-the-mast mainsail furling. The recently launched Dieter Empacher designed 70 foot sloop (pictured Pg1) features hydraulically controlled furling and locking mechanism for reefing under any

SWAN 68

Continued from Pg 1

and Nautor to provide an interim aluminum rig within 21 days so he could participate in the Swan Worlds. GMT responded by flying to Finland to transmit all engineering details of the rig to Nautor. Their group produced a new mast in record time. It was flown to France where it met a new set of standing rigging supplied by GMT. The group installed the mast in the boat, tuned the rig and delivered it to Porto Cervo, Sardinia. This great cooperative effort enabled the Swan to be back on the race course and take the Prix d'Elegance to boot.

conditions. Since the owner's prime objective was to have a user friendly system operated for the cockpit, the main halyard runs aft to the starboard hydraulic main sheet winch.

So, whether you're planning a rigging solution for a new yacht or upgrading your existing system, why not let us put our experience to work for you?. Call us today to discuss the many options.



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