

CARBONICS

Advanced Composite Engineering & Manufacturing for Marine & Industrial Applications



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GOETZ EQUIPS ISABELLE AUTISSIER'S PRB FOR AROUND ALONE RACE

During the summer, famed single handed sailor Isabelle Autissier came to GMT for a new carbon mast for her Open 60 footer PRB. Autissier, who had recently completed the New York to San Francisco race, was making final preparations for the September start of the Around Alone at Portsmouth's Alden Yachts. In addition to wanting a lighter spar than her present mast, Isabelle challenged the Goetz team to fabricate the all carbon rig using new techniques to an exacting schedule. Isabelle chose GMT for a combination of reasons: she had sailed on the Goetz sparred CRAY VALLEY with J.P. Mouligne the previous summer in the Around Europe race and knew of our experience in past BOC races. Further, she and shore support crew Jean Saucet knew that GMT has the best record in the industry when it comes to structural integrity of its products.

The mast is made from high modulus uni-directional carbon pre-preg and allowed a weight savings of nearly 100 pounds in the mast tube. Chief Engineer and GMT President David Schwartz worked closely with French structural engineer Herve Deveaux to design the mast to with-



Photo: Billy Black

World renowned solo sailor Isabelle Autissier putting her new Goetz Marine spar through its paces en route to the Charleston start of the 1998/99 Around Alone.

stand the rigors of the Around Alone. Spreader attachments were a new experience for the Goetz crew with pre-preg spreaders permanently bonded to the mast with carbon and epoxy. This method was chosen for its simplicity and ability to eliminate weight from stainless steel pivot pins. All tangs, the mast has three sets of forestays and runners, are carbon, as are masthead and gooseneck fittings and sheave boxes. Composite backing material secures the main-sail track. Aside from headstay bushings and runner tang ferules there is no metal on the entire mast.

Completed in August, the 86 foot spar was trucked to the Alden yard early one Saturday morning. The permanent spreader attachment made this a wide load at 19 feet plus!

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1998/99 AROUND ALONE MARKS TEN YEARS AT THE TOP FOR GMT

In 1988 GMT built its first parts for the BOC Around the World Race when it installed rudders on Duracell for Mike Plant. The lessons learned in building high strength components for the world's longest and most grueling race have been key to our success. As Goetz Marine Technology celebrates its 15th anniversary later this year we are proud of our decade of association with this premier event.

Building rudder posts for IOR boats in the mid 80's led the new GMT to increasingly demanding and high profile applications and events.

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JOHN BOONE JOINS GOETZ CUSTOMER SERVICE TEAM

We are pleased to welcome John Boone to GMT! John will fill the new position of Sales Manager. Assisting Director of Marketing Ben Sprague, John will concentrate on the development of GMT's composite carbon mast and rudder business in both the premier racing and cruising sectors of the industry. "John brings a wealth of practical knowledge to Goetz Marine," commented Sprague. "He will be drawing on more than 15 years of rigging experience and his expertise with One-Designs to Super-Yachts will greatly enhance our sell-

ing and service efforts."

John has worked for rigging companies around the world, including Baltimore Yacht Rigging which he founded in 1992. Most recently he was Sales Manager and Field Rigger for Riggarna, Inc. and his sailing resume includes such high profile programs as Gaucho, Rima, and Full Cry, and Super-Yachts Atlanta, Teel, and Mirabella. "John's combination of sailing and rigging experience make him a much needed and welcome addition to our team here," said GMT President David Schwartz. "I'm delighted to have him join us and look forward to the positive impact he will have on our business."



GMT welcomes John Boone as Sales Manager and member of the Goetz Customer Service Team.

John and his wife Katie, employed by Hinckley Insurance, live in Middletown not far from Second Beach. When not at work they can be found surfing or walking their Golden Retriever Ella.



Photo: Billy Black

Isabelle Autissier and PRB have what it takes to make the others take notice.

..... GMT NEWS

GMT Special Projects Division has been busy with a variety of steering components and non-marine related parts. Earlier this year we built a carbon stern door for the 92 foot sloop Georgiana. The door came out nearly 200 lbs. lighter than the original making the deployment of the yacht's swim platform easier and safer. Gary Crosby constructed a beautiful 2300 mm diameter wheel (see photo and article on page 3) along with a carbon pre-preg rudder and S-glass quadrant. Currently in the shop is another composite shower assembly for a 767 aircraft. Next on the schedule will be a set of four uni-directional carbon pre-preg column covers for the lobby of a building presently under construction in Virginia. Other parts yet to be built include rudders for a Reichel Pugh 48, R/P 74 ft. sled, and a French Admiral's Cup '99 50 footer.

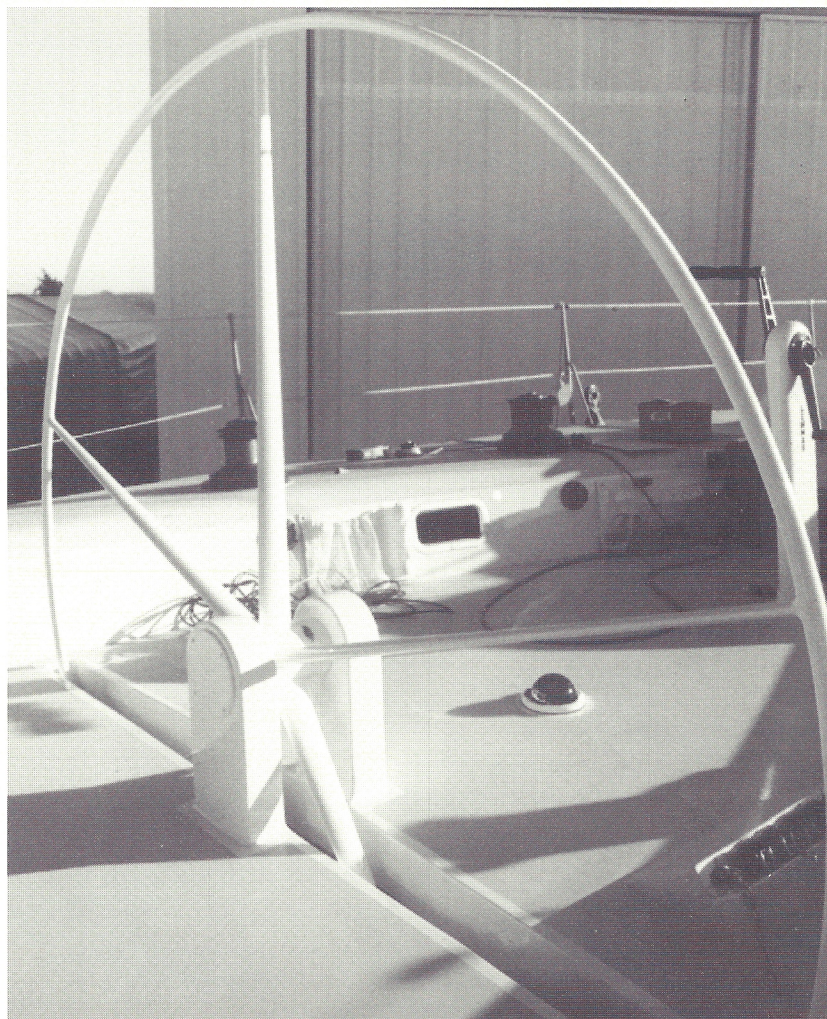
CARBON RETROFIT PROFILE: ALDEN 52 KETCH

In a continuing effort to make the case for carbon spars for older boats, articles on GMT re-fits have become something of a fixture in CARBONICS. We are continually surprised by the number of people who still believe carbon's just for racing. Carbon simply rejuvenates older boats, racers and cruisers alike.

RETRIEVER is an early 1980's cruising ketch built by Palmer Johnson which had recently changed hands. The new owner, Dave Verdier, was interested in seeing what kind of performance gains he could achieve through various modifications. When Dave consulted Naval Architect Niels Helleberg at John G. Alden, N.A. in Boston, he inquired into the benefits of raising the main-mast height to get better light and moderate air performance. This was thought to be a good solution but for the effects of adding weight aloft through increasing the mast height by nearly six feet. One proposed solution was to build the new spars in carbon fiber, resulting in the performance gains through increased horsepower and a reduction in weight aloft of 100 lbs. A new main-mast five and a half feet taller and two foot longer carbon boom combined to increase sail area by 12% and increase the boat's righting moment by 2%.

Commissioning and sail trials took place in May on Lake Michigan's Macatawa Bay. Noted sail-maker and go fast expert Ed Reynolds personally bent on a new suit of Spectra sails for the newly sparred yacht. In light to moderate conditions the boat outperformed her earlier rig's capabilities as ex-

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IDLER, brand new out-of-the-box Nelson/Marek 50 features complete GMT steering system highlighted by its 12.25lbs 2300mm diameter S glass wheel.

AROUND THE BUOYS

With her now six year old GMT rudder PYEWACKET broke another Trans-Pac record, this year in the Pacific Cup. Captain Greg Hedrick, exclaimed "Boy, you guys sure built us a nice rudder." We look forward to building a newer one on the new PYEWACKET under construction in Eric Goetz's shop.

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CARBON RETROFIT *Cont*

pected. After a season of day sailing and cruising with his family, Dave reports all is well and that the new performance lift to his Alden ketch may inspire him to do some competitive "cruising" to a place called Mackinaw.

NEW PRODUCTS

Eric Goetz Custom Sailboats, GMT's favorite customer and partner, recently launched IDLER an IMS 50 from the drafting table of Nelson-Marek Yacht Design. GMT was commissioned to supply the complete steering system from the tip of the pre-preg carbon rudder to the rim of the 2300 mm S-glass wheel. The wheel features a five spoke layout to facilitate walk-through access. Each of the spokes is made in female tooling to an air foil shape. The total weight of the wheel is 12.25 lbs. IDLER will make her debut this Fall and Winter at Key West Race Week before taking on the world in the 1999 Admirals Cup as the US big boat hopeful.

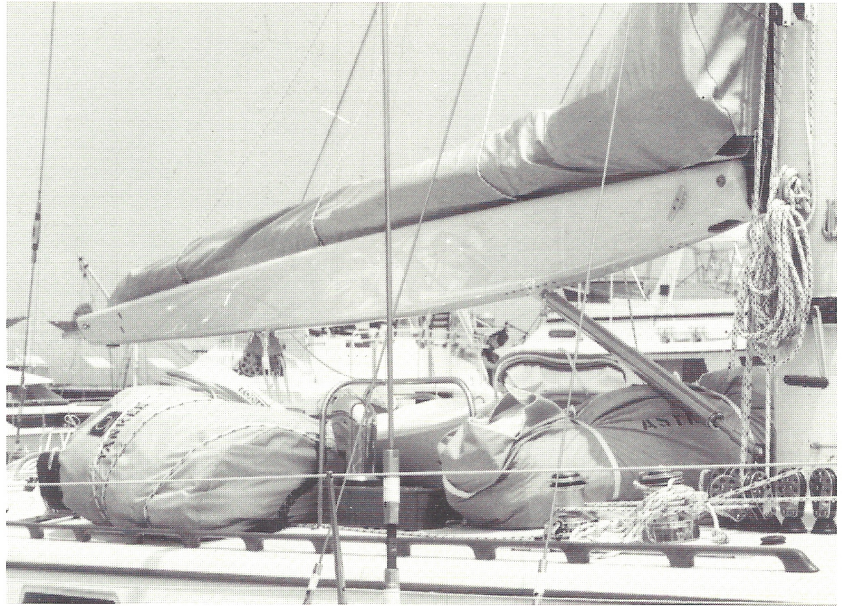
1998/99 AROUND Cont

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Experience gained in the early BOC's enabled Goetz to continually improve its high strength lightweight products leading the company into the development of carbon spars in 1990. While GMT carbon spars were finding their legs, our rudders were finding their way onto America's Cup Class yachts and winning! By 1992 the success of our spars program attracted the attention of designers and single-handers planning boats for the 1994 race. With the addition of an Open 50 mast (Great Circle, ex-Alexandria) and later an Open 60 spar for Steve Pettingill (Hunter's Child), our spars were to be tested as our other parts had. After the dust settled in 1995 Steve had logged the best American finish ever in the Open 60 foot Class, a class still dominated by the French. Steve's achievement was not without duress as his rig survived two rigging failures on two separate legs. Less than a year later Jean-Pierre Mouligne came to GMT President David Schwartz about a new Finot designed 50 footer he was planning. Based on our successes in previous BOC boats, Jean-Pierre chose us to supply both his rudders and rig package. In 1996 Cray Valley shattered the Newport to Bermuda record by over four hours. With over two years' experience in his Cray Valley J.P. is among the entrants in this year's race with the most sailing time on their present boat. With the addition of Isabelle Autissier to the Goetz family of customers (see accompanying article), GMT has sparred boats in both the Open 50 and 60 Classes for the first time.

Through this type of continued experience from the world's most demanding testing laboratory we are

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Goetz carbon Park Avenue boom featured on SCEPTERED ISLE, an Alden designed 63 foot sloop built by Derecktor-Goetz Yachts.

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able to provide the strongest and lightest parts available anywhere. As with other sports, sailing at the top levels, be it America's Cup, Admiral's Cup, Around Alone or Whitbread, provides technological benefits for all levels of the sport. Call us today whether you're setting off around the Bay or Around the World.

ISABELLE *Continued from Pg 1*

The spar went in the boat without incident and Isabelle completed her check list and departed for Charleston and the start. On the way south the crew encountered 50 knot winds from the remains of Hurricane Earl. The mast performed superbly under triple reef and storm jib allowing PRB to beat to weather (the breeze was on the nose the entire trip) at a modest 11 knots. We wish Isabelle fair winds and safe passage in her circumnavigational quest for victory.



GMT Response Card

Name

Address

City

State

Zip Code

Telephone

Please add my name to the Carbonics mailing list.

Please send me more information on the following products.

Composite rudder Carbon spinnaker pole

Carbon fiber mast

Boat type



Goetz Marine Technology

48 Ballou Blvd.

Bristol RI 02809-2728

Tel: 401.253.8802

Fax: 401.253.9395

e-mail: gmt@loa.com

Contact: Ben Sprague

John Boone

104127.3307@compuserve.com