

The Tripp 30 (9.1m) was a production fiberglass yawl (or sloop) built in The Netherlands in the late '50s for Seafarer Yachts, one of several designs Tripp did for this boat company.

Island. Other projects of the day included the production fiberglass Tripp 30 (9.1m), being built in The Netherlands for Seafarer Fiberglass Yachts; and a 40' fiberglass yawl designed for a group from Port Washington's Knickerbocker Yacht Club, to be built by Henry R. Hinckley & Company in Maine. In addition, Tripp & Campbell was about to take delivery of the first of three 32' (9.8m) wooden boats built in Norway, which, in honor of their heritage,

we named the Vineland class.

Tripp also had a potential custom big-boat design in the works, but owner and designer could not agree on the location of the main companionway. Tripp insisted that it had to lead directly from the cockpit to the owner's stateroom, while the client wanted a private cabin with the companionway forward of that. Their differences were never resolved, and the boat was never built.

Many of Tripp's friends and supporters, including Bill Campbell, thought Tripp was simply being stubborn. The incident showed that Tripp was unwilling to compromise when it came to designing a racing layoutdespite the fact that his partner in the firm was eager for the design fee to

banded together to form the Storm Trysail Club, which exists today to promote a healthy respect for the sea among offshore sailors.

Not well known is a series of tests conducted in the 1980s by the Gougeon Brothers shop (Bay City, Michigan; manufacturers of epoxy resins and related products) on typical fiberglass/polyester laminates, which determined that under longterm use (15 years), repeated fatigue cycles can cause as much as 80% of the initial strength of the laminate to be lost—a very sobering statistic. Fatigue stress occurs when a material is subjected to cyclical bending. Bill Tripp was right to be concerned about the long-term viability of the material. His boats beat the fatigue problem by being unvielding and not bending much in the first place.

Other examples of Tripp's ultraconservative approach to structural integrity are the massive bronze bowfitting castings he specified and designed. These castings typically are set into the hull and bolted into recesses molded in at the time of layup. They spread the load over a wide area and have molded-in eyes to accept the headstay turnbuckle and tack fitting, chocks on either side to control dock or mooring lines, and a post that accepts the forward leg of the bow pulpit. When cast of the proper alloy, such fittings are immensely strong and play a key role in the hull-to-rig attachment. Their disadvantage is their weight at the

extreme forward end of the boat, where they probably contribute to an undesirable pitching moment. Presumably, Bill Tripp considered this a small price to pay for peace of mind.

The measurement rules in effect when Bill Tripp was designing offshore racing yachts prohibited mast bend. This carried over from the CCA rule into the IOR, but in the latter case it was largely ignored as unavoidable. Tripp masts were designed to stay in the boat. By today's standards, they were tree trunks-straight, strong, and stiff. Typically, they had a single set of spreaders with double lower shrouds to further discourage bending of the mast fore and aft, as well as supporting the panel athwartships below the spreaders.

Larger masts would be tapered by cutting a wedge out of the leading edge, and then bending the two sides together and welding the gap shut. Welding 6061-T6 aluminum, the alloy from which all Tripp's aluminum masts were fabricated, is tricky work, and Tripp was particular about who did it: too cold, and the weld would not be strong; too hot, and it would compromise the temper of the material and its strength. Tripp preferred not to taper masts, particularly in smaller boats.

Virtually all designs of this period were masthead rigs, and masthead fittings were large stainless steel boxes that capped the mast and also held the halyard sheaves, which

were slightly greater in diameter than the fore-and-aft dimension of the mast. These were set at an angle so the aft side of the main halvard sheave lined up with the sail track. while the forward side was offset away from the genoa halyard. The genoa halyard sheave was in line with the headstay on the forward side and offset away from the main halyard on the aft side. The sheaves were a snug fit inside the boxes to keep the halyard from jumping the sheave and jamming in the box. This was further complicated by the use of wire halyards with rope tails, so the sheave had to be wide enough for the rope; the gap between sheave and sheave box was tight enough to retain the wire on the sheave. Ears welded onto the sides of the masthead fitting accepted the upper shrouds, and similar protrusions fore and aft terminated the headstay and backstay. A crane ahead of the headstay fitting held a swivel cheek block (or two) for the spinnaker halyard(s). I once heard a customer question the strength of this assembly; Tripp assured him that if it were possible, the entire boat could be swung around on its masthead fitting.

He'd made his point.

I don't think Tripp ever accepted internal halyards, as he felt it was important to be able to reeve a new halyard if one broke-virtually impossible to do while sailing if the halyards are internal.

-Ted Jones



Designing Warren Brown's custom wooden sloop, Force Seven, in the early 1960s presented an unusual challenge for Tripp, as the Bermuda-based owner wanted a boat that could be raced competitively in both Europe and North America. Force Seven is shown here racing in England, where, the author recalls, she was very successful.

help defray Tripp & Campell operating expenses.

• The Vinelands arrived from Norway one at a time every few weeks, as deck cargo aboard freighters. I met the ships in port. Our boats were launched into the East River with the ship's cargo booms. A tug operator and I then struggled to get each boat away from the ship as quickly as possible before it could be damaged, and together towed it to Port Washington for fitting out.

The Vinelands arrived without masts, which were fabricated at a machine shop in Yonkers. Tripp was confident of this shop's mechanical ability, even though its owners knew nothing about sailboats. Nevertheless, Tripp asked me to go to Yonkers to supervise mast assembly.

When the Vinelands were ready to sail, Tripp would borrow one to race

on Long Island Sound, and I usually sailed as crew. The Vineland was beamy and light, but the fourbunk/enclosed-head/galley-aft cabin arrangement was a bit cramped. Many prospective buyers complained about the lack of room in the head, on one occasion causing Tripp, who was a tall, muscular man, to demonstrate that it was hig enough. He entered the head and closed the door. "But can you get your pants down?" the prospect asked.

To provide standing headroom under the low, narrow cabin trunk, Tripp lowered the cabin sole partway into the keel sump area, which meant that one's feet did not touch the floor when seated on the bunk. All this was secondary nonsense to Tripp. The boat was functional, it had the accommodations most people wanted, and it was fast.

Problem was, it didn't sell—despite

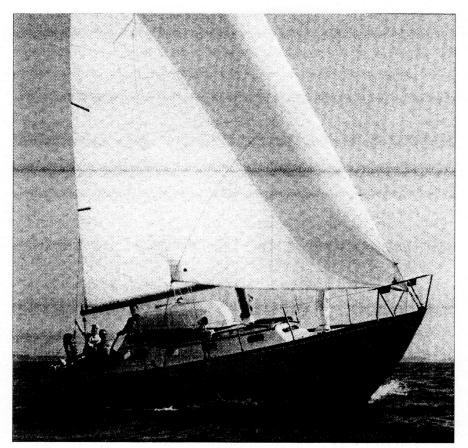
expensive full-page ads in Yachting magazine. Not because of layout, though, but because buyers were already shying away from wood construction in favor of fiberglass.

• Tripp was often asked to sail aboard his designs. He was an excellent helmsman and sail trimmer, and his presence always seemed to make the boat sail faster. (I'm sure he was motivated by enlightened self-interest.) Tripp seemed generally blessed with good owners who, for their part, made the most of his designs.

Ondine, launched in the spring of 1959, is a good example. Tripp made frequent inspection trips while the boat was under construction, and had dealt with a few problems that came up, one of which was the expansion and contraction of the aluminum hull plating during welding. Apparently everything ended up where intended, because she was an immediate success, and owner Huey Long campaigned his new boat in ocean races all over the world. In her first few seasons alone, Ondine logged 30,000 miles, traveling from the Bermuda Race to the Southern Ocean Racing Circuit series to the Sydney-Hobart Race, and back again to the States.

 When pressed to meet a builder's deadline, Tripp would often work at home in Port Washington, where he could design undisturbed. No doubt there were distractions in the Manhattan office, but there were major advantages as well. Not least was a printing company in our building's basement arcade, which handled all of the firm's printing needs; routinely, Tripp's original drawings were returned with copies within an hour.

The Seafarer 38 (11.6m) Javelin was a project for which Tripp had difficulty meeting plans deadlines. He had a lot of design work under way then, including other production boats (for Hinckley and Pearson, to cite two) and custom racing cruisers for assorted clients. All of the Javelin drawings were produced in Port Washington, with design assistant Bleumhardt adding some details back at the main office. Tripp resented the commute, especially when he had more work than he could easily handle. His designs were never entrusted to an assistant, however much he may have trusted his own. In many



Another in the Seafarer product line, this is the 38'/11.6m Javelin model, a boat the author says was fast, attractive, and achieved a good rating under the Cruising Club of America rule—the guiding measurement rule of the day.

respects, I think the Javelin is Tripp's best design of that period. It certainly is a very attractive boat and a fast sailer with a good Cruising Club of America rule rating.

The first Javelin to be delivered, finally, was not hull #1, but #5. I sailed as crew in the season's first race on Long Island Sound-the Edlu Trophy Race from Larchmont around Six Mile Reef buoy and back again. Everything aboard was new and unfamiliar, but we managed a good downwind start, and set the spinnaker for the long run to Six Mile Reef. We were flying, and all was well. However, when we rounded the buoy for the return leg on the wind, the boat laid over on her side and couldn't carry a reasonable amount of sail.

Clearly, something was wrong. We made the best of a bad situation by close-reaching to the Connecticut shore to smooth water, and then close-reached in its lee on one tack back to Larchmont. Considering our difficulties, we had a respectable finish near the top four of our class.

After considerable Monday-morning head-scratching back at the office, and lots of slide-rule activity, Tripp proposed adding 900 lbs (408 kg) of lead in the sump behind the keel, and asked veteran builder Bob Derecktor (Mamaroneck, New York: see Professional BoatBuilder No. 75, page 126 for a profile) to install it before the Block Island Race the next weekend.

The following week we learned the buyer was returning the boat. She said she didn't want her sons sailing what she considered to be an unsafe boat, given the lightweight keel and some breakage (due to the nearknockdown). There was also an allegation that the hull was too thin, so Tripp asked me to cut 4"-square (100mm) samples from each side of the hull just above the waterline, which he sent off to Underwriters Laboratories for analysis. The returned samples, whose resin had been burned off, showed the laminate schedule to be exactly as specified and that the resin-to-glass ratio was ideal-better, actually, than most contemporary American builders were achieving.

Bill Campbell, for his part, insisted that the boat's owner could not give it back; instead, he agreed to correct any problems at company expense, and then sell the boat without charging a commission.

Javelin #5 was eventually purchased by an industrial designer, who cruised and raced her happily for many years.

The reason for the light ballast was never determined, the builder insisting he'd followed the designer's specifications. It had to be either a miscalculation of volume by Tripp, an error in making the ballast pattern by the builder, or the builder employing an alloy with a lower specific gravity than lead. Whatever the reason, all Javelins after #5 had 900 lbs or more added to the sump tank aft of the external ballast keel.

• The Invicta was a 37' (11.3m) production centerboard-yawl designed by Tripp for Pearson Yachts, in Rhode Island (see sidebar "On Structure, Spars, and Fittings," page 58), which had earlier introduced the Pearson Triton, designed by Carl Alberg. The Invicta featured some characteristics of previous Tripp centerboarders: turret doghouse, and a wide keel box below the cabin sole into which the Atomic Four engine was fitted entirely beneath the sole. The keel was deeper than other Tripp centerboarders—5' (1.5m) with the board up as opposed to the Block Island 40's or Bermuda 40's draft of 4' (1.2m) with the board up. Not many Invictas were built, but one became famous by winning the Bermuda Race in 1968: Burgoo was the smallest yacht—at 25' (7.6m) waterline length—ever to win that race, and the last to do so. Subsequently, the rule was changed to increase the minimum size so that