

50' KETCH *PALMYRA*

DIMENSIONS

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|--------------------------------|------------|
| LOA: | 50' 0" |
| LWL: | 40' 10" |
| BEAM: | 13' 11" |
| DRAFT: | 5' 10" |
| DISPLACEMENT, 1/2 load: | 36,226 lbs |
| BALLAST (lead): | 13,680 lbs |
| SAIL AREA (100% foretriangle): | 1179 sq ft |
| DISPLACEMENT/LENGTH RATIO: | 270 |
| SAIL AREA/DISP RATIO: | 17.23 |



Ted Cooper of Marblehead was a successful yacht broker in Marblehead and importer of the Baltic line of sailboats when the exchange rate went the wrong way. It looked like he could make a better living building boats in America so he bought a share of Able Marine. He had some ideas for new yachts that looked like worth taking a shot. And they were—within a few years he and Cro Fox had developed the *APOGEE 50*, which won the Boat of the Year award, and *WOLF*—in the vanguard of a whole new concept of fiberglass motorboat called a “lobsteryacht”.

I designed *PALMYRA* for Ted's father Henry. He liked the *WHISTLER 48* but didn't want a bowsprit. Somebody came up with the idea of molding a *WHISTLER 48* hull, sawing off the bow, and substituting another one more to Henry's liking. We didn't do it in exactly that way but developed a method that amounted to the same thing. I drew a set of lines with the new bow fairing in to the existing *WHISTLER 48* hull about ten feet back. We molded a *WHISTLER 48* hull, stopping the fiberglass layup just short of the centerline for a third of the boat's length. Fiberglass is pretty flexible stuff—it bends easily until internal reinforcement is added. We guessed it would bend sufficiently and it did. We pried the two halves of the bow apart and the new one-off bow was built forward of where the molded laminate stopped.



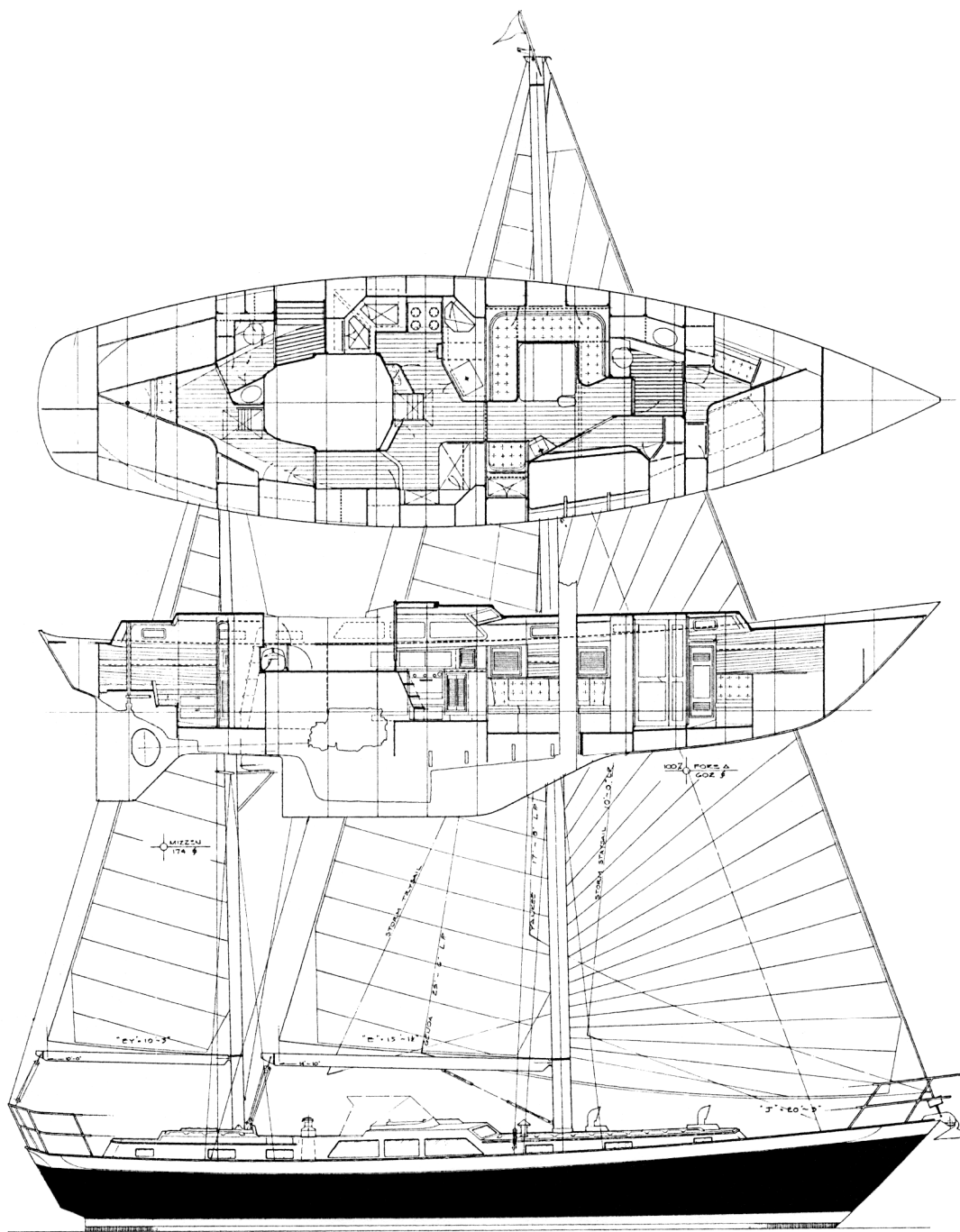
The finished hull with its custom bow. It faired together perfectly

Even at this early date we in the Paine studio had discovered the most important trick in getting a center cockpit design to look good- a trick that many didn't understand until decades later. For the purposes of what is called in architecture “massing”, the most massive element of the profile of a yacht (or building) must be located in the right place. In the case of a center cockpit design the most massive element is the highest part of the cabin sides- the part that contains the tallest windows. For aesthetic reasons this should be located as far aft as possible- well aft of the middle of the sheerline.

This is also aft of the front of the cockpit. There is no reason why the large windows must be

located forward of the cockpit—they are on a different surface than the cockpit sides. Note that the entire aftmost window of the three large ones is located aft of the forward end of the cockpit. This is a trick we used on our center cockpit designs for years before other naval architects adopted it.

Many years after PALMYRA was launched her new owner called and asked if anything could be done to improve her performance. I recommended three things: replace the ketch rig with a single stick, replace her aluminum masts with carbon, and most expensive of all, remove the Scheel keel and put on a deeper "Paine Keel", a proprietary geometry which I'll describe for you shortly. In the end he removed the mizzen and fitted a taller carbon fiber mast and a cutter rig. It resulted in much better windward performance.



By 1983 the standards of draftsmanship in my office were improved to the point where everything was drawn in ink. We paid strict attention to line weights and types. The inboard profile details were accurately rendered—if the owner specified louvered doors they were drawn that way.