

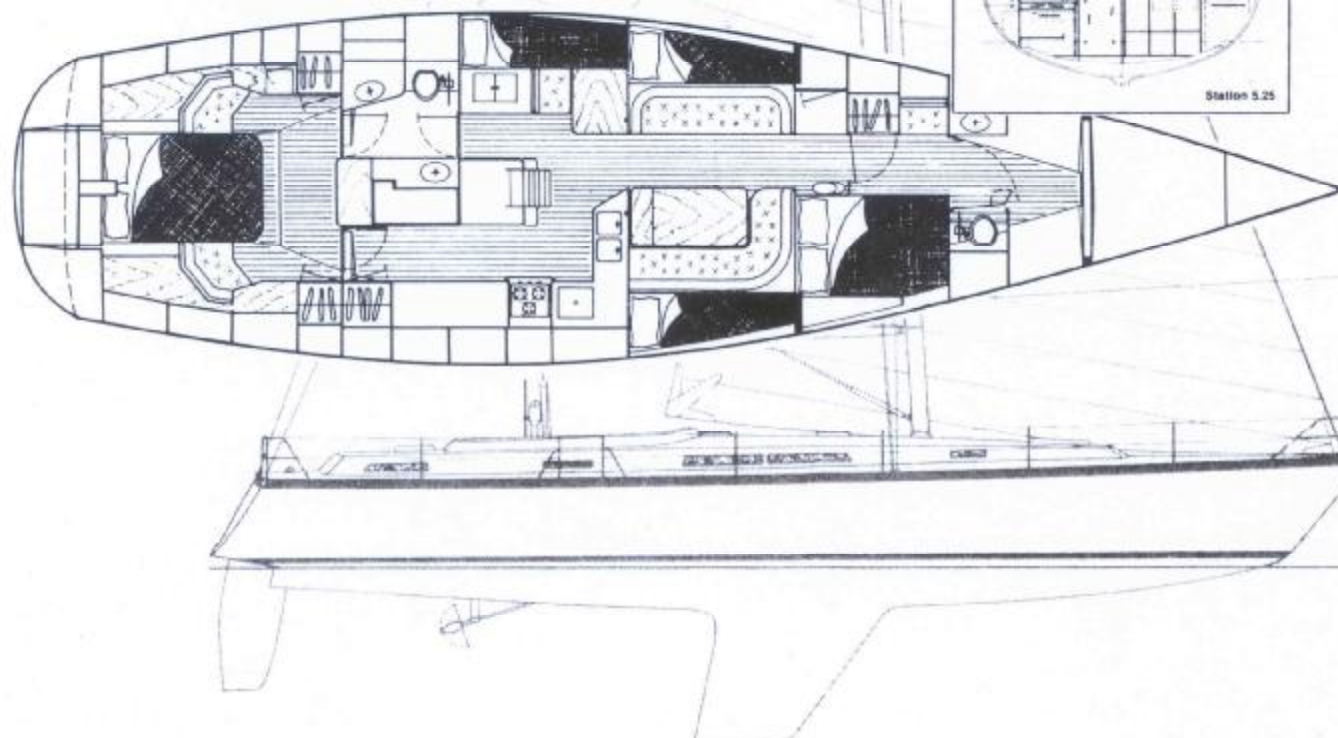
From the Drafting Table



Design Analysis

by Robert H. Perry

technical editor



Tompkins 55: Farr cruiser for fast passages

On a cruise last summer Warwick Tompkins told me he was involved with a cruising yacht project and asked if I would like to see the drawings. You can imagine the response. The design is by Bruce Farr and the boat is a very high performance cruising yacht.

Here we should stop and once again remind ourselves that cruising yachts can and do take many forms. Where one sailor does not care at all about speed another may make speed the prime design objective. It doesn't take too much of an imagination to hypothesize the type of sailor who would go for this design.

We are obviously looking at a boat designed for a very experienced racer who can appreciate the benefits of getting to the destination quickly. On the other hand, perhaps our racer turned cruiser will learn something about life in the slower lane. I think it would be very interesting to interview the owner after a year of cruising on this vessel and ask if the yacht was still the type he would choose if he started over. I know at least one of the owners of this new design and I would guess that he would settle for little else on

the performance scale. This boat is designed to be an offshore passagemaker.

The hull, rig and general appearance of this design are pure Farr. Note the short bow overhang with the knuckle raised just above the DWL. The profile here suggests a flat forefoot with very U-shaped sections forward of station 3. There is a common misconception that this causes a boat to pound going to weather. I have found that this is not the case. In fact, it does cause the boat to pound when motoring into a head sea but once heeled over, the turn of the flat bilge presents a V-ed entry to the seas.

The keel is small and 8'6" deep. (Why don't I get clients who appreciate that kind of draft?) This will of course limit the cruising grounds, but in the time it takes Baggywrinkle Jones to reach one shoal harbor, our Tompkins 55 owner will have explored a dozen deep harbors. The rudder shows a hint of elliptical planform as have Farr rudders for as long as I can remember. The displacement to length ratio is 109.49. A short time ago this would have qualified this

design as a radical ULDB. Today, it's merely an almost radical ULDB.

While this design suits me to a T, there are some areas that I question relative to offshore cruising. There is little doubt in my mind that when going to weather this boat will leap off a wave or two. There is simply very little boat under the water and this means that it takes very little effort to pull the whole front half of the boat out of the water. It's no problem pulling the front half out—it's putting it back in that bothers me.

Regardless of the forefoot shape, there is just not enough rocker to this hull profile to allow it to ease back into the water. I think it will slam. Now, I can slam along out to Swiftsure Bank for an afternoon then turn around and run home for breakfast, but I'm not so sure I can slam along for several days. Perhaps you just reach off more to the point where the motion is acceptable. Off the wind this design will be superb.

Fractional rigs are great. They are very versatile. They do, however, require a little more fine tuning and fiddling with main shape to reward the owner with top performance. Our cruising sailor in his Tompkins

55 will have to watch the vang, flat-tener, mainsheet, cunningham, permanent backstay, running backstay and checkstays. Then he can start trimming the jib.

This is all fine and dandy if you are Dick Deaver, but Baggywrinkle Jones still doesn't have telltales on his genoa and wouldn't know what to do with them if he did. This rig will require a rather bendy mast and vigilance to make sure it stays in the boat. The sail area is 1,283 square feet.

Going below the boat is a perfect combination of comfort and offshore considerations. Note the navigator's berth and the additional freezer space. In displacement, this boat is no bigger than a Valiant 40 but the additional length allows a very nicely laid out interior including a good sail locker forward.

The helmsman will sit fairly exposed in a shallow cockpit. That's the bad news. The good news is he won't have to sit there very long.

Warwick Tompkins, Sailing Yacht Systems, 50 Portola La., Mill Valley, CA 94991; Farr International, Inc., P.O. Box 3457, Annapolis, MD 21403.

LOA 54'9" / DWL 45'7" / BEAM 14'7" / DRAFT 8'6" / DISPLACEMENT 23,226 LBS. / BALLAST 9,491 LBS. / SAIL AREA 1,283 SQ. FT.

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