



# Farr 42

Photo courtesy of Boatingshots.com

BY LEIF BEILEY

This month we have the pleasure of studying the new Farr 42, a racer/cruiser designed specifically for the IRC handicap rule. The IRC is a measurement rule that is popular in Europe and is being promoted here in the USA as an alternative to PHRF. Developed from the British CHS rule, it is intended to provide equitable racing using a single number handicap and time on time corrections. In plain English, it means that a boat is given a single number that is a time correction factor, similar to a PHRF rating. However, instead of time on distance such as seconds per mile, the handicap is time on time, using the time it takes to finish a race regardless of the distance sailed as the basis for corrected times.

Since IRC is essentially a measurement rule as opposed to a performance rule, it is based on a formula that is kept secret, into which a boat's measurements are entered. This is similar to the old IMS rule. However, I found it interesting that part 2.6 of the IRC rule states that there are elements of subjectivity in it and that the rating authority has the option of making subjective judgments about a boat. It can be argued that that the IRC incorporates the best (or worst) of both IMS and PHRF.

As with any measurement rule, the proportions of the hull, keel, rudder and rig affect the boat's rating so we can be sure that the Farr office has carefully proportioned this boat to take advantage of whatever they have been able to deduce about what the IRC looks for in a boat.

Based on a displacement of 15,540 pounds, the boat has a Displacement/Length ratio of 135; fairly light for its length. It has a Sail area/Displacement ratio of 26.36, which means it has lots of power for light air performance. Since Farr is a very competent design office, we can assume that the IRC would penalize boats that are lighter or more powerful because designing to a measurement rule demands that you design to the optimum displacement and sail area numbers that the rule allows. This is sometimes referred to as type-forming. In spite of the fact that the rule-makers try to prevent type-forming by keeping the handicap formula secret and other measures, it is inevitable in a measurement rule. This is true because designers will always look at what

boats do well under the rule and deduce what factors and ratios produce the best performance for a given rating.

The next question you might ask is whether type-forming is a good thing or not. To find the answer we can consider the evolution of IOR and IMS designs. Boats designed to the IOR certainly took on characteristics such as pinched ends, low stability and bumps at measurement points that did not make them particularly fast or seaworthy. IMS racers have other characteristics and seem to be better all-around boats, but in the Mediterranean, a hotbed of IMS development, the boats have taken on very distinct design elements that we would not ordinarily think of as attractive. So, while type-forming is not necessarily a bad thing, there are many examples of type-formed boats which, to put it delicately, could have been better. So now that we understand the basic idea behind IRC, let's see how the Farr 42 meets the challenge of this rule.

The hull is an interesting shape. In the side view the bow is slightly raked with a rather soft turn at the knuckle. The midships sections are fairly deep and the stern overhang is short, with the transom raised slightly above the waterline. The sheer is a straight line and freeboard is fairly high. This is subtly different from what we would ordinarily expect from the Farr office and it could be that these proportions are what the IRC rule favors. Notice the transom, there is not a lot of grace in those truncated lines. In the plan view we see a shape that is vintage Farr. The overall beam is only 12.9 feet, rather narrow for a boat of this length. The bow sections are very fine and the point of maximum beam is pushed aft, while the stern is wide and powerful.

The keel is a moderately deep fin with a very large torpedo shaped bulb. It appears that the IRC does not penalize stability. There is no mention of a kelp cutter in the specifica-

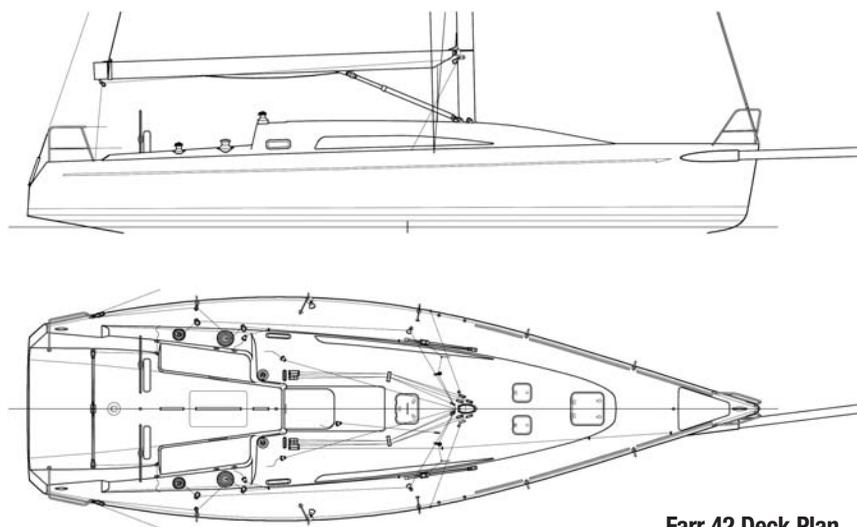
*The Farr office has carefully proportioned this boat to take advantage of whatever they have been able to deduce about what the IRC looks for in a boat*

tions so you'll want to practice your "back down" maneuver when you get your Farr 42 because, like most modern keels, this one is going to capture a lot of kelp. The rudder is a deep, high aspect fin that is raked aft almost enough to shed kelp. Notice that the area of the rudder is about 65 percent of the area of the keel fin. Rudders not only steer the boat but also help lift it to weather and this one will generate a good deal of lift.

The deck design of the Farr 42 is nicely proportioned. The cockpit is a hybrid of racing efficiency and cruising comfort with coamings and seats forward giving way to a wide open racing configuration aft. I have used this arrangement in my own designs and it can work beautifully for both racing and cruising. The deck hardware is laid out for racing efficiency. All the halyards and sail controls are led aft to two self-tailing winches on the cabin top. The vang controls are led to both sides and there are in-haulers for the jib sheets. These pull the jib clew inboard for pointing. If

the jib tracks were located at the optimum position, the designer has the choice of mounting them on the cabin top, a poor solution, or making the cabin trunk narrower, also not desirable. In-haulers enable the jib tracks to be placed at a reasonable location while still enabling the boat to have some punch upwind. The mainsheet runs from the traveler, forward along the boom, down to the deck near the chainplates, then aft to a pair of winches. This is known as a German mainsheet system and, while it does have some advantages, I would prefer to see a simpler system on this 42 footer. The boat is fitted with twin steering wheels. This not only gets the helmsman outboard where visibility is better, it leaves a nice passageway to the transom.

Going below, we find accommodations that are cruising oriented and quite nice. There is a large forward cabin that includes a good sized V-berth, seat, hanging locker and private access to the boat's only



**Farr 42 Deck Plan**

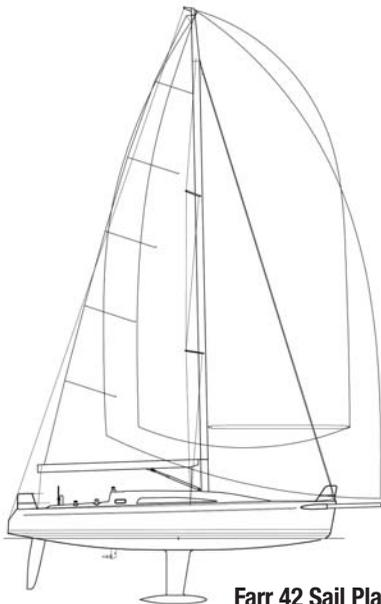
head. Adjacent to the companionway is a small galley to starboard and a large nav station to port, with big settees and a dropleaf table in the main cabin. Aft is a pair of private staterooms with double berths. I like this straightforward arrangement. Aside from a lack of good sea berths for racing, this interior has all the necessities for reasonably comfortable cruising.

I am usually a big fan of Bruce Farr's design work. Perhaps it is because this boat is wrapped somewhat around the IRC rule, but the Farr 42 seems to have less grace and natural elegance than most of his other work. It remains to be seen whether the IRC rule becomes popular in the USA, but if it does, and the Farr 42 does very well under it, then we may see a lot more boats with these proportions launched. In the meantime I am looking forward to seeing this boat compete in the local PHRF fleet. ■

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## *Farr IRC 42 – specs*

<b>LOA</b>	<b>41.8'</b>	<b>IM</b>	<b>56.8'</b>
<b>DWL</b>	<b>37.2'</b>	<b>J</b>	<b>16.2'</b>
<b>Beam</b>	<b>12.9'</b>	<b>P</b>	<b>56.8'</b>
<b>Draft</b>	<b>8.4'</b>	<b>E</b>	<b>19.9'</b>
<b>Ballast</b>	<b>7,300 lbs.</b>	<b>ISP</b>	<b>62.7'</b>
<b>Displ</b>	<b>15,540 lbs.</b>	<b>SPL</b>	<b>17.8'</b>



**Farr 42 Sail Plan**