



## Big Brother to the Sprog is Announced

# Winger

for hot-stuff racing: get her footing fast to weather and she's sluggish down-wind; alter the trim so that she'll do a screaming reach, plumb the mast for that hectic plane, and you'll lag behind on the beat.

So we chuck away a little nimbleness to weather; retain the ability to get up and plane, and the result is a subtle compromise in rig giving the all-round performance that allows for tide and wind and course to vary."

Thus *Winger's* lines are a compromise; a little speed has been sacrificed for a bit more stability; other sailing qualities have been forfeited in order to make the hull easier to build. And, while the construction is unorthodox much was learnt from the intense proving of such light-weight hulls as the "Sprog", and the knowledge of what can be done by exploiting fully the possibilities of marine plywood and water-proof glue.

*Winger* is approximately 1/7 larger than "Sprog", and as scantlings are only very slightly heavier and this extra weight is off-set by the space taken up by the larger cockpit, the total weight is therefore about 1/7 more. There is about 1/7 more plywood in the sheathing, 1/7 more rigging, and proportionately the same increase in sail area.

Nearly all metal fittings are the same as those designed for "Sprog". Additions are the spinnaker, the double wheel spats, the plastic non-return valves, and a few small items hardly worth mentioning. Therefore it is reasonable to assume that *Winger* should not cost more than £30 over and above the average estimate for an amateur-built Sprog.

The lines of the hull provide far more stability than those of the Sprog for not only is the maximum beam fairly generous in proportion to overall length but the transom section is wider and more buoyant—which give greater steadiness when running.

The V sections forward gradually alter aft of the plate box, and although the hard chines are continued to the transom the bottom becomes a flat arc section, which is ideal as a planing surface at high speeds.

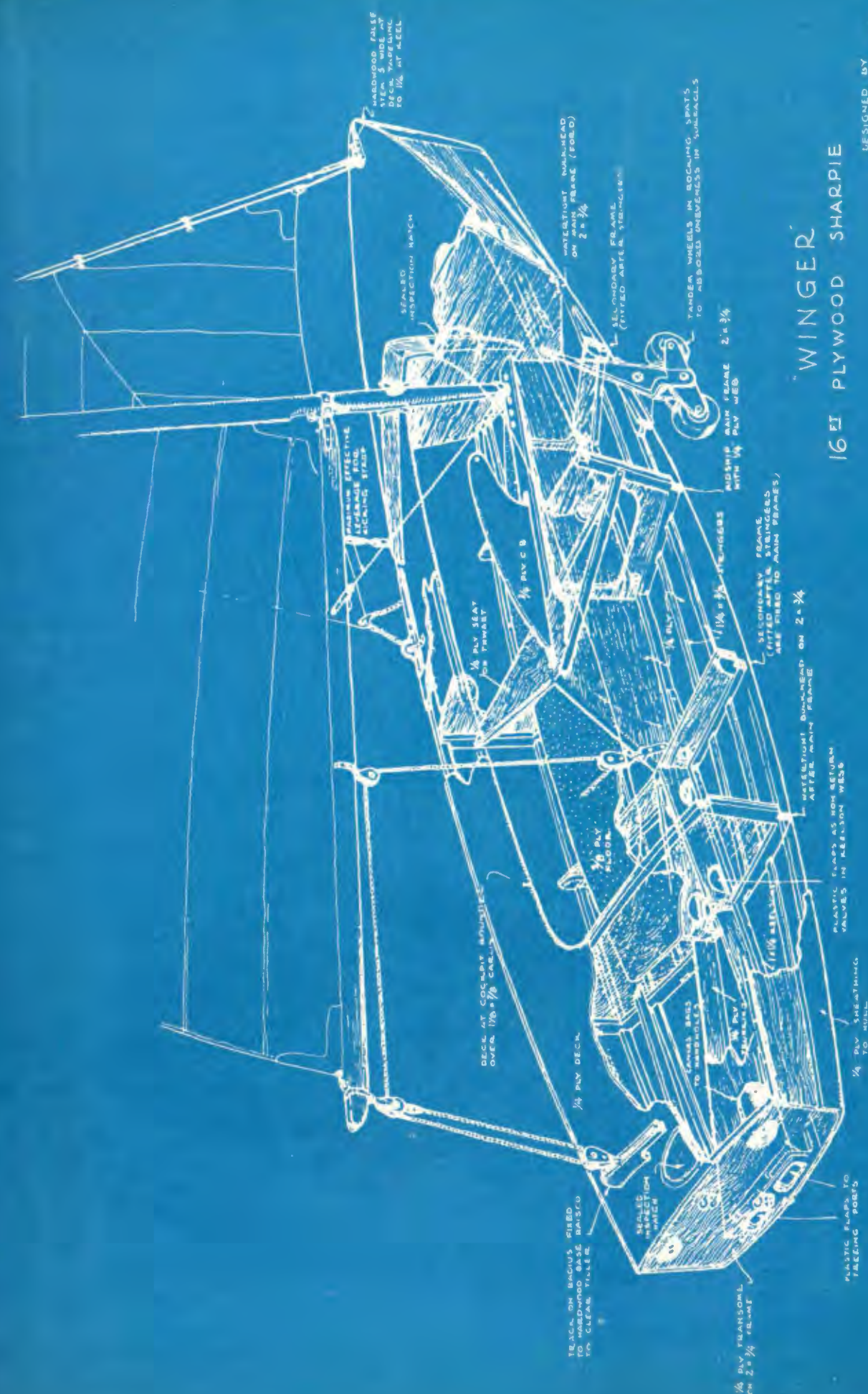
Adequate positive buoyancy is provided by fore

**o.a. length** : 16 ft.  
**beam** : 5 ft.  
**sail area** : 120 sq. ft.  
**weight rigged** : 306 lbs.

ON March 17 last from the same place, and almost on the very day that the first Sprog was launched eleven years previously, there took to the waters of the Zwartkops River a sixteen foot plywood sailing boat that may yet become a popular class in this country. The old crack about "the proof of the pudding" still applies for in these days, more than ever, no yachtsman is prepared to accept performance on hearsay; there are too many designs available all of which are to be able to fulfil practically every requirement.

Herbert McWilliams, designer and builder of *Winger* is fairly modest in his claims. While admitting that he has been influenced—even inspired—by the lines and construction of the Sprog, he says:

"This boat, like every racing yacht, is a compromise. You can't have it all ways! What is gained in obtaining efficiency on one point of sailing usually has to be sacrificed in other ways. We all know what happens when we tune our boats



WINGER  
 16 FT PLYWOOD SHARPIE

DESIGNED BY  
 HERBERT H. MCWILLIAMS  
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 SOUTH AFRICA

# WINGER is Simple to Build:

and aft watertight compartments. The fact that the platebolt does not occur in the forward compartment reduces the possibility of leakage so that the usual ventilation is not required, and this compartment is sealed.

The cockpit is very large, and of course this means that in heavy weather green seas may be shipped. Provision is made for getting water out of the cockpit with the least delay by means of gravity operated non-return flap valves in the keelson webs and freeing ports in the transom. This is an innovation which we do not believe has been used before, although it makes use of transom flaps similar to those in the 505.

Usually, when a couple of heavy seas have been shipped the water runs across to leeward and tends to increase the angle of heel, making the boat difficult to sail.

This cannot happen in *Winger*, since the platebox prevents water from getting from one side to the other except through the webs on the double keelsons in the after end of the cockpit. While the flap valves in the leeward web automatically close the weather (or upper) flaps open, allowing water to flow into the triangular space leading through a duct in the after watertight compartment to the freeing ports in the transome, where non-return flap-valves allow the water to escape.

Each time the boat is brought on to the opposite tack this self-emptying action is automatically operated, and the amount of water shed through the two  $4\frac{1}{2}$ "  $\times$   $2\frac{3}{4}$ " flap valves is naturally greater and more rapidly disposed of than by means of the usual  $\frac{5}{8}$ " diameter suction balers. (These ports are actually able to shed 540 gallons per minute!)

The building of the hull is very simple, as there are only three frames, two of which are bulkheads. Secondary frames are placed in position *after* the

hull form has been produced, and are adjusted to suit the keel, chines and longitudinal battens, or "stringers", that are fixed to the bottom over the three main frames.

These "stringers" provide additional rigidity to the bottom panels, and prevent "flats" occurring between the widely spaced frames. (Note: such "flats" are apt to occur in the "Sprog"; although the frames are only 1'  $9\frac{1}{2}$ " apart.)

Transverse bracing of the platebox is not only rigid and positive, but also provides a comfortable seat for the forward hand while on the run. This is actually a very light structure of battens and plywood, far less weighty than the usual thwart.

Spray deflectors are built in as part of the gun-wales and the deck is extended over them.

The construction of the stempost is particularly straightforward, no complicated checking out or rebating being required.

The mast is very simply stayed, and due to the fact that the heel is stepped considerably below the chainplates the supporting moment of the side stays is much greater than usual.

The sail area is somewhat less than the hull might comfortably carry, as it is felt that it is wiser to have less sail and not be obliged to reef than to be frequently over-canvassed, especially in coastal conditions. Reefing for the mainsail is provided and reduces the area without upsetting balance.

*Winger*, being so much lighter than the Sharpie, does not require the usual cumbersome padded trolley or cradle. Rocking bogies set in Sprog-type spats carry her over uneven surfaces with the usual jolting smoothed out by dual rubber wheels. These have the advantage of being able to be stowed in the cockpit and used for coming ashore anywhere, when cruising.

(Turn to page 32)

THE PROTOTYPE: The wide spray-deflectors reduce the apparent height of the topsides, but the lines generally are similar to the Sprog. Rocking-bogie wheels absorb shocks. Detail changes have been made in production models.

Photos: J. Forbes,



## WINGER — Continued from page 24

Finally, *Winger* has been devised essentially as a two-man racing craft capable of carrying at least four adults in comfort for knockabout sailing, but also able to be sailed single-handed with ease. The characteristics of a racing yacht and a family cruiser are thus combined, and the result should fulfil a long-felt want in all South African waters.

There has not yet been much opportunity for testing *Winger* in a wide range of conditions, or comparing her performance with established classes, but in a westerly of sufficient strength to capsize most of the Sharpies and Sprogs taking part in one race *Winger* finished two minutes behind the scratch Sharpie, with whom she had started, and one minute behind the scratch Sprog which started nine minutes earlier. The trapeze and spinnaker were not used at all.

She has proved amazingly stable; despite fairly heavy seas, not enough water was shipped to make use of the gravity baling; in fact, even the additional suction-baler was not opened.

Planing on a broad reach is thrilling and spectacular, the boat "getting up on the step" in typical Sprog fashion, while running downwind—even by the lee—presents no misgivings, gybes being accomplished without the least feeling of insecurity. On the beat *Winger* seems to forge along in the inexorable manner usually associated with dinghies, nosing up to weather in a highly gratifying way during the puffs, and with little tendency to fall off in the lulls.

The intention is to test the design practically to destruction before it is released, and it will be interesting to see how it compares, all round, with other 16 footers.

Of one thing there is no doubt whatever: *Winger* must certainly be one of the most comfortable racing or knockabout sailing boats of her size. The cockpit is wide and roomy, the thwart providing easy seating for two average-sized persons. Her stability gives that essential "time-lag" for older and less agile yachtsmen, and obviates the perpetual need to "sit out" when on the wind.

Furthermore, being light and handy, she can be taken into and out of the water by a single person with a minimum of effort, which is an advantage not usually associated with sailing boats having these characteristics.

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The hull ready for sheathing. There are virtually only three frames, two being watertight bulkheads. Note the change from a V-section at the after end of the platebox to an arc-section at the transom.



Part of hull before decking. This shows the double splayed webs forming the bifurcated keelson from aft of platebox to transom, in which are placed the flap valves for gravity-baling. These webs are covered within the after watertight compartment, forming a duct to the transom.



Plenty of room in this cockpit. It is 8 ft. long, the platebox is low and the wide reinforced plywood thwart makes a comfortable seat amidships.