

BUILT FOR ADMIRAL'S CUP:

MERCEDES III

AUSTRALIA'S FIRST MOULDED OCEAN-RACER

Designed by owner Ted Kaufman and sail maker Bob Miller, this 40-foot lightweight yacht may be the answer to the Carmen-types.

"IT can't be done," the experts said when Ces Quilkey suggested that Ted Kaufman's new ocean-racer should be moulded. A few months later, those same experts were praising the hull and forecasting great things for large cold-moulded racing yachts.

When Kaufman first approached Quilkey he had a vision of the boat he wanted but didn't know how to build it. He and Bob Miller — who is a mine of new ideas — had nipped out the general lines of their super Admiral's Cup contender, and they wanted lightweight construction as well as strength to put it on equal footing with the Carmen and Camille types that have done so well.

The cold moulding technique proved so suitable that the designers were able to modify their plans even further than they had dreamed possible. For example, Quilkey managed to obtain a smooth 9-inch radius from "planks" to keel right through the hull from bow to stern. He also moulded the timber, aft section of the unusual keel in one piece. Saving in bolts alone totalled 400lb. There's only one bolt in the entire keel assembly!

Built upside down on carefully-prepared moulds — most yachts are built right-side-up, especially 40-footers — Quilkey and his brother, Bob, finished the shell in record time using 200,000 monel staples and 36 gallons of Resobond glue. The glue was spread with a roller on both surfaces of contact. Quilkey did not make the common mistake of skimping with the adhesive.

Monel staples, fired from special compression guns, halve labor, as they are left in the job. Anyone who has built a "mouldie" knows what a tiresome, time-wasting job staple removing is.

Planking is first grade edge Oregon. The first and fourth (5/16 inch) planks were laid fore and aft, under and over two diagonal layers 3/16 inch thick. Queensland maple was used for the keel, ribs, frames and floors ... all laminated. The keel, bonded in 10 layers, is as strong as hardwood and half the weight.

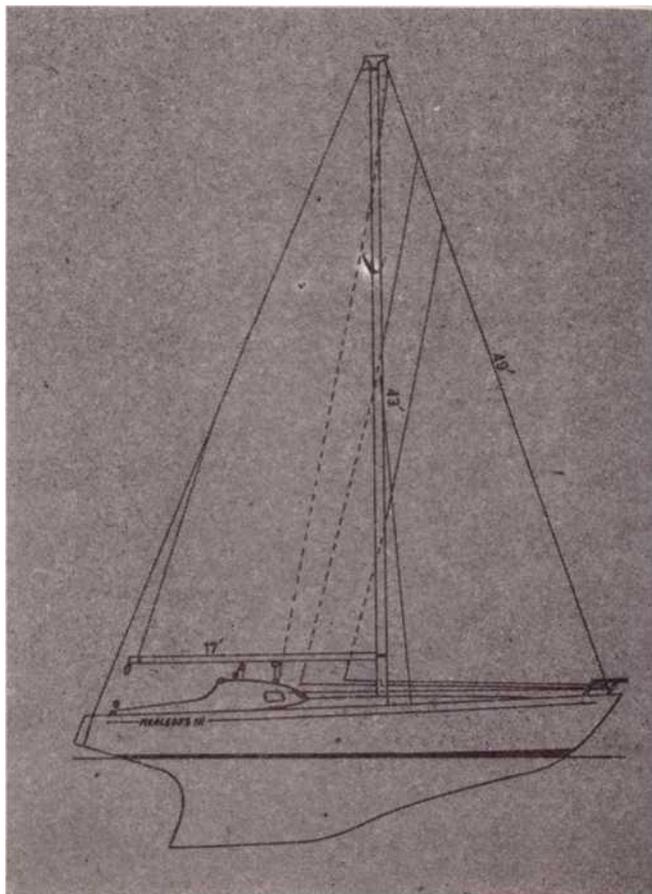
Removing the moulds was not as tricky as anticipated. The shell was rolled on to its side and the moulds removed. Although a fair weight was thrown

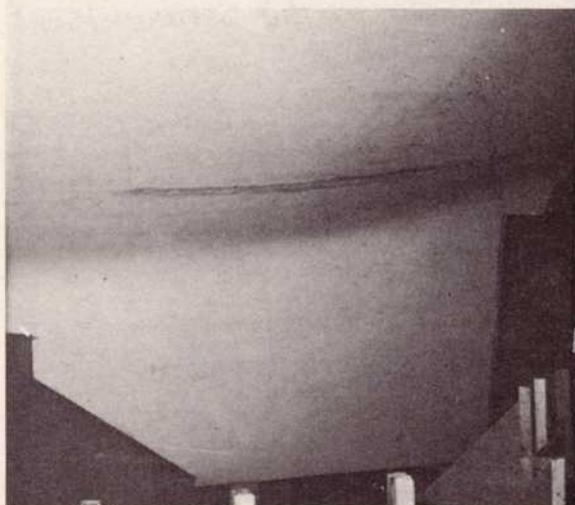
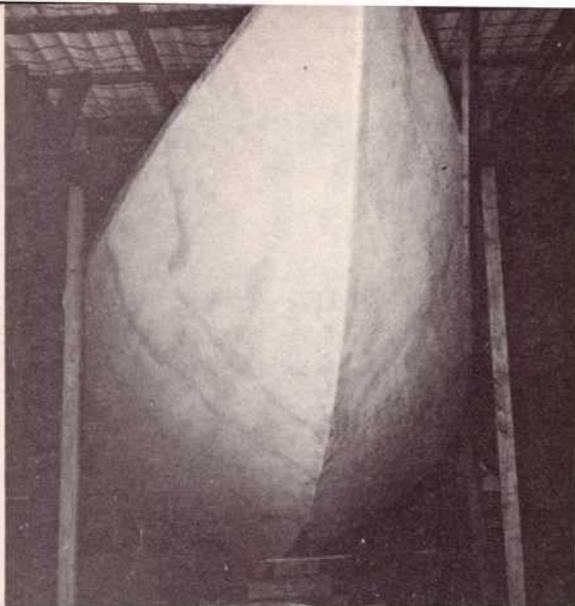
on to the topsides, the shell did not distort or make unhealthy cracking sounds.

Mouldless and right-way-up, Mercedes III has now taken on a more conventional look — if you can discount the different keel profile, the way the rudder is hung, its excellent shape and the fact she's already as smooth as a pampered Dragon.

They'll have her in the water before long and we'll know the true worth of Australia's first moulded ocean-racer. Incidentally, Kaufman's last boat, Mercedes II (see gatefold) was all steel. Does this mean that moulded Oregon is just as strong? At any rate, it's twice as smooth.

Finally, Bob Miller has designed another 40-foot mouldie which, he estimates, will weigh seven tons! It will have two rudders, one on each bilge to make windward work a snack ...





SPECIFICATIONS

LOA: 40 ft.

LWL: 31 ft 1½ ins.

Beam: 11 ft 3 ins.

Draft: 6 ft 6 ins.

Displacement: 9¾ tons (including 5½ tons lead — giving 60/40 ratio).

Sail area: approximately 750 sq ft (mainsail 350 sq ft; genoa 400 sq ft total).

Built by Ces Quilkey, Ritchie Street, Sans Souci, NSW.

