She’s a Foaming Beaut

Australian and World Cherub champion, Jennifer Julian, is a foam and glass unsinkable that has knocked the small boat sailing world for a loop.

By Jim Sharples

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JENNIFER JULIAN, the meat in a most successful foam sandwich devised by New Zealand-born Russell Bowler has done it again. Last season Bowler's 12-foot Q class skiff thrashed the best Australian and New Zealand 12s to win the Interdominion on Sydney Harbour. This season past another 12-footer bearing the *Jennifer Julian* tag captured both the Australian and the World Cherub championships.

She was a very different Cherub, yet quite legal, and made the plywood Cherubs from the UK and New Zealand quite obsolete. What's more, she cost only $400 complete with the very best gear!

As reported in April SEACRAFT, 1969, Bowler, and Javelin Interdominion champion Peter Walker, planned to drive across Australia to Perth where they would get jobs and build a Cherub to compete in the World Cherub titles. That report on Bowler's proposed Cherub ended with what must have been the understatement of the year: "His boat could be revolutionary."

Drive to Perth they did, and once there they joined the Mounts Bay Sailing Club and got cracking on their mission: to win the Cherub world's.

Bowler again used the foam fibreglass sandwich construction method to build the new boat…..fibreglass each side of sheets of polyurethane foam.

During the planning of the new Cherub much thought was given to making sure it would comply with the standard specifications regarding hull lines and buoyancy compartments. When designing the hull, the displacement curve was set only after considering both the crew and the rig weight. This is most important in a lightweight dinghy whose hull weighs less than one crew member. Working strictly to their tailored to-measure design. the boys set the moulds up, placed foam over the frames and held the lot in position with string. In other words, sewed the sheets of foam together.

Using a layer of eight ounce fibreglass cloth followed by a six ounce layer, they then covered the outside of the hull applying resin liberally. When the outside was dry, the inside was also glassed. Of course, before applying any glass, the boys faired in the polyurethane foam in much the same way as one fairs in a moulded hull before painting. High spots were removed and the run made true and even.

When the hull was finished, the 1 1/8 in. thick skin gave a calculated buoyancy figure of 7 1/4 cubic feet, a little in excess of what the rules called for. The only piece of plywood used in the construction was that on the foredeck and a scrap to strengthen the centreboard case.

To support and stiffen the hull, lengths of small diameter alumimium alloy piping were fixed behind the mast to the topsides alongside the chain plates and centreboard case. The resulting hull was extremely light and, although not quite a piece of furniture (some of the timber boats seen at the world's were almost too good to put in the water - beautiful examples of the boat builder's art) fair and workmanlike.

JJ's sails appeared to follow the usual pattern but they carried the boys' five years' experience with Cherubs, which they passed on to the sailmaker. *JJ's* deck fittings were also the result of experience and were kept as simple as possible.

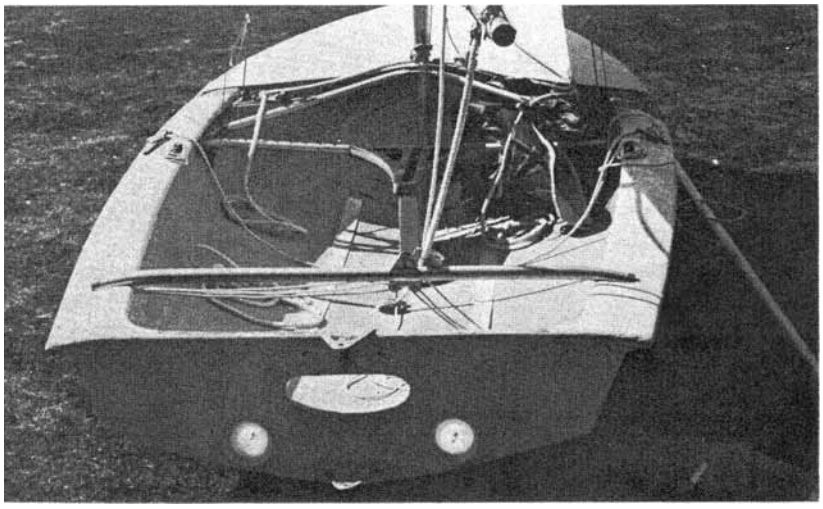
Bowler, a recently graduated civil engineer, built the world champ out of foam for the same reasons as he sandwiched his open 12. He wanted a very light, strong hull that would flex. And, if the boat happened to capsize, he knew he could simply right her, release the two transom ports, and sail her out in about 20 yards.

That's the big advantage of foam sandwich construction. The entire skin of the boat is flotation (as is skin of timber or ply hull). Difference is in thickness; 3/16 in. plywood doesn't have a fraction of the flotation of 1 1/8 in. foam!

It was only natural that the appearance of *Jennifer Julian* - a foam sandwich Cherub, mind you! - surprised visiting crews. Many arrived in Perth with the very latest and most expensive (some probably three times as costly as *JJ*) conventional hulls to be confronted for the first time by a space-age rival they had not expected.

Such an experience, however, does prove that providing the newcomer complies with all the rules, it is foolish to meet the challenge with negative sailing. It is much better - and more sporting - to use one's own ability to the fullest to try to overcome the obstacle.

As history knows, with *Jennifer Julian*, skipper Russell Bowler and crewman Peter Walker were able to win the big double. To gain this kind of success one has to produce a lot of sailing ability, plus the will to win. These boys possess both by the spinnaker load.



Cockpit layout is very simple. No bulkheads are needed as inbuilt hull flotation is 7 1/4 cubic feet. Only plywood in construction. is centreboard case top strengthener and foredeck. Light aluminium alloy tubes tie the case/chainplates and mast step together. Shrouds run from keel via chainplates to mast hounds to save poking mast through bottom. Traveller aft is controlled by normal lines. Trapeze wires are for'ard of shrouds and feature oversized open stirrups for belt connection. Plastic funnels block transom drain holes - held in place by shock cord. In event of a capsize, cord is released and funnels disengage. Lightness - not beauty - is big thing about foam/glass construction.

Jennifer Julian foaming across the Swan River, in quest of the highest Cherub award - the world title. As readers know, they scared a bulls-eye wounding a few hearts on the way. Her hard chine hull is exceptionally light and is completely self-buoyant, skin being. 1 1/8 in. thick. Skipper Russell Bowler won the Interdominion 12 foot title on Sydney Harbour in his open foam /fibreglass 12-footer last season while crewman Peter Walker won the Interdominion Javelin crown the same year - also on Sydney Harbour. Hull construction aside these two make a formidable combination.