So, good luck to *TORIA*, which was designed to win the race, and did ! Good luck to *SNOW GOOSE* (the Round-the-Islanders must be getting fed up with her record—*please* don't become a Round-Britain-Islander, *SNOW GOOSE* !). Best wishes to *IROQUOIS* and the stalwarts who sailed her ; at least she helped the Rod Macalpine-Downie cat future more than the largely experimental *MIRROR-CAT*. A grand toast to the wonderful effort of *SEVERN* and her crew—busted ribs and all. In my opinion this was the finest effort of the lot (Cor ! and sh'e a monohull ! !).

STARTLED FAUN ? Well, you see we *knew* that all the monohulls would do best to windward, so we designed her specifically to do just this. And, she does ! Incredibly, she can head *comfortably* three points off the wind. The only trouble was that she only had one opportunity to prove her worth—at the start. As everyone now knows all the rest of the race was downhill !

TAO

30 FOOT MUSTERS MARINE TRIUNE TRIMARAN

BY

WING COMMDR. R. J. BURROUGH, D.F.C.

44, Bedford Gardens, London

TAO has been splendid. For a new boat launched 9 days before a race such as Round Britain 1966 she has shown no faults. For 2,000 miles racing under very rugged conditions this is a tremendous tribute to her first class design and building. We have broken one jib halliard twice. That is all, and even that can be put down to the jib halliard fraying its tail while in harbour or at moorings.

TAO is very fast and an excellent sea keeping boat. We were without our 420 square foot ghoster from Plymouth to Lerwick. We were only 1 hour 40 mins behind Toria to Crosshaven and only about 12 to Castle Bay, i.e over 700 or 6 days at sea—only 12 hours. Much of this with light airs less than Force 3 and on the wind and we would have used our ghoster for at least 48 hours. Experience so far shows that this gives us a good 2 knots extra in these conditions. We made an error which cost us 12 hours off N.W. Ireland, came hard on the wind and left the centreboard up and hit Ireland again instead of clearing it. Best run so far, 42 miles fix to fix in 4 hours.

She has behaved magnificently under rugged conditions. She has proved that trimarans can take the worst sea conditions. With 4 rolls in the main and our 65 square foot storm jib, she behaved wonderfully well on the Henderson self-steering throughout a very dirty night, if you can call it night, off Muckle Flagga, N.W. Shetlands, on 16th July. A very rough cross sea, wind just free on the part tack

Force 6 gusting 8, she took us comfortably through the night. Nothing inside the saloon had been lashed down, one thing that moved was one plastic wine glass on the draining board, fell over, bounced in the sink on to the cabin floor.



Jack Burrough's TAO—Musters Marine

The centreboard case is excellent. We did have a very stupid leak on the hinge pin due to a fibreglass face plate cracking and becoming a distance piece allowing some water in. I pumped bilges at their worst for 5 minutes every 4 hours which is nothing; in fact I was quite

glad to have the water in the bilges to give us extra stability and easier motion.

I find *TAO* a splendid sea boat, very comfortable for cruising, the family man's boat with a splendid turn of speed. After 4 days from Lerwick it was fun coming into Woolverstone under reduced sail and passing everything in sight.

On arrival at Plymouth, single handed from Boulogne, after three gales, one of which sank the ill fated *DARLWIN* all that was necessary before returning to our home port, Poole, was to charge the battery.

I would like to thank Mike Farrow of Cox Marine in helping all boats in the race and particularly *TAO*.

TAO—ROUND BRITAIN SAILING RACE 1966

BY

JACK BURROUGH AT HARWICH

The outstanding performance of trimarans in this rugged race has proven the basic design which has been fostered by A.Y.R.S. for the past eight years. Derek Kelsall's *TORIA* is so right in design concept—lightness ; long narrow hull shape both for floats and main hull ; floats of equal length with the main hull ; curved main beam to give water clearance and incidentally to improve accommodation below ; the greatest possible beam, because beam times weight equals stability and if we do not have weight we must have beam. Improvements which must come—spare rudders, better self-steering, easier reefing and unfurling of sails.

Before the race my skipper Jumbo Edwards, the well known Oxford Blue and Rowing coach had said that this was above all a test of crew endurance. How right he has proved to be. The fastest boat spends less time at sea. Some energy spent in making her fast, can thus reduce the overall strain, but may bring your crew temporarily nearer to the breaking point. To me the race has been a study in psychology. Jumbo is the skipper—appointed by me as entrant and owner. He owns a conventional 9 ton cutter, but does not know trimarans. He has heard that they capsize. He is a good seaman and an excellent navigator ; no risks are to be taken if they can be avoided whatever the cost in time. Jumbo has close experience of the sea—very close—he was the sole survivor in a liferaft from the crew of a Liberator in the Atlantic in 1943 !

As for me, I think I am cautious enough, but my wife thinks I am a member of the up-spinnaker and let's go, " press on regardless " brigade.

Be that as it may, the fact is that Burrough comes on watch and immediately suggests an increase in sail. Jumbo comes on watch and

immediately suggest a reduction in sail. I know I cannot win because I am not the skipper. The same two crew must finish the race and I cannot afford to have too much friction—God knows we have plenty. After three weeks the time has come when I know I will make the skipper happy if I suggest a reduction in sail as he comes on watch. He knows he can annoy me by reducing sail, or suggest a reduction in sail as I come on watch.

The psychological factors are there. Sailing is a form of madness. Ocean Racing is its more extreme form, and the Round Britain Sailing Race must be " The " Ocean Race. We must all be fairly mad to start with. Some friction between crew is inevitable. It has a vital bearing on endurance.

One of the best nights we had for comfort, except for the damp and cold, was in force 7 gusting 8 with a steep shortish sea on the beam, going to windward between Foula Island and Muckle Flagga on the extreme North West of the Shetlands. It was our fourth or fifth night at sea. We had the sails nicely balanced, with our 65 square foot jib and five rolls in the main. Our self steering took over and kept us on the way through two watches, eight hours. According to the sea and the amount of pitching, our extra crew member, George, the self steering, would stay out there in the cold and wet, noting every slight change in the wind and carefully applying just the right amount of helm to keep her on course. George would stay out there without food clothing or sleep. George was the most important man in the boat. One of the worst nights, was starry and warm with a calm sea and little wind, off Harwich, with low visibility in the shipping lanes and shallows. George cannot work without wind. No, George, no self-steering—DISCOMFORT.

Under all conditions she can be sailed much faster with a helmsman. In a reach in heavy seas, for example, the helmsman can choose his route through the waves and get that exhilarating surfing down the wave faces with your speed going up from 8 or 10 knots to 12, then 15, then 18 and then off the clock. Then you are off the wave and back again to normal but searching for the next chance. Or, running before a force 6 gusting 7, spinnaker up, everything else down—a heavy following sea—and she is trying to broach. Self steering cannot work as there is insufficient wind to drive her. It is an interesting sight to see the spinnaker taken aback as one's speed down the wave front increases above the wind speed. It is great fun, but an individual cannot keep it up for long, four hours is too much. What do you do ? Reduce sail, thus reduce speed, thus have an apparent wind on which

George can work. Now seas will overtake you, the motion becomes tiring, you are going slower and will be longer at sea, and you are using up your endurance. It really is all a question of human endurance.

THE NON-ACCEPTANCE OF MULTIHULLS

BY

JOHN MORWOOD

From time to time we get letters and hear comments from sad multihull enthusiasts who are amazed by the under-reporting of the speeds and racing successes of catamarans and trimarans. They feel that, now that multihulls have proved themselves faster and quite as seaworthy as single hulled boats, the whole yachting fraternity should immediately take to multihulls.

The reason why the ordinary yachtsman actually hates multihulls is that he has been brought up with single hulls ; he has invested a sizeable proportion of his wealth in his yacht (which his wife resents) which he must defend to himself (and his wife) at all times ; he has got into a routine of meeting men with similar yachts, racing with them and enjoying the discomfort and pleasures of the process. But finally, he just *loves* his yacht—possibly as a symbolic cradle with a love-hate relationship to the sea as his mother. This man is just *not* going to be converted and he must not even try. Admire his boat as you would his wife and bolster his personality. Don't say anything unflattering about his boat but ask him to sail with you and part saying how nice you think *his* boat is.

Catamaran sailors are emotionally against trimarans and both will doubtless hate the flying hydrofoils when they also come about. Usually, however, it is the people who are commercially involved with catamarans who are most against trimarans. The common catamaran sailor seldom makes this kind of remark and he will usually be delighted to try out a trimaran, while it is easier to get a conventional sailor of single hulled boats to like the trimaran—it is more like a cradle than a catamaran.

The whole matter is a storm in a tea-cup. Catamaran racing classes are springing up all over the world, though many yachting centres have yet to have one. Cruising trimarans are numbered in their thousands, though many people have yet to see one. There is room for all and only by the true merit of boats will they become the majority, which takes time.

Middle-aged fogies, like me, have an image of one particular yacht in our minds. It is that one in which we, for the first time had,