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'ROUND BRITAIN' Racing & Cruising



THE AMATEUR YACHT RESEARCH SOCIETY

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1978 ROUND BRITAIN SAILING RACE

by

Michael Ellison

The fourth Round Britain Race was again organised by the Royal Western Yacht Club of England, sponsored by the Observer newspaper and started and finished at Plymouth.

There have in fact been more than four races 'Round Britain' but so far as is known, these are the only ones for yachts with only two crew and held with the intention of developing yachts and equipment suitable for short handed cruising. There was a race 'Round Britain' in the 19th Century which was won by the yacht "Genesta;" that was a non-stop race with full crew. There was also a race for power boats in 1969, in which I was skipper of a catamaran, one of the first to take part in an offshore race. As the race used the Caledonian canal to avoid rough water off the North Scottish coast it should have been called 'Round England' race.

Only one crew member has completed all the R.W.Y.C. races. David Cooksey sailed 'Snow Goose' with Don Robertson in the early races and now sails with Phil Weld, first on 'Gulf Streamer' and now 'Rogue Wave.' Unfortunately, first prize has always eluded him. I have sailed in all the races but was knocked out of the race in 1974 in Crosshaven by the French trimaran "Manureva" who dragged her anchor and lay across our 4 foot wide "wing" for about 20 minutes before being towed away. The performance of this 34 foot hydrofoil-stabilised yacht had been disappointing on the first stage in any case. A full account of the second race is given in our publication 75 and of the 3rd race in publication 80. The first race is in publication 57 but this number has not been available for some time. ("Snow Goose" although built by Prout, has no resemblance to the newer g.r.p. production class).

This year is notable because there were more entries than ever before. The list closed at 100 to avoid congestion at the four compulsory ports of call and 74 yachts started. The yachts seemed better prepared than in previous years and the weather was in general less strong and for many competitors there was more windward work than before.

At first glance it may seem that there has not been a lot of progress over the past 12 years since the first race. Multihulls still take the first places and the time is no faster than before. A closer look at the yachts shows a different story and I will mention some of the points that struck me as being important.

Two features seem to make this race a most enjoyable event for competitors. The first is the compulsory 48 hour stops at the four ports when crews find out how others are doing in the race and the second is that 'private' races between yachts with similar performance develop into very keen matches often with bets and prizes such as free meals for the winner at each stage. This is clearly shown in the log of "Cherry Valley Duck" which we are very pleased to include.

Changes in the weather pattern such as a calm setting in after the first yachts have arrived at a port and differences in the tidal stream tend to split the race into fleets and it is usually impossible for a yacht to 'break through' into the group ahead. In all the races so far, yachts that have done well on the first 9 miles to the Eddystone lighthouse have been in the first group all the way to the finish. In 1978 the race started with a useful breeze which steadily reduced to a week of calm so that the fastest yachts got well away.

It has again been shown that speed and size do not necessarily mean the same thing at all. Sail area, displacement and ability to windward are key factors. The greatest improvement in recent years must be the performance of the 'new breed' of monohull racers. These yachts are very light and carry a tall rig, they are not limited to their waterline speed, and they are usually well sailed with good equipment and instruments.

On "Comanche" our excellent windward ability in the breeze plus careful study of the tidal stream atlas got us to Crosshaven before a lot of faster multihull yachts. This gave us a private match against "Yamaha D' Ieteren" from Belgium and "Mezzanine" crewed by two 'girls.' Both these 33 foot monohulls were in sight as we approached Plymouth after over 2,000 miles. Their better sail area — weight ratio and less wetted surface gave them a superior light weather performance. We could beat them in a breeze to windward or not, but especially if they kept too much sail up when close hauled. Once when we were overtaking "Yamaha" she went noticeably faster after taking in a reef.

"COMANCHE"

In 1966, Peter Ellison and I sailed a 30 foot "Iroquois" catamaran and finished third to the 40 foot trimaran "Toria" and the 36 foot "Snow Goose." This year, Sail Craft lent me a 32 foot "Comanche" and Reg White came as crew. "Comanche" is available with fixed keels, but I prefer the centreboard version — mainly so that I can get closer to the seagulls that are walking on the sandbanks before running aground. Clarence Farrar made the sails for both yachts and here was a main difference.

Sails

In 1966 we had a large mainsail with full battens and lots of roach. "Comanche" has the mast slightly further aft and only small battens. In my own opinion, this is a step backwards. Although we could sail under mainsail only and with two reefs, control is quite good and she handles better under a headsail if you choose to use only one sail. The "Iroquois" had roller reefing with eyelets for slab reefing at the batten pockets. "Comanche" only has slab reefing, the lines are kept on the sail and a winch under the boom pulled the sail down with no trouble at all. It was quick and easy to reef the mainsail without calling out the other crew, so we could easily have managed a larger sail. A full battened mainsail would have set better, especially in light winds. On "Comanche" the main sheet leads to the mast and back along the cabin top to a quick release cleat by the helmsmans hand. A winch is positioned for use if required and the system is safe and convenient to use with the wheel steering.

Headsails

It was our intention to use a roller reefing headsail and our 160 'J' genoa was cut flat to be used with a roll up forestay. Wykeham Martin roller-furling headsails were popular in the days of gaff cutters with long bowsprits but only recently, since 1966 have new sail cloth and suitable extrusions for rigid stays made it possible to buy reliable reefing gear for headsails.

For our 200 mile passage to qualify for the 'Round Britain' in April, we used the genoa with a roller forestay. The aluminium spar was not enough for our sail as we found that we could carry the whole genoa in 30 knots of apparent wind. At that wind strength the head and foot seemed to pull tight and the middle of the sail pulled out in a bag that could not set well.

In May we sailed from Brightlingsea to Poole using the genoa with hanks fitted but with two forestays so that the jib could be kept hanked on to its stay ready for a quick change. With two halyards we could change headsails very quickly but it became difficult to keep the forestays tight and Reg did not like the extra windage and weight aloft.



Reg White on left, Mike Ellison on right, showing cockpit of "Comanche" on arrival at Lerwick. Halyards and sheets are various colours.

Our final arrangement was to have a single forestay secured direct to the forward beam with no bottle screw. Removing the bottlescrew allowed space for the second sail to be hanked on below the one being used which saved some of the time needed for sail changes. We kept the two halyards. This arrangement kept the stay tight and greatly reduced the risk of the spinnaker getting itself knotted but it did mean that headsail changes in strong wind took too long for one man to nip forward without calling the

other man out to steer. The forestay was kept tight by adjusting the backstay. During the race we found that the first reduction was to reef the mainsail and we could carry the 160 genoa up to 35 knots of apparent wind. At 40 knots we would have the jib and the sea state would indicate the second reef in the mainsail.

There is no doubt that new ways of making spinnakers have greatly increased their usefulness. "Big Mamma" is the name we gave to our 1100 sq. ft. sail, she is very fat and reached from the masthead to the rail in light wind, in fact she got torn on the stemhead roller during the race. In spite of her size she pulls happily with the apparent wind 10 degrees forward of the beam and if one person is available to play with her, she could be coaxed considerably closer. We also carried a smaller flat spinnaker which we called "Twiggy" which we used once when it was too calm to fill "Big Mamma" and at the end of the race after "Big Mamma" got too much wind and burst. When we first tried the big spinnaker on a reach, I took it down at 18 knots as I was sure an extra gust would cause a capsize. During the race, we were running with a wind of 35 knots and we came onto a reach rounding a headland in a rainstorm — our speed was so impressive that we kept the sail up and I am happy to report that it burst before we capsized. I can not say how much if any of the weather hull remained in the water but we had five minutes of anticipation with all sheets ready for instant release. We used a "Spee Squeezer" and always found that we could put the spinnaker away in strong winds without any trouble, even after it had burst the pieces went happily into the tube. We found that on a run, we could carry the whole sail in 35 knots of true wind without "reefing" the sail and on a reach it would not set properly when partly inside the squeezer. We had quite a lot of trouble getting the sail up and down in light winds, especially in the dark. I seemed very able to get the lines used to pull the tube up and down wrapped the wrong side of the pole and twisted up with the sail I was about to hoist or lower. Perhaps in the stronger winds I took more time or more care but we adopted the practice of setting the sail without the squeezer if the wind was light, partly so that we could hoist the sail nearer to the masthead to catch more wind and improve the view ahead. I have now been converted to a spinnaker user but I wish the sail could be made of a heavier cloth that does not tear so readily. For a long distance run I still think inflatable battens might be helpful.

We carried storm jibs; we had two as the race scrutineers considered the first one, borrowed from an "Iroquois," to be too light a cloth. It is a small sail and I believe it would hold in a storm unless it started to flog — flapping sails in a storm are something I don't wish to know about and if you must have sails in force 10, my only suggestion is full length battens again.

Also on board was a "ghoster." This sail we only used twice and it was not a success. The sail was ordered when we intended to use the roller headsail and the plan was to use it to windward with wind strength between nil and 9 knots and downwind if there was too much wind for the spinnaker. The sail had roller furling gear and is set "flying," it could be set from either bow or from the middle of the beam. The cloth had a shiny texture.

The first thing against the ghoster was the spinnaker which set much closer to the wind than I expected it could. The second thing was our 160 genoa;

although smaller this sail was cut flat for the slack roller forestay and when fitted with hanks it set to a beautiful shape and although quite heavy cloth it hung in the right shape even when there was almost no wind. Perhaps when using the ghoster we should have dropped the mainsail — we didn't and with the mainsail up, the extra area did not seem to do any useful work at all. We had set the sail in the North Sea for the second time in the race and after 20 minutes of slowly catching a monohull the spinnaker block at the mast-head parted and the sail dropped. As this is the halyard we had used in each port to hoist Reg White to inspect the rigging he resolved to be hoisted on halyards which come down inside the mast in future. Although we had replaced the block within five minutes, we did not use the drifter again during the race.

Instruments

In 1966, we used an ex R.A.F. 'P6' grid compass, a Walker trailing log was on board and we borrowed a wind speed and direction instrument which worked for five minutes at a time if hit in a certain place with a hammer. We had a 'Seafix' D.F. radio and an excellent "Seafarer" echo sounder reading to about 45 fathoms.

In 1970 the only instrument we had on "Three Fingered Jack" was a compass. We had an echo sounder in a box but were unable to fit it and at one stage we would have paid a lot of money for a D.F. radio had one been available.

For "Mantis IV" in 1974, I again chose to use the 'P6' grid steering compass (which also proved invaluable on the power boat race as it is dead beat and does not swing wildly), a Space Age echo sounder because it has a better signal in deep water, and the 'Seafix.'

"Comanche" was equipped with an 'Airglide' compass, imported from U.S.A. and mounted on the cabin top in front of the helmsman. The markings are in 5 degree divisions with main marks at 15 degrees. Even after 4,000 miles, I still got confused by steering from the back of the compass and by not having marks in units of 10. Not a fault of the compass which was good and steady, but I noticed other people who are used to a conventional compass had trouble at first when they got tired. It was also quite difficult to fit a new bulb to the light at night, a problem I often seem to meet on yachts.

On a display ahead of the helmsman on "Comanche" are a range of instruments by 'Aquatronic.' From right to left, that is in order of importance, we had an echo sounder, speed and distance dial (speed marked "log" and log marked "knots"!!!), wind speed, wind direction and magnified wind direction for close-hauled and running. The wind instruments worked very well throughout and for two nights, after a failure of the compass light, we were able to steer mainly by the wind instrument, referring to the compass by torch. The speed and log were accurate except at very low speed when they under read, low speed being about two knots. The instrument works from two metal pins flush with the hull, no obstruction to cause drag or catch weed. My only complaint is the light which shone on the word "log," and one had to read the distance with a torch. Also there was no 'trip' mileage which could be useful to a helmsman. The echo sounder is the most

useless that I have used, the makers had obviously had a 'bad batch,' their man was keen and we started the race with the third set installed but it was just as unreliable as the others. The metres only had one switch and were either all on or off together. The echo sounder was marked in metres and should have read to 60 fathoms, but it read maximum depth in calm weather while we were close to an oil rig standing firmly on the bottom which they assured us by radio was 282 feet below the surface. Sometimes the needle would swing wildly across the dial and twice in light foggy weather the needle indicated a slow steady reduction to shallow water while sailing along the coast on a course which maintained a steady depth. In each case the hand lead confirmed that the compass was correct and the sounder wrong but sailing brings enough problems without this sort of machine — especially when a reliable Seafarer can still be bought for £40. (Thomas Foulkes, November 1978).

As well as a 'Seafix' D.F., we carried one of the new 'Aptel' sets with push button tuning. The set was delivered to us in Plymouth with instructions but we failed to get satisfactory results. Having spoken to other users and visited the factory where the sets are made I can say that there are checks at stages while the sets are assembled and every set is tested before it leaves the factory and other users seem so very satisfied with results that our set may have suffered from operator trouble. Whatever the cause of failure, we had to rely on the 'Seafix' again and it is very difficult to tune to distant transmitters with this type of set. Once close to the station, that is when it is most needed — there is no trouble and the set is much better than no set at all.

On all the races I have carried a sextant and clock, but I have not used them in earnest for position fixing. I have used the sextant to find distances off and to resolve disputes as to whether other yachts are getting closer or further away. (This is done by measuring the angle between the water and the mast — it is no better than the original guess as it depends on the angle of heel remaining constant!). This year I bought a quartz alarm clock from the mail order firm 'Scotcade' for £12.00, it remained 10 seconds slow from the end of April when we put it on board until the end of the race in August and is certainly excellent for astro navigation.

For interest and information I made a simple clinometer from a mahogany offcut. I cut an arc into the wood using a 40 degree segment of a polar curve sheet and marked it in degrees 0 — 20 each side. I put a ball bearing into a piece of plastic tube and put it in the slot I had cut. I had to fill the tube with white spirit to damp the movement and had trouble sealing the ends so that I had a bubble. Designer Rod Downie suggested that I could save weight by removing the ball and inverting the scale to use the bubble which worked very well. I would suggest that at 20 degrees we would have no interest in the angle of heel and 15 degrees either side would be ample scale for a catamaran. To make up for the lack of a 'trip' mileage recorder, I fitted half a spring clothes peg to the mahogany board and used it to hold pieces of card on which I wrote the distance that the log should read when we reached the next mark or headland. I also wrote the magnetic course to steer to avoid accidental changes of course.

Self Steering

David Jolly lent us a 'Tillermaster' electric self-steering gear, the same set that had previously been used by David Palmer on "F.T." "Comanche" has wheel steering and so David Jolly fitted another wheel of smaller diameter outside the normal wheel. His wheel has a series of holes through it and the pin of the self steering gear fits into one of the holes in the wheel instead of fitting into the hole in a tiller. The machine works by pushing and pulling one quarter turn of the wheel each way. This was entirely satisfactory in moderate or light conditions and especially when running under spinnaker or under power. Electric self steering gears have the advantage of maintaining a compass course instead of following wind changes and they are being used by an increasing number of yachts in the race. Many yachts had both electric and wind operated servo gears. There is no doubt that the electric gears need a lot of improvement to their weather seals — while our gear gave no trouble it was kept inside during rough weather and our steering position was above and protected from the waves. Our warm, dry cabin was used as a repair shop for several other types of gear which gave trouble during the race.

Details

"Comanche" is fitted with 'Clamcleat Racing' quick release cleats for all the sheets and the spinnaker halyard which is rope. These can be tripped by pulling a light rope tail which can lead to the helmsman or any other convenient position. A tug on the line, releases a catch on the aft end of the cleat which hinges up at its forward end so that the sheet falls out. On a few occasions something would catch one of the release lines that we lead across the cockpit to the helmsman and a sheet would be accidentally released but we think this was a small penalty to pay for the advantage to the man below who could sleep knowing that the man on watch could let things go if he wanted to.

We used butane gas for cooking; the stove has an oven and grill which we used regularly. The gas bottles are stowed in the sail locker forward which drains overboard. This is required by inland waterways regulations but for offshore sailing I much prefer to have the bottle of gas close to the stove so that it can easily be switched off after use. The locker with drain only gives protection against a faulty tap or connection to the bottle, a most unlikely fault. People who have told me of gas accidents and leaks on my own boat have always been caused by wear at the flexible pipe to the stove or damage to the pipe between the bottle and the stove — the shorter the pipe the less the risk. It is safe when the bottle is turned off but who is going up onto the foredeck to turn the gas off on a windy night when he has just got dry and enjoyed a hot drink?

Yamaha outboard — we had a two cylinder 26 h.p. outboard which runs on 100 : 1 mixture. It has electric start and never once failed when needed. It did fail to run on one cylinder and then did 3 instead of 8 or more miles per gallon and caused us to be late for the A.Y.R.S. Poole Rally. During Brighton week racing, I got an engineer to "look at it" and he said he would have to remove it for service. When he arrived, he said that ours was the best installation he had ever seen and he could fix it at once. The trouble is that the factory fit metal plug covers which allow excellent T.V. reception, but

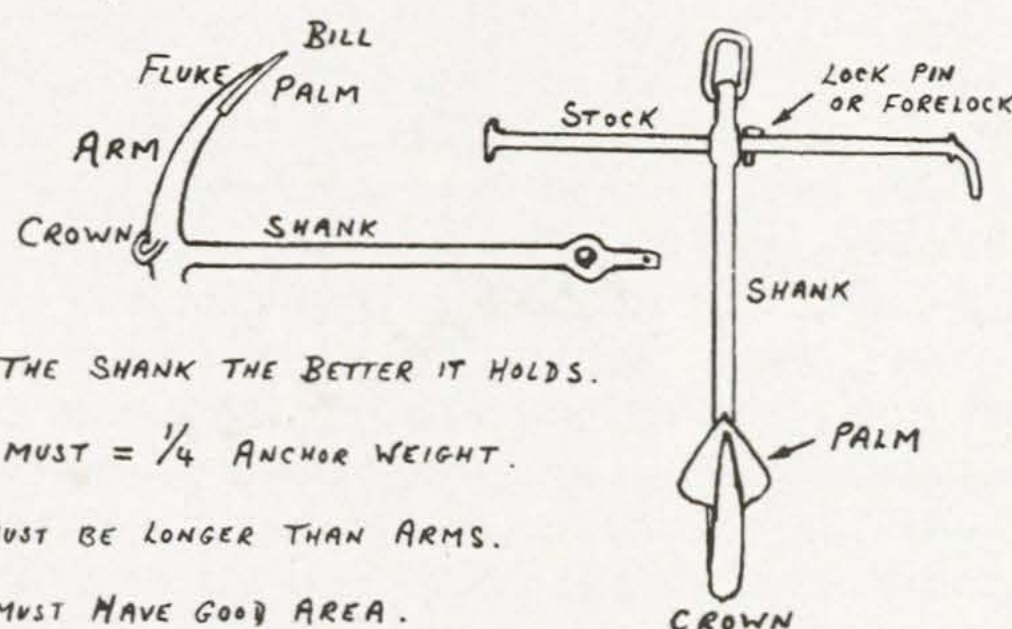
if moisture should get near the plug they will no longer work. He has changed all the plug covers of the Yamaha outboards in regular use around the marina and has no further trouble. If T.V. reception is not important while you are using the outboard, the answer seems clear. I am just cross that an outboard is supplied which can't work in damp conditions. This may well be the answer to the failure of one cylinder of the 8 h.p. Yamaha on the 'Telstar,' owned by Terry Downard, I have reported in several past numbers that all the makers agents and experts have failed to make it run as it did on its first passage on two cylinders. Even changing every piece of electrical equipment has so far failed. Members may recall that it caught fire but that was after our trying to cure the fault rather than being the cause of the fault. (The outboard is fitted in a well inside the 'Telstar,' fuel leaked onto the water and floated on the surface unnoticed until it caught fire).

Anchors

We started with a C.Q.R. "plough" main anchor and a Danforth as kedge. Although well in excess of the **minimum** size required by the race rules the plough was not big enough for use on rock, weed or shingle. "Comanche" is a heavy boat, her weight when measured for I.O.M.R. rating was $3\frac{3}{4}$ tons and her weight before the start of the 'Round Britain' with stores but without water was four tons (measured on an accurate scale suspended by a crane) We dragged our anchor at Crosshaven and then bought an 18 kilo (40 lb.) fisherman. Unfortunately, we were not able to buy a fisherman anchor with wide palms, most of the ones offered had points of the flukes like grapnels and very narrow palms. As we needed the anchor to hold in rock and the plough was adequate for mud or sand our needs were well catered for. Years ago when new anchors were being introduced, the 'fisherman' (correct name "Admiralty pattern anchor"!) was used as the base for comparison. It seems probable that in order for the tests to be as favourable as possible to the new anchors, they did not use the best available fisherman. To put matters right the magazine "Geartest," with help from the British government and Lloyds, intends to conduct a careful series of tests.

To hold well a fisherman anchor should have a long shank — this gets the weight of the stock back and down. The stock must be longer than the arms to tip the palm down and as already mentioned the palm must have a good area to grip. Multihull equipment regulations require a 'fisherman' and 'stockless' anchors to be 33% heavier than "high-holding" anchors.

FISHERMAN OR ADMIRALTY PATTERN ANCHOR



One of the main problems of the 'fisherman' anchor is the danger of the yacht drying out on top of it. Quite a number of Thames barges were holed by the anchor coming through the bottom as they dried out.

We were certainly not alone in dragging at Crosshaven; a number of other yachts moved off without their owners consent. The problem is partly due to the large number of yachts arriving at the port which is already busy and once the area of mud with good holding is crowded yachts have either to stay some distance from the club with its showers and bar or anchor over rock and weed. New pontoons have been provided for monohulls but large multihulls would take more than their share of room. Phil Weld had "Rogue Wave" drifting towards the shore and was very pleased that he had not agreed to the strong requests from his crew to leave his engine in Plymouth. The yachts without engines are mainly multihulls; only a few monohulls had their engines out for the race. As most multihulls that race use outboards it is perhaps less trouble to take them ashore and as the boats are light they are less difficult to row. It seems that rowing (which is allowed in this race) has increased in popularity but it may just be that there are more entries. So far as I am aware no one used a yuloh or other means of transmitting man power to the water and this is a subject which might reward some research. The trouble seems to be that 'man power' is the last piece of equipment to be fitted before the race and little time has been given to finding the most efficient position to work from. "Day Tripper" and some of the "Val" trimarans rowed for long distances and used their electric steering gears to maintain course. On "Comanche" we were so high above the water that we could not think of a convenient means of rowing. We kept our Yamaha and five gallons of fuel for use in harbour and certainly found it most useful; the engine is fitted into a shallow nacelle with a locker over it below the helmsmans feet. It is protected from the weather, accessible from the cockpit or the cabin, can be hand started and if the yacht runs aground the propellor does not touch. The weight is positioned in the middle of the boat and about the only snag is that steering with the engine in the event of both rudders failing would be rather difficult.

"Comanche" had two heavy duty 'Freedom' AC Delco Ref. No. 072-1250 108 amp hour approx. batteries which were new to me — they do not leak if tipped over and the fluid can not be checked with a hydrometer. There is a small window and a green glow can be seen when the battery is charged. We found that one battery was enough for the instruments, navigation lights and neon cabin lights for each stage and we charged one at each stage keeping the other fully charged as a reserve. We used masthead navigation lights at sea but the three deck navigation lights with white steaming light as appropriate were used entering or leaving port; other yachts do not look up in the sky for navigation lights and the mast head light does not seem quite right in very confined waters. We carried oil lights in case of power failure, but not an oil light for the compass and a fault at a cable joint with a faulty bulb caused us to sail for two nights using a torch. On a clear night or with steady wind, this was not a problem but the second night involved a landfall in a violent thunder storm. Note that the wires to an electric compass light must be twisted so that the current does not make a field that can cause deviation — when adjusting the compass it should be checked with the light both on and off. Other instruments should also be checked,

even if they are always on while at sea — the current might fail and it is useful to know if a different error should be applied. A note should be made on the deviation card and if there is no deviation, a note should be made in the log book.

For readers who like details, "Comanche" is a 32 foot overall, the same length as an extended "Iroquois." She has wider hulls and fuller lines so that she is better able to carry a diesel engine plus the stores and equipment that cruising people like to take with them. She is a fresh design with more headroom everywhere and with the middle deck higher from the water and with the engine mounted well forward to prevent the propellor lifting clear in open water. The rudders are below the hulls protected by skegs. Wheel steering but the cross bar between the short tillers can be used with an extension in an emergency or one could steer with one rudder inside an aft cabin.

Our yacht was weighed for I.O.M.R. measurement at $3\frac{3}{4}$ tons and she weighed 4 tons in Plymouth just before the race with stores but no water on board. The 'Val' trimarans and "Day Tripper" weigh around two tons. We had good reason to want a measurement rule as our 'Portsmouth Number' started at 95 (hopefully including a reduction of 1 for our masthead float!) and it steadily reduced to make allowance for our 'Reg White Factor.' Handicapping to allow for crew members prevented us from winning any handicap prizes but we did win the Brian Cooke Memorial Trophy presented by Jack Hemming of Multihull International for the yacht with the highest number of points from racing during the whole season.

At the end of the season, Reg White tipped "Comanche" over so that she floated on her side and masthead float. This showed that she is quite stable in that position but that it is necessary for someone to close the shut off valve for the galley sink drain to prevent the hull flooding. (There is foam under the bunks so that she can not sink). Reg reports that it would be extremely difficult for one man in a dinghy to right a capsized "Comanche" but two people in a stable boat had no difficulty in lifting the mast to tip her back up.

Specifications

Length Overall	32' 2"	(9.8m)
Length Waterline	28' 9"	(8.76m)
Beam Overall	13' 10"	(4.21m)
Draft — Hull only	3' 2"	(.965m)
Draft — Centreboard Down	5' 6"	(1.676m)
Mast Height	38' 1"	(11.68m)
Mast Height above Waterline	44' 10"	(13.665m)
Total Sail Area	445 sq. ft.	(41.34 sq. m)
Mainsail Area	185 sq. ft.	(17.25 sq. m)
Designer	R. Macalpine-Downie	
First Boat Launched	January, 1978	

Beware of overinflating:



D. HANINAIN
1.27.79



Letter from Robert J. Nickerson, Skipper of "Cherry Valley Duck" The Elms
Market Rasen, Lincolnshire to Michael Ellison

13th March, 1979

Dear Michael,

A few notes made during the last Round Britain Race by my crew, Bill Upton. Unfortunately, poor Bill was killed in a motor accident last week, but you may find his notes interesting for any write-up you happen to be doing on the race.

Following are a few of my personal observations with regard to this race. There seems little doubt, in monohulls at least, that there is a maximum size that can be sailed anywhere near efficiently shorthanded. There is no doubt that "GB II," at 77 ft. overall, was much too much of a handful for Robin. The speed and pointing ability of the newer multi-hulls has improved dramatically over the last few years. Although it is our camp, I feel that the performance of the standard production monohulls, especially those of an I.O.R. type in terms of boat speed to length ratio, was outstanding compared with boats built for speed with no regard to the current handicapping rules. These boats have large volumes and make first class cruising yachts when the large overflapping head sails are not used, and, in this respect, I consider that I.O.R. boats of the 76/77 era were a success in design terms.

I personally found the race interesting and challenging, but also exhausting. I would certainly not have wanted a bigger boat. I felt the handicapping "system" lacking and could see no reason why "Ocean Beetle" a 28 footer, should have time conceded to her by a Contessa 26.

Everywhere the hospitality was fantastic and I shall certainly go again.

I wish you and the A.Y.R.S. every success, and I assure you that the work you are doing is much appreciated.

Yours sincerely, Robert J. Nickerson

Skipper, Robert Nickerson — Crew, William Upton

8th July 1978

was a day tripper), but the third, unidentified, shot away.

After rounding the Bishop we were able to ease the sheets a little and started close-reaching for Crosshaven. A large creature suddenly appeared on our port quarter - a porpoise? It was very large (about 20 feet) with a dorsal fin and white cheeks. Robert is not a world authority on whales but he did take the trouble to learn to positively identify one kind and this was it - a killer whale.

We sailed on, keeping just to weather of our course according to the hadrian computer. About 25 miles on we saw the rigs of the Kinsale gas field away to the West - just visable. These should have been much closer to the rhumb line. We were by now close-hauled on port. An RDF fix indicated that we were much further East than we meant to be - and a lot further East than the Hadrian thought we were. This meant a beat in. About five miles from Crosshaven the wind died away almost completely. We saw Slithy Tove under the cliffs just outside and to the West of the entrance to Cork harbour. A small tri was coming up astern. We

Voyage from _____ to _____		Date _____				
TIME		VIS	COURSE	LOG	WIND SPEED	WIND DIRECT BAR
	hoisted the Drifter (ultra light hood) which in 0-5 knots of wind picks up every little puff. The tide finally helped us in towards the finishing line, but then we got a puff and had to change to the light No.1 about 100 yards from the line to avoid blowing out the Drifter (made of 1½ oz. spinnaker cloth).					
	Finished 06.35.10 on Monday 10 July 1978. Log 116 - 266 miles 43 hours 35 minutes. Average speed 6.10 knots.					

Voyage from CROSSHAVEN to BARRA		12 July 1978				
TIME		VIS	COURSE	LOG	WIND SPEED	WIND DIRECT BAR
08.35	Start. Beam reaching under main with hood spinnaker set.	MOD/P	210	116	10	E 1044
09.00	Old Head of Kinsale abeam. Wind zero. Hood down and extra light enormous Kite set. Course set for Fastnet Rock.	MOD/P	265	133	0-2	E? 1017
10.30	Slithy Tove abeam to port. We crossed astern of her in order to keep the wind 30° on the port quarter and also looking for more wind offshore.					
12.30	Now rapidly overhauling NS44. She seems to be in a flat spot so we gybe and reach back, this time wind over stbd quarter and cross ahead of Slithy Tove at about 1.30. We feel sure that it is warm enough for a sea breeze and this is borne out as the wind firms up to about 3-4 knots (apparent) nearer the shore. Off Galley Head we have to luff up by ½ mile to avoid Irish fishermen's nets, partially losing sea breeze.					
15.30	Sight what promises to be (?) another race boat ahead. It looks as though it may be the big tri "A Capella".					
15.40	White boat with blue/white spinnaker seen astern offshore - may be Petit Suisse.			155	4	E 1019
15.55	Swiss 117, S.T. 136. NS 143					
16.30	Stags abeam	Good	255	157	4	E 1019

Voyage from _____ to _____		12 July 1978				
TIME		VIS	COURSE	LOG	WIND SPEED	WIND DIRECT BAR
19.00	We had a lull all of our own a little while ago with the result that four race boats have passed us - Whiskey Jack, NS44, Slithy Tove and of course, Petit Suisse. Still, it now gives us more targets to go at!					
	Fastnet coming up at about 4 knots! We missed the weather forecast, again - must get it at 21.00 hrs, therefore, set alarm clock, (no, not on the starboard halyard).	Good	265	169	5	SE 1020
19.30	Slithy Tove passed - now hard on the transom of Petit Suisse!					
20.00	Fastnet. Hadrian has been playing up so we conducted a "test" from the Old Head of Kinsale to Fastnet - H. said we were 4.4 miles to port of our course - he is wrong by 8°! From Fastnet to the Bull we have set him up on 315° (true course 307°(M) to see if he is consistent. At Fastnet we gybed onto stbd tack - still under main and Hood (ultra light Kite). Making 5 knots with 4 knots apparent. Beautiful sunshine since about 3 o'clock - still very hot.	Good	307	173	5	SE 1020
20.30	We are under-steering the course whereas Petit Suisse is nearer the rhumb line. In theory we should sail slower since the wind is more directly behind us - but we are keeping!					
	Very close racing all night and morning breaks with the Swiss					

TIME	Voyage from	to	Date	WIND			
				VIS	COURSE	LOG	WIND SPEED DIRECT BAR
	on our port quarter and NS44 about 1½ miles astern.						
13 July 13.00	The Swiss have set their spinnaker and are reaching off to leeward (and ahead a little) NS44 has caught us up. Our group has GBII in sight - not her kind of weather.						
19.00	We have fought all day to hold the Swiss who have somehow, got away! The "group" split to weather and to leeward of the rhumb line (019°) to Black Rock. We went to weather, initially, as the wind was East, then South East, then dead flat before coming from SW for a spell before going NW. Now we are to leeward of the line, beating up to gain clearance of the various headlands, Slyne Head, Inishark (island) and Achill Head. However, the best we can do is 030° which is not good enough.						
	The sun has been blazing all day - very hot. During the afternoon we sailed into a school of porpoises and disturbed their reverie. The result was a mass exodus at high speed - very exciting seeing them leap 2-3 feet out of the water and jumping about 10 feet in distance. Robert tells me that they can move at up to 40 mph! Robert is now recharging his batteries having had only about six hours sleep since the start of this leg.						

Voyage from		to	Date	WIND		WIND			
TIME				VIS	COURSE	LOG	SPEED	DIRECT	BAR
	I'm on until about midnight (I've had 6-8 hours kip so far).								
	Sail changing is the hardest work we do (apart from concentrating on sailing fast). I started counting the changes today but lost count in the morning at about 12. Today we have used - mainsail (all day), Hood ultra light spinnaker, light spinnaker, Drifter, light No. 1 genoa, Reacher (Jib topsail) and Staysail. These sails have been up and down in just about every combination imaginable!								
19.30	Altered course to 020 ⁰ , Slithy Tove abeam 50m. to port l.			Good	020	295	11	NW	1027
	All night we sailed close-hauled to the North with Slithy Tove in close attendance.								
Friday '4 July	We spent the whole day sailing close-hauled - lost sight of Ireland. Was Achill Head behind Eagle Island? The wind became NNE/N about force 2-3. The wind was shifting all the time, sometimes by 30 ⁰ . The weather forecast keeps giving North Westerly wind for sea areas Rockall and Malin - just what we want. We therefore make a tack to NW on starboard tack for about three hours. The wind is still very variable in direction but								

TIME	Voyage from	to	VIS	COURSE	LOG	WIND		WIND SPEED	WIND DIRECT	BAR
	steady at 10-12 knots. We begin a long haul to the North East pointing no higher than about East or 080° on port tack. We speak to a ship the "Shiverer" who gives us a fix which puts us six miles North West of our DR position, which means that we have been pointing somewhat better than we thought. The wind steadily frees until we can sail about 030 most of the time - getting an occasional lift to North - which we take. Saturday. Morning breaks with a trimaran astern, which turns out to be 15 July RFD who is going very quickly indeed although sailing freer than we are. She soon speeds away as she is close reaching. We sail all day gradually easing off until some 20-25 miles from Barra Head we bear away to a beam reach at about 7 knots. Robert radio telephoned Plymouth who told us that GBII, GBIV, Rogue Wave and Mezzanine were in. This dispirited us more than somewhat since the girls in Mezzanine are sailing a smaller, less powerful boat than we are, and we had worked hard! They must have skirted the calm at Valencia by going well offshore. The Swiss were probably in hours ago. We keep losing sight of Barra as the rain clouds sweep across the									

TIME	Voyage from	to	Date	VIS	COURSE	LOG	WIND		WIND SPEED	WIND DIRECT	BAR
	islands and ourselves constantly. Only when both are in the 'clear' can we see the Head. We debate whether to set the heavy kite since the wind is on or abaft the beam. We are very tired and decide against this. We are sailing under full main and heavy No. 1 genoa - with the No. 2 on deck in case of a prolonged gust. We prepare for the final beat into the Castlebay channel - two reefs in the main. We sail into the lee of a tall island and drop the No. 1 hoisting the No. 2. We have a final beat of ½ mile up the channel which teaches us one thing - the No. 2 is a very close-winded sail, being far superior to the No. 1. On arrival in Castlebay we are welcomed by John McLeod who shows us where to anchor, picking up a mooring chain for good measure. He remembers us from last year when we had about 6 attempts at anchoring, but always dragged until finally we broke a CQR in half when it did get fast! On board he has Customs, an official from RWYC and Angela Greene of the Observer. They tell us that they thought we were the Swiss - and that neither Petit Suisse nor Mezzanine were in! Finishing time 22.37.19 Saturday 15.7.78 493 miles 5.5 knots 90 hours.										

609

Voyage from BARRA

to LERWICK

Date 17 July 1978

TIME

VIS COURSE LOG WIND WIND
SPEED DIRECT BAR

10.37 Departed Barra in darkness and in thick fog. During the night visibility improved, but we never saw any other yachts. We think we saw the lights of Slithy Tove or Petit Suisse coming up astern at Barra Head, but we may have been mistaken. The night was very cold.

18 July

Dawn broke promising a fine morning but in fact it was cold and damp until about 10 a.m. Then visibility cleared and we saw St. Kilda - the most Western point on this leg of our course - some 30 miles away.

14.45 Approaching St. Kilda, now about two miles away. The weather is basically fine but cloudy. However, St. Kilda seems to be permanently enshrouded in mist and rain, only revealing itself very occasionally in a sunny spell.

16.30 St. Kilda well and truly abeam. Magnificent peaks stretching up 1400 feet, very rugged. Before rounding we see a white sail coming up astern - is it Petit Suisse?

Good 716 12-15 NW 1013

Voyage from

to

Date

19 July 20 July

TIME Wednesday and Thursday Morning

VIS COURSE LOG WIND WIND
SPEED DIRECT BAR

Spinnaker reach at 8 knots from St. Kilda to Sula Sgeir - no sight of following boats. Wind headed us so kite down and jib topsail and reacher set. Wind freshening and veering. Heavy No. 1 set and carried until wind too strong. Forecast is force 5-7 we, therefore, set No. 3.

Very long heavy beat to windward on port. Nico doing most of the steering. Approaching the Orkneys we tack to NW off the Papa Bank. Wind heading us but we hold on for 15 miles to get into deeper water. This proves to be a bad tactic. We have seen no other race boats for 1½ days.

We first see other boats off NW coast of the Shetlands. At Muckle Flugga - Northern tip the weather is very cold and sea rough. This is caused by a cross swell - some waves caused by the North Easterly, others by the North Westerlies. When these coincide they break and the result is a wave right over the Cherry Valley, half filling the cockpit.

1.30 Wind still 20-30 knots as we bear away around the top of the Shetlands. NS44 and Petit Suisse are now in close attendance,

	Voyage from			Date
TIME			VIS COURSE LOG	WIND WIND SPEED DIRECT BAR

having made up ground in the beat to Muckle Flugga.

The run from Muckle Flugga to Outer Skerries was a very fast broad reach. We set the "storm spinnaker". The Dutch and Swiss restrained themselves. Cherry Valley surfed very fast down some of the waves - about 12 knots or more. We breached once or twice and then a third time. This was much worse - the boat rounded up into the wind very quickly and lay right over on her side - the keel lifted right out of the water. The Dutch in NS44 were bearing down on us very quickly but managed to avoid us. We later learned that they had been busy with a camera! The Swiss by now had nearly caught up but after untangling the kite we got away again, about 3 mile by Outer Skerries.

We didn't get the kite down soon enough after bringing the wind on our beam and lost some ground to leeward. The result was that rounding Noss Head we were leading the Dutch by a few hundred yards and the Swiss by a quarter of a mile. Lerwick lies up a fiord of some 3 or 4 miles - our course was a dead beat, one slip up and the Swiss would be through. At the finish we were

	Voyage from			Date
TIME			VIS COURSE LOG	WIND WIND SPEED DIRECT BAR

two seconds ahead of NS44 and 6 minutes ahead of Petit Suisse.
01.22 12th boat to finish, 4th monohull, 1st monohull under 35 feet.
21 July

Distance sailed 484 miles in 74.44.49 hours - 6.48 knots through the water.

	Voyage from	LERWICK	to	LOWESTOFT	Date	23 July 1978
TIME					VIS COURSE LOG	WIND WIND SPEED DIRECT BAR
01.22	Leave Lerwick. We are still very tired from the last sail and have not been encouraged by the forecasts of the last 24 hours. These have consistently foretold of Southerly gale force winds for all Northern Sea Areas.				MOD/P 178 1094	25 SSE
	For a spell on Sunday a.m. we let the Nico do all the work. Luckily, with a steady wind it can cope.					
15.00	Swiss sighted coming up on starboard, we are on port tack. We cross ahead by some 2-3 mins. We begin to feel competitive again.					
21.00	Total Oil platform "Total 14-9" coming up abeam. Robert asks them if they have seen any race boats. No. But the East crane driver, who is higher reports that he can see three. We think they are Whisky Jack, Petit Suisse and ourselves. The margin between Petit Suisse and Cherry Valley has not changed markedly since 15.00, but before we can check this more accurately they					
22.00	go onto starboard tack and head offshore again.				Good 210 1212	20 S 1003

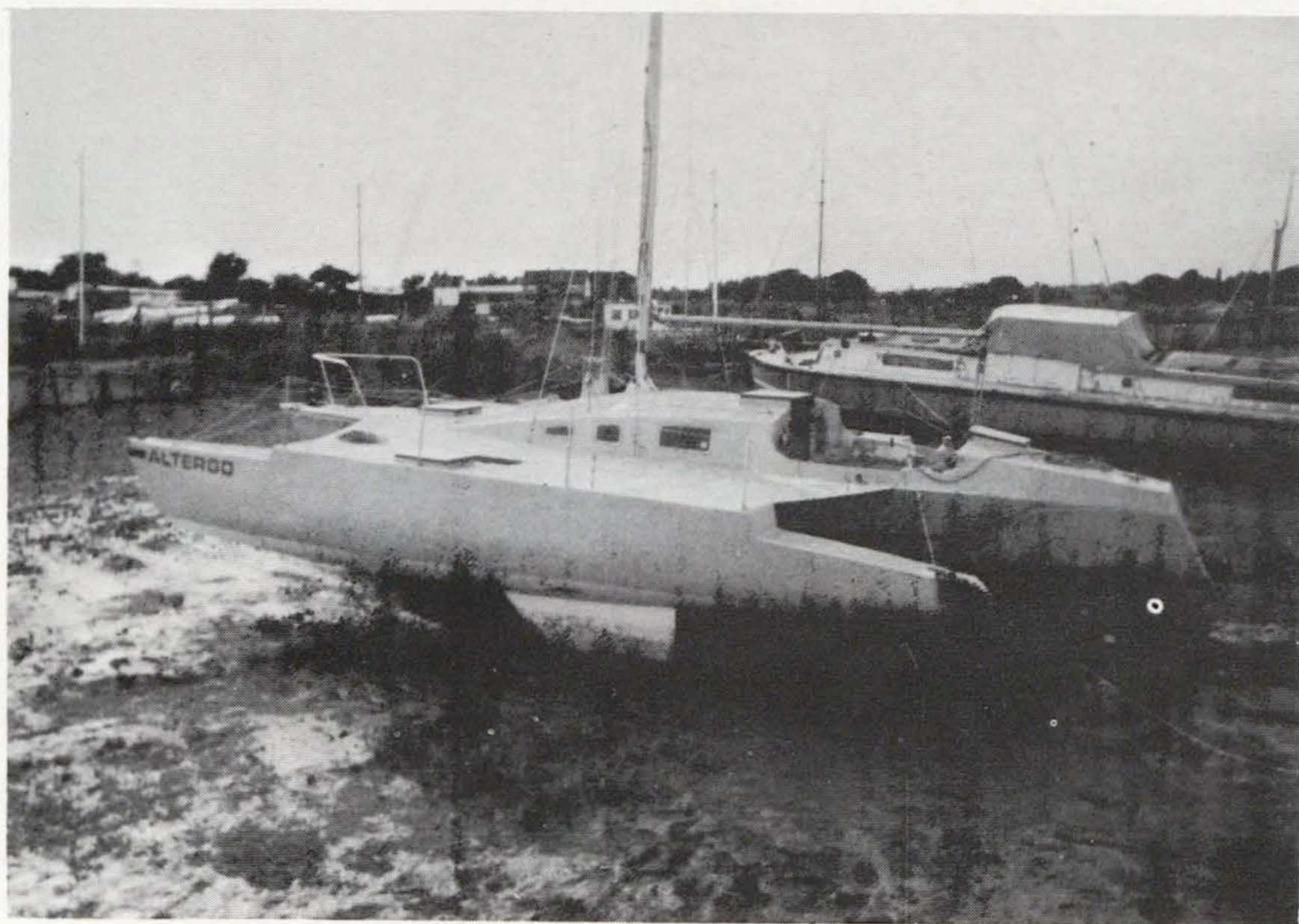
Voyage from _____ to _____		Date _____					
TIME		VIS	COURSE	LOG	WIND SPEED	WIND DIRECT	BAR
Monday 24 July							
15.00	The night was fine, wind steady from South and then backing Southwest about 3 a.m. We have made a steady 6 knots since then, all in the right direction. Weather is beautiful, nice and sunny. We have both been getting the rest we need, thank goodness!	Good	175	1314	20.25	SW/S	1009
Tuesday 25 July							
02.00	Eyemouth abeam! We are now in England. Wind has gone round to West so we are back on the rhumb line heading for a buoy just East of the Dowsing light vessel off Grimsby. Cherry Valley is close reaching at 6½ knots.	Good	180	1385	20	W/SW	1013
05.00	Dawn is breaking - as yesterday the wind is dying and heading us. Full main now. Slightly cloudy sky clearing - a fine day ahead.						
14.00	Still beating but now 30° off course to port. Hope for a freer later. Forecast for Humber is SW3 increasing 4-5 later.	Good	150	1458	15	S	1015
16.30	Petit Suisse passes astern, some two miles behind, heading in-shore. We have a beer to celebrate!						
18.00	We seem to have been in "shallow" water (200 ft.) for too long. An RDF fix says we are still North of Flamborough Head whereas our D.R. says we are at least level. We are lost!						

Voyage from _____ to _____		Date _____					
TIME		VIS	COURSE	LOG	WIND SPEED	WIND DIRECT	BAR
18.30	The wind is SE and we can lay South on port tack.	Good	180	1484	15	SE	1014
22.00	We think we know where we are! Our navigation included 2 fixes which were based on too little information. Our correction is confirmed by the D.F. off Flamborough Head, but it is possible that we are a little further West, since we have come off the Dogger Bank quicker than expected. Wind freshening 6-7 SE.	Good	200	1504	25	SE	1012
Wed 26 July	Stayed on port tack and made landfall just West of Cromer. Very lucky not to have been headed by them. From Cromer, beat all the way to Great Yarmouth, mostly in gale force 8 wind. We used the 3rd reef in the main and No. 3 genoa - the former for the first time. At Great Yarmouth we found a new wind, lighter and westerly and reached down to Lowestoft close inshore at 6½ knots in the flat water. Just made Lowestoft on the turn of the tide. Finished leg at 17.02 (Petit Suisse 18.34!) to finish 12th overall, again. 81 hours 40 minutes. 523 miles. 6.00 knots.						

Voyage from		LOWESTOFT	to	PLYMOUTH	Date		28 July 1978			
TIME					VIS	COURSE	LOG	WIND SPEED	WIND DIRECT	BAR
17.02	Start in light breeze from SW. This held until approaching Sizewell Power Station - then died. We anchor, sail 100 yards and then anchor again in foul tide. After an hour wind picks up from SE, light about 8 knots. We sail on to Orford Ness where sea birds are very disturbed by our proximity. Wind is very patchy - half way across the Thames Estuary the Swiss have caught us up. We tack together towards North Foreland. It appears that, when there is a breeze, we can match or even better their boat speed, but in a long lull we lose contact and they open up a lead of around $\frac{1}{2}$ mile.				Mod	210	1619	10	SW	-
Sat am 29 July	We decide that we must reach across to the Kent coast to beat the foul tide through the Dover Straits. The only way to do this is through the Kellert Cut. We feel our way through this in poor viz. with some apprehension since the Goodwins, with its wreck (three masts) is only 50 m to port. Not helped by losing the wind altogether when half way across. We eventually reach the South Foreland just North East of St. Margarets and proceed close inshore under the cliffs to Dover.									

Voyage from			to		Date					
TIME					VIS	COURSE	LOG	WIND SPEED	WIND DIRECT	BAR
	This tide-cheating exercise worked well and we overtake Petit Suisse and Whisky Jack at the Western entrance, causing some consternation to hovercraft and cross-channel ferries alike. Running with ghoster we establish a small lead over the other two boats and hold this to Dungeness. The weather is very heavy with thunder in the air, and a lot of rain.									
	A sudden squall struck us, heavy rain, thunder, lightning and winds of 30 knots - no weather for the ghoster. We run East while trying to salvage the sail. By the time we had sorted everything out the wind had dropped to nothing and no other yachts were in sight.									
Sunday 30 July	Visibility poor, we pass Beachy Head on the tide at 10.30 a.m. The wind is very light and variable - extremely frustrating. By 18.00 we are 5 miles from Selsey Bill, 8 miles offshore.									
Monday 31 July	By 3.00 a.m. we have covered another 14 miles plus or minus tides. Wind still very patchy, light and variable. Passed GBII 8.30!									
09.00	Approaching St. Catherine's Point I.O.W. wind freshening. We calculate that at six and a half knots we can reach Portland Bill									

Voyage from		to	Date		WIND 'WIND		
TIME					VIS	COURSE LOG	SPEED DIRECT BAR
	before the foul tide. The course is, therefore, direct across Lyme Bay rather than inshore to dodge the tide. Cherry Valley doing nearly 7 knots - fingers crossed. (We had a three-egg corned beef omlet each for breakfast instead of the customary bacon and eggs.)						
10.00	Log reading 834.2 - 11.00 1 hour log 850.7!						
23.52	Finished - 13th overall. 2nd in class - just under two hours behind Petit Suisse.						
	78 hours 50 minutes. 316 miles. 4.01 knots.					1935	
Total Distance Sailed		266	Time	43 hrs 35 mins	Speed	6.10 knots	
		493		90 02		5.5	
		484		74 45		6.5	
		523		87 40		6.0	
		316		78 50		4.0	
		2,082		374 hrs 87 mins		5.6 knots	<u>15.6 days</u>



"Altergo," a Kelsal 39 trimaran, stolen in October, 1978 from the Medway in England and no trace has been found up to May 1979. This is a distinctive light cream yacht. The theft must serve as a caution to members to take precautions and to check that they are covered by insurance.

Photo by Campar and Nicholson, London

Letter from Robert J. Nickerson, The Elms, Market Rasen, Lincolnshire.
to Michael Ellison

23rd March, 1979

Dear Michael,

Many thanks for your letter of the 16th March. Please find enclosed a photograph of "Cherry Valley" in black and white as I thought that this might be better for printing purposes. I hope it is suitable, but if not, we have lots more in colour if you prefer.

You requested details of "Cherry Valley" and they are as follows:

She is a Contessa 35, designed by an American, Doug Peterson, in 1975 as a production version of a boat called "Gumboots" which won the World One Ton Cup Competition in 1974. She was therefore designed to the I.O.R. rule as it stood in 1974/75. As I have said before, I believe that in that era, good dual purpose yachts were produced with the possible reservation that the rather pinched sterns do not lead to stability when pressed hard down wind in a blow. There is a tendency for the enormous masthead spinnaker to induce a synchronous roll with the inevitable ensuing broach!

The boat has a beam of 11 ft. 4 ins. and a draught of 6 ft. 2 ins. She displaces 7 tons with cruising gear, although the manufacturers claim a displacement of 6.25 tons. Of this, 3.5 tons is in a lead fin keel with a large spade rudder. The standard boat is 35 ft. 6 ins. in length overall and 7 ins. was removed from the transome, i.e. the retrousee part, to bring the boat into the under 35 ft. length overall category for the Round Britain Race. She is tiller steered and a Neco autopilot was fitted and used with great success for much of the race, requiring half an hour's battery charging per 24 hours. An additional bank of six 12 volt batteries was installed for this purpose and the auxilliary engine fitted with a second alternator. We also had a Hadrian distance off course computer and alarm which worked very well until it went beserk between the Bishop and Crosshaven and cost us a lot of ground to leeward as you will have seen from the log. We never did trace the fault, but it seems to be working okay now.

The boat is masthead rigged with a twin grooved luff forestay and three in-line athwartships halyards for the fore-triangles as is standard practice on many I.O.R. boats and this proved to be a perfectly satisfactory system for shorthanded sailing. We also used a hydraulic kicker, which when released pushed the boom up by pneumatic power, obviating the need for a topping lift and making slab reefing very easy.

We carried a very large sail wardrobe and everything except the working jib (No. 4) and the storm jib were used to effect. Sail wardrobe as follows:

Mainsail	267 sq. ft.
Drifter	583 sq. ft.
Light No. 1	583 sq. ft.
Heavy No. 1	583 sq. ft.
No. 2	470 sq. ft.
No. 2½	420 sq. ft.
No. 3	385 sq. ft.

No. 4	234 sq. ft.
Storm Jib	180 sq. ft.
Reacher	580 sq. ft.
Dual Purpose Staysail (Spinnaker or Reacher)	
Spinnakers:	
Floater	1,100 sq. ft.
Triradial Working	972 sq. ft.
Spider Storm	820 sq. ft.
Big Boy	352 sq. ft.

We did try a spi-squeezer but found the added complication of the string tiresome, and were quite able to set (in elastic band stops), peel from light to heavy and douse spinnakers in the conventional fashion two-handed without difficulty. I believe this was really due to the fact that our Neco was quite capable of holding an accurate compass course in any wind or sea conditions with the exception of force 8 and above. When it was only necessary for one man to trip the spinnaker the Neco would cope adequately.

We found that the boat going to windward would not stand up to her heavy No. 1 in over 16 knots of wind without the benefit of her six normal crew displaced along the weather deck, so we block packed all our unused sails and stowed them in the weather pilot berth to help compensate for this. AB. & G. Homer RDF was used and a Seafix carried as back up. Both sets worked well although the B. & G. gave smaller cocked hats especially when approaching the maximum rated range of beacons and was much easier to tune with the digital frequency counter. Many beacons have now changed their transmission mode making recognition of signals much more difficult with a permanent B.F.O.

Gear failures were: damaged spinnaker halyards due to broaching, autopilot steering wires, originally stainless, which fractured, were later replaced with smaller gauge galvanised which did not, and the Hadrian mystery.

We also carried a Dancom 200 SSB two megacycle RT which gave up after Barra and the Dancom 402B VHF which was reliable. Pre-race navigational planning consisted of plotting the rhumb line and ensuring an adequate supply of large scale charts for inshore work. Tactics were, in open sea, to always sail on the gaining tack and when both were equal to hold to the west of the rhumb line the object of this being to catch any change in the weather earlier. Turning marks, headlands, etc., were rounded close to keep the distance sailed down. Downwind in very light weather, we sailed with the apparent wind 20 degrees on the quarter and gybed. It later transpired that we were beaten by "Petit Suisse" a sister ship, because, having arrived at Beachy Head in very light weather with two hours of fair tide and two hours ahead of the Swiss, we held offshore becoming almost completely becalmed whereas the Swiss arrived with a foul tide, stayed inshore all the way to Selsey Bill, holding the breeze and arrived at St. Catherines 5 hours ahead of us. We had taken 28 hours from Beachy Head to St. Catherines.

I trust the above information will be of some interest. If you have any further queries, please do not hesitate to get in touch.

Kindest Regards, Robert J. Nickerson

P.S. We are having a crack at AZAB 79 with "Cherry Valley" this year. Good luck in you Horta Race.



"Cherry Valley Duck"

ROUND BRITAIN RACE RESULTS

Yachts in Final Order

<i>Place</i>	<i>Yacht</i>	<i>L.O.A.</i>	<i>L.W.L.</i>	<i>Type/Rig</i>	<i>Skipper/ Crew</i>
1	Great Britain IV	54.0	46.0	Tri./Sloop	Chay Blyth R. James
2	Three Legs of Mann II	53.0	46.0	Tri./Cutter	Nick Keig D. Beirstow
3	Rogue Wave	60.0	57.0	Tri./Cutter	Phil Weld David Cooksey
4	A Cappella	37.9	33.0	Tri./Sloop	Walter Greene Joan Greene
5	Jan of Santa Cruz	31.5	28.0	Tri./Sloop	Nigel Irens M. Pridie
6	Tielsa II	53.8	46.0	Mono/Cutter	Dirk Nauta A. Schouten
7	R.F.D.	32.0	29.0	Tri./Sloop	Martin Read P. Greig
8	Slithy Tove	48.0	40.0	Mono/Sloop	Michael Pipe W. Luhrs
9	Day Tripper	33.5	31.5	Tri./Sloop	Richard Norris A. Ellis
10	Whisky Jack	34.0	32.0	Tri./Cutter	Philip Walwyn F. Tate
11	Petit Suisse	35.0	29.5	Mono/Sloop	Beat Guttinger A. Schiess
12	Great Britain II	77.1	68.1	Mono/Ketch	R. Knox-Johnston B. King-Harman
13	Cherry Valley Duck	34.9	29.5	Mono/Sloop	R. Nickerson Wm Upton
14	Johnwillie	46.0	39.0	Tri./Cutter	W. H. Cherry J. Westell
15	Norvantes	47.0	34.0	Mono/Sloop	Peter Jay L. Fitzherbert
16	N.S. 44	44.0	37.0	Mono/	T. Romke de Vries W. Koekebakker
17	Gazelle	28.0	26.0	Tri/Cutter	Charles Dennis Julia Awcock
18	Kurrewa	34.9	28.0	Mono/Sloop	Fred Dovaston J. Wetherup
19	Comanche	32.2	28.8	Cat./Sloop	M. Ellison R. J. White
20	Yamaha D'Ieteren	33.0	26.0	Mono/Sloop	Yves Anrys A. Wilmet
21	Run Around	35.0	34.5	Tri./Sloop	Tony Bulimore H. Cassen

<i>Place</i>	<i>Yacht</i>	<i>L.O.A.</i>	<i>L.W.L.</i>	<i>Type/Rig</i>	<i>Skipper/ Crew</i>
22	Mezzanine	32.2	28.5	Mono/Sloop	Stephanie Merry C. Clegg
23	Attila	32.0	27.5	Mono/Sloop	J. Hurlbatt N. MacRae
24	Jaws	34.0	28.4	Mono/Sloop	N. Svendsen N. Brooke
25	Lydia Cardell	35.0	33.5	Tri./Cutter	Frank Wood M. Hampson
26	Bollemaat IV	45.0	34.7	Mono/Cutter	K. Roemers Nancy Roemers
27	Sherpa Bill	36.0	26.5	Mono/Sloop	Alan Parkes Tim Reese
28	Assent	32.0	24.0	Mono/Sloop	William Ker Alan Ker
29	Ultima Thule	40.0	33.0	Mono/Cutter	Richard Wood A. Scott
30	Lone Rival	37.5	24.9	Mono/Sloop	Geoff Hales Chris Smith
31	Robertson's Golly	37.5	26.3	Mono/Sloop	Richard Clifford G. Hornett
32	Gipsy Moth V	57.0	42.0	Mono/Ketch	Giles Chichester M. Richey
33	Telstar	26.0	24.0	Tri./Sloop	A. J. Smith W. Rietig
34	Checkmate	32.0	24.0	Mono/Sloop	Rodney Barton P. Clifford
35	Lydney Maid	50.0	41.0	Mono/Cutter	Hywell Price R. Linnell
36	Tsunami	30.0	22.0	Mono/Sloop	John Bradley A. Fioretti
37	Slightly	28.0	23.0	Mono/Sloop	Andrew Spedding M. Wheatley
38	Kass-A-Nova	28.0	22.0	Mono/Sloop	Arthur Sowerby T. de Sousa
39	Haigri	37.5	29.5	Mono/Cutter	J. Russell D. Russell
40	Ocean Beetle	29.0	23.0	Mono/Sloop	John Dungey J. Boulter
41	Pyledriver	30.0	25.0	Mono/Sloop	David Pyle P. Gately
42	Skol II	25.0	19.1	Mono/Sloop	R. F. Gatehouse D. Robinson
43	Ella	25.5	21.3	Mono/Sloop	D. Whistance P. Smith
44	Elena	50.5	35.0	Mono/Sloop	J. McKillop C. Steinly
45	Lara of Bosham	36.0	31.5	Tri./Ketch	C. P. Lee Paul Jeffes

<i>Place</i>	<i>Yacht</i>	<i>L.O.A.</i>	<i>L.W.L.</i>	<i>Type/Rig</i>	<i>Skipper/ Crew</i>
46	Wild Rival	34.0	24.9	Mono/Sloop	D. Hampton K. Hampton
47	Tarnimara	32.0	24.6	Mono/Sloop	John Cunningham Bob Lush
48	Areoi	34.9	27.5	Cat./Cutter	Graham Rates J. Thewlis
49	Sagitta	30.0	23.0	Mono/Sloop	Herman Struijk Dick Struijk
50	Hajji Baba	34.0	24.9	Mono/Sloop	T. Metternich M. Kemmis-Betty
51	Contagious	32.0	24.0	Mono/Sloop	Roger Corral D. Ellison
52	B. P. Catcracker	30.0	27.0	Cat./Sloop	Trevor Harvey B. Sismey
53	Melodikum III	24.7	17.4	Mono/Sloop	Ulf Olhagen T. Barnard
54	Ron Glas	47.0	36.0	Mono/Junk	Jock McLeod D. Cowper
55	Yacht and Boat Owner	24.0	17.5	Mono/Sloop	Gavin Howe Mike Owen
56	West Wind	32.0	24.0	Mono/Sloop	R. Lloyd Williams R. Adamson
57	Christian Saul	30.0	22.0	Mono/Sloop	Paul Rodgers Bruce Henly

The following 5 yachts failed to finish by the limit time of 20.00 on 8th August.

58	Melmore	46.0	34.6	Mono/Gaffk.	Frank Esson J. Oliver
59	Super Achilles	24.5	20.0	Mono/Sloop	Chris West M. Moulin
60	Galway Blazer	42.0	35.0	Mono/Junk	Peter Crowther A. Addis
61	Bird	32.0	24.0	Mono/Sloop	Michael Hall R. Baker
62	M. M. Microwave	25.5	20.0	Mono/Sloop	Chris Shaw J. Bunting

The elapsed times include time penalties for rule infringements, mainly being late for pre-race inspection at Plymouth. The weather before the start was "inclement" but this is the only way open to the organisers to persuade entrants to have their craft ready for inspection on the appointed day.

Tielsa II 3h 15m., N.S. 44 8h 00m., Yamaha 0h 11m., Run Around 8h 00m., Mezzanine 2h 32m., Contagious 14h 15m.

For the 1982 race, the penalty will be 25% of the time the yacht is late.
Deadline 0900 on Tuesday, 6th July.

1982 RACE

Entry forms are now available for the next race starting on 10th July, 1982, write to Sailing Secretary, Royal Western Yacht Club of England, West Hoe, Plymouth. Entry fee is £150 of which, £75 will be refunded after the yacht passes inspection at Plymouth before the race. (No go = no refund). Entries will again be limited to 100 yachts and must be received by 0900 on 10th May, 1982.

For the 1982 Race, the minimum length will be 25 instead of 24 feet overall and the time limit for the course has been reduced by two days.

CROSSHAVEN, FIRST PORT, 230 MILES

<i>Total Time at Sea</i>			<i>Crosshaven Time</i>			<i>Comments</i>	<i>Position</i>	
<i>D</i>	<i>H</i>	<i>M</i>	<i>Handicap</i>	<i>Position</i>	<i>D H M</i>		<i>V/L</i>	
1	13	01	24	31	6	1 12 39	Design—Derek Kelsall	13 .886
2	13	13	59	38	2	1 07 56	Design—Derek Kelsall	17 .852
3	13	15	05	47	1	1 03 37	Design—Dick Newick	32 .763
4	14	13	14	18	4	1 11 21	Design—Walter Greene	4 .940
5	14	23	47	12	7	1 12 43	Design—Dick Newick	1 .992
6	15	01	04	28	5	1 12 00	Ex "Bestevaer". Dutch	27 .777
7	15	04	14	14	15	1 21 38	'Val' with solid wings	2 .962
8	15	07	56	21	11	1 19 21	Ref. A.Y.R.S. pub. 75	24 .810
9	15	09	21	23	8	1 16 10	Design—Simpson-Wild	9 .909
10	15	11	11	17	13	1 20 24	Design—Simpson-Wild	10 .898
11	15	11	37	7	14	1 20 38	Contessa 35 Class Yacht	6 .933
12	15	12	15	54	3	1 10 33	G.B. 2 = 2 Round World	53 .613
13	15	12	52	8	12	1 19 35		7 .932
14	15	14	03	30	9	1 17 24	Float detached in '74 race	25 .807
15	15	16	05	9	25	2 03 31	Camper & Nicholson yacht	16 .859
16	15	22	38	20	10	1 18 50	Dutch Entry	19 .827
17	16	05	32	15	33	2 07 10	Day Racer by Kelsall	3 .949
18	16	07	17	5	16	2 00 47	Half scale 12 metre yacht	8 .911
19	16	10	45	16	19	2 01 15	Cruiser-Macalpine-Downie	12 .889
20	16	11	45	2	17	2 00 52	Belgium. Well found yacht	5 .935
21	16	13	57	49	23	2 02 45	Chartered. Ex. 3 Legs of Mann	20 .823
22	16	14	12	4	21	2 01 28	Female Crew	11 .892
23	17	00	34	13	20	2 01 18	Camper & Nicholson '76	14 .879
24	17	01	07	11	28	2 04 47	Holman & Pye — UFO 34—¾ ton.	15 .865
25	17	18	00	37	24	2 02 48	Eric Manners, driven hard!	30 .764
26	18	02	18	44	18	2 01 11	Dutch entry. Cruiser	36 .737
27	18	19	08	3	26	2 03 46	Grown from 'Sherpa' in '74	23 .812
28	18	21	57	6	29	2 04 54		18 .847
29	20	17	37	51	39	2 12 53		51 .658
30	20	17	54	46	42	2 14 10	Rival 38 Class	45 .696
31	20	20	45	48	36	2 08 53	Ohlsen 38 Class, Ex. O.S.T.A.R.	42 .707
32	20	21	13	61	22	2 02 19	Ketch—slow in light winds	55 .580
33	21	01	23	57	43	2 15 18	Jury rig for 4th leg	33 .761
34	21	03	05	35	30	2 05 58	Contessa 32 class	34 .759

<i>Total Time at Sea</i>			<i>Crosshaven Time</i>			<i>Comments</i>	<i>Position</i>	
<i>D</i>	<i>H</i>	<i>M</i>	<i>Handicap</i>	<i>Position</i>	<i>D H M</i>		<i>V/L</i>	
35	21	03 59	60	47	2 17 19		56	.579
36	21	08 59	19	32	2 07 09	Arpege Class	26	.782
37	21	11 37	32	37	2 12 09		31	.763
38	21	16 14	45	38	2 12 41	Carter design ½ ton	28	.772
39	21	17 39	52	57	3 01 21	Rival 38 Class	49	.665
40	21	21 00	1	34	2 08 15	Slipper 28 Class	35	.749
41	21	21 18	24	48	2 18 18	Moody 30 Class	39	.718
42	21	23 03	22	40	2 12 55	Sadler 25 Class	21	.819
43	22	05 08	36	50	2 19 48	Hustler. Home completion	29	.767
44	22	06 00	55	58	3 03 44		54	.597
45	22	06 32	59	55	3 01 06	Comfortable cruiser	52	.629
46	22	06 48	41	51	2 20 32	Rival 34 Class	44	.705
47	22	07 00	39	61	3 06 14	Canada	41	.710
48	22	07 33	58	67	4 10 06	Wharram Design	48	.671
49	22	07 36	34	60	3 04 49	Holland	37	.734
50	22	07 55	42	63	3 09 45	Rival 34 Class	43	.705
51	22	14 38	50	41	2 13 06	Contessa 32 Class	38	.728
52	22	18 32	62	46	2 16 51	Iroquois Class	50	.664
53	22	18 33	27	62	3 08 14	Sweden	46	.694
54	22	19 35	33	64	3 11 48	Schooner, Angus Primrose	57	.573
55	23	01 10	10	53	2 23 30	Reve de Mer Class	22	.815
56	23	04 29	40	45	2 16 49		47	.692
57	23	08 39	29	54	3 01 03	By Sparkman & Stephens	40	.716
58	23	21 20	25	72	5 05 14	Gaff ketch/Cutter		
59	23	22 30	56	59	3 03 52	Achilles 24 (extended!)		
60	23	23 12	43	71	5 04 54	'Chinese' Schhiner Rig		
61	24	02 25	53	69	5 03 40			
62	24	11 30	26	65	3 15 56	Contessa 26 Class		

We regret that we have not received confirmed reports from the yachts that retired but the proa "Anglia Pipe Dream" retired at Lowestoft the last port when they realised they could not finish by the deadline. Although slow in the light winds, she was 49th at Crosshaven in 2 days 19 hours and 38 minutes only 2¾ hours after the Iroquois. After 2 days weather off Crosshaven was calm with fog, this delayed the slower yachts.

Major Prizewinners in 1978 Round Britain Race

1st to finish Great Britain IV; 1st Monohull Tielsa II; 2nd Yacht Three Legs of Mann; 3rd Yacht Rogue Wave; 1st Monohull under 35 ft. Petit Suisse; 1st Multihull under 35 ft. A Capella; Winner on handicap Ocean Beetle; 2nd on Handicap Yamaha D'Ieteren; 3rd on Handicap Sherpa Bill; Henri-Lloyd Trophy Mezzanine; Boxall Trophy Jan of Santa Cruz.

Henri-Lloyd Trophy

The Henri-Lloyd Trophy was awarded to the yacht, other than a major prizewinner, adjudged by the competitors to have achieved the most outstanding performance in the Round Britain Race.

The Boxall Trophy

The Boxall Trophy for the yacht which achieved the highest speed/length ratio in the race overall was won by JAN OF SANTA CRUZ.



The Newick designed Val Trimaran, Jan of Santa Cruz, being lifted for weighing in Plymouth before the start.

Letter from Gerard Horgan, 132 Gayton Road, King's Lynn, Norfolk.
to Michael Ellison.

28th October, 1978

Dear Michael,

Some notes about MARRAM, promised when I saw you last June.

She is a 52 foot Atlantic Proa, with a 45 degree Bruce Foil below the small lee hull. Gross displacement ready to race, with crew, stores and safety gear is well under 5,000 lbs. Working sail area, 750 sq. ft.

First serious sea trial was also a last minute qualifying run for the 1978 R.B.R. Prior to that, we had a total of four hours testing in Pegwell Bay. After passing the required 200 mile mark, and while cruising back to base, the mast fell down, buckling 10 feet above the deck. The mast was an interesting Kelsall experiment, with a pronounced concavity to windward. Mast was non-rotating, with the luff groove in the lee face. Curved top to windward should reduce twist, and mast to sail transition always smooth on lee surface. Windward rigging could be tensioned to alter curvature. A strut to windward supported the mast if backwinded, there being no rigging on the lee side of the mast. There were no rigging wires to interfere with the generous roach of the fully battened main when shunting. In action, there was one big catch, a curved mast cannot withstand any compression loads. The roller reefing foresails must be set on a very tight forestay. We set the stays as tight as we dared, but the inevitable happened, and the mast collapsed like a bowed leg trying to hold up the sky. It took many hours to make Dover under jury rig, averaging 1.5 knots. Plenty to watch just there.

The totally redesigned rig was completed only 80 hours and 300 miles from Millbay Docks. Our second sea trial was en route to the start of the R.B.R. In retrospect, it was fortunate that there was a summer storm in the English Channel that weekend. We made about 170 miles and learnt much. We could not reach Plymouth in time for pre-race inspection, and we did not feel that our radical craft was sufficiently developed for a serious event like the R.B.R.

The foil seemed to work well, no burying of the leehull even when reaching briskly. The section is flat on lee face, and constant radius on the other. About 12% thickness chord ratio. The rectangular board is lowered through a 45 degree case in the lee hull. Working portion below the hull is 7 feet by 4. A portable A frame was needed to raise the foil, very necessary in shallow water with a tide running. A Bruce foil makes a good emergency anchor fluke. No measurements of leeway were made, but trying to make to windward off Beachy Head in confused seas and force 6, with too much feathering due to anxiety about a creaking mast step, observed leeway was excessive.

The general feeling of MARRAM is right, but such a radical design needs development time. A proa needs new procedures, such as remembering to reverse the log transducer when shunting. Most instruments such as compasses logs, windspeed and direction indicators are intended for use in boats with only one bow. It will be necessary to duplicate some and rotate others.

As a reference for potential performance, GB IV was building in Derek Kelsall's yard at Sandwich at the same time as MARRAN. Water line lengths are equal, at 45 feet, but MARRAM has half the displacement and sail area. In most formulae that says faster and more easily managed by a small crew.

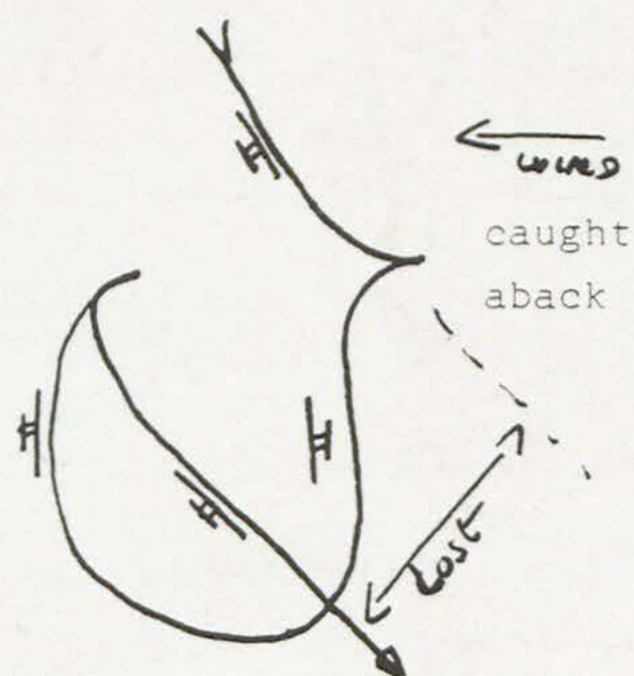
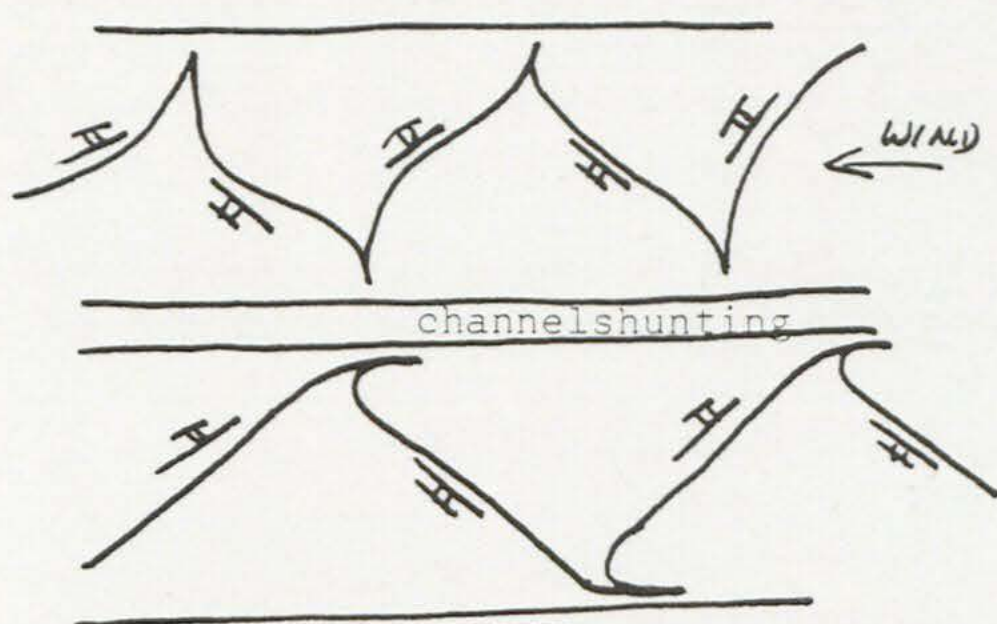
The two areas which require some reworking this winter are the mast step and the rudders. The step was hastily repositioned when the new rig was installed, without adequately distributing the enormously increased loads. Creaks and visible cracks suggest a fore and aft beam and bulkhead are needed. The accommodation will be improved at the same time.

The rudders are hung far out at the ends of the main hull, the thinking being that a longer leverage would require a smaller area, and lower stresses generally. Each rudder is pivoted in a clamp running across the fore deck, allowing the vertical rudder shaft to swing up alongside the deck when not needed. Right angle gearboxes at the top of each shaft allow a steering rod to be led to the central cockpit. A cleated line raises the rudder during shunting. In early testing, the general arrangement was satisfactory, especially the comfort and good all round visibility achieved by steering from inside the main hull, the helmsman exposing little more than his eyes. Later experiences in lumpy seas have made us think again. The extreme length and light weight of the main hull will often lift the rudders right out of their intended element. We tried using both fore and aft rudders, which helped, but it was still possible to be running, poised atop a good surfing wave, with no directional control at the critical moment. There were several occasions when trying to force to windward in gusty force 6 that made us wish for better control. Either the gust would catch us atop a wave and swing us up into line, resulting in a harmless sternboard before moving ahead again. Or more exciting would be a swing across the wind, leading quickly into a wild reach from which only loosing the sheets reduced our speed enough for the overloaded rudders to bring the head up again. We could see 45 degrees of give in the steering rods, and the tiller arm was already against the stop. The new layout will be nearer to amidships and deeper.

The two roller reefing headsails, one at each bow, were a delight. Shunting is a very novel manoeuvre, but short tacks are possible. We had to learn quickly coming out of Newquay harbour, at low tide the banks are 15 foot walls of concrete. It seemed very narrow in flukey head winds. The better technique is not to turn across the wind as in most illustrations of shunting, but to luff up parallel to the bank, stealing a few feet, while quickly rolling away the foresail. As soon as the rolling is done, back the main and swap rudders. As you begin to move back, swing through 140 degrees, unrolling the other foresail. With two people and light winds this can be an elegant turn. It also makes best use for the narrow channel. We indeed have been caught aback several times when well offshore, with plenty of room to reverse what is a naturally stable situation, with the foil upwind. The foil makes a very large contribution to prevention of capsizing from this attitude. Recovery requires a slow turn downwind, sometimes after the main has been dropped. I think better rudders would make recovery easier.

Congratulations on a good run in R.B.R., when are you going to find yourself a real greyhound?

Regards, Gerard Horgan



Letter from Josef Dusek, P.O. Box 404, Potts Point, Sydney, Australia. to Michael Ellison.

BULB FOR THE MULTIHULLS?

And why NOT?

The following development (and subsequent discovery) came about when I became aware of the various measurement rules for different short-handed races. Yes man, I was going to do a little cheating!

To be eligible for the new, "Rhum Route" race (La Route du Rhum), for which I didn't get a sponsor anyhow — I couldn't extend my boat any more to be long enough to satisfy the eleven meter minimum (Rhum Route 11m, La Transat 9m, O.S.T.A.R. even less — one has to be a rich man or have a rubber boat to fulfill all the criteria!

Luckily I was able to dust off some of the knowledge I'd gained while fiddling with Submerged Bouyancy (Amateur Yacht Research Society publications) and came up with the idea of extending the boat forward, by adding a "bulb" with a vertical cutwater — and this gave me the needed 11m water line.

What a big and pleasant surprise I got when I fitted the device onto a scale model and plunged it into my testing tank! The bulb produced such an increase in performance compared with data from previous tests of pure Foiler and Trimaran that I didn't hesitate to build a full scale bulb for my experimental Aquafoiler "Dalibor."

Being in possession of several Submerged Bouyancy bodies, it was relatively easy to adapt one for the role, with some alterations to the shape.

Taking the form of the bow, fibreglassing a 6 ft. "shell" on the beach and joining it to the S.B. was the next step. Four weeks later, the "Slipper" (as I call the bulb because it's detachable — although there's a more descriptive nick name which I'll leave to your imagination, not wanting to be called a dirty old man!) was slipped on the bow and firmly secured by bolts in the upper skirt above the water line through the hull.

With the addition of the bulb, Dalibor is now a truly T.C.C. (Totally Crazy Craft), but here are some of the benefits I gained:

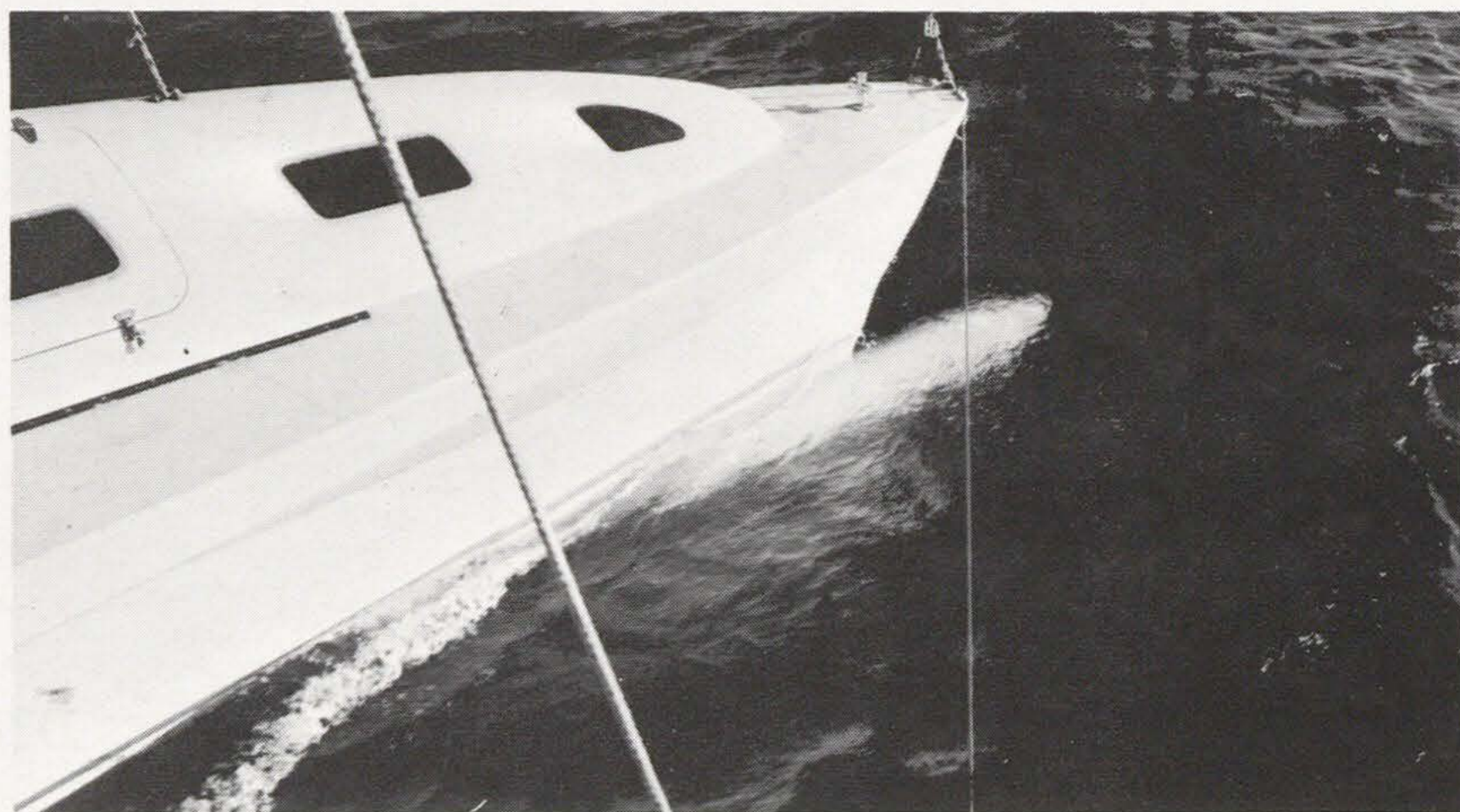
- 1) In the case of Dalibor's planing hull, the bulb helps the boat to plane 2 knots sooner at around 10 knots.
- 2) Extra buoyancy (straight on the nose) helps prevent burying the bow.
- 3) Damps pitching (according to Elvstrom & Kjaerulff) up to 50% on Coronet Elvstrom 38 Super Moton sailer.
- 4) By increasing lateral resistance, helps windward performance.
- 5) Altering the bow wave pattern makes a "fat boat like Dalibor" slimmer and some cruising trimarans, main hulls also.
- 6) The flat bottom of the bulb at fixed angle of attack provides pronounced hydrodynamic lift (at 10 knots greater than the displacement of the bulb—in Dalibor's case).
- 7) Increased directional stability.

I presume the idea can be adapted to Multihull Craft generally, to improve performance and comfort. The bulb can be easily fitted and no great constructional changes are necessary.

Technically, the bulb can be fitted even on floats of trimarans especially those with submersible floats where mainly hydrodynamic lift at higher speeds will help stability. Proas may have to use the bulb on leeward float configuration to keep the bulb in the water, "working." There may be some water disturbance using the bulb on catamarans when the bulb enters and leaves the water "flying the hull" but should work on those craft.

A marked increase in performance on "Dalibor" is partly due to the ability of the float to plane but on other types of multihulls which are generally "displacement" types, total benefits should be great enough to justify the fitting of the bulb.

Happy Bulbing, Josef Dusek



Bulb Bow on "Dalibor"

Photo by Joseph Dusek



Joseph Dusek and Bulb Bow on his "Dalibor" in Sydney.

Letter from Alan G. Perkes, 57 Twickenham Road, Teddington, Middlesex.
to Michael Ellison.

SELF STEERING GEAR

On 'Sherpa Bill' during the 'Round Britain Race' we used the Aries Self Steering Gear which we found very satisfactory, especially as 95% of the time we were close hauled. However, the normal adverse comment on these gears is the downwind in light conditions performance, and on our boat we think we have the answer.

Disengage the chain link from tiller, line up the vane so that the servo blade is at right angles to the deck line. The tiller chain should now be centred across the cockpit. If not, adjust so that it is.

Tie extra line to each end of the chain and fix firmly to strong point either side of the cockpit. This locks the servo blade firmly in the middle and therefore it becomes an auxilliary rudder. The tiller is then locked onto chain at whatever position is required so that the vane is working more or less upright.

Do not forget, if you disconnect the tiller, to hand steer that the auxilliary rudder is still happily steering as the vane dictates.

We found that this worked in down to two knots of wind with the spinnaker up on a dead run.

A light weather large area terylene wind vane, weighted to give the same balance as the wooden vane is also an improvement in these conditions.

Alan G. Perkes

THE LIFE-RAFT OR LIFEBOAT PROBLEMS

by

R. M. Ellison

In our publication, "Yacht Tenders and Boats," June 1977, I wrote a chapter on "The tender as a lifeboat." I listed the following requirements and sketched a craft similar in several ways to one which subsequently won a design prize in a competition for such a craft arranged by the R.Y.A. Seaman-ship foundation. A prototype of the winning design was built and extensively tested. It did not prove satisfactory on a number of minor points and two or three major alterations would be needed.

Requirements: Must— Stow on yacht with minimum inconvenience.
Be capable of rapid preparation and launch.
Be self-righting when launched.
Be easy to board, from the water if necessary.
Able to withstand knocks while launching or alongside.
Have a secure painter which the crew can release.

Protect the crew from weather, hot or cold.
Allow at least two crew to lie down.
Allow an all round lookout to be kept.
Be highly visible.
Be capable of propulsion by manual or wind energy.
Have practical means of exit to rescue ship.
Be as light in weight as possible.
Be inexpensive and require little maintenance.

The raft tested was fully inflatable with a rigid box forming a seat and container for the emergency kit. Main faults were that as the raft inflated one end at a time, the second part to fill always brought water into the inside of the craft which had to be bailed out. The seat prevented the crew from lying down and there was minimal thermal insulation.

Quite a number of design faults which could presumably be relatively easily corrected ranged from the colour of the canopy being the wrong shade of red; self-destructing stability pockets on the bottom; a gap between the 'hull' and canopy at the sea anchor point; no safety lock on the inflation cylinder when used as a tender.

More difficult would be to make the raft less difficult for one man to right (it was just possible) and to correct the fact that it was almost useless with one of the two compartments deflated.

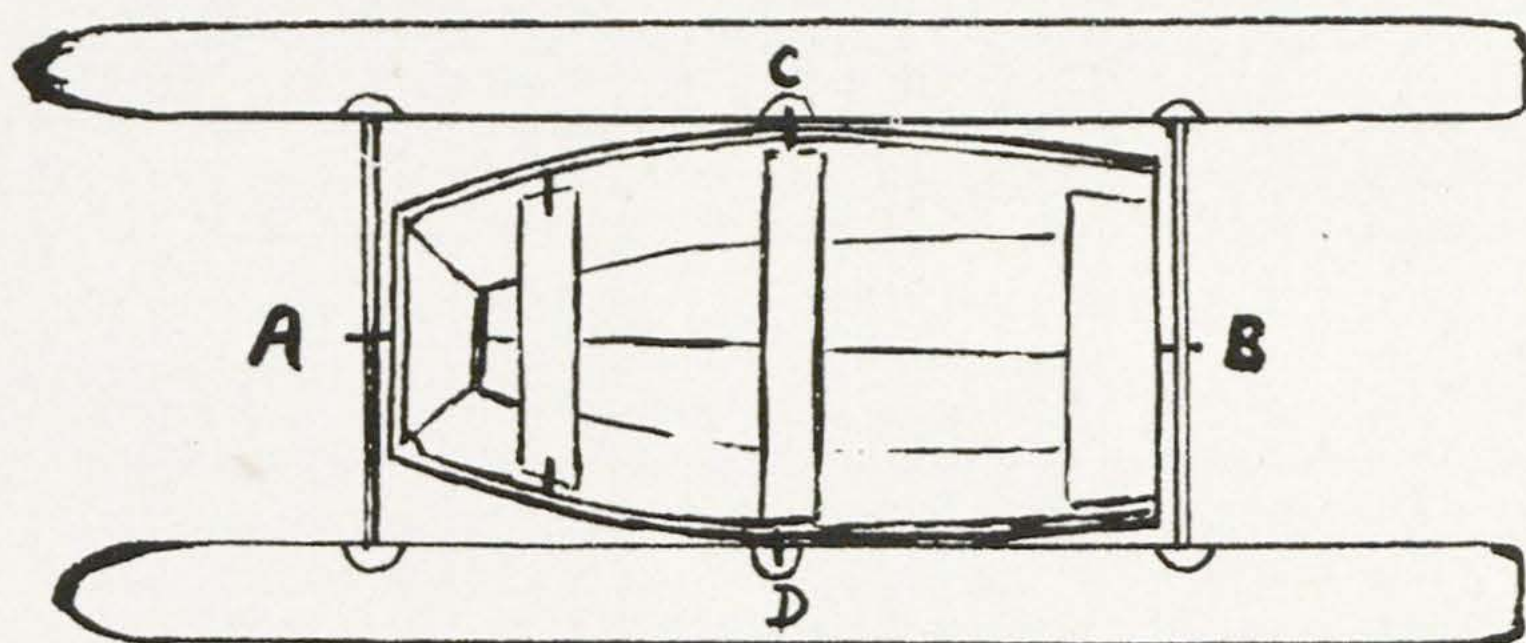
It seems to me that having the bottom part of the raft of rigid P.V.C.; sheathed with G.R.P., other similar plastic material or of cold-moulded wood with foam buoyancy ("WEST" for example) would make the inflated craft self bailing and provide thermal insulation. It could perhaps fold in half for stowage which would be an added expense and complication but an inflatable seat giving a good rowing position or room to lie down is an excellent idea.

Discussing the requirements with many members at the London Boat Show brought out two fundamental facts:

- 1) The craft must be an excellent tender in its normal mode and
- 2) It must be rightable at sea in heavy weather.

Requirement 1) requires study of publication 88 but light weight makes extra built in equipment undesirable. Requirement 2) proved difficult because beam is desirable for stability and weight carrying and yet a wide boat is difficult to right and if too wide, its impossible to row or stow.

An answer to both these problems is shown in the sketch which is put forward with encouragement from several A.Y.R.S. members. I have not yet got down to design details but the basic proposal is to have a pram type rigid tender, such as the Jack Holt "Jack Sprat," about 8 feet long and 4 ft. 3 ins. beam (larger would be better if it can be stowed on board). The "Jack Sprat" is plywood and weighs 60 lbs., complete kit costs £82.50 in January, 1979. To this tender should be added buoyancy, bilge keels with hand holds and four small fittings for attachment one each at 'bow,' stern and on each side. This is the liferaft as a tender.



A + B : FIXING WHICH CAN TWIST
 C + D : FIXING WHICH CAN BE RELEASED } LASHINGS ?

2 TUBES WHEN DEFLATED FOLD

CLOTH BETWEEN TENDER & TUBE TO DISCOURAGE SPRAY.

NET ACROSS AFT END TO MAKE ACCESS "EASY".

COVER - COULD BE USED AS A SAIL.

Before proceeding on a passage, two inflatable tubes with cross beams, like an inflatable catamaran of the "Sisi" or B.T. type with automatic inflation is secured to the four points on the tender and an emergency pack including canopy and bellows is secured inside the tender.

If the liferaft should be needed the tender is launched and the tubes inflated hopefully automatically, otherwise with the bellows. The tender is now protected, stabilised and protected by the catamaran outside it. In the unfortunate event that the boat capsizes during or after launch, a crew man should be able to climb onto what is now a raft and by releasing the two side attachments of the inflated tubes, he can revolve the tender between the tubes which remain attached bow and stern. Once righted the sides can be secured and the canopy erected.

There is no limit to the improvements that can be made at the expense of extra weight — the canopy could be a self-inflating part of the boat which rights it when the side securing points are released. The advantage is that all the parts that make it a liferaft can be kept securely below deck in semidry conditions while the yacht is moored and the tender is in use. It might be possible for the inflatable tubes to be an exciting sailing catamaran in their own right like "Sisi" or "Pumperuppa" with the advantage that the owner can inspect and test them before he makes a long passage.

All suggestions, alterations, objections and proposals regarding a combined tender and liferaft are welcome by me and by your Committee.

REQUIREMENTS FOR A CRUISING YACHT

A.Y.R.S. London Meeting

Report by

Michael Ellison

Speaker — Michael Saunders. (Author of "Walkabout" a book of a cruise to U.K. from Mozambique. A professional delivery skipper and designer, he was having a 45 foot monohull built of ferro cement to meet his requirements).

Michael Saunders brought a scale model of his long keel, transom stern cutter-rigged yacht and he showed slides of his previous gaff ketch to illustrate points as he explained how this new yacht will meet his needs.

Michael Saunders has long been an A.Y.R.S. member and in Rhodesia, he built a Manners designed craft with five hulls. Perhaps because of his experience, including a capsize with this craft, he dismissed multihulls as being unsuitable for his purpose. He has a wife and four children and wishes to live permanently on board making extended voyages often to remote places. This leads to the need to carry a load of crew and stores estimated at four tons. There must be six separate bunks with private locker stowage. The engine compartment with diesel engine is separated from the living space by a fuel and fire proof bulkhead; it includes a workshop and storage space.

Galley

The galley is fitted across the hull, the gimballed stove swings in front of the cook rather than towards the cook. All stowage is planned so that the yacht should remain safe after a capsize — Michael met with one yacht on which the crew had to proceed on deck in a storm after a capsize because the gas, paint and fuel leaked and the interior filled with poisonous fumes in addition to the 'normal' confusion of stores to be expected after such happenings.

Hull Shape

The hull shape and rig were chosen after a process of elimination by considering the available alternatives. Cash for the venture is limited and had there not been a requirement to keep to a budget, the yacht would probably have had a steel hull. A hull with a fin keel was considered and rejected on the grounds of strength and reduction in stowage space not because of problems of directional stability. The transom hung rudder was a priority because it is easy to get at and the trim tab gives the most satisfactory self steering. A transom stern is most satisfactory in a following sea and gives more deck and stowage space on a given length of hull. The design includes a bowsprit and enough volume for'ard in the region of the waterline to resist trimming down by the bow, the result of being driven through the mast a some point well above the deck. (The boat actually has, by modern standards, a relatively modest freeboard).

The requirement of a separate engine room meant that the engine had to be mounted higher than it would be for choice. To lower the engine would

involve moving it forward and using cabin space. Michael Saunders reported that diesel fuel is readily available even in very remote areas and this led to a question about cooking fuel.

Fuel

It seems that butane gas is readily available but that parafin (kerosene) is becoming difficult to obtain at the quality necessary for cooking and for use in pressure lamps. Butane gas was chosen for cooking against diesel as the alternative because diesel stoves are either too heavy or give off too much heat to the cabin area. (Or both — he has visited many yachts in hot climates to find a gas ring sitting on top of a diesel cooker!). The gas bottle will be fitted outside the cabin area to be safe should it be damaged by impact or fire — there was no strong preference for this position. Gas lighting will not be fitted due to the length of gas pipe necessary and the amount of gas required — lighting will be electric with battery charging by alternator on the main engine. There was some discussion at the meeting about alternative means of obtaining electricity and it seemed to be agreed that it may be satisfactory to tow a rotator through the water but windmills will not provide enough for living aboard. A Honda seemed the most satisfactory method presently available.

Lifeboat

Michael Saunders is in favour of liferafts for coastal waters frequented by shipping and for racing craft but for his projected voyages across open oceans away from shipping routes, he feels that a lifecraft which can sail is an important item, and his wife fully agrees with this. He has designed an aluminium boat weighing about 120 lbs. which will be fitted with inflatable tubes to make it self righting. It will be fitted with a sail using an oar as a boom and a canopy. This boat will be used as a tender in port and fitted as a lifeboat at sea. There was great interest in this emergency craft as many members have been working on similar lines including James Wharram and the Polynesian Catamaran Association. An inflatable kit to fit to rigid dinghies was shown at the 1978 London Boat Show by Avon Inflatables Ltd., (Address: Dafen, Llanelli, Wales SA14 8NA).

Sail Rigs

The original specification called for a gaff ketch with a vang from the gaff to the mizzen masthead to control the twist in the mainsail. The designer Ian Buchanan was against this rig and others were then considered. The main faults of the ketch were extra cost against little extra drive and difficulty in staying the masts aft while allowing the boom to swing forward for running down wind.

The Bermudian ketch was dismissed because the mizzen mast with all its extra sails and cost only reduced the height of the mainmast by nine inches in 53 feet to give the same sail area. (Which area would give less drive except on a beam reach).

The junk rig was dismissed because of the size of yacht — she would require very thick and heavy masts to stand without stays although Michael would consider the rig for use on a smaller yacht.

The chosen rig has twin standing backstays; shrouds leading abeam of the

mast with two spreaders and running backstays to support the inner forestay. For long distance down-wind sailing, two headsails will be used — there was considerable discussion about the best way to fit these and the most satisfactory way to recover hats and other objects lost overboard while using this rig. A few eyebrows were raised but there was no comment when we were told that “a spinnaker is not a sail for a cruising yacht.” A square sail can not be set because the shrouds come off abeam to the mast, in any case, Michael does not want the extra expense of special sails and the ordinary headsails will be used for running.

Self Steering

Self steering will use a vertical wind vane connected to a tiller on to the trim tab. The linkage from vane to tiller is adjustable and the tab tiller can be locked to the main tiller so that rudder and tab act as one unit or so that the helmsman can use the tab as a servo in the same way as a Hasler gear. It is also possible to adjust the tab to balance the rudder and eliminate weather helm.

Bath

Much of the interior design was altered to fit in a small size bath. It was agreed that this gives a great deal of independence from shore facilities and is a desirable extra for extended cruising. This was said more in jest than anything. The space needed for a ship's hip bath is scarcely more than that needed for a shower which, unlike the bath, is extremely messy in use. The bath can also be used for laundry, stowage of wet clothes, etc., and because of its shape uses less than 2 gallons of water. (If you're ever interested, I have the design somewhere).

Construction

Although only by inference I gather that Michael agrees with many offshore sailors that a leaking deck is worse than a leaking hull. On this yacht the ferro cement hull continues as one unit to include the deck and side of the cabin. The cabin top is wood. This construction with side decks is preferred to a flush deck to avoid having portholes in the hull. Windows in the cabin side can be opened for ventilation.

METAL FAILURES AND FATIGUE

Notes on a talk to A.Y.R.S. and M.O.C.R.A. members

by

Lt. Cdr. R. Q. E. Evans, R.N.

Bob Evans built and sails a Wharram catamaran. At work he has the interesting, important and unpleasant job of inspecting the wreckage of crashed aircraft and finding out which part failed first to cause the crash and why it failed.

He made a careful study of equipment failures on yachts in the 1978 'Round the World' race and so he is highly qualified to speak on the subject which he illustrated with slides showing greatly magnified parts which failed, and he brought a number of fittings for us to inspect.

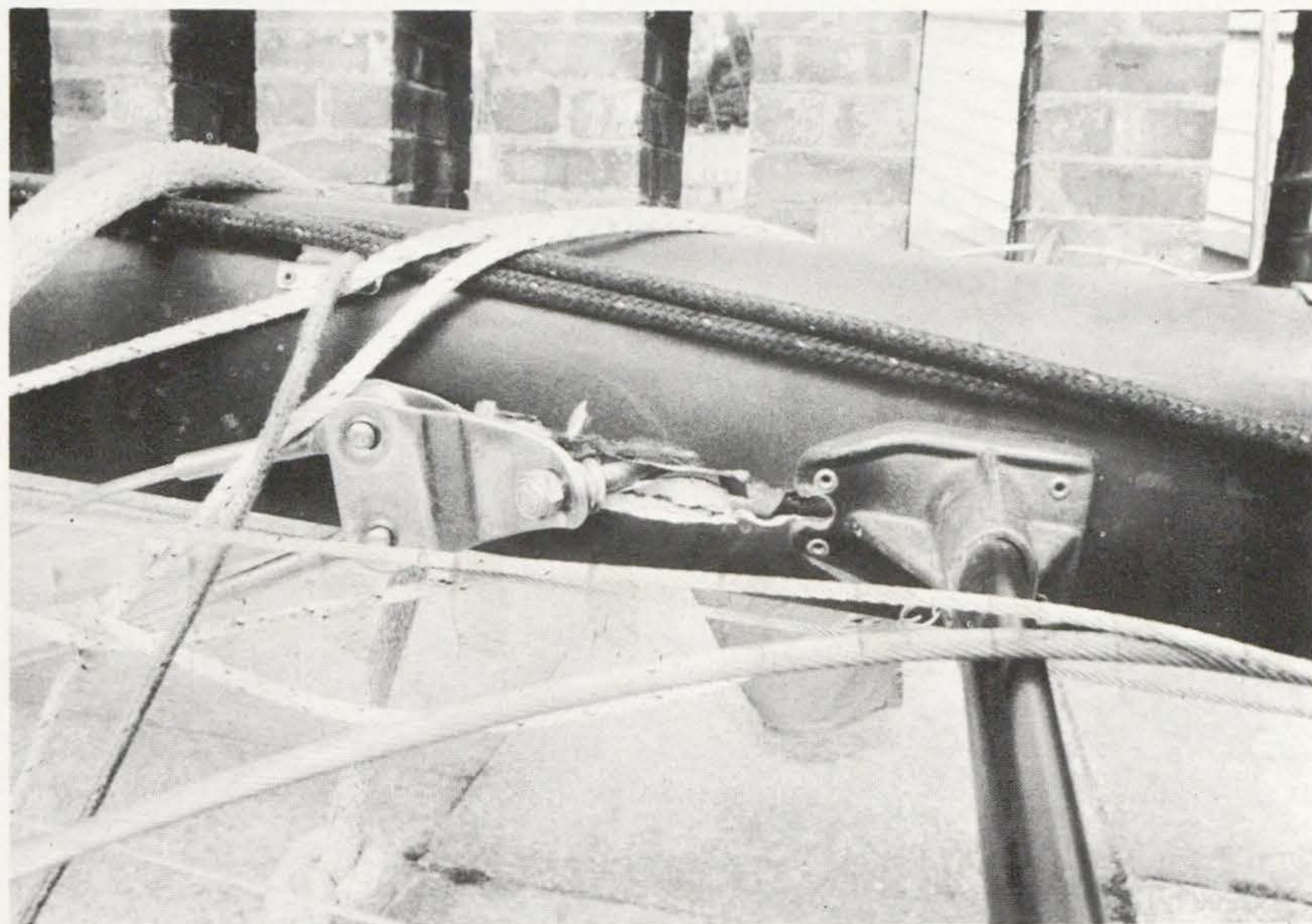


Photo from Wolfgang E. Quix of Munchen, Germany, showing the mast of his 32 foot monohull sloop "Lady Garuda" in the 'Round Britain race. His comment with the photo – "explanations aren't necessary, are they?"

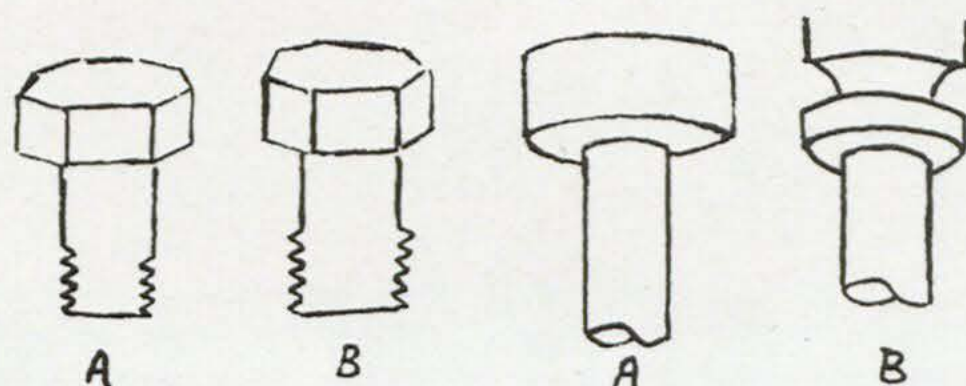
The most common failure is probably caused by fatigue. In the cases illustrated these were either due to damage caused by great overload being followed by gradual failure, by bad design or by error in manufacture. In every case a very careful inspection by an experienced person could have avoided trouble and Bob stressed that every skipper should train himself to be an inspector. As an example, the rigging should be regularly inspected, any small nicks on load bearing surfaces should be suspect and watched in case minute cracks should start. Any bent bottle screw has been subject to an unfair load and must be suspect; the inside of the thread should be inspected with a magnifying glass if it can not be replaced.

To illustrate error in manufacture, we were shown a headsail sheet traveller with holes for locking pins drilled off centre which lead to wear on one side, this uneven load distribution leading to failure after considerable use.

Bad design was illustrated by stress lines in failed metal parts including ordinary threaded bolts – see sketch.

Gradual failure was shown on a forestay bottle screw (turnbuckle in U.S.A.) which failed in a moderate breeze four days out of port. Before arrival at Rio the yacht had been 'knocked down' and lay over at 90 degrees in a squall. At this stage a crack started between the threads but was not noticed at inspection after the 'accident' nor on inspection in port. The 'beach mark' lines of fatigue failure when magnified showed clearly the gradual increase in the crack across the metal leading to final failure when the metal remaining was unable to hold the normal load.

Bob suggested that yachtsmen should learn to look very carefully for chips and nitches in load bearing parts of metal fittings as failures start from these points. He did not suggest discarding all scratched fittings but rather to make a note and to inspect them carefully at intervals for signs of further cracking. Special care should be taken if bolt or pin holes become oval as these put an uneven load onto the pin leading to rapid wear. Bolts in such fittings should be replaced frequently.



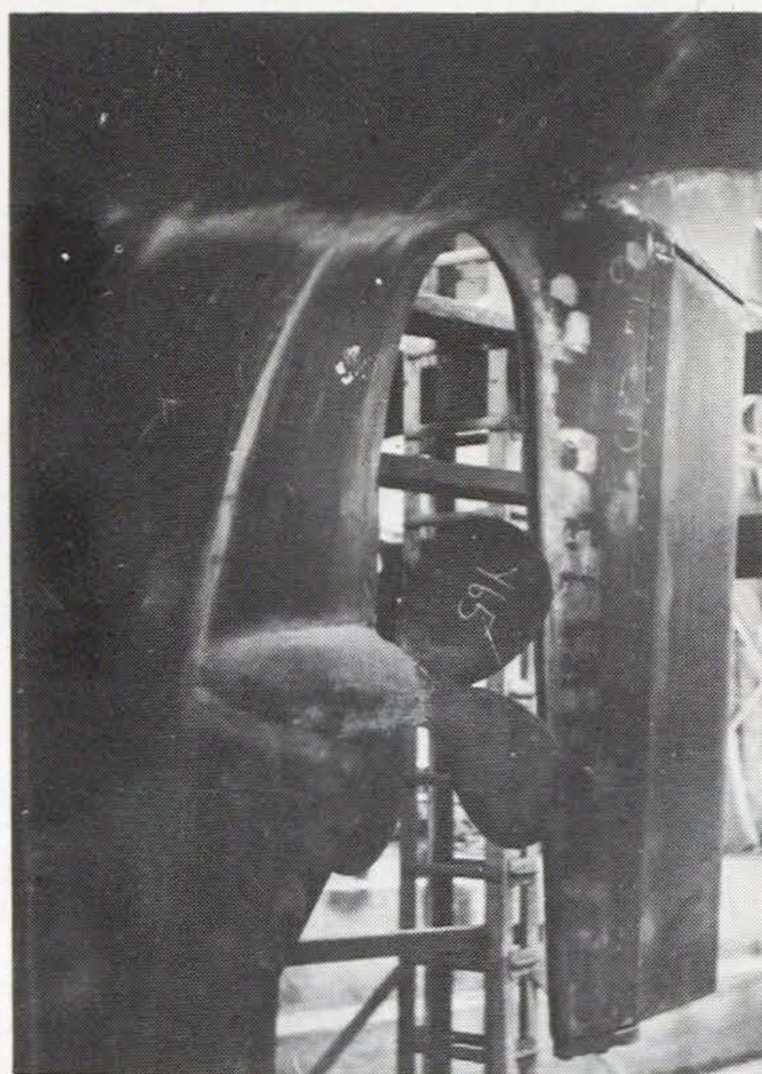
For High loads, 'B' is in each case better than 'A'. Removing metal from bolt 'A' so that the thread is proud, will make it less likely to fail.

COPPER – NICKEL YACHT

At our London meeting on 5th December, David Hudson of 56a Station Road, Thatcham, Berkshire, spoke about the design, building and trials of a new yacht with copper-nickel hull. David is a marine consultant and Naval architect whose work more usually involves commercial craft and work with sail training ships like the "Winston Churchill."

The keel of the yacht was laid in the building shed at Bideford, Devon in December 1975 and she was completed in August, 1978. The whole building was to Lloyds highest standard and with full inspection for classification.

Ketch rig was chosen for ease of handling with 1,105 sq. ft. of working sail area, maximum 1,800 sq. ft. Power is by a Perkins V8 510 diesel marine engine, giving 140 h.p. and a 20 kw Lister HR3 WMA generator provides power for full 220 Volt electric cooking, deep freeze, Perkins Central Heating, radar and all the equipment that one could need on a 60 foot ocean going home.



Propellor, Skeg and Rudder.

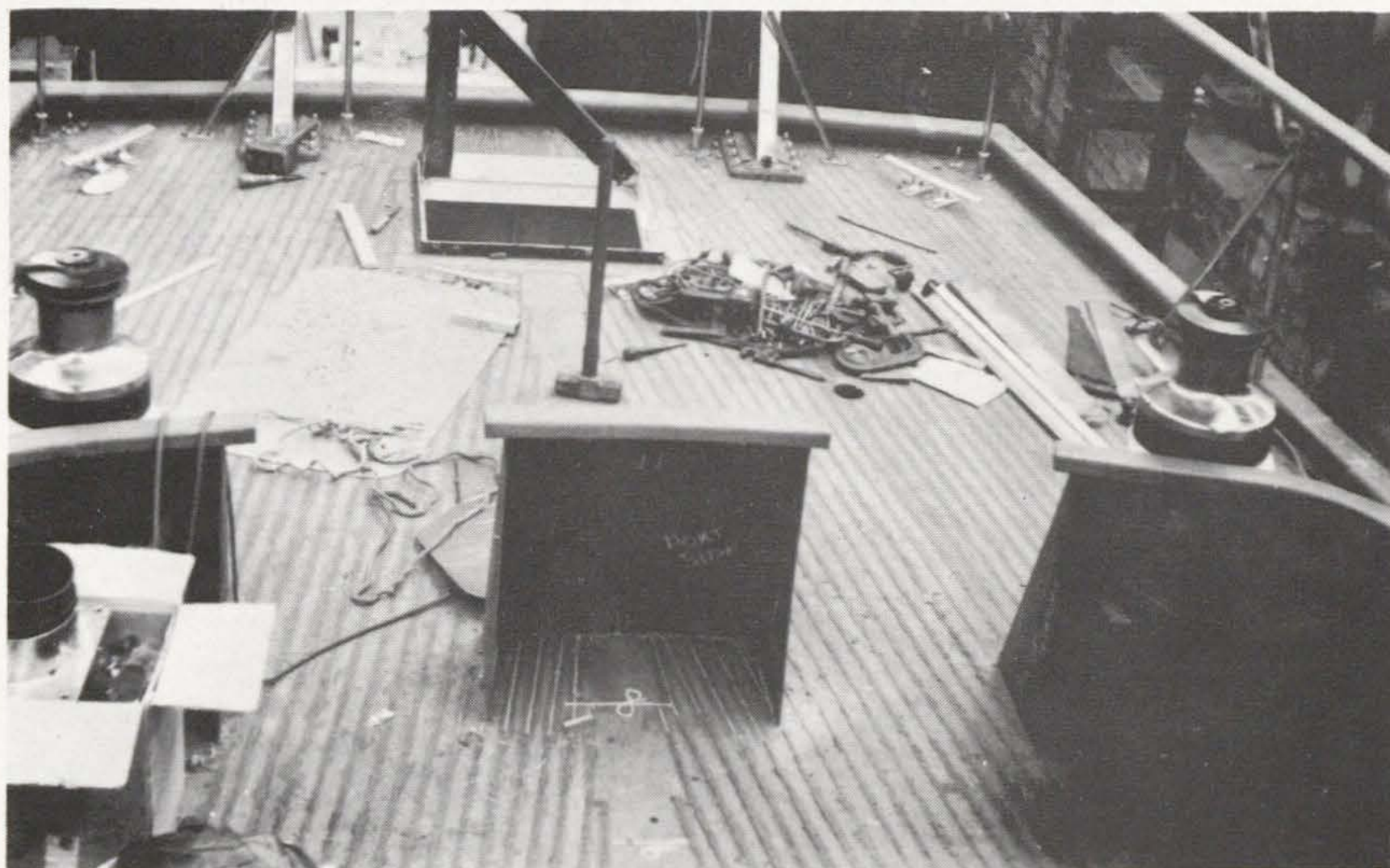
Scantlings are the same as used for steel construction, the copper nickel is welded directly to the mild steel frames, argon gas was used for the majority of the welding. The ballast is 20% of displacement consisting of 9 tons of iron shot set in resin to avoid contact between the iron and the shell plating. The plating inside the hull has been sprayed with expanded foam for insulation.



David Hudson (middle) discusses details with the Builders Foreman, and Owners rep.

Many interesting problems had to be overcome during the building. Among these were finding compatible metals for the rudder and stern gear, fitting the portholes and painting. Paint is of course not necessary for protection and no antifouling will ever be needed but above the waterline paint was required and outside contractors were brought in for the job.

The final warning is:— Do not moor alongside with an aluminium yacht!



Aft deck during building. Decks are sheathed with Laid Teak Planks. Hull is divided by watertight bulkheads.

CATAMARAN HULL SHAPES

Extract from a letter to Ken May

by

Eric Lerouge

Design Philosophy

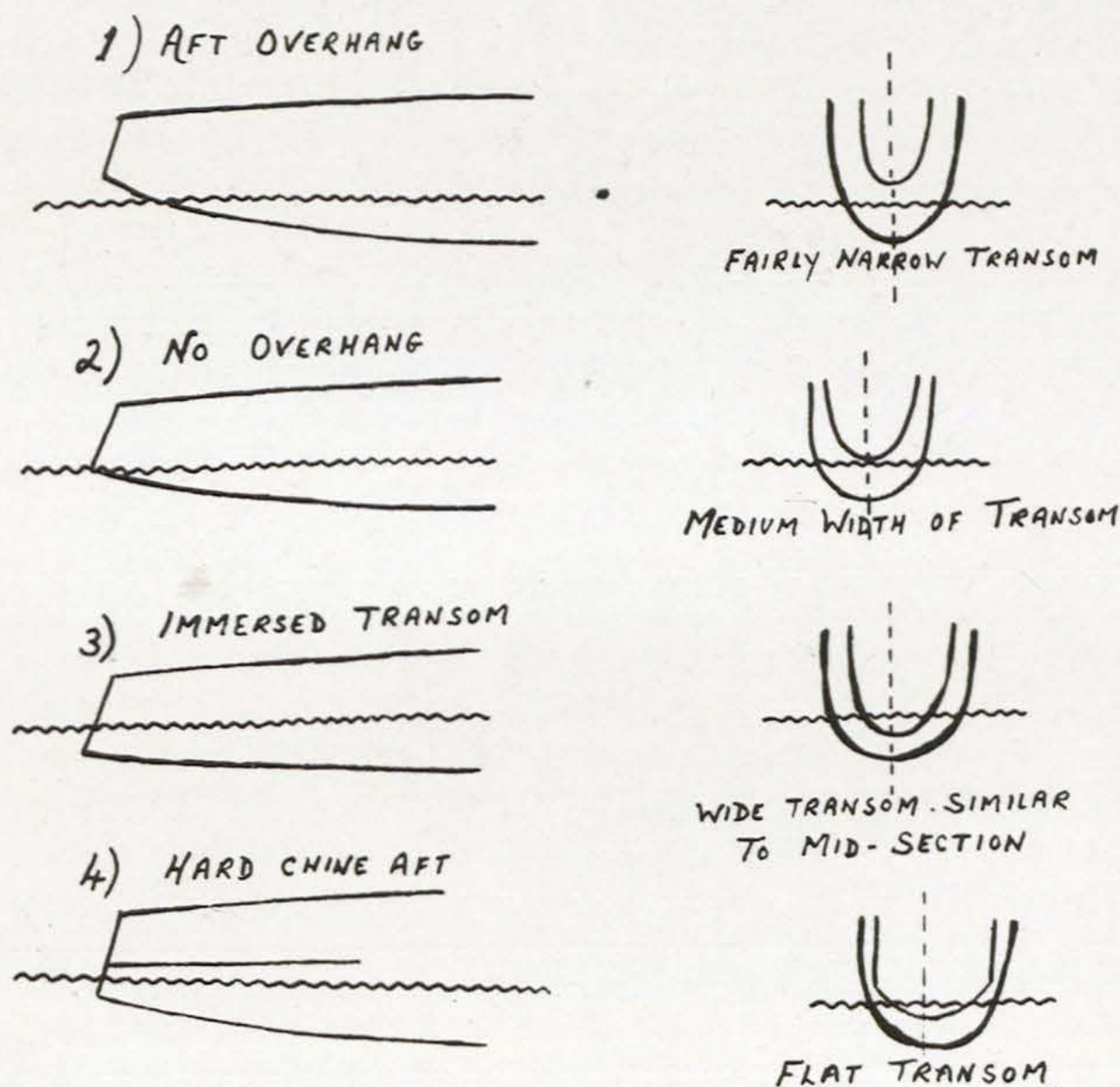
A bridge-deck accommodation catamaran is expensive to build, has windage, has a high centre of gravity, is heavy, looks ugly and slams a lot under the bridge deck.

For the same money with accommodation in hull and bulge you can get a bigger catamaran which doesn't slam, is more seaworthy, is faster and looks better.

To be honest, you have some troubles too: the accommodation is split in two and you pay more in marinas.

Catamaran Hull Shapes

I tank tested four catamaran hulls differing only on the stern shape from section 8.



The best overall performer was the 4th stern. It seems that the drag at low speed from an immersed transom is only psychological, drag is only from wetted surface but the flatter run at speed has definitely an edge and the chine aft helps the water to break away from the hull.

Southern Concept

Designed to be home built in Australia in foam-sandwich for racing with 2 people on the trapeze and cruising with 4 on board. Boat easily trailed and dismantled. For simplicity, cheapness and speed a una-rig is used with the help of a reacher for off wind sailing.

Low aspect keels are preferred for cheapness, safety, grounding, more room inside, lightness and keeping cool cans of beer!

Stampede Spirit

The first one is built by Mustang Yachts in 'tortured ply' as a cheaper alternative to foam sandwich. Deep Vee hull and fairly full transom for simplicity of construction. It is expected that weight saving from centreboards and cases and drag saving from centreboard slots overcomes a departure from the theory.

Editors Comment:

The findings on hull shape tests agree with results published by A.Y.R.S. in the early 1960's, especially Michael Henderson's tests before building "Misty Miller." It is worth some thought as to the power of psychology regarding the drag caused by an immersed transome. Mike Butterfield owned "Misty Miller" and he raced her hard. His new catamaran is designed as the first paragraph above but with the transomes as sketch 2. We have published details of other members who have extended the sterns of their yachts to change the stern from 3 to 2. Improved performance will come with the increased waterline length but improvement in speed can be measured when the transome is brought to the surface on some yachts, for example, the 'Telstar' and "Iroquois," by moving weights forward. This could be due to improving the under water shape or changing the waterflow past the log but the fact remains that a significant number of experienced people do not agree with the results of properly conducted tests on model yachts.

Extract from letter from N. D. Boon of Groningerweg 46, Noorderhoogebrug, 9738 AB Groningen, Holland.

Recently the CTC, the Dutch Catamaran and Trimaran Club has organised a kind of mini symposium of multihulls, with 8 Dutch designers of the yachts present.

There is naturally a much better interest in cats than tris., mainly because of the harbour room the trimarans take up. Further, it is not proved in any way that cats built for racing are slower or less seaworthy than trimarans. On the contrary, I think it is proved by Hugo Myers that cats are inherently more stable than tris. This idea is popularised by James Wharram in his article on "The Stable Multihull."

In Holland there is a slow growing interest in serious racing, and with catamarans. A type like the MacGregor 36 is studied for that. On the other hand, types produced by Lars Oudrup from Denmark is growing too. These boats are more cruising-racing types, thus they have a more widespread range of usefulness.

N. D. Boon, (3rd Jan., 1979)

Part of reply from Michael Ellison.

Your comments on fast catamarans agree entirely with my own observations. "Mirrocat" built in 1966 is our only medium sized cat. built and fitted out to sail fast and although she had a lot of problems with her rig, she did seem to show that she was as fast as the best trimarans of similar size, especially in winds over force 4.

In my opinion, there is an important change in the stability and ability to be driven hard between cats and tris at about 30 feet. I sailed the 26 foot "Three Fingered Jack" in "Round Britain" 1970 and I found her safe and fast offshore. I would have been most unhappy to take a 26 foot catamaran unless perhaps of the Wharram type but the beam would have to be wide and the height of the beam over the water would be a problem.

The loss of so many very experienced trimaran sailors over the years is very sad, I know that the 'skipper' in each case may well have fallen overboard before the capsize but I am not satisfied that the designs may not be partly to blame.

The living space aboard a 'Telstar 26' trimaran is in my opinion, better than the space that can be used on a 26 foot cat of any design but I have yet to find a trimaran of 30 feet that can match an "Iroquois" for living space.

SWITCHING TWO MAST LIGHTS WITH ONLY TWO WIRES

by

David Jolly

Many people are fitting dual function mast-head lights such as the British Marinaspec etc., normally requiring three wires.

If the existing two wires are of adequate gauge — 2.5 mm. for example — and in good condition, they can be made to operate two separate lamp — bulbs by an old dodge well known in the electrical world.

At the masthead, it is only necessary to double up the two wires to feed both lamps in parallel and insert four diodes of switchable voltage and current rating, one in each wire as shown in the sketch.

At the other end a 'double pole double throw centre off' switch is fitted to reverse the flow, and the route taken through the diodes, and also provide an off position in the middle.

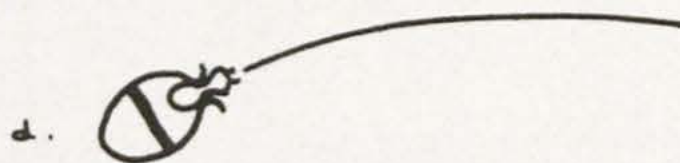
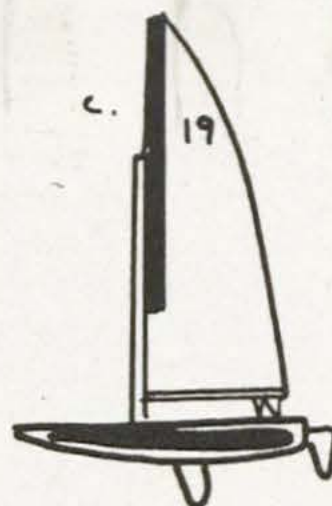
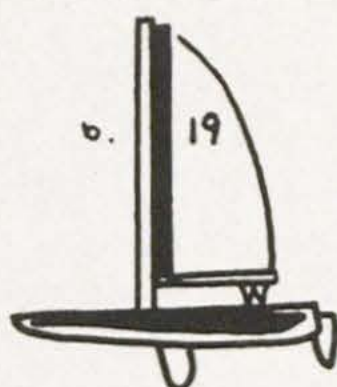
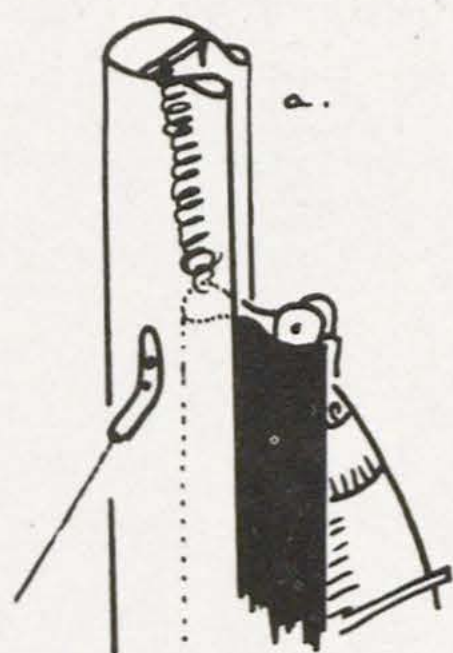
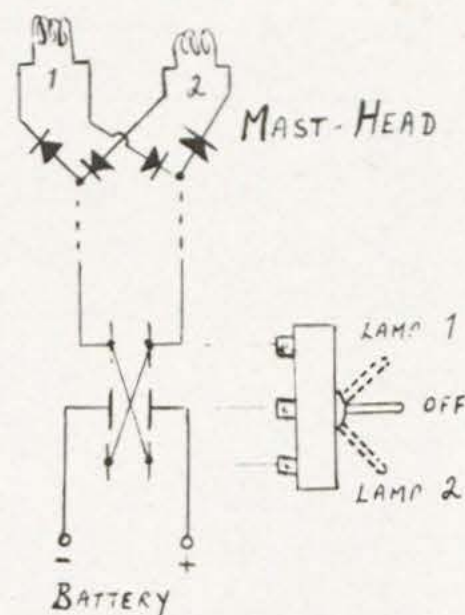
There will be a voltage drop across the diodes, more for silicon ones than the older germanicum ones — if you can find them.

Remember, most waterproof fittings leak and are best filled solid with heavy grease or silicon rubber ('bath seal')

David Jolly is a marine radio consultant and the U.K. agent for 'Tillermaster' self steering.

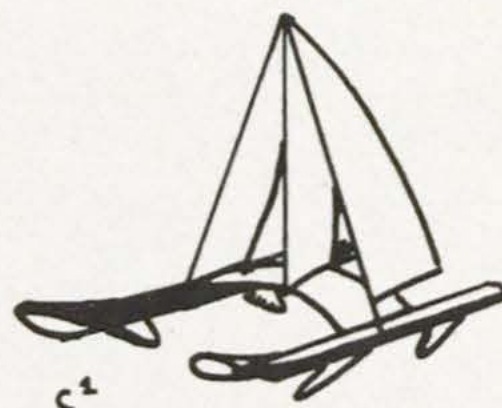
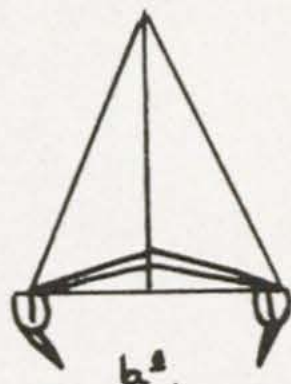
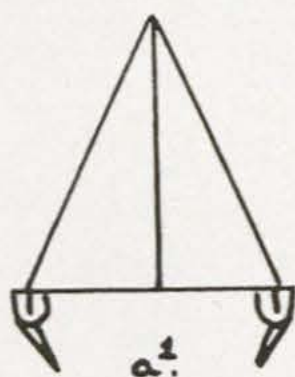
His adress is:

Little Russel, Lytchett Minster, Poole, Dorset. BH16 6JD.

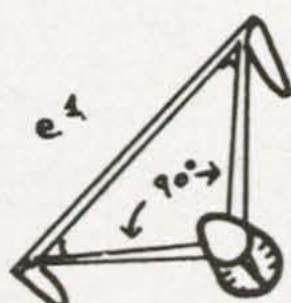
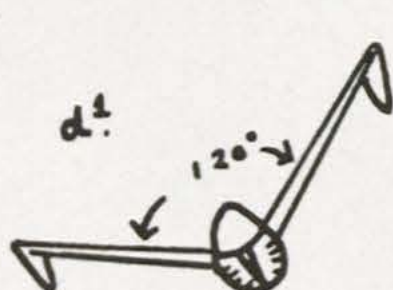


Above: The new enlarging sail technique via 2 sectioned sliding mast and roller fuelling boom.

CONCEPTS: (DOUGLAS HANNAN - 1.27.79)



A TRI-SAIL CATAMARAN w/ A GROUND EFFECT PLATFORM



A Gull wing flyer w/ Bruce Foil + ground effect connecting wing.

Below: Evolution of FAST SAILING CONFIGURATION.

SEA FEVER

2/3 Berth Trimaran Cabin Cruiser

L.O.A.	—	Main Hull	18ft.
L.O.A.	—	Outriggers	15ft.
Beam	—	Main Hull	4ft.
Beam	—	Outriggers	1ft.
Max. Overall Beam			12ft.
Towing Width			8ft.
Total approx. Weight			900 lbs.
Draught			1 ft.
Sail Area	—	Main	100 sq. ft.
Sail Area	—	Jib	70 sq. ft.
Aux. Engine			.4 h.p. Long Shaft Seagull
Total Cost at Launching (ex. engine)			£250.00
Designer, Builder and Owner: D. S. Banham, Greetwell, Bodinick-by-Fowey, Cornwall.			

SEA FEVER was launched on 16th June, 1978. She has been designed for comfort rather than the pure speed concept which many people always associate with multihulls.

True, she has a fair turn of speed when required, both under sail, or with her outboard motor, but this consideration comes secondary to actual comfort and cabin space with plenty of head-room. Gone are the days when I thought that hanging out on a trapeze in freezing weather was a delightful way to spend a weekend! Now I am much more inclined to concentrate on creature comforts, such as a cabin in case of rain, facilities for hot drinks, and a boat that stays level in the modest weather conditions that I am likely to be sailing in.



Sea Fever coming into her moorings, hence the fenders at the ready.

In spite of living quite close to the river Fowey, one has to negotiate very narrow Cornish lanes in order to get down to the water. It was therefore necessary to be able to remove the outriggers for trailing. What better method than the one used on my previous cabin trimaran SEA WRAITH (AYRS publication No. 52 — Trimarans 1964), using two alloy plates, 3ft. long, 3ins. wide and $\frac{1}{4}$ ins. thick, secured with four coach bolts, 5ins. long by $\frac{5}{8}$ ins. thick at each junction. The plates were made from a sheet of alloy given to me by a friend from his junk heap, and cut to the required size by a local engineering firm on their guillotine for the princely sum of £1!

The Main Hull, skinned with $\frac{1}{4}$ ins. marine plywood, is of hard chine design, with no centre board. The slab sides of the hull, plus the 15 ft. long by 18 inch draught of the outriggers were considered to be sufficient to prevent excessive leeward drift (as proved to be the case with SEA WRAITH).

The gunnels and chines are 2ins. x 1ins., and the hog 4ins. x 1ins. parana pine. The three sets of ribs, the stem, and transom are made from excellent timber, which originally formed the frame of the old Village Hall piano, which had been thrown out for scrap. The cabin beams and trusses are made from mahogany, obtained from scrap dealers' timber yards, and old furniture accumulated over the years.

The king post, positioned at the forward end of the cabin, also serves to strengthen the cross beam, leaving the cabin free of obstruction. Both main and rear cross beams to the outriggers are of box construction 4ft. x 1ins. parana pine with 2ins. x 2ins. deal blocks inside.

Each outrigger is skinned with 4mm. marine plywood, and like the main hull, has three bulkheads, each of 2ins. x 2ins. deal. The forward and rear bulkheads are connected to the crossbeams by solid Oregon pine blocks, cut from the step of an old broken stile. These in turn are glued, and then through bolted to the outrigger with 12ins. x 1ins. steel bolts horded up in my junk box from SEA WRAITH days, and were originally part of a billiard table used in the construction of that craft.

The mast, boom, sails and rigging come from my present day-sailing trimaran, SEA RAKER (AYRS Airs No. 7, Nov. 1973 and No. 8 March 1974), which of course helped considerably to keep costs down. They can be transferred back unaltered when required.

To sum up, SEA FEVER is built on the lines of SEA WRAITH, but with a wider main hull, longer outriggers, wider foredeck, and of course Bermudian rig, as compared to the gaff rig used on the earlier boat.

Finished in blue and white, SEA FEVER looks a pretty little craft, and when launched, received much favourable comments from the local traditional Cornish boat builders. (praise indeed!).

Taking advantage of the sunny days last summer, I sailed SEA FEVER as often as possible. She has proved easy to handle, light on the tiller, and with all halyards and sheets aft to the cockpit, is simple to operate. I am well pleased with the results of my twelve months (on and off) labour.

IN THE WAKE OF THE SAILORMAN

A 158 page book by the Polynesian Catamaran Association, priced at £3.00 or £4.00 overseas, including airmail.

The book contains information essential to anyone building or sailing a catamaran, designed by James Wharram Associates. The contents have been carefully edited from back numbers of the Association journal "Sailorman." There are chapters about building, materials, alterations to the plans, accidents and rigs including the junk and spritsail rigs.

This book is of interest to any person considering building their own catamaran of any design. The comments on suitable rigs list clearly the problems and advantages of the simple low aspect ratio rigs usually fitted to Wharram craft.

Printing by litho, direct from the typewritten script, makes it hard to read; it is illustrated with excellent line drawings and slightly blurred 'photos which are still clear enough to illustrate important points. Parts are often given special names used on the plans by James Wharram, and people not familiar with these may have some difficulty in understanding the detail drawings.

The sort of gems that give the value to the book are for example on building—"It is important to have a clear consistent idea from the beginning, for chopping and changing ideas throughout the construction leads to frustration and horrid-looking, leaky and perhaps, dangerous boats." There are drawings of different hatches with details for making them watertight. There is considerable repetition in letters from different builders but as they all refer to yachts which they have built this serves to highlight problem areas.

The book is available from Robin Faultley, A.C.A., 11 Park Street, Southend-on-Sea, Essex. SS0 7PA.

Plans are available from James Wharram Associates, Killowen, New Ross, Co. Wexford, S. Ireland.

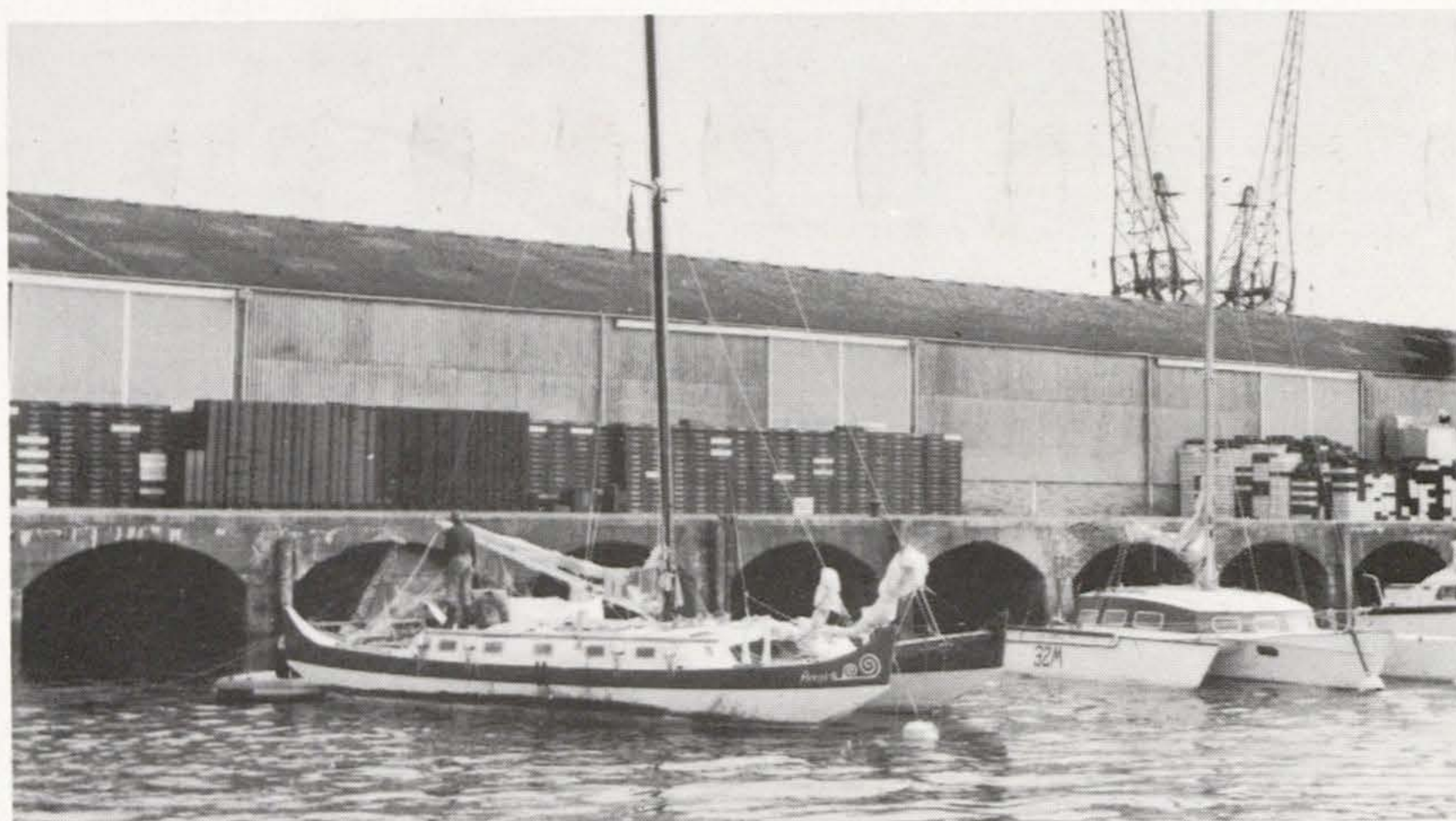
The Shape of Future Yachts?

"Trimama" is owned by Roland Tiercelin of 5 Rue d'Estienne d'Orves, 91120 Palaiseau, France. She sailed over to Portland, England for the 1978 World Sailing Speed Week and has been entered for the 1979 M.O.C.R.A. race from Plymouth to Horta on 29th July. There will be a description of this yacht in publication 93.



"Trimama"

"Aeroi" is the first of James Wharram Associates 35 foot "Pahi" range of catamarans. She is built of g.r.p./foam sandwich and was completed just in time to qualify for the race. An account of her progress is published in "Sailorman" the P.C.A. magazine. (Refer book review "In the Wake of the Sailorman"). It is interesting to note that "Aeroi" logged about 2,700 miles and "B.P. Catcracker" logged a similar distance over a course officially 1,185 miles long. On "Comanche" we logged nearly 2,000 miles which is over 500 miles less distance — my preference is to sheet the sails in hard and point high. This, plus heated discussions with Reg about pending wind changes seem to have rewarded us well.



"Aeroi" at rest. The latest from the Wharram 'Stable.'



"Aeroi" — Trials at Sea.



BP Cat Cracker — Not Crane Cracker !

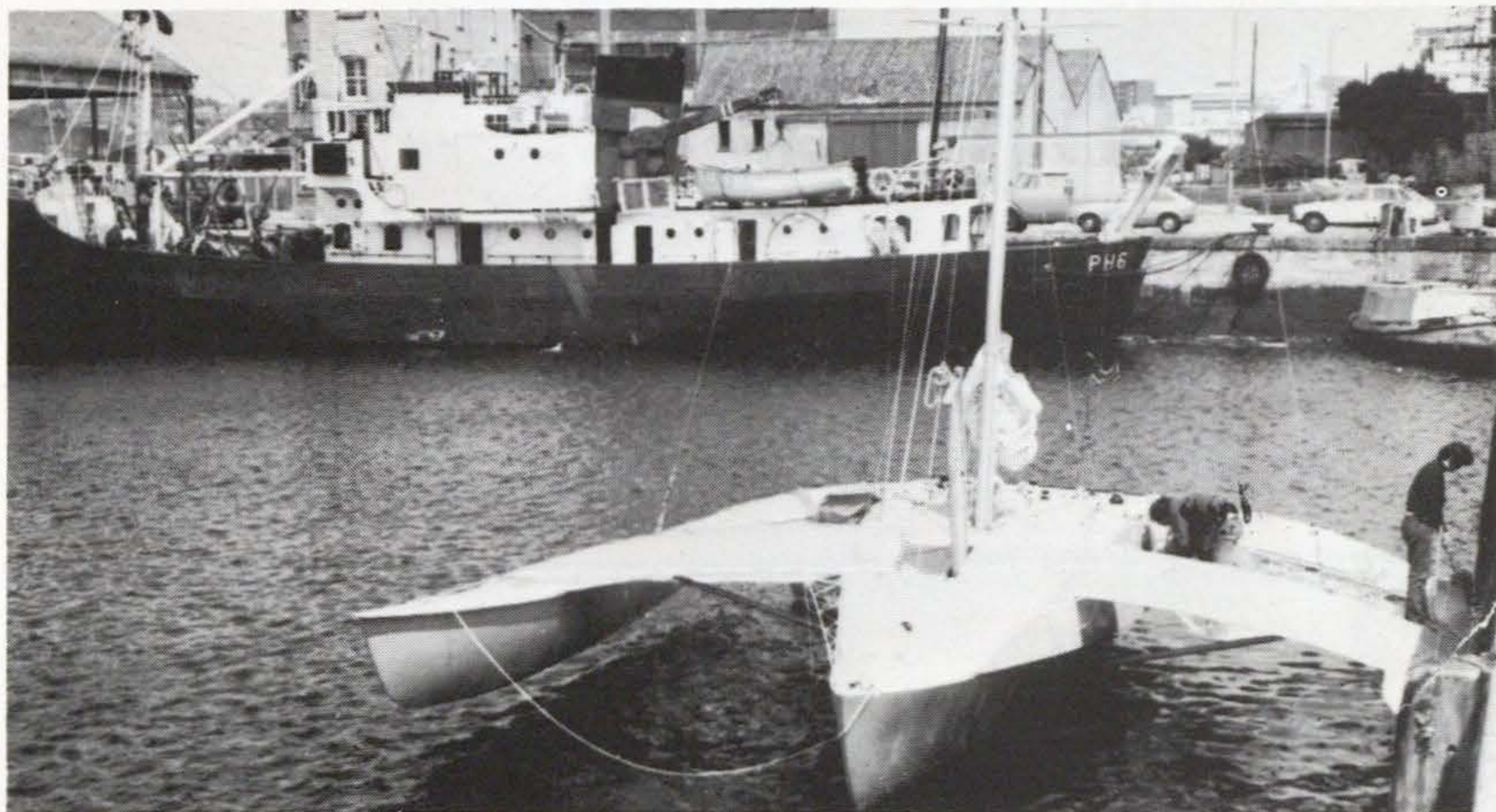
LA ROUTE DU RHUM

The first four yachts in the 'Round Britain' race were entered and sailed in the French 'Route Du Rhum' race. Unfortunately all accounts indicate that the race started in a total confusion of single handed racers trying for large amounts of prize money and spectators, perhaps because it was the end of the season, trying to "sell their yachts to their insurance company." One or two were successful and perhaps doubled their money by doing it in front of the press launch for the benefit of the camera men.

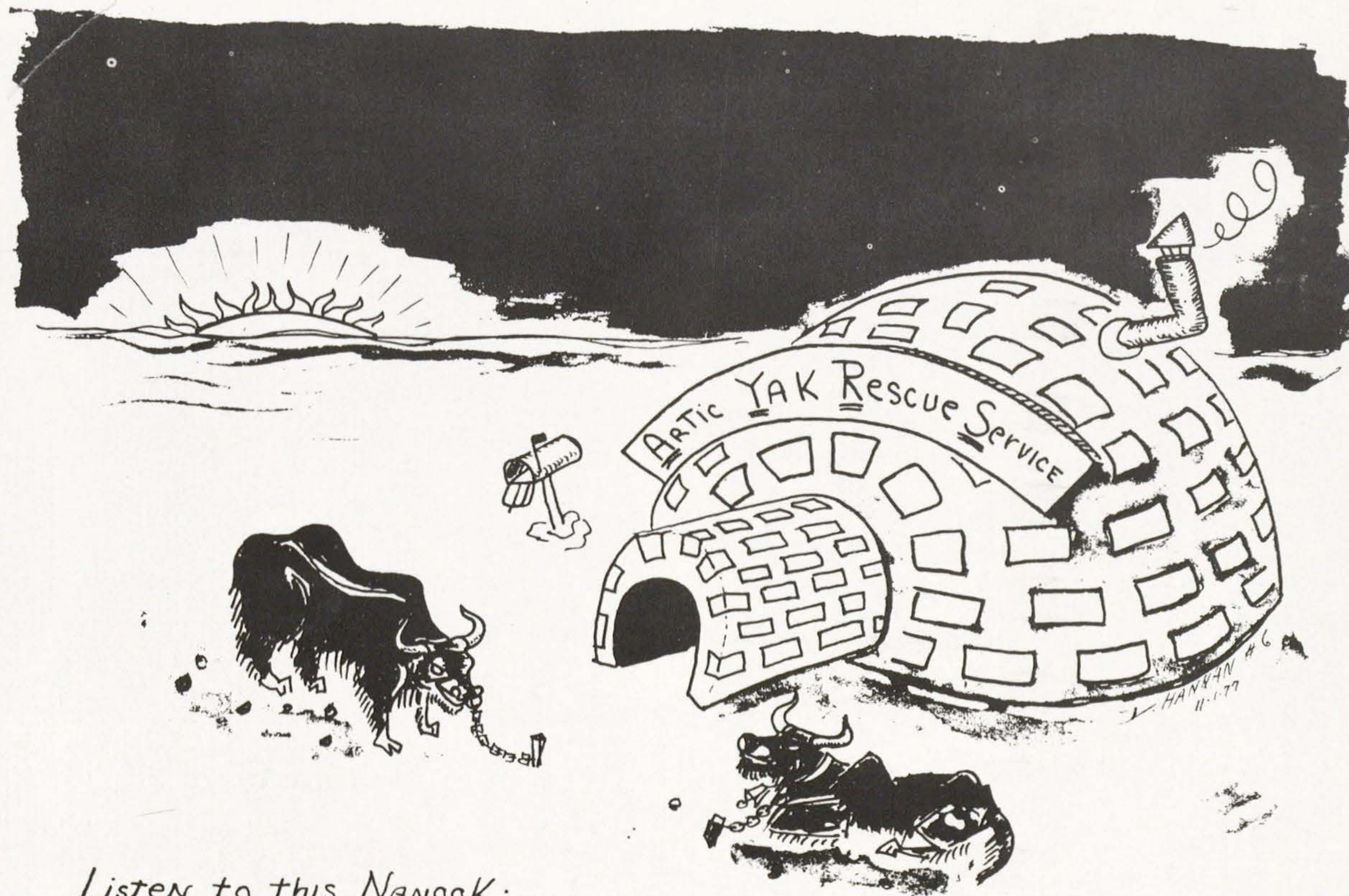
Many of the yachts were sponsored and so had their names altered just before the race so that Mike Birch won the event sailing "A Capella" re-named as "Olympus Photo." Her length seems to be variable as she entered the 'R.B.' at 37.9 feet but was presumably shortened to 35 feet to win the under 35 ft. class and then lengthened to 36 ft. to enter the R.duR.' Second (by 90 seconds) in R.duR. was the "Kriter V" a 68 foot monohull and third (again!) was Phil Weld on "Rogue Wave."

"Three Legs of Mann" retired to Horta for repairs. A member there reported that she had been altered before the race in rather a hurry and none of the alterations proved satisfactory. Major General Farrant sold his trimaran "Trifle" and I understand she was one of the smallest to finish and had no failures. Throughout her life "Trifle" proved consistently fast and reliable. Like the others she had a new French name for the race and has perhaps been re-named again now? With total confusion at the start and presumably a surplus of rum at the finish, none of the A.Y.R.S. members who took part have been able to write about the race for us. It must be recorded that Alain Colas and "Manureva" were lost at sea during the race. "Manureva" was 'Pen Duick IV' a 65 foot A64MC light alloy trimaran built for Eric Tabarly for the 1968 OSTAR.

A good account of this race is printed in "Multihulls" Magazine, Volume 5, Number 1.



"A Capella" before Round Britain Race. Later "Olympus Photo."



Listen to this, NANOOK;.....

Strange letter come about "Yacht Tenders". Must mean Sealskin KAYAK!



"Dalibor" has lost her 'Pyramid' Rig and gone conventional. Note the extra sail is set on the weather shroud.

Joseph Dusek, Sydney.

AMATEUR YACHT RESEARCH SOCIETY

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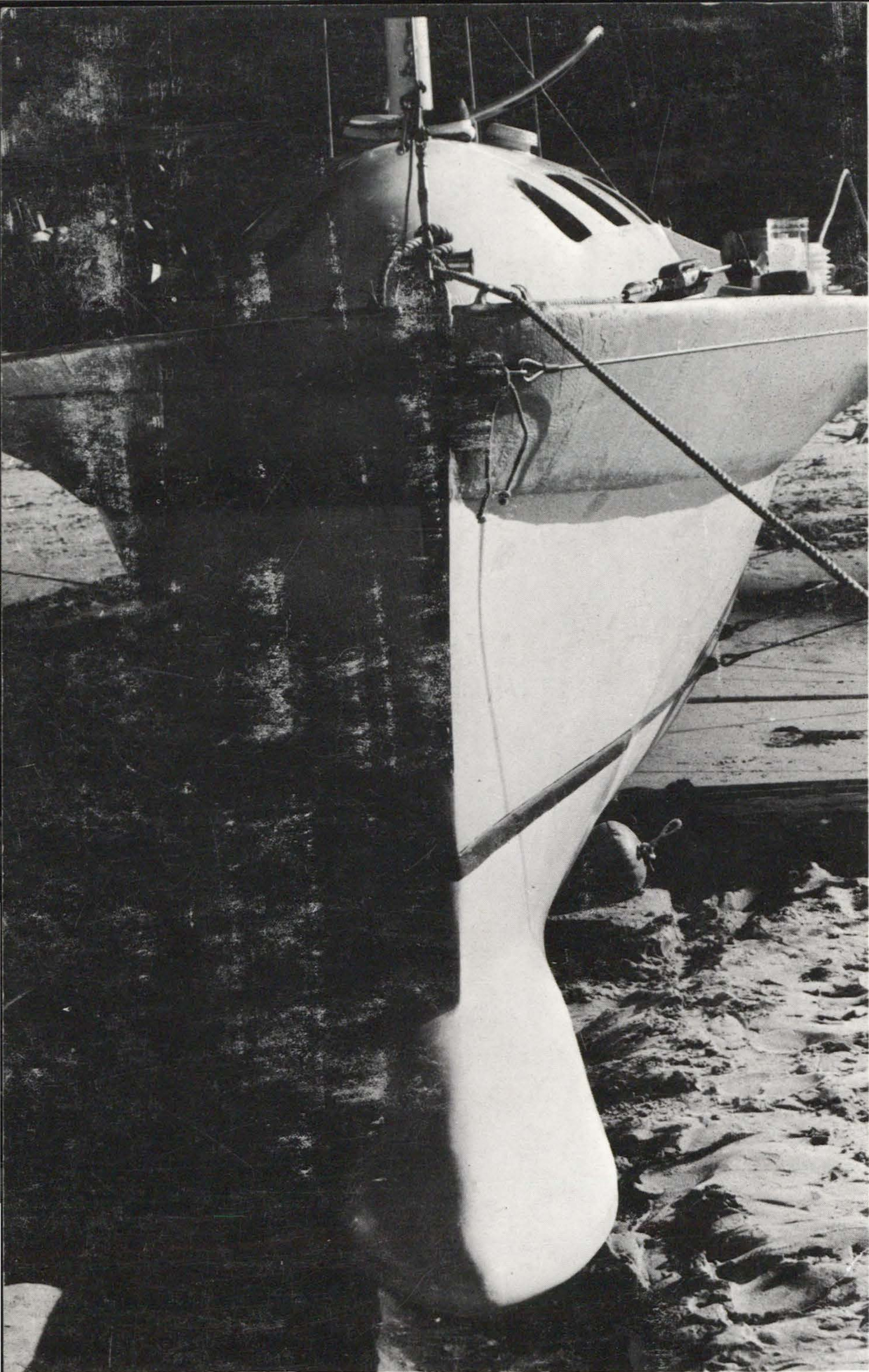
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Bulb Bow on "Dalibor" – Photo by Joseph Dusek