



The Sailorman

A periodical Journal published by The Polynesian Catamaran Association

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EDITORIAL

The A.G.M. in January 1973, was a very crowded and successful occasion. We were pleased to have quite a few friends from overseas present, including Hanneke Boon and Janick Cortsen. James Wharram has commented elsewhere about Annual General Meetings.

Details for the Summer Meeting arrangements are on Page 16 and we are very grateful to Cmdr. James Briggs, for his initiative in making it possible for us to have the privilege of using the facilities of H.M.S. Osprey, Portland Harbour. Martin Lillystone, who lives near Weymouth, has and is putting in a lot of work on behalf of George Payne, our Sailing Secretary. The meeting, given reasonable weather, should prove to be the best yet.

The draft Articles of Association of the Polynesian Catamaran Association will be published in the next edition of "The Sailorman" ready for the 1974 A.G.M. and the decision to join the Royal Yachting Association. Jim has made the point that the R.Y.A. are a powerful force resisting restrictive legislation, particularly licencing of yachts. There is, however, another aspect to the problem; the very existence of a national association makes the introduction of legislation possible. The Department of Trade and Industry would most likely think twice about introducing legislation if they had to set up an organisation to implement it. The R.Y.A. is an agency which could be given the job of policing any legislation at no cost to the Government. The governing body of the R.Y.A. whilst sincerely against legislation may be unable to resist the blandishments of extensive powers and authority with the prospects of a Knighthood if everything goes smoothly.

Material for the journal sent in by members has been of a very good quality and interest, as you will discover as you read on. On behalf of you all I send our contributors thanks. We have some material over for the next issue, but we still need more articles, however, short. I have run out of ideas for cartoons but I am sure there is a budding cartoonist amongst us. The April 1973 issue of "Practical Boat Owner" has an article about R.S. Steed's TANE being struck by lightning in Dar es Salaam - a very rare occurrence.

David Lewis

Editor



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Jim's Columnfrom Milford Haven, Pembs. Sth Wales

I like our A.G.M.'s. They are noisy, vociferous - and there is something about the atmosphere that encourages the most shy to stand up and say his or her piece. If that "piece" is way off the issue in question - at least they have been given the confidence to say something - which, in the final count, may have been of value.

The Polynesian Catamaran Association - with a membership of 350 at the moment of writing (and rising every week/month) has much to say of value - and is an important part of the world's multihull Clubs and Associations. It is international in its opinions, and, I suspect, the largest body of offshore multihull owners in the world.

I serve as a committee member on Britain's Multihull Offshore Cruising and Racing Association - which is probably the world's second largest offshore multihull group. In the last few months, a small group of men in the International Yacht Racing Union have attempted to foist a rating rule for offshore racing multihulls on the world's multihull clubs.

I write "foist" because, on examination, the few people not on the I.Y.R.U. who examined the rule found it "unworkable" - in that it would be highly expensive to operate - and Lord knows what bad effects it would have on future multihull design. I was able to play a leading part in holding off the adoption of this arbitrarily imposed rule - so that it could be openly examined and discussed by world multihull owners. NOT because I am James Wharram - but because I represent over 1,500 Polynesian Catamaran owners and a close organisation of 350 owner/members.

This year, the Polynesian Catamaran Association committee have the job of drawing up rules/charter for the Association. Not an enviable job - but necessary. The A.G.M. proposed that we affiliate to the R.Y.A. This would give the Polynesian Catamaran Association direct access to what is going on in government legislation re licensing of boats (I believe this may come sooner than people think). It would mean that the R.Y.A.'s various "help" departments would be open to members. The R.Y.A. perhaps will benefit, too, from the wide experience of "do it yourself" offshore boat-owners within the Polynesian Catamaran Association.

Rules and regulations are anathema to a large number of Polynesian Catamaran builders. One gets so pin-pricked by modern society that the desire to be free sometimes overwhelms all other feelings. Many people get "freedom drunk" - like others go wild after the first experience of sex - or taste of alcohol.

An excess of the desire to be "free" can lead to the restriction of others. For example - take Sandy Haven Creek. A boat of "freedom lovers" sails in and moors to the rocks on the shore. Up goes the television aerial on the hillside: on goes the generator to power the television: overboard goes the garbage to litter the sand with broken bottles and jagged tins when the tide is out. The result is that the local beauty spot is spoilt and questions are asked in the Council.

In the future - a reasonable proportion of the world's people living on the sea will be Polynesian Catamaran owners. The standards I have always tried to work to were those set by the barge-men ("sailormen") of the London River and the East Coast when I began my sailing career. The ships were tidy, workmanlike. In their beauty they added to any place in which they lay. Their crews - through their skills and abilities - were respected by all observers. This, I hope, will be the aim of all - if we are to become a sea-faring community. Let it be one known for its competence and ability.

James Wharram.

WHY FOAM SANDWICH? by Fionnuala MacDowell

Wood is becoming a luxury material. What are the alternatives?. Concrete, steel, aluminium and GRP. Concrete - is difficult for the amateur, in spite of the claims made for it, and is also heavy for catamaran construction. Steel - too heavy: aluminium - expensive. GRP - the conventional female mould construction is expensive and difficult for a one-off boat.

FOAM Sandwich Construction - A GRP foam sandwich is light in weight but has considerable rigidity. It is, therefore, comparable with plywood which is one of the lightest practicable boat-building materials. A good GRP skin has excellent durability and the cost is comparable with wood/ply construction at present prices.

It is an "easy" construction method for the amateur in that no skills are required - but intelligent application is essential. Chemicals must be correctly mixed - brushes and tools cleaned before the resin goes "off" (it is too late afterwards) - and most essential, the correct "coverage" of resin must be used for a given area of glass.

The actual application of resin to glass is easy to the point of monotony - but CARE must be taken during laminating. Once the resin has gone off - that's it. There is no chiseling and shaping as there is with wood. A slapdash approach will result in a disaster of a boat. It is also "easy" in that a female mould need not be constructed first. All that is needed is the male form, or frame, to which the foam is attached - we glued and sewed it - finding this easier and quicker than screwing.

The outer layer of glass is then laminated. Here, one must be organised for fast work - for no longer than twenty-four hours must elapse between layers, or chemical bonding will not take place and the GRP will have to be sanded for mechanical bonding - rather unpleasant - and as sanding of the exterior is an essential part of this construction method in order to obtain a smooth outer surface, one will have quite enough GRP sanding to do without giving oneself extra work.

This sanding of the GRP is a disadvantage of this method of construction. Some people are allergic to GRP dust - it brings them out in lumps and blotches - and they should therefore avoid this method. It is not pleasant for anyone - but if rubber gloves and protective clothing are worn and also a respirator designed for the purpose (this is essential as the dust is harmful if inhaled) then the sanding can be done with only minor discomfort.

When the outer skin has been laminated, the "shell" is lifted off and the interior is laminated.

The laminate should consist of a combination of Matt and Woven Rovings. Some designers use only two layers of woven rovings.

Woven rovings have a high tensile strength and this gives a laminate with a high strength/weight ration - but as the resin content is only approximately 55% of the laminate, weather resistance and general chemical resistance is poor: in fact, Matt is essential in the construction of a boat hull so as to obtain a resin-rich laminate, with good weathering properties.

Finishings - here some designers in foam sandwich use filler over the GRP woven rovings to obtain a smooth outer surface. This is not good GRP practice for a boat hull which is constantly immersed in water, since filler is a water permeable material - and over a period of time, it will retain moisture next to the laminate which will then be attracted into the laminate via any exposed

Contd. WHY FOAM SANDWICH?

glass fibres, where it will cause deterioration of the laminate - and may eventually seep between the GRP laminate and the foam, causing de-lamination.

Therefore - instead of using filler to obtain a smooth outer surface - we use a layer of surfacing tissue on top of matt. This can be sanded to a very smooth surface, needing only minute amounts of filler for "finishing" - and without sanding away any of the structural laminate.

FOAM: - either unplasticised PVC foam or Polyurethane foam can be used as a core material - but care must be taken not to use too low a density, i.e., not below 5lbs per cubic ft. - or crumbling and dusting of the core material will take place.

We have built two experimental boats with this method, here in Milford Haven; one of fourteen feet and the other, twenty-three feet, which are now undergoing extensive sailing trials.

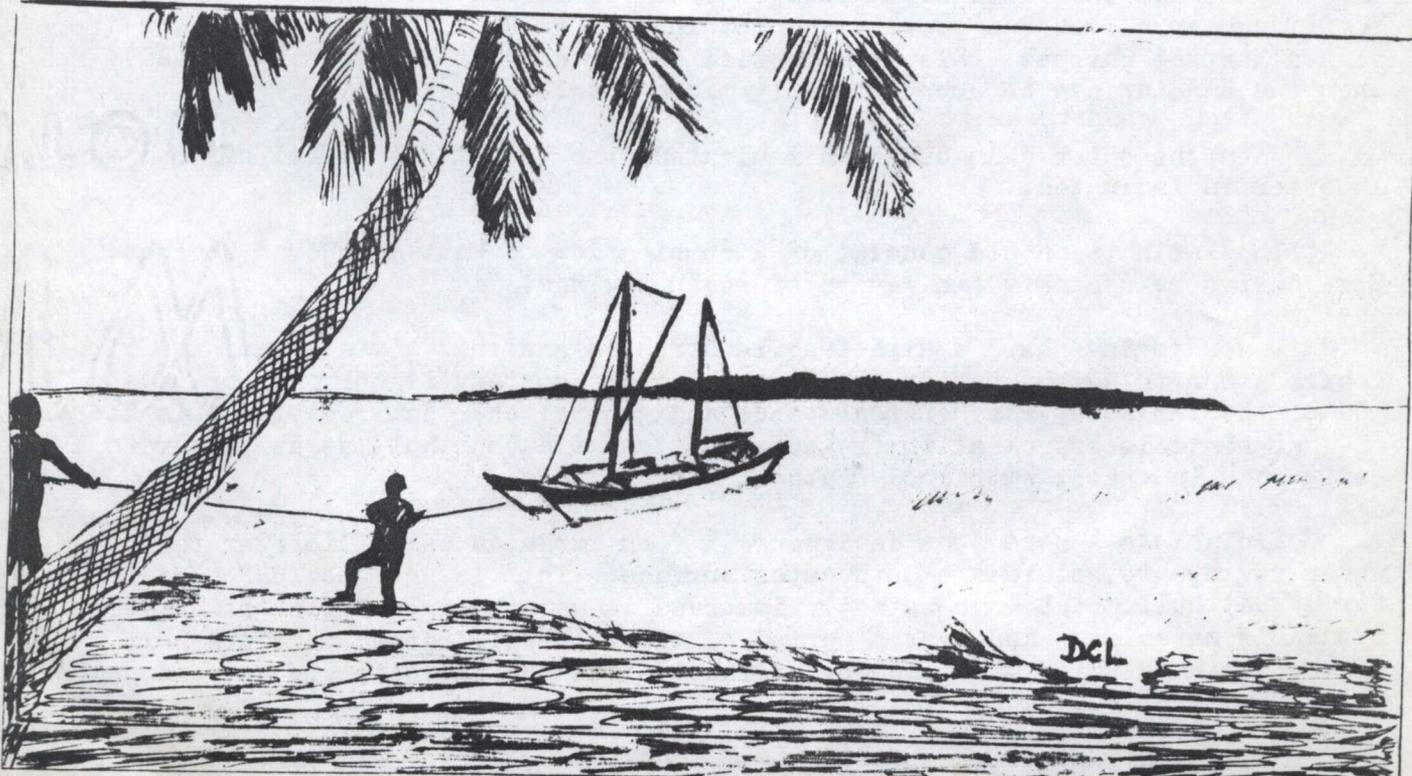
Fionnuala MacDowell.

- oo -

Maggie sent us a brief News Item on the 16th March, 1973:-

"Isabelle, Serge and Bernado sailed their TEHINI "Khorysko", from Honfleur to Gosport, last week averaging 12½ knots across the Channel.

They built the boat in a boatyard on the Seine, Isabelle and Serge are French, and Bernado is Brazilian. Later on in the summer they'll be heading South!.....



HAMMER, NAILS and a bit of GLUENARAI Profile - "FRYGGA"

Lt. Cmdr. Robert Evans, R.N., chose a Wharram NARAI as a replacement to his 1927 Humber motor car. The high cost of maintaining a veteran car had taken the pleasure out of ownership. Being in the Royal Navy was sufficient reason to chose a boat to replace the car. But why a polynesian catamaran?. With a growing-up family of a boy and girl the choice of boat was decided by the four S's, shillings, space, sleeping cabins, and speed of building.

The Hulls

Building started in Scotland in May 1971 and the first hull was turned over in October of that year; the second hull was started in May 1972 and turned over in October. Between times the hulls and materials had to be shifted from Scotland to Hampshire, on a change of assignment. The hulls were built with $\frac{3}{8}$ " marine mahogany ply B.S. 1088, made in Israel and sheathed in nylon cloth bedded in resorcinal glue. These will be painted with epoxy pitch, synthaprufe. The stringers and other solid timber is pine. When your Editor visited Robert and his wife in November 1972, the decks were on and most of the interiors had been fitted.

Galley Hull has provision for a two-burner calor gas oven and a double drainer s/s sink. Under the cabin sole will be two 15 gallon flexible water tanks made by Crewsaver of Gosport, likely to cost about £8 the pair. They will be filled from the deck through a water tight fitting. There are two bunks in the galley hull plus a bucket toilet in the forepeak.

Navigation Hull. This also has two bunks plus a Lavac toilet beneath the aft bunk. a seat runs the length of the hull between the bunk cabins and on the opposite side are three fiddle fronted shelves.

Raised cabin trunk. The 18" high raised cabin trunk over the mid-section of each hull will be made of G.R.P. foam sandwich. This will partly solve the condensation problem. Condensation is the main problem of living on a boat in cold climes. Dry heat and plenty of ventilation are necessities but good insulation is essential for comfort. The sensible course is to migrate to a more kindly climate, which Robert no doubt has in mind, like the rest of us, when the opportunity presents itself.

Rig - Lying beside the hulls were two pine trees, 36' and 30' long. These cost £12 delivered in Scotland. These will be dressed and finished as the main and mizzen masts. The main being sprit-rigged and the mizzen bermudan. The suit of sails will include two foresails, one working jib and the other a large light weather staysail.

Costs Costing is always very difficult to give accurately, unless one keeps books meticulously. The approximate cost of "FRYGGA" when complete will look something like this:-

Timber	£600
Fastenings (Brass screws)	60
Glue Aerolite 306	30
Sheathing(70 yds, nylon at £1.40) and resorcinal glue	120
Masts	13
Sails (Jeckels)	260
Rigging etc,	?
Decker jig-saw and circular saw.	50
Paints etc.,	50

say

£1,300

"FRYGGA" contd -Building Time

Robert has spent about 25 hours a week on the building of "FRYGGA" and he and his wife and family hope to launch her at the end of February 1973, off the South Coast.

Editor.....

A CO-OPERATIVE TEHINI at COOKHAM

John Foote has written giving news of how he and two other couples are getting on with their Tehini at Cookham on the Thames. The co-operation of three couples in the venture calls for a considerable amount of patience and "committee" work if serious arguments are to be avoided. Give and take is the order of the day. Major decisions are put to the vote and the majority view followed. This can lead to heated exchanges, but at least life is never dull.

Progress has not been as fast as hoped but then all builders tend to be optimistic - they would not have started building otherwise. With a large team, each member tends to gravitate to the jobs he can do best and which give him or her most satisfaction. The hulls have been Cascover sheathed but they found the process very difficult under the primitive conditions they have to work. They are, however, quite pleased with the finish. If anyone would like some first hand advice on this method John will be pleased to help. They are now working on the interiors. Some "bold" changes have been made to the layout to fit in with their own special needs and ideas. John is diffident about giving details as he fears being drummed out of the Polycat Association. Bob Smart (the ORO builder who still owes us an article about his experiences) reckons the strength built into her will set her well down in the water. She has laminated ply stringers. They can ease their worries by the fact that it takes quite a hefty bit of weight to put a 51' boat down even a few inches below the D.W.L.

They have seen two winters come and go since starting to build. By September 1973, they are determined to be sailing. The rig will be bermudian ketch. The best quote they could get was £750. They received a recommendation from the trade to approach R.H. Summers & Partner, Tims Boatyard, Timsway, Staines, who quoted £492. This included three lines of reef points in the main, two in the mizzen, leach lines, and colour. Colour costs 20% extra. Anyone looking for a very competitive, well qualified sailmaker should pop in (or write) and ask for Peter.

The bilges have been filled with foam from Strand Glass. To save foam, plastic bottles, 9" x 4" x 4" are foamed in. John can let members have some of these bottles (which must not be used for food or petrol). You will have to collect. John will need notice in order to get a few together.

J. W. Foote, "Elicia",
Turks Boatyard, Cookham, Berks.
Telephone Cookham 20110.

H. Heupers, Amersfoock, Holland, writes:- Her name shall be AREAREA -

I am building a Tangaroa design No.14, purchased a few years ago. Until now I had a 25' trimaran, also homebuilt, but the atmosphere around Wharram's cats attracts me.

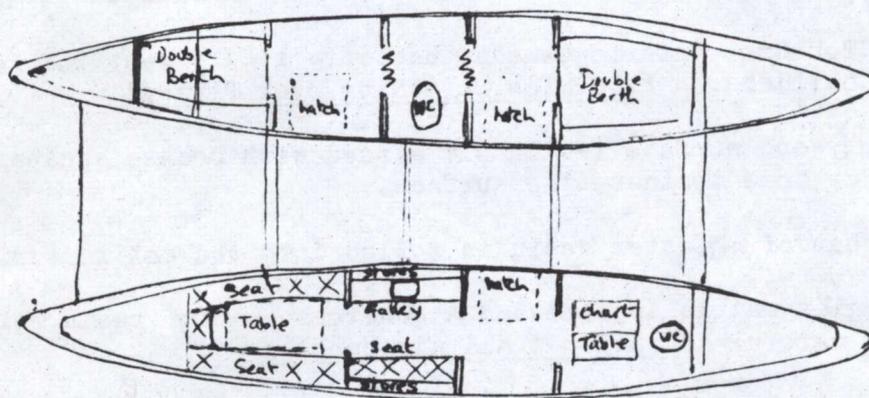
I follow the plans rather exactly using exterior grade W.B.P. plywood, deal and for the masts, beams etc, oregon. The fastenings are Aerodux and galvanized screws. All cleats, blocks and posts are of wood. I like decorations too.

This summer I'll set up the frames and backbone and then build the hulls around the interior to save time and therefore money as I have to rent a building.

HAMMER, NAILS and a bit of GLUEA NARAI IN A CIDER ORCHARD

The 20th January 1973, was not the best of days to make a pilgrimage into the heart of rural Sussex to share with Phil and Anne Wrestler the pleasure of admiring their nearly completed 40' NARAI catamaran. It was a cold overcast drizzly day and the log fire in the large open fire place of their lovely 16th Century Sussex cottage was a great reviver. The warmth of the fire was reinforced by a glass or two of their own cottage made cider.

The catamaran rested quietly by the apple trees from which the cider was pressed. Wharram catamarans have the quality of seeming, even on dry land, miles from the sea, to be waiting the word to be off. Phil and Anne have spent three years of hard work to reach the point at which they could see launching day as a reality. Phil's Narai is a very strong boat, built of $\frac{5}{8}$ " marine ply instead of the usual $\frac{3}{8}$ ". He has made some alterations to the accommodation layout which will be of interest to other builders. In the starboard hull the toilet was in the centre of the boat (see sketch) which serves the fore and aft sleeping cabins. All was very bright with white paint. Each cabin has its own entrance in addition to an emergency hatch over each double bunk.

Accommodation Layout

The port hull also combined some original ideas. The most interesting being the use of the fore cabin as a dining saloon, which could be converted into a double bunk. The galley was beautifully equipped with banks of storage cupboards, and extensive work surface and a bench for the cook to sit at whilst preparing food. The aft cabin was fitted out as a navigation area with an additional toilet. The inside of the boat was lined with megaprufe, a thin sheet material which provides excellent insulation and over which will be fitted further foam sheet to cut out condensation. The deck head was lined with pegboard which also eliminates most of the condensation problem. An idea which Bob Smart uses on his ORO, are life lines led from stem to stern of each hull to which safety lines can be clipped. Phil is a firm believer that anyone on deck alone should be attached to the boat. The man going off watch has the duty to see that the new watch is clipped on.

Rig

Phil has decided on a split sprit rig with gunter mizzen and twin fore sails. He had practical experience of the seaworthiness of this type of rig when he helped crew with Bob Smart on his similarly rigged 46' ORO last summer. He was greatly impressed with its qualities. As he will normally be sailing with only Anne as his crew he has designed the layout and working of the boat for ease of handling. His sail plan follows the plans except that the mizzen is

gunter rigged. The main working sails are of soft terylene made by Jeckels (Phil advises that you get quotes for your sails from various sail lofts). Auxiliary power will be provided by a 16 h.p. Carnetti diesel outboard.

Steering

In order to install whipstaff, joystick or wheel steering, he has fixed the slatted decking between the two aft cross beams to their underside, instead of laying them on top. This provides a shallow cockpit area to which he will lead the tiller lines. The usual tiller connecting arm has been dispensed with and in its place he has fixed a length of sail track to the top of the aft cross beam (one reason for fixing the deck below the beams) from which two metal rods are connected to the inside face of the rudder stocks. Tiller lines are led via blocks from the sail track slide to the whipstaff in the cockpit. We will report on how this system works in practice after sailing trials. Held in reserve will be a set of standard tillers.

With congratulations to Phil and Anne for their magnificent work on their NARAI (name yet to be decided) we look forward to seeing their boat at the Summer Meeting to be held in Portland Harbour in August.

Editor.....

=====
Roland Huebsch of Toronto, Ontario, Canada, has very kindly sent the following advice to Polycat builders on Fiberglas Sheathing over Plywood

1. The plywood surface is lightly sanded with coarse sandpaper to give some tooth to the surface.
2. One coat of Polyester resin is rolled into the entire surface.
3. Fiberglas mat is applied and a generous coat of resin rolled on, being careful to roll out all air bubbles
4. The whole surface is again lightly sanded with coarse sandpaper to eliminate any high spots, whiskers etc.,
5. A layer of gel coat of plaster consistency is scraped on with a plasterers trowel to fill any low spots.
6. Finally, sanding for the paint surface.

=====
Crawford Owen of U.S.A. writes he is busy constructing his NARAI and will begin the second hull in May 1973. He sent the following cutting from the New York Times which may amuse fellow sailors.....

WHEN PORT WAS WINE by Robert K. Berry

My life was very simple once,
a long, long time ago
When I walked on floors instead of decks
and "put" things - now I stow.
And ropes were ropes instead of lines
and all the ships were boats
I'd never seen a floating home
or nuns or gongs afloat,
And heads were on the top of folks
instead of underneath
And hatch was what young chickens did
and sailor's palms were leaves.

A bridge was made to drive across,
Not sit upon and steer.
And now it's stern or aft I go
instead of to the rear.
A kitchen used to be the site
of where I got my food
But now a galley's where it's at.
If my stomach's in the mood.
And port was wine instead of left
And cleats were on my shoes
And Tide was used to clean my clothes
And bites to cut my food.....

WHEN PORT WAS WINE by Robert K. Berry

contd.

And now there's all these other things
That I must sorely learn.
Hope your patience never wanes
Until my place is earned.

Chas. Thorslund sent a card in February 1973 with news of snow in Florida.....

From aboard "Blue Bell" - Florida is usually O.K. but a week back they got some snow in the Fla. panhandle since then northerly winds sent chill down here. Firsttime I heard of snow in Florida.

I built "Blue Bell" in my home port Edgewater New Jersey and she has been my home for past 13 years. As a sailor I roamed the seas in ships of six nations so English ships and ports are like home to me. When I found Mr. Wharram's advert in "The Rudder" magazine my interest in Polynesian Catamarans started. I am taking my time about construction but my Tane is to be called "Infinite Freedom". With friendly regards.

Chas. Thorslund...

Peter Bugler of Picton, New Zealand needs some moral support from members!

He writes...." Just a brief pen picture for you. I am one of the original ORO builders No. 3 or 4 plan from memory. Have been building in my spare time for the past five years. What spare time, I work six days a week from 8am to 10pm. I had high hopes of building completely single handed, but with one hull decked in and one hull still upside down awaiting a coat of glassfibre, not too much progress for five years work, so I have relented and now a boatbuilder friend is going to put some time in and help me get 'Kupe' in the water.....".

Good luck to Peter from the Editor and helper, but remember with so much work and no play you could end up being the youngest millionaire inthe graveyard.....

oo

Quality of Marine Plywood

The Association of British Plywood and Veneer Manufacturers issued a Press Release last year about reports they had received expressing doubts as to the quality of imported marine plywood even if marked with B.S. 1088: 1966. They conducted tests on random samples. Of 5 different stocks available in Britain. The conclusions were that all samples failed to comply with B.S. 1088. Similar tests on British marine ply showed that all passed the tests. This does not mean that all imported plywoods are inferior. P.C.A. members when considering buying a particular brand of plywood should telephone the A.B.P.V.M. (01-628-5801) and ask whether their product was included in the test. They obviously will not reveal what products were.

The marking of B.S. 1088 on its own does not give you any guarantee. It has to include the British Standards Kite mark. If a piece of plywood with the B.S. Kite mark delaminates in ordinary use, then you can report this to the British Standards Institute and claim recompense from the manufacturers. Keep receipts and make sure they describe the plywood purchased by manufacturer and that it is B.S. 1088: 1966 with the B.S. Kite mark.

Jim replied to the A.B.P.V.M. Press Release in the following terms.

"I understand your concern over this problem, for delaminating plywood effects the name of all plywoods, including the good ones, exactly as a capsizing multi-hull effects all multihulls, including the stable ones".... He went on to illustrate the lack of imagination by British plywood manufacturers to advertise their wares. When he had to build a new 40' catamaran after sailing the first British catamaran across the Atlantic, and likely to be the first ever to cross the North Atlantic, none of the plywood manufacturers showed any interest and weren't prepared to offer even concessionary rates for the necessary plywood. Likewise in 1967 when they were approached about the building of TEHINI for a round-the-world trip via the "Roaring 40's", they not only once again showed lack of interest but were in fact quite rude in their refusal. Builders of Polynesian catamaran designs have most likely been responsible for the biggest single demand for marine plywood, but still the manufacturers show no interest in encouraging the use of British plywood. Maybe the Dutch firm "Brynzeel", now Britain is in the E.E.C., will start pushing their product in Britain at a competitive price?

What grade of plywood to buy

Douglas fir plywood is made by CFI members in twelve different grades. Grade names in general are based on the quality of the veneer used for the face and back of the panel. Veneer quality, which naturally varies somewhat depending on each log, is designated by the letters A (the highest grade), B, and C (the lowest grade).

Condensed versions of the official Canadian Standards Association specifications for the surface appearance of the veneer grades are as follows:

A Veneer Smooth and sound. No knots, splits, pitch pockets, or other open defects. May contain a restricted number of wood patches and synthetic filler repairs. Suitable for paint finish.

B Veneer Solid surface free from open defects. May contain sound tight knots, tight splits, slightly rough grain, a restricted number of wood patches and synthetic filler repairs, and minor sanding and patching defects.

C Veneer Contains minor open defects, tight knots, and limited size knotholes, pitch pockets, splits, and worm or borer holes. May have rough and feather grain and wood patches and shims.

The manufacturer, using these veneer grades in various combinations, can produce a variety of panels. Of the twelve standard grades of plywood manufactured, only one—Marine grade—is made specifically for marine use. Six of the other grades can be used for decking, bulkheads, and superstructure. The remaining five grades have no practical application to boat building and need not be considered. The pertinent grades, their characteristics and uses are summarized in Table 1.

Specialty grades

Overlaid plywood Fir plywood can also be obtained with a factory applied resin fibre overlay which vastly improves the paintability of the panel. The overlay obscures the wild grain pattern typical of fir plywood. This type of plywood is called Medium Density Overlaid. It is frequently used for bulkheads, and cabin furnishings where a high quality paint finish is required.

Preservative treated plywood Plywood, like all wood, is subject to fungal attack and decay under certain conditions of temperature and humidity.

The most effective and reliable form of protection is pressure impregnation of the plywood with oil-or water-borne preservative salts such as pentachlorophenol and chromated copper arsenate. This is a proprietary, highly specialized process performed by licensed companies only, nevertheless preservative treated plywood can be obtained from many lumber dealers. Its main use in boat building is in permanently damp, poorly ventilated areas such as rope lockers and bilges. Most impregnation treatments with oil-borne salts leave the plywood difficult to glue and impossible to paint or fibreglass. So if you're thinking of using preservative treated plywood, you would be wise to discuss the specific problem with the experts.

Sizes and thicknesses available

Fir plywood is readily available from most lumber dealers in thicknesses of 1/4", 3/8", 1/2", 5/8", and 3/4". Plywood thicker than 3/4" and up to 1 1/4" can be obtained on special order.

Small boat hulls are usually sheathed with 1/4" or 3/8" plywood. Larger boats may use 1/2" material. Plywood thicker than 1/2" is generally used for laminating stems, breasthooks, knees, transoms, and the like.

Standard panel sizes are 48" x 96" and 60" x 120". Panels longer than 120" up to any reasonable length can be purchased with factory-scarfed joints. A scarf jointed panel actually consists of panels glued together end to end along a tapered cut to form a single continuous panel.

Scarf joints are made with the same waterproof glue that is used to make the plywood. Strength loss across a correctly made factory scarf joint is negligible. You can expect to pay a premium for factory-scarfed panels and you'll probably only get them on special order. The alternative is to splice the panels yourself as explained later.

Weight of plywood

The weight of plywood varies with the density of the wood. For all practical boat building purposes, the approximate and average weights of the most commonly-used thicknesses can be taken as:

- 1/4" — 0.79 psf
- 3/8" — 1.125 psf
- 1/2" — 1.525 psf
- 5/8" — 1.825 psf
- 3/4" — 2.225 psf

Table 1.

Grade Name	Grade of Veneers Used in Panel Construction			Use and Characteristics
	Face	Inner Plies	Back	
Marine	A	B	A	For hull sheathing. Made of Douglas fir veneer throughout. Has sound core with no core gaps. Sanded.
Good Two Sides (G 2 S)	A	C	A	For decks; bulkheads; transoms; superstructure; cabin and cockpit soles; laminating knees, stems and breasthooks. May have coniferous species such as hemlock, larch, spruce and others as inner plies. Small core gaps admitted in these grades. Sanded. Less expensive than Marine grade.
Good Solid (G Solid)	A	C	B	
Good One Side (G 1 S)	A	C	C	
Solid Two Sides (Solid 2 S)	B	C	B	
Solid One Side (Solid 1 S)	B	C	C	
Medium Density Overlay (MDO)	B	C	B or C	For any marine surface, including hulls but particularly interior surfaces, on which an excellent paint finish is required. Plywood manufactured with a resin-fibre overlay which improves the paintability and durability of the panel. Overlay bonded to the plywood by heat and pressure to form an inseparable bond as strong as the wood itself. Available with overlay on one or both sides. More expensive than regular grades.

Use plywood only on boat hulls designed for it

This discussion on plywood for boats would be incomplete without a word of caution: *Do not use plywood sheathing on a boat not designed for it.* A plywood hull is designed according to the developable surface principle, which, in the most general terms, is based on the fact that when a panel of plywood is bent and twisted it also develops a belly. The frames of a plywood hull must therefore be designed with curves that fit against the inside of this belly. It is the plywood that determines the curve of the frames and not the curve of the frames that force the plywood to bend. So do not attempt to use plywood on a boat hull designed for strip planking; it won't work.

Now that you're able to decide on the type of plywood best suited to your boat and budget, it's time to think about building; so here are a few practical tips on working with plywood that should make your work easier and your finished boat look better.

Ron and Linden Blake of Weybridge, Surrey write:-

" Our NARAI sail No.83, is being constructed under a shelter in our back garden. We had hoped to have the two hulls ready to turn by now, but of course, it always takes longer than one hopes and we have not yet completed the planking.

We are a husband and wife building team. We have occasional 'help' from our two children. The younger one (nearly 3 years old) is a dab hand with a hammer so we have to keep a sharp eye on just what and where he is hammering. His sister is not quite so keen on helping thank goodness! Good sailing in 1973....

=====

V. Felgate from Stockton-on-Tees sent his sub, with the following news of his TANE:-

"We started building last year (1972) about the beginning of August, and soon had the hulls completed. These were transported to Hartlepool where we intend to moor, and where we hoped to store the hulls for the winter. Our intention then was to wait until the onset of warm weather this year and start work on the hulls again as they were to be stored outside. One day over a pint of beer in our Club (Hartlepool Small Crafts Assoc), we met a foreman from the local Port Authority and he was persuaded to look out for a suitable building to complete the hulls. Eventually, he came up with a building with the sea on three sides and a slip leading into the sea through double doors. Unfortunately, this is rented to us on a temporary basis, otherwise we might have sold TANE when completed and built one of the bigger Polycats. Anyway, it has enabled us to carry on working throughout the winter sometimes under near freezing conditions, as we have no means of heating such a large building.

The hulls are decked and cabins completed and at present we are making the beam troughs. When the weather gets warmer we intend to sheath the hulls using Torpedo Paints Method with epoxy paint and glass tissue. It's been a long slog working every spare minute, but from reports in "Sailorman" it is going to be worth it.

We have taken photos at various stages and if they turn out O.K. we could probably make the negatives available to you. The photos I would have liked are the expressions on peoples faces when they come to see what we are building! The only favourable comments have

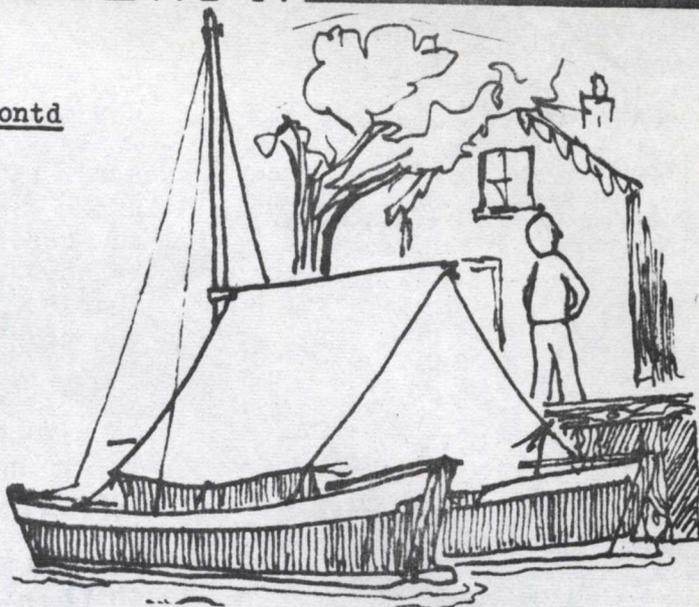
Hammer, Nails and a bit of GLUE

V.Felgate - TANE in stockton-on-Tees contd

come from "Yachtsmen" who realise what Jim Wharram was doing when he designed such craft as TANE.".....

We look forward to seeing your TANE sailing on the briny in 1973 and wish you many happy days aboard her.

Editor.....



"CARISMA" TANE built and sailing

E.W.Johnson, Sheerness, Kent

"I have built a TANE which is called "Carisma", which was assembled on the beach and let the tide float her off. I built the hulls in my back garden had to have them lifted over the house by crane.

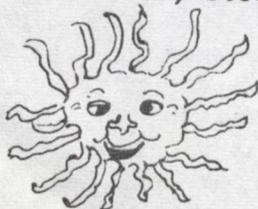
I only had room in my garden to build one at a time as its only 7' wide at the side of the house, the only part of the garden long enough. As each hull was built and lifted out, I pushed it around to my local pub and finished it off there in the car park. I used the front end of a bubble car which I bought for £10 to transport the hulls on and found it very easy to push. It took me 18 mths, to complete the boat from the time I received the plans to my first sail. I rigged her with a 27ft, Lifeboat lug sail and a home made foresail and a 23ft, mast, which I made out of 2" x 2" deal with plywood sides, but I will be making a longer mast and getting the proper sails for 1973.

We haven't had a good summer here as it had been blowing force six to seven most of the time, and dead calm in between, so I haven't been out as much as I had hoped, but I have had some very fast trips- fast for me that is. As I do not know what she is capable of, and in a strong wind and confused seas I tend to be over cautious and run home to shelter.

I would very much like to have an experienced Polycat man sail with me and give me some idea of what my boat is capable of. I hope you haven't come to the conclusion that I am in fear of the sea from what I have written, but after ten years of dinghy sailing I possess a great love and respect for it. I keep my boat in Queenborough Creek in the Isle of Sheppey.

By the way it may be of interest to other boatowners to know I do not use an outboard fixed to the aft beam as my outboard has a short shaft and I think it would get swamped, plus the fact that the bracket would be a long way down (I think of the leverage) so when I need the motor I launch the rubber dinghy (which is kept on deck when sailing) and lash it between the hulls aft, with the outboard attached, this pushes the boat along and keeps the outboard in the correct depth of water, steering is by main rudders.

Ted Johnson.....



We want
to hear
from you...

ASSOCIATION NEWS :

Peter Davey, Secretary, would like to have names and addresses of crew/ sailing/ required and wanted. If you are keen for a sail on a Polycat let him know. If you need a crew he will give you available names of members. Telephone Numbers Please!

CAPSIZES OF SURFCATS

1. From:- Alfred C. Petersen, 7223 N.Hamilton, Chicago. Ill. 60645, U.S.A.

"On my second sail, after about 1½ hours of sailing in wind 20-25 mph, I flipped her. She was pointing about 50-60 degrees off the wind and really moving - about 15 mph, I would guess. The lee bow buried into the water and all I had time to do was to grab onto the rear beam to avoid slipping forward. The boat was bow down about 15-20 degrees into the water and then the wind pushed the cat over all the way. The mast broke the ½" plywood deck support down the centre line of the piece and I suspect that the force of the water on the mast caused the plywood to part. I went head first into the water and it was a bit cool for swimming - especially with pants and jacket on. The next weekend I was out again in similar wind conditions and had no trouble. I made the mast support 8" x 8" and hope that will hold...."

2. D. Wheeldon, 91 Lonsdale Road, Barnes London S.W.13. writes:-

" You may be interested to know that I have managed to sail my Surfcat under. I took it out off Worthing. There had been a gale blowing the previous night and there was quite a heavy swell running 4-6 ft. I rather under estimated the wind speed (turned out to be Force 6) and as two of us were aboard, failed to put a reef in. We were surfing on the swells at 10-12 knots when we were hit by a squall whilst in a trough - she just sailed straight under the swell in front of us and turned over. Nothing broken...."

FOOTNOTE from James Wharram..... "The knack in sailing the Surfcat is to move one's weight backwards to prevent nose-diving. Remember at 12ft, O.A.L. it is a very small boat and cannot take the weather that bigger boats can...."

AMONG the members who belong to the POLYCAT Association in 1972 there seems to be keen interest in Tangaroa boats, followed by Hina's and equally shared between Narai's and Tane's. 1973 the Editor thinks will bring the Narai's up in total, not just because he is interested in building, but of the new members joining so far there is more news of people ready to launch Narai's in 1973. Lets See!

PEARSON WEEKEND CHARTERS - TYGWYN - FERRYSIDE - CARMS - ORO Bermudan ketch

For full details of rates write to above address - but if you want a weekend sailing to Tenby, Saundersfoot, or the famed beaches of the Gower Peninsula, with Professional Skipper and crew, 2 nights afloat, all food, harbour dues, etc, included for a party of six will cost £6 each person.

ASSOCIATION NEWS

Report on the stranding of Catamaran

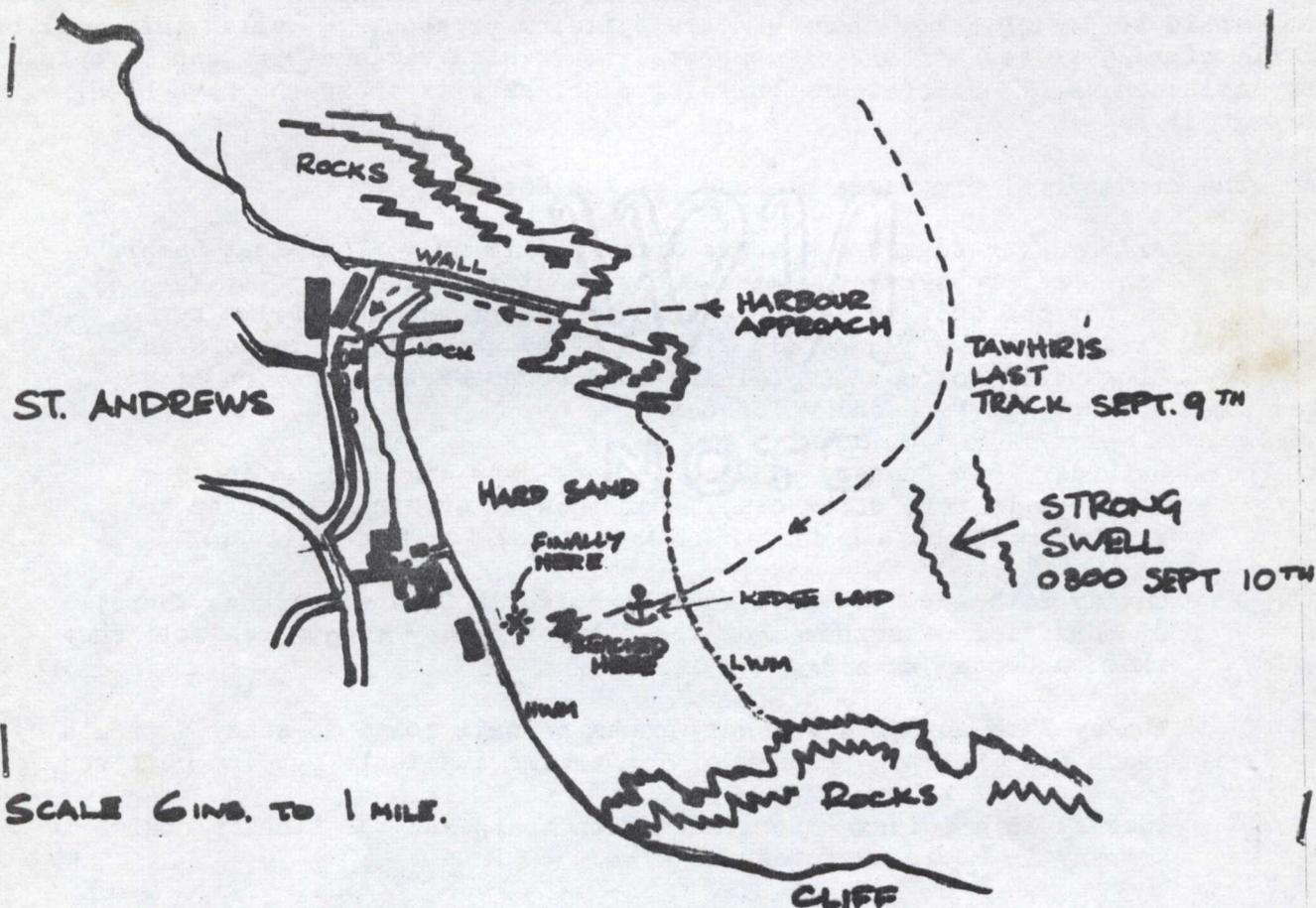
During the summer of 1972 we had enjoyed a memorable cruise to Norway, Sweden and Denmark. This made the loss of TAWHIRI the more poignant.

On Saturday September 9th 1972, in company with a number of other yachts from the Royal Tay Club, my family and I cruised Tawhiri to St. Andrews for the Regatta weekend there. Prior to departure I obtained a local area weather forecast from RAF Leuchars, who indicated light and variable winds. After a long sail (and motor) in very light airs we arrived at St. Andrews at about 1700, half an hour after high water. Since our boat is too beamy to enter the inner harbour we normally anchor off in the bay, provided that no Easterly winds are in prospect. In view of the very light conditions on Saturday, there was scarcely enough wind to fill the sails of the lightest dinghies racing in the bay, and the insignificant swell, I motored on to the East sands in order to give the boat an end of season scrub. We had just returned from a nine week cruise in Scandinavia. A second call to RAF Leuchars confirmed that light winds were expected on Sunday morning and that moderate N.NW winds would prevail during the later part of the day. We were therefore confident that the boat would be easily kedged off on the early morning tide. I have since learnt from others that at lunch time that day the B.B.C. were putting out a gale warning for North Sea areas but apparently the warning was short lived. I have also since heard that at about the time we were beaching Tawhiri a South or South East wind of force 5 was being experienced only 20 miles off shore! The scrubbing was completed during the evening, and the kedge anchor (35lb CQR) plus 36 ft $\frac{3}{8}$ " chain plus 300 feet of 2 inch warp was laid out to seaward. We set our alarm and turned in for the night about 2300. Just after 0200 on Sunday the tide reached the boat and I was concerned to see and hear (what one can see at 0200) a heavy breaking swell. There was at this time and throughout the events which followed no measureable wind. At approximately 0230 the boat was afloat and we kedged off into deeper water. About 100 yards offshore however, the intensity of the breaking swell from the North East increased considerably to a height which I estimate at 6 ft. One particularly large breaker slewed the boat broadside to the sea and before the engine could be started filled the dinghy (four feet above sea level), swamped the decks and crew on deck. Almost immediately the filled dinghy was thrown off the boat, snapping its securing lines and puncturing one hull in two places, at the same time carrying away the engine. Despite all efforts the boat could not be budged from the broadside position and was carried slowly back on to the beach rolling to 45 to 50 degrees and carrying away every moveable object. Deck work became too hazardous (anchors and chain flying through the air) and self preservation became the prime objective. As the boat touched the beach once again it began to pound heavily in the surf and I saw the only hope to be a line taken ashore in another attempt to get the boat stern onto the surf. When I considered that the boat was close in shore I went over the side. The water was unfortunately too deep to wade and the breaking surf necessitated a difficult swim. It was then at least one hour before the boat was swept close enough in shore for a warp to be passed to me. This was secured ashore but it quickly became clear that the forces at work could not be resisted. I then regained the boat and as water was by this time waist deep in both hulls, I quickly got my family and crew ashore where they were later taken care of by the local police force. At this stage nothing further could be done with the boat. As Tawhiri was pounded to pieces the contrast between the roaring breakers and the complete absence of wind was uncanny to say the least.

Later that morning, after breakfast and a change of clothes we returned to Tawhiri, now left high and dry by the receding tide, and still anchored. (The CQR was actually bent!) She was a sad sight with over 30 feet of planking and stringers missing from both sides of the starboard hull, mizzen gone, rudders split and twisted, deck twisted, and both hulls half full of water and sand. The starboard hull had its keel fractured at the lowest point of impact and the stem and stern posts had parted company from the keel. The port hull was less severely damaged, being holed in about six places and with a split stringer. The boat had clearly taken a hell of a pounding. The $\frac{3}{4}$ " bolts securing the beams to the cabin tops

ASSOCIATION NEWS contd.....Report on the stranding of Catamaran

resembled corkscrews. All internal fittings and equipment had disappeared and what was subsequently salvaged from the half mile of beach was ruined by water and sand.



The engine was dug out of the sand the next day, some 100 yards out to seaward. Members of my Club and the St. Andrews Club were of great assistance in the recovery of such items and in the dismantling of the boat. The starboard hull and much of the deck was clearly a write-off and after consultation with the Insurers, I burnt the pieces where they lay. The port hull lies above HWM awaiting the outcome. What we will do next I don't know. My love of sailing is in no way diminished but after 2,600 hours of work, I don't feel able to begin again. It's some sailing we need now, and our 1,700 mile cruise to Norway, Sweden and Denmark whetted the appetite. There are, of course, a few lessons to be learnt from our disaster. Whatever precautions are taken the unexpected can still happen and precipitate a dangerous situation. A boat, particularly a catamaran with long keels lying broadside to a sea and without way on is in a very stable position from which it is very difficult to manoeuvre. (especially without wind or power). To beach a boat on any beach which has the slightest exposure to open sea would appear to be risky even in quiet local conditions. The steep breaking swell we experienced was undoubtedly the product of some strong winds out to sea: but how far out? The effect of the exceptionally high tide is also very difficult to judge. The damage to Tawhiri was caused primarily by the shock compression loads imposed by pounding on a hard sand beach, aided and abetted by the force of the breaking swell on the topsides. The masts were shocked into multiple curves resulting in the failure of the mizzen. How the mainmast survived I will never know. It bent like a loaded fishing rod. In spite of the ultimate condition of the boat, she remained intact for a long while and withstood the pounding long enough for us to get clear in relative safety. In my view no craft, even one of steel or ferro cement, could have survived the treatment suffered by Tawhiri

Paul Gardner

ASSOCIATION NEWS -

SUMMER MEETING 1973

The last week end in August should be a thoroughly enjoyable occasion for the large number of Poly Catamarans expected to turn up for this years' Summer Meeting, at Portland Harbour, near Weymouth, Dorset. There should be an extensive fleet of Polycats - at least ten members said at the A.G.M. in January, that they would be coming. For those who are building or about to build, this will be an opportunity to see a range of completed boats with various rigs and layouts, have trial sails and discuss any building problems with those who have been through it all.

The provisional programme planned for the meet is:-

Friday 24th August - members arrive, film show "Your most humble and obedient servant, James Cook" about the discovery (by Europe) of New Zealand, in colour - also two short animated films by Fred O'Neill - "The Great Fish of Maui" about Maori legends and "Legend of Rotorua" explaining the legend of the creation of hot springs, geysers and volcanoes.

Saturday 25th August - Chance to look over and sail on boats (remember to take off shoes). Barbeque in evening with beer and wine. Bring your own chops, sausages etc, for the grill up.

Sunday 26th August - Mass sail to Lulworth Cove with lunch there. If insufficient members for the film on Friday evening we will show them on Sunday evening.

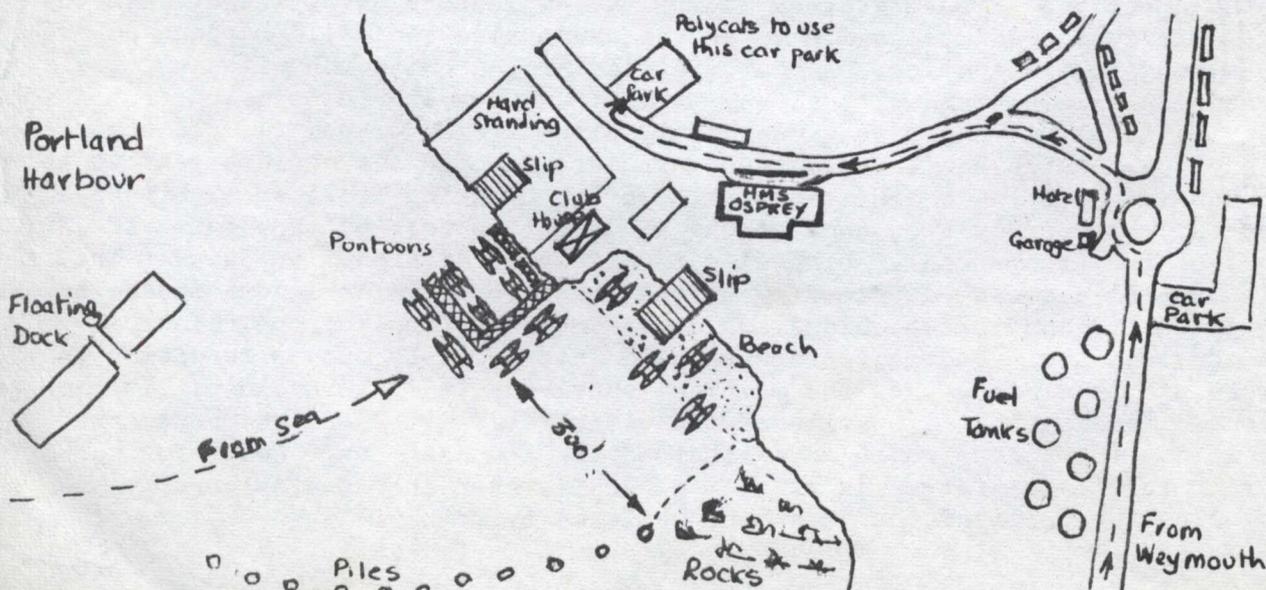
Monday 27th August - Friendly races or sail round to sandy Weymouth beach for the day - plenty of ice creams available for the children.

Tuesday 28th August - for those with boats and the time, a cruise in company to Poole or somewhere else.

- oooooooooooooooooooooooooooooo -

Information

H.M.S. Osprey - The Portland Harbour Naval Authorities have kindly given their permission for us to use the pontoons of the Sailing Club for our boats and we can also use the Club House and arrange for a bar. There are toilets and showers. The following sketch shows the layout and approach to H.M.S. Osprey.....



contd.

SUMMER MEETING 1973

2. Caravan Sites - Gloucester Caravan Park 4 1/2 miles from Portland, about 90p a night with showers and toilets. This is a chance site so no bookings can be taken. Martin Lillystone, however, is willing to try his best, ten days before the meeting to persuade them to fit in 6 vans.

Caravan Sites - Bagwell Farm, 6 miles from Portland, 66p a night bookable £1 deposit for each van should be sent as soon as possible. Has toilets and showers shop etc., Write to Mr. Texton, Bagwell Farm, Chickrell Weymouth, Tel. Weymouth 2575.

3. Tent Sites - Mr. Ballam, "West Fleet Farm" Fleet, Weymouth. 30p a night for tent and car. £1 deposit for bookings which should be made as soon as possible. Bagwell Farm - (address as for caravan site) about 30p a night £1 deposit for bookings which also should be made as soon as possible.

Littlesea Holiday Park (Adults 30p each, children 10p each night). Minimum charge 60p - chance site.

4. Bed and Breakfast - Weymouth Guides (10p plus postage) are obtainable from the Conference, Entertainments and Publicity Department, 6 Pulteney Bridge, Weymouth Dorset.

Martin Lillystone, 3 Mill Street, Broadway, Weymouth, Dorset, is willing to pass on some names to members if they want them but do send stamped addressed envelopes please!

- oooooooooooooooooooooooooooooooooo -

Members who are planning to attend the Summer Meeting should fill in the slip below and send it to the Sailing Secretary: George Payne, Tythe Barn House, Combe Martin. N. Devon - or if you want to reserve bed and breakfast accommodation, or caravan site, to Martin Lillystone, 3 Mill Street, Broadway, Weymouth. (Telephone Upwey 2620) with deposit money. He will forward the slip on to George Payne.

- oooooooooooooooooooooooooooooooooo -

.....Cut Here.....

Name.....
Address.....
.....
.....
Telephone No.....

I will attend the Summer 1973 Meeting
24th -28th August 1973, at Portland
Harbour.
Family: wife: number of children.....
Friends / crew(give number)
Boat.....(give class)
Please reserve / I shall make own
bookings (delete as necessary)
Bed and Breakfast
Tent - Caravan site.



WIND AND SAILNews and Greetings from Adriaan Slotemaker in Holland

ARIKI was launched on 15th July, 1972 at the Haarlem sailing club, thanks to their enthusiastic and capable harbour commissioner who arranged the transportation on their versatile boat-trailer. To hook this to our car, we had to use an extra trailer in between so, to circumvent all red-tape, we started at day break (4am) with the already loaded first hull. Then we hoisted her in the crane-sling and fetched the second hull - this all without any trouble on the highway.

The first hull was swung over and lowered into the water. The mono-huller crane driver who was not used to lightly built craft, let go too far..... so that to our horror she capsized, luckily to the outside - flat on her side. After fixing the fourth beam, she was pulled upright without any damage. Next, the second hull(port hull) was lowered, and the first laid alongside: the fourth beam connected on the second hull easily. As there was no room for launching her in toto, this was the only possible way - and after all, a lighter job.

Then followed a frustrating two months waiting for timber for the mast. Construction was finished in eight days (four masts) with Lautier. After this, the transport problem which we solved "do it yourself" on the HINA trailer one night. Painting and fitting - pestering the Smith for boom fitting and motor bracket. In the end, raising the masts with a tackle fixed high to a building - bows to the quay - on a Saturday.

Next Sunday, as it was already late in the season, the one and only bridge we had to pass would not open. We sailed up and down the canal - very exciting - tacking was hair-raising.

The maiden trip was seagulling - the weather was misty - no wind - thus rather boring for the real sailor. We spent the "maiden night" in Muiden, after having dinner with seven people - all sitting together in the port hull. Next day we said goodbye to the Juttings and then Lautier joined us early in the morning. We sailed up the Volendam - misty with neither wind or tide - still she was the only craft making steady headway. Jim must know this stretch of water rather well under the same conditions. A fortnight later the Boons and a Force 4 N. to Hoorn. I knew the main mast had become a bit crooked - but seeing how much it was bent now - it seemed advisable to reef and stay the top better. She was fast, dry, easy on the helm but tacking needed the helm hard over and some persuasion with the jib. Ninety degrees and a bit, between courses. (Comment from James Wharram on the bending of the mast is that they(the Builders) had omitted the top-mast stays, hence the trouble mentioned here.)

It soon became apparent, she held course on her mizzen. Hard on the wind, she slowed down and showed leeway - which resulted in a near miss from a French cutter who misjudged our course and speed. And, anyway, gave no sea room, blast him! This happened on the trip back to Haarlem where she is laid up for the winter. A 20 h.p. motor is a must in our canals - with which we experimented. In a seaway motor propulsion will be a problem. Hydraulic is probably the best - but most expensive solution.

I hope she will be seaworthy next summer. Plans are made to visit Milford Haven. Happy sailing to you all!

Adriaan Slotemaker

Postscript

Fellow members who attended the A.G.M. in January saw for themselves the launching operation described above which was recorded on a colour film kindly lent to us for the occasion. The Slotemaker family are great Polycat supporters.

HUAHEINE'S SUMMER CRUISE INTO THE 1000 ISLANDS - R. Huebsch

This is the story of a cruise with no excitements, gales, shipwrecks or other alarming incidents. Although not all our objectives were achieved, the whole crew enjoyed the trip thoroughly.



INTO THE 1000 ISLANDS

HUAHEINE is a standard sprit-rigged Hina with deck tent for overnight accommodation and side flaps on the hatches then can be folded down, holding the hatches in a partly open position, to form small cuddys. A stove was operated in the starboard cuddy while underway, while the port was used as a 'playroom' by the crew. Ship's company consisted of my wife Ginny, my eight year old son Jonathan and myself. With a full load of stores and equipment (including three bicycles stowed on the foredecks) we drew about three inches more water than usual. Our plan was to take advantage of the prevailing Westerlies and make a fast day and night passage down the center of Lake Ontario, making our first stop at Main Duck Island. Then on to a pleasant week's cruise through the 1000 Islands, (there are actually about 1800 of them, enough to last a week!), visiting both the Canadian and U.S. shores (we had provided ourselves with a U.S. flag; it was to be our first international trip!) The slower return trip would be through the scenic Bay of Quinte and along the north shore of Lake Ontario.

We left Toronto on July 17th. Due to circumstances beyond my control I had to take my holidays at this time of year when the winds on the lake are usually light. However, the forecast was for Westerlies and on a burning hot, hazy, humid day we sailed in an optimistic mood. After a day and night of tacking into light Easterlies, we were becalmed ten miles off shore and only 40 miles east of Toronto. We started the trusty 2 h.p. Yamaha and motored into Port Darlington. This once busy lumber port, today consists of little more than a ruined breakwater at the mouth of a shallow creek. The rest of the day was spent motoring along a hazy shore with the temperature around the 90° mark. We pulled into Port Hope for the night. There is a delightful marina run by the young people of the Navy League, with accommodation for about a dozen boats. There is no charge for stopping here, including use of the washrooms and showers. July 19th: The heatwave continues. Wind from the South at force 1, we set sail but kept the motor running at about half throttle to help us along. We made a stop for petrol at Coburg in case we had to motor all day, but by afternoon the wind drew aft and increased so that we could make about 5 knots under sail. We had to heave to for twenty minutes to finish supper before turning North West into the buoyed channel of Presqu'ile Bay. We spent the night at Brighton Marina at the shallow head of Presqu'ile Bay.

July 20th: Light Westerlies. We didn't hoist sail at once because we had the Murray Canal ahead of us and I didn't know if the three swing bridges on it would



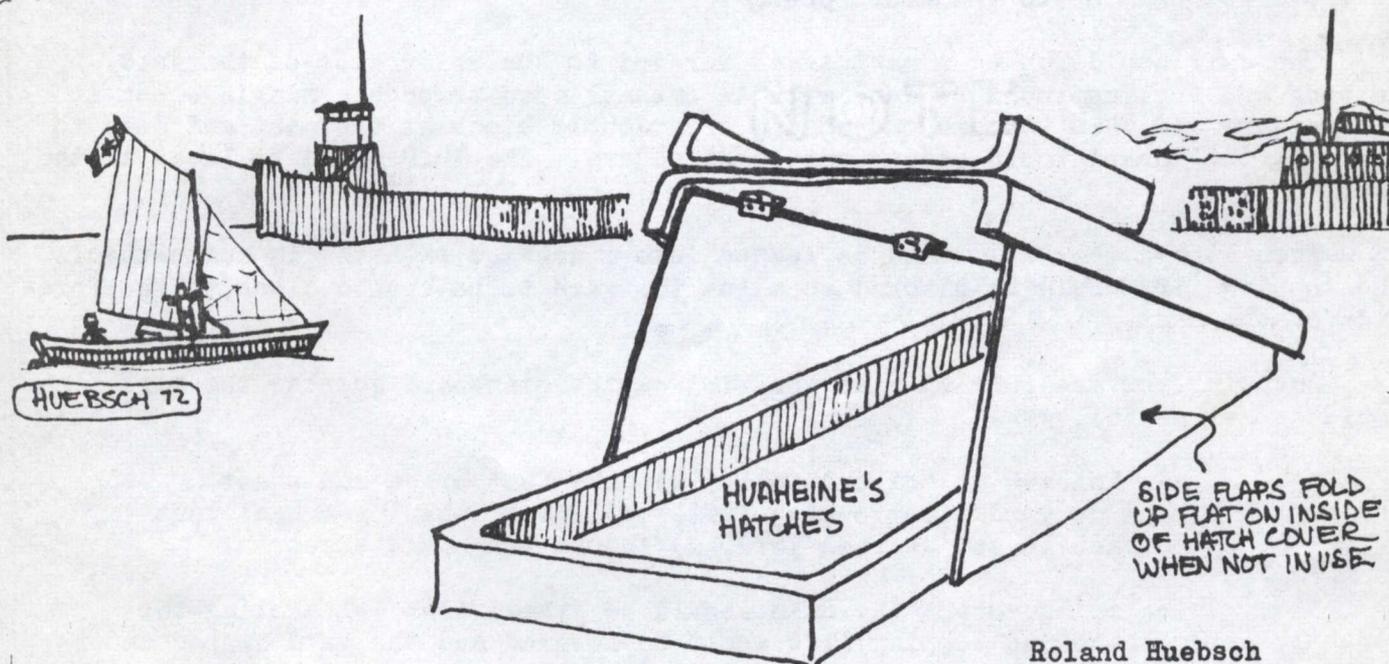
open promptly for us. However, all was well and we hoisted the main and motor-sailed through the rest of the canal and into the Bay of Quinte. This fifty mile long bay is 'Z' shaped and varies in width from three miles to less than a quarter of a mile. With the wind still aft and little waves sparkling under our bows we sailed down to Belleville, and after heaving to for ten minutes to wait for the hourly opening of the highway swing bridge, we sailed into the harbour and tied up for the night. Next morning the Westerly wind increased to force 4, and we had a fine day's sail; first with the wind aft across Big Bay and through Telegraph Narrows, then from the first turn of the 'Z' at Deseronto, we sailed close hauled down Long Beach to Picton at the lower corner of the 'Z'. We had covered 30 miles from Belleville in 5 hours. This was the highest day's average speed of the trip. We sailed the remainder of the Bay of Quinte and into the North Channel, between Amherst Island and the mainland. In the middle of the channel, we came upon a Canadian Navy diving tender flying her ensign upsidedown; coming alongside we discovered that her engines had broken down. She had spent the afternoon firing off flares at passing yachts, but no one had taken any notice of her. She had inverted her ensign as a last resort. We gave one of the crew a lift ashore to telephone for a tug and after delivering him back onto his boat continued our trip towards Kingston. A schooner, some 50 feet long, that had followed us up from Picton, passed us during our mission of mercy and was now a mile ahead. We set off in pursuit. With our shallow draught we were able to take a short cut between the Brother Islands, although sailing between the islands into the rough water funnelling up the Lower Gap from the open lake just as supper was being served caused a little excitement. We had the satisfaction of passing the schooner just before turning into Kingston harbour.

We spent five days in the Kingston area. Ginny had not been feeling well and ended up spending three days in hospital (nothing, as it turned out, connected with the trip). When Ginny was released from hospital it was time to start heading home. The day we left, a stiff South West wind was driving a short steep chop right in our teeth. We did a great deal of moving up and down, but not much moving forwards. Finally, we gave up and put into Stella Cove on Amherst Island. We had a picnic supper in Centennial Park in the company of a number of snow white pigeons. Next morning the wind had veered to NNW and, alternately sailing and motoring as the wind and our course allowed, we re-entered the Bay of Quinte, rounded the two corners with a stop for petrol at Deseronto, and finally with the wind picking up in our teeth, we put into Baycrest Marina for the night. July 29th: Sunny with light winds from the West. We motored into Belleville where we made a shopping expedition to the farmers market. I timed our departure to arrive at the swing bridge just as it opened, but unfortunately an encounter between our propellor and some weeds upset our plan and we spent some time at anchor, admiring the skyline of Belleville from the bay. We finally motored under the bridge through the remainder of the Bay of Quinte, the Murray Canal and into Brighton Marina for the night. The next two days we found the light winds and hot hazy conditions that we had left on Lake Ontario. We made slow but steady progress along the north shore with stops at Coburg and Port Hope. August 1st: wind from South West, we left Whitby on the starboard tack, for a while considered sailing across the lake thirty five miles to Wilson N.Y. This would at least give us an opportunity to use our American flag which was still neatly folded. However, ten miles out the wind backed and headed

us, so we tacked and made for Toronto. With ten miles to go, the haze turned to a cold grey mist. A tanker that we had watched unloading in Whitby ghosted past us. We put into Ashbridges Bay, in the East part of Toronto, and left HUAHEINE there for the night. Next day in a cold, grey drizzle, we moved her the last six miles to her own berth. We had covered 436 miles in sixteen days under mainly poor sailing conditions. About half the total mileage had been with the motor running. We visited twelve new ports, and apart from the last day, were only rained on once.

The boat and her rig behaved perfectly, our only mistake was to take too much gear with us for the size of boat. The first night I was in despair. It seemed that every time we needed anything, it was packed at the far end of a hull and we had to haul every damned thing out. However, Ginny worked out a system that went well for the rest of the trip. Every evening we would unpack everything, she would go through it all, picking out anything we would need the next day and put it in a water tight cooler which was left on the deck for easy access. This was my wife's first experience of cruising, and the fact that she enjoyed herself thoroughly in spite of the somewhat primitive conditions, and her experience in Kingston, has certainly confirmed our intention to start work on a NARAI as soon as possible. Her only complaint was that when under way, there is virtually no shelter from the weather, be it sun, wind or rain. In two and a half weeks you get pretty exposed.

A Polycat with sprit rig is certainly distinctive, we would frequently have people come up to us and say things like: "Didn't I see you last summer in Port Dalhousie" or "Hey! I passed you off Port Hope a week ago". No fibreglass monohull would stick in the mind like that. Everywhere we stopped we would draw a crowd. "Where do you sleep", "What do you call that funny sail?". "You came all the way from Toronto in THAT!". "How fast will she go"? We met a lot of friendly people.



TREASURER regrets has to sell her Y.M. 3 tonner, gaff rigged 20 footer to help finance Editor in building a NARAI. Full details of boat construction printed in "Practical Boat Owner" March 1969. Cold-moulded, three skin, round bilge, fin keel, built and launched June 1968. Two full berths, rest of boat designed to give plenty of space for stores, galley area, chart table etc. Always kept at tip top condition. Gear will include, sails, Seagull outboard, 12 foot sailing dinghy, built 1971. Price in £750 range, will be on mooring in early June, Chichester area for sailing trips. We should like to keep her until after summer meet of POLYCAT. Contact Joan Lewis for more information. 15 Cottingham Avenue, Horsham, Sussex.

WIND AND SAIL

Down-wind sail for a Sprit-rigged HINA

by K. E. Waite

After three seasons sailing our HINA the only disadvantage we have found is lack of sail area in light weather for down-wind sailing. As I detest spinnakers, I roughed out drawings for a half squares'l, or stuns'l which seemed to provide a more easily managed alternative.

Like the mainsail the stuns'l would remain bent on throughout the season. Brails on the main and a staysail set on a furling spar have made us too lazy to welcome fiddling with sails in bags and piston hanks etc; The stuns'l yard would have a proprietary spinnaker pole end fitting on its inboard end (or a large eyebolt for economy). This would engage in a horizontal eye screwed to the forward side of the mast just below the forestay fitting.

It would be hoisted by a topping lift rove through a block at the masthead and led down to a cleat on the mast within easy reach of the deck. A single brace would control its angle relative to the centre line, this would be made fast to the after beam or to the stern post.

The sail could run on a mast track screwed to the under side of the yard. Setting and furling would be done with an outhaul rove through a single block at the yardarm and then through one sheave of a double block at the mast and down to a cleat; the inhaul would occupy the other sheave. The luff would be laced to the mast.

When stowed the sail would be lashed into a sausage with the in and outhauls, the topping lift would be slacked to allow the yard to be housed close to the fore-side of the mast.

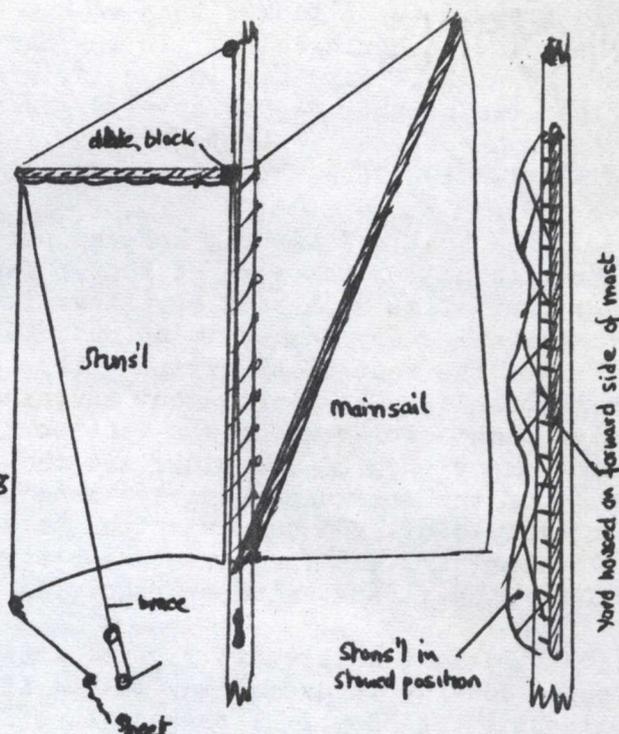
Assuming you are running with the wind on the starboard quarter the sail would be set as follows:-

- a) Release in and outhauls, b) Make fast brace and sheet, haul up yard with topping lift, c) Check inhaul and haul taut outhaul to set sail on yard, d) Adjust brace and sheet.

When gybing is necessary the main should be gybed first, blanketing the stuns'l, after which the topping lift would be lowered and the yard dipped under the forestay and up on the new weather side after brace and sheet had been moved across.

Unfortunately we sold our boat before this could be tried, but it may give some food for thought for other Hina owners.

Hinas are wonderful platforms for experimenting with rigs. Downwind they steer as though on railway lines with no fear of broaching and the wide sheeting base would be perfect for a stuns'l. For light weather sailing on the wind I drew up a fisherman's topsail laced to an 11 ft yard and hoisted with a halliard led down through a deadeye screwed to its heel and sheeted to the sprithead. The combination of these two sails should make a vast difference to the ability of



Contd, Down-wind sail for a Sprit-rigged Hina.

these boats to ghost along in light airs and should postpone the need to motor, even in a waning breeze.

K.E.Waite

Peter Bugler from Picton, New Zealand very kindly sent us a few Maori names as suggestions for Polycat builders:-

HAKOAKOA = sea hawk
 ANIWANIWA = rainbow
 RANGIMARIE = peaceful
 PATERE = flow freely
 TIPIWHENUA = vagabond
 TIRA = travellers

HAKORO = old man
 KERERU = N.Z. pigeon
 PETAPETA = all together
 WHITIAU = east wind
 WHAKAANGI = to fly
 MAENAE = mosquito

hints for pronunciation:

A as 'AR' E as 'AIR'
 I as 'EE' O as 'OR'
 U as 'OO' (as in room)

Would you Like to Sail RAKA

She is moored at Watermouth Cove, near Ilfracombe, North Devon and is available for charter for day/week Deepsea/inshore, or Fishing/sailing.

If you bring the family and your wife wants comfort - come and stay at:-

Tythe Barn Guest House,
 Castle Street, Combe Martin, Devon.

3 miles from Watermouth- within easy reach of Exmoor. Safe beaches - secluded coves. But above all a warm and friendly welcome for you all. Write for moore details and terms to George Payne at the above address.

FOR SALE

Mr. R. Rose of 33 Brandon Road, Hall Green, Birmingham B28 8 DX has a Maui for Sale at £100, with alloy mast and terylene sails.

SURFCAT

Looking for a new home, contact Derick Wheeldon, 91 Lonsdale Rd, Barnes, London S.W.13.

For Sale

Fairy Marine Silver Spruce Mast, ex Albacore, complete with diamond shrouds, gooseneck and boom. Would be suitable for Mizzen of Tangaroa or possibly Narai or even Hina. Price £14.

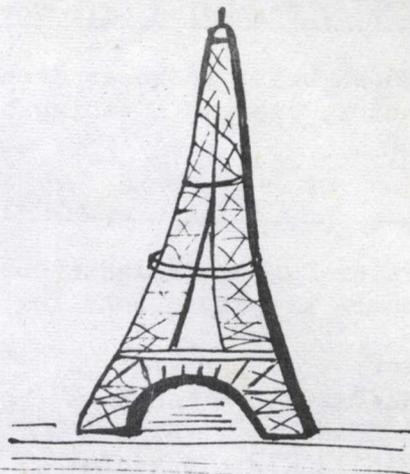
Also available ex Albacore main sail approx. 100sq ft, no longer suitable for racing, but would do a couple of seasons crusing £5. Slightly torn Jib £1. Phone Molyneux 01 330 0218

WIND AND SAIL

South Coast TANE up the Seine

by

Cmdr. J. W. F. Briggs, R.N.



A heavily-laden South Coast Tane slipped her moorings off Emsworth at 1030 on Saturday 5th August, destination Paris. Her crew of three, author 40, his son Michael 17 and daughter Sarah 16 had all been dancing into the early hours but the weather forecast was good and a W.S.W. force 4 wind promised a fast channel passage. The Nab tower was abeam at noon and Laa Mao Mao hauled thirty degrees to windward of the direct course to allow for an expected backing later. By 1330 the usual sea breeze effect had raised another wind force. Reefing the mizzen at high speed while hanging out between the racing sterns in the open sea has given rise to having a spare mizzen cut down to some two-thirds of its original size for breezy cruising conditions.

As so often happened in late summer 1972 the wind had dropped and headed by 1700. By the time that the Le Havre packet had thundered past at 1930, confirming our longitude, course was thirty degrees to leeward of track and progress slow in very light airs. A heavy cargo of cut-price petrol for breasting the Seine current was of little help and we were tempted to expend some in mid-channel. However, a S.S.W. breeze sprang up at midnight and Cap de La Heve light was raised 0400 Sunday giving a decent range and bearing arrival fix. A second maddening back in the wind left us five miles to the North and to leeward of the Seine Estuary by 0730 just as the tidal stream turned foul. An hour or so of engine close inshore under the shadow of Hifler's crumbling Atlantic wall saved the last of the flood up-river. A screaming reach past Le Havre and Honfleur took us under the soaring spans of the Tancarville bridge by noon, by which time we were some 120 miles from home. Streams run fast in the twisting river below Rouen, it changes direction in seconds and the wind is either dead ahead or right astern; usually ahead. With some help from our valiant 10 H.P. Chrysler outboard a good 25 miles were covered against the ebb by 1700. We then beached on the filthiest muddy beach that Michael and I have ever waded in to remove a healthy coating of small white barnacles of the type that seem to thrive on anti-fouling. Just before doing so disaster came close when two-thirds of the crew, which included the helmsman, failed to notice a hawser stretched across to the shore from a ship lying between buoys in mid stream off Villequier.

The flood stream made things very easy after 1800 and we were quaffing French wine and pastries in a hostelry at La Bouille by 2200. After a surprisingly quiet night alongside a pneumatic fronted pontoon near Dieppedale, Laa Mao Mao sailed on into the centre of Rouen docks where, in a quiet basin on the North bank, we gently lowered and unshipped her 32' mainmast. The 23' mizzen mast was moved for'd to the empty main tabernacle and, by far more luck than judgement, just cleared every low bridge up river. We left the mainmast and boom at the Appontement Villetard which lies just up stream of the first group of low bridges in the heart of Rouen on the left hand fork of the river. Being a Monday the little shipyard was closed. Two large, fierce and distinctly anti-common-market alsations guarded the premises. By the time Monsieur Pierre Bonvillain arrived from Paris the skipper's trousers had suffered and one dog



had a well bruised nose. After a combined cultural and victualling spree we headed on up river to the first locks at Poses. Safe navigation was impeded by use of a spinnaker which hung down over the stem, effectively blotting out most of France ahead. Things improved when tiller lines were taken for'd of the mast with the helmsman enthroned upon a camp stool, or a safari bed. Suitable flag signals from the international code served to allay any wrath and Laa Mao Mao had the honour of being locked in splendid isolation by about 1730.

The non tidal beaches with their chalk cliffs, wooded slopes and appealing villages were a delightful contrast to the muddy dockland below Rouen. There was barely a knot of current and good progress was made as far as the Muids Sailing Club soon after dark. This was another safe and peaceful mooring where the deck tent proved its worth once again.

In spite of an early start on the Tuesday morning it soon became apparant that time in Paris would be short unless we left the boat below Vernon that day. By the time that this situation had been faced up to Laa Mao Mao had reached Gaillon where Mon. Bonvillain disembarked at the railway to fetch his car. Having seen a small Marina a few Kilometres downstream at Les Andelys we returned there at speed and moored with anchor out ahead and stern to the jetty just below Richard Coeur de Lion's Chateau Gaillard. The climb up to the castle gave our lazy sea legs a badly needed stretching in time for climbing the Eiffel Tower on the Wednesday.

Paris was at her best those two sunny days in mid-August. Versailles was followed by shopping in Le Printemps, then visits to the Louvre, Eiffel Tower, Notre Dame and, finally, the Gare du Nord and so back to Laa Mao Mao at Les Andelys; all tired but soaked inculture. Having said a sad farewell to the kindest of Frenchmen there was no time to lose in making for the open sea again. That same Wednesday night saw us below Muids and secured alongside close to the banked piers of the railway bridge at le Mesuil-Andre. In the morning, lack of wind and a rapidly emptying petrol tank dictated a tow from a most friendly pair of bargees. Steering out on the windard quarter on a really long nylon kept us clear of diesel smoke and we were through the locks and down to Rouen again by lunchtime. All that our kind friends would accept was some English tea.

Main spars re-embarked (without another rearguard action) Laa Mao Mao became a Ketch again in the shadow of the Cathedral of Jeanne D'Arc and was nearly left hanging from the jetty bollards by the rapidly falling tide in the process. The beat downriver contined into the early hours of Friday morning with much of the breeze being provided by the ebb stream. When the moonlit bank suddenly stopped moving past, the anchor was let go and the cable drew ahead as soon as it hit the bottom. In spite of the racing stream gurgling between the hulls we all slept well that night. As a compromise, when the ebb started at dawn, Laa Mao Mao sailed the first few kilometres under genoa and mizzen only, with two thirds of her crew still turned in under the deck tent slung over the main boom. One of the more remarkable sights that passed us in the Seine that day was a three decked 'pusher' barge with about three hundred cars embarked: a marvellous solution to all traffic jams.

That first ebb of the Friday sped Laa Mao Mao down to a pile close upstream of Quillebouf through swathes of dense early morning mist through which ruminating cows would suddenly appear close aboard at the waters edge.

After some overdue cleaning up and maintenance, an easterly breeze allowed progress to be made against the last of the flood and we were soon making good some fifteen knots past Honfleur with every stitch of canvas set. They do say that harbour rots both ships and men and so it proved when the afternoon sea breeze met the ebbing torrent in the shallow waters off the Dique du Ratier,

South of Le Havre. One moment we were broad reaching in glorious sunshine and a calm sea all laden with red wine and exotic cheeses, the next soaked to the skin, shortening sail and close hauled with the jagged rocks of the training wall far too close to leeward. Just as we struggled to tack in the almost vertical seas the port for'd hatch cover bounced off, for the simple reason that the strongback hadn't been fitted. The whole port for'd compartment filled in seconds and a general aura of gloom began to descend. Had Laa Mao Mao not come through the wind a number of most expensive and distressing things would certainly have happened. Being a well balanced thorough-bred, she did, and the port bow, now to windward, was soon pumped dry, hatch properly secured and course set for the fleshpots of Deauville, some five kilometers to the south.

Having just been washed so unceremoniously out of La Seine another somewhat undignified landing was made through the moderate surf onto the sand outside the harbour entrance. Pilotage through the runnels on the beach was effected by keeping close to those bronzed holidaymakers who had water lapping the bottoms of their bathing trunks. By the time that sails were stowed and the last francs retrieved from the bilges it was possible to walk ashore dry-shod.

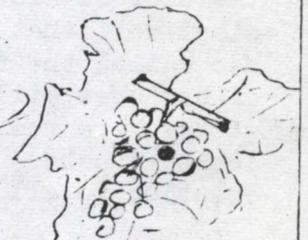
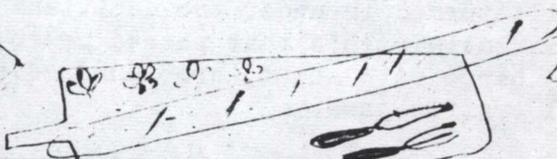
Later that evening we locked into the peace of the Yacht Basin and relaxed in a cafe across the road from the Casino, whose clothing regulations do not cover polycat rig after a week away from home.

Saturday morning saw the first rain of that voyage so it was with less regret that we sailed for England at noon, close hauled as usual and in very poor visibility. The next thirty hours were some of the most frustrating that I can remember in the English Channel. A breeze would get up for an hour or so, then die away to nothing for hours on end. The fog got steadily thicker and a large empty petrol can was hoisted to the main truck as a makeshift radar reflector. Tension rose as each syren drew closer, apparently on a steady bearing until the last few hundred yards by which time we could clearly hear the bow wave and engine room noises. The last gallon of petrol was hoarded to ensure just catching a tide into Emsworth. At about 1700 on Sunday with some progress being made at last Laa Mao Mao suddenly found herself amongst heavy tidal overfalls which could only have been the shoal off Selsey Bill. An hour or so later we were off Chichester Bar and that precious gallon saw us home for dinner as the sea breeze died fitfully away.

It had been eight and a half days of contrasts, surprises and, as always afloat, useful lessons learnt. Laa Mao Mao never let us down, was much admired in France and once again demonstrated the versatility of her Ketch-Sloop-Ketch rig. Furthermore, I doubt whether three people could have had a less expensive holiday to Paris and back or a more rewarding one.



J.W.F.B.



FOR SALE

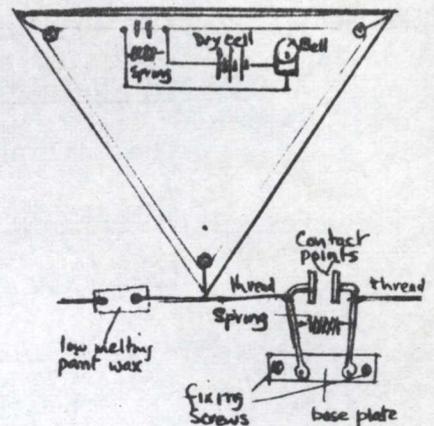
22ft. HINA. Sprit rigged, s.s. rigging, terylene sails, 1088 plywood; all new when completed August 1971. Firstclass survey, trailer made from old caravan chassis. Price £270.

Contact

Mr. G. Brown. 8 Matteredale Rd, Leyland, Preston, Lancashire. Leyland 23563

BOSUN'S LOCKER

Verner Jensen has suggested that when you go sailing you take your front door bell with you! You can't hear it ringing anyway. The diagram is self explanatory of his alarm system. The only suggestion I would make is that because the fine thread would only break by burning in the presence of flames, which is leaving things a bit late, a low melting point piece of wax should be used to join a break in the thread at highest point in the thread circuit. Two such circuits could be fixed to each bulkhead in both hulls, using one dry cell and bell in each hull.



-ooooooooooooooooooooooooooooooooooooo -

Metric Knots

Sir, References to the use of the 'Dutchman's Log' usually give a calculation for converting the speed of passing the floating object from feet per second into knots.

I have used the metric calculation for many years as it is simpler and easier to remember. All you need to do is to express the distance over which you are going to time the passing of the object in metres instead of feet. Double this figure and divide it by the number of seconds taken by the object to pass over the distance and the result gives you the speed in knots- as near as damn it.

The arithmetic based on the fact that one sea mile is near enough 1800 metres and one hour is 3600 seconds, hence:

$$\frac{1 \text{ metre}}{2 \text{ seconds}} = 1 \text{ knot.}$$

Taking a convenient length of your boat in metres is not difficult. My own boat is 30ft overall and for this purpose may be regarded as 9 metres from stem to stern (9.15m) from the level of the mast to the genoa sheet is 3 metres (9.84ft) Either of these distances multiplied by two gives a nice easy figure to divide by the number of seconds involved in passing the floating object thrown overboard at either of the two points selected and timed to the other appropriate point.

I have found this most useful and easily carried in my head - others might find it more convenient than the formula of the conventional method.

Dr. Stephen Mackenzie. London W.9.

-ooooooooooooooooooooooooooooooooooooo -

Michael A.P.Smith of "Strone Vaar" 217 Glasgow Rd, Dumbarton writes to say he is building his NARAI in his backgarden, still at bulkhead and backbone stage, but awaiting improvement in temperature for glueing. Anyone passing his way would be very welcome to drop in.

-ooooooooooooooooooooooooooooooooooooo -

POLYNESIAN CATAMARANS are pleased to offer charter facilities for 23ft HINEMOA during 26th May to 29th September, with tuition also
TEHINI takes weekly charter parties when design work permits.

For full details of costs, gear on boats, what customers are expected to bring etc, write to either, Ruth, Maggie, Nuala, Lesley or Hanneke, who look after the boats, at Polynesian Catamaran Ventures, The Longhouse, Milford Docks, Milford Haven, Pembrokeshire.

Telephone Milford Haven 3737

BOSUN'S LOCKERMULTIHULL DEFINITIONS by James Wharram

The present day Western Multihull is based firmly on the basic ship principles of the Pacific Ocean, where the ship types break down into the following classes:

1. THE SAILING RAFT

The Sailing Raft was used in several parts of the Pacific Ocean.

2. THE OUTRIGGER CANOE

This type has three forms, as follows:-

A. The Single Outrigger Canoe

The Single Outrigger Canoe has one hull capable of sheltering crew and stores, (which could be up to 100ft long), stabilized by the outrigger, (a solid log of wood), held parallel to the main hull by projecting arms. The Single Outrigger Canoe has a bow and stern. Sailing to windward on one tack, the outrigger is on the windward side, on the other tack, on the leeward side. When the outrigger is to leeward, it is prevented from burying by a balance or trapeze board on which the crew move out.

B. The Double Outrigger Canoe

This type has an outrigger on both sides. When sailing to windward, the windward outrigger is off the surface of the sea and the crew's weight is again used on the windward side to prevent the lee float burying. These boats also have a bow and stern.

C. The Micronesian Proa

The Micronesian Proa has a single outrigger log, which is always kept to windward. It usually has an assymetrical shaped main hull with the flatter side to leeward. To tack, it is necessary to turn the boat and sail rig end-for-end, either end of the Micronesian Proa serving as the bow depending on the tack.

3. THE DOUBLE HULLED CANOE

(Now miscalled, but generally accepted, as a "catamaran"). These are two distinct hulls, either planked or dug-out, joined parallel several feet apart to give the stability of a raft, with the easily driven speed of the canoe form. Like the Outrigger, this type has three basic forms:-

- A. Two hulls of equal length with a definite bow and stern, the boat tacking bows through the wind in European fashion.
- B. Two hulls of equal length, but the boat is rigged and sailed in Proa fashion, i.e., mast and sails are mounted on one hull instead of the centre of the deck and the boat is reversed end-for-end for tacking, one specific hull always being to windward.
- C. Two hulls but one of a distinctly shorter length than the other. This type is usually Proa rigged, seeking to use the short hull to enable quicker end-for-end reversing, (called in Fiji, a "Ndrua").

contd.....

BOSUN'S LOCKER

contd. MULTIHULL DEFINITIONS by James Wharram

Applying Western developments to the traditional types, we find:-

The Raft type has only been briefly touched by Western Designers, (one or two trimaran designers).

The Single Outrigger has not been developed.

The Double Outrigger has been well developed in the Lock Crowther designs, Kelsall/Farrant "Toria/Trifle" designs, and in Dick Newick's "Trice" and "3 Cheers" designs. All are distinct in appearance with their flying floats.

The Micronesian Proa has not been developed for offshore sailing, but was first fully demonstrated in the 60ft. "Crossbow" design in the World Speed Trials at Weymouth.

The Double Hulled Canoe, (or catamaran), has been well exploited in design.

The above five Pacific types of sailing craft are reasonably well known and clearly documented in books of Naval architecture/history. Confusion has arisen since the 1968 Single-Handed Trans-Atlantic Race in the nomenclature of certain designs due to the fact that Dick Newick described his distinctly double hulled, i.e., catamaran "Cheers" as a Proa. As shown in the above description, with its two equal sized hulls, it is a catamaran, Proa rigged.

In "Sidewinder" and "Lillian", Derek Kelsall has also followed Dick Newick's practice of describing two-hulled vessels, Proa rigged, as "Proas". These descriptions, blindly followed by yacht magazines and newspapers, have led to confusion and a request for clarification, as shown in the magazine, "Multihull International", (August 1972 edition, Page 9), over "Lillian". The above analysis shows that clarification of type is simple if one follows the traditional historical information available.

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WHY NOT DROP IN AND SEE US?

Ian Reid already lives where most of our Polycat builders hope to end up - in the West Indies. He considers that the NARAI is about the right size for cruising among the Islands. He has found that cruising from Barbados is not much use for a working man as the nearest island is 100 miles due West. This is O.K. going - takes about 14 hours in the 31ft Van der Stadt sloop he used to have - but coming back against the Trade Wind and the Equatorial Current is a struggle. He took 36 hours. A powerful auxiliary is a must for anyone with a time table to keep.

Ian is planning to build a NARAI some time in the future but in the meantime he has not had a sail yet on a Wharram Cat. A Narai or Oro dropped anchor off Barbados back in the early part of 1972, Ian rowed out to have a word and extend hospitality to the crew, but he was not met with a very friendly reception. I am sure this boat did not belong to a Polycat member. When a member is in Barbados next don't forget to call on Ian and offer him a sail in your boat. He is willing to give information about Barbados and the West Indies, a very useful contact to have.

Ian A. Reid,
32 Golf Club Road,
St. Lawrence Post Office,
BARBADOS

- oooooooooooooooooooooooooooooooooooooo -

Travelling by Head and Thumb

After finishing High School in Denmark at the age of 17 Verner Jensen spent a year on the Esbjerg-Harwich ferry route. His ship caught fire and he decided it was time for a change. Not having much money he used his head and thumb to travel down through Europe. During this period he passed his exams as a 'bum'. Following this he spent two years with a Norwegian tanker- he saw a lot of water but little of the world. He signed off in Australia and bought a motorbike to see a bit of the country. He tried a few odd jobs but towns bored him. He headed westward with a few other blokes and they had a really good time. He finally ended up in Sydney where he accidentally met his brother - mainly due to the fact that bars were not too plentiful at that time! He went back on the boats and ended up where he started, only 4 or 5 years older. From then on he became a wireless operator in the Navy then the Merchant Navy, got married and now has two marvellous boys. He gave up the sea life and became a school teacher. At this time his younger brother brought up the idea of building a sail boat. After spending £15 on mail alone he decided that a Polynesian Catamaran was the most intelligent decision.

He started building whilst still studying to become a school teacher. The few difficulties encountered were sorted out by letters sent across the North Sea. The keel, bulkheads and other small items were fabricated in the kitchen and hall. As the boat grew he moved out into the garden and finally performed the putting together act down on the pier. Building took nearly five years - he had other things to do, including a house, garden, family, studying psychology (which he now teaches in his spare time), designed and built a 22' catamaran. NARAI No. 4 was launched last summer and christened "NARAI". There was just time for a trial sail before his younger brother went to sea in the Merchant Navy. The boat was not really completed - the main mast stood only on a 8" x 3" plank laid flat. The interiors were not fitted out - all very spartan but everyone was eager to be off on a further sail. They sailed down the coast through the moonlight at 7 knots. The wind strength increased and speed went up to 9 knots - sailing between two buoys they logged 10.2 knots with the wind abaft the mast. Whilst keel boats were laid well over with their crews having to hold on, not a drop of tea was spilt on "NARAI". They kept up with the keel boats, although only the jib, mizzen and mizzen staysail were set. The main sail had had to be lowered because they discovered that the plank on which the mast stood had broken. They passed through the Kiel Canal and up the East Coast to Vejle which is nearer Verner's home. Here they tied up to the pier only to be awakened to find "NARAI" hanging with one hull caught by the bulkwark on the pier with the water rapidly falling. They eventually freed her by cutting away part of the bulwark. "NARAI" was taken out of the water so the interiors could be finished. She will be afloat again by the Spring of 1973. Verner thinks all the work and trouble has been worth it, made possible by the most understanding wife in the world.....

"NARAI" was built of the best materials including Aerolite 306 and marine ply better than B.S. 1088. The hulls were sheathed with two layers of "Versatex", an artificial cloth, along the bottom stem and stern, and one layer over the rest of the hulls. Equipment includes an 18 h.p. second hand Evinrude outboard, two plough anchors, which Verner made himself, and a spare mast. The cost of "NARAI" was £1,200 in which price is not included bunk mattresses, galley and some other interior fixtures. Verner has no hesitation in stating that if he had to build another boat it would be a Polynesian catamaran design. He would, however, consider making one or two changes in construction and building procedure. First he would increase the height of the fore and aft water tight bulkheads by 8" or so, in order to provide a strong fixing point for the fore and aft main beams. He thinks this would make for easier building and save on welded angle irons etc. It would also give added buoyancy. Before putting the ply skin on the hulls he would put in the strengthening pieces, extra frames and floors etc. He would put two layers on the inner keels, stem and stern so that the ply would have a larger glueing surface.

contd.....

Travelling by Head and Thumb contd.

In addition to building "NARAI" Verner last year built with the help of his wife and two sons (aged nine and six) a large house. To other builders or potential boat builders he has one word of advice "Keep going. The reward will come to you one day".

Verner Jensen,
Sonderlund 18
Østved, 7100 Vejle,
DENMARK

- oo -

We received a note from Alan Brook of Millcombe Farm, Blackawton, Totnes, Devon just prior to the A.G.M. and this was displayed on the notice board - He is selling his Tangaroa, price £1,900 in case members did not see this, anyone still interested should contact him at the above address.

- oo -

Clay Philbrick writes from U.S.A. "I'm the guy building the highly modified "Tehini" on Vashon Island, mentioned in Harold Goddard's article. Also in reference to the same article and Harold's note on capsizing - the reserve buoyancy has nearly nothing to do with the capsizing problem except in broaching conditions in heavy seas. Choy boats have big rigs - are sailed very hard and near their stability limits - and occasionally somebody goofs and doesn't let the sheets go soon enough.

There is a combination of beam, height of center of gravity, and size of rig on a Polycat - (which also must have netting the full length of the wing) - which will produce a boat with two stability peaks in the righting moment versus heeling angle curve. The combination is close to a TANE with aluminium mast and netting in the wing. In a capsize sequence the boat will first hit the windward hull touching peak. Next peak is with leeward hull side flat on the water - and this second peak, in the right boat combination, will allow the boat to sail on her side while the crew still frantically tries to free the sheets - with one hand - the other hand being used to hold on. Carry on sailing -

Clay Philbrick

- oo -

Graham Rates sent us a resume of the life of his Tangaroa "Mehitabel" -

1st Jan 1970 Construction Started, 14th Aug, 1970 Launched - Sailing Trials started. 70, 71 and 72 Seasons cruised Western Isles.

She is rigged as a Bermudan Cutter with the mast set almost exactly amidships. The mast is a bendy aluminium mast by Anderson Aerospars. Sails are by Elvstrom Anderson Aerosails (Jim has taken a copy of our sail plan). She is built as per plan with the exception of a self draining cockpit in starboard hull with five sheet winches at the forward end of it so the helmsman can tack the boat unaided and without moving. Instead of lifting hatches there are traditional railway carriage style doghouses on each hull, this gives 6' 2" headroom in galley and chartroom.

The chartroom is so arranged that five people can sit round the chart table instead of sitting in a row. Cooking is by Calor gas with large cooker including oven. Lighting is fluorescent and there is an intercom between the two hulls.

Auxiliary power is a Seagull silver century plus longshaft.

Series No.3.

Who Needs Food!



Tripe with Parmesan

- 1 lb Tripe
- 2 oz butter
- 3 tablespoons Cheese Parmesan

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Cut tripe into small squares and cook in boiling salted water for 1½ hours, or until tender; drain, and reheat with butter. When hot, stir in Parmesan cheese and serve as soon as this starts to melt.

Ceci Alla Marinara (Italian) (or chick peas, sailors style)

- 1 lb Chick peas (soak over night in cold water) cook in salted water for about 2hrs.
 - 3 tablespoons Olive Oil
 - 1 tin anchovies
 - 1 tablespoon chopped parsley
 - juice of half a lemon, black pepper.
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Having cooked the peas in a pan until tender, allow them to remain hot in the water in which they have been cooked. Meanwhile, heat olive oil, and add anchovies, parsley and ground black pepper, mix well.

Drain chick peas and place in serving dish, pour over anchovy sauce, and finally juice of half lemon

Serve with fried white fish and fresh mixed salad.

Carrot Halva (Eastern)

- 2 lbs carrots, peel, wash and cook in salted water until tender. Drain, mash and stir in 3 tablespoons brown sugar, 2 oz butter, 2 oz sultanas, cook for ten minutes and keep stirring. Add 4 crushed cardamon seeds, 1 level teaspoonful ground cinnamon, ¼ teaspoonful ground nutmeg.

Transfer to serving dish and stir in 2 tablespns, brandy (from ship's stores) Decorate top with mixture of loz chopped almonds, loz chopped hazel nuts, 6 pistachio nuts. And if you have any, a thin sheet of beaten silver (optional)

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Serve warm or chilled with thick cream

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PAY UP AND KEEP SMILING - 1973 P.C.A. Subscription

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And most important - Please write and let us know when you change your address as we do not believe in telepathy.

Joan Lewis
Hon. Treasurer