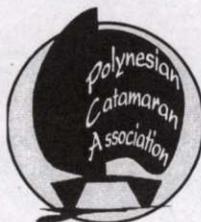

The Sea People



- **Moana Pahi part 1**
- **Tiki 38 photo's**
- **TIKI 31 redesign**
- **Melanesia**
- **Pahi 42 build**
- **Hinemoa rebuild**

The Sea People

Magazine of the
Polynesian
Catamaran
Association



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Proud owners ~ Neil Sandidge
& Ake Eckerwall on the beach
with Ake's 38.

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Scott Brown's



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Tane	£4,600
Tiki 21, Germany	£5,300
Tangaroa Mk1	£5,950
Tiki 21(GRP)	£6,250
Pahi 26	C. £5,000
Tiki 26 (GRP)	£9,750
Tiki 26 (monocoque)	£7,500
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Tane	£12,000
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Pahi 42, Turkey	£38,000
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Narai Mk4, US	\$50,000 US

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Tangaroa ~ Skipjack

Clive Thomas

Skipjack is a Tangaroa Mk IV extended to 36ft, built from Brunzel marine ply on Colombian pine stringers and framing, sheathed in glass and epoxy.

The accommodation is increased by building the decks to the level of the gunwales & extending the coachroof forward. This enables the headroom to be increased, and the level of the bunks to be raised with the resultant increase in width of the berths.

The port hull, containing the galley, has 7ft headroom & loads of storage while the starboard hull sole has been raised relatively about 18 inches so that, when seated along the fold down table, one has a view of the outside, and there is plenty of deep storage under the sole.

A very useful modification has been the building of a ply pilot house / bridge deck which gives vir-

tually complete shelter from the elements and allows one to do the chart work, while under passage, seated along side the steering wheel.

The water and diesel tanks are integrally built to the port and starboard side of the mast, (allowing gravity feed of the water to the galley) while the 22Hp diesel engine is situated aft of the mast in a sound proofed engine box driving a three bladed propeller on a retractable sonic drive unit.

When standing and steering, the bridge deck has a cut out which allows one to stand with the wind in one's face while the body is sheltered and, as one who suffers from cold extremities, this has proved to be most useful.

All in all, while I do not confess to be an expert on these matters, Skipjack is full of good practical ideas, and all credit to Ted Jansen, the previous owner and builder and, as Steve Turner commented

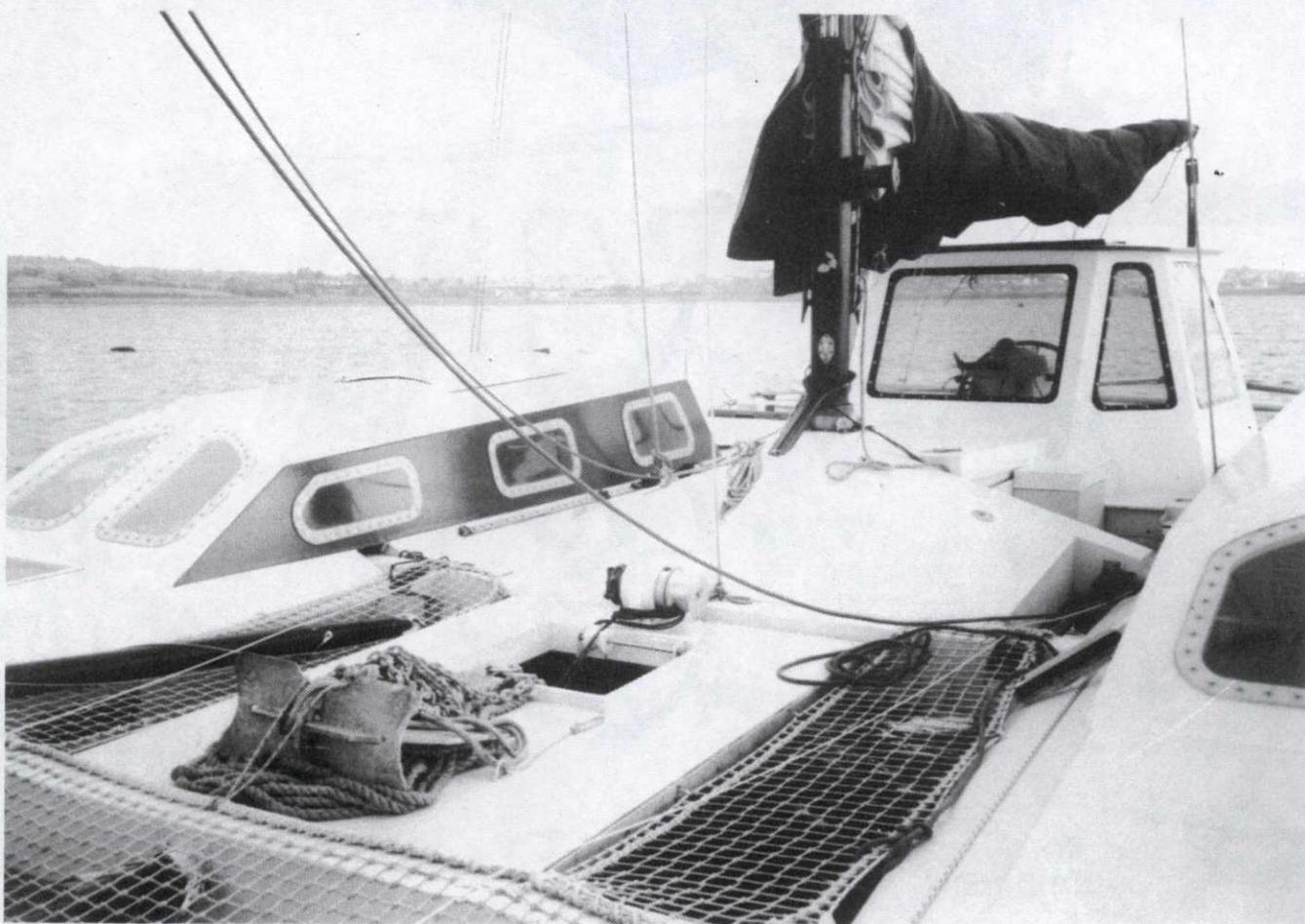
on survey, built to an exceptionally high standard & carefully maintained!

Anyone who would like to have a look for any inspiration or curiosity is welcome to do so.

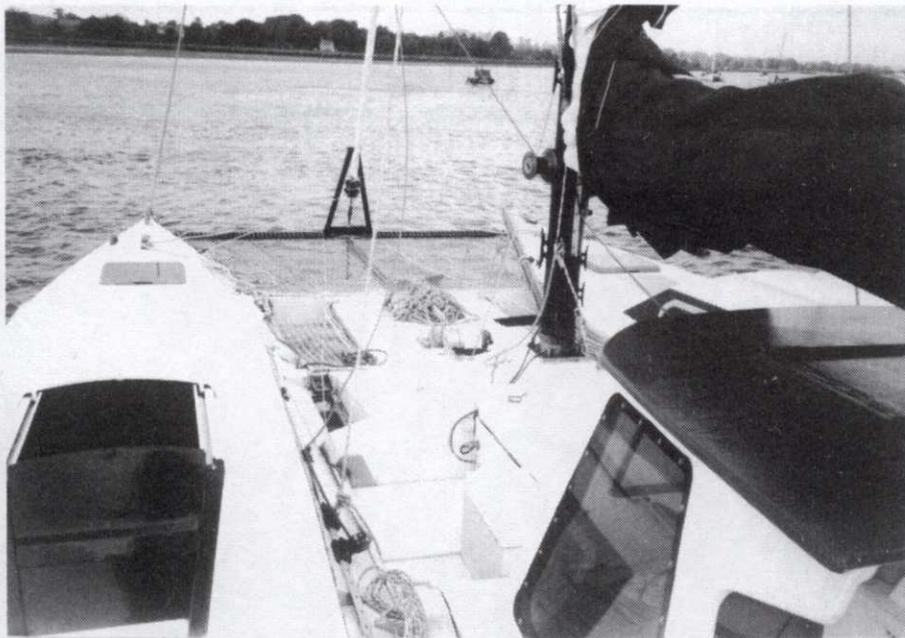
The Prelude, Purchase and Cruise Home.

For the past 10 years, I have been working towards the dream of setting off for a period of time towards the sun, always imagining I would be on a monohull yacht. Having finally set the date (approximately), circumstances have changed, mainly due to the arrival of two additional crew members aged 6 and 4. During the year prior to our departure, the benefits of multihull Vs monohull slowly began to favour the former. I had never sailed a catamaran before, but had always fancied the philosophy & design of a Wharram.

I decided to put my boat up for sale almost as an experiment, and







was most shocked when the first person to see her put in a reasonable offer and within two weeks the boat was gone. To cut a long story short, within another two weeks I was the owner of a Tangaroa Mk IV and about to set off from Stellen-dam, Holland towards Devon in my first sail on a catamaran with one other crew and a rather iffy forecast.

At about 2pm Monday 29/9/98 we set off into a N.W.3 which died out about dusk, to leave us motoring down the Dutch coast on an increasingly glassy sea. By the next morning still motoring we were off Dunkerque and as the morning progressed, with S.E. forecasts of 4 increasing to 6, we had S.W.ly. I was a bit concerned that the low of 978mb lurking in our path had shifted north, so we called in to Boulogne for fuel and a further update

on the forecast. There they were forecasting the S.W.ly turning to S. E.ly so off we went. By early evening we were moving nicely down channel with a following strengthening breeze & I was becoming increasingly impressed by the speed & stability of the boat.

By midnight, the wind had increased to a F7 and we had doused the main, Still doing 8 -9 knots under jib only when the forecast upgraded to imminent gale force winds. We decided that a gale on a unknown boat, which neither of us was particularly familiar with, was not desirable, and diverted to Newhaven, conveniently situated 15 miles to the north, where we duly arrived & tied up a couple of hours later. As we cracked open a bottle of red wine, sitting in the cunningly designed bridge deck, the heavens opened

and we toasted our wise decision making & good fortune.

We awoke to S.S.W. gales and I thought my delivery cruise home was over, but after exploring the delights of Newhaven nightlife, we woke to a forecast of S.E. -E. - N.E. 5 - 7. So with heavy heads, we set off into a lumpy sea, on the last 140 miles or so, on what turned out to be the most enjoyable sail of my life. Mainly broad reaching in 6 - 7 winds, surfing at speed for what seemed like for ever (but probably for about 10 sec's), moonlight, heaving seas, passing Portland Bill faster than I would ever have thought possible, arriving at Exmouth about 18 hours later which included a slightly baffling spell of poor progress tide bound past the Isle of White.

My only regret is that I waited so long to try out a Wharram Catamaran, but what a sail to introduce one to a new boat!



Editors note from Steve:

Shortly after Clive brought "Skipjack" to her new home I received a rather plaintive letter from her builder Ted Jansen and his wife Madeleine, with whom I stayed when I surveyed the boat.

Madeleine wrote, "Although it is not yet the sailing season we are already missing our Skipjack!" They went on to ask, "Do you know any cat owners who have the same doubts we always had when it came to letting our catamaran to unknown sailors?"

We are a Dutch couple aged fifty with two daughters, all experienced cat sailors. We sailed our Tangaroa for 10 years around Holland, Denmark and Germany. As we have sold our beloved cat, we would like to hire a cat to sail in the Mediterranean for three weeks next summer."

Please contact them if you are interested. Their address is: De Logger 12, 1931 Egmond aan Zee, Holland. You can Phone Ted and Madeleine on +31-725062945 or Email: madeleine@crossmart.com

Melanesia ~ in Ibiza

by Jan Leendertz

In my article on improvements on Hitia 17 in Sea People 36, I found two numbers (on page 7 and 9) that made my wife Elke and me laugh, and we giggled when trying to imagine our Hitia 17 with 23 fore stays. The other misprint was the Beaufort 11 when the shroud lashing almost came off. (That was in a force 4 or so.)

Nevertheless, I can offer a true force 11 story with our Hitia 14. That happened on November 6 1997 on Salinas Beach, Ibiza, where are boats are "parked". We had the feeling that bad weather would come and so we put the Hitia 14 higher up in the dunes. When the storm came (more than 50 knots wind straight on the beach) we rushed the 20km to the beach and couldn't believe our eyes. A roaring chaos, no more beach, and we found our Hitia on a stony road about eighty feet away from where we had left her. A friend came running and shouted



"She just flew high up in the air and landed mast down on this road". We had a close look in all the chaos and found her totally intact. There were just scratches along the sheer stringers and on the mast top. We couldn't explain it. Three other (factory made) 18ft. cats were badly damaged. Praised be the flexibility of the ancient boats that the Wharrams have taken over!

On November 6 1998, exactly a year later I started building "Melanesia" and finished her on the 14 December. We launched her on the 20 December. Elke on Hitia 14 was faster as she has double the sail area (10m²) but Melanesia is great fun too. She obeyed perfectly to the steering paddle, turning into the wind when lifting it up and vice versa. But after 10 minutes of trying around in a



light wind I found out that I didn't need the steering paddle at all! I sailed and tacked without it by just moving my body forward and back. She responds even better than the famous 20ft. patin Catalan which also has no rudders. Maybe I'll

need the steering paddle in stronger winds? That has to be checked out.

So now we have 3 Wharram boats in our family, but unfortunately I won't be able to sail them next

year as I'll be on a 60ft. ketch sailing from Antigua via the Polynesian Islands towards New Zealand from mid April to November. I hope to see lots of outriggers there..... Si Dios quiere.



TIKI 31 ~ MORGENWIND

Bernd Frieboese

I bought my TIKI 31 (plan no. 21) in December 1995 from builder Ted Griffiths of Rochester, Kent, England. I thought then that modifying an existing boat would be the easier way to my dream boat (see sketch) than starting from scratch. Now I think that I was wrong. My project is to make a TIKI 31 with cabins (sitting headroom) in both hulls instead of the hull cockpits. This includes reducing beam no.2 to a light half-beam because it would otherwise block the passage inside the cabins. Hanneke Boon told me this is OK. So far I have almost finished the port hull which now contains the galley with 2-burner cooker, sink, refrigerator, some cabinets and a small folding table. An electric pump feeds 2 faucets from 2 tanks (45lt + 95lt) in the bilges. The aft cabin contains a toilet with 50lt holding tank (vacuum flush system) and a small washbasin.

I will start the starboard hull this summer, after a move to a new

workshop. It will contain a raised nav station and steering amidships.

PROBLEMS AND IDEAS

DECK AND COCKPITS

The purpose of the typical TIKI 31 deck layout is apparently to earn money by taking fishing clubs out. The anglers can sit on the hull cockpit seats, lean their backs to the deck boxes and hold their rods over the sides. Non-fishing charter parties would probably prefer to find seats along the outboard sides of the cockpits as well so they can face each other rather than the sea, possibly with backrests attached to the coaming.

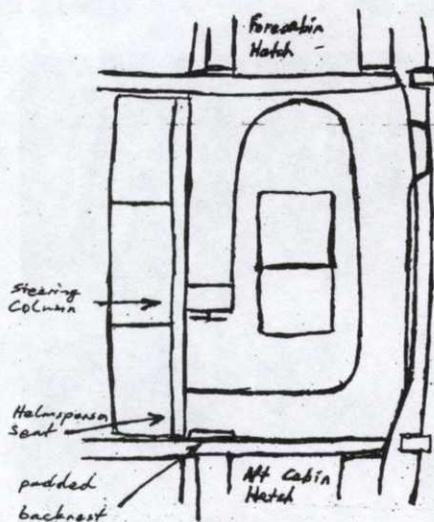
Small waves find their way into the cockpit-scuppers all the time so you have some water sloshing about under the floor gratings and creeping into the lockers. Mine were always very wet, so be careful what you put in there.

I removed the awnings above the cabin hatches (except port aft) because they made going below very difficult. Remember that you have to climb over the beams, so where do you put your upper half if there

is a roof about 60 cm (2 ft) above the beam?

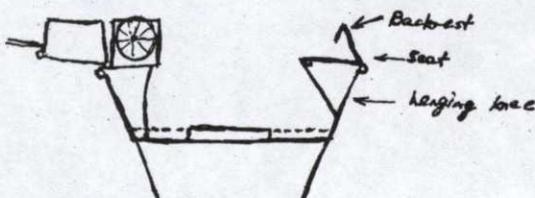
Another problem is the assembly of the centre bridgedeck with the box lockers along both sides. Hanneke thought that the boxes should simply be fitted with "hanging bars" that nest in the hollow sides of the beams. The whole system is then assembled like the decks of the smaller Tiki's: put the beams loosely in place and tilt them outwards so you can drop the boxes in between, then put the beams back in-position. BUT THEN you cannot tilt the inner beams of a TIKI 31, 'because the cabins are in the way.

Ted's solution was to drill holes in the beams in line with the bolts that attach the hanging bars. From these he could attach the bars to the boxes with everything in place by sticking the bolts through the holes in the beam, holding them with a screwdriver and putting the nuts on the other ends. This means that the bars cannot be glued to the boxes, losing a lot of strength. By the way, the bars must be shortened to clear the lashings.



TIKI 31

Suggested shape of starboard hull cockpit with outboard seats, helmsperson's seat and wheel steering column



Bernd Frieboese

12 April 98

Member Thom del Forge suggested shortening the boxes by the width of the hanging bar so you can glue and bolt another set of hanging bars to the beams as ledges for the box bars to sit on. Make sure the boxes cannot move sideways or upward, because in each case the centre platform would fall off the box's inboard ledge. A lashing around the hanging bars and beam ledges would prevent upward motion.

Another problem with the deck boxes is the gap between the, box and the hull cockpit seat through which small objects fall into the ocean. On MORGENWIND a line went through there to foul the prop - at night in Ramsgate harbour. I managed to drop the anchor just in time. The swung-up outboard can easily be reached from the boarding ramp.

STEERING

The best way to steer the TIKI 31 is to sit on the aft cabin roof and grab the tiller crossbar, as you

would on the smaller Tiki's. I am making the ends of the roofs flat for sitting comfort. Still, Ted Griffiths and I were determined to sit in the cockpit, so we tried as many as 6 different steering systems so far:

~ The "tiller or whipstaff steering" as designed by Hanneke. The amount of slack caused by the 8 blocks of which some dangle about on very long pennants is greater than the possible movement of the whipstaffs. Another problem is that-you might stumble over the lines when you walk on the netting to handle the mizzen sail.

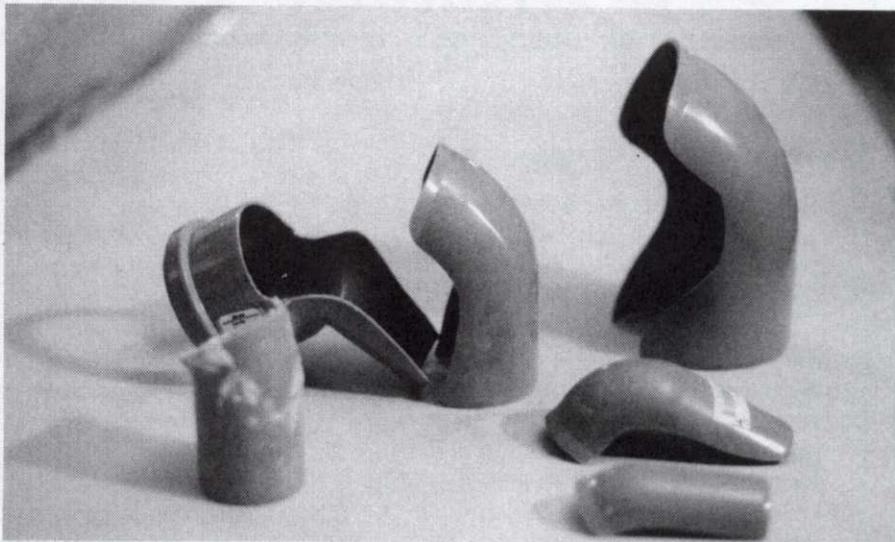
~Ted then put a 35 cm (14 in) wheel with a 25 cm rope drum into the place of the port whipstaff between beam 3 and the aft deck slatting, with only the upper half of the wheel standing out above the deck level. The rope was led as before, but around and attached to the drum. This system still had too much slack, and the wheel was of course awkward to reach from the cockpit. He attached the YAMAHA's remote control to the side of the port deck box.

~ Next Ted bolted a 2.5 m (9 ft)-stainless steel tube rigidly to the port tiller. This was bent several times to pass above the aft cabin hatch awning and carried a handle at shoulder height above the port cockpit. This long tiller could be swung between the mizzen mast and the port aft shroud, limiting the rudder movement to about 20° each side which is a bit tight for harbour manoeuvring.

~ After I had bought the boat I removed all this and attached a .3 m wooden-stick flexibly to the centre of the tiller crossbar, like they do it on many beach cats. This did not feel very good, since from the cockpit this stick reaches the crossbar at a too wide angle to effectively push or pull the rudders over.

Then I put one of the horizontal whipstaffs back in place. I ran the lines from the middle of the crossbar through 5 blocks, above the aft decks and close to the cabin sides, to 2 clamcleats attached to the forward part of the staff, just behind the handle. This still did not give a lot of rudder angle, but the slack could be tuned in the clamcleats. In the end the (provisionally too long) tail of the line found its way

My filleting tools. I cut them out of PVC drainpipe bends which are available in Germany in diameters 40, 50, 80 and 100mm to make different size fillets.



through the gap between cockpit seat and deck box to the prop, stalling the engine and breaking the whipstaff.

~ So I put Ted's wheel back in its place in the port aft deck and led the line from the crossbar to the drum through only 4 blocks. This worked well enough and whenever the going became difficult, such as the eddies of the river Rhine, I kneeled on the aft deck so I could spin the wheel with both hands and see where I am going think my next steering will work something like this, but with the wheel forward of a comfy seat in the nav station in the starboard hull. Both the wheel and the drum could still be a bit bigger, and I will make the line detachable from the crossbar for easier direct steering. Lines from a wind vane could be attached at the same fitting. The wheel will have a brake.

TRIM

As Tim Webb also found (see mag No 33), the Tiki 31 tends to float slightly stern-heavy as soon as you install the engine. I am considering to move the engine forward of beam No 3 for better balance. As the designers have not given any measurements for where to paint the boot stripe, I guess that the draft at the skegs should be the same as at the lowest part of the keel amidships. The best position for the- centre of gravity seems to be about 30 cm (1 ft) aft of beam No 2. All heavy gear should be placed as close to the centre as possible to reduce hobby-horsing motion.

Rigging I think that the double rigging cleats on the mastheads

(upper and lower cleats for forward and aft shrouds) are not a very good idea, because the forward hooks of the gaff might get stuck on the lower shrouds. I am going to make 1 pair per mast of stronger cleats and plant them into a groove in the mast and then put the loops on in the way the old European shipwrights did. The starboard foreshroud goes on first, then port fore, st'bd aft, port aft and finally the forestay. If you have not yet made your masts, consider putting slim radar reflectors, inside the tops, as well as the cables for lights and antennas.

The designers suggest using a 4 part tackle stretched horizontally across the fore netting to tighten the jib luff. Good idea, but this tends to pull the forestay bridle so far aft that the jib completely loses its trim and the sheeting point has to be moved aft beyond the end of its track in the foredeck. I am going to rig a light wooden boom parallel to the downhaul tackle to hold the bridle out, or maybe replace the bridle with an aluminium fore-beam (a piece of mast section from the yacht junkyard).

I have replaced the double block for the main halyards at each masthead with a pair of single blocks on separate pennants because the double block tends to twist when the sail is almost up, causing friction and chafe. Maybe I'll make something even better someday.

Well, I hope that my ideas are helpful to you and I wish you good success building and sailing.

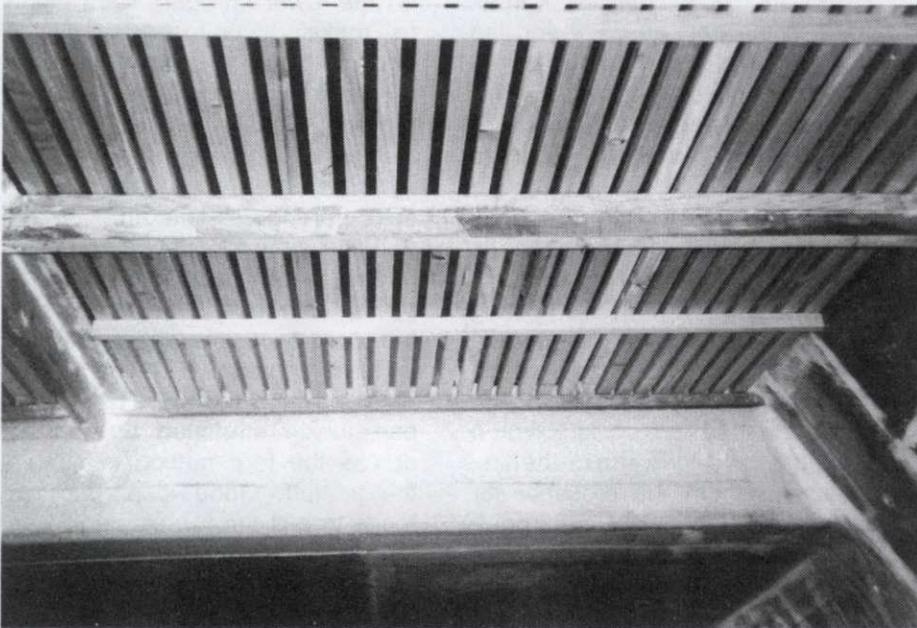
* See back cover drawing.

Narai 4 ~ "Havaiki"

REBUILD Part 2

Dave Irving and Lena Ljungqvist

In 1997 we made longer beams for Havaiki (a Narai mk 4) and glassed them rigidly to the hulls (see mag 36). During 1998 we have been filling in the space in between the two hulls. The old galvanized steel engine box has been converted into a work bench, and replaced with wood and foam sandwich. At 180 kilos it makes a very strong work bench. Behind the engine box is a steering cockpit, also in foam sandwich, and the remaining space between number 2 and 3 beams is decked in with 20 mm foam sandwich.



Now that the beams are glassed to the hulls all this deck and cockpit structure can also be glassed to the hulls, making everything much simpler. We resisted the temptation to incorporate a bridge deck cabin into this structure, although several people have said why not? This would add weight and windage but it would also destroy the character of the boat. A very attractive feature of Wharrams is that you can work the boat from the large flat decks in the centre of the boat, without having to clamber over a large bridge deck cabin. Anyone who has had to climb onto the cabin of a Catalac to put in a reef, in a rough sea, will know what I mean. Anyway two hulls, 40 feet long and 7 feet wide is enough ac-

commodation.

The next job to attend to was the slatted decks. These are a safety feature on a Wharram. They let water through from on top and wind through from underneath. With a wider boat this becomes even more important. They also make an attractive and hard wearing deck, so we had decided to keep them between beams 1 & 2 and 3 & 4. They are also fairly heavy. If you follow the plans and use '3 by 1' (which ends up around 71 mm by 22 mm planed) with gaps of 16mm, this is the same weight as a solid timber deck 18 mm thick. We decided to make the slats narrower to get more gaps to

let the water through and reduce the weight. However if you make them too narrow then they need more support underneath, so it is swings and roundabouts. We chose 30 mm by 22 mm with 16 mm gaps, which is the same weight as a solid timber deck 14 mm thick, (still fairly heavy).

The next problem was what timber to use? Hardwood is expensive and heavy, and we don't want to use tropical hardwood anyway. Of the softwoods, joinery pine goes rotten, Cedar and Douglas fir are expensive. We went to Moorshead sawmill in Holbeton near Plymouth to ask for advice. They suggested Larch. It is durable, attractive, and

not expensive. Our 30 mm by 22 mm strips cost £10.50 per cubic foot, including planing, and they come from a wood in North Devon, not the other side of the world. You must allow for some wastage because of knots, but about 70% of the strips were knot free with a good straight grain. It wasn't completely dry so an added bonus was that we had the strips drying in the hall for a few weeks and the whole house smelled wonderful. If I were building a Wharram cat from scratch I would seriously consider Larch for all the woodwork.

The slatted decks are now finished (Jan 99) and they look fantastic! The next job - fitting the engine, after its unbelievably expensive overhaul (£2,300, and there wasn't even anything wrong with it).

DITTY BAG

FOR SALE, SW UK

Set of 4 beams and brackets for Narai Mk.IV
Also main mast and mizzen-mast in wood, with fittings and sails for ketch rig.

Dave and Lena Irving
01752 880984

WANTED

Classic Wharram Cat
From Tangaroa Mk.I
upwards.

For completion / renovation.
Will tackle serious work but not a basket case!

Pete 01208 814628 (UK)

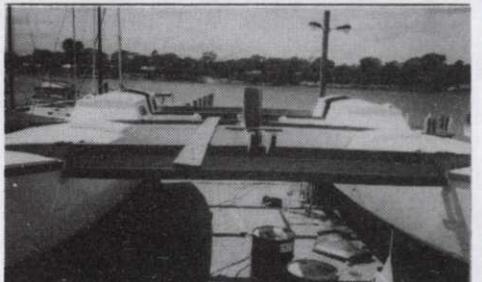
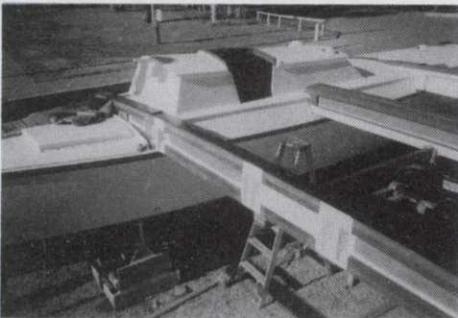
If you get the answerphone please speak slowly and clearly for God's sake!

TIKI 38 ~ "COCONUTS FISH & RICE"

Ant & Anita

We are very happy with our Tiki 38 "Coconuts Fish & Rice" so far and plan to spend forever cruising and exploring. We started in January 1997 and will launch in May - masts only half ready. We are looking forward to living on the sea again.

We will send a full story on the project with more pictures in a couple of months. Our only modification to the plans is a flat deck area with a half pod. We are also having tiller steering. We hope it is okay to change the layout like this, everything else is to plan. *Ed: We received the above article from Australia, no last name! Oz members keep an eye out for the boat & try joining them up!*



Pahi 42 ~ Mahuini

Build Part 1

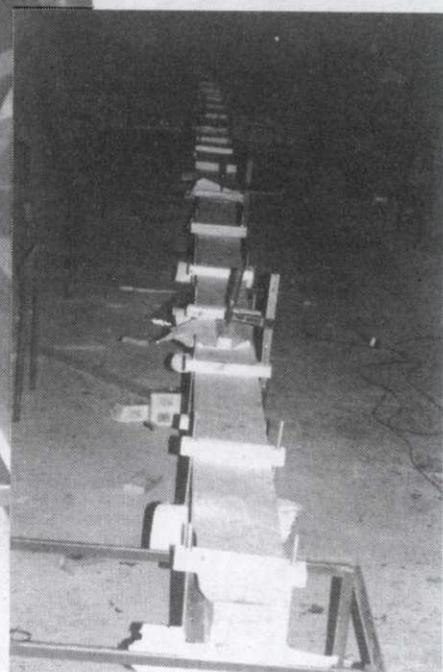
Steve Whenman



Turning the hulls was done by four people, the main concern with turning Pahi hulls is that if you try to roll them (as you would with Narai hulls) the bulkheads take all of their weight on the corners and could be damaged, you also need lots of room. Our solution was as follows, equipment needed, 8 double blocks (always handy to have on board) 1 15ft x 3inch steel tube some old cushions and loads "a" rope, if the pic's are not clear the drawings may help. We found that the hulls started to turn with a light push and a restraining rope was needed to slow them down.

MAKING THE 43 FOOT MAST

We had to order the Sitka spruce from an importer and to get the right grade we had to wait 10 weeks. The mast isn't difficult to make, the scarves need to be accurate and it needs two people to handle the long lengths. You can see from the pic's that the inside has been coated with epoxy (3 coats) and then filled with baking foil to act as a radar reflector (as recommended by Tristan Jones



and Libby Purves) I hope it works! The clamps, 24 of them are made from 2x2 timber with 8mm studding epoxied into the bottom half to stop the stud from turning when tightening.

BEAMS, BEAMS, EVERYWHERE

I think the pic's show most stages of the basic construction, my tip use loads of glue and use screws not clamps the holes can be plugged as the hulls were.

NETTING BEAMS

A very simple jig using Spanish windlasses (or is it windlii) the other clamps are to keep it all in line, it's very slippery!

The finished beam in place it just needs coating.

THE WISHBONE JIG

A very simple jig. There's no great strain on the timber and it didn't take days just to make the jig, we used other clamps and Spanish windlasses to hold it all together.

THE WORK PLATFORM

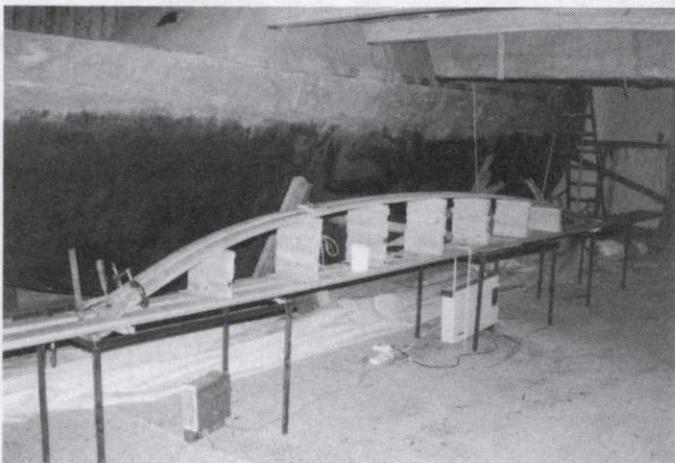
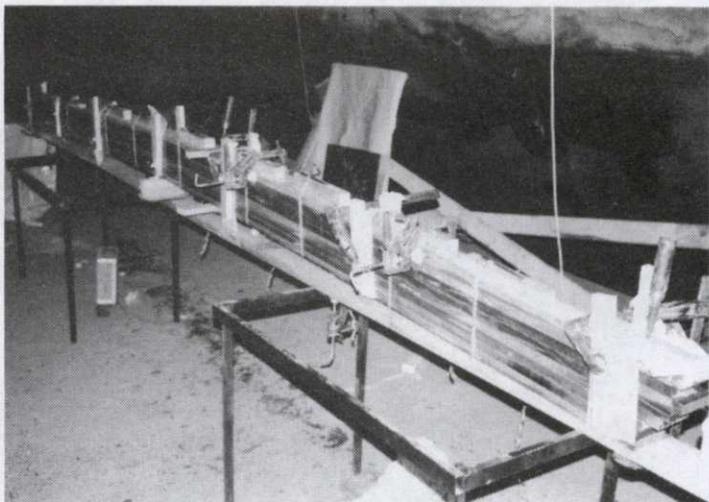
We were lucky enough to have room for a platform at hull height. this saved an amazing amount of time and stopped too much wear and tear on the knees. Most of the construction of the inside and the cabin-tops was done from up here.

THE SUPPORT BEAM

This beam was lashed down and held the hulls upright whilst we painted the hulls with the hull supports removed. We found that we could safely work on or in the hulls with this beam in place.

Gill and I have been building MAHUINI for 3 years mostly at weekends, some evenings and at least two weeks worth of holidays every year. We anticipate launching in June, three and a half years after starting the build.

Best wishes to all, Steve and Gill Whenman.



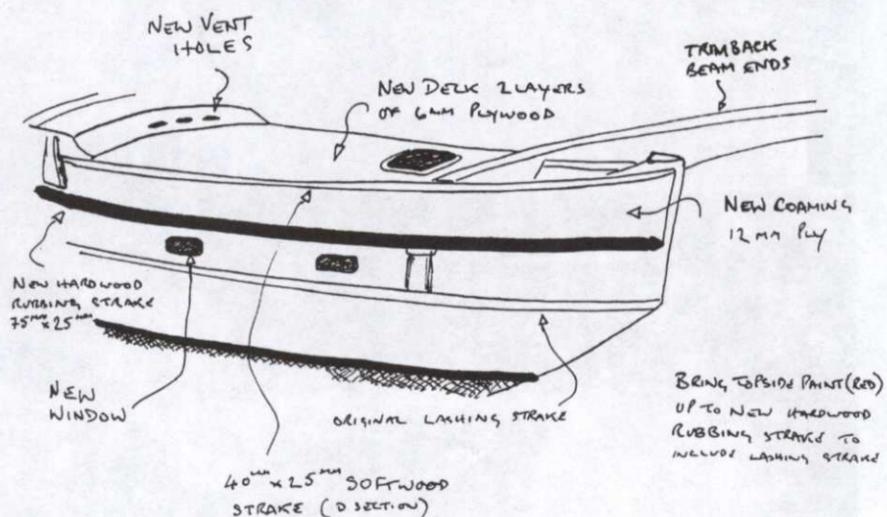
Pahi 63 ~ Moana Pahi

Steve Turner & Chris Dunn



Chris Dunn, owner of the well known Oro "Mannini Pahi" has been planning for a while to replace her with a similar but even larger boat, his ideal being a Tiki 65! As this dream boat is, as yet, unavailable he was very interested to hear that Peter Mican's Pahi 63 "Moana" was on Scott Brown's brokerage list. The boat was still in the yard beside the Danube in Austria, where Peter built her, (See SeaPeople # 25) so, once the deal was done, a team travelled out from Cornwall to prepare her for the trip to the UK.

To make the Pahi a bit more like a Tiki, and to increase the freeboard and volume of the hull ends, Chris asked me to sketch a raised deck



line with a conventional sheer and we carried out the modifications prior to her launch on the Danube. Other work completed prior to launch included the installation of two Yanmar 28 hp diesel engines with Sillette out drive legs and construction of a temporary steering console for the long slog through the waterways of Europe heading for the North Sea. A short signal mast was erected to carry the radar, lights and signal flags.

Peter (who had built the boat unaided, despite having the use of only one arm) was invaluable during this process. As well as ferrying the team members to and from the airport, running around Vienna fetching materials in his Landrover

and acting as local guide and interpreter, he also worked alongside the team cutting large holes in the boat he had lovingly created! His partner Dina fed and looked after everyone so well that we were all a few kilos heavier by the time we left Vienna.

A large crane and a 22 wheel articulated truck were hired to move the boat to the harbour for launching and a date arranged with the police for the closing of the road. This would allow the cat to travel there in one piece! We built two massive cradles to stand on the truck and support the boat under the cross beams, the hulls hanging down on either side.

CHRIS DUNN TAKES UP THE STORY:

Late August 1988 saw me packing in London ready for the trip east, to move "Moana Pahi" from the wooded field where she was built, to the dock ready for launch.

Firstly, however, business in Antwerp! I am normally pretty focused but that day a hundred things plus were going through my mind - would the boat move OK? - How about the police escort - would there be any last minute red tape? What happens if.....?

Friday Sept. 11th : I got to Brussels airport early but the plane was late! After an hour we eventually



got going. Vienna at last - it had been raining, I was met by a tired Peter Mican who had been giving his all in support. Peter is an amazing person. Anyone who can build a 63' Pahi solo with one "able-bodied arm" must be one hell of a person - and he is! I have every admiration and respect for him and the boat is a testimony to what can be achieved.

While driving to the boat we discussed the sequence of events. (It was now about 11pm)

At about midnight the "trombone" low-loader driver would return and move the boat, sounds easy doesn't it? Moving a 63' boat however, from a field where the soil is variable in depth, including a rise of rocks *and* it has been raining, is enough to get the heart beat going. The boat had been craned onto her cradle earlier in the day and she looked good. We needed everything with us that night: The planning and preparation, the solidity of the structure under Moana and a bit of luck..!

Four hours later we found ourselves in the yard at the dock basin about a mile and a half away. What a trip, the boat spanned the whole road and we even had to bend a few street signs to get the boat through!!

The police were absolutely brilliant and so were the helpers. There were some really anxious moments getting the boat onto the road, the low loader, fully revved, lurched back and forth and on one occasion she lurched off the rocky path and the boat grounded! Fortunately it was just a graze and we got her off on the next "lurch"! Agonising moments! My heart was in my mouth and I had that "dry mouth" effect which of course, later on, needed a beer to put right! at last Moana was on the road and Peter and I both breathed sighs of relief.

Sunday evening I had to return home to London but on the Monday morning the boat was lifted perfectly into the water and warped to her temporary mooring by Peter, Hugh and Mark. (two of the fit-out team.) Work carried on, Hugh staying on board, to eventually be-



come a crew member for the trip back.

I went back to the boat the next weekend, when we did some initial engine trials and talked everything through. The engines performed well giving 8 / 9 knots at 2400 revs. She should therefore reach her 10 knot maximum planned speed at maximum revs, possibly more. Another huge relief!!

On October 3rd, with PCA member Steve Yates (Skipper - 2 Whitbread races behind him and now owner of a Tiki 26), Peter Mican and his partner Dina (still feeding the troops and looking after everyone!), my old boss Les Jones from days at Rank Xerox, local PCA member Gerald Winkler and Hugh Hardwick (a stalwart throughout) Moana was ready to leave the dock basin and join the Danube!

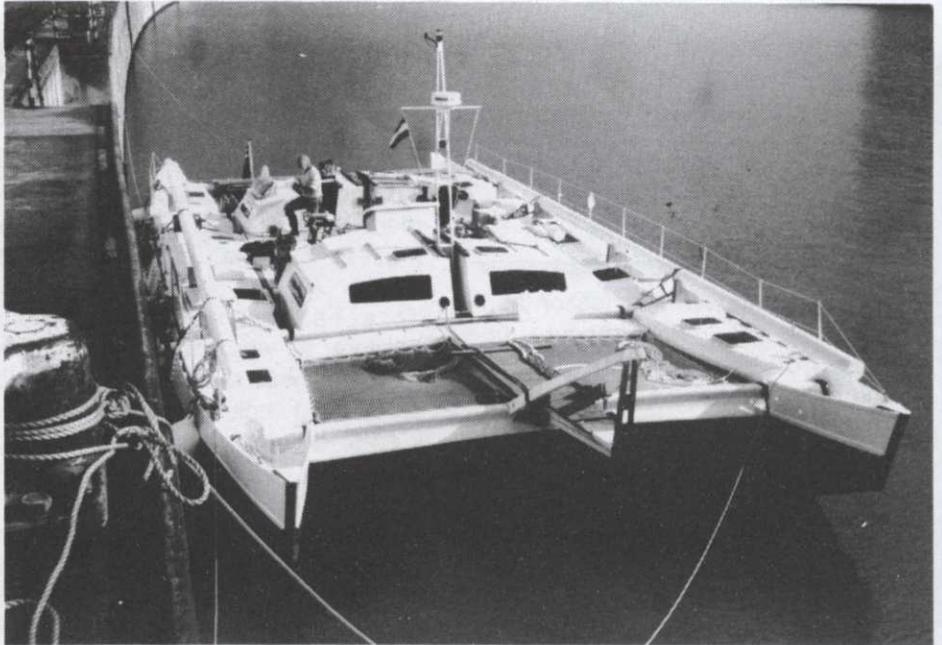
I don't wish to build this up but it was quite a moment of reality - some would say "an adrenaline rush"! - What would happen when we met the main current? Would the engines hold up? How would the boat manoeuvre in the strong current (10/12 Km hr.)?

I helmed her up the basin but was more than happy to pass over to the experienced skipper before we hit the main river which was flowing hard after much rain. We shot off down river before turning across the current and taking station facing upstream, with other vessels waiting for the green light for the lock. Our first of many which lay in front of us.

After months of hassle, hard work, worry and money issues to overcome we now had a different set of challenges - it felt good! This was the reason we were there.

Next issue: Vienna to Linz, the wrong way, **up** the Danube!

Eds. note: Peter and Dina are now sailing in Thailand on the 40' cat they bought to replace Moana.



CAT CORNER ~ PORTUGAL

'ALIAS' WINTERS ON HER OWN AT SEIXAL

Patrick Orme-Lynch

Jorge sighed with satisfaction as he surveyed his neatly moored pontoons of little mono hull yachts through his office window.

It was Thursday in mid August and tomorrow would be festival. The start of his own summer holiday. Soon the half dozen foreign yachts would be gone and the local boats would tie up for the winter.

There was no need to have the marina VHF switched on, for surely no one was going to arrive now on such a foggy day. Everything was ar-

ranged neatly - for Jorge didn't like loose ends - and a smile of contentment crept across his face as he mused on the carefree weeks ahead.

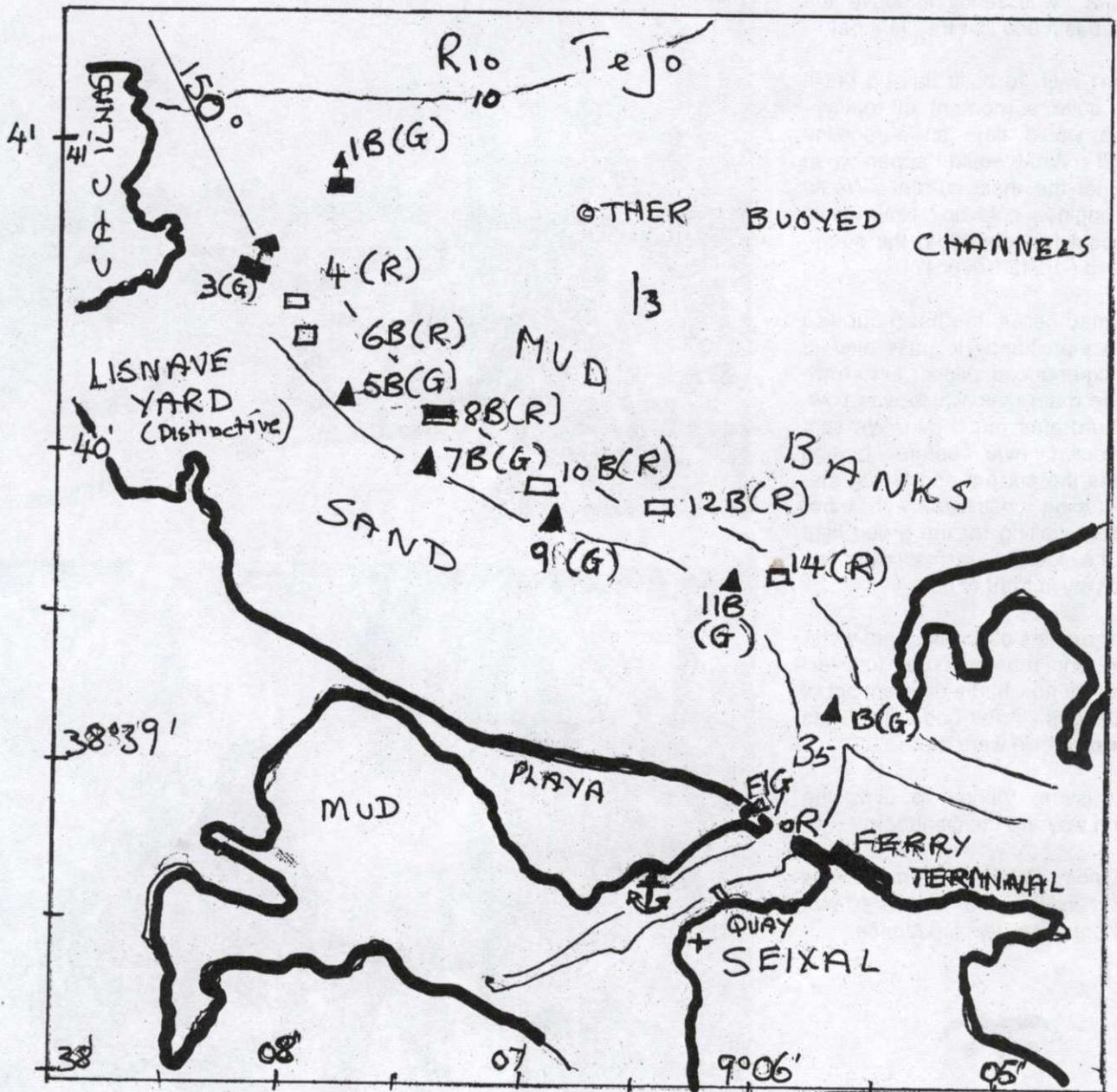
Today had been a good day so far! - but then all was shattered as a fifty foot Polynesian catamaran nosed around the molehead and manoeuvred to tie up on his one remaining free berth.

Jorge was fluent in English and clearly enjoyed his job of helping visiting yachtsmen but large catamarans in need of long term moorings were closely linked to his personal anxiety threshold. 'This is becoming

a very bad day' our host pleaded on several occasions that afternoon until he was able to interest us in sailing on to the port of Seixal, a lagoon backwater opposite Lisbon on the Rio Tejo with plenty of room for a large Oro to anchor.

Apart from an unmarked sunken breakwater extending eastwards off Santa Martha lighthouse to snare the unwary and being notorious for sudden onshore squalls, Cascais, at the mouth of the Tejo can supply a convenient anchorage to await the tide for those approaching from the north.

Dawn found 'Alias' sailing up the



river in a near calm with a jubilant crew snatching breakfast and posing in front of the Torre de Belem.

The landmark small castle on the quay from where the early explorers departed for unknown oceans. Breakfast being interrupted only by immediate attention to reefing the full rig in 30 knot squalls that have a tendency to race across the valleys of Lisbon and slam down onto the river .

Jorge's advice made our exploration well worth while. Immediately above the I Ponte 25 de Abril' the southern bank of the river at Ponta de Cacil-has opens out into the Ensenada de Seixal, a large bay that dries to numerous mud banks. A course of 150 degrees takes you to no 3 buoy. the first of a series demarcating the narrow Canal de Barreiro, where you can easily becoming a sitting duck for the numerous local ferries (some of them seriously super-fast catamarans) which appear from no where and alter course for no one like demented Valkyries on a mission.

Seixal itself is a 17th century cod fishing port, a lingering breath of the old world, some of its buildings a tiled cameo that have been engulfed by the urban sprawl of Lisbon across the water (the ferry connections are very fast and frequent though), The old port lies within a lagoon approached from buoy no 13 through a narrow channel between two mole-heads to the south. Whatever Seixal and the mudflats of the Rio Judeu might lack in yachting facilities is made up for by warm and helpful hospitality of the local people who, like all Portuguese have a special

affinity for seafarers. The Club Naval de Seixal is mainly concerned with providing facilities for young dinghy sailors and maintaining their very pleasant bar that overlooks the moorings and mud flats that lie to the north, across the river from the jetty. It is also worth asking the management if they will extend to you their limited, shower and fresh water facilities.

Another pleasant quayside venue, among many, from which to soak up some of the local colour and where you will find value for money is the Communist Party Headquarters Cafe clearly differentiated from its surroundings by a very large and slightly surreal flashing red neon lit hammer and sickle.

Many marine facilities are available nearby, any vessel requiring the diesel doctor may find some useful components at Marco Diesel, a kilometre west of town along the river and nearby the fuel station. Although travel lift haul out facilities were available at one yard on the Rio Judeu up to a maximum of 7.5m beam width, we were quoted £1,700 for haul and storage. we said no thanks and made do with the mud.

'Alias' stayed on the mud there for the winter under the eye of Venancio, a friendly local boatman but unfortunately she did sustain some damage from burglary. It was more hatch damage than large scale theft that we suffered since Ray and I had spent two days stripping everything nickable of her and stowing it in our best crafty manner.

Eclipse!



SUMMER MEET

*The S.W. UK will see
a total eclipse
of the sun
on Wednesday 11th Aug.*

*Duration of darkness over one
and a half minutes!*

*The SW area Meet will start on
Saturday 7th, BBQ on Saturday
14th, finish Sunday 15th Aug.*

*See the eclipse afloat! Bring
your boat down early, moorings
in the West Country will be in
high demand!*

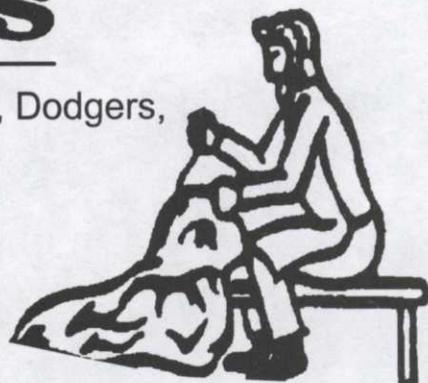
*Full details in
1999 yearbook.*

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HINEMOA ~ OWL

Rebuilding OWL

By Claudia & Hans-Dieter Bader

We had owned OWL, a Hinemoa built in 1982 by Laurie Walker here in Auckland, for about four years. We thoroughly enjoyed sailing her around the Hauraki Gulf, one of the best sailing areas in the world. She guided us even through a tropical depression (just short of a cyclone) with winds gusting at 52 knots, confirmed by a nearby weather station, under reefed jib alone going to windward. She was quite happy - we were frightened to death, especially our small dog Henry who sat in one hull shaking!

On the hardstand this year our worst fears were confirmed: one beam showed rot, together with rot in all six beam troughs. The boat was built for fun-sailing, not to last long. Hull and cabins are built out of construction ply and the beams were pine building timber. The bolt holes together with trapped moisture in the beam troughs caused the rot. The hulls are still holding



up very well, but the cabins leaked. The decision was made to give her a new lease of life. And as we were at it anyway, we decided to stretch the beam to 4 metres and build new, lighter decks. As Hans has a deep rooted suspicion of

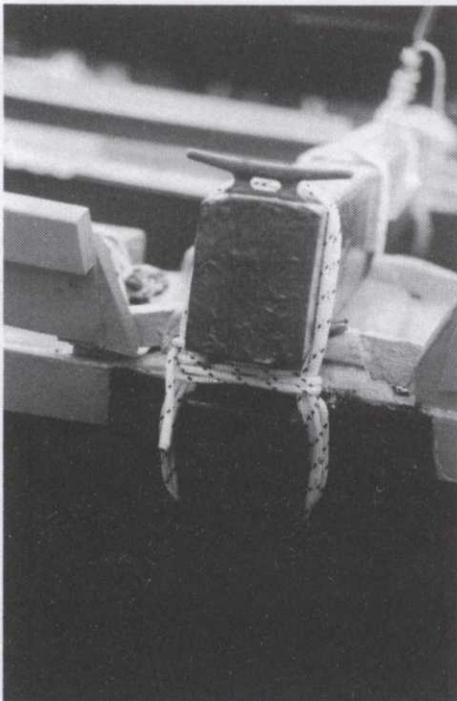
metal fastenings (still living in the stone age?!), beam lashings were a must. Oregon pine from the demolition yard served as wood for the beams. It cost only 10 pounds (NZ\$28) for all beams. Two 15x4.5cm pieces are glued together for each beam. They are reinforced with unidirectional glass on top and bottom as well as sheathed with very light fiberglass. During the building we realised that this is a complete overkill and a waste of epoxy resin. Now we would groove each beam in the middle with an electric plane to make them hollow and use light fiberglass mat reinforcing only on the lashing areas. A couple of good soaks in epoxy resin would be sufficient for the rest of the beam. All beams rest on small pads on the outside of the deck with a 1-2mm gap to the deck (air prevents rot!).

The inside of the area of the lashing hooks is reinforced with an additional layer of plywood. This is enough for the back-beam as it rests on top of a bulkhead. The



forward beam position is offset to a bulkhead and has small additional knees inside the cabin. The main beam position is reinforced not only with additional plywood but with four small knees in each hull. The lashing hooks on the outside are glued and bolted to the hull. The bolt is not taking really any force as the hook is bonded to the hull with multiple layers of unidirectional heavy glassfibre. Each layer lies on top of the hook and twists on both sides of the hook towards the hull, where it feathers out. To rip the hook out, it is necessary to rip out a hull area of 40x40cm, reinforced with knees and additional layers of plywood at the back (overkill!). Just a safe feeling! The lashings are five turns of 6mm racing braid, locked over each other on the top and tightened with whipping between beam and hook (appr.2.5-3t breaking strength -> overkill). Movement of the beams is even on a fast, broad reach minimal.

The new decks are of 6mm marine grade plywood reinforced with small beams and covings in fore-aft direction. The middle deck has the massive dimension of 2x2.17metres. Covered together with the cabins by a large deck tent on anchor it provides a very reasonable living space (water lounge - just wait for the sofa next year!). The aft netting is the space for solar panel and outboard. One word to outboards: forget it (at least in the Hauraki Gulf)! We

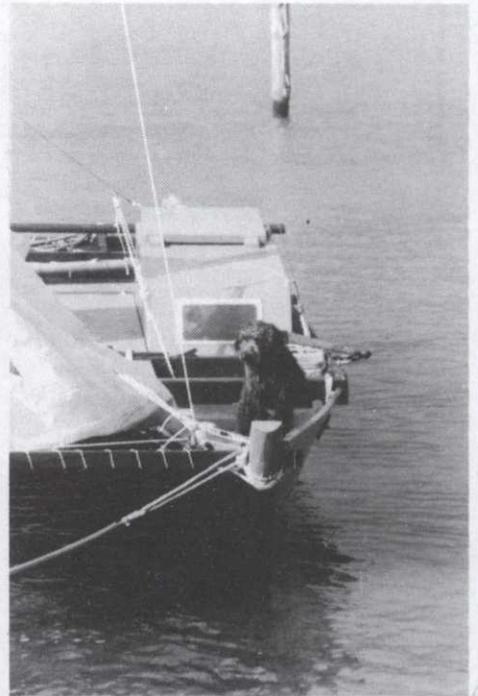


learned from Rory how to gather enough courage to sail through closely moored boats and out of leeward lying small bays. It is more a mindset, not to rely on the outboard, than any sort of magical skill train your mind! One day you might need it. We use the outboard only during calms, just before we start to melt in the heat.

The gap between rudder and hull was closed with small pieces of wood. This increased the steering power a lot. Now the rudder starts to vibrate at around 5knots of speed, but even with 10 knots it doesn't feel uncomfortable. We heard, that fairing the trailing edge of the rudder would cure the vibrations. We fixed a narrow, triangular plywood wingle (1.20x0.20metres) underneath the shallow, sacrificial keelson. Bernhard Rhodes - a good multihull designer in his own right - gave me this advice. Our windward performance increased dramatically, also enhanced by the better tracking with a wider beam. We point as high as we did before, but leeway is reduced significantly. We tack through approximately 100 degrees, even better in high winds. With new sails, instead of our old, baggy ones, we would expect to tack through at most 90 degrees. Not too bad for a Hinemoa.

As we have reached the sails now: We inherited a 'normal' Bermudan rig from the previous owner. All stays are lashed. We are not happy with the Bermudan rig, as it seems to lack sail area aft. A crab claw sail (a two sparred, triangular sail) or a gaff rig TIKI style, even the original sprit rig, all may work better overall than the Bermudan. An old sail of 'Oystercatcher', a Narai MK IV, is used as a drifter and waits to be put on a small bowsprit to run both jib and drifter, in light winds (thanks Pete and Cherry!).

Sheathing of the cabins (curing the leaking for once and all) and applying two new layers of epoxy on the underwater part of the hulls (after scraping off all bits of old flaking antifouling - by the way, has anybody some experience with this epoxy/copper antifouling, which needs replacing only every 10

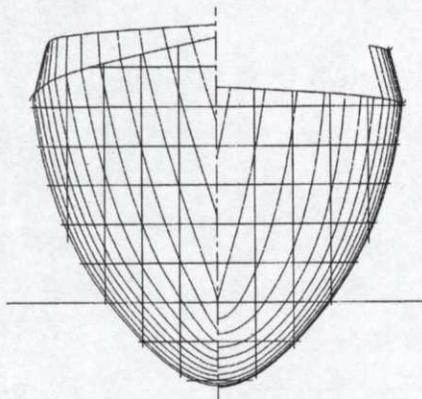


years and some light sanding in between?) completed the overhaul.

As colours we used a light green on the decks, cabins and bulwarks and dark red on beams and hull contrasted by black antifouling. Anybody thinking of enhancing an old Hinemoa or finishing a Hinemoa started years ago, please make the beams wider if you can! The performance boost is enormous. She is faster, dryer and safer (we don't bother to reduce sails before 25knots of wind). Leeway is much less than before and with a set of new sails we would not have to hide from halfboats, when it comes to pointing.

The space on the deck improves the social environment of the boat, either sailing or on anchor under the decktent. The lashings feel more comfortable than the bolts, as you can easily check on a lashing but you never know what happens inside a stainless steel or galvanised bolt (we threw out all the bolts from the old beams, as all of them had suffered major corrosion !inside! the beams, not visible on the head or nut of the bolt). Two weeks ago we even got the stamp 'Rory approved', after beating together with Rory McDougall for seven hours into the wind to reach the first, small Wharram meeting this year in NZ.

and ramifications and Murray did just that. He and I were able to think through the design and discuss what I wanted to achieve. I loved the Wharram open deck and sea-kindliness, I disliked the lack of shelter for the helmsman. I was sold on cats and the new flexibly lashed beams. A living, cooking and eating space was designed in



one hull, a sleeping, washing and clothes store in the other.

Eventually a design emerged that felt right, the lines were produced plus a table of offsets. Temporary moulds were erected on a strong-back. (Useful source of info; Simpson on Boatbuilding by Roger Simpson PObox 2 Hemmant Queensland 4174 Australia)

I elected to use profiled Western Red Cedar strips, which are a bit like T&G as they give a fair shape with the minimum of glue. Occasional "stealers" were needed when the strips wouldn't lie happily. This was easily done with a small circular saw.

Once completed the hull was sanded and glassed. Further fairing was then done then the hull

sealed with further coats of epoxy. The keel and skeg were attached, the hull inverted, the moulds removed and the inside of the boat glassed. The bulkheads were then filleted and taped.

This is the situation after five months work. I am not one of the worlds fastest woodworkers but I found this method of construction fairly fast compared to the old method, and the inside of the hull is not full of stringers.

I have been fortunate to have help, advice and encouragement of friends and my amazing wife Bee who has mixed glue, cut cloth etc. been the source of much wise advice and support and who doesn't even like sailing! I hope to be writing a further progress report when the second hull is complete.

SUMMER MEETING IN FRANCE

Jacques Bayard reports on the meeting held in July '98

With a letter to the people interested in Wharram's, and after an announcement in a magazine, 5 boats and around 20 people were scheduled. But the reality was different; the owner of the just launched TIKI 21 had fallen off his motorbike and could not sail; the PAHI 42 had not yet her masts. The TIKI 28 expected never arrived. Just there were a HITIA 14 from Vendée (800km travel by road) and my own MELANESIA not yet finished, but launched! In France, to see a Wharram boat is not easy, because they are not enough. Only people living on the seashore or people who sail a lot of time have the opportunity to see one, and generally from a long distance. So a lot of French people are interested to see this boats and to try one, because they know about JW ideas through magazines. But they want to confirm their hopes before to decide a building. Also the language is a brake. I think it is mainly why they don't go to the summer meetings in UK. So many people wanted to see the boats at the meeting and the few who came were disappointed.

Nevertheless there was a good atmosphere; if cruisers were not coming, the owners were there and fans, with photographs, experiences, stories, details. A family had gone to the UK summer meeting in '97 and they told us how it was, very interesting. Two owners are building or have built 3 boats! Never been with other designers! They confirm what I have experienced with my outrigger canoe - easy to build. Addresses were exchanged, boats were tested and after 2 days we finished the meeting, tired, red skinned (the skins are not brown at this beginning of summer) and happy. For myself, organiser, the activity does not finish; some people phone to have news, to give an address, etc.

After one week, a Melanesia builder phoned me that there is bamboo in Anduse (25km from home) and it is perfect for this canoe. I ran. While coming back, from the highway I saw a PAHI in a little channel in Arles (Camargue). This is time to visit BILITIS the unmasted PAHI 42, and to drink a welcomed cold soda in board. During the visit a very good event happens; my wife agrees to a Wharram catamaran! ... Goal!! A week later near Hyeres, within 1 n

mile of the meeting location, as I was walking at night on the sea shore, I catch sight of a small TIKI at a mooring. Nobody inside. Looking on the seashore, I see her tender, and I put my address on a paper in the tender. The next morning, the owner was phoning to me, very enthusiastic. So, how was the meeting? Positive. And "many" people are preparing a new one next summer.

DITTY BAG

Serge Samzun is looking for a boat building project that needs a partner.

He retires in 2005, has money available but no time.

If you are thinking Tiki 46 or even Pahi 63 and are interested contact him at:

35bis Av. Pasteur, 94250 GENTILLY, FRANCE

South West UK Summer Meet

Steve Turner

Although, because we were both deeply involved in Chris Dunn's Pahi project, Scott and I had planned our meeting as a low key, local affair this year, more than fifty members turned out to sail, barbecue, chat and socialise over the weekend 20th-23rd August.

Saturday was fine and sunny, with a nice sailing breeze. Four cats took to the water, Christiano Ridolfi's Pahi 31 "Bamboo", Paul Evans Hinemoa "Sabastian", and the Tiki 21s "Dandelion" (Sally Turner) and "Felix" (John Thornhill). Everyone went sailing, swapping crews boat to boat, before all collected again on the quay for the evening barbecue.

Sunday was a very different day- Force six, bad visibility and driving rain. Not bad enough to put off indomitable PCA members though and Oro "Mannini Pahi" took a heavily oilskinned crew for a thrash up and down the River Tamar amidst flying spray. This was followed by the sixth annual St. Johns pub cruise. St. John is a small village in the next creek upstream from Millbrook, distance about two miles. This was the third time out of six years we have made the cruise by car! A very convivial evening was spent in the St. John inn, with generous quantities of hot food and alcohol to overcome the effects of the after-



Top: John Thornhill's Tiki 21 "Felix".

Middle: Paul Evans Hinemoa "Sabastian"

noon sail!

Bottom: Cristiano's Pahi 31 "Bamboo" was sporting a Tiki rig and a newly made, superb, pod. We hope to bring you details & photographs of the pod but he is currently in the Canaries waiting to start his Atlantic crossing – so don't hold your breath!





Sunday: Mannini goes out with the brave ones



Scottish Summer Meet

John Cooke reports.

The Scottish Polynesian Catamaran Meet 1998 took place on Loch Dunvegan, Isle of Skye over 7-9 August. This was the first meet of its kind in Scotland and was run on an informal basis, but turned out to be very successful, with over 40 people attending. Most of these were from Scotland, but Bertrand and Marie-Helene Fercot and their family had travelled all the way from Brittany. Dave Charles sailed in from Findhorn, through Loch Ness and the Caledonian canal. He had an excellent "reach" up most of the West Coast from Fort William, and a particularly exciting run into Loch Dunvegan; unfortunately he had to return home by road for family reasons, leaving his Tane moored at Dunvegan.



Peter Richardson's Toroa (Pahi 42) slipped serenely into the loch on Friday evening after his journey from the Clyde, and Stuart Whatley, another member living on Skye, also came round to Dunvegan with his trimaran. More PCA members arrived and met up at Dunvegan campsite on the Friday evening. Pictured are Deirdre Cooke, John Cooke, David Gillespie, Roger Nadin, and Penn Nadin. The 14 foot Aoraki is on the car roof rack. This photo was taken



before everyone was driven under cover by the midges. By all accounts there was a record set for the number of PCA members in one tent for the evening chat, just to get away from the dreaded insects. Note PCA sweatshirts proudly worn!

Saturday started with the weather looking more promising than it had for some time, and after a quick investigation of the rocks and boulders on the beach at the campsite, the two 14s were taken round to Dunvegan pier where there was a promising looking, if steep, slip. After assembly we saw the assorted rocks, seaweed and concrete blocks as the tide dropped, but were able to get both the 14s in to the water easily enough (the seaweed was nice and slippy, helping us slide the hulls over the boulders!). David Gillespie (Hitia 14 Rock Steady) headed off first with a crew of two youngsters, beating up out of the loch towards the coral beaches.

Toroa next left the pier with quite a few enthusiastic additions to its crew, followed by the Cooke family on a well-laden (2 adults plus two youngsters) Aoraki (Sea People no. 35). Some glorious sailing in rapidly improving weather under glorious blue skies followed, including views of porpoises and many seals. Later Rock Steady and Aoraki and their crews met up at the warm coral beaches with others who had taken cars round to the end of the road and walked out to the beaches. The two small cats were taken out several times to look at the seals basking on the rocks. Eventually they had to set off back up the Loch, as on Saturday evening we had the promised get-together at the Dunvegan Castle restaurant. There, some 35 polycat people enjoyed some excellent food, good company and a lot of lively chat.

On Sunday the wind had changed direction completely and the weather looked less than promising - though at least it wasn't raining! Peter had offered to tow the two small cats round to Loch Bay,



but looking at the conditions their skippers declined the offer and decided to car-top their boats round. Aoraki was part assembled before everyone arrived for lunch in the Stein Inn, but over lunch the wind shifted and visibly increased (as seen from inside the inn) enough to dissuade the 14' skippers from going out. However, following some pretty impressive ferry work over the waves with Peter's small tender, Toroa set sail back for Dunvegan, again with a greatly increased crew.

All good things come to an end, unfortunately, and the meeting gradually disbanded over Sunday. We'd had a fantastic time and many thanks must go to Roger Nadin for suggesting the meet in the first place, and then for the follow-through of organising it. Hopefully there will be another next year, with maybe one or two more polycats out on the water. Even with only three boats sailing, the opportunity to meet and talk with other members, and to see other boats (especially Peter's beautifully finished Toroa), regenerates enthusiasm for those building or dreaming. See you all again next year!

Solent

Chichester Harbour Rally 14th - 16th August '98

The rally was attended by: Mike Turney and Vicky Sanders and their recently acquired Tiki 20 'Riki', Dave Peak who has a Narai (in Florida) that he has lengthened, by chopping it in the middle and adding 15', Ed Bracken and Pauline Glosal who have Pahi 31 plans (awaiting a building site), Dave Weinstock and Pat Fysh with their Heavenly Twins, Hitia 17 under construction, study plans for Tangaroa M4, Tiki 30, Tiki 31, Hitia 17 & Hitia 14, and a Wharram design book!

The weekend began with a jovial get together at 'Hannibals' Stir-fry restaurant on the Friday night where we became acquainted and swapped stories. We ended up on board 'Elara' (Heavenly Twins), looking at all the plans. Next morning we sailed down to a popular anchorage with sandy beach (East Head) near the harbour entrance. We anchored for lunch, used 'Elara' for hospitality and lounged about in the sun. Different crews went for fun trial sails on 'Riki', coming back to change crew. That evening, amidst a glorious sunset, we flew kites and barbecued on the beach (thanks Ed!). As darkness fell we tried to fly a hot air balloon using the embers, but the wind hadn't died enough. Still there is always next year!

Next day, while Pat and I collected Ed, Pauline and Dave from the shore, Mike and Vicki studied the plans, which caused a lot of discussion later on. 'Riki' being a recent

purchase, there were lots of new things to try aboard and we helped rig the spinnaker. It's just as well that we had so many experts to get it right! As the tide came up we had a lovely sail up the harbour to the moorings and went for a final drink before saying good bye.

Even though the group was small and there was only one Wharram cat, we all had a relaxing time and enjoyed the discussions on the designs and other related subjects. We look forward to seeing more boats in the future, particularly John Thornhill's who's Tiki 21 was having trailer problems, and my own Hitia 17 which will be finished just as soon as I am able. Our thanks to all those who came.



BOOK REVIEW

SELF-STEERING UNDER SAIL

Autopilots and Wind-steering Systems

Translated from the original German, this new book takes a very comprehensive look at the different types of self steering and analyses most of the models available with colour photo's and clear drawings. The author is a recognised expert in his field, being the manufacturer of a well known range of wind vane gears. There is always a risk in this situation that the book will end up as a poorly disguised advertisement for the author's products but while those products may receive a little more attention in this book than their rivals, the impression is that all the systems looked at were subject to the same dispassionate scrutiny. Although multihulls are paid little specific attention, most of the general information in this book will be of interest to Wharram cat owners, whose boats hold their course well and are not quite as "flighty" as some of the more "performance" oriented catamarans.

Self-Steering Under Sail by Peter Christian Förthmann, Adlard Coles Nautical Ltd; London. £14.99
147 pages ISBN 0-7136-4892-9

Review by Steve Turner ^{ASNAME}

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