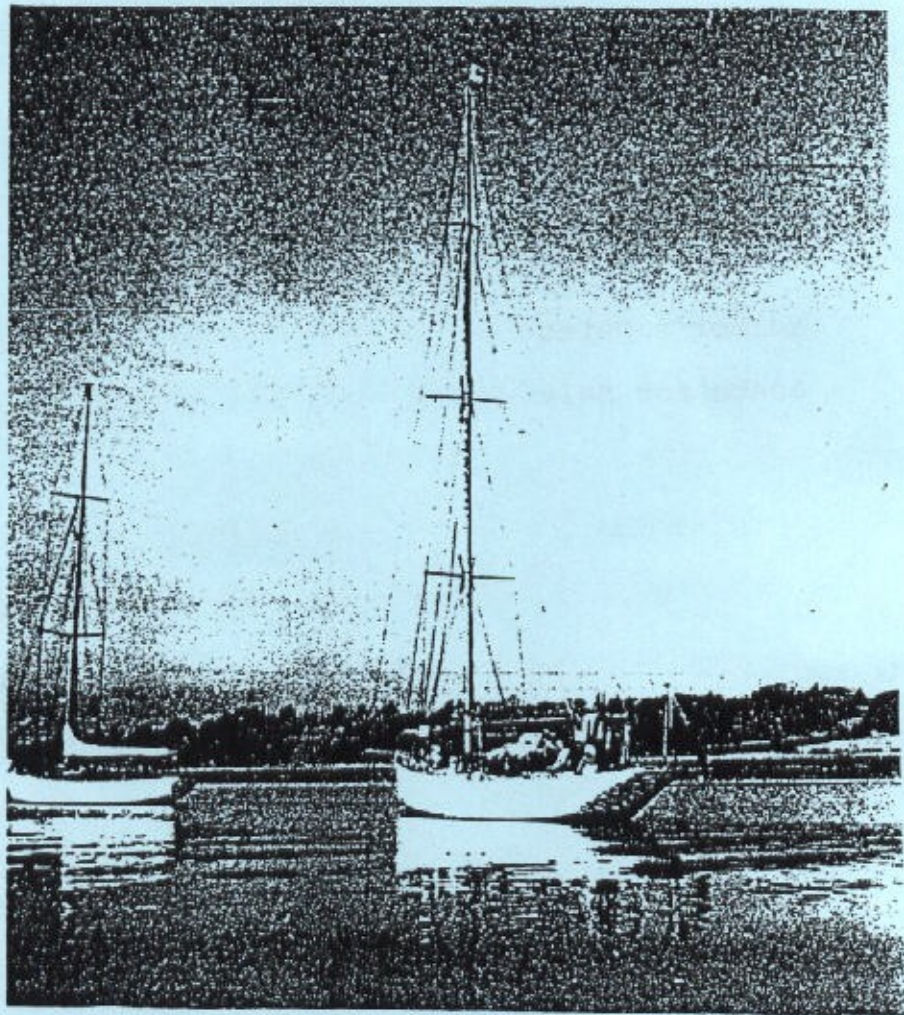




THE HARRISON BUTLER ASSOCIATION



Newsletter No: 41

Summer 1995

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PRESIDENT'S LETTER

July 1995

The Crag
St Mawes

Dear Members,

I am going to start my letter with the question: Have you paid your subscription? If not, don't be put off by the thought that it may be too late. It is never too late and, in case you have forgotten, the sum is £10 and the

Treasurer is: Simon Wagner
11 Bittern Place Tel. 01983 825833
Island Harbour
Binfield
Isle of Wight. Reach for your cheque book, now!

I mention this now, partly to get the dull bit off my chest but also because when you look at the List of Members you will see that it is sadly depleted. We had to take drastic measures with members who had not responded to repeated reminders. There is a limit to the number of 'phone calls I can make on such a quest. We have, unfortunately lost a number of boats but they cannot be kept on the pay-roll forever. My efforts have, however been successful here and there and several members have come in from the cold.

It is a long time ago now but on February 25th we celebrated our twenty-first AGM. In a way, it was a dual celebration for we also launched the fourth edition of my father's book, "Cruising Yachts: Design and Performance. David brought the first consignment to the meeting where they were snapped up. To mark the occasion, on both counts, David very generously gave us the wine for our lunch and I was therefore able to devote the whole of the lunch money to the food.

My resident galley-slaves this year were, Geoffrey and Caroline Holton and, Helen J-B., thus keeping it in the family. Jill Betts arrived early on the Saturday and found plenty still to be done. We had tea, as usual, after the meeting and the birthday cake sported burgees in lieu of candles. It was the usual large, family party and you can read what transpired in the Minutes. I was very touched to be presented with a huge bouquet of lovely flowers at the end of the meeting. I extracted the last inch of beauty from them and some of the flowers lasted for ages. Thank you, again: they gave me great pleasure.

It was rather sad that only three of the members who were at our first meeting in 1975 were present: Trevor Cheesman, Denis Murrin and myself. I am the only member to have been at all the AGMs.

In April, one day when I was returning from shopping in Truro, I overtook a young couple on bicycles, laden with camping equipment ... 'In this weather!' I thought and went on my way. Later, while sitting in the car outside our gate and cogitating about its re-hanging, the cyclists appeared, dismounted and were obviously asking directions so I joined in and asked if they were lost. 'We are looking for an address, The Crag', they replied, so I made myself known and we all repaired to the Crag where I had the great pleasure of having Jochen and Anja Schreiber here for two nights and was able to arrange their next port of call which was to Roy and Sonia Aldworth, to see Omega. Jochen is building an Omega in Meissenheim and wanted to see Omega and Omega Breeze.

They continued on their way eastward, taking in various National Trust properties en route and a telephone call later were back with me in Theale for another two nights before sallying forth to East Anglia, Harwich and home. I was astounded when they told me that they had travelled on the Underground complete with bicycles which they had carried on the escalators! Such is youth.

A few days ago, on June 30th, Geoff Taylor rang from the village, having sailed from the Azores. He was fed up with head winds so put in to St Mawes instead of pushing straight on to Cremyll as is his usual wont. Hooray for

head winds, say I: I saw more of Geoff in the ensuing two days than in the sum of many previous years' meetings which usually are of a few hours duration only. Mark and Priscilla came to lunch on Sunday but at such short notice I couldn't muster any more HBA members to meet him. On Monday morning he rang to say what I had already noticed, that the wind was fair and he was off. It was so good to have time for unhurried conversation.

Geoff said that he's always intrigued by my letters because one thinks one has got to the end (and so do I) and then it starts again and, however many drafts I write I nearly always forget something until I've tucked it all up. It will probably happen this time, too.

I have had letters from all directions. I was going to say, from all corners or, quarters of the world /globe but globes don't usually have corners. I have not heard directly from Alessandro since he left Newport in Australia but he rang his brother to say that he had reached South Africa and all was well. That was in early April and since then, nothing. Usually, he sends me a letter from his resting places. I don't know what route he will take.

Ariane van Wageningen wrote in February, from the island of Elba, apologizing for her long silence but said that the last eighteen months had been very hectic. Meanwhile, Jacaranda is safely tucked up in a mud berth in the boatyard where she was working until May of last year. David (whose surname escapes me at the moment) had sold Freya about two years ago, to take up a position 'as senior boatbuilder in a team privately employed by a rich Italian Boat-collector.'

Ariane decided to join David in Elba but found it very difficult to find work as there was no possibility to join David's team and, as she said, 'the Latin culture is not quite ready to accept that women are capable of anything other than cooking and childbearing.' (I must say, for those of you who don't know her, that Ariane is a most unlikely looking boatbuilder: petite, slight and feminine - very deceptive.) Her letter continues:

'However, with some perseverance and more than a little luck, a year ago I became the boatbuilder for a large yard which didn't have anyone with the skills to do wood repairs/alterations, etc.. They also have a large woodwork/machine shop which had fallen into neglect and disrepair as there hadn't been anyone to run it for fifteen years! So I happily picked up the post, got acquainted with some of the most primitive woodworking machines I have ever come across and gradually got the place going again.

'In fact, David's boss is now one of the yard's biggest clients as they moved to "my" woodwork shop to rent some space. So all is well - incredibly!

'I expect to work here for another year or so and then pick up my study plans and go to Southampton Institute to get a degree in yacht and small-craft design.

'Meanwhile, I am considering getting Jacaranda to Italy if I can get the time off, in September. She isn't going backwards but, not having sailed her for two seasons is getting to me and I believe boats are always better off being used, rather than sitting still. Hopefully, I shall be able to get John and Ann Lesh's advice on this as they are making their way here, with Andante, and we hope to see them sometime in the spring.

'I hope this has filled you in a bit, meanwhile, all the best, and, greetings,

'From Ariane.'

I had a letter from **John** and Anne, from Ibiza, but I think they must have been on their way towards Elba as no mention was made of seeing Ariane and David. Their letter revived memories of the voyage which John Ives and I made, to Malta, in 1975. Goodness! Twenty years ago.

What good news from Ariane: the last letter I'd had from her was a sad one. I'm so very glad that the tide has turned.

Now for another interesting letter, from Steve Phillips whom I feared we had lost: not beneath the waves but from our ken. Patience and perseverance have paid off and here he is, back again, and ready to tell his tale. This letter too, was written in late February and comes from Saltspring Island, BC, Canada.

'Dear Joan,

Please don't feel you must apologize to (or for) all of those careless, disorganized or just plain lazy individuals who take advantage of the good graces of the President and the Editors of the HBA. As one of the above, who would prefer to consider himself disorganized, but has more than once been accused of all three failings, mea culpa. I hate to say it, Joan, but if you'd cut me off 2 years ago, I'm sure it would have shocked me into a response. So, please find enclosed my subscription for 1993-94-95-96!

'I am penitent, and will tell you what GALATEA has been up to, which is far from exciting. Although you address your missives to Marlene (Rice) and me, we are no longer 'an item' as the jargon will have it, and I am now the sole owner of all of GALATEA. No small responsibility, as I know you can appreciate. I am no longer a boatbuilder on Saltspring Island, but an over-educated academic in the earth-sciences who wants to be a boatbuilder! I have spent the past six years doing a PhD in Geology, working on earthquakes in Central America. The project was inspired by the two years that I spent there on GALATEA in the mid-eighties and, since I began, I've been asked each year if I'm planning on taking the boat down there again. Well, I haven't, of course, as such a trip entails more time and planning than I could ever spare. But I have come to know an area of Panama that few yachts ever explore. More on that later.

'GALATEA has been my principal residence for three of the past six years. In 1988 I moved her to Cadboro Bay in Victoria and lived at anchor in that exposed bay, hiding behind the breakwater of the Royal Victoria Yacht Club. (GALATEA was for many years a member of that club when owned by Jack and Connie Stewart.) South-easterly gales blow straight into the bay in the wintertime, and there were days when it was impossible to get ashore due to the bouncing rafts of driftwood logs crowding the beach on the storm-driven tides. The worst of that winter, and the next, were spent tied to a government dock in the Victoria inner harbour, in front of the famous Empress Hotel. The summers saw GALATEA in the employ of the Geological Survey of Canada. She logged many miles as a roving base of operations for crews of geologists mapping the British Columbia coast, towing two large Zodiacs.

'In 1990 we were off Vancouver, where GALATEA was moored at the Maritime Museum. Those were better days, when the museum was still apparently able to make decisions for itself, and knew the value of B.C.'s heritage vessels. On weekends, boatowners would be present to talk to the many visitors and shoe them around the boats, and a general feeling of sharing and goodwill prevailed that has since gone from that institution. During each of the next three years I spent 4 months in Panama while GALATEA languished at the small government dock in Fulford Harbour on Saltspring Island. During this time she did not get the attention she deserves... the varnish is all-but-gone, there are deck leaks, the mainmast is desperately in need of finishing, and so on. She is still, however, the prettiest boat in the harbour. I never told you, but after the reconstruction, GALATEA was painted not white but pale yellow, with white trim and a grey bootstripe. I have received considerable abuse over this eccentricity but bear it gladly as my heart always lifts at the sight of her.

'Speaking of GALATEA, I must confess that part of the reason I have not been as conscientious as I should with the HBA may be due to what to me is an inordinate amount of attention paid to Z.4-tonners and other boats that I have never laid eyes on. There have been precious few mentions of the larger boats like SEASALTER, GALATEA's sistership, which remains a mystery to me. I also

wonder where this design fits into the evolution of metacentric shelf theory, and in what way it is related to the 22' waterline class (i.e., the Albert Strange et al class of 1921 or thereabouts) which seem to me very similar to the larger design. I suppose it's my fault for not bringing up such questions.'

[There has been a pause in the typing operation while I nipped out onto the terrace to take photographs of the Russian barque, "Kruzenshtern" leaving Falmouth under sail. She is a training ship which had hoped to raise some money by taking parties of trippers to Penzance but the marine safety people wouldn't grant her a licence to take passengers so they had to sell bottles of vodka instead - or, so the story goes. Anyway, she was a fine sight but it was about 2030 hrs, and somewhat dimpsy so they may not come out well. I am, however, using a 400ASA film so, here's hoping.] (Sorry, Steve)

'While I'm in this vein, Joan, I do have a specific question about GALATEA /SEASALTER and their ilk which perhaps you can help me with. GALATEA has iron ballast, and when I bought her she had about 1200 lbs of lead inside, all of it forward of the mast in the forepeak bilge. I took this as being a counterbalance for the enormous 65hp Lehmann-Ford diesel. After the rebuild, she was fitted with a Volvo Penta MD2B (550 lbs). She floated high, but was soon after loaded for extensive cruising and was easily down to her lines, and I removed the lead. She was never stiff, however and now, in 'Weekend trim', is light in the bows and tender. I know that she's meant to carry inside ballast but I 'on't know how much - her designed LWL was lost long ago, so I have little more than aesthetics and performance to guide me. I've sailed her about 45,000 miles and never felt that I got it quite right! In her present trim she sails herself happily to weather (with no mizzen) and can be balanced on a reach with enough bungee-cord vs mizzen, but she's not what you'd call rock-steady in that configuration, partly because she heels so readily (I think). I know this goes against shelf-theory, but she was an early design. Any ideas?

'At the moment of writing, GALATEA sits on her mooring in front of my house on Isabella Point Road. Soon, however, I shall have to deal with the old problem of where to leave her when I'm away. I hope to be back in Panama by the summer, beginning a new project in the western province of Boca del Toro, on the Caribbean coast, close to the Panama - Costa Rica border. This part of the Panama coast is dominated by a large embayment called Chiriqui Lagoon, much of which is clear, shallow water protected from the Caribbean swells by an extensive arcipeligo. Within the islands, the names of which commemorate the landfall of Columbus on his final voyage to the Americas in 1503(?), are innumerable secluded anchorages, sandy beaches and tiny communities. The area is, however, almost unknown to cruising yachts. In the final four months of 1993, four sailboats anchored in the islands - two Canadians, a US yacht from Florida, and a catamaran from Costa Rica which was dismasted in a squall while on delivery from Puerto Limon, CR, to Puntarenas via the Canal. This misadventure aside, the area is one of moderate breezes, sunny days with a daily shower, and clear, clear water: an idyllic cruising ground whose only disadvantage is the difficulty of getting there from Colon and the Canal Zone, i.e., it's uphill so no one goes there. Normally, the passage can be done on a close reach in 24-36 hours, but most yachts in the area are so intent on their imminent Canal transit or, Caribbean beat, that they take little time for excursions on the Panamanian coast. The exception, of course, is the San Blas Archipeligo to the east of the Canal Zone, which is also worth a leisurely visit. It is much better documented than the Bocas area, but then the yachts which visit there are not experiencing quite the sense of adventure to be had in the unknown waters of Chiriqui and Bahia Almirante. Incidentally, the area is very well covered by Admiralty and US charts. If any of your readers should happen that way, please look for Steve Phillips, or, for Willy Serracin, at Lime Point, Boca del Drago, Isla Colon (Bocas Island) You

will be welcome. Perhaps you'll even see a yellow HB yawl anchored inside Boca del Drago!

'I will close for now, and enclose a money order. Thanks for the fair warning, and the generosity. I wish I could meet you. All the best.

'Steve.'

I reciprocate the wishes: I'd love to meet all our members - such a pity that I can't. I'm not doing too badly though as I have Nick Hodge coming here for lunch tomorrow (our first meeting) and we shall be joined by Mac McKinney and Debbie in the afternoon. The forecast is for more good weather and I am glad but I do hope it will rain soon!

Steve's cruising ground sounds fascinating - not many secret places in this part of the world. I answered his letter some time ago tried to answer his problems.

The above visits have now taken place and, as a bit of serendipity, Mac and Debbie stayed overnight - and have just departed. We were able to sup outside on the terrace and we sat and talked with the lights of Falmouth shining across the water. Unfortunately, the wind had gone into the eastern section and much of our view was missing in haze but there was still enough to captivate them.

Rather than re-typing the whole letter (Oh for a word-processor!), this seems a suitable moment to slip in a paragraph which I inadvertently omitted from Ariane's letter. She said:

'As I write this, the smell of almond blossom is thick in the warm, sunny afternoon and mimosa is in full blossom too. The yellow daffodils are competing with the nearly ripe grapefruit dangling overhead - in colour, that is.

'Having worked outside in cold north-easterlies in muddy slipways, I very much appreciate the change of climate and scenery.'

'You will read in the Minutes that we are again on an Editor hunt. Keith and Janet stepped into the breach last year but they do not wish to continue longer than necessary. Twice a year, there is a period of concentrated work with collating, duplicating, stapling, enveloping and posting. Also, it is often necessary for the Editor to scrape around for items with which to fill the pages for our members are not often very forthcoming, on paper, about their exploits. Speaking of which, I have thought that it would be interesting to have a series of tales of how HB boats have emerged from predicaments. There is a story, for instance, which I have heard myself, of how Dilys was restored to the sea after having been deposited on the wrong side of some rocks when she broke adrift in a storm. Omega has just taken to the water again after a major restoration (beautifully carried out) after she had been found abandoned in France. Incidentally, look out for an article about her in 'The Boatman' in the not too distant future, in an issue which I believe will be heavily HB orientated. There are, I know, other stories which could be told. Perhaps people don't like to advertise their predicaments - although, most are things which have happened in the past and to previous owners.

Two dates to keep in mind: September 16th, Laying-up Supper at Woodbridge (Notice included with the newsletter) and, February 24th, 1996 which is our next AGM. Betwixt the two comes the dreaded January 1st which tends to be memorable for members forgetting to pay their annual subscriptions!

My typewriter is giving signals that I should finish this letter and I shall respond, just adding my apologies for any disjointedness and pleading the (very pleasantly) disjointedness of my life over the past few days when I have been putting the letter on paper.

My very best wishes to you all, from

Joan.

P.S. Geoff will not be disappointed for here I am, back again.

My train of thought was broken after I had written out Steve's letter but I meant to point out that there is bound to be more chat about Z.4s than the larger boats because there are so many more of them. Galatea has but the one sistership, Seasalter, built by Anderson, Rigden and Perkins and she is now 'somewhere in the Caribbean' - as far as I know. She is not an HBA member. At one time, my brother Rupert owned her and in June 1949, we made a grey and chilly trip from Burnham on Crouch to the Hamble in her. I do not recollect her being tender but she carried frantic weather helm. She had been converted from a Bermudan yawl (as per the design) to a cutter, with the mast still in its Yawl position, which may have been a contributory factor. These boats are Fastnets and when THB up-graded the design Aristene was the result and one (known) boat was built, in Australia. It was still a pre-metacentric design. This boat, curiously, also named Seasalter (a place close to Whitstable where Messrs A.R. & P. functioned) is now in New Zealand and when I find a hole in my life big enough, I shall write to the owner and try to entice him into the Association.

Tramontana is the largest HB boat in this country and possibly the largest, full-stop. She, too was A.R. & P. built - as, Morena. Now, she lives across the water, in Falmouth. She is a 16-tonner, built to the Cayuca design.

There are several 6-8 tonners sailing around but not many of them utter. Geoff is not one of these and is a very faithful correspondent when on his commuting voyages across "the Pond" in Watermaiden.

I have heard on the grape-vine that two boats are on or, about to be on the market in Australia and I have deduced that they are Quest and Jaslia. I hope that we shall retain Quest and that Jaslia will return to us.

In this issue, we are featuring a different sort of HB boat - one in which he would not himself sit very happily for he did not like dinghies - being rather large and slow-moving. You will notice by their names that he was still in his Arabic period; a hangover from his years in Jerusalem. Mark Miller has dug them out from limbo. The RCC judge did not think very highly of the positioning of the centre-board nor of the rig. During World War II, he designed a lifeboat for (I think) the M o D. I had married by then so was not around to absorb details and my recollection is hazy.

O.J.J.B.

THOUGHTS FROM AN EX-EDITOR.

A tradition seems to be establishing itself whereby ex-editors of yachting magazines are given a couple of pages by the new incumbent in which to propound their thoughts on a variety of topics. Des Sleightholme in Yachting Monthly is usually humourous. In Practical Boat Owner Denny Desoutter has covered such exotic matters as electrical methods of checking for defects in standing rigging. I have been told that my humour is somewhat suspect and I know that my knowledge of electrikery is limited but hope that what follows may be of some interest to our members.

Do you ever read a book describing a long voyage in a small yacht and wonder what the writer did next? Only very few, of whom the Hiscocks are the best known, seem to write more than than one book. Probably the vast majority of these venturers find that they have worked the wanderlust bug out of their systems and are content to return to the more normal lifestyles from which they were once so eager to escape.

Peter Tangvald circumnavigated in DOROTHEA in the early 1960's. She was, as you all will know, built to Harrison Butler's Khamseen design in 1934 by Anderson, Rigden & Perkins at Whitstable. The voyage is recorded in his book 'Sea Gypsy' published in 1966 by William Kimber & Co, price, then, 36s.net. It is an entertaining story, enlivened by his amorous adventures, but also containing much to interest cruising yachtsmen. It is a pity there are no photographs. The book ends with his sailing DOROTHEA back to Birdham Pool, Chichester which had been the starting point of his trip. In a post script he indicates that a year later, in 1965, he made a passage to Gibraltar in the same boat and got married.

There were reports in the yachting press of how he lost DOROTHEA in the Caribbean in 1966 after hitting an unidentified object but was able to get ashore after sailing 55 miles in a small dinghy. Later stories hinted that he was building a new boat in French Guiana. Then there was a newspaper story in 1979 of a brush with pirates in the China Seas during which his wife was killed.

Now, at last there is a second book. Unfortunately Tangvald died before it was quite finished but it has been completed by his son. If you are one of those who always wonder what happened next you should read 'At Any Cost' - the autobiography of Peter Tangvald.

AT ANY COST, LOVE, LIFE AND DEATH AT SEA. Peter Tangvald. Published by Cruising Guide Publications, PO Box 1017, Dunedin, Florida 34697-1017. USA. ISBN No 09-44428-09-6 (paperback). £9.95. Available in UK from any good nautical book shop.

Have you ever struggled to make an accurate measurement between two uprights? Imagine you are wanting to fit a shelf in a locker. How do you measure the distance between the two bulheads? No problem! Obtain two of those A4 plastic spine binders used by the publishers of some newsletters to hold the pages together. Slide one inside the other and make the measurement.

One of the sadest events in 1995 was the demise of REEDS NAUTICAL ALMANAC. This most useful annual was started in 1932 by Captain O.M. Watts, well known for his yacht chandlers business in Albemarle Street, London. In their first mention of the new publication Yachting Monthly declared it 'A Yachtsmans Almanac at last!'

When I started cruising in the late 1940's I only remember two almanacs, Reeds and Browns. Apart from one year, when I acquired a copy of Browns as a Christmas present or by some other method which did not involve actually spending money, I have used Reeds ever since.

Over the years competitors have appeared. One large volume apparently advertised some brand of cigarette and contained a most complicated set of tables for working an astro position line. A group of navigation students once offered me a substantial fee if I would explain how to use these particular tables. After a few hours study I decided the fee was inadequate and convinced the enquirers that Reeds Haversine Tables were quite adequate.

Despite further competition from the P.B.O Almanac, from 'Channel West & Solent' and latterly from Simpson Lawrence, I remained faithful to Reeds. Admittedly it became rather bulky and when the ownership changed they mistakenly, in my opinion, tried to expand the coverage well outside the traditional 'Home Trade Limits' of Brest to the Elbe and also followed the competition and began to try to be a pilot book as well as an almanac.

This year our sailing is limited to Falmouth Harbour with maybe a trip to Helford if the weather is nice. So a free tide table from our local Harbour Master is all we need. Next year when we intend to go cruising again there will be a problem. None of the remaining almanacs include the Nautical Ephemeris and I enjoy using my sextant if only to get a latitude when sailing over to Brittany. Thank goodness we still have a navy and they publish THE NAUTICAL ALMANAC and THE ADMIRALTY TIDE TABLES!

From the above readers will realise that we do not have one of those magic devices that gives you an instant position to an incredible degree of accuracy. In fact I only bought an echo sounder when Priscilla refused to allow me to make tallow in her kitchen with which to arm my lead.

The following conversation is reported from an up-market chandlery: Owner of new, shiny, flash Gin Palace "I say, my man, I think I've got everything on that boat. I just type the destination in and the electronics take over. The automatic pilot does the steering, the position is displayed on the screen, the speed is adjusted to maximise fuel economy according to sea state and I can go from here to Cherbourg without lifting a finger."

Chandler: "But sir, have you not seen this latest unit? You interface this in your electronics and it will switch on the microwave so that your meal is ready immediately you reach port."

I do not expect you to believe this but when the owner admitted he did not have the amps to run a microwave the chandler assured him he could supply one that ran on bottled gas.

MM 7/95.

HARRISON BUTLER DESIGN SERIES

This article by Mark Miller features *FATMEH*, possibly HB's smallest design, an entry for

THE CLAYMORE DINGHY COMPETITION

Much of my leisure time over the past year have been spent in research for a second book about Albert Strange. The first book, written by John Leather, covered various aspects of Strange's life including his career as headmaster of an Art School, his work as an Artist, his involvement in Model Yachting in addition to his success as a designer of small cruising yachts. The new book concentrates on Strange's methods of design which were originally explained in a series of articles in *Yachting Monthly* in 1914/15 and will have undoubtedly been studied by Harrison Butler.

One of the pleasant problems of researching in old yachting books and magazines is that it is delightfully easy to be diverted from ones principal objective. While going through a volume of the 'Yachtsman' magazine for 1914 looking for references to Strange my attention was drawn to the plans of a 10-ft dinghy by Mr T. Harrison Butler.

Now I already had a note that a design of his for a dinghy had appeared in the 1912 Royal Cruising Club Journal and wondered if the design in the 'Yachtsman' was for the same boat. Unfortunately I could not check this out immediately as the 1912 edition is missing from my collection of Journals.

As always Joan came to my rescue and kindly allowed me to study her copy of the 1912 Journal at the AGM. So I was able to confirm that the two designs were for the same boat and discover how the design originated.

In 1912 or maybe 1911, the exact year is irrelevant, Mr Gerald Otho FitzGerald of the RCC suggested a competition for the best design and specification of a 10-ft rowing and sailing dinghy. He offered a prize of a boat built to the winner's design. It was not until I looked Mr FitzGerald up in the 1912 Lloyds Yacht Register that I understood why the competition had been called 'The Claymore Competition'. His own yacht, an 81-ft schooner built to Lloyds A1 by White & Son of Cowes, was named CLAYMORE II. With a yacht of that size, an address in St. James Square, London SW. and membership of no fewer than seven Yacht Clubs he could clearly afford to offer a generous prize.

Mr Percy Tatchell was asked by the Committee to judge the competition. Designs were submitted by Mr Arthur Briscoe (who was adjudged the winner) Mr Harrison Butler, Mr Boughton Chatwin, Mr Draycott, Mr Rhodes, Mr Gilbert Millar, and the Rear Commodore, Mr H. Stuart Moore.

MR PERCY TATCHELL CONSIDERS THE REQUIREMENTS OF A GOOD DINGHY.

(The judges comments have been edited where necessary to remove references to other competitors entries.)

In judging a designing competition, it is well, to start with, to take the requirements drawn up by the promoters one at a time, and try to arrive at the interpretation to be placed upon each, afterwards seeing how they compare with the designs submitted for judgment.

This competition was for 10-ft rowing and sailing dinghies, pram or other type.

Nine designs were sent in, eight being of the ordinary kind, and one a pram, a proportion reflecting very fairly the popularity of the respective types amongst yachtsman in general.

The first requirement is "CARRYING POWER". This calls for a flat floor and a beamy boat, one capable of carrying four people comfortably in rough water with fairly skilful handling. By a flat floor is meant a midship section, the floor of which is horizontal out to 1/4 beam. In other words the boat must be very stable. The two features which make for stability are (1) A dead flat-floored midship section. (2) The absence of too much buoyancy in the ends below the normal waterline both forward and aft.

Three diagrams are shown below to illustrate this second point. Diagram 1 represents a common type of dinghy with a nearly straight keel, and the sections brought down to near the bottom of it all the way along. In Diagram 2 the line of the terminations of the sections at the middle line—the rabbet line practically—is rockered at either end. Diagram 3 shows the two placed one over the other.

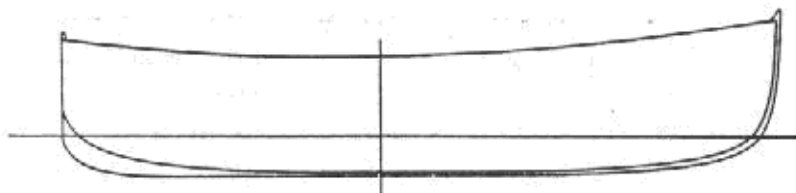


DIAGRAM 1.

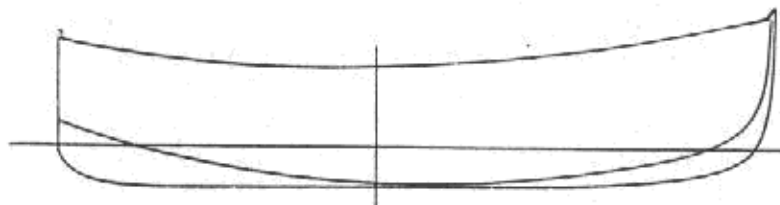


DIAGRAM 2.

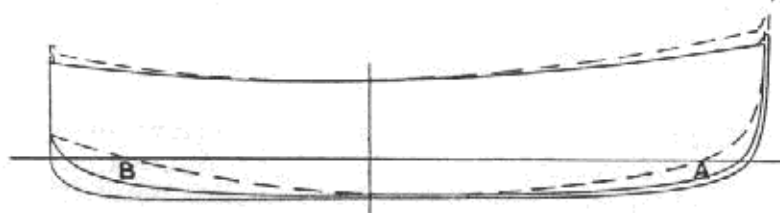
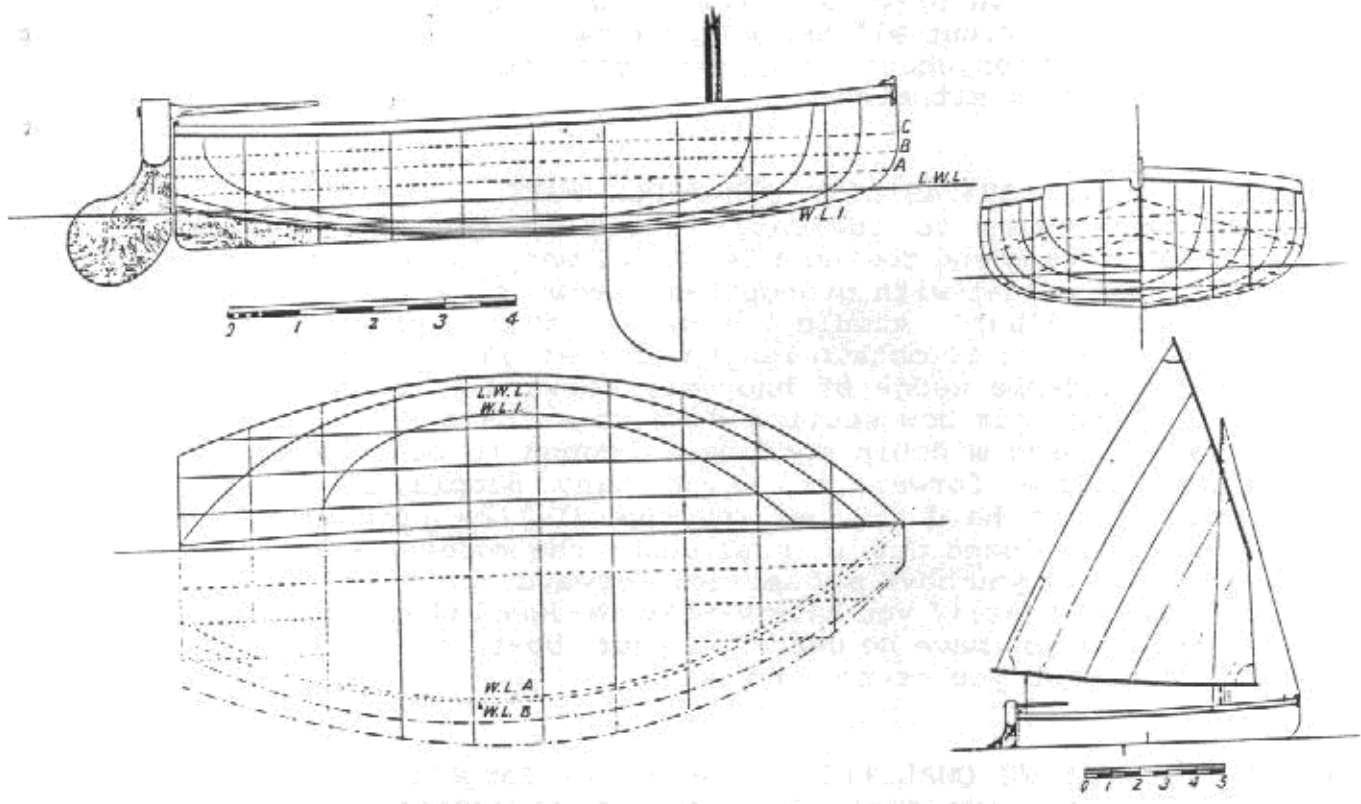
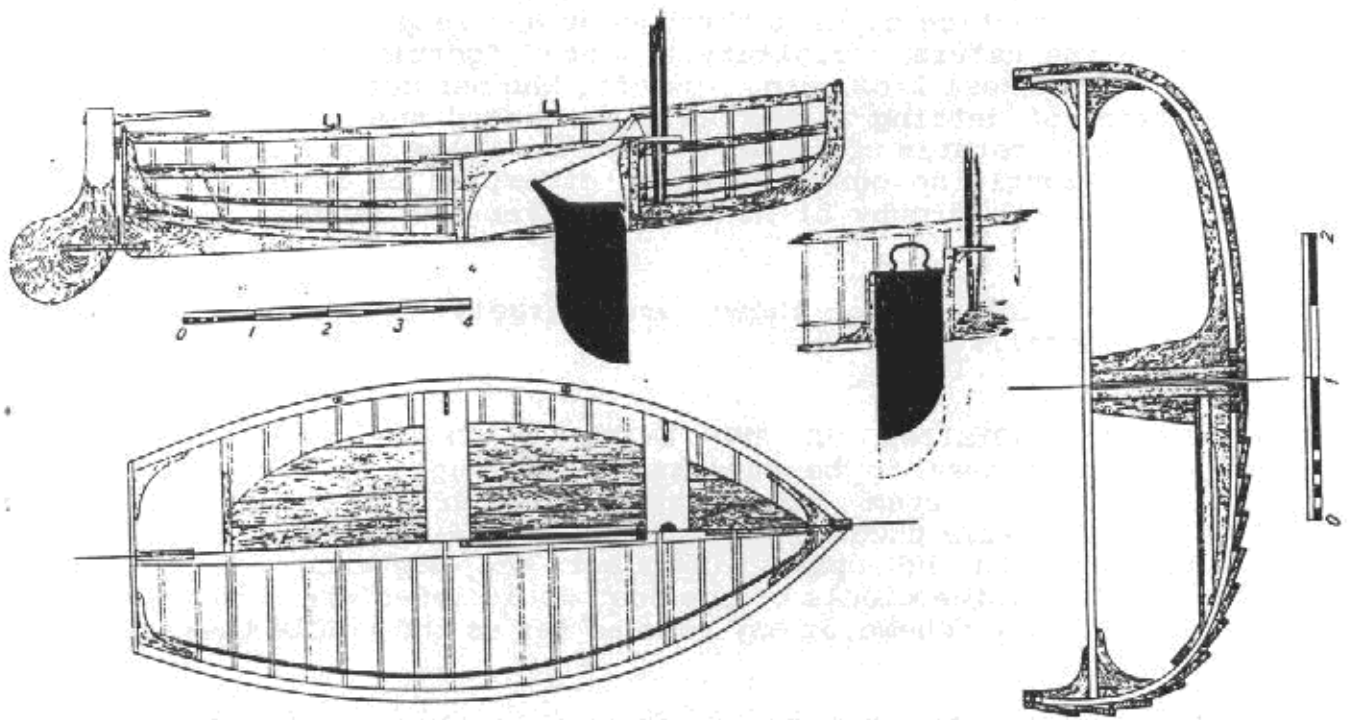


DIAGRAM 3.

FATMEH



SCALE: 3/8ths inch to one foot.



Sail and construction plan of 10-ft. dinghy, by Mr. T. Harrison Butler.

Although they both have the same midship section-it is not drawn because the argument applies whatever the shape- No 2 will be much stiffer than No 1 because she lacks the wedges of buoyancy, marked A and B, which are below the centre of buoyancy of the boat. With the same load the boat in Diagram 2 will sink slightly lower in the water than the other, but all her buoyancy will be concentrated in her midship section, where her greatest beam or stability-producing factor is situated.

The next item is "SUITABILITY FOR KEDGE WORK". Beyond implying stability, this seems to indicate length of keel to keep her straight when rowing and towing a length of warp through the water. Diagram 2 shows a boat with pronounced deadwood forward. It would look unorthodox, but should answer that purpose. The alternative, in order to obtain length of keel, and at the same time avoid an undesirable wedge of buoyancy forward below the water-line, is to bring your bow section down to a sharp V. This worked into a flat-floored midship section is bound to make the lower water-lines hollow forward, to which many people take strong exception. It is hard to see why; the dislike probably arose because they were found detrimental under the modern rating rules of measurement. If you have a V section forward, you get a hollow in the lower water-lines; if you have simply deadwood there, you get an angle in them; if you have no deadwood, your boat falls round stern to wind the moment you cease to row.

"ROWING AND SAILING QUALITIES". These are largely a matter of general design; the two qualities are not so antagonistic as is often stated. It is true that the out and out racing dinghy is a poor thing to row, but a flat-floored dinghy with a fair length of keel rows uncommonly well when not too heavily laden.

"FITNESS FOR RUNNING ON TO AND LYING ON A BEACH" suggests bilge pieces, and a projection of keel throughout her length to take the rub. Also, if the natural corollary be added, "getting off from a beach," a straight keel from amidships aft. Who has not experienced the difficulty of getting a boat with a rounded keel off a flat shore? She simply rotates upon that part of her where one happens to be standing. Rightly no competitor has attempted to introduce a "double-end" into a dinghy of such short over-all length.

"LIGHTNESS" - "STRENGTH". These are largely a question of construction details.

"HANDINESS FOR HOISTING UP AND LYING ON DECK". The first requirement would seem to be answered by a couple of ringbolts through-riveted at stem and stern; the second opens up the question of detachable thwarts for enabling the dinghy to fit over a skylight when turned upside down, but the presence of the centreboard case in the middle of the boat would interfere with the usefulness of such a scheme, at any rate as far as the middle thwart is concerned.

"SAFE IN USE". Finally we must remember that this is the ship's lifeboat.

MR. HARRISON BUTLER'S DESIGN AND
SPECIFICATIONS.

Scales.—Lines and plans, 1 in. to 1 ft.; midship section, 2 in. to 1 ft.; sail plans, 1 centimetre to 1 ft.

Dimensions.—L. o. a. 10 ft.; extreme beam, 4 ft. 6½ in. Sail area (unstretched), 59 sq. ft.

Keel.—American rock elm or oak, 5 in. moulded, tapering to 2¼ in. forward and 2¾ in. aft, sided 1½ in.

Stem.—English oak, 3 ft. moulded by 1½ in. sided.

Transom.—¾ in. elm or mahogany.

Skeg.—Pitch pine, 2 in. sided at fore end, tapering to 1 in. at after end.

Transom knee.—Oak, 1½ in. sided.

Bilge stringers.—American rock elm or ash, 1¾ in. by ½ in. This might be placed 6 in. nearer the keel than is shown in plans.

Thwart stringers.—1½ in. by ½ in.

Gunwale.—American rock elm, 1½ in. by 1 in., secured by an oak breast hook, and knees aft.

Timbers.—American rock elm, ½ in. by ¾ in., spaced 6 in. centre to centre.

Planking.—If clinker, of wych elm, 1⅝ in. thick, each plank 3½ in. broad. If carvel, pine ¾ in. finished. To be copper fastened; fastening between each timber; each timber to be rivetted over a rove.

A bilge keel to be fitted each side if much heavy beach work is contemplated.

Breast hook.—Of oak, 1 in. thick.

Centreboard case.—Sides of yellow pine, ⅞ in. thick.

Posts at ends of case.—1½ in. by 2½ in., of oak, mortised into keel and rabbeted for sides of case. Each post knee to thwarts.

Floors.—Of oak, ¾ in. thick, of oak joggled over keel, situated where shown in plans. That in centre of centreboard case to be cut to form a knee as shown in midship section.

Centreboard.—Of galvanized boiler plate, ¼ in. thick, weighing about 45 lb. Flexible wire fall running over sheave in thwart through a slot in fore post, down to a sheave on keel, with tackle leading aft.

Sparring.—Of ¾ in. elm.

Rudder.—Of oak, ¾ in. thick, with two checks at head to take oak tiller.

Mast.—Of spruce; diameter at thwart, 2¾ in., tapering to 2¼ in. at sheave for halyard.

Thwarts.—Of pine or mahogany, ¾ in. thick, 7 in. wide.

Ordinary river sculls, 7 ft. long, with square looms, river battens and shaped blades. A broad stretcher with three stations to be fitted aft. A man with decent oars and a stretcher can pull for miles farther than with the round sea paddles generally found on dinghies. Square rowlocks to be fitted, not round ones. The oars had better be made by Salter Bros., Oxford.

MR TATCHELL'S COMMENTS ON *FATMEH*

Fatmeh has a useful beam of 4ft. 6in., and is a very comely little vessel. Her floor though not horizontal, is perhaps flat enough. Exception must be taken to three things concerning her. First her centreboard is a full foot too far forward.

In general most of the competitors placed their centreboards too far forward. The centre of a dinghy's centreboard should not be arranged very far in front of the C.L.R. of the boat without it, otherwise she will carry entirely different helm with it up to what she does with it down. The statement that better results are obtained with it well forward is absolutely wrong; the only result is a stiff arm and a hindmost position if it comes to racing, followed later by the excrescence of a bowsprit and jib, or a costly operation to shift it further back.

Second, the middle thwart and the fore-thwart might with advantage be put their own width further forward, the former for rowing reasons—she would trim better and her head blow off less against a head wind—and the latter in connection with the sail plan. This is a balance lug with the tack 15in. from the end of the boom. This is not a safe sail in a dinghy; if the end of the boom gets in the water it is useless to let the sheet go, the boom being held down by the tack cannot rise, and the water holds the sail in until the boat fills.

Third, the addition of a little deadwood would save her a lot when taking the shore; it might be obtained with advantage to her by slightly flattening the sections amidships without altering her present graceful profile.

THE JUDGE MADE TWO GENERAL COMMENTS

One of the joys of dinghy sailing is inshore pottering. Sailing fast over a rocky bottom—and hard wind sailing is all the fun—with a dagger plate is a perfect nightmare. A hinged plate is much better; the case is bound to project aft of the middle thwart if correctly placed, rendering removal rather difficult; but if it is made of 1/8-in. boiler plate it won't weigh more than 12lbs., and is scarcely worth the trouble of removing. Vertical edges should be avoided both in rudders and centreboard as being likely to catch weed.

One other point is the position of a middle-thwart in a dinghy. A good rule is to put the after edge over the centre of buoyancy of the boat

12th December 1912.

Harrison Butler in fact submitted two competition entries. The second was a pram dinghy, *FATIMA*. The judge commented "this would probably prove the most suitable boat of any to those who can swallow the snub nose; the same remarks regarding centreboard, deadwood, and sail plan, apply to her as to *FATMEH*." Joan is checking whether the plans of *FATIMA* have survived.

It is one of the few conditions of membership of our Association that only owners, or past owners, of boats designed by HB may be Full Members. For the benefit of any Associate Member who desires promotion a Table of Offsets for *FATMEH* is given below.

It is interesting to note that HB gave measurements directly in eighths of an inch. The usual convention among Naval Architects, working to eighths of an inch, was to omit the '8', the denominator, merely retaining the numerator. Thus two foot three and five eighths inches would be written as 2.3.5.

If the measurement was a little greater than the nearest eighth he would add a +, if a little less a -.

TABLE OF OFFSETS.

Stations.	Stem.	1	2	3	4	5	6	7	8	9	Transom.
Height of Gunwale above L.W.L.	1-5 $\frac{1}{8}$	1-4 $\frac{1}{4}$	1-3 $\frac{1}{4}$	1-2 $\frac{3}{8}$	1-2 $\frac{1}{2}$	1-1 $\frac{1}{2}$	1-1 $\frac{1}{4}$	1-2	1-2 $\frac{1}{2}$	1-3	1-3 $\frac{1}{4}$
Keel (above) and below L.W.L.	0-3 $\frac{3}{8}$ (above)	1 $\frac{1}{8}$	3	4 $\frac{1}{2}$	5 $\frac{3}{8}$	5 $\frac{3}{8}$	5 $\frac{1}{2}$	4 $\frac{1}{2}$	3	1 $\frac{1}{8}$ (above)	1 $\frac{1}{2}$ (above)
Half-breadths of Gunwale	10 $\frac{3}{8}$	1-3 $\frac{1}{8}$	1-7 $\frac{1}{8}$	1-11 $\frac{1}{8}$	2-1 $\frac{1}{8}$	2-2 $\frac{1}{8}$	2-2 $\frac{1}{8}$	2-1 $\frac{1}{8}$	1-11 $\frac{1}{8}$	1-8 $\frac{1}{8}$	1-3 $\frac{1}{8}$
Half-breadths of W.L. "B."	5	1-1 $\frac{1}{8}$	1-7 $\frac{1}{8}$	1-11	2-1 $\frac{1}{8}$	2-3 $\frac{1}{8}$	2-3	2-1 $\frac{1}{8}$	1-11 $\frac{1}{8}$	1-6 $\frac{1}{8}$	1-0 $\frac{1}{8}$
Half-breadths of W.L. "A."	0	0-10 $\frac{3}{8}$	1-6	1-10 $\frac{3}{8}$	2-1 $\frac{1}{8}$	2-3	2-2 $\frac{1}{8}$	2-1 $\frac{1}{8}$	2-10 $\frac{3}{8}$	2-4 $\frac{1}{8}$	0-7
Half-breadths of L.W.L.	0	0-1 $\frac{1}{8}$	1-2 $\frac{1}{8}$	1-8 $\frac{1}{8}$	2-0 $\frac{3}{8}$	2-1 $\frac{1}{8}$	2-1 $\frac{1}{8}$	1-11 $\frac{1}{8}$	1-8 $\frac{1}{8}$	0-11	0
Half-breadths of W.L. "1."	0	0	0-0 $\frac{1}{8}$	1-4 $\frac{1}{8}$	1-9 $\frac{1}{8}$	1-11 $\frac{1}{8}$	1-11 $\frac{1}{8}$	1-8 $\frac{1}{8}$	0-8	0	0

We have to remember that the competition for which *FATMEH* was an entry was held more than eighty years ago. The requirements for a dinghy have changed. In those early days small yachts invariably towed their dinghy. In bad conditions it could break adrift or damage the parent vessel when flung against her by a following sea. At all times towing a dinghy was detrimental to performance. Even if it was possible to carry it on deck it was very much in the way.

All this changed soon after the end of WW II. Folding dinghies were introduced and enjoyed a brief popularity before being replaced by the ubiquitous inflatable. Despite their popularity these would fail Mr Tatchell's list of requirements on at least two counts. They are hopeless to row and positively dangerous when it comes to laying out a keedge.

But of course everyone now has an outboard engine and with the proliferation of marinas and visitors moorings there is no need to anchor, let alone lay out a keedge.

The following information was obtained from the records of the
 Department of the Interior, Bureau of Land Management, on the
 subject of the above-captioned land. The land is situated in
 the County of [County Name], State of [State Name]. The land
 is described as follows: [Description of land, including acreage,
 location, and any other relevant details]. The land is owned
 by [Owner Name], who is the [Relationship to land, e.g., owner,
 lessee, etc.]. The land is subject to the following conditions:
 [List of conditions, including any easements, covenants, or
 restrictions]. The land is being offered for sale by [Seller Name],
 who is the [Relationship to land, e.g., owner, executor, etc.].
 The land is being offered for sale at a price of [Price]. The
 land is being offered for sale on the following terms:
 [List of terms, including any contingencies, financing, or
 other conditions]. The land is being offered for sale by
 [Seller Name], who is the [Relationship to land, e.g., owner,
 executor, etc.]. The land is being offered for sale at a price
 of [Price]. The land is being offered for sale on the following
 terms: [List of terms, including any contingencies, financing,
 or other conditions].

The Domsday Drug

There have always been prophets of doom. Since someone decided that Genesis was a Good Idea and typed " In the Beginning...." into her wordprocessor - harbingers of doom have walked the planet, with billboards front and back, proclaiming that the End was Nigh. Well I think they may just be right this time!

I mean, what other explanation could account for a normally sane individual selling a perfectly good GRP boat, which was safe, seaworthy and dry, in order to buy 1.77 Tonnes (gross reg or 4 Tonnes - Thames Measurement) of rotting wood and oxidised iron tenuously held together by copper nails and suspect keel bolts in an Essex field?

Such irrational behaviour has been blamed on Pollution, Ozone Depletion and Global Warming. Others insist it is a direct result of mutant neuro-muscular viruses borne like spores across the vastness of the Universe to seed on poor old Earth. (Even the re-activation of a dormant self-destruct gene within us all caused by the stress of modern life has been mentioned) - but whatever the cause the result is sure to be the the same; the end of civilised society as we know it!

Personally I dismiss all of the above causes and lay the blame squarely at the door of a small subversive group formed in 1974....

In the early seventies the apparent inevitability of an Atomic Apocalypse was driving Hippies to use cocktails of Magic Mushrooms to attain a drugged Nirvana - but in quiet tidal creeks and little known boatyards around the coast of Britain another group were emerging; disciples of this new group were attempting to achieve an hallucinatory State of Altered Consciousness called "Sailing into the Sunset".

This state was achieved by slowly inhaling a mixture of Oak,Teak and Mahogany dust, linseed oil, Varnish and red lead putty while chanting the mystic mantra "THB, THB, THB".

(Sometimes miniature saunas called Steaming Boxes were constructed nearby to distill and enhance the effect of the drug and enable users to coax strips of wood into unnatural shapes).

Devotees appeared normal at first and then as they gained experience with the new drug began to introduce friends - "It's OK, we can stop whenever we like - just keep breathing deeply, sanding the coachroof and chanting THB..." In every case the cover for these activities was the same: they always claimed to be restoring an old wooden boat which was linked somehow to an ophthalmic surgeon!

Not until it was too late did they realise they were hooked. Families were bereft of one or both parents every weekend, careers suffered, finances were strained, judgement was impaired (even to the extent that a pound of Silicon Bronze ringnails seemed more important than food on the table)! Large decaying wooden boats were squeezed into small suburban gardens and love, care and lots of money were poured into them as they were converted into

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.../continued

Temples where the disciples could retreat from the world and get their 'fix' of this potent new narcotic.

Some tried to kick the habit and broke away. They threw themselves into everthing new and modern. Many bought GPS to try to 'find themselves' and most became borne-again GRP worshippers.

But to no avail. Cut off from the THB drug disillusionment quickly followed. There was to be no way back and yet no way forward. These sad people usually withdrew to nautical sanatoria called Marinas; living in abject squalor aboard Cornish Shrimpers. Their days filled only by Phenol fumes, pink gin and fading sepia photos of a Zyclon, Bogle or Cayuca.

And what became of the addicts that remained?

Well, the happy few attained enlightenment and sailed of into the sunset. Some fell off the edge of the world and others crossed oceans (buoyed-up through long weeks becalmed in the doldrums by varnishing and mantric chanting) - one is even sailing the Alimentary Canal and hoping to meet his Doppelganger coming the other way!

The rest are happy to accept their fate: recognising that there can be no cure they have organised themselves into a support group for new victims of the drug. They offer counselling, mutual help and advice and they all meet up once a year near Reading!

STOP PRESS: DISTURBING REPORTS ARE COMING IN OF A NEW OUTBREAK (UNCONFIRMED) - THE DOOMSDAY DRUG SEEMS TO HAVE BEEN PASSED ON TO ANOTHER GENERATION - THE SO CALLED "NEW AGE RESTORERS". A MAN IN ASHBY-DE-LA-ZOUCH LEICS HAS APPARENTLY PLANTED AN OAK, A MAHOGANY AND A TEAK TREE IN HIS BACK GARDEN AND IS SITTING IN THE LOTUS POSITION ON A BED OF COPPER NAILS, CONTEMPLATING A SET OF 4-TONNER PLANS WHILE WAITING FOR THE TREES TO GROW!

Terry Abel

Yachting Monthly April 1933

Common Faults in Small Cruising Yachts

T. Harrison Butler

Had your editor not invited me to do so, it would be presumptuous for me to write upon such a controversial subject. I can only carry out his wishes to the best of my ability.

The field is a very wide one, and can be considered under many headings: there are faults in design, in rigging and gear, in construction, in the internal layout and in general appearance. Again, the fault may lie in a lack of suitability for the purpose in view: features desirable, even essential, in a racing craft are out of place in a cruiser, and a design ideal for long ocean passages is not the best for use in sheltered waters. The deep draught useful in the Clyde would not be an asset in the Thames Estuary.

It is an education to take a dinghy and row down the Hamble River or through the Burnham anchorage and study the yachts at anchor and underway. The discerning eye sees much to admire, but, I fear, more to criticise. It is always a mystery why, when the back volumes of the yachting journals are full of admirable designs of every type of yacht, when designing competitions have brought out the best talent, both professional and amateur, with this wealth of design, embracing all types of yacht, men are still found who go to a builder of coasters and fishing craft and ask him to build them a "yacht".

A model may be whittled out and submitted for inspection, approved, and built from. I wonder how many have taken the trouble to take-off such a model and lay it down on paper. They are all unfair and need hours of work to fair them up: often the two sides are not symmetrical. Here I make my first point: the worst fault in a yacht is complete lack of intelligent design.

There is a hoary tradition that varied coasts have by a process of evolution produced the type of fishing boat most suited for the local work. Such should be the case; but is it? We find curious anomalies. Built for similar work, we find a grand vessel like the Deal lugger and that curious craft the Yorkshire Coble. Penzance has produced a magnificent well-balanced boat, the well-known lugger: while Lancashire has evolved a very inferior type. Both the Lowestoft drifter and the Gloucester Banks fishermen carry out similar work, but these craft are wide apart as the poles in design.

It is significant that when Japan wanted a model for a National fishing boat she did not adopt one of the products of evolution but commissioned one of our most eminent Scottish designers to produce the ideal type. Again, the Royal National Lifeboat Institution does not select a fishing boat but goes to the same firm for its standard designs.

It by no means follows that because a vessel is good for fishing she will make a good yacht; generally the reverse is true. The Brixham trawler has a low freeboard and high bulwarks. These features are ideal for getting nets aboard but are objectionable for ocean work.

APPEARANCE

A yacht cannot be really artistic in the true aesthetic sense: she cannot compare with the tan-sailed fishing lugger, with the Mediterranean lateen-rigged boat, nor with the Chinese junk, but should have a trimness, a harmonious entity, all her own. A yacht may be ugly because her sheer is bad or because her ends do not match; she may have an ugly transom or a poor paint-scheme. Many a beautiful yacht is ruined in appearance because her boot-topping has been badly run in; it must harmonise with the sheer line. It costs no more to build a yacht that is pleasing to the eye, one that seems to sit on the water like a duck rather than in the water, than it does to build a craft that looks a "tore-out" as soon as she is launched.

Very trivial alteration will often make an ugly feature handsome. I know one very shapely little 5-tonner that is completely spoiled because her transom flares out at the rail. A pronounced roll-in (or tumble-home) here would make an enormous improvement in her looks.

On the other hand one must not be a slave to Art to the detriment of utility. For example, if a deep-bodied yacht is to have a transom stern that is to carry out her lines to their natural conclusion and afford good balance between fore and aft body, then the transom should be of the V or Dory type. Such a stern cannot be really artistic. It is seen in the very successful American design Eaglet, and is the reverse of beautiful. On the other hand Alden has worked an equally effective transom into Svaap with some pretensions to good looks.

DESIGN

Faults in actual design may lie in a selection of unsuitable proportions and form, or the actual development of these factors.

I dealt fully with the influence of size upon proportions in an article which will be found in THE YACHTING MONTHLY Vol XXV, page 225, 1918. it is essential to realise that the sail area of a yacht varies as the square of the linear dimensions, whereas the displacement varies as the cube. As an example, if we take a yacht 20ft. on the LWL with a sail area of 400 sq. ft. and a displacement of 3 tons, and double all the dimensions, we get a yacht 40ft. on the LWL with a sail area of 1,600 sq. ft. and a displacement of 27 tons. If we take Albert Strange's rule and allow 100 sq. ft. for every ton of displacement we see that the 20ft. yacht is rather overdone with sail, whereas the 40 ft. is undercanvassed.

We also note that a displacement of 27 tons is too great for a LWL of 40 ft. We double the dimensions and get a very slow, "podgy" type of yacht. As the length of the LWL increases the sections must be more spaced out, so that the displacement is kept within reasonable limits and the yacht can be driven by a manageable sail area.

An example of this process can be seen in three of my designs. Cyclone has a displacement of 3 tons on a LWL of 19ft. and a beam of 7 ft. Several of these yachts have been built, I cannot say how many, and they seem to have given great satisfaction to their owners. I enlarged Cyclone's dimensions proportionally to a LWL of 22.5 ft., a beam of 8ft. 6in., giving a displacement of 5.7 tons. Six of this model have been built, and they have proved excellent ships. In spite of the fact that

they are rather of the chubby type, they are reasonably fast.

These dimensions seem to be about the limit for these proportions. The same sections were now spaced out to produce *Khamseen* with a LWL of 28ft., a beam of 9ft. 4in. and a displacement of 9 tons. This yacht has been built reduced proportionally to a LWL of 25ft., and as Kapoes has given her owner great satisfaction (She ran for 6 hours unattended!)

It would appear that below a LWL of 25ft. the beam may be more than one-third of the LWL. Up to about 30ft. three beams to LWL is about correct. Above 30ft. we can multiply the LWL by 0.3 and again obtain the best results.

American designers give their small cruisers far more beam and displacement than is the rule in Europe. In many cases one wonders whether they have not gone too far. It would be most interesting to cruise in some of these dumpy yachts and thoroughly try them out before condemning them. Several interesting designs of this type have been recently published in *Yachting*- if they make for good yachts then many of our notions require modification.

Thus in the November number of *Yachting* we find a beautifully-worked-out design by Ralph Winslow of the following dimensions: LOA 29ft. 9in., LWL 23ft. 11in., beam 9ft. 2in., draught 5ft. 3ins., displacement 6.4tons. This is driven by a Bermudian ketch rig of 482 sq. ft. I mention these dimensions to show that many eminent designers on the other side are not afraid of beam in yachts of fairly large displacement.

If these dimensions really make for good sea boats, efficient to windward, then let us utilise them, for the yachts are really floating homes. On the other hand the late C.P. Kunhardt, in his *Small Yachts* (1891), heartily condemns this chubby type as "yachts which pitch twice into the same hole and cannot get out of their own way."

Faults in carrying out the design fall under two chief headings:

(1) A faulty midship section. This is the commonest defect, especially in the work of amateur designers. I have grieved to see so many beautifully drawn, thoroughly well balanced hulls, completely spoiled by a weak V-type of section. As an example of a perfect mid-section I select Albert Strange's *Cherub III*, and in the larger class that of *Tern IV*. In a small yacht one has to consider floor space, and for this reason the mid-section has to be wider in the garboards in a cabin yacht than would be necessary in a day-boat.

Beam is valuable in a small vessel, because she must have "power" to hold her up to her work in a strong wind and heavy sea. Power may be considered to be total weight acting on the righting lever. Beam gives a long lever and makes up for the lack of weight possessed by a small yacht. But beam must not be combined with excessive displacement. As the comparative beam increases so must the section become fleeter, the bilges are harder and the width at the garboards reduced.

The well-known *Friendship* sloops are examples of great beam combined with a fleet section without excessive displacement. Displacement can be kept down by fining the ends. This was done in Mr. Shepherd's yawl that won a Designing Competition held by the now extinct *Yacht Sales and Charters*.

It is quite a mistake to think that great beam means a slow ship. *Amberjack*, a small schooner with ample beam and all her

ballast inside, made a wonderful passage in the recent Atlantic race. Good beam means comfort in the cabin and a yacht that sails on her bottom and not on her side. This makes for comfort below and safety on deck. A yacht that sails at a great angle of heel is uncomfortable, tiring and unsafe. Reasonable initial stability is desirable, but when excessive it is apt to make the motion of the yacht jerky and she is uncomfortable and spills the wind out of her sails in a light wind combined with a swell.

(2) Balance of hull is the most important element in a good design, and leads to easy steering on all points of sailing. Lack of balance can have most serious results. I once built a skip-jack to an American design. She carried so much lee helm on a wind that she had to be sailed without her jib. With the wind on her quarter she griped so badly that she once carried away her rudder, broached-to and at once capsized. This was, of course, an extreme case, but in a less degree the same fault is present in a large number of yachts.

I know of one 20-ton yawl, built from a builder's whittled model, which is so hard-mouthed that in a strong breeze on the quarter it takes two men at the tiller to hold her on her course. She has a V-sectioned bow and fat quarters like a galleon. The galleon was the better ship, for her round stern was balanced by an apple-bow.

The term "balance" is a wide one and embraces not only the hull but, in the racing type, the keel also. In any case there should be harmony between the wedges on immersion and emersion. Without going into detail, it is obvious that if a yacht has V-sections for'ard and broad U-sections aft she must, when heeled, put more boat into the water aft than she does for'ard. This means that she must drop her bow to maintain the centre of gravity in a line with the centre of buoyancy. This fault can be so pronounced that a model of an Itchen ferry boat put her stem under when heeled in a strong wind and could not be sailed.

Not only does a yacht of this type "root" by the head, but develops a screwing motion in a seaway that is most uncomfortable, and she loses speed because of the excessive helm necessary to hold her on course.

The requisite balance can be attained in two ways, namely by swelling out the bow sections or by fining the stern sections. If you must have a straight stem (one of the worst features of naval architecture, and one peculiar to Britain) then the stern must be pointed: the double ender can be perfectly balanced, as in the Penzance lugger and the Scotch Zulus and Fifies. On the other hand, conventional counters and transoms must be mated to a forward overhang and wide V- or U-sections.

My X-type boat Moyezerka was perfectly balanced: a child could steer her on any point of sailing in a strong breeze, but she was very wet, a feature that would be trying in a sea-going cruiser.

Undue fineness in the after-body must be avoided. A yacht is not always going to windward. When she runs she is in the position of a power boat and different forces come into play. If a fast motor yacht is fine aft she draws down aft at speed. This would be a dangerous feature in a sea-going yacht, for if she was forcibly sucked down aft she could not rise to a following sea and would be pooped.

The element of compromise comes in, and even when the designer has done his best the result can be realised only by

actual trial. The new method by metacentric shelf is stated by Mr Welsh to have given ideal results in his yacht Fidelis. She has broad V-sections in the bow, and it is difficult to see how a good shelf can be obtained without them. Many authorities would reject them for a cruiser, but it is possible that they are correct. In any case, if we do not accept them we must swallow either some form of double-ender or the Svaap type of stern. Personally I would vote for the latter alternative.

BALLAST

The position of ballast is important. A good yacht can become vicious if her ballast is wrongly placed. There is a mechanical factor called the moment of gyration. A flywheel has a heavy rim to increase this moment but this action would cause a yacht to plunge dangerously. The ballast must not be carried too far fore and aft, nor must it be unduly concentrated in the centre.

Weights in the ends, whether anchor and chain, heavy water tanks or ballast, will make the yacht plunge and take green seas over her bow. Too much concentration amidships will make her too lively and she will be uncomfortable and will throw the wind out of her sails.

Herr Munnig Schmidt was able in Kapoeas, to obtain the best position for his ballast by trial and error. She is a steel vessel and her ballast is stowed in a trough keel. He found that when the ballast was too much amidships her motion was very uncomfortable; by spreading it along the trough he found the best situation.

Much has been written about the evil effect of carrying the ballast too low, where it causes excessive rolling and a jerky motion, making the yacht uncomfortable and throwing a great strain upon her masts and gear. In a large yacht this is a factor to be taken into consideration: a shallow-draught yacht of the Alice type can carry most of her ballast outside, but one of deeper body should stow some of it inside.

In small yachts the conditions are quite different, the actual weight is small and therefore power is limited. Most of the ballast must be on the keel to keep the vessel up to her work.

SAIL PLANS

Faults in sail plan and gear are to be found in nearly every small cruiser. Until quite recently most yachts were over-sparred and over-canvassed. The advent of the motor, of better designed hulls and of the efficient Bermudian rig has made this fault less common. It is a curious fact that the sail area of really large yachts, say of the Sonia type, is very much less in proportion to their displacement than that of small ones. Of course, the reverse should be the case. This points the moral that most small yachts are over-canvassed.

In the 'eighties the mast of the cutter was placed where it should be: well into the yacht, say at about two-fifths of the length of the LWL from the stem. In the 'nineties the mast crept forward and an unhandy type of sail area developed.

Curtailling the area of the headsails has many disadvantages: they are, size for size, far more efficient than sail abaft the

mast; a yacht with the mast forward will not heave-to with comfort; cutting up the sail area into small areas makes the yacht far more handy; the mast in the bows increases the moment of gyration and causes plunging; a mast "well in" the boat can be more effectively stayed.

The shape of a gaff mainsail is often very bad. A long gaff and a short luff give the worst possible form for going to windward. It is the luff that drives the ship to windward. A long gaff sagging out to leeward, as it will unless controlled by vang, forms an inclined plane that presses the yacht down instead of driving her ahead. As regards Bermudian sails, the faults seem to lie in the track-way and slides. Many that I have seen, even on comparatively large yachts, are not as well made and designed as the ordinary rail that one buys for a window curtain. For an ordinary cruiser it is not necessary to save weight aloft to the same degree as in a racer. The mast can be made sufficiently stout to carry the shrouds high up, and then ordinary mast rings can be used and all difficulties are at an end. The head of the sail can run on a jack-stay.

This method was used on Svaap, and there is no mention of any trouble in Robinson's book. (As far as one can gather from the photographs of the yacht there was no jack-stay). The masts were long ones, and yet they stood up to their job even when Svaap rode out a hurricane at anchor.

These remarks do not apply to large yachts. Here the "ultimate strength of material" comes into play, and a large Bermudian mast needs adequate staying. For this reason, among others, it is probable that the gaff sail is better for the larger size of cruiser.

The mast in a Bermudian cutter must not be far forward: if it is placed here the yacht will not heave-to in a gale nor balance under close reefs. This has been emphasised already in THE YACHTING MONTHLY.

Faults in gear are probably the most common faults that one observes on small yachts. The size of the ropes is often wrong: they may be absurdly massive, and not infrequently the blocks are not correspondingly increased, with the result that the halyards do not render freely through the blocks.

On the other hand one frequently sees gear that is palpably inadequate. It is often not only too light, but it may be worn and dangerous. I never can understand why men who can afford yachts cannot afford the small sum necessary to keep their gear in good condition. Nearly all the trouble that one reads of in yachting yarns is due to faulty gear. Gerbault, in Firecrest, spent hours repairing his rotten stuff, and such examples can be multiplied.

The sheet leads of the jib and staysail are often wrongly placed and so the sail cannot be effective. The correct lead of the jib sheet, and the tension on it have an enormous effect upon the work of a yacht to windward. (See Manfred Curry).

Cleats are generally in an awkward position. In one yacht I sailed on the jib and foresail sheet cleats were so close together that one was constantly taking the skin off one's hands: they were also so placed that they were under water when the yacht was rail down, and in a position where one could not get an effective pull on the sheet. In a small yacht that may be sailed single handed it is a good thing to take one fall of the main sheet forward to a block and lead it aft to the cockpit so

that the sheet can be worked without looking backwards.

CONSTRUCTION

Faults in construction have so recently been dealt with by the Editor that I shall mention but a few points. Most small yachts are built with bent timbers. Sometimes they have no bilge stringers. It is better to have a side stringer as well as a bilge stringer. Two diagonal deck-braces are often used in racing yachts. There is no reason why they should not be embodied in the cruiser. They take the wringing strain and help the knees to keep the ship together.

The main idea should be to keep the construction as light as possible, and to get strength by good workmanship and good engineering design. One important source of weakness is constantly overlooked, and I have been one of the offenders. Every designer likes to get a nice stream-lining into the run of the ship low down. I have recently had the opportunity of studying the keel of three of my Yonnes that are under construction at Portsmouth. The oak keel is a massive bit of timber, but it tails off to a narrow strip at the stern. Here it has neither siding nor moulding. If it were not buttressed by the stern knee it would be definitely weak in this spot, and it is just here that it might be split in grounding.

The old-fashioned log-keel had not this weakness. In future, in designing the run, I shall plot out the keel before I complete the lower water-lines and see that the strength here is adequate.

Faults in lay-out are largely a matter of circumstances. The requirements of owners are so diverse that what would be a fault to one is a virtue to another. But there are certain broad features that should be mentioned.

The worst fault in a small yacht is a lack of any spot where one can sit with comfort. Most of the time below is spent sitting; in the spring and autumn the nights are long and a considerable time is occupied in reading. One must have a spot to rest in. The ordinary cabin-top can be very obtrusive, and it is only at the ends of the seats that one can sit with ease.

Let there be backs in at least two of these corners. I think that it is worth considerable compromise to have the yacht flush-decked, so that one can sit anywhere under the deck itself. This not only gives comfort below but safety on deck, and it makes for a stronger construction. It cannot be attained much under 7 tons, unless one widens the space between the garboards to get the cabin sole low down.

In a yacht over 6 tons there should be 6ft. headroom in some part of the cabin. The seats are often too high, so that one cannot sit with comfort, and yet one cannot get headroom under the deck. Lowering the seats two inches will often make the cabin ideally comfortable.

Care should be taken in a small yacht that there really is room to get into the fo'c'sle. The opening may be such that one can just wriggle through at anchor, but it is a very different kettle of fish at sea!

Again, everything must be self-stowing. One reads in nearly every yachting yarn that after a dusting "all was confusion below". The cabin was a welter of Swiss milk tins, whisky bottles, herrings and what not. This is quite unnecessary. All locker doors must open fore and aft, not beam-wise. Then the

doors cannot burst open and void their varied contents on to the seats and floor. The food locker should have partitions to fit all the tins and jars, so that they are effectively jammed.

On Sandook, when I go to sea, all that I have to do is to put a newspaper on the top of the things in the food locker and put a cushion over it, and the whole thing is firm. The shelf above the bunks has been fitted with flaps held in place by adequate bolts. No matter how the yacht tumbles about, everything stays put. It is only a matter of thought and a little trouble. But if the position of the locker doors is left to the builder, they may look very nice but they will not work at sea.

Provide plenty of lockers, each for a specific purpose, and see that things like warps can be got at in a hurry. I carry mine in the lockers under the cabin seats where they can be found in a moment.

I am well aware that some of my views may be controversial.

Editor's Notes

Many Thanks again to all contributors. The next deadline for copy will be 5th November 1995. The following boats for sale list may be out of date as we have no updated information. We hope to see many of you in September. One piece of really good news for us is that *Lady Mary* is sailing and now based at Burnham. Best wishes to all, Janet and Keith

I am asked to remind anyone who has not paid to contact the Hon Treasurer immediately if not sooner. He also has for sale ties (£6), Large Burgees (£8) and small Burgees (£5).

Paul Crowman has sent us an advertisement for his Classic Yacht Brokerage. Anyone interested should make contact at "Shalimar", Wheatfield Avenue, Worcester WR5 3HA. Tel:0905 356482.

Boats For Sale

<i>Myfanwy</i>	Bogle design	Apply Keith Towne
<i>Tradewind</i>		Contact Phil Gordon c/o
		4, Maytree Close, Coates,
		Cirencester GL7 6NQ

<i>Free Spirit</i>	Philesia Design	3.6 tons	
	Partially restored		Apply John Paton

<i>Saltwind</i>	Zyklon	Z4, new diesel	Apply Roland Dowling
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Andante II Norman Dallimore Design Apply John Lesh

10 ton cutter

Selamat Dream of Arden Ken Gregson

6 Belfor Flats

17 Bastion St

Senglia

Malta

This Yacht was built in Malaysia in 1948. It has built up topsides. a teak hull, all original interior panelling and a Stuart Turner 10 h.p. engine. In very good condition she is lying at Porto cervo, Sardinia. £12,000

Wanted

Z4 or other HB in thoroughly sound condition free from primitive alterations or additions. Good sails and engine essential but lavish inventory not a major consideration. Contact Peter Mather 0394 387072

Particulars of Yacht Arderne

Dream of Arden 6 tons displacement 30ft. LOA, 23ft. LWL, beam 8ft. 9in., 5ft. draught. Huron pine planked, Laid deck in white beech. Cabin sides etc, red cedar. Timber mast and boom with a tabernacle. 10 h.p. Bukh diesel, give a good performance. Built by professional boatbuilder 6 years ago with tender loving care and the best Australian and Tasmanian Timber. Copper and bronze fastenings. Price \$55,000 Australian o.n.o. Apply John Hartley, 3A Rose Av, Bulleen 3105, Victoria, Australia.