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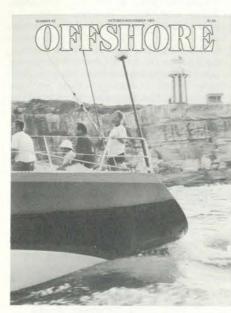
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Cover: Apollo heads south for Montagu Island behind Helsal, which was already just about over the horizon. Helsal smashed the race record, carving six hours off the previous mark; Apollo, not sailing up to form, also broke the record. The first 10 on corrected time were, in order, Salamander II. Vanguard, Piccolo, Once More Dear Friends, Phoenix, Impetuous, Sweet Caroline, Big Schott, Beach Inspector, Patrice III. CYCA Division placings were: Division 1 - Once More Dear Friends, Impetuous, Sweet Caroline; in Division 2 - Salamander II, Vanguard, Phoenix; Division 3 - Matika II, Zeus II. Impeccable.

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OFFSHORE, October-November 1981 - 1

OFFSHORE SIGNALS





William Raymond (Bill) Bold (1926 - 1981)

Bill passed away on the evening of Thursday, 10th September. His death was sudden, precise and to the end, I guess, reflected the exactness for which he was known around the waterfront

Not only was he a personality of the Rushcutters Bay area, he really was part of it. He was there just about every day during his last twenty years, except for when he was at sea, first as Yard Manager for the CYCA, and then as the hand on 'Pacha' and 'Koomooloo,' In fact, I felt a little concerned as to whether I was qualified enough to put pen to paper to pay tribute to Billy, but having done three Hobarts with him I suppose one obtains a pretty good idea of the ilk of a man.

Bill Bold came to Australia from England in 1949 after serving in the Royal Navy. Initially he worked for Malcolm Campbell at Rose Bay and, subsequently, for Hal Venables after he took over the boat shed. He became a member of the CYCA in 1958. In 1962 he went to the CYCA as Yard Manager and from 1972 worked on 'Pacha,' then 'Koomooloo' from 1977. By virtue of the fact alone that he worked on these two beautiful craft reflected his attention to detail, as it was common knowledge that you could eat your lunch from their bilges.

17 Hobarts, winning on 'Pacha' in 1970, as well as being on 'Balandra' when Australia won it's first Admiral's Cup in 1967. In fact, I believe he had won every offshore race on the earth. CYCA programme as well as a record in the Montagu.

One who sailed many miles with Bill, including two trips to England, Peter Green, says that he was completely unflappable, a superb helmsman with tremendous powers of concentration, and he could not remember him having a cross word with anyone.

Two other people who knew him very well as past Commodores of the CYCA employers and skippers were Sir Robert Crighton-Brown

From Sir Robert Crichton-Brown, K.C.M.G. C.B.E., T.D.

"The 'Baron,' or 'Baron Bold' as he was affectionately known to so many, made his last passage in 'Koomooloo' on Tuesday 15th September, 1981, when his ashes were scattered in the sea that he loved so much. In Bill Bold's passing we have not only lost a good friend but a great shipmate. On board or ashore his warmth, his puckish humour. his charm and his thoughtfulness were such that one always enjoyed being with him. He was a kind man.

A most competent and experienced vachtsman in all departments, he sailed with me in many parts of the world and under a variety of conditions, and were I to be asked to nominate who I would most desire to have in my crew I am bound to say that Billy Bold would be amongst those named.

No-one can deny that Bill lived his life to the full. He worked hard and he played hard and he expected others to do the same.

We shall miss him and his cheerfulness. and shall not forget his days in 'Ronita,' in 'Balandra' and in 'Pacha', nor shall we forget his companionship and his contribution to the CYCA."

From Norman Rydge, O.B.E. "I have had the priviledge of knowing Bill Bold on a sporting and personal basis for over 25 years. While in the last four years of his life I very fortunately associated with Bill on a daily basis when he accepted the position of professional seaman on board

During these many years, Bill was the most consistent of men I have ever met; his outlook and attitude were always characterised by sincere loyalty, friendship and good humour.

Bill was one of the finest men I have ever known. He was universally liked and I was greatly saddened by his passing."

As Bill's only career had been the sea, it was no surprise that the 100-odd people who paid their last respects on Monday 14th September, at his cremation, were all associated with the briney. He knew of no

The following day, on an immaculate Sydney spring afternoon, with a slight nor' easter wafting in on the dark blue chop of the Pacific, Father Kevin English slipped Billy ever so gently over the stern of the

Sailing-wise, Baron was no slouch either - magnificent M.V. 'Koomooloo', about a mile off South Reef, as his wife, Val, scattered coloured petals on the sea, in surely one of the most beautiful places on this

> As we slid back in past Hornby Light, and veered to port towards the Eastern Channel, with glasses tinkling, cans popping, I am sure that his twinkling eyes, twitching moustache, slick of fair hair and those bloody tremendous Irish-type coffees he used to make, had left an indelible impres-

> It also seemed that the South Reef gas buoy, as well as the old black tin one (now green) and the Sow and Pigs, knew that William Raymond Bold had made his final voyage and that they were now as marks of his course, no longer necessary.

> > - John Dawson





John Barry

John Barry, one of our finest Members, died on Sunday 6th September

The Naval Chapel at Watsons Bay, where the Funeral Service was held on Wednesday 9th September, was packed with his life-long friends and fellow comrades-in-arms. A simple but eloquent ceremony was conducted by Reverend Parnell (Naval Reserve Chaplain).

All paid tribute to a wonderful man, and the memory of his coffin draped with the Australian flag, his naval hat and medals, and his pal's naval sword, will remain with us all.

He will be missed . . . very greatly . . . by his lovely wife, Joy, daughter Susan, son Cliff, and not least of all by the crew and friends of 'Manukai', Derek and Rosie Rye, Bob and Lyn Hastings, Tom Hawley, Max and Carol Allen. Tony and Judy Wynn, Hayden Skudder and Jan Rattigan, Syd and Linda Sharp, Joe Goddard, Debbie and myself, and many, many more . . . our hearts ache.

A tall handsome chap, John was always cheerful, never ruffled, and achieved much.

His Dad was a 'Digger' in the First World War, his mother an English actress. At the outbreak of the last War John joined the RAN as

an ordinary seaman served in Australian waters, consists of a loaf of bread (similar to a bread then on loan to the RN and served in the stick) sliced down the centre and filled with Mediterranean in HMS 'Cleveland', rising to the fried eggs, Think of the fun you could have rank of Lieutenant Commander. Subsequently with that in Bass Strait, being careful of serving in the Navy Reserve until 1972.

After the war John opened a small coffee of your foul weather gear! shop, 'The Lincoln', near Martin Place, and it soon beame a great haunt of the artistic and 'good sambo' is the 'fried red egg sanger'. the cosmopolitan. Customers loved it and John thrived.

business . . . the luckier I get in business! And eggs in Australia because our hens don't he was right.

Soon he moved into a bigger place at 9 desires these items, one would suggest Springfield Avenue, Kings Cross, providing taking a laying hen to Hobart on a 1/2-tonner, reasonably priced accommodation. There he You would certainly frighten something out met Joy, soon to become his wonderful wife of it. and life-long companion. (She was then working for Billy McMahon)

They soon started moving upwards into Knocker White, bigger and better places, 'Gladswood House' in Double Bay, another accommodation Hotel, then to 'Glenavon' in Edgecliff Road, Finally in 1970 they built a magnificent management 1981 Hobart Race Sponsorship training centre, 'Glenavon Lodge' in Vaucluse - The CYCA has indeed been fortunate in 21 en suite rooms, billiard table, sauna, a well- attracting sponsors for the Sydney-Hobart run restaurant for their clientele, several lecture Race who have now been associated with and closed-circuit television rooms, and so on. the event for many years. John was in his element, and so was Joy who

But work was not the only thing for John. money, services and technical expertise Many years ago he joined the CYCA, sailing is key in the continuing success and worldbeing his main hobby. His first Sydney-Hobart wide recognition of the event. was in 'Samuel Pepys' in 1956 . . . those were the days . . . no radios . . . little navigational gear . . . and one of the roughest crossings ever. In 1974 he purchased 'Manukai', a 35' Duncanson, and did his second Hobart in her in 1977, coinciding again with a very rough

Sydney-Hobart in 1978 and 1979. Lord Howe races . . . Noumeas . . . twilights . . . a great yacht . . . a great crew . . . a magnificent through the generosity of its Managing skipper.

treasured Joy . . . Susan . . . and Cliff. In recent The funds provided by Hitachi are used years he suffered from heart trouble, neverthe- in the administration of the Race - to meet less continuing just as cheerful, just as hard- the costs of providing extra facilities to working, and sailing just as much, although cater to the large number of overseas and sensibly adjusting his way of life. Being a wise interstate visitors, to provide over forty man, as well as a brave one, he planned sensibly, extra moorings in Rushcutters Bay, to make and brought Cliff closer and closer to him during arrangements for media coverage of the the last years, so that now he has gone, his son, Race, which includes the setting up of two still only 21, has ably taken on his father's press centres, and the provision of telephones mantle, backed by Joy and Susan.

On Sunday, the 20th September, four yachts, 'Manukai' (Cliff Barry), 'Trident' (Syd Sharpe), Club to provide meals and refreshments, 'Sieglinde' (Tony Wynn), and 'Genista' (Haydon extra marquees and bars must be set up in Skudder), cruised outside the Sydney Heads to the Club grounds, and temporary ablution bid a last farewell to John . . . a wreath floating blocks are needed. upon the sea.

- Henry Rain.

Letters

Whilst perusing Hamishs' informitive ideas on how to humiliate an egg, I was reminded of similar types of concoctions which are encountered overseas.

For instance, there is the popular 'egg banjo' that is usually found in some of the back-street coffee stalls in Singapore. It

course not to let the egg run into the sleeve

Another delicacy on the style of the Found in various parts of Sri Lanka and India, it is so named because of the red He often told me . . . the harder I work in spots in the volk, (Very difficult to get red usually go for curries.) But if your palate

Sincerely yours,

The commitment which these sponsors helped him greatly. They continued to thrive. make to the Club each year in terms of



Hitachi Sales (Australia) Ptv. Ltd. Director, Ken Caldecott, has this year John was a family man. He looked after and increased its cash sponsorship of the event. and telex facilities.

In addition extra staff are needed by the

The funds also provide special stationery needed for the Race - entry forms, Notice of Race, posters, as well as houseflags, competitiors' flags and so on.

Hitachi's Ken Caldecott is himself a veteran of 20 Hobart Races and his love of the sport continues to be expressed in the support which he has offered the Cruising Yacht Club of Australia each year since 1974 for the running of the Hobart Race.

Ken says "Hitachi is proud to be associated with the Race - our sponsorship is Hitachi's way of showing appreciation to its many customers in Australia for their acceptance of the wide range of Hitachi products."

Another sponsor who has come forth year after year and who in fact provided the first commercial sponsorship for the Sydney-Hobart Race in 1975, is TAA.



Trans Australia Airlines

This year TAA will again provide a cash contribution to the running of the Race as well as a number of services to vachtsmen. The company provides a special booking service in all States to arrange advance bookings for crews and a wharfside booking office in Hobart, A special baggage service allows yachtsmen to leave their baggage at the Cruising Yacht Club of Australia on Boxing Day and, for a minimal cost, collect it from a TAA representative who meets the vachts when they berth at Constitution Dock, On Boxing Day TAA provides a ferry to take 300 to 350 guests to watch the start of the Race. As many as 12 different countries are represented among the guests, including TAA clients and international airline representatives, thus extending international recognition of the Bace. TAA also produces a Race poster which, over the years, has become some hing of a collectors item.

The two nost vital functions in the adminstration of the Race are the communications and in ormation processing systems. These highly afficient facilities are largely responsible for the 100% safety record of



The CYCA is greatly indebted to AWA for the provision of communications, and to General Electric Information Services Pty. Ltd. for the calculation of yacht handicap positions and results. AWA's association with the Race goes back to 1969 when the company first installed radio telephones in the radio relay ship. The company has continued to supply the radio equipment including the sophisticated Telex-over-radio equipment now used on board the radio relay vessel to communicate with vachts and race headquarters

The early Sydney-Hobart Races used Morse code to send scheduled position messages to the Cruising Yacht Club of Australia's press centre, and double sideband radiotelephone for Race broadcasts to the ABC, both via Sydney Radio. With constantly improving technology the com-munications facilities provided for the Race have changed markedly. This year AWA will be providing Telex-over-radio facilites using a Marconi 'Spector' ARQ/FEC Error Correcting System with Creed 2300 Teleprinter. The main transceiver will be a

Hobart Race Sponsorship

Marconi 'Transocean' 400 watt HF SSB Transmitter with Marconi 'Pacific X' Communications Receiver. Two reserve transceivers will also be provided: a CAI CA-35MS MK II 150 watt HF SSB, and a Stephens SEA 101 120 watt HF SSB. A Hull 922 Transceiver will be used as the watchkeeping receiver, whilst an AWA Pilotphone VII 55 Channel 1MM Transceiver will act as the VHF Transceiver with an AWA Skyphone VHF Transceiver as Aviation VHF.

The navigation equipment supplied to the radio relay vessel this year will include an AWA/Tractor 'Transtar' Satellite Navigator C/W 'Observata' Compass.

With the help of this communications equipment, yacht positions can be determined quickly, and in an emergency aid or search facilities can be underway within minutes of a distress report being received.

GENERAL SO FLECTRI



The high-technology equipment provided by GE Information Services will be used to calculate the handicap position of yachts and race results for the 13th successive year. Throughout the Race each yacht will radio its position twice daily to the radio relay ship and this information will be passed to Race Headquarters at the Cruising Yacht Club of Australia. The GE Mark III Computer will transfer information via satellite to a centre in Cleveland Ohio. The US computer, in constant operation seven days a week, will plot the latitude and longitude of each yacht and its position in the Race and relay details via satellite back to Sydney. This information is passed to the media and is available within 30 minutes after the yachts have reported their positions. Yachts are advised of their handicap position through the radio relay ship. This facility is made available free of charge by GE.

GE will also provide pilots of news media aircraft with an up-to-date 'latest' position, i.e. latitude/longitude report on the field, to enable the aircraft to locate individual yachts quickly in adverse, low-cloud weather. The report will be produced at the airport via portable terminal coupled to an ordinary telephone just prior to the plant's departure.

In the event of an emergency or if a yacht fails to report on a sked (due to adverse weather or radio communication breakdown) the computer will forecast the yacht's position based on its previous position reports and on the performance of similar yachts in the same area.

This year the 'E.B. Cane' will be used as a radio relay vessel, once again skippered by popular Eden identity Graeme White. Graeme is the Governing Director of Charter Craft and Marine Services Pty Ltd Eden; he has made a vessel and its crew available to the Cruising Yacht Club of Australia free of charge for many years.

Chief of radio communications Bert Oliver will be making his 22nd trip to Hobart this year on board the vessel.



As has been its custom for a number of years, Ampol will again provide thousands of litres of fuel to the radio relay vessel. Ampol makes an important contribution to yachting in other areas too. For many years the company has sponsored the Ampol Tasman Series, a four race event involving the South Solitary Island, Montagu Island, Sydney-Mooloolaba and Brisbane-Gladstone Races.

The Yachtsman of the Year award is sponsored by Ampol; this year the award was won by popular America's Cup skipper Sir James Hardy. Other Ampol sailing sponsorships include the Eighteen Footer and Trailer Sailer classes.

The Cruising Yacht Club of Australia gratefully acknowledges the generosity of all these companies and of the people who over the years have contributed a great deal of their personal time as well as their professional expertise to the successful organisation of the Race.

Meetings of the International Technical Committee and the Research Committee September 1981

The International Technical Committee has met to review the 1981 season to date and the effect of the current rating rule on racing worldwide under the International Offshore Rule.

It appears to the ITC that the performance of the Rule in its present form has been satisfactory during the season, and holds promise for a period of rule stability as well as encouraging dual purpose boats. The Committee therefore does not intend to propose changes in the rating rule at this time.

Owing to measurement discrepancies reported in several important regattas this past year, the Committee is taking steps to ensure measurement compliance, particularly with respect to the condition of the yacht afloat for measurement. With a single exception, the proposal that no sails will be allowed aboard at the time of measurement in the future, the Rule and measurement requirements remain unchanged. Details will be more specifically defined.

A measurement inventory sheet detailing the condition of the yacht and its equipment for measurement afloat has been proposed and it is intended that this inventory be completed and initialled by the owner together with the measurer at the time of measurement. It is hoped that this inventory will clarify the situation regarding equipment stowage for measurement.

The effect of specific gravity of water on rating has been studied and found to be considerably less than rumour and gossip would indicate. However, a further computer

study is being made between now and November before the Committee's final recommendation is put forward.

The Scantling Guide has been reviewed and found to be generally satisfactory for aluminium construction. Large panels in FRP and cold-moulded wood will be corrected in the Rule as will wooden deck beams and balanced keel bolts, but, on the whole, the Scantling Guide is proving quite effective. Further work remains to be done before a section on masts can be added.

The Committee is discussing the possibility of bringing division three of Mark IIIA forward a year but has made no determination at this time. Computer study to aid this decision will be carried out between now and November.

The Research Committee has met separately and in joint sessions with the International Technical Committee.

The Committee has proceeded with its first priority, the development of computer programs, whereby IOR measurement data can be obtained from sets of measured hull lines rather than by direct point measurement as at present.

They report good progress. Two programs are currently under test and seem to show promise. There was much discussion on their relative merits and how much additional measurement is necessary. It is hoped that some draft measurement rules will be available in November.

It was noted that two measurement instruments are in existence, that can measure hull lines — the USYRU/MHS tool and the "Maine Yankee" device produced for the Committee. The former is expensive and sophisticated and the latter basic and relatively cheap and easy to construct but is more demanding in man hours for measurement and data input. A grid to test the accuracy and the acceptability of any device has been developed.

The Committee hope to be able to recommend to the Council in November that the Chief Measurer should provide for the use of the system in appropriate selected cases on an experimental basis so that a practical system can develop for subsequent general use.

The Committee are continuing their studies of the various Velocity Prediction Programs.

Montagu Island Race

from John Brooks

No two Montagu Island Races are the same, it is said, but this year a new elapsed time record was set in conditions quite similar to those encountered in the two previous record-breaking runs, by 'Balandra' in 1969, and by 'Helsal' in 1974. Running and reaching predominated in all three of these races, and this time the first leg to the Island was favoured by a strong northerly stream (although it was not quite of the black nor-easter variety) and by up to two knots of southerly set. However, a forecast gale force SW change never reached the leading boats, which came back up the coast on a north-wester to begin with, then picked up a south-easterly of 10 - 15 knots, about the only wind direction not mentioned in the Sydney Radio weather forecasts. Finally, the long awaited SW change arrived late in the proceedings, but without much force.

The elapsed time record was broken, by over six hours, by the hard-charging 'Helsal Of Our Town Newcastle'. The conditions suited her admirably, running and reaching over mostly easy seas except for a nasty patch east of Jervis Bay, when she broke her boom. It was in this area that 'Apollo' took a dangerous knockdown, fortunately without damage, and a few others who were not so lucky got knocked around enough to warrant a diversion into Jervis Bay for repairs.

'Helsal OOTN' continued on under spinnaker and staysail only, still drawing away from 'Apollo', which was having steering problems and spent a lot of time bareheaded. Not far behind her in the next group was 'Vanguard' (Dick Cawse) which, at that time, was looking good on handicap. 'Helsal OOTN' managed makeshift repairs to the boom before the Island and rounded over two hours ahead of 'Apollo' eventually stretching that to over four hours at the finish. She was very well sailed by her new charter crew, a highly motivated group from Lake Macquarie led by a few of the cagiest performers on the coast, in John Pickles, Albie Burgin and Albie Mitchell, the latter who is probably one of the most under-rated sailing masters in NSW although not, of course, at Lake Macquarie.

The quality of mercy is seldom strained in yacht racing these days, and the race was not without its un-dull moments. One vachtsman, in a moment of pique, hurled an egg at one of his opponents in lieu of a formal protest: the egg broke on the mainsail of the recipient yacht, and ran down the cook's neck. After the race, the egg-er made the mistake of coming over to the egg-ee to apologise, and received an egg shampoo from the cook for his trouble. Knocker White's descriptions of galley extravagances apparently are taking their psychological toll, and perhaps this cook had decided to throw in the towel and to turn his hand to hairdressing (or maybe he'd just decided that this could be his ultimate creation with the humble egg (oeufs cheveux, anyone?)

Not unnaturally, a Farr design took the first place overall in the Montagu. 'Salamander 2' is a Farr 1104 from MHYC which

is consistently well sailed by Ken White and his sons, Greg and Steve. She has figured high up in the results quite often, although this is her first win in a major event. This time they got it all together for a narrow win over 'Vanguard' with 'Piccolo' (Bob Schroder) third. It was a popular win at MHYC, where the 'Salamander' crew celebrated at great length on Sunday.

Volunteer ladies wanted for Hobart Race Press Centre

Volunteers to answer phone enquiries during the Hitachi Sydney-Hobart Yacht Race are needed again this year. Jenny May, who is organising the ladies' volunteer phone corps, has asked that anyone who can help in the Hitachi Press Centre at the CYCA, from Boxing Day through the 31st, please phone either the office (32-9731) or Jenny May (427-2926) and put your name on the list. Three shifts are run to answer phone enquiries to the Press Centre - 8 a.m. to 12 noon, 12-4 p.m., 4-9 p.m. You can have lots of fun, keep up with the excitement of the race, and help out with the important task of keeping the press and relatives and friends abreast of the progress of the race.

CYCA Summer Twilight Series

Volunteers who are competent power-boat handlers and who have a knowledge of elementary starting and finishing procedures are required to conduct the Wednesday twilight series which starts with the introduction of daylight saving time. Please contact Burnie Hamill, the Sailing Secretary, at 32-9731, or leave your name and phone number with the office.

Trivia

Shipway's Trivia guessing game in the last issue was won by 'Blade' Hollingsworth, that well-known 'stayer' of the waterfront who is also, perhaps not such a well-known fact, one of our most astute members when it comes to general gnoss. Congratulations to Blade, and condolences to Dave Kellett, who got all right but one. The answers were:

1. 2 yachts, in 3 years:

Solo, 1956; Solo, 1962;

Freya, 1964.

 Six: Tradewinds, Struen Marie, Solo, Siandra, Freya, Cadence.

- Bacchus D (P. Deaton); Balandra was subsequently named the winner after receiving time for going to the assistance of another yacht.
- 4. Hellaby (John Lasher)
- 5. Newport Offshore USA.
- 6. Judel and Vrolijk.
- 7. Regardless, Satin Sheets, and Patrice III.
- 8. Geoffrey Williams in Sir Thomas Lipton.
- The Great Escape.
- 10. Mike Fletcher.
- 11.1968 Montagu Island Race.
- 12. Elf-Aquitaine.

Shipway escaped to Melbourne before putting in his Twizzlers for this issue, so we rest from his banalities for at least one issue.

Mike Fletcher of the Elvstrom Loft



Getting The Best Out Of The Sales We Have

Before tabulating the wind strength in which each headsail is used, there are much more important things to be done. The most important is to mark halyard tension and sheeting positions for each sail.

To mark halyards, pull up the No. 1 while you've in the dock, with no wind. Stretch it past the point where the wrinkles on the tape disappear until you have a tension corrugation behind the luff tape, Mark this as 'medium luff tension.' Sew some cotton into the genoa halvard and mark No. 1 position on the deck. Follow this procedure for each sail on both halvards. If, on the fresher-weather sails, the shortness of the luff starts to take your halyard mark off an easily readable area, fit a short wire strop to the top of the headsail. This may not be exactly correct; however it is a quick way of getting a starting position. If you find, under sailing conditions, that any sail is faster with more luff tension. then shift the mark on the deck.

Now to the sheeting positions.

Using the marked halyard positions, experiment with sheet positions until they are correct, then mark them on the deck in large enough letters for somebody to read in the dark. There is also a simple method for finding the correct car position, which must be done under sail. You are basically trying to divide the sheeting load between the leech and the foot in the correct proportion. You normally know that when the sail is sheeted in, say, until it is within 2" to 3" of touching the spreader, that your speed and height is good. Therefore start sheeting in the headsail looking alternately at the spreader distance and at the shape of the foot. If the foot becomes tight and stretched before the spreader distance is reached shift the lead forward (more sheet load transferred to the leech, less to the foot). Conversely, if the spreader distance is reached and the foot is hanging out against the rail, shift the lead aft. The stronger the wind, the straighter the foot should be to make the lower section as flat as possible. The correct position is always when the boat has the best speed and pointing.

If you pay attention to these basic facts, you will start to build information and performance about each sail instead of stabbing around in the dark.

At Elvstrom Sails you can be advised by Mike Fletcher, who races you both in the harbour and offshore. He also has a proven track record, from Olympic coaching to Admiral's Cup racing. Elvstrom sails is at 97-101 Pyrmont Bridge Road, Pyrmont, telephone (02) 660-6528. 660-6186.

ADVERTISEMENT

Offshore Signals Product News

New Scott Kaufman 46 Footer

This design is one solution to the set of problems many owners have. They would like to race but also have some accommodation enough to enjoy the boat with their family. Some performance will be sacrificed, but because the accommodation is centralized and weight is eliminated from the ends, the loss is minimized. The aim of this design is to produce a complete, well-finished yacht that can be successfully raced.

With the current IOR Rule, I believe that we can look forward to a period of stability in design. The rule makers appear to have tightened the rule to such a point that the rapid advances of the past have been eliminated. I feel that any current IOR — based design should be competitive for a number of years. The hull for this design is a development of many previous racing designs but has a lot of rocker and is aimed at lighter-air performance.



The hull is constructed using Airex core material and unidirectional fibreglass in the skins. A Vynalester resin was used to increase the stiffness of the layup. The result is a lightweight, very strong yet very stiff hull. The deck is made from plywood laid over longitudinal frames. A 5/16" thick teak deck is laid over the plywood with black mastic between two inch planks laid parallel to the sheer line.

The interior arrangement is based around a private aft cabin for the owner with a double berth and private companionway to the aft cockpit. The galley is located amidships with sinks and counter space above the engine box and refrigerated box fitted against the hull. I think that this will be a comfortable galley to cook in when at sea as there will be good support from the engine box when heeled.

Opposite the galley is a walk through head and chart table to starboard. Amidships is a standard dinette with pilot berths above. Forward are crew lockers and hanging lockers. Further forward is sail stowage with large hatch above.

The deck layout is such so that the boat can be handled from the aft cockpit when sailing short handed. The secondary winches and the mainsheet winches are situated so that they can be operated from the aft cockpit. The primaries are located in the center cockpit. The large 66 inch diameter wheel which was originated by this office is now considered a standard for this type of boat.

The first boat is being built for Dr. Bruce Ohmart of Alpena, Michigan and it is possible that a series of these boats will be built as the builders have made a mould for the hull.

I believe that this design is a carefully thought out approach to the problems of producing a successful racing boat with a workable comfortable interior.

Scott Kaufman.



Greenwich Marine releases EPIRB

Greenwich Marine Electronics has released a completely self-contained emergency position indicating radio beacon (EPIRB) designed for pleasure-boat use.

The unit is completely designed and built in Australia by GME to take advantage of the opening up of the international VHF distress frequencies to pleasure boat owners. Operating on both 121.5 and 24 MHz simultaneously, the GME EPIRB sends out a distress call which can be picked up by commercial and government aircraft and shipping over a range of over 300 km.

Waterproof and self-righting, the GME EPIRB will operate on board or in the water, in all weather conditions. The unit will transmit for at least 8 days on its inbuilt batteries.

As well as carrying a normal 12-month warranty against defects, the GME EPIRB is covered by GME's Product Warranty and Battery Replacement service. Every 12 months the EPIRB may be returned to GME where, for a nominal charge, the batteries will be replaced and the unit given a complete performance check and further 12-month guarantee of performance.

The GME EPIRB is available from GME dealers around Australia.

New GME Depth Sounders

Greenwich Marine (Electronics) Pty. Limited has released two new neon — flashing-type echo sounders, the GME Electrodepth Models ED-360A and ED-101.

The GME Electrodepth ED-360A has two ranges, 0—60 ft. (shallow), and 0—120 m (deep).

The shallow range is desinged to be used for testing the depth of water when entering estuaries, whilst the deeper range can be

used as a navigational aid when sailing offshore.

The GME Electrodepth ED-360A incorporates an alarm which can be adjusted to any depth to provide an audible signal from 5' – 55' on the 60' range and 2 m – 100 m on the 120 m range.

The GME Electrodepth Model ED-101 is a more economical model with a depth range from $0-30\ m$ (100') and does not incorporate an alarm.

Both models have a high-quality transducer which is suitable for mounting in a wet box inside the hull, and the transmitter is sufficiently powerful to fire through up to 1" of fibreglass.

The GME Electrodepth ED-360A and ED-101 are both high-quality Depth Sounders manufactured in Japan. Spare parts and after sales service are guaranteed by Greenwich Marine (Electronics) Pty. Limited.

New Whale Pumps

New from Munster Simms Engineering Ltd, manufacturers of Whale bilge and galley pumps, is the Whale Gusher Urchin, a compact hand bilge pump incorporating new technology, making possible a more efficient, yet lower-priced pump.

This pump, with a generous output capacity, is ideal for use in sail boats, yachts, fishing boats and work boats.

Compact, lightweight and robust, the Whale Gusher Urchin comes in three versions: with a fixed operating handle; with a removable handle for confined and difficult spaces; and a through-deck or through-bulkhead mounted version with removable handle. All handles have a distinctive yellow grip, easy to spot in an emergency.

The light lever action of the Whale Gusher Urchin permits a fast pumping rate. Constructed throughout from non-corrosive materials, it has steeped inlet/outlet nipples, suitable for either 25mm (1 inch) or 38mm (1% inch) hose connections.

The method of securing the pump diaphragm allows for total variation of the handle position to the inlet/outlet flow and there is quick and easy access to the diaphragm ensuring simple maintenance.



Give a boat book for Christmas

You can hardly go wrong with a boat book when it comes to finding a Christmas present for either the difficult-to-please or the easygoing. A book is the sort of present that gives the opportunity to show that you put an immense amount of thought into making just the right selection — without having to spend a lot of money to make the point.

Boat Books, of Crows Nest, has the greatest concentration of nothing but books about boating in this hemisphere. John Ivemey, Boat Books proprietor and CYCA Member, has offered us a number of suggestions for Christmas shopping, choosing from among both new titles and old stand-bys.



Inflatable Boats by Cdr. Don Hubbart, USN (Ret.) (\$10.50*; paperback) is an excellent new primer on the increasingly populare inflatable boat, Cdr. Hubbard gives tips on what to look for in design and construction - and cautions against the 'cheapie' versions which often look terribly attractive as to price but which also may dissolve the first time you get them near petrol or oil hard to avoid sometimes. Low-priced inflatables are so often a disappointing investment if your time frame is more than two years or so. A good book for the intending purchaser, or even the owner who was disappointed with the instructions that came with his own inflatable.

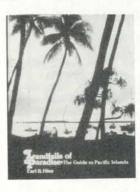


The Calculator Afloat by Capt. H. Shufeldt, USNR (Ret.) and K. Newcomer (\$23.75*; cloth) is another of the growing number of books on using electronic calculators to solve navigation problems. This one begins with a lucid review of the basic trigonometry employed in navigation problems, and then goes on in step-by-step fashion to give formulae and methods for solving problems ranging from inshore navigation to celestial. It is remarkably clearly written, having the marks of both naval discipline and mathematical competence in its presentation without the verbal obfuscation that

often accompanies both. It contains a host of useful formulae and practical examples of solutions and calculator keystrokes (both for algebraic and Reverse Polish Notation calculators). The book falls short of actually telling you how to write a program, should you have a programmable machine, perhaps leaving just a bit of the mental exercise to the reader.



Down Below by Matthew Walker (\$22.95*; cloth) is for the man or woman who really has an appreciation of (and a yen for) doing things to the 'nth' degree. It is a 'Belle' or a 'Vogue Living' afloat, glimpse of how the most luxurious yachts in the world are appointed down below. A visual orgasm of wood, brass, cabins, galleys, state rooms, skillfully photographed and elegantly presented.



Landfalls of Paradise: The Guide to the Pacific Islands by Earl Hinz (\$36.00*; cloth) covers 33 island groups of the Pacific including Polynesia, Melanesia, Micronesia and Oceania, with photographs, charts and information on ports of entry. Obviously only one who has vast experience in this area could comment with authority on how thorough or accurate this volume is and, considering its breadth of purview, how upto-date it might be. Irrespective of that, it provides a wealth of information about the Pacific Islands and would be at the very least a valuable introduction for the intending cruiser. It gives details of local requirements for customs clearance, pratique, medical tips, weather, radio communications, facilities, etc. A book for winter dreaming?

Cruising the New South Wales Coast by Alan Lucas (\$17.95*; cloth) is an old stand-by that is due out in a new edition before Christmas. Lucas' books on Australian coastal cruising are basic to the small ship's library, and this new edition would make an excellent gift, especially for the man or woman who is planning his or her first coastal volyage at Christmastime.



The Complete Yachtsman's Handbook to the Whitsunday Passage by David Colfelt and David Bradley (\$16.95*; paperback) sold out three months after its launching in March this year, and a second printing is now available - the ideal gift for anyone who has not yet experienced Australia's finest cruising grounds, the Whitsunday Islands. This book is a must for anyone visiting the area and is the most authoritative volume on the area; it incorporates some sixty detailed sketch maps of anchorages, and has in-depth information on avoiding tropical dangers, local services, techniques for coral cruising, anchoring etc. 264 pages of maps, photographs, illustrations and pertinent text.



The American Practical Navigator, Bowditch (Vol. 1, \$19.95*; Vol. 2, \$10.25*; cloth) is a bible of navigation and a gift that will be valued for a lifetime. It has a remarkably clear style, and this two-volume set covers everything to do with the subject of navigation and pilottage. It has a depth of authority on a wide range of topics rarely found under one cover. Charts, tides, weather, oceanography, coastal and celestial navigation, compasses, electronic navigation systems and much more are covered in detail, and Volume 2 contains a host of tables and detailed discussion of solutions of navigation problems. A fundamental (and readable) reference work on navigation.

This is Rough Weather Cruising by Eroll Bruce (\$22.95*; cloth) is a relatively new (1980) candidate for the list of 'classic' books on seamanship. It is unusually well presented, with attractive and clear colour illustrations and photographs, and it displays a very pithy style of a very experienced offshore sailor. Although only 136 pages, there is more 'good oil' between its covers than found in volumes three times the size. A truly excellent book.

Offshore Signals

For the racing man, The Rules Book by Eric Twiname (\$11.50*) is AYF recommended and makes the yacht racing rules comprehensible to the ordinary man in the cockpit. This is the 'classic' explanation of the



Sailing, a Sailor's Dictionary by Henry Beard and Roy McKie (\$6.95*; paperback) is possibly the funniest sailing book since Sod's Law of the Sea and is remarkable perhaps because one usually associates clever humour with the Brits rather than the Yanks. This book has been written by Yanks, which explains some of the different terminology one encounters in reading it (e.g. 'flashlight' instead of 'torch'). Sailing is a series of humourous/ironic sailing 'definitions', undoubtedly inspired by that devil of a dictionary writer. Ambrose Bierse, who for those unfamiliar, described (approximately) a violin as 'a torture device designed to inflict excruciating pain on the ear by dragging the rear end of a horse over the entrails of a cat'. To wit:

Course: The direction in which a skipper wishes to steer his boat and from which the wind is blowing.

Flashlight: Tubular metal container used on shipboard for storing dead batteries prior to their disposal.

Propellor: Underwater winch designed to wind up at high speed any lines or painters left hanging over the stern.

Lazaret: Although by no means all, or even a majority, of sailboat owners are superstitious, by longtime custom a small shrine called a lazaret is maintained in the stern of most sailboats. It is basically a locker, with a watertight cover, and it contains what might be best described as an amulet or 'juju'. This consists of a barbecue grill (representing harvest and the hunt) securely wrapped in 20 to 30 feet of depth-sounding small anchor (a symbol of peaceful anchorages). Exact practice varies from boat to hoat but snorkels and face masks (representing the recreational aspects of the seal are sometimes jammed into the barbecue grill, a plastic bucket and a mop (symbolizing cleanliness) are tied to the anchor, and a lantern with a dead battery (a reminder of the cruelty of fate) is placed in the bucket.

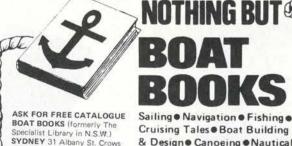
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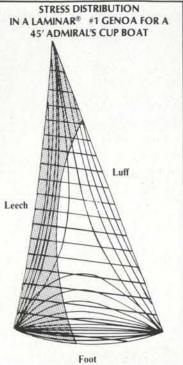
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same basic technology works here too. We put extra fabric only where the stress demands. The Hood Crescent-Cut main is the lightest possible with a leech that sets easily and doesn't require a lot of adjustment.

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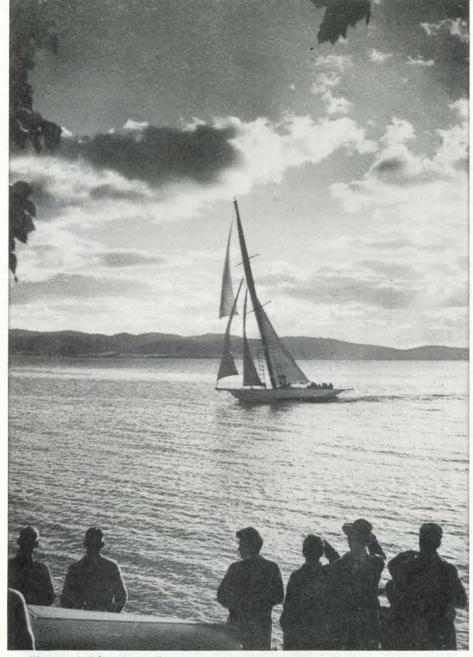
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THE RON ROBERTSON MEMORIAL RACE

by Hilary Hansen



'Kurrewa IV' (nee 'Morna') finishing in Hobart in 1957 in the then record time of 3 days, 18 hours, 30 minutes, 39 seconds.

The Cruising Yacht Club deeded. The Ron Robertson Memorial Race after the tragic loss of one of Australia's most famous yachtsmen off Sydney Heads on 15th June 1958. Having heard several contradictory accounts of the incident, I have interviewed yachtsmen and others who were directly involved and have endeavoured to relate, in broad terms, what in fact did occur on that fateful day, together with other background information.

About 2.30 p.m. on Sunday, 15th June 1958 the Maritime Services Board Pilot Cutter 'Captain Cook' put to sea to investigate a report of a yacht under bare poles in trouble off the Heads. Police launch 'Nemesis', standing by inside the Heads, watched her depart and saw her pass 'Kurrewa IV', inward bound under split mainsail only, in heavy weather. Sea spray swept the yacht's decks as she heeled over to the southerly wind; great waves lifted her up out of the troughs as they swept on beneath her, and thick sea mist filled the atmosphere markedly reducing visibility.

The weather was bad. Low storm clouds, rain squalls and hail driven by strong southerly winds had swept Sydney throughout the day. Wind velocity had increased to a top recorded gust of 72 knots about 2.00 p.m. — a hurricane on the Beaufort scale.

A crowd of interested people had gathered along the cliffs at Watsons Bay to watch the seas that the wind had generated — mountainous and breaking heavily in deep water, and most with the tops blown off creating thick spindrift. It was an awesome sight, the low fragmented cloud base, thick sea mist, and heavy rain squalls lay like a pall over the wild sea.

Against this background 'Kurrewa IV' presented a forlorn picture with the crew moving about on deck in wet weather gear, her torn mainsail flogging and her waterline submerged by the weight of water she had taken inboard.

Inside the Heads the crew spoke to 'Nemesis', reporting that they had sailed down from Pittwater and had lost their skipper, Ron Robertson, overboard about a mile and a half off North Head. A lifebuoy had been thrown to him and he was seen to grasp it but was lost from sight. They endeavoured to put about, but only with a mainsail set and in the wind and sea state prevailing, they were unable to do so. They then ran for the harbour to report the loss. Having done so they made their way to Watsons Bay where 'Kurrewa IV' was swung off the baths on a head line. Seeing this manoeuvre,



spectators had a presentiment which was shortly confirmed when 'Nemesis', experiencing considerable difficulty, put to sea.

Returning to Ron's loss for a moment, a crew member told me that they had completed the Bird Island Race in Pittwater on the Saturday, and were returning to Sydney on Sunday for slipping in preparation for the Sydney-Noumea Race. Some of the normal crew of 16 had left her in Pittwater, and she sailed for Sydney with a crew of about 10 including a 16-year-old lad.

She departed Pittwater under stay-sail and full main in a strong southerly wind and high seas. Sailing comforably she reached a position south of Long Reef where the staysail blew out as the weather rapidly deteriorated. Stowing the staysail someone-remarked, "What about sheltering in Manly?" Ron replied, as he took over the tiller, "She is sailing all right. We might as well go on into Sydney."

Being very cold and wet on deck, all the crew, with the exception of Ron and two other men, went below. She continued to sail well in the troughs and through or over the seas which by now had become mountainous. Green water taken over the bows caused no problem as it swept the deck and cleared overboard to leeward or aft.

Reaching a position about 1½ miles off the Heads Ron altered course for the run into Sydney Harbour. He was still on the tiller with another man in

the cockpit and a third man forward on the weather deck.

In heavy seas, with some of them breaking over her, efforts were made to ease the main sheet which was submergered most of the time. A danger in easing the sheet was the probbability of it taking over with the force exerted on it by the 80 ft-high mainsail. At that stage the lookout suddenly shouted, "Hang on." A very bad sea hit her amidships and broke over her, swamping the cockpit and apparently broke Ron's hold on the tiller, lifting him overboard.

He was seen nearby and was thrown a lifebuoy which he got into. The crew was called on deck. Ron's brother Doug took the tiller, one man told to keep Ron in sight and an attempt made to put about. The attempt ended in failure, as did repeated efforts, because she had no headsail up and wouldn't come into the wind without one. Gybing was out of the question because of insufficient crew members to man the main sheet and the two sets of Highfield levers to complete the manoeuvre. Had this been attempted in the prevailing conditions she would have been dismasted and, not having sufficient auxiliary power to be handled, would probably have been driven ashore. The decision was then made to go into harbour for assistance.

To continue the narrative of that fateful day, 'Nemesis' made a determined effort to clear the Heads and was finally forced to return with more sea water in her bilges than the pumps could contain.

Arrangements were then made for shipping to be warned and a request for the services of 'Captain Cook' to conduct a search. This was agreed to, and the pilot cutter put to sea where she carried out a search in an area indicated to her, without result. The master of the cutter told me the sea was confused and mountainous, with long periods of successive waves at least 30 ft. in height. As she rolled into the seas, the boarding boats, swung out on the davits, dipped into the waves scooping water into the boats with a danger of them carrying away.

The Australian flag tanker, William G. Walkeley', 12,600 tons gross, was lying off the Heads from 2.45 p.m. where she kept a lookout for Robertson until she later entered. Whilst on the

leads, the writer saw one large wave strike her port quarter causing heavy spray to be driven over her aft superstructure and funnel.

'Nemesis' made two further attempts to put to sea but was unable to do so because of the heavy buffeting she received. Further attempts were made to obtain assistance from all possible sources, but there was not one launch in Sydney Harbour or Pittwater capable of putting to sea at that time. Arrangements were then made for Police to maintain a watch to seaward from vantage points north of the Heads and to search all norther beaches.

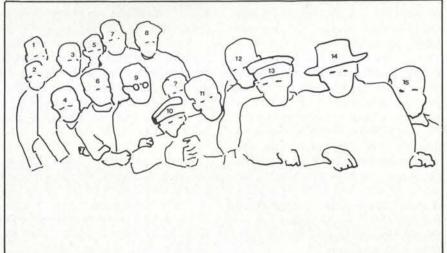
With the weather abating overnight, a full search was carried out by launches and service aircraft the following day, but no trace was ever found of Ron Robertson.

The storm experienced on this occasion is fortunately a rarity on this coast. Past records reveal that storms generating waves such as these occur about once every five years. Lesser cyclonic distrubances generating wave heights of up to 20 feet occur about every six months. At Sydney, the directions of strong winds and high seas associated with these storms vary between east-south east and south.

The circumstances surrounding the loss of Ronald Robertson prompted the NSW Police Department to order the building of launch 'Colin John Delaney', a 45 ft. chine-built timber rescue craft, the first of a number of sea-going search-and-rescue launches now operated by the Department along the coast of New South Wales. Launch 'Nemesis III', which took part in this incident, was 38 ft. in length, designed and built by Lars Halvorsen Pty. Ltd. in 1941. She served as an RAAF Crash Boat during the war, was purchased by the Police Department in 1947 and finally sold to private buyers in 1965.

Well known, well liked and always in demand as a crew member in yachting circles, Ronald was born in Hobart, Tasmania in 1904. He was one of seven children, five boys and two girls, and was the twin brother of Donald. Another brother, Archie, was reserve skipper on 'Gretel' in Australia's first challenge for the America's Cup. They commenced their sailing careers as boys on the Derwent River on board 'Rondon', a 45 ft. cutter jointly owned by their father, Ron, and uncle Don. The boys received their schooling





The crew in Hobart: (1) Robert Maidment (2) Scott MacBeth (3) Henry Gunson (4) Fred Thomas (5) Doug Robertson (6) Bob Wallace (7) Jim, Biddlecombe (8) Neil Shannon (9) Frank Walker-Smith (10) John Livingston (11) Rubber Kellaway (12) David Halliday (13) Frank Livingston (14) Ron Robertson (15) Grahame Wright. (The chap with a ?' on his head couldn't be identified before going to press; can someone help us out? — Ed.)

at Hutchins School, Hobart, and later sailed 'Rondon' to Sydney where, in 1925, Ron joined the Accounts Section of AGL Coy. and remained in their employment until his death.

At the outbreak of war in 1939 he joined the Army Water Transport, was promoted to the rank of sergeant and served for a time in northern Australian waters in command of 'Tarni', a 55 ft. yawl. After the war she was purchased by Messrs. F. & J. Livingston and renamed 'Kurrewa III', entering in four of the early Sydney-Hobart Yacht Races with Ron on board taking a watch.

In 1954 the Livingston brothers purchased 'Morna', a 64 ft. cutter, renamed her 'Kurrewa IV' and entered her in six Sydney-Hobart Yacht Races

from 1954 till 1960, achieving fastest time in four of these races.

'Kurrewa IV' ex 'Morna' was built by Morrison and Sinclair, Boatbuilders, of Balmain in 1913 to the order of Sir Alexander Duncan McCormack, surgeon. After several owners she was purchased by Sir Claude Plowman, radio manufacturer, who entered her in the 1946-47-48 Sydney-Hobart Yacht Races, achieving fastest time in each race. She is now owned by Mr. J.L.G. Bisley of the Royal Sydney Yacht Squadron and has reverted to her original name 'Morna'.

Until his loss in 1958, Ron crewed in each of the thirteen Sydney-Hobart Races conducted since the 1945 inaugural race. He was regarded by his contemporaries as a 'bluewater man' in

the days when ocean yacht racing was the domain of only a few yachtsmen.

The weather conditions and circumstances surrounding the tragic loss of Ronald prompted the Cruising Yacht Club to examine its safety rules for offshore racing, which resulted in the introduction of stringent safety requirements for yachts participating in ocean races. With this thought in mind an interesting comparison may be made with any, or all, of the hundreds of offshore races conducted under the auspices of the Australian Yachting Federation and the recent 1979 Fastnet Race which ended with disastrous results.

On Thursday, 26th June 1958 a Memorial Service was conducted by the Reverend Clive Goodwin at St. Marks Church, Darling Point to honour Ron's passing away. His sailing hat was placed near the altar surrounded by floral tributes. The crowd attending was such that all the pews were full, the aisles were packed with standing people and a further crowd gathered outside the church where they were able to follow the service by means of especially installed loud speakers.

Shortly after, the Cruising Yacht Club Committee considered that it was appropriate to initiate the Ron Robertson Memorial Yacht Race, the first of which was held in December 1959.

'Kurrewa IV', viewed with admiration on the harbour for years, invariably taking line honours in offshore and harbour races, weathering all conditions, crewed by blue watemen, the envy of many — and yet one of her top crewmen lost, a tragedy!

Ron's love of sailing, skill, years of experience and popularity, coupled with the circumstances of being lost just off Sydney Heads, still provides a topic of conversation in yachting circles. The sea state viewed from the cliffs at Watsons Bay on that day filled the onlookers with awe. Looking this bad from ashore what must it have been like afloat? Can a sea become more menancing and destructive than this? How can Sydney Heads, which opens up the beautiful harbour for which so much affection is felt, change into such a scene of awesome finality? There is only one answer to this

Letter in Sydney Morning Herald 30th June 1958.

'Recently in the press and on radio, the Port Jackson Pilot Service has been subject to unjust attacks, and we would appreciate the opportunity to inform the public of the circumstances which, in fact, prevailed on that fateful day, Sunday 15th June 1958.

First, the unfortunate yachtsman who was lost overboard from 'Kurrewa IV' had a good chance of being found had available vessels then in the vicinity been promptly informed. This was not done, although we understand that 'Kurrewa' was fitted with 2-way wireless and also carried an Aldis lamp and a Verey pistol.

The vessels in the vicinity at the time of the accident were:

 'Captain Cook,' proceeding to sea to investigate a yacht off North Head under bare poles. (This yacht was later found to be proceeding under power).

2. The ocean-going tug 'Woona,' returning from Botany Bay.

 Two ocean-going tugs in West Channel. All three tugs were fitted with radiotelephone.
 Pointed Towards the Yacht

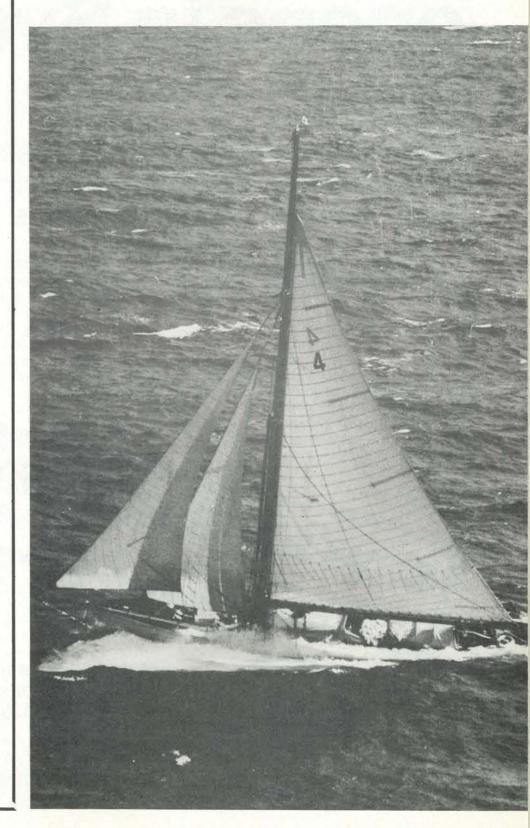
At 2.36 p.m. the 'Captain Cook' received a message to proceed to sea to investigate the vacht off North Head, and whilst proceeding through the Heads 'Captain Cook' passed the yacht 'Kurrewa,' and those on board the yacht pointed in the direction of the yacht which had bare poles. 'Captain Cook' went to this yacht and found she did not require assistance. On the return journey to The Heads, 'Captain Cook' received a message that the 'Kurrewa' had lost a man overboard five minutes earlier. The 'Captain Cook' immediately went to and searched the area where the 'Kurrewa' would have been at the time indicated. The 'Kurrewa' had not remained to pinpoint the position, and it was not until much later that the men on 'Captain Cook' heard that the accident had actually happended 11/2 miles off North Head, and that the yachtsman was wearing a Mae West lifejacket which would probably cause him to be carried along with the sea.

The 'Captain Cook' is a pilot vessel and has successfully served the port for 20 years, and has never failed to attend a vessel or go to sea when required.

T. Martin, Gen. Sec. Merchant Service Guild of Aust., Sydney. question: it is the sea.

Some 22 years after that fateful day a pertinent observation was made in the report of the formal inquiry into the disastrous '79 Fastnet Race, conducted by the Royal Yachting Assoc-

iation and the Royal Ocean Racing Club: "Those who go to sea for pleasure must do so in the full knowledge that they may encounter dangers of the highest order."



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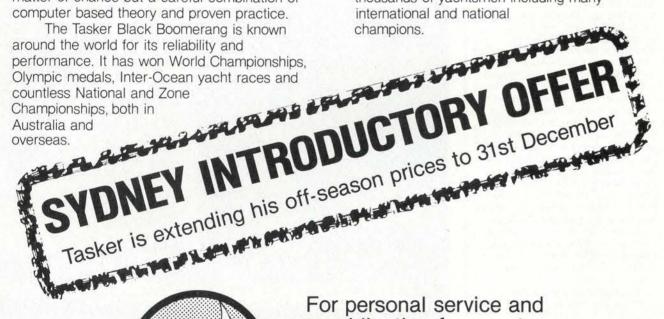
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BIGGLES' COLUMN

Minimum maxis

From having reasonable expectations of five overseas maxis in town for the December regattas we are now down to one - if Bob Bell brings 'Condor of Bermuda' over from New Zealnd after her refit. Events in Sardinia have thinned the ranks of top maxis; 'Condor 2,' which already had enough problems to put her passage to Australia in doubt, dropped her mast over the side the day before the World Cup series started off Porto Cervo. This not only ended her World Cup campaign; it also resolved any uncertainties about her next move. tulations fellas, well sailed. It's back to the builder's yard.

A similar fate stalked the new SORC Score Ondine, which also experienced shake- Events arising out of the rating scandal down problems. A lifting keel design from the board of controversial U.S. designer, Dr. Jerry Milgram, she is a great looking boat in traditional 'Ondine' blue, but she did not perform well at all. Huey Long is sending her back to the mitted that, amongst other things, yard for alterations.

Our own flag carrier Bumblebee 4' was outclassed by an all-power 'Kialoa,' and despite a new keel, the 'Bee' was The word is that John Kahlbetzer now plans to sell the 'Bee,' and as the secondhand maxi market in Australia has never been exactly buoyant, she will stay

above left him without competition in Australia, so he reluctantly cancelled 'Kialoa's' trip to Australia this year.

'Kialoa' looks every inch a World Maxi Champion, Beautifully built and prepared for racing, her sail inventory looks superb, her crew work is immaculate, and the manner in which she charged around the track at Porto Cervo leaves little doubt that 'Condor 2,' 'Ondine' and the other new maxis will have a long haul ahead of them to knock her off her perch, even though 'Condor 2' has the boat speed to match

Also in Sardinia, the full committee of the International Class A Yacht Association voted against Sydney as a World Maxi Cup venue for 1983. The European members of the Association freaked out at the passage distances involved in getting their boats here, despite strong support for the move by Jim Kilroy and other American members of ICAYA. Content to play in its own back yard, the ICAYA again opted for Nassau and Sardinia as World Cup arenas, and it saddens me to think that, while European members dominate the ICAYA, it may be some time before we see the magnificent maxi duelling off Sydney Heads as part of their world championship.

Duelling off Marblehead (Massachusetts) is still on, though, and at the World Etchell's Championship the Australian flag flew proudly enough through the efforts of Pod O'Donnell (second), John Savage (thirteenth), and the CYCA's own Peter Hankin (sixteenth). Congra-

at the 1981 SORC appear to have run their course with the disqualification for two years of 'Williwaw's' owner Seymour Sinett. At the USYRU enquiry Williwaws' lead hand, Harvey Ward, adhe had surreptitiously run water into the bilge just prior to measurement, which helped to slice over a foot from the true rating. Shock and horror are being outpointed handily to weather. registered on the faces of all, but before you pour scorn on those sneaky Yanks you might reflect on the fact of an Australian boat which came up for remeasurement by a new owner and was overseas. Jim Kilroy felt that all of the found to have 500 lbs less of internal

lead ballast than appeared on the rating certificate. The yacht had competed in the Australia Admiral's Cup Trials too. but to save me being threatened with vet another libel action, I won't say which year.

Getting back to the Williwaw case. the measurer involved is a highly respected man in the USA, and although no collusion on his part has been suggested, it seems that his premeasurement inspection must have been pretty cursory. A ton of water in the bilge of a modern IOR racer would be fairly obvious to say the least - in fact, you would have to be nearly ankle deep in it. A few years ago I watched an Australian-crewed boat being measured in Lymington. The mast was cranked so far forward it had noticeable reverse rake, yet that, and a few other little tricks which would never have been allowed in Australia, was then quite acceptable in the U.K.

Australian measurers, it is claimed, are stricter than most to the degree that it is common practice for Australian boats to be re-measured overseas prior to an international event in the hope that a rating improvement will be gained. If that is really the case, then the two years suspension of Seymour Sinett is rather pointless. The IYRU should take a close look at the whole system of yacht measurement and give it a good solid kick in the transom.

However, it is all too technical for my puny brain. Space-age engineering is all very well at work, but sailing is supposed to be fun, and here we all are buried to the armpits in higher technology when what we really need is lower technology. You only have to look at the latest developments amongst Admiral's Cuppers or the new maxis to appreciate the extent to which yacht designers have gone. Synthetic composite hull materials, carbon fibre reinforced spars, mylar/keylar sandwich sailcloth are all a fact of yachting life, not just a figment of a designers imagination.

"Where will it all end?" I ask. "Shut up, I'm trying to get to sleep,"

she snarled. Stifling a whimper, I retired to the spare room with a copy of the IOR handbook. Flipping through the pages in the hope that some of the simpler mathematical formulae contained therein might at last begin to make sense; I reflected that what we need most in yachting is a reversal of



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Biggles

technological proliferation. (How do you like them apples, Editor? Who said I wouldn't know syntax from covering

Inspired by one yacht designer's personal account of how he got his best inspirations from watching soap floating around his bathtub, I have decided to form the Offshore Untechnical Committee to examine methods of limiting. or completely doing away with, higher technology in sailing. For instance, we could do away with bendy masts. No more exhaustive trimming to get the top batten parallel with the boom, only to find the bottom of the sail looking like a potato sack full of angry Irish wolfhounds.

The mast would have to be rigid, probably some sort of electric light pole would do the trick, and you could nail the sail to it, putting an end to any arguments about luff tension and the like. Mechanical winches would be banned (back to the handy billy for sail trim), which would make tacking a should write to the Editor, but don't maxi mighty interesting. Instead of a use my name; it tends to upset his ulcer.

tailer and four gorillas on cross-linked coffee grinders, you would have to have a tug-o-war team of say, thirty. You'd have to reserve seats on the weather

I can visualise publication of the Offshore Untechnical Committee Handbook (OUCH) which would lay down the ethics of measurement (something new) and the limit to which you could cheat. Instead of the debacle which followed the SORC rating scandal, the OUCH would detail a random checking procedure for major events called the Remeasurement and Punishment Exercise (RAPE), and just to keep everyone honest, we could remeasure the whole fleet at the end of each season. This would be done by the Standards Committee for Re-measurement Every Winter (SCREW). Of course, if you had already been RAPEd, you would not have to worry about being SCREWed.

Any readers who have suggestions for the Offshore Untechnical Committee

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WITH KEELTY WITH KEELTY

by John Keelty

Eutectic Refrigeration

(or "What's for dinner tonight, Lucricia?) How many times do we see advertised 'eutectic refrigeration for yachts or cruisers', or hear people talking about their 'eutectic systems' and how great they are, and how much truth is there in these statements?

Well, if you do have a eutectic system installed, and if it is proper eutectic refrigeration, it is great. It is the best equipment available to do the job. But have you actually bought a eutectic system? Or is it something else? If so, what?

Unfortunately there are very few properly-designed eutectic refrigeration systems around, and for every properly-designed system, there are dozens of incorrectly-designed brine systems being installed and passed of as eutectic systems. So let us briefly examine the subject of eutectic refrigeration, what it is, what it does and, for those of you who may think you have it now, let's see what you do have after we've looked at it more closely.

Refrigeration, one must remember, is simply the transfer of heat from one area to another. What a domestic refrigerator or freezer takes 18 hours or so to achieve, a properly-designed eutectic system will do in approximately one hour, sometimes even less. This is achieved using modern techniques and top-quality commercial refrigeration equipment, and by this I mean top quality, not car air conditioning equipment adapted for the purpose.

In this issue we will discuss freezers and the advantages of using a marine eutectic system over any other form of refrigeration.

Now, the whole idea behind food preservation by refrigeration is lowering the product temperature to a point where the rate of growth of bacteria will be slowed sufficiently for the food to be kept safe and edible for the time we require. (See diagram.) As can be seen in the diagram, food, if it is to be kept for any material period of time, must have the benefit of a eutectic system.

"Rubbish!" you say. All right, let's examine the subject closely.

It should be pointed out at the start that in order to keep the temperature of a freezer compartment at 'x' temperature, the freezer plates must be an average temperature of 'x-100'. If the significance of this is not obvious from the diagram, it will be clearer after the discussion of 'hold-over capacity' below.

Hold-Over Capacity

Why use eutectic plates for hold-over? Why not some other form of brine solution, such as methylated spirits (alcohol) and water, or alveol etc ? The reason is simply because these additives are used to prevent the tank or plate from freezing, and if they are not correctly mixed, or if they are mixed in proportions that permit them to actually start to freeze, they will form a slush ice which cannot maintain a uniform temperature level during its freezing and melting periods, resulting in the formation of layers of varying concentrations. This will eventually lead to more-or-less permanent precipitation of any solids and will result in a complete decomposition of the brine.

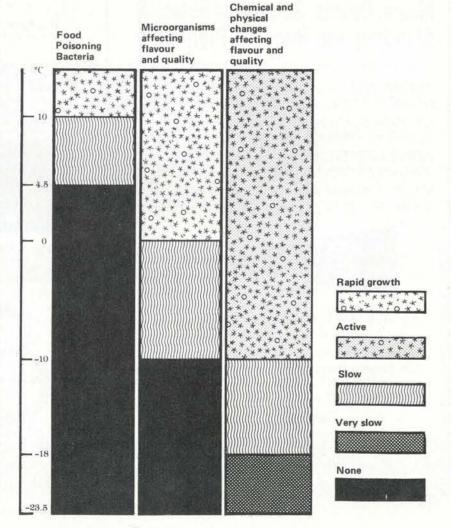
This is, however, not the case with eutectic solutions (cryohydrates). The word eutectic means 'well interwoven', and a eutectic solution is one which will retain uniform composition at all temperatures in either its liquid or its solid state; in other words, a eutectic solution is designed to the job.

Let's look at the case of two freezers with identical tanks, one with a eutectic solution, the other with metho and water, both holding, say, two gallons. For this explanation an understanding of 'latent heat' is required.

Latent Heat, and its Significance

Latent heat, or 'hidden' heat, is the amount of heat required to cause a change of state without a change of temperature, and it occurs when a liquid, say, water, changes state from water to ice or water to steam. It occurs in most products, including food, which has a most important bearing later. Latent heat is measured in British Thermal Units, or BTUs, one BTU being the amount of heat that is required to raise or lower the temperature of one pound of water by 1 degree Fahrenheit. (I am speaking in the old imperial system at this stage, as things get slightly out of hand when we go metric; however, I shall give dual temperature

Diagram. Biological activity at different storage temperatures.



scales.) The formula for calculating BTU capacity is:

weight (wt) x temperature difference x specific heat = BTU capacity.

As the specific heat of water is 1, we will neglect it in this explanation, leaving us with

wt x td = BTU.

So, if we take one gallon of water at 42° and freeze it at 32°F, we have:

wt = 10 lb water (1 gallon)

td from 420 to 320 = 100

therefore.

(1) 10 x 10 = 100 BTU

But, as the latent heat value of water is 144, to change the state of the water from a liquid to a solid (ice) will take 144 times as much heat.

So

(2) 10 (wt) x 144 (latent heat) = 1440 BTU.

Total BTU capacity is:

(2) + (2); 100 + 1440 = 1540 BTU

which is why a block of ice is so effective as a cooling medium.

Brine Vs. Eutectic

Now, back to our two identical tanks. As we are examining a freezer, it, as such, should maintain a temperature of -18°C (0°F) to keep the food in good condition, and it should not permit temperature to rise above -12°C (10F). Let's look at the hold-over of the plate (disregarding the effect of frozen food) to compare.

Recommended times in the ho	maximum stora me freezer.	ge
Product	Expected storage life	Recom

	at -16 C	in the home freezer at -18°C
Bacon (unsmoked)	2-4 months	2 months
Bacon (smoked)	2-3 months	1-2 months
Beef	10-12 months	
Bread, baked Bread, unbaked,	2-3 months	2 months
unrisen dough	3-4 months	2 months
Chicken	1 year	6 months
Concentrated fruit juices	2 years	6 months
Cooked, spiced dishes	3-4 months	2 months
Crab	6 months	3 months
Crayfish	6 months	3 months
Fish	8 months	3-4 months
French fried potatoes	2 years	6 months
Fruit	12-18 months	6 months
Green vegetables	15 months	6 months
Ham (smoked)	2-3 months	1-2 months
Ice Cream	6 months	2 months
Lamb	10-12 months	6 months
Pies, fruit, baked	3-4 months	3 months
Pies, fruit, unbaked Pies, meat,	8-12 months	6 months
baked or unbaked	4-6 months	4 months
Pork	6 months	3 months
Prawns	6-8 months	3 months
Turkey	1 year	6 months
Veal	9 months	6 months

Brine

2 gallon of water and metho at 10 lb/gal. = 20 lb. (wt).

temp. diff. + 10° F to -20 F = 30° F (td)

The formula

wt x td = BTU

20 x 30 = 600 BTU,

the holding capacity of brine,

Eutectic

2 gallons of -10° F eutectic at 12 lb/ga. = 24 lb. (wt)

temp. diff. + 10° F to freezing point -10°F = 20° F (td)

24 x 20 = 480 BTU

plus the latent heat of freezing, where the latent heat value of eutectic is 122 BTU/lb

24 x 122 = 2928 BTU

plus the temp. drop to -20° F:

24 x 10 = 240 BTU.

Add these together and we have: 480 + 2928 + 240 = 3648 BTU, the holding capacity of the eutectic — six times that of method/water brine.

Now, as can be clearly seen, unless the solution actually freezes, there is very little hold-over available, and unless a proper eutectic solution is used, only approximately 1/6 of the capacity can be obtained. Therefore the brine tank relies heavily upon the product keeping itself refrigerated, that is, the food keeps freezing, then semi-thawing, freezing, and so on, which leads to a very quick deterioration of the food — unless we increase the capacity of the metho-and-water tank.

The average freezer contains four gallons of eutectic. To have the same capacity with brine, we have to have 4 gal. x 6 gal. = 24 gal., or 240 lb weight, of the brine; without this we cannot achieve our object, a 'freezer'. Although brine tanks may pass for a fridge, they are totally unacceptable as far as holdover freezers are concerned. I certainly would not eat anything out of one after three weeks.

Eutectic Plates

Now, how do we tell whether we have eutectic plates or not? A eutectic plate or tank is usually constructed completely of copper. And it is designed to freeze. It is quite robustly made, having internal baffles in the form of spacer fins. It is fully silversoldered, and after the solution is added, allowing enough room for the expansion to occur when the change of state takes place, a vacuum is drawn on it, and whilst under this vacuum, it is silver-doldered closed. Thus, when the plate freezes and thaws the pressure remains neutral and no air enters the plate and, in turn, no water from the atmosphere in the form of condensation is allowed to enter into the plate,

If the plate is copper, which is the best material because of its excellent heat transfer properties, one will not experience the problems usually found with plates made from dissimilar metals, such as different rates of expansion and contraction, metal fatigue, etc. This is especially important where the refrigerant lines enter and leave the plate. After construction the plate is normally tinned, not only to comply with the pure foods act and to eliminate food contamination, but also to seal the surfaces and eliminate corrosion.

The use of eutectics at their various freezing points allows us to design freezers —24°C, or refrigerators —7°C, within the same system. And by actually changing their state, we can move massive amounts of heat in very short periods, thus achieving results which, when they are first encountered, can leave one amazed.

So what is the answer to our first questtion? Do you have a eutectic system, or a
brine system? Are you allowing the freezer
to cool the food, or is the food cooling the
freezer? And if it is, on your next long
voyage, you may be asking "What's for
dinner tonight, Lucricia?"



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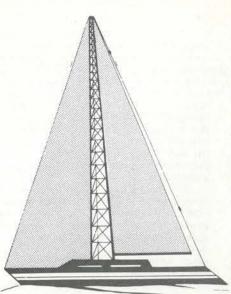
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RADIO SKED

by Bill White

a regular appointment with radio specialist, Bill White

Although not a new concept (having been with us since 1967) the U.S. Navy's 'TRAN-SIT' Satellite Navigation System is enjoying a boom in popularity amongst the smaller craft owners. The low-cost availability of the silicon chip microprocessor has resulted in a welcome and dramatic reduction of both the size and price of the shipboard hardware necesssary to utilize the service, fundamentally consists of an ultra high frequency (UHF) receiver and a microprocessor, combined to receive and interpret data transmissions from a network of up to six satellites in transpolar orbits about 1.000 km above our earth's surface. As these devices spin around our planet at 71/2 kilometres per second, they transmit data every 30 seconds indicating their positions (accurate to five metres). Orbit parameters and numbers, identification, and time syncronization information is also transmitted.

This data is updated twice a day by 'injection' of up-to-date message data derived from ground tracking stations and is processed by a computing centre at Point Magu on the US west coast. The satellites also transmit a continuous tone to enable monitoring receivers to distinguish them from the estimated 4,000 man-made contraptions still orbiting in this most expensive junkyard.

As the satellite orbits are essentially fixed in longitudal planes with the earth rotating within, we are, for any given point on earth, exposed to each satellite (five at present time) at least once each day. At either of the polar regions we would be overpassed by one on an average of every 21½ minutes. At the equator this interval

would average up to two hours.

The determination of geographic position is made as follows. As the satellite appears above the horizon, the receiver locks onto the transmitted radio signal and awaits the data which indicates its exact position. Simultaneously the Doppler shift in frequency from the assigned channel of 499.968 MHz is accurately noted. If the apparent frequency is higher (as it would be) the satellite is moving towards you at a rate of:

Speed (km per sec) = apparent freq (MHz) — assigned freq MHz) 0.002666

As the satellite crosses the latitude of the SATNAV receiver, the relative speed between the two points will be zero, and no Doppler shift would exist. This information, coupled with the known position of the satellite every thirty seconds for, say, a five-minute pass, leaves you with only a complex trigonometrical calculation to determine your own position.

Even though the dedicated microprocessor of the SATNAV is capable of executing approximately 1,000 basic arithmetic functions per second, it may take one or two minutes to compute your position, such is the complexity of the calculation. Such a calculation would include compensation for speed and heading of the vessel if it was in motion during the fixes.

The resultant answer is accurate typically to 0.05 nautical miles though such influences as ionospherical 'bending' of the signal, or inaccurate aquisition of the vessel's heading or speed, will degrade the accuracy to 0.25 mp per knot of error in speed (or equivalent heading error). Even so, it beats an Admiralty Chart and set of darts every time.

Between fixes the navigator will continuously update your dead-reckoned position based on heading and speed information, either entered manually or derived automatically from peripheral sensors. Tell the Navigator your destination in Lat. and Long. and it will inform you of the distance in nautical miles to run, the course to steer, and the time to run (based on your present speed) for either Rhumb Line or Great

The Navy Navigation Satellite System (NNSS), also called the TRANSIT system, consists of up to six satellites in polar orbits circling the earth. Each satellite continuously transmits a message consisting of its own orbital data and predicted orbital motion on two highly-stable carrier frequencies of 150 MHz and 400 MHz. These carriers appear to shift frequency slightly as the satellite passes overhead. The receiver must remain 'locked' onto the satellite for a minimum 5-8 minutes for accuracy, and the longer it does the more accurate the fix is likely to be.

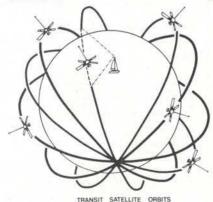
Circle course. The same applies for a number of waypoints on your course. If required it will also sound an alarm should you approach within a predetermined distance from any one of these locations.

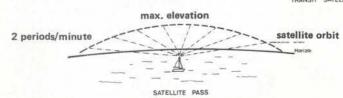
Before anyone reaches to throw their sextant and almanac over the leeward side. I hasten to add that these systems are not without a few minuses to be accounted for. Power Consumption. These 'beasties' can typically drain 1% to 2 amperes from your 12 volt system, and continuous operation for cruising yachts may present a problem. Fortunately the SATNAV can tell you in advance when a useable satellite pass may be expected, making it possible for you to switch the device on, say, twice a day, to obtain fixes without unecessarily burdening your electrical system. For general cruising this should be sufficient to enable you to avoid those nasty immovable objects.

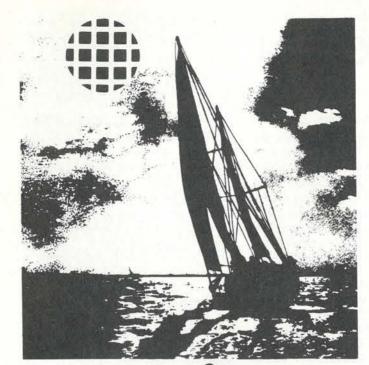
In the event of a momentary or temporary loss of power most makes incorporate some means of memory backup to ensure that you are not faced with a complete memory 'crash'. If the power cannot be restored, then, of course, the device will be as useful as the proverbial parachute in a submarine.

Radio Interference. All microprocessor equipment generates some degree of electrical interference. In some cases the effect on your SSB reception or even broadcast reception can be devastating. This can usually be almost totally eliminated by the efforts of a competant technician with lots of patience and time; just ensure that you don't have to foot the bill or the consequences!

Susceptability to Water Damage. Like much electronic gear the Satellite Navigator is not improved by dunking in salt water, so do not rely on it to function after your 360° roll. This fact is covered by one of Murphy's Laws which states that the only side of the instrument to be exposed to water will be the one with the ventillation holes in it. Corollary 1. to this law further states that the technician will behave like a demented spastic when you confront him with it.







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DIARY OF A MAD WOMAN

By Dianne Palmer

I take holidays to coincide with the finish of the Sydney-Noumea Race, buy a one-way air ticket to New Caledonia, determined to sail back. The yacht that would welcome me aboard is, as yet, undetermined.

After two days in Noumea my weak character causes me to be enticed to the east coast of the island, which enjoys a reputation of being particularly lush and tropical. This deviation results in a late return to Noumea and a much depleted sea-going fleet.

Oddie, appreciative of my plight (due in the main to his own instinctive lack of regard for the passage of time) organises an 11th-hour introduction to the crew of 'Double Bogey'.

Wednesday, June 10

After a few projected sailing times and dates are extended due to the unsavoury weather conditions 'out there', we finally depart Noumea for Sydney at 8.45 a.m. We're all full of optimism for a sun-drenched, spinnaker run home. Well, hopeful that at least part of the way will live up to the brochure image of sun-tanned bodies lying around on deck sipping cocktails, with the occasional lazy hauling in of another offering from the deep.

Day one sees us motor through Amedee reef (one of the few breaks in the reef that surrounds New Caledonia) about 11.45 a.m., and then we're at sea, and sailing. We wish each other bon chance for the voyage. There are five of us to share two watches - Robbie, Dave, Sue, Sharon and myself. Sue's father, Eric, our sixth crewmember is the navigator, a valiant 72-year-old. He stays below 'naving' and doesn't venture onto deck except for sextant sights. Because of his presence, Sharon and I keep our tops on and mind our language. For a while, at least.

First nights out are always a joy, and being woken every three hours to go on watch is a real pleasure. Particularly as I share the 'dawn patrol'. Glorious sun-rise. Steaming cups of coffee. Wot we paid our money for!

Thursday, June 11

Day two dawns as we'd dreamed. We set the spinnaker, have saltwater bucket showers on deck, much merriment . . . 'If nudity offends, avoid foredeck'. Dave cooks tuna rissoles for lunch. He is a great sailor — his cooking just another string to his bow. Palmer, (seemingly the lone groger) hits a few Heinekins and scotches. Dreamtime.

Late afternoon sees the wind strengthening considerably — an uncomfortable 20-25 knots from SW. Seas are lumpy and getting bigger by the time we make 6.00 p.m. radio sked as arranged with three other yachts that departed about same time as us. 'Buchaneer' (which set sail the afternoon prior to us) reports wind gusting to 35 knots and high seas. They're about 100 miles ahead. Not good news, but we're made of sturdy stuff and morale is high. Too rough to cook, so soup has to suffice for dinner.

We have a rotten night. Short, lumpy waves in between high swells.

Friday, June 12

Day three — Wake to pretty big seas. Asked if I've seen them this big: 'Yes, in Bass Strait'. Thank God for experience and the preparation it provides. We discover very quickly that Double Bogey is a 'thumper'. Very lively and makes horrific drumming noise rounding off a wave. Down below it's virtually impossible to sleep because of this continual 'thumping'.

On the helm (bloody tiller!!) — always a wheel in future — we learn to baby her over the most innocent-looking waves. Very difficult when the moon sinks about midnight and it's as dark as a negro's black mood.

Everyone tired and irritable, not helped by one of our able-bodied men taking to his bunk seasick, leaving four of us to take the three-hour-on-three-hour-off watch, two at a time. Wrestling with the helm about 3.00 a.m., in between, almost dropping into tired oblivion, I curse the boat and call her a slut, saying she bangs more than a brothel-keeper's cash register. The

thought appeals, and I laugh aloud quite hysterically. Restores my sense of humour — temporarily at least. Decide to rename her 'Double Bumper'. Later, I prefer Sharon's renaming — 'Aunty Jack': 'Rip your bloody arms out!'

Meanwhile, just surviving, i.e. life's simplest chores become a hardship. Living at a constant 45° angle is exhausting. To cook requires digging into the fridge, trying to keep ingredients on bench, lighting the bitch of a stove, which involves injections of meths followed by bike-pumping up of kero. We grow to hate it - but not when it works first-off and provides a hot, energising bowl of something or other. More often than not we settle for a cup of soup, as it's manageable and the easiest. I finally get so fed up with crawling round on hands and knees recovering food and utensils from the floor, and operate from a beach-towel placed on the floor against a bunk. It looks ludicrous and causes humour but it works.

Going to the head is a trip of its own. Turning on the sea-cocks as you bounce against bulk-heads, lurching to feet, trying to aim arse to sit on bowl, trying to remain seated on bowl, pumping out as the ship tosses you about with no regard, close sea-cocks. We wonder what the we're doing here.

Saturday, June 13

Day four — Radio sked last night confirms our other friends in same boat, so to speak. Foul weather all around. Our man recovers from his seasickness which in itself boosts morale. One hand more to take turn at the helm makes an incredible difference to the exhaustion factor of each of us.

The boat develops leaks here and there — nothing dramatic, but sufficient to make bunks and blankets slightly damp, plus when we come off watch our combined wet weather gear drips all over. Moods alternate from varying degrees of hysteria to despair.

Sunday, June 14

At last day five dawns, clear and with considerably calmer seas and moderate wind.

Tuesday, June 16

Day seven - One week at sea. We ask

our skipper to make an anniversary speech. He says grace. What happened to days five and

six? The considerably calmer seas and reduced wind were a false promise. Wind switched back to the monotonous SW we've had to endure all these bloody days. Only excitement provided by our being on a collision-course with a bloody huge tanker. Palmer was on the helm about 7.00 p.m. Sees starboard light of vessel on our port horizon. Pretty confident this indicates ship coming our way. Theory backed up by fact that lights become increasingly nearer. Alerts rest of crew. Quite a stir as only ship sighted was a yacht crossing our beam on first night out. They take compass bearings of ship and don't appear unduly concerned. Having been accused of panic-merchandising once before (issue escapes memory), Palmer asks what we're going to do about it: 'Ship is approaching rapidly'. The non-concern continues with wonderings aloud as to where the hell ship is coming from and where going. (There are no shipping lanes in our no-man's ocean.) Finally, to hell with my reputation, I screech: 'Someone else take the ing helm — you're all bloody insane!' At this point everyone seemed to agree and sprang into action. (Races are won on slower jibes.) They'd obviously picked us up on their radar as by this stage they'd slowed almost to a halt. Hmmm. . .

Yesterday was a real bummer. Hadn't slept and was totally stuffed. You can't just claim 'tired' and stay in your bunk. At 6.00 a.m. I was picked on for switching off the instruments instead of the nay, lights. In retaliation went off my face about the soup the 'pickee' had spilt all over the galley when he'd cooked up during the night. Burst into tears cursing all male sailors (and in particular, Oddie, for organising this ride). Realised I was verging on hysteria so took two of the seasickness pills which cause drowsiness. Calmed me down all right - woke about midday like a zombie. Was bad news for everyone else in the mood I couldn't shake off. Back to normal late afternoon. (No more pill-popping

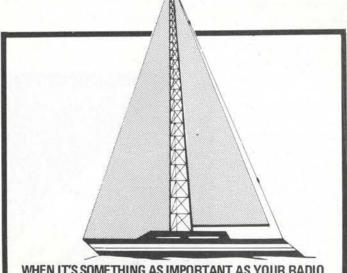
at sea for me.)

Wednesday, June 17

Now today (day eight) wind has switched to SE. and sun desperately trying to break through. We've decided to head for Coffs Harbour. Will take us another three days, at least, to get there and noone has the time (nor inclination) to risk further rotten days trying to get to Sydney. Robbie will try to get his partner to drive to Coffs and take boat back, leaving us the car. We'll have better idea late tomorrow what we're up to. Disappointing not to take her all the way back but enough is enough!

Today is the first SE. wind we've experienced and first time we've been able to reach since day two, with spinnaker. There was much morale boosting this morning with the wind switch. Last night saw my first rainbow by night — really amazing — never heard of such a thing. Dolphins provide a night excort — cavorting round our bow. Wonder where they are during the day.

(continued next page)



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QYC-0

Diary of a Mad Woman

Earlier, below cooking, I heard Dave on deck holler out for 'Mark'. Digest this with some confusion. There is no Mark on board. After a while it comes again . . . 'Mark!' I leave him to it - perhaps that's his way of calling for Ruth. Suddenly his head comes through the hatch and he tells the nav he thinks he can bring 'Nigel' down to the horizon. The nav seems particularly pleased with this snippet. I pretend non-concern but surreptitiously pour a hefty rum and coke. After a few large gulps he can bring Nigel to his knees for all I care. (Later, as we near the Australian coast, there's further proof of the pressures he's had to endure. Then he starts to call for 'Flash!' 'Where will it all end?' I ask myself.)

Thursday, June 18

Day nine. After much discussion we finally agree about 8.00 p.m. last night that we'll head on to Sydney. Forecast is all in our favour, and besides, everyone is in accord that a delivery isn't completed with true style unless final port is reached. Telegrams sent off to our various places of work. Am I still employed? It's a definite worry...

Nightmare! Nightmare! God knows where I left off — after the last 40 hours wonder if I'll ever have the heart to go back and finish this. Sitting at nav. table about 4.00 a.m. (on til 6.00 a.m.). Just pumped the bilge for the third time in an hour. Managed to make hot chocolate just then — first thing hot since yesterday morning — I think. It was really horrible but great just because it was warm. Can't use light as it wrecks the night-vision of the helmsman. The chocky was all guess work.

We've been falling off waves since this ing S-SW. hit late Friday night - just after sighting our first Australian lighthouse. Smokey Cape? Some home welcoming! The seas have been too rough and unpredictable for us girls to helm, except for the occasional day-light spell. The guys have been three-houring on and off alternatively. Eric, who normally doesn't venture on deck, also took a turn to spell them. He's fantastic. The only thing that relieves my misery is the sight of lighthouse looms, and now, the lights of towns. We're not far off Pt. Stevens - only 100 miles or so then to Sydney. The heads will never

have looked so good.

Down to my last set of dry clothing. Two slightly damp spencers under two ditto sweatshirts on top of two fairly soggy track-suit pants do nothing to help warm sockless feet. If I ever do it again — more socks. Have just changed the Coursemaster again. Wind variable and hard to find a manageable course.

Curses on my regularity. I eat like a wolf at sea so shouldn't wonder at it. But under these conditions was in tears trying to open cocks on which is firmly wedged the spinnaker bag — fat lot of good that colorful flyer has done us! — and which are under 8" of cold, cold water slopping about in the sail locker. That integral task achieved, the same horrific story of trying to get onto — and stay onto — loo seat.

Before this watch, resorted to sleeping on the cabin floor. It's the only place where I can wedge myself against something firm and the ugly banging as we fall off yet another wave, seems slightly less significant down there.

The guys have been great; in spite of the shit they're putting up with on deck they've maintained a sense of humour*throughout. Well, mostly.

Ships are a constant worry. Our nav. lights less than adequate because of screwed-up fixtures . . . or something.

Earlier last night on deck — briefly — a big greenie washed over us. Safety line saved me from any damage but as it swept me into the cockpit, grabbed for the nearest object which happened to be the tiller. Not really the thing to do under the circumstances. The torch and pee-bucket started floating away in the filled cockpit so I grabbed both and started bailing with the bucket. It was an automatic reaction. Dave on the helm, unimpressed by this sight, reassured me the cockpit was self-draining. Everyone knows that! But it sure seemed slow to empty at that moment.

The only other incident I might write up was bribing our seasick one with shortened helm-time for a night, in exchange for delving into the loo for the most basic of purposes, on the occasion when it broke down and he was feeling particularly ill. Loved him lying in his bunk whimpering 'Why me dear Lord? I've only been twice during the whole time and everyone else goes

six times a day.' Actually did it because my strong stomach has sometimes made me feel quilty. Like on the occasions when I've made an onion and garlic-salami sandwich when most others are wishing they could die. Even earlier this morning, at the height of the holocaust, I got stuck into the carcass of a fruit-cake. Guess it's my way of reacting to a highly stressful situation. In fact, now I think about it. might just have to have a big hunk of salami to steady my nerves . . . The ultimate snack was Sao with cheese raspberry jam and slices of cucumber. Well, you have to be totally demented to be out here doing this, so why not?

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POINT OF VIEW ·····

As my mind drifts back through the sailing years, a man and his image always springs to mind. His name is 'Billo' Hayward, and his day was the greatest skiff sailor in memory. So much a legend you always felt great just to be near him.

For those not blessed with these memories, I point out that he sailed out of St. George Sailing Club in 16 footers, around the 1950's, and he psyched the opposition out of the trophies even before they left the beach. When the weather was unpredictable, competitors would find excuses not to decide on rigs until Billo made his choice. He would retaliate by being late on the scene, and the last-minute scramble had to be seen to be believed

I remember rigging my VJ as close to him as I could, always to leeward, hoping some of his magic would enshroud me as well. On reflection, I remember Kevin Sheppard with his able craft not being too far away either.

I would watch this man in his twilight years, somewhere in his seventies, arrive with his tiller under his arm and be actually carried aboard with grace and aplomb befitting royalty. I would muse to myself, there in a few years go I, and visions of being carried aboard my yacht, with full glory, raced through my mind.

If I had only known that such grandeur was not really unattainable. Concentrating more on where the boat was going and not how to get it there could have brought about these desired results. By choosing this course there is no doubt in later years I would have been an obvious candidate for one of those yacht navigation schools, where elocution, myths, and sleight-of-hand are high on the list of priorities, supported by road maps, briefcases, and those new French neck-slung compasses. (Did you ever try to get a look through one while on board? Not a change! The neck chain was kept short so the compass would just reach their eye. Irremovable it was!)

On race days, these high-stepping gentry, with their beautiful timing, were always last aboard. Each time we helped 'ours' on deck, with his easel and chalk, my mind would drift back to Billo Hayward and, boy, how I really missed my boat. But alas! Due mainly to the Japanese, that bubble has burst, the myth and magic gone. Enter the Tamaya calculator, exit the navigator as such. Now everyone's a mathematician, and subject to batteries. Nothing is a problem. Having missed this fanciful 'boat', I mourn. But would you believe, I think I see another one coming?

The boat is called 'Scantlings'. It's new, ready-to-be-complicated, and there's miles of magic in it. So, with slippery feet I just might beat some of those mystical fellows looking for another myth and a chance to use up those old 77's. You can imagine my excitement, as I've been dour for so long.

When one looks back on the original IOR formula designed to produce equal ocean racing and quality boats, it's noteworthy to see that the formula has had miserable results. Over the years the length of the equation has doubled and the quality of the boat has halved. Now that's no mean feat!

Looking at the new scantling rules to be adopted by ocean racing, produced by the American Bureau of Shipping, it's intriguing to read, first of all, the "Foreward." In essence it states that the basis of theory to follow was taken from boats that have appeared to be O.K. over the years. O.K. where? I know why they are calling these rules the 'Bible'. It's like the Old Testament. If you believe the first bit, the rest follows suit, as my Sunday school teacher taught me.

But, wanting to get involved, I sought out a controversial boat, with large flat areas that the rules might sink before she starts. 'Helsal'. A glass foam sandwich. The 'scuttlebug' seems to be she would never pass the rules in a fit and is built far too light for a maxi.

Well, if you think that, you're dead wrong. Would you believe the keel area is six times the recommended strength? Three floors are suggested by the rules, but 'Helsal' has seven. In most other areas, 'Helsal' is way overbuilt, excepting one area, which was around the recommendation. Based on this, it seems the rules could be too light for fibreglass, so current owners shouldn't worry too much at the moment.

Other materials are still being studied, with Alan Payne to the forefront on aluminium. I cannot help feeling the rules are pandering to the designers to justify current designs.

I used to complain before about my cone theory. But now it's easier to design unseaworthy boats. Before, the designers hiccupped at least when designing the strength and engineering of a yacht. Now they have an engineering crutch. The ABS rules. If it fits the rules, designers are exonerated.

Rules are made to be tampered with, and no one does that better than yacht designers, and tampering with the rule in its present form could be suicide for someone. Can you imagine their glee. Two rules to get around. The IOR and the ABS. If it fits the IOR rule really well, it's sea-keeping qualities could be in doubt. If it just fits the ABS rule, it's structure could be in doubt.

Instead of being led by the blind, why don't we follow the practices of the building industry. They have had the answers for years. You get your house designed by an architect who consults an engineer and comes up with a design. Can you then go and built it? Not on your life! It's all subject to a third party. The local council. Their expert personnel study the project to assure all and sundry that the design works, and the engineering principles are correct. The plans are stamped, if approved, and even then periodic inspections during building are compulsory, at preplanned stages.

With holes in the IOR rule, and gaps in the ABS rules you could drive a ship through, why not set up our own board of approval for yachts designed to race in Australian waters? No boat-building before the plans are stamped, and the buck stops at the board. It has teeth, is responsible, and is comprised of people who know. Building inspections a must, by designated qualified people. This way yachties will be safeguarded by common sense and our own yardsticks.

If not, we might have instant yacht design. The IOR formula, the ABS formula, and the NC 77. As I said before, I see another fanciful boat coming.

While my feet are hardly touching the ground, I think perhaps, for all concerned, it might be better not to get aboard. For safety's sake, maybe we should leave that vision of old Billo Hayward as it is, rather than some of us trying to emulate him.

Nev Gosson.

RIPS WI

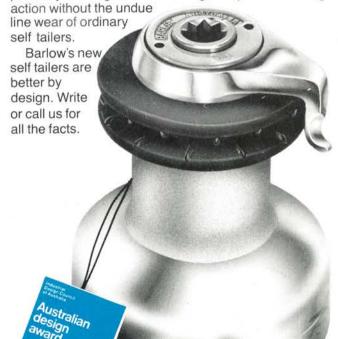
Until now, all self tailing winches have shared a common problem. The jaw design. For a self tailer to work perfectly the center of the sheet in the jaw must be vertically aligned with the sheet on the drum, ensuring an equal drum and jaw feed rate. V-shaped and springloaded jaw designs have had to compromise this principle in order to accommodate a variety of line sizes. The result is a dramatic loss of efficiency due to friction in all but optimal situations.

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