## OFFSHORE

**NUMBER 36** 

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## The Wind, the Sea and Lister



## **OFFSHORE**

iber 36 June-July,1977

### **OFFSHORE**



Cover: 'Mark Twain' hangs on at the start of the U.T.A. Noumea Race; She went on to win this year's event in which 'Helsal' set yet another record.

Photography by David Collett.

The theme of this issue was to be "Safety at Sea", and John Brooks' leading article on search and rescue beacons sets a good pace. Unfortunately, the call of the U.T.A. Noumea Race spirited off our other intending correspondent before he could complete his review of the subject, which we will hope to present in some future edition.

Otherwise, this month we have a final send-off report to Australia's Admiral's and America's Cup aspirants; exciting news of the C.Y.C.'s intentions to represent at Henley-on-Todd; an important announcement about radio frequency changes for small craft, effective January 1978; Noumea; Watson on Knaviguessing, etc.

Many readers have commented on the excellent photographs of the Admiral's cuppers in the last issue of Offshore (taken by Bob Ross); unfortunately the shot of Ragamuffin on the cover was attributed not to Australian Sailing magazine, as it should have been, but to another — an inexcusable and inexplicable error. To set the record straight: you can see photographs like the aforementioned in every issue of Bob Ross's excellent new magazine, Australian Sailing, and we apologise for our mistake.

#### **FEATURES**

S.A.R. Beacons	4
Important radio frequency changes	7
The Big Ones—Australia's Cup aspirations	8
C.Y.C. to represent in Alice Springs	10
Biggles Column	15
RACING	
Noumea '77	10
TECHNICAL	
Watson's Knaviguessing know-how	18
OFFSHORE SIGNALS	2
MARINA NEWS	2



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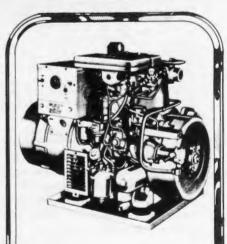


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\*Since the '76 Sydney—Hobart Race the Farr 1104 has gained 1st and 3rd in the '77 Australian 1 Ton Championship; 1st in Class C (1 Ton Div.) American S.O.R.C. Series and 3rd overall in the unofficial point score.

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28 OFFSHORE – June/July 1977



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## S.A.R. BEACONS: THEIR USE AND THEIR LIMITATIONS

by John Brooks



Search and rescue beacons are a relatively new addition to the list of yacht safety equipment, but like much of the now-commonly-used electronic gear seen on yachts, they have been around for years on military and commercial aircraft. Amortisation of development costs and advances in manufacturing have put S.A.R. beacons within the reach of the average offshore yachtsmen in much the same way that hand-held computors and electronic instrumentation have become almost standard equipment on the ocean racer.

The S.A.R. beacon is a self-contained, battery-operated transmitter which broadcasts on 121.5 MHz (civil aircraft V.H.F. distress frequency) or 243 MHz (military aircraft U.H.F. distress frequency), or both frequencies at once, depending on the type. S.A.R. beacons are compact, lightweight and simple to operate, but being battery operated, they have a limited endurance (the significance of which we will examine later). Most have a total continuous transmitting time of 24 to 48 hours.

V.H.F. and/or U.H.F. transmissions are line-of-sight emmissions, that is, they travel (for our purposes) in a straight line, so the higher the transmitter the greater the range; likewise the higher the receiver the greater the range, which makes aircraft search by far the most effective where S.A.R. beacons are concerned. In practice, the signal range is normally what is referred to as 'radio horizon', which is 15-20% greater than line of sight. Table 1 gives examples of some S.A.R. beacon signal tests.

Aircraft Altitude	Frequency	Range
2,000ft	243 MHz	15 n.m.
9,000ft	243 MHz	30 n.m.
21,000ft	121.5 MHz	160 n.m.
22,000ft	121.5 MHz	150 n.m.
33,000ft	121.5 MHz	165 n.m.
38,000ft	121.5 MHz	210 n.m.

The beacon transmits a swept-tone signal sweeping from 1000 Hz to 300 Hz at 2 to 3 cycles per second. For the crew of a passing aircraft, the R.F. signal is reproduced through their headsets or speakers as a distinctive oscillating tone similar to that of a N.S.W. Police car siren. It is unlike anything else heard in the air and once heard is never forgotten.

Although the beacons have been available in Australia for some time now, they are still not officially approved for use in private yachts by either the P.M.G., which licences all radio transmitters, or by the Department of Transport, which has a major interest in their use. Currently the D.O.T. is evaluating the use of S.A.R. beacons on pleasure craft, including ocean racers at the behest of the A.Y.F., but it is likely to be some time before official approval is forthcoming.

There are good reasons for this, primarily departmental concern for the potential chaos to be created by the haphazard use, accidental or otherwise, of privately-owned S.A.R. beacons. One way of minimising this problem is to ensure that the transmitted signal from a pleasure boat S.A.R. beacon has audio characteristics quite different from those of commercial or military users, and this possibility is also under consideration. Nevertheless there is nothing to stop you going out right now and buying a S.A.R. beacon for your yacht, and if you ever have to use it in danger, you can take my word for it that the signal absolutely electrifies the flight deck of any nearby aircraft.

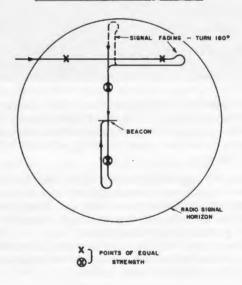
How an aircraft tracks a S.A.R. beacon signal depends upon how it is equipped, but essentially there are three methods: (a) V.H.F. or U.H.F. direction finding equipment (results accurate).

- (b) V.H.F. search meter (results accurate).
- (c) Aural search pattern (results doubtful).

For an aircraft equipped with V.H.F. direction finding equipment, it is a simple matter to tune the D.F. set to the signal and home in on the transmitter, a technique which gives very fast results. Unfortunately, in Australia only a handful of military aircraft are equipped with V.H.F. D.F. gear although you may be sure that if you are subject of a search operation such aircraft would be made available.

Commercial aircraft are not fitted with V.H.F. D.F. in usable form, but trans-oceanic jets carry V.H.F. search meters that measure signal strength very accurately thereby indicating whether the aircraft is travelling towards or away from the transmitter. Combined with use of doppler or Inertial Navigation Systems, the search meter can pinpoint the transmitter accurately but it will take longer than D.F. Fig. 1 gives a typical search pattern for an aircraft equipped with a search meter.

### PATTERN FOR VHF HOMING PROCEDURE 121-5 MHz WITH VHF SEARCHMETER



Light aircraft are not normally equipped with either of the foregoing search aids and consequently are of use only in a visual search (albeit they can fly lower and slower than all but helicopters and are of value in a coastal search). Such aircraft can also run a pattern based on the strength of the audible signal using a technique similar to that of the search meter, but it is a very slow and not very accurate process.

S.A.R. beacons were developed to meet two requirements. The first was a means of alerting S.A.R. services to the presence of survivors when the situation prevented transmission of a normal Mayday radio call; such a situation would arise if a pilot had to eject quickly from a military jet, or what is of more interest to us here, when a yacht crew takes to a liferaft after a sudden sinking.

\*\*Continued next page\*\*



**David Colfett** 

There are many such documented cases — Guia III, for example, which struck a whale and sunk suddenly in the Atlantic, and probably many undocumented cases where the crew did not survive either the sinking or the trial by liferaft which followed.

The second requirement arose from the need for some method of pinpointing survivors in difficult visual search conditions once a search was under way. At sea almost any conditions are difficult for visual search — hence the need for flares, smoke signals, marker dye etc. In any sort of seaway, spotting a rubber dinghy or even a small yacht from the air without these aids becomes a matter of chance. With a S.A.R. beacon the problem is easily resolved.

An aircraft selects a search altitude according to its best endurance speed. Slow aircraft fly a lower altitude and have a better chance of sighting small objects on the surface; fast aircraft fly higher so that the terrain does not pass too quickly and thus have limited chances of a sighting; in the latter case a larger area is scanned visually but obviously not as effectively.

It is here that a S.A.R. beacon comes into its-own. The higher the aircraft the greater the range of reception so a fast, highflying aircraft can cover a large search area in a short time, locate a beacon signal and pinpoint its position very quickly. It is then relatively simple to visually locate the search target, even in poor conditions, by dropping down to minimum altitude.

So far we have examined the details of S.A.R. beacon operation mainly from the search aircraft side. Let us consider some practical aspects from the yachties' angle.

The worst possible situation I can imagine is a sudden sinking at night such as that experienced by *Guia III*— no time for mayday message, crew leaps into liferaft, what now? If this was to occur in mid-Tasman en-route, say, from Sydney to Auckland, or for that matter anywhere over 300 miles offshore, you would be in for a long stay in the dinghy whatever the conditions. Without a S.A.R. beacon your chances are very slim indeed, as it is unlikely that any search would get under way until you become overdue at your destination a number of days hence. There is very little surface traffic to attract visually and no chance that you will be spotted from the air by a passing commercial jet because they fly too high.

By the time a search did get under way you might no longer be around to be found if the weather had deteriorated in the meantime (remember the C.Y.C.A. liferaft exercise). Additionally, the S.A.R. authorities would have an enormous area to cover and only a vague idea of where to begin unless you had been sending progressive position reports, and who ever does that outside of a racing fleet?

Remember the *Blythe Star*? What was termed a full-scale air and surface search failed to find the survivors of the *Blythe Star*, some of whom managed to stay alive in the liferaft and drift ashore 8 days after the sinking. Furthermore that search was conducted comparatively close to shore and the survivors reported seeing search aircraft but were unable to attract their attention.

What chance do you think you would have in mid Tasman? A S.A.R. beacon would certainly have saved lives in the *Blythe* (continued page 17)

## IMPORTANT RADIO INFORMATION

Important changes to some radio frequencies used between smallcraft and OTC Coast Stations will come into effect as from 1st January, 1978. These changes reflect Australia's compliance with international agreements on future needs and utilisation of maritime radio frequencies.

The changes will affect only the 4 and 6 mHz bands. The distress, urgency and calling frequency 2182 kHz and it's working partner 2201 kHz are unaffected and will remain in use after 1.1.78.

4136.3 and 6204 kHz have recently been designated supplementary distress, urgency and calling frequencies, and Coast Stations have therefore been obliged to use the new working frequency 4428.7 kHz when transmitting traffic other than routine weather and warning broadcasts. However, smallcraft will be allowed the use of 4136.3 and 6204 kHz for both calling and working up to 1.1.78. After this date, when DSB transmissions will no longer be authorised, 4136.3 and 6204 kHz will be replaced by 4125 and 6215.5 kHz as supplementary distress, urgency and calling frequencies.

Thus, in the 4 mHz band, 4125 kHz will be used by Coast Stations and ships in the same manner as 2182 kHz, ie; for distress, urgency and to establish contact. 4428.7 kHz will remain as the Coast Station working frequency for transmission of traffic, and ships will be required to use 4134.3 kHz for this purpose. Traffic exchange on 4125 kHz will be prohibited.

Similarly for the 6 mHz band, the following will apply:

6215.5 - Supplementary distress, urgency and calling.

6512.6 - Coast station working frequency.

6206.2 - Ship station working frequency.

Bearing in mind the limited channel availability on most shipboard radio installations, it should be noted that the fitting of 6 mHz frequencies to smallships will be optional. Those who have traditionally used 2 and 4 mHz to good effect in the past would be well advised to fit the following frequencies for use with OTC Coast Stations after 1.1.78:

2182 - Transmit & Receive.

2201 - Transmit & Receive.

4125 - Transmit & Receive.

4134.3 — Transmit only.

4428.7 - Receive only.

In their own interests, owners should make these changes well in advance of the changeover date, and preferably before the commencement of the fishing and yachting seasons. In order to encourage this, it is proposed that from 1st October to 31st December, 1977, Coast Stations will have the capability of handling calls on both the existing and the new frequencies.

Information on any aspect of marine communications can be obtained from The Manager, Coast Radio Service, O.T.C. (A); G.P.O. Box 7000, Sydney, N.S.W. 2001, or from any Coast Radio Station.

NOTE: Appropriate amendments will be made to A.Y.F. Safety Regulation 10.6.1.

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Q.What do Gretel II Ragamuffin Superstar Runaway

all have in common?

A. They will all be using Plotmaster Navaids in their overseas campaigns.

Only available in Australia since last December, the Navaid has been adopted for use by all three Australian representatives in the Admiral's Cup later this year, following successful trials in the selection heats.

Gretel II is also modifying a Navaid to suit the America's Cup courses at Newport in September. The Plotmaster Navaid is an Australian designed and manufactured navigational plotting device, intended for marine use, which will perform the following functions:

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Keith Farfor's 'Superstar'

Boh Ross

#### by Gordon Bray

This year is the tenth anniversary of Australia's only Admiral's Cup win. After a stout second place behind Britain in 1965, the Australians returned to Cowes two years later to reverse the result by a record 104 points. The successful boats were a new 46 footer, *Balandra*, built by Bob Crichton-Brown, a new minimum-rating 40 footer, *Mercedes III*, designed by Ted Kaufman, and the veteran from '65 — *Caprice of Huon*, which, under Gordon Ingate, had won three of the five races in that year. *Caprice* was chartered by Gordon Reynolds in 1967 because Ingate had another problem to contend with . . . he was campaigning on Sir Frank Packer's *Gretel I* against the Melbourne owned *Dame Pattie* in a series of trials off Sydney Heads to determine Australia's America's Cup challenger.

It's said things arrive in cycles, and who can argue? Ten years hence, Gordon Reynolds finds himself engaged in another Admiral's Cup campaign . . . this time as manager, and Gordon Ingate, after seeing his hopes dashed in the 'slop' off Sydney Heads a decade ago, now finds himself as skipper of yet another potential America's Cup challenger, *Gretel II*.

Since the Admiral's Cup trials in March, the Australian campaign has progressed with precision and new-found optimism within the camp. After the team of *Ragamuffin*, *Superstar* and *Runaway* was announced, a series of intensive training sessions over four weekends took place on the harbour. It was close racing over short courses to improve boathandling and crew techniques. One day was devoted to

sail evaluation with an eye to conditions in the Solent. In order to point higher, sails have to be a little flatter in the smoother English water, which contrasts with the fuller sails needed to cope with the chop and joggle off Sydney. The three sailmakers, John Bertrand (Superstar), Hugh Treharne (Ragamuffin) and John Anderson (Runaway) followed in speedboats, and the results are most satisfactory.

Superstar's designer, Doug Peterson, came out from America over Easter and made recommendations after watching her training. They included cutting two inches off the mast, which reduced the rating by .1 feet.

1500 lbs lead was added to *Runaway* and a bigger propellor and shaft were made. Under close association between designer Allen Blackburne and John Anderson, two inches was also cut off her mast with an overall effect of reducing the rating by a very significant .3 feet.

From there the three yachts were loaded on board HMAS *Melbourne*, despite one cradle giving way under *Runaway*. Least amused was Jim Hardy, who hastily ensured that his boat was lowered back into the water while the cradle repairs took place. The yachts were kept in one of the aircraft hangers which, in effect, meant they were stored in a shed for six weeks. Colin Betts travelled on board the *Melbourne*. ETA Portsmouth was 13/6/77 with the remainder of the advance party, Peter Shipway, Brandon Kibby and Mark Tostevin due three days earlier. After off-loading, three weeks was set

aside for rigging and transforming the boats into racing condition before the main team arrived in early July. Awaiting Rags was a new, lighter mast from United States' rigging and mast wizard, Tim Steame, which was better suited to the reduced windage of the Solent than the bigger, heavier one with which she won selection.

The masts were scheduled to be stepped at Portsmouth, and from there it's only a hop across the Solent to Cowes and all facilities for the major preparations. One man has been allocated from each boat to look after catering. This will leave him free from yachting chores for a few hours each day.

The first of the series, a solent race, starts on July 28th.

On the America's Cup front, the Swedish challenger, Sverige, the two Australians, Gretel II and Australia, plus the mysterious French entrant will take part in an elimination series in August. Each boat will race each other boat three times and then be seeded on placings. Two semi-final races will then take place between the number one and four and number two and three seeds. The two winners will then be matched in a best of seven series to decide the 1977 challenger. In 1970 Intrepid had 33 match races before taking on Gretel II. The Australian boat had only 4 against a disappointing French boat. So the elimination series this year will provide that racing sharpness which has previously been the exclusive property of the American defender. Gretel II will especially benefit as she did not have a trial-horse for training in Australia.

Australia on the other hand had extensive trialling at Yanchep against Southern Cross. Top soling skipper, Noel Robins received excellent competition from Ben Lexcen who had the last Australian challenger sailing better than at any previous time. As Sir Frank Packer showed in 1970, lessons from previous challenges have been absorbed. Second time around Alan Bond realistically gives Australia a big show. Her crew is a top professional unit. Last minute additions were David Forbes, who sailed on Gretel in 1970 with Jim Hardy and Mike Fletcher. And getting back to that cycle, it's interesting that John Bertrand, the Olympic bronze medalist, who was also a Gretel crew member as well as campaigning on Southern Cross, will be imparting his energies at Cowes this time.

And what of *Gretel II?* Well as *Intrepid* proved, the newer 12 metres are not necessarily the fastest. She was successfully redesigned by Britton Chance in 1970, and we all know how well *Gretel* performed. She was an outstanding boat, at least the equal of *Intrepid*. Her lack of top-level match racing was her downfall. Admittedly this will be a problem again but to a much lesser extent. *Gretel* had 2½ months on the water before leaving Australia. The syndicate admits this was not nearly enough time. Much lost time will be crammed into the four weeks of sailing in Newport before the elimination series starts on August 5th. Alan Bond hopes to be trialling against the the Swedes while *Gretel* looks like trialling extensively with the French boat, which was only launched in March.

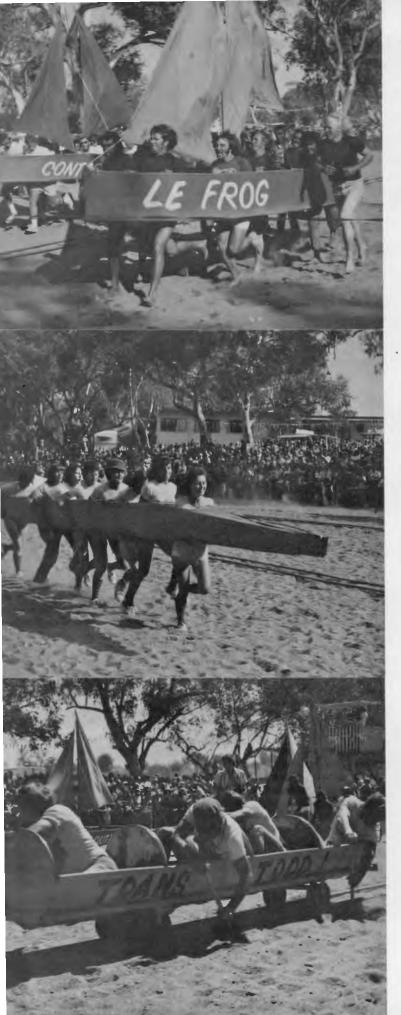
Jim Hardy likens an America's Cup campaign to a rowing buildup. . . an arduous daily grind leading up to the big day. This year Hardy has a different 'shell'. He's out to help erase the blackout of Australia's last Admiral's Cup challenge in 1975.

Australia's best and most dedicated yachtsmen are about to represent the nation in two different countries in two major yachting events. They have gone, thankfully, without distorted publicity, but with a fierce desire to restore Australia's dented yachting reputation. Win, lose or draw, we wish them well.



'Gretel II'

David Colfelt



### C.Y.C.A. TO SEND TEAM TO HENLEY-ON-TODD

Members to represent this year in Cowes, Newport and Alice Springs

**By Tony Cable** 

After much detailed negotiation the C.Y.C.A. has made arrangements to send the first ocean racing team to the Henley-On-Todd Regatta at Alice Springs, Northern Territory.

Trans Australia Airlines will be sponsoring the challenge and will be flying the team to Alice. This series will thus represent the third major racing event that our members will participate in this year. Taking place on Saturday, 27th August, 1977, the races will follow the Admiral's Cup and will be a curtain raiser for the America's Cup series.

It is hoped that media coverage of the Todd activities will in no way over-shadow the international efforts of the Australian yachtsmen. Organisers were worried at first that with three boats away in England and two in the US, there would not be enough experienced hands left to crew the six-man yacht. However, there was a sifting, and the last dregs of those remaining were signed up before being engaged elsewhere.

The first breakthrough came with the securing of the services of Alan Brown as leader; he was the 1975 Admiral's Cup team manager, and it was fortuitous that he was still available to lend his organisational and administrative talent to the team.

Contracts were also signed with: Bob Langridge, noted salt and instigator of the challenge and Bob Scrivner, air pilot with local experience of sea conditions in the centre. The remaining slots were taken by David "Chalky" Hutchen, onetime Victorian ocean racing heavy in weight, John Dawson and Tony Cable — all three having been involved in the Hobart quiet little drinks (and fully prepared to run another in Alice!).

The team have participated in many ocean races in Australia and overseas and, among them, have done around two score Hobarts. None, however, has ever raced as far as 1100km from the shoreline before.

A leadino Australian naval architect has been approached to design the yacht, *T.A.A.*, his brief being to present a very very lightweight vessel, airportable, with a capacity for a crew of 6-10. Underwater shape is be unimportant, and as overnight racing is not envisaged, there should be no inbuilt accommodation. Sleeping aboard will only take place in the most unusual circumstances. A special computer programme is being written so that her unusual features are capable of being rated.

Arrangements for building are not yet complete, but construction should be very rapid, using surprisingly innovative ad hoc techniques. Officials have considered asking the State Dockyard to undertake the job to help them fill their order book.

A number of VIP's will be asked to put their names in a hat to draw for the privilege of launching her.

T.A.A. are taking care of the team's travel arrangements, while each member will pay his own accommodation and other expenses. Treasurers, Ministers of Sport and suchlike will find this a pretty cheap challenge.

In fact, the team will offer a unique feature in major representative yachting, in that their key objective is to raise a bagful of money for a charity — the "Alice Springs Old Timers Home".

An unlimited number of co-sponsors is being recruited by means of an offer of cheap advertising. For \$25 their names will be freely used in all blurb that will be generated.

With the books scarcely opened, various offers have already come from a number of sources. Tropical weight oilskins from Marlin; Desert Marine Insurance (Marine Hull); McNeil and Sheeran (sails); Mullens and Co (Stockbrokers); Gordon and Gotch (newsprint); Standardgraph (drawing materials); other sponsors include Mr Boats, Collaroy; Solo Marine; Monarch Boats; Bob Holmes; Nev Ham Ford.

The Motor has been sponsored by Mercury, Chrysler, Johnson & Evinrude (and there is plenty of room for more on the list!).

The team leaves Sydney on Wednesday, 24th August and hopes to stop at Birdesville for a quick practice on the track. While at Alice there will be an optional trip for supporters to Ayers Rock.

The team will have a couple of days practise before the races on Saturday, 27th. It is hoped that we will be able to take the Mayor and the Matron of the Old Folks Home for a sail.

Full ocean racing gear will be worn, as team members cannot believe that the course is only a sandy river bed at this time of the year.

Events include the "Oxford Tub Fours", "Southmark Head of River" (8 crew), and the "Australia Cup" (10 crew). The triumphant return will be on the Sunday.

Sooner or later, training will begin in Rushcutters Bay Park so that our representatives will perhaps be fit, up to a point (if it is at all that necessary).

Places for supporters should still be available on the special T.A.A. departures. Why not join us for a quiet restful holiday at the "Cowes of the Antipodes" the Alice? Ring Ken Triffett on 238-0266 for more information.



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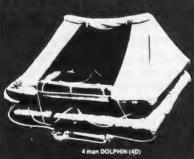
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TASMANIA, GREG MUIR (002) 23 1946



This column is being written in late May and that must be absolutely the worst time of the year to write about the yachting scene. Absolutely nothing is happening in May in Australia, at least on the surface; this summer series is all over, the northern hemisphere action still to begin in earnest; the Admiral's Cup boats are en-route; so too are the America's Cup contenders, plural this year (what a long way we have come), and everything has been said about the potential performance of them all at least twice.

That leaves me with the aftermath of the Sydney-Noumea Race which is reported on elsewhere in this issue. Nevertheless I have to comment on the fact that *Helsal* picked up yet another race record to add to her already record number of race records, current and past; for such a maligned boat she does all right. By now Tony Fischer has taken so many records he ought to be in the music business.

The U.T.A. Sydney-Noumea Race had a record number of entries but paled into something else beside the Auckland -Suva Race, which had so many starters they had to split it into two divisions and two destinations, the I.O.R. division of 68 boats to Suva, and the cruising division of 41 to Lautoka on the other side of the Island. That is some fleet what is off-season for this part of the world. Run by the Royal Akarana Yacht Club and sponsored by Air New Zealand, both fleets took a hammering for the first two days out of Auckland, 40 knots on the nose with gusts reported to 80 knots. Even allowing for the usual awe-struck exaggeration, that is no way to start a 1200 nautical mile passage race.

The latter days of the race were blessed with hundreds of miles of spinnaker run, but the early bashing accounted for nine retirements including one for crew injury. First overall was the Farr One Tonner, Country Boy (Clyde Colson), which also took out the N.Z. National One Ton Title over Easter (shades of Piccolo). Line honours went to a Miller design, the 50ft Anticipation, in just under six days.



(by John Brooks)

Some miscellaneous Admiral's Cup news. The Italian A.C. Team includes Moby Dick, a Peterson two-tonner rating 31.3ft; Vanina, a 44ft Gary Mull design rating 34.2ft; and Mandrake a Holland 44ft rating 35.0ft. Mandrake is a sister to Big Apple, which looks like making the Irish A.C. Team along with another Holland design, the new Irish Mist. The Brits are still trialling, but in early events David May's Holland two-tonner Winsome 77 was the front runner.

The International Technical Committee of the O.R.C. met in London and are pushing for an amendment to the I.O.R. to give a small bonus to classic centreboards and a penalty to deep boards under shallow hulls. What this amounts to is that they have taken a look at and are putting a tentative brake on the current daggerboard trend. They also considered the cat rig, so if you liked the idea of a cat-rigged level rating machine

such as those which have surfaced in Europe, forget it; they too will be penalised if the I.T.C. recommendations are approved by the O.R.C.

Britton Chance started a new trend with his successful one tonner, Resolute Salmon, and now everyone is getting into the act. Ron Holland has a centreboard half tonner scheduled for the World Titles in Sydney this December. I understand that Holland himself will be sailing it along with Butch Dalrymple-Smith. Bruce Farr takes a look at the new development with a daggerboard one tonner aimed at the World Titles in New Zealand this November for a Tasmanian owner, the project to be headed up by former World Champion, Chris Bouzaid.

Another interesting centreboard project is that spearheaded by Tommy Stephenson in Melbourne. His machine is a Peterson one-tonner with a 7/8 rig and some extra special ideas in the way of layout and gear. However, the most interesting thing about Tommy's effort is the way it is financially structured; the boat will actually be owned by an electronics manufacturer (I'd give the company a plug but I am not sure who it is) and chartered to the crew for the World Titles.

This you will agree introduces a new element into the sponsorship of sport in Australia and opens up all sorts of possibilities. No doubt the purists and the armchair admirals will be horrified, and we can expect some journalistic outrage from Sheila Patrick, but the A.Y.F. has looked at the set up and the project will go ahead.

The A.Y.F. Offshore Committee meets in June and amongst other things will consider a Victorian proposal for a National sail numbering system corresponding to the postal codes; i.e. N.S.W. sail numbers would start with 2, Victorian numbers would start with 3, and so on. The Victorians are also pushing for a central office to handle I.O.R. measuring organisation and documentation, a chore currently handled by Tony Mooney as his other duties permit. In his new position of A.Y.F. promotions officer Tony would be hard put to continue the service.



lan Howard, owner/skipper of Race winner Mark Twain, collecting the spoils of war.

### **NOUMEA'77**

by John Hawley

11.00 a.m., Sydney Harbour, 7th May 1977. Bright sunshine and 6-10 knots of wind from the southeast was more than sufficient to gladden the hearts of the crews of the 34 yachts gathered on the starting line for the U.T.A. Sydney-Noumea Yacht Race.

This was the largest fleet to sail from Australia to a foreign port, over 1000 miles away, and five boats from Noumea were among the starters. Queensland, N.S.W., Victoria and South Australia were all represented.

10 girls were among the crews, whose ages ranged from 67 to 17, upon yachts which ranged from 32 feet to 84 feet.

At a briefing conducted briefly and adequately with usual C.Y.C. style bonne of many Hobart briefings, we had learned that Harry M. Miller was somehow connected with the scene and that he had discussed it with Prince Charles in Buckingham Palace a couple of days earlier. The briefing pouches and race instructions were covered with the Royal Coat of Arms to add dignity to the scene, and the Royal Australian Navy fired some of their big guns to draw attention to the raising and lowering of starting signal flags, and H.M.A.S. Duchess was dashing hither and thither.

Almost all of the yachts had spinnakers and bloopers flying within seconds of the starting gun, and the harbour was cleared in spectacular style within half an hour.

The light sou'wester soon became a 20-knot southerly which stayed for over 36 hours, giving the fleet a comfortable start on their long journey. *Helsal* and *Anaconda* soon opened a large gap between themselves and their smaller rivals and were half way to Lord Howe Island within 24 hours. Alas, this was too good to last, and the third and fourth days saw yachts covering only 60 to 80 miles a day in almost windless conditions.

Past Middleton Reef, the fleet was looking for SE trade winds which are supposed to blow at this time of year. They never came. First there was a light nor'wester giving a pleasant reach for 24 hours, then the nor'easter, almost on the nose, at strength varing by reports for 20 to 40 knots. Many stories of blown out gear, lots of reports of storm gear and trysails. The boat upon which I sailed never needed to change below No. 1 regular genoa and full main at any time.

As the race reached it's final stages, the tactics of being well seaward off the rhumb line began to pay off. The boats which stayed west had long losing legs beating to seaward for days, which cost them heavy penalties, whilst those to the east were able to reach for Amedee Light at the entrance to the Noumea Reef.

The finishing line —  $\frac{1}{2}$  mile inside the reef provided trying moments for almost all the competitors, for the leads through the narrow entrance were in line 050° to pass through an

opening but 4 cables in width; for three days the wind blew — guess where — 050°. However, all the fleet negotiated the pass with the exception of *Satin Sheets* which went aground with only 300 yards to go to the finishing line and required outside assistance to get off, unscathed but disqualified.

For the rest, the tension was over. We had a Noumean welcome of beer, wine, food, bread and camembert cheese and a few minutes' anchorage at Amedee Island, a picture-book coral isle with waving palms, white beaches and a beautiful white lighthouse — then a peaceful sail for about an hour across the tropical lagoon to the Clubhouse of the Cercle Nautique Caledonien and it's magnificent marina.

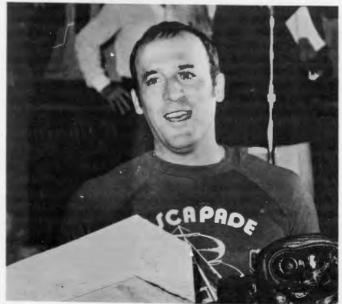
As usual, *Helsal* took line honours and broke the race record, closely followed by *Anaconda*. Within hours the crew of *Helsal* were sporting the most outrageously immodest T-shirt proclaiming their list of race records over the boat's 4 years of life.

For the Cercle Nautique Caledonien and the hospitality of it's members, one can only give the greatest of praise. A floating bank provided currency on the jetty. Free French Champagne flowed at all the receptions and presentations. A free bus service to anywhere in the city catered for all one's requirements, and most of all the competitors were taken for extensive trips into the beautiful mountainous centre of New Caledonia.

There is no doubt whatever that there was a serious language barrier for competitors who spoke no French. For those who made some effort to learn a little of the language beforehand, there were not too many problems; for those who determinedly spoke only English, contact was difficult indeed.

The French Airline, U.T.A., applied their sponsorship in many ways which were of direct help to all competitors, with prodigious prizes for many things other than 1st, 2nd and 3rd in divisions, interpreter services, and support in every direction — music, entertainment, transport and entertainment.

A frigate of the French Navy, *Le Dunkerquoise*, with its powerful transmitters, did a magnificent service relaying radio messages to and from the yachts during the last four days of the race, and their Captain received the loudest cheer on presentation night.



Gerald Martinez, skipper of Escapade, who came second on corrected time.

#### **U.T.A. SYDNEY — NOUMEA RACE RESULTS**

I.O.R. Division-new race record-"HELSAL" 7d. 01h. 43m. 11 secs.

PLACE	YACHT	ELAPSED H.M.S.	CORRECTED H.M.S.
1	MARK TWAIN	199.11.34	152.22.57
2	ESCAPADE	204.45.02	157.45.37
3	RUM RUNNER	196.47.25	158.58.02
4	ODYSSEY	214.18.58	161.38.14
5	JISUMA	216.46.54	161.47.03
6	FOLLOW MEE BOOMAROO III	220.39.37 235.26.23	169.38.37 171.22.36
8	PIMPERNEL	235.41.39	171.37.57
9	MANU KAI	230.40.09	176.40.10
10	WIMAWAY	238.12.21	177.06.22
11	HELSAL	169.43.11	178.13.22
12	ANACONDA II	171.38.53	178.52.28
13	WILLI WILLI	216.56.17	179.50.30 181.52.12
14 15	GIBSY FREEDOM	244.44.42 244.38.14	182.31.26
16	GWALARN	247.37.18	193.59.12
10	SUZY Q	Retired	100.00.12
	SATIN SHEETS	Retired	
ARBITE	RARY DIVISION		
1	SWIFTY	240.42.06	132.23.09
2	CAPTAIN WOODIN	246.54.32	143.12.26
3	CERA	220.43.07	145.40.27
4	CUIDADO	258.19.24 289.55.00	160.09.38 162.21.12
5	ILE OLA ONYA OF GOSFORD	Retired	102.21.12
	BOURINASSE	Retired	
CRUISI	NG DIVISION		
1	MANDALAY II	8.20.25.52	
2	BORN FREE	9.23.09.19	
3	LADY CAROLINE	8.06.09.14	
4	THE PROMISE	10.11.20.33	3
5	PINJARRA	11.21.10.00	
6	MISTRESS MINE	12.00.32.48	
7	WATHARA III	12.02.08.00	)
8	ULUMBIE	13.02.02.10	)

#### S.A.R. Beacons (continued from page 6)

Star tragedy not to mention saving the crew from a long, hazardous and fatal drift in the liferaft.

Let us examine how a S.A.R. Beacon can help you in the unannounced mid Tasman sinking. There are approximately 10 flights a day across the Tasman, not necessarily at even intervals (but not counting Air Force maritime patrols or communication flights), so it is very probable that within a few hours an aircraft will pass within range of your S.A.R. beacon signal. All commercial jets monitor 121.5 MHz continously enroute although it is most unlikely that a jet would interrupt its flight plan to run a search pattern on your signal if it was previously unaware of your predicament. The reason for this is that the aircraft would not normally carry enough fuel over its required reserves to be able to take the time.

What it would do is to take a single check on your signal as it passes and report to Air Traffic Control who would pass on the report to Marine Operations Centre, Canberra. Within hours the M.O.C. would have several reports and probably enough information for a rough fix. When further checks failed to reveal any explainable source of the signal (e.g. an accidentally triggered beacon on a nearby ship) the M.O.C. would ask the R.A.A.F. to investigate or even the R.A.N. if it happened to have a ship in the vicinity.

Of course if you are really lucky, long before this a wandering Air Force Orion might have intercepted your signal. The Orion Continued page 19

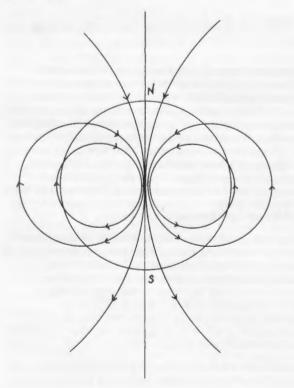


## Watson's Knaviguessing Know~how

What is the most frequently used item of navigation gear in any boat? The answer to that question must be "the steering compass". Next would be the speedo/log, and then the bearing compass. Speedo and log are based upon well understood principles and are subject to mechanical/electrical faults only. So we encounter few problems there, except perhaps undue reliance upon their accuracy.

The compass, on the other hand, is a mysterious device, controlled by invisible forces and subject to strange influences. Many people, particularly when they are new to sailing, have no understanding of what makes a compass tick. So briefly, let's have a look at what controls a steering compass.

It is known that a freely suspended magnetic needle will align itself roughly north and south. This it does as it aligns itself with the lines of magnetic force emanating from the earth. The earth may be considered as a sphere with a small bar magnet at its centre, lying N.-S.



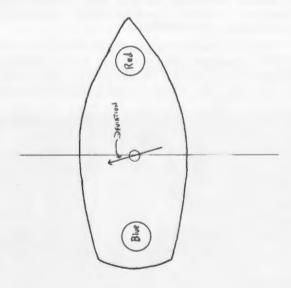
Lines of force surround the magnet. Most of us will remember the school experiment of placing a bar magnet under a sheet of paper and then shaking iron filings over the paper. The filings distribute themselves along the lines of force, in a manner very similar to the sketch.

Notice also in the sketch that the lines of force emerge from the surface of the earth at varying angles to the surface. The angle of incidence (called 'dip') increases as the poles are approached. In fact, the magnetic poles are established as points where dip is 90° while the magnetic equator is the line around the earth, close to the true equator, joining points of zero dip.

A free needle, then, will not only point N. — S., but in addition will tilt downwards towards the closer magnetic pole. In the northern hemisphere, the N. end of the needle will dip, and vice versa. As a compass card needs to be horizontal, this is achieved in yacht compasses by placing a weight on the high side to compensate for dip. Larger compasses are levelled by having the centre of gravity of the card well below the pivot point. This makes the weight of the card act against the dipping force.

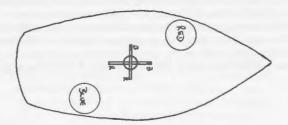
Let's consider a steel or ferro yacht. Ferrous materials are usually magnetised to an appreciable extent. Marine grade stainless steel is a relevant exception, thank goodness. Some of the magnetism will be permanent, while the remainder will be induced temporarily by the earth's field and will vary as the hull changes its angle to the lines of force.

The North-seeking end of a magnet is coloured red, the other end blue. When two magnets are close together, the like colours tend to repel each other, and the unlike colours attract each other. In the sketch, we show a hull with a permanent red pole forward and a blue pole aft.



On east-west headings we will get maximum deviations — westerly deviation when heading east and vice versa. These poles were created while the hull was being built. To correct for them, we place a small magnet close to the compass with its blue end forward. If the job is well done, the compensation will be precise.

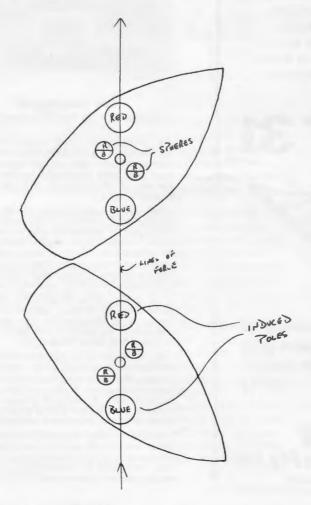
Permanent magnetism, however, is usally acting diagonally across the hull, as in sketch 3.



When compensating, therefore, we divide the deviations into fore and aft and athwartship components and correct with combinations of fore and aft and athwartship magnets. The combined effects of the magnets will (or should) balance the permanent poles precisely.

What about the induced magnetism? The earth's lines of force, as they pass through the hull, create poles. (Magnets are made by placing them in a strong field.) Obviously, as the ship's head changes, the poles will move within the hull, and will have a varying effect on the compass. The strongest effect will be felt when the course is 045°, 135°, 225° and 315°— the quadrantal headings.

To correct for this effect, we use what are called soft iron correctors — the spheres and the Flinders Bar. Sketch 4 shows how the spheres compensate for the changes in the induced poles. The Flinders Bar is seldom used in yachts, so I won't go into that here.



Next issue, we'll discuss the vertical forces which come into play when the boat is heeled.

The Brisbane — Gladstone Race has been and gone — a good downhill run for most of the boats, with *Wistari* taking it out again. This year we organised a beer drinking competition and a 'Quiet Little Drink' at the Seafarers' Club. 4400 beers later, the presentation of trophies was seen rather blurrily.

A bit of local information. The Narrows has been re-beaconed, with better beacons, and an improved chart is being produced. Also the channel between Curtis and Facing Islands is being lit, and has been well beaconned. This puts Gladstone in a better position for a port of call, as it saves re-tracing your steps. Tony Marsden, a Sailing Club member, has also started a chart hiring service for yachts cruising the Reef, which makes sure that your charts are up to date and saves you money, too. For enquiries write to Cruising Services, 25 Hibiscus Ave., Gladstone 4680. Phone (079) 78-1222.

See you next time,

Hedley Watson

#### S.A.R. Beacons (continued from page 17)

has endurance by the bucketful, the equipment to pinpoint you rapidly and a crew who would love to be seduced from the monotony of maritime reconnaissance by something different. But they do fly at low level when patrolling so they have to pass fairly close to receive your signal.

Now your S.A.R. beacon has alerted Australia's thinly-spread search and rescue organisation and a search aircraft is on the way to your area with an almost 100% chance of finding you as long as your beacon is transmitting. So your troubles are over, or are they? Once they have found you, the R.A.A.F. can give you little further help other than maintain contact and maybe drop you more safety equipment and supplies if the situation warrants. There are no longer any long range flying boats or amphibious aircraft in Australia (in or out of the armed services), so a surface vessel must effect the actual rescue. If you are in luck a nearby ship can be directed to you; if not, a Navy unit has to be despatched and you might have to cope with another day or two in the water.

Another point you should consider is the endurance of a S.A.R. beacon. The Tasman and Coral Seas are criss-crossed with well-travelled airways, but even so, I would be inclined to delay activating a S.A.R. beacon until daylight hours when the air traffic is heaviest. Additionally, there are no specialist self-contained S.A.R. service units in Australia as there are in North America, so reaction time is comparatively slow. If, say, you found yourself sitting in a liferaft at midnight with a surprised look on your face, it could be half a day at least before the previously-described sequence of events resulted in an aircraft taking off to look for you — even longer on a weekend, and they still have to find you. 48 hours should be long enough, but being very nervous, I think I would wait until full daylight before saturating the airways with my emergency signal.

The foregoing applies to the Tasman and Coral Seas. The Indian Ocean is another matter altogether, also the large expanse of Pacific Ocean east of New Zealand. In those areas even a S.A.R. beacon may be of no help to you unless you got off a Mayday call on a good radio before taking to the liferaft. The Beacon battery could peter out after two days transmission without anyone ever noticing. Under those circumstances I would consider keeping the beacon in reserve for a while, turning it on if an aircraft is heard but only letting it transmit continously after all else had failed. In this respect I have specialised knowledge, so unless you are

(continued next page)

#### (continued from previous page)

aware of your situation in relation to trans-oceanic air traffic, the rule would be to turn the beacon on and leave it on, the only reservation being that close to Australia as in most places, air traffic is heaviest during the day.

Most of this article has dealt with the use of a S.A.R. beacon in a mid ocean emergency, but taking to the liferaft is a pretty traumatic experience at any time so the usefulness and the limitations of a S.A.R. beacon apply even close to the coastline, if to a lesser degree. There is no question at all in my mind that S.A.R. beacons are worth their cost to ocean racers and cruisers. They are not terribly expensive and I believe it is only a matter of time before they become compulsory within Category 1 of the A.Y.F. safety

regulations. I only hope we do not have to have a repeat of the *Blythe Star* tragedy applied to some unfortunate yacht owner in order for this to eventuate.

It would be interesting for instance to hear the comments on this article from the crew of the *Rajah*, which burned and sank during the Sydney-Brisbane Race this year. Anyone who has spent any time at all in a liferaft, even on a practice run, will tell you that the thing that occupies their minds most is an overwhelming desire to be out of it and back on dry land. So as a boat owner, make sure you never find yourself in that position and, additionally, cursing a previous decision to buy a few more spare snatch blocks instead of a S.A.R. beacon.

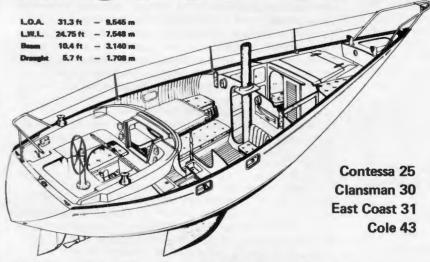
## How to win COMFORTABLY

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head room, teak interior, sleeping for 7 persons in seperate compartments, and two double bunks. Ideal for cruising. And a proven winner. CALL BRUCE FAIRLIE TODAY, or write for leaflets on this attractive yacht.

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## OFFSHORF



#### New Deep Digital Echosounder for Offshore Use

A revolutionary new depth indicator designed with the requirements of Australian boat owners for deep water soundings in mind, has been introduced by the Marine Division of Amalgamated Wireless (Australasia) Limited.

The deep water digital Model 2700 "International Offshore" echosounder was developed by Datamarine International Inc., USA, leaders in digital navigation instruments. It offers a new variety of features of interest to the larger yacht owner, and is expected to draw equal attention from operators of small to big commercial vessels.

The display of the Model 2700 has front panel selection for feet, fathoms or metric ranges. It is designed for fully automatic operation in any depth to 200 fathoms, 300 metres of 999 feet in three digits.

In shallow depths of less than the two-digit number 10, the Model 2700 automatically displays the depth in tenths of the selected calibration, down to its minimum depth capability of 2.5 feet, 0.8 metres or 0.5 fathoms. This decimal scaling allows precise definition in critical shallow water areas.

Another feature is a depth measurement offset adjustment on the rear panel for measuring depths from surface or below keel, rather than the conventional method of measurement from the vessel's transducer.

This feature allows the user to either know the clearance under the keel or to correlate with charted depths more accurately. A flexible front panel alarm control may be set to warn of any shoaling depth from zero to 120 feet, 20 fathoms or 30 metres. An audible alarm also sounds in the remote display station or stations.

The bright, non-blink display is clearly visible from close-up or at a distance and can be transmitted over a simple two conductor shielded wire cable to as many as two optional remote stations at one time.

This unique data multiplexing method of transmitting all data from the main display to the remotes offers a simple, low-cost installation without the need of large connectors, splicers or junction boxes.

The method of data transmission also allows the remotes to be located at long distance from the main station. This long cable feature lends considerable flexibility to a variety of commercial and scientific digital depth applications.

The remote displays of the system are optional and are available either in an attractive compact "U" bracket mount instrument, or in a round, flush, watertight case of anodized aluminium for sailboat cockpits or exposed fly bridges.

The bronze, 120 KHz transducer is the conventional stem-type or an optional round flush bronze transducer is also available. Power to the transducer is a massive 450 Watts RMS. Current drain with max brightness is 1.A nominal 800m. There is a "wake rejection" feature which can be owner adjusted for maximum rejection of aerated surface echos.

This equipment together with a big range of marine electronics, is available from all AWA Marine branches and AWA agents throughout Australia.

#### AMPOL AUSTRALIAN YACHTSMAN OF THE YEAR 1977

John Bertrand, Olympic bronze medallist in the singlehanded Finn dinghy, is the Ampol Australian Yachtsman of the Year for 1976-77.

The selection panel chose John Bertrand because of his fine Bronze Medal in the Finn class at the Olympics, against one of the best-ever fleets in this tough singlehanded class, for his efforts in other classes and for his contribution to Australian yachting by way of many lectures since returning to Australia.

#### Mooney in new Y.A. position

The Yachting Association of N.S.W. has announced the appointment of its former Secretary, Tony Mooney, to the new position of Promotions Officer.

Tony had held the position of Secretary since 1969 and is well known throughout the State as a result of his efforts in administration and from his many visits to Clubs throughout New South Wales.

The new position will allow him more time on the promotional and coaching aspects of the Association's activities, much of which was being performed previously in an horiorary capacity.

He will still be available for technical advice to Clubs and Associations, but much of the day-to-day administrative functions will now be handled by Mrs Myra Richards.

Myra has been with the Y.A. for some 12 months and is well able to answer the normal day to day queries on yachting.

The new appointment has been made possible by a grant of \$6,250.00 for 1977 from the N.S.W. Government Department of Sport and Recreation.

### A.W.A. to deal direct with yachtsmen

Private boat owners are now able to purchase sophisticated electronic equipment direct from the Marine Division of Amalgamated Wireless (Australasia) Limited, thereby obtaining price reductions of up to 20%.

A spokesman for the Division said today this represented a major change in the Division's marketing policies within the private yacht, power boat, fishing and small boat fields.

He said these items, of necessity, must be those which require installation by professional electronic technicians where AWA's expertise is most necessary and readily available.

The new pricing will reflect up to 20% deduction for the end user of radiotelephones, radar depth sounders, yacht instruments and the new COURSEMASTER Australian built and designed award winning automatic pilot.

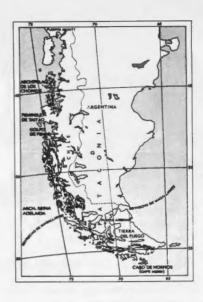
Technical warranty and installation advice can be provided without additional cost in the major seaports around Australia, and a service exchange module system will be introduced for customers.

"We believe boat owners will be better served by dealing directly with AWA's own network of marine depots throughout Australia," the spokesman said.

#### NEW NAVIGATIONAL AIDS FOR THE STRAITS OF MAGELLAN AND CHILE'S WEST COAST ARCHIPELAGO

A new system of navigational aids, which will allow the largest bulk carriers to pass safely through the Straits of Magellan and open new sheltered routes for ocean-going ships through Chile's coastal archipelago, is being established by the Hydrographic Institute of the Chilean Navy (IHA) with a \$50,000,000 loan made to Chile by the Government of Brazil.

The equipment to be supplied includes some 60 GRP buoys, as well as 19 major and 60 minor land stations (some fitted with radar transponders). All must be designed to meet exceptionally severe conditions of weather and climate, and operate reliably for long periods in one of the most desolate regions on earth. Buoys and their moorings may have to face 6-8 knot tides, and ice can be encountered in some of the channels where glaciers calve into the sea.



Major land stations will be equipped with Stone Platt "Power Beam" beacons (Fig. 1), powered by wind-operated generators and having acrylic lenses to give white light ranges up to 48 km. They will be controlled by photocells which will not only extinguish them at daybreak, but ensure that they light up again should one of the black squalls or snowstorms, for which Patagonian waters are notorious, turn day temporarily into night. Other land stations and buoys will use battery-powered and photocell-controlled ZP20 'Seagull' lanterns with polycarbonate lenses, giving white light ranges up to 18 km.



#### Saturdays by John Keelty

I must go out to the yacht again, Go race with the C.Y.C., Experience all the joys of life In a great crew's company.

I hear again the starter's gun, The "starboard" helmsmans' shout, Hard on the wind or on a run, To sea, where it's all about.

To find the mark and round it close, As close as close can be, Then clap on all the running gear And go surfing down the sea.

Where's the finish, Lado? At Watto's Bay? We're on a winning run; If the wind holds good and does not break We'll get the finishing gun.

Our luck's not in, for as we try To make the Wedding Cake, We watch him lift across the line While our wind begins to break.

Back at Coaster's Retreat (with oilies on), Where the waves are at their peak, We meet out friends we saw afloat And resail the race all week.

#### New LP Gas safety device



The virtues of liquid petroleum gas for cooking on yachts are known — cleanliness, relative odourlessness, instant lighting, high heat, convenience, etc. But because LPG vapour is heavier than air, it poses a potential fume-accumulation hazard, and proper installation of LPG tanks (sealed compartment which is vented overboard) and observance of certain precautions — principally turning off the gas at the tank — are essential. The recent explosion of a Halvorsen cruiser in Broken Bay underlines the latter point; nevertheless, as LPG tank installations are frequently at the stern or other somewhat inaccessible place, inclement weather or just plain human forgetfulness result in neglect of important safety precuations.

A new American device of the Marinetics Corporation automatically shuts down LPG at the tank. It consists of an electrically-operated solenoid valved (installed on the LPG regulator) and a switch and red warning light panel which can be mounted in any

convenient location near the stove. A flick of the switch turns on and off the LPG supply at the tank.

The solenoid valve and warning light draw a minimal 10 watts while in operation, and fail-safe valve automatically closes in the event of a power failure or if the pressure regulator fails. Available from Brandts P/L, 371a Pitt St., Sydney.

#### Letter

The Commodore, Cruising Yacht Club of Australia, New Beach Road, Rushcutters Bay.

Dear Sir,

I would appreciate if you would extend to the C.Y.C. members involved in coming to our assistance last Monday, April 25th, our heartfelt gratitude.

In particular were those members in the CYC tender and the tender operator whose names are not known to us.

Thank you very much.
Yours in gratitude,
Richard K. Johnstone

The foregoing letter refers to an incident which took place on Anzac Day when Charlie Cole, CYC Tender driver, went to the assistance of a man drowning by an overturned dinghy off Yarranabee Park. Offshore learned the following details of the incident:

Charlie was operating the Club tender off Yarranabee Park when his attention was drawn by the shouting of people along the shore. It happened that a small row boat dinghy had sunk leaving one of the occupants in the water and unable to swim. Charlie raced the tender toward the drowning man, but was unable to pull him from the water into the tender since the man was blue and almost unconscious. Fortunately a doctor noticed the incident and swam out to the tender. The two of them succeeded in getting the man into the tender and they proceeded to the Navy ResearchStation. On arrival at the station they found that surprisingly enough the Navy did not have an oxygen bottle which was, in the doctor's opinion, required to resuscitate the man. Charlie ran down New Beach Road to the club's oxygen bottle. Fortunately the man recovered; unfortunately we do not know the name of the attending physician.

Congratulations to Charlie, whom many will have noticed does an excellent job, including looking after Members who arrive back at the marina after 6 p.m., sometimes with lines tangled around their propellors, sometimes having miscalculated and beached their craft instead of securing their moorings, etc.

#### Attention C.Y.C. Photographers

Like to see your photographs in print — with your name on them? We're looking for good colour transparencies for possible use in the 1977 Hitachi Sydney-Hobart Yacht Race Programme.

Please send any shots you think might be of interest — preferably in a nautical vein — to the Editor, Sydney-Hobart Program, c/- C.Y.C. Unfortunately, we cannot pay for those used but will acknowledge authorship. All photographs will be returned.

## BOOK



## THE OXFORD COMPANION TO SHIPS & THE SEA Edited by Peter Kemp

Oxford University Press \$27.50\*

Anyone familiar with the already formidable list of "Oxford Companions" will need no explanation of this volume The espoused purpose is "to bring together in readily accessible form a range of marine information which can otherwise be gleaned only with the help of an extensive library", and in 964 pages, plus appendices, the Companion has a go at just that. From "A.B." to "ZULU", this book contains a very broad selection of mantime references with the exception of those under the headings of "oceanography" and "dinghy sailing"; the Editor of such a volume must draw the line somewhere, and the former topic was considered too large to incorporate properly, and the latter was considered to be sufficiently well catered for that the Companion could not be a "rival in price or topicality".

The Companion makes fascinating browsing and can be used equally to start or settle arguments about things nautical, just as one might do with The Guiness Book of Records; for example, if I say "rowlocks" and you say "crutches", the Companion, with its ingenious employment of cross-referencing asterisks\*, will put this matter of correct terminology straight in a jiffy. You can learn to BOX THE COMPASS or read up on THE BATTLE OF THE CORAL SEA.

The publisher kindly supplied us with a copy of another review of the Companion by Michael Richey, a much more thoughtful and learned commentary than we could possibly attempt. Mr Richey finds fault with a number of the Companion's entries on navigation, particulary astronomical, and remarks upon the "loose and uninformed thinking that marks so many of the navigational entries". The Editor in his preface concedes that the very range of his subject has lain him open to error, and he invites corrections for future, inevitable "revised editions", something which may provide hours of good fireside diversion for the nautical sleuth.

The book is beautifully illustrated on almost every page.

D.C.



#### **OCEAN RACING** by Eric Tabarly Norton, \$7.50\*

171 pages with numerous illustrations of doubtful quality by one of the world's most celebrated ocean racers should be an absorbing book. Its failure to enthral must stem from Tabarly's detachment from Ocean Racing as known in Australia and his hatred of the I.O.R. Measurement rules. "Biggest and fastest" is his often repeated dictum; "First to cross the line is the real winner". He finds it illogical that Rainbow should have beaten him on handicap in the 1967 Sydney-Hobart Race.

The majority of the book is confined to preparations for and action in the Trans-Pacific Race of 1959 — a race from San Francisco to Tokyo in which there were only five competitors. The chapters devoted to hull design and self-steering gears make interesting reading, but the first Trans-Pacific Race cannot have raised much enthusiasm, as there were no officials to finish the Race and Tabarly was unable to find anyone to interest themselves in his arrival until the day after he finished.

It is notable that with Pen Duick III, Pen Duick IV and Pen Duick V, Tabarly was in the same situation as most Australian owners, in that his boats were unprepared until the last minutes prior to starting their first

### The Parmelia Race Plymouth to Perth .... 1979

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Courses have been selected to allow the entry of vessels somewhat smaller than those eligible for previous "round the world"

The Race is programmed to allow entrants to take part in two of the world's greatest Ocean Classics, the Fastnet Race and the Sydney to Hobart. Entrants will be able to compete for a major points score trophy over the three

Full Facilities at the Port of Fremantle will be provided by the Race Organisers, the W.A.Government, and Yacht Clubs of the State. First class facilities for maintenance will be available.

After the race, you may take part in a season of ocean racing or cruising in the warm sunny conditions of our West Coast, followed by a leisurely cruise in company to European waters via the idyllic Seychilles, and the Mediterranean.

A race or cruise in company to Sydney will be provided for those wishing to compete in the Sydney to Hobart race, the climax of the 1979 Southern Cross Cup series.

Those wishing to race back to Europe may then take part in the Tea Race over the route of the China Tea Clippers, from Hong Kong to London via the Cape of Good Hope. These yachts can be shipped from Australian Ports through the Tropical Cyclone belt south of the Equator.

The Parmelia Race project is being administered by a Management Committee on which are represented Royal Perth Club of Western Australia, The Western Australian Government and the Race Sponsor, the Hotel Parmelia. Perth. Western Australia.

#### Race Information

#### RACE COMMITTEE

The Race will be conducted by a Joint Race Committee of the Royal Perth Yacht Club of Western Australia, the Royal Ocean Racing Club, the Royal Western Yacht Club of England and the Royal Cape Yacht Club, under the Chairmanship of the Commodore of the Royal Ocean Racing Club.

A Management Secretariat has been established in London under the direction of Anthony Churchill Esq. to provide all possible assistance to interested yachtsmen.

Enquiries on any of The Parmelia Race or the Tea Race should be directed to:

Mr Anthony Churchill, Parmelia Race Management Secretariat, 34 Buckingham Palace Road, London, SWIW ÖRE. Telephones(01) 834-3430, (01) 834-3511.

In Australia, address enquiries to:

Royal Perth Yacht Club of Western Australia, P.O. Box 5, Nedlands 6009 W.A. Telephone (092) 86-6217.

(continued page 24)

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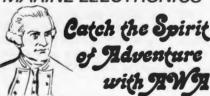


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#### by Jack North

"New Endeavour" added a touch of glamour to the Whitsundays when she was in the charter business up there. Later everyone used to look at her when she sailed on Sydney Harbour. It's a shame to see that she's in strife now, and hopefully, by the time this goes to press, Dick Mills will have found a fair breeze.

Her rig is a puzzle for sailing ship purists. Althought called a barquentine she could also be a three masted topsail schooner. However, that is not an argument for this column.

So much for the commercial side of sailing. In Mooloolabah were several yachts that have passed through the C.Y.C. marina. Among these was "Mercator" which spent quite a longish time in Sydney. Also noticed was the Canadian ketch, "Pieces of Eight". I found that the unusual looking stern profile is due to the fact that she does not have an inboard motor, but an outboard which is fitted down a well at the after end of her waterline.

Many visiting yachts have passed through in the last month or so, but I fear *Offshore* has not been on the ball in meeting them. One yacht was a black painted Tahiti ketch from Melbourne, I think. She bore the grim name of "Black Joke" which was a famous, or infamous, pirate ship on the Spanish Main in the days when pirates played it rough.

However, there's nothing rough about the present "Black Joke". Her owner said the name should have been "Black Joe" after the Stephen Foster song. But owing to a painter's error . . . well, there you have it.

With the latest Noumea race now history, it's worth noting that "White Cloud" won the first race by sailing from Bradley's Head to Noumea on the starboard tack all the way. Is this a record?

Sometimes ships come in from the sea with wild-eyed sailors telling the most hair-raising stories in between gulps of grog. These yarns go the round of the waterfront and lose nothing in the telling. Nobody seems to be interested in voyages where nothing at all happens,

although a nice quiet trip is better than all your blood-curdling adventure.

Take the recent passage of "Bacchus D" from Sydney to Shute Harbour, for instance. She left Sydney on the first Thursday in May, in rain. It rained all the way, with not a breath of wind, until she reached Mooloolabah on the following Tuesday. Grahame Campbell got off there, I joined the ship's company and things changed for the better. Weatherwise, that is.

The sun shone warmly, the breeze blew ten to twenty knots from the sou'-west and it was a tourist brochure ride all the way to the Whitsundays. The whole thing was a dream of sunshine, pleasant sailing, blue seas, jewel-like islands, bright stars and dry decks. We just steered and it was hardly ever necessary to trim the gear.

The usual argument broke out in the Whitsundays, of course. Which is the best pub? Well, there was only one way to find out, and we still proved nothing.

Quite a few ex-Sydney yachties live up that way. Hal Evans of "Moonbi" fame runs a charter boat service out of Shute Harbour. Vic Meyer, with "Solo" on the market, has settled down in Mooloolabah where he grows the best tropical fruits I've ever tasted. Dougie Lintern lives at Mooloolabah too, having moved there recently from the south coast.

All older members of the club should remember Dougie, who sailed in "Ripple", "Southerly" and a lot of other boats. His theme song was "A Shanty in Old Shanty Town".

"Bacchus D" is in the charter business, of course. The number of charter boats is smaller than it was some years ago, but they are bigger now. Sail has made its appearance in the game and "Bacchus D" is undoubtedly the finest windjammer of the fleet. Several former luggers and suchlike cater for the tourist trade, the best known of these being the former Thursday Island mission lugger, "Torres Herald", now re-rigged as a motor schooner.

#### Parmelia Race (continued from page 23)

#### **RULES AND SPECIAL REGULATIONS**

Rules and special Regulations will be promulgated by the Race Committee. The latter will be based generally on the R.O.R.C. Special Regulations for the 1975 Financial Times Clipper Race.

#### CONDUCT OF RACE

The race will be conducted in separate Divisions, with courses to suit the requirements of the various classes of vessel.

#### **CLASS 1 IOR DIVISION**

This Division will be for monohulls rating beween 35ft and 70ft IOR and will start at Plymouth on Monday, August 27, 1979.

A non-stop race to Fremantle, Western Australia, is planned but this is subject to review if a sufficient number of entrants wish to include a stop at Cape Town.

#### **OPEN DIVISION**

This Division will cater for monohulls fo 30ft LWL and above. The Race Committee reserves the right to accept entries from owners of smaller vessels with suitable experience in long ocean passages. No upper size limit will be set in this Division.

This Division will include sections for both racing and cruising yachts. The racing section will compete for Trophies on IOR ratings.

The Cruising Section will be allocated handicaps by the Race Committee but will in addition compete for Trophies on the basis of navigation, seamanship, communications and log keeping.

This Division will start in the Solent on August1, 1979, round Eddystone Light to Port and sail to Cape Town which will be a compulsory stop. to allow for exchange of crews, particularly of sail training ships, provision will be made for optional stops at other Ports by the Cruising Section of the Open Division.

In the Cape town to Fremantle leg, St. Paul and Amsterdam Islands, in the southern Indian Ocean, will be left to Starboard.

#### CREW

Yachts in all Divisions will be fully crewed. Minimum crew numbers will be laid down in the Special Regulations.

#### BOAT SPONSORSHIP

Sponsorship of entrants will be permitted providing certain restrictions in boat naming are observed.

Details of such requirements are available from the Race Management Secretariat which will also assist in any way possible to obtain sponsorship for potential entrants.

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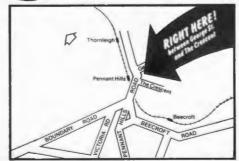
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