CYCA launches Sail of the Century

With applications to enter the last long ocean race of the century being received at a steady rate, predictions are that close to a 100 yachts will line up at the starting line on Boxing Day for the 1999 Telstra Sydney-Hobart Race.

"Indications are that most yachts that finished the race last year are fronting up again, while those who were forced to retire have 'unfinished business' in Bass Strait," Commodore Hugo van Kretschmar said.

"We have seen near record fleets in all major offshore races and regattas throughout 1999, with many new boats on the scene, and we expect many of these will also race to Hobart."

Ironically, the worldwide publicity given the stormswept 1998 race has created even greater potential for international competitors, with the CYCA receiving positive inquiries from yacht owners in the USA, Russia, Czechoslovakia, Sweden, Germany, Great Britain and Holland.

The entry of the Seattle-based *Alaskan Eagle*, a Sparkman & Stephens-designed 65-footer which raced in an early Whitbread Around the World Race as *Flyer*, was confirmed, along with another American yacht, the J60 cruising yacht *Pipe Dream*. Another likely entry is a Volvo 60 from Sweden.

Other possible overseas entries include a cruising 80-footer from Germany, a British owned Farr 40 OD, a big Swan from the Netherlands, a 40-footer from Germany and a 40-foot cruiser/racer from Russia.

Former maxi yacht owner John Kahlbetzer is making a comeback to ocean racing, having commissioned Murray, Burns and Dovell (MBD) to design him a 62-footer, *Bumblebee V*, which was launched last month. Iain Murray will sail on the boat, along with prominent sailmaker and international yachtsman Michael Coxon and CYCA Commodore Hugo van Kretschmar.

Kahlbetzer is best known for his yachts named *Bumblebee* which contested the Admiral's Cup in 1975 and several Sydney to Hobarts, including the 23m *Bumblebee IV* which took line honours in the 1979 Hobart.

Geoffrey Ross is having a new *Yendys* built by Boatspe at West Gosford - a state-of-the-art Farr 49 IMS racer.

• The address of the 1999 site is www.syd-hob.telstra.com.au

MiniSats

In its capacity as the major sponsor Telstra will team w J-Trac International to provide MiniSat roaming technol for all race participants.

J-Trac will provide mobile satellite handsets and Tel will provide satellite air-time to send data in real-time fr each yacht to race organisers, media and Telstra web visitors.

Used in conjunction with GPS units, the MiniSat sen will be used to track the progress of every yacht's posit to within a 15 metre radius, throughout the 630 nautical race.

The CYCA has offered unqualified support for the init and has amended race rules to ensure all yachts carr accredited tracking technology.

Antennae Farm

In addition to having each yacht carry a MiniSat, ov race communications are also being upgraded:

- A new Hobart Radio antennae farm is being establi for the Royal Yacht Club of Tasmania which will v improve direct radio communications between R Headquarters, the Radio Relay Vessel and the fleet
- The Sail Training Ship *Young Endeavour* will be Radio Relay Vessel for the seventh year in succes with the brigantine this year having aboard two C radio teams and upgrade communication equipm
- The Australian Communications Authority has gra the CYCA an exclusive marine radio frequency for t the race. The new race frequency will be 4603.6 KH position reports and race traffic schedules, repla 4483 KHz, with 6227 KHz continuing as the secon frequency.
- Each yacht must upgrade at least one of its EPIRBs t more sophisticated and accurate 406 Mhz unit.
- Each competing yacht will also have to carry a w proof, hand-held VHF radio in addition to its fixed HF and VHF radio sets.

letters

Koree

I write on behalf of Gordon Doig and in reference to two letters in the October issue about two vessels named *Koree*.

When Mr Doig had enquiries made for him at the Commonwealth Archives at Villawood, he was given the information that *Koree* had been registered at Sydney under the (Imperial) Merchant Shipping Act 1894, as No. 1 in 1903. An Official Number 112589 was quoted. He was not told of her dimensions or whether her Registry had been closed. This is obviously the ferry referred to by both Robert Young and Geoff Johnson.

Under the 1894 Act, the Commonwealth was not qualified to own a British Registered Vessel. However, an Order in Council of 1923 qualified the Commonwealth as able to so register. One example was the Commonwealth Health launch *Jenner* on Sydney Harbour. Since the enquiry at Archives did not produce the existence of another *Koree*, the strong probability is that the *Koree* built in 1939/40 was not registered by the Commonwealth under the Order in Council. This latter vessel's description fits the target towing vessel that Gordon served in.

Mr Doig wishes to express his appreciation to all those who have taken an interest in his quest.

Don Bayswater,
Long Jetty.

True Challenge

The Hobart race review is like Claytons.

Heaps of excellent recommendations to improve emergency procedures, but no outstanding advice for avoiding the need. Except that rules may need to be changed to require stronger decks. Don't hold your breath, the buck's been passed to an international committee for consideration. Fragile decks, held up by camber and down by a single wire, have been breaking because of hull flexing for decades. Who didn't know?

It's tempting to jump to conclusions after a sensational story or cursory glance at incomplete information. Thousands of miles of uneventful racing doesn't prove seaworthiness, and blaming rogue waves for damage is a cop-out. Seaworthy boats don't need to resemble submarines. A well-designed light displacement yacht can come out of a violent capsize in good enough condition to continue racing. As for informed choices; crews seldom ask to see survey certificates.

Many yachts don't have enough interior grab rails, most locker doors have friction latches, bin lids and cabin soles are usually held down by gravity, sometimes heavy gear is left loose and occasionally tanks aren't properly secured. No bridgedeck is common, washboards rarely have spring catches, and masts are dangerously light with feet not even pinned. Structural bulkheads are often not tied, GRP could be aerated or riddled with concealed osmosis, carvel-builts have a low strength to weight ratio that worsens with age and restoration to perfection is impossible.

It'd be a true challenge for a solo globe sailor to discover such defects halfway to Cape Horn.

Neville Cottee,
Avalon.

What price a clean bottom?

I have observed over the last couple of years that the price of some "International" brand anti-fouling paint (CSC and Longlife) sells in New Zealand for SNZ100 to SNZ105 for 4 litres. This is about half the price charged for the same product at Australian discount marine suppliers.

The manufacturers tell me that although the products in question are made in Australia and shipped to New Zealand they have no control over the retail price either there or locally.

Perhaps some of your readers could shed some light on why this could be so?

Doug Watkins,
Balgowlah Heights.

it is flawed. I found a trend that showed, of the boats considered in that section, the lighter displacement boats with low stability factors were rolled through 360 degrees whereas the heavier boats with higher stability factors were knocked down and recovered. There were other details in that section which I found misleading and inconsistent too.

It is correct that rotational inertia, or the roll moment of inertia, is a very important factor in relation to dynamic stability, or stability in waves. But I am uncomfortable with the idea that it can be solved with a 10kg weight hoisted up the mast in times of trouble. That sounds like a good way to loose the mast if it has not been designed to allow for it. (just like you would with a radar). The real answer is a more robust spar and rigging with greater mass, and a deeper hull with its interior weights lower down and more substantial structure, also generally, lower down than in a light displacement hull. Then we start seeing a boat with a better roll moment of inertia and a much more sea-kindly motion. It's a balance and compatibility of all characteristics that produces a good seaworthy boat.

In such a boat you don't have to be a sitting duck at all, you can keep sailing and remain manoeuvrable, well reefed down, with minimal attention to the helm.

The seaworthy boat looks after you, not the other way around.

My late uncle, Naval Architect Alan Payne, was always proud of how one of his *Koonya* designs sailed off a lee shore in New Zealand over a period of three days, caught in an intense low. With just storm sails set and no one at the helm for extended periods, she sailed out to safety until the storm eased. It was lucky that *Bin Rouge* and others had searoom and could turn for shelter rather than have to continue on, as would have been the case if there had been a lee shore.

Once you have read Marchaj, go and look up the history of the Grand Banks fishing schooners in the 1880s to early 1900s. You will see that they started out with beamy, shallow-hulled boats going too far offshore and getting overwhelmed. They changed to deeper, narrower hulls and gradually evolved a safer design of vessel. Curiously, it was due in part to yacht designers of the time who also designed fishing schooners, such as Edward Burgess and Bowdoin Crowninshield, that caused this change in shape to happen.

What about today's generation of yacht designers? I am one of them, and I have been lucky enough to have experienced designing and sailing in large heavy displacement yachts and lightweight racing craft, over a period of years.

I think we have gone too far with speed orientated designs for offshore racing craft and it is time to reverse the trend. We need to go offshore in seaworthy craft for racing and not go offshore in racing yachts with extra equipment for survival and recovery as their main concessions to safety. I saw Chris Bowling put on his safety harness and pull out his small storm sail at the seminar. Yes they were better than the regulations, but it misses the point. These are held in reserve with other equipment, often not used or really needed in a race, but there as a safety margin when required.

Your boat, the hull, appendages and rig, needs a significant safety margin built into the design and structure so it has reserve features which give the yacht much greater potential to manage with storm conditions.

Current yachts have no significant reserve features at all.

Seaworthy Craft — the Forgotten Factor

*Yacht designer **David Payne** argues its time to reconsider structural safety margins and reverse the trend of speed-oriented designs for offshore racing craft.*

Those who agree with Chris Bowling's point of view on light displacement boats, should go out and buy the book "Seaworthiness, the Forgotten Factor" by CA Marchaj, (Adlard Coles 1986 and since revised). Read it thoroughly. It takes a while and the maths might look daunting, but it gives good reasons why modern yachts have a combination of characteristics which make them potentially very dangerous and why older yachts were generally much better craft in severe conditions.

Nothing has really changed since it was written, we may not have the awkward designs typical of the IOR era, but we have continued to refine the racing yacht as a beamy, light displacement boat with high aspect ratio appendages, intent on speed and designed with no proper regard for safety margins or factors in the hull shape and structure. Safety seems to be about equipment and experience only.

By reading the book you will find that it is not an assumption that heavy displacement boats are potentially safer. They are compared to light displacement boats and it is clearly shown why heavy displacement boats perform better. It will also become apparent that *Bin Rouge*'s sideways skidding is not as safe as it looks. It is a matter of luck that it did not end up tripping on its beam ends and being knocked down to 90 degrees, as were 39% of the Hobart fleet.

One noteworthy comment from the book sums up the luck factor ... an unpredictable sequence of events can overwhelm a seaworthy boat, but the predictable consequences of an unseaworthy boat should not be considered in the same category.

I was at the UNSW seminar too, and Naval Architect Warwick Hood, amongst others, made a case as to why current light displacement boats have problems in storm conditions. Stability is one of the issues and I would note that Andrew Dovell from Murray, Burns, Dovell stated at the seminar that the Hobart race should perhaps be Cat 0 with its higher Limit of Positive Stability and Stability Index of 120 degrees. This would present problems for smaller boats such as *Bin Rouge*, which in Dovell's published paper has an LPS of 116 degrees. Note too that the stability index takes into account beam and displacement, not just static stability.

I have also read the CYCA report on the race. Yes, almost all the damage to yachts was to decks, windows and cabins due to rollovers and knockdowns, but that is because the seas were taken beam on. The previous high attrition races in 1984 and 1993 had severe head seas and this caused considerable hull damage as boats pounded and leapt of waves. The very different conditions invalidates the comparison and does not prove that the hull problems of previous events have been addressed. No significant rudder damage occurred, but in the next major race after the 1998 Hobart event, to Mooloolaba, five new yachts retired with rudder and steering problems. I think this shows that all the structural issues of the past 10 years or so still need consideration, not just decks.

I believe the CYCA report is wrong in its finding that size etc was not a determining factor in whether a yacht fared better or worse. Their section 6.2 Stability dealt with this and