AMATEUR BOAT BUILDERS' ASSOCIATION

Jan/Feb 09

The two amahs await Harry Speight's F82 trimaran in Hovea

MAINTENANCE AGAIN, IF OUT OF SEASON

Eighteen months ago one of our most interesting guest speakers was Craig Wilson, talking on winter maintenance. On November 26 we finally, after a bit of a wait, got him back to enlarge on the ideas he originally spoke about.

After checking that the predominant interest in the room lay with sail, as opposed to power, Craig fired up the computer projector and launched into a power point talk. He first summarised the usual types of hull construction; fibreglass, wood, aluminium and steel, with fibreglass covering three forms – polyester, vinylester and epoxy. He seemed to think that timber was the hardest to deal with, whether wet or dry, although aluminium and steel could be difficult to get fair and polyester glass usually suffers from osmosis.

When it comes to painting, especially below the waterline, Craig definitely favoured epoxy products all the way. Quality two-pack epoxies from names like Hempill and International, sourced from marine suppliers rather than hardware shops, are the way to go. Epoxy primers in particular rely on their solids content for effectiveness – the higher the better, with 45% being desirable. Antifouling, he reminded us, works by the paint falling or wearing away in an ablative process and new antifouling only needs to be

applied when the old has just about worn off. Don't use copper based A/F if your boat has aluminium extras like inboard/outboard legs, etc. And don't mix more than 10% thinners in your A/F. Another thing to remember about antifoul is that products advertised lavishly in northern hemisphere publications may not be as effective in the warmer waters we have here. One needs to research the local market. As far as application techniques go, spraying is usually a no-no on yacht club hard-standings which leaves choices of brush and roller. Craig very much favours the brush, pointing out that rollers lift off the paint as well as lay it down.

The perfect antifoul is a product by Prop-Speed but it's a tad pricey for whole hulls. About $20 000 would do a 30' hull, but it's good for propellers.

Osmosis is a separation and leakage under the gelcoat, mainly on polyester hulls and can extend over all the layers of the substrate, generating a brownish liquid akin to glycol. The big O can be detected either visually by bubbling or by tapping the gelcoat and listening to the sound. When found there's nothing for it but to grind out the whole weakened area and repeatedly wash out the brown liquid before building up with new materials. Hairline cracks that are not yet osmosis may often be found near bulkheads, keel bolts, bearings and skin fittings. Craig didn't really say what to do about these but it would seem reasonable to grind down and replace the gel coat, while reinforcing internally in the bad cases.

For above the waterline, if you're not repainting, you'll at least be cleaning down the existing surface. There are various acid-based products for cleaning; all of them needing dilution to a greater or lesser extent. Craig's favourite is Kleen-a-Hull and it can be used to remove oxidation and stains from anchor wells, etc, etc. After using these acid-based chemicals on stainless steel, however, it's important to polish the metal with something like T-Cut, followed by a wax. Once again gelcoat needs to be examined for stress cracks, especially near stanchion bases and so on, with consideration for the possibility of delamination and osmosis.

Another area for constant concern is 'glass-sheathed timber since this often delaminates, especially if polyester resin was used. The cure? Grind it out and start again. And the best of gelcoats eventually become dowdy and need to be painted over, preferably with a good two-pack epoxy. If done this way the results will last a long time. Stripes, often stuck on, can improve appearance but, when too wide, may make the boat seem too short. The paint should be polished before application of stick-ons.

For electrics Craig again recommended the use of tinned wire but warned that it was not available in motor shops suggesting the price might be high, and also suggested smearing all connections with Vaseline for insulation and sealing. Some electricians specialize in marine work and Craig's favourite is Jenkins Auto Spark in Myaree, which is not too far from the water. Electrolysis falls under the heading of electrics, too, and is best managed by earthing all subject areas with a common earth with, of course, suitable sacrificial anodes fitted outside. It presents its greatest risk in marinas, especially when hooking up to AC power for battery chargers, fridges and so on. There can often be as much as ¾ of a volt potential difference between a marina earth and the water - and that's where the trouble starts. Cooling systems can conduct the difference into the boat so that the big E can attack both internally and externally. Hence, earth everything.

As far as the timing of maintenance goes, the condition of antifoul and anodes dictates when to haul a boat out of the water while maintenance above the waterline is usually ongoing. Care of the motor should, of course, be based on the manufacturer's manual (if you can find it).

Once again this was a very comprehensive talk, delivered to a very appreciative audience. Many thanks, Craig.

THE HARRY SPEIGHT TRI-LOGY

Yes, I'm afraid you've got to put up with more dreadful puns, but this time the "Tri" refers to our third trip to Harry's trimaran project. Up in the hills just east of National Park he's still working on a Farrier F82A folding tri in Western Red Cedar strip plank. We first saw it in '02, then again in '04 and Harry invited us up again this last December.

At the first visit he'd all but finished the two amahs and had the port half of the hull and deck mostly planked up in a female mould made up from particle board shadows. This was then to be hauled into the roof, the shadows re-arranged for the starboard side, that side laid up and the port side lowered onto it for joining.

By the second visit the join had been achieved and the hull was upright and fully decked. Harry had had second thoughts and was adding the optional aft cabin, too. The off-centre fin case was in place, along with the carcases of much of the internal furniture, having been built in when the half-hulls were laid up. The deck was complete, of course and at the bow a large tube for the retractable spinnaker pole was 'glassed in, with a S/S pulpit sitting in place. The outrigger hinges had been manufactured, at horrendous cost, in Queensland but a start was yet to be made on the arms themselves. Now read on.

For this most recent visit the cynical might say Harry has done little in the intervening four years, but then he's had a trip to England and, separately, acquired two more boats for his "fleet". One of these, a John Leather (I think) 17' day sailor, was on a trailer in his yard and is in excellent nick. The other is a larger ketch, on a mooring at Rockingham, and probably needs some work. No doubt they both distract from the Farrier exercise.

Even so, Harry has achieved a fair bit. Interior and cockpit furniture is now much closer to being complete, seat backs to bunks, etc, etc and most importantly, the outrigger arms are done, all four of them. They are each about 1.8m long (the LOA is 8.2m, remember), hollow and banana shaped. Harry still had the jig on which he'd built them in the workshop. Hinge boxes are moulded into the main hull just ahead of, and also level with the aft end of, the main cabin. These cavities contain the hinges and the inner ends of the arms when everything is locked into the operating position.

Harry had temporarily set up one outrigger arm on its hinge and he was able to demonstrate its operation quite easily. The hinges work on unequal-length arms themselves, so that the inner ends rise up as the outers fold down, tucking the amahs in under the main hull for trailing. Trailed width is 2.5m, whereas rigged for sailing it's 6m (that's 20 feet!). I would imagine there's a fair amount of weight counter-balancing inherent in the hinge design, too, to minimise the amount of muscle needed to fold and unfold.

As stated in an earlier article, the main hull appears beamy at deck level (probably 2m or so), and with the full-width cabin, appears most commodious. However, this is a fast multihull and to this end Farrier designed a wine-glass shaped main hull section that steps down the waterline beam considerably, so that in the water you've got a fairly narrow main hull stabilised by one or both amahs. Internal furniture makes use of the expanded, above waterline beam.

With the completion of the outriggers and hinges Harry is getting close with this project, as long as he doesn't go buying any other boats. But of course he still has to paint it, negotiate with sailmakers and rig it, all of which takes time. Many thanks for another interesting visit, Harry. We look forward to seeing it on the water some day soon.

POST SCRIPT: The more eagle-eyed and older members among you (such as Rob Sewell) will have observed three different spellings of the word "amah" in my reports. The first two were guesses. This time I looked it up in the Concise Oxford – no marine definition, even there – but it does list it as a Chinese nursemaid (my father would have had one as a child in Malaya) and as a support alongside a main hull it seems apt.

ADMINISTRATION NOTES

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FREMANTLE BOAT SHOW

As announced earlier, this event is scheduled for Friday 27th March to Sunday 29th March, with set up to be the previous evening, the Thursday. It now seems almost certain that we will be accommodated on the hard standing within the RPYC annexe, Challenger Harbour, which is fenced and can be gated off at night (as opposed to the open Esplanade); so that's good. Unfortunately, an individual insurance fee has been reinstated, but it's less than the original figure of $125, now $75 (assuming you don't already have public liability insurance of your own). I'm not sure if ABBA is up for another $125 or not – I don't think so.

The chief organiser, Richard Pyett, would like all nominations in early, 20th January to be precise, so if there's any chance of you exhibiting you need to think about it immediately on receipt of this newsletter. If you have a registration form it can be faxed to 9476 9466. Richard can be telephoned on 9476 9423 or emailed at boating@exibit.info Only about half a dozen of us put up our hands for this at the last meeting, most members, I guess, having non-portable projects at home. We would like to get all of those six, at least, on that weekend, because it will lift the status of ABBA considerably. At the next evening meeting we'll be calling on members, whether exhibiting or not, to participate in a roster of supervisors for the three-day weekend. If we could get a couple of people on at a time, changing every half day, it should be pretty simple.

TECHNICAL MEETING, Wednesday 28th January.

Apart from discussing the Boat Show we will be addressed by Glen Swarbrick, of Swarbrick and Swarbrick Yachts in Henderson, on the subject of lofting full-size lines – a necessary first step when building boats from older (non-computer) plans, which seems to confuse more than a few of us. We've visited Glen's workshop on two previous occasions; this time he's coming to us. It should be very interesting. That's at 7.30 for 8, in the Committee Room of SoPYC. If you're interested in the evening meal, better get there about 7pm.

TOOLBOX VISIT, Saturday 14th February. This time it's another longish hike, to the Wanneroo area to be precise, but should be well worth it. It's to Ron Lindsay's place at 23 Honey Place, Marijiniup, where he's got the 1913-built, 40' launch, Kiewa, undergoing a total rebuild. When we say "launch", she was originally described as an auxiliary lugger because it was usual to set a small gaff sail at the stern to reduce rolling because she is, of course, a fairly narrow boat. She was built by Ron's great grandfather, William Lawrance and his brother, Sam at their famous boatyard in Fremantle, and many tools from this boatyard are displayed in the FMM. The restoration was started by Steve Handley in Fremantle and he completed re-ribbing and planking. Ron is to do the rest himself. Kiewa was originally owned by a RPYC commodore so she's a pretty important boat, both to WA and to Ron himself. Ron's block is battle-axed behind another in Honey Place and he'll mark the driveway with a coloured balloon tied to the letter box to aid your navigation. That's the second Saturday in February from 2pm to 4pm – see you there. By the way, if you know of a qualified boat builder in the northern suburbs who could help Ron on an occasional, supervisory basis, please let him or me know

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