AMATEUR BOAT BUILDERS' ASSOCIATION

July/August 2011

We're back in time by three years – half scale duck punt on the wall of Jay Niven's previous workshop in Lesmurdie
Jay has now shifted his establishment to Gooseberry Hill

ROW, ROW, ROW YOUR BOAT

On May 25 our guest speaker was Warren Anderson, an ex-oarsman and one with a passion for rowing and rowing history. And he was able to satisfy us that rowing as a sport has a very long history, even in WA. As he said, the first rowing match in the colony took place in 1830! That would be just about the state's earliest sporting contest. Well, at least we had the river for it.

The WA Rowing Club was formed in 1905 and its original building still survives at Barrack St jetty. It's claimed to be the only surviving wooden, over water building in the world. That seems a little hard to believe when compared with contenders in Britain and America. It could be true of fully floored buildings (exempting boathouses themselves) but when one considers the age of things in the Northern hemisphere it seems a bit strange. Mind you, from my own limited experience, I don't think I've seen anything similar at Henley or Cambridge – I think they were mostly built over land with just a launching ramp over water. Be that as it may, the Barrack St building is Heritage listed, so it should survive a fair time yet.

The earliest racing rowing boats were fully open skiffs, usually clinker planked, not unlike Iain Oughtred's Acorn 15, but if anything, longer and narrower. I actually have an Acorn and believe me, it's plenty long enough and narrow enough for me. By about 1880, however, the classic form of the modern racing shell had basically evolved, with carvel needle noses and sterns, canvas decked, separated by an appropriate length of parallel or near-parallel centre section in which the rowers and cox sat. These hulls and hull sections were not clinker or carvel planked but steamed and moulded out of thin veneers.

Basically the hull section is semi-circular because this minimises wetted surface area, which would be the main drag otherwise. Some time in the dim, distant past someone

tried alternatives in Victoria – a triangular section and a fully circular one. We had a lot of difficulty visualising the latter and imagining how any crew kept it upright. That one and only specimen is now owned by a rowing club in England! The triangular one must have been an experiment to reduce form drag as opposed to skin friction. It would have been hard to balance, too. A project is underway in Victoria to recreate both of these types although I don't know how far down the track they've got.

Outriggers would have been around for a long while but sliding seats are younger. They were preceded by sliding canvas pants – it makes your eyes water just to think about it. Then eventually wooden hulls were replaced by fibreglass (although fibreglass doesn't really improve on wood for strength-weight ratio – maybe it's easier to manufacture), followed by carbonfibre and C/F-foam sandwich. Now carbon does have a much better strength-weight ratio, which is why it's used in racing dinghies, etc. Warren pointed out that the old wooden shells were much easier to repair than 'glass or carbon ones. With the latter any reasonable ding can result in a write-off. Modern, cleaver-style oar blades came in in 1992, probably along with carbon shafts. Warren pointed out that carbon shafts present their own problems because they're so stiff. The slight spring in timber oars was much easier on rowers' backs.

Warren is in the process of writing a history of WA rowing but we weren't told how far he's got with it so far. He also has a collection of eight rowing shells, ranging from an early open skiff type up to the end of the wood era covering such WA builders as Laurance, Ninham and Rimmer. (And there were many more builders in the Eastern States of course) These must present quite a storage problem, especially considering that eight-oar boats work out to be sixty feet long, and I guess fours must come out about forty feet. What to do with them? Well, Warren would like to move the collection from his Wanneroo base to a riverside site and establish a museum. He's thinking upstream of the Causeway because everything below it is taken, and the WARC still occupies its original building, but even above the bridge there's not much around. One possibility is the WA Kayak Club in Belmont, but it's not clear if he's negotiating on that one yet. Certainly, if any members know of a likely site please let Paul or myself know your thoughts.

Although racing, rowing shells were seldom amateur-built, Warren's insights into his interest and hobby were fascinating especially since we can all understand the construction processes. We are indebted to him for coming along from the northern suburbs to share his information.

THE ROSEMARY REPORT

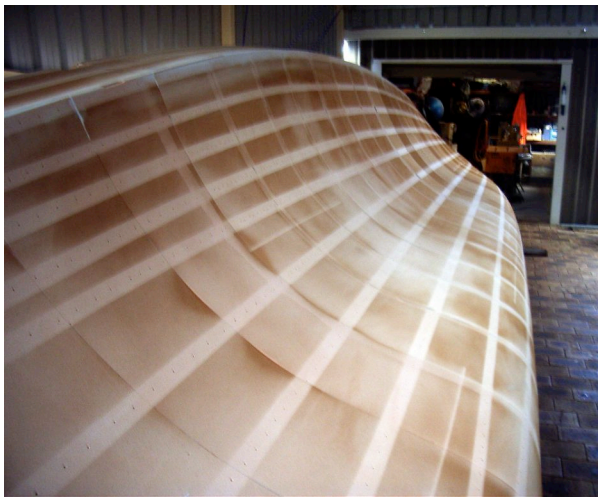
Our Vice-Pres continues to improve following her fall at the Maylands Boatyard. She's been home for quite some time now (this is written on 27 June) and is currently allowed to move around home with only one crutch for assistance. Her pain level is reduced a fair bit, but it's still there, but this is not slowing her down too much.

She does supervised hydrotherapy once a week at Bentley Hospital and intends adding a second day, unsupervised, at St John's, Murdoch. Chris Davis was able to lend a wheelchair which she finds very useful at home and doing the shopping, etc.

She went back to work at Medicare last week, doing 2 or 3 hours a day for two days. She's planning to raise this commitment, too. Her employer has supplied her with an electric gopher at work. To me it sounds as if she's doing too much, but then she has to keep her muscles in condition and they've had a fair rest already. More strength to her arm, not to mention her legs and pelvis.

A BIG PROJECT IN FOAM SANDWICH

On Saturday, June 18 we all made the trip to Ocean Reef to view Brent Ireland's backyard project, a Farrier F32-R folding trimaran. The "32" stands for its length in feet and the "R" indicates it's a racing version and laid up as a fibreglass/foam/fibreglass sandwich. As with Harry's boat, it's laid up in a female mould using MDF shadows arranged on a building jig but set up to construct either the port half and then starboard half, rather than top and bottom. Once one half is completed (and this includes the appropriate deck-half as well) and lifted out of the jig the shadows are rearranged and remounted on the frame so that they mirror-image the original and are set up for the opposite side. The system certainly guarantees symmetry!



This shows the port half of the hull facing skywards from the bow – keel to the right

While still in the mould the inside is easily fibreglassed and at the same time bulkheads and other things can be easily 'glassed in. Of course, any temporary fastening of the foam core with screws has to be from the outside so that the inside is clear for sheathing. When this is done the hull-half is lifted out of the jig, the shadows dismantled and the hull-half rolled over the other way up and in Brent's case lowered down onto the basic building frame. This is the stage Brent was at on Saturday. He has the port half ready for external 'glassing and then he'll be free to repeat the exercise for the starboard side. So the structure showed the outside of the hull uppermost, with the centrelines - deck and keel, resting on the frame and the gunn'le pointing to the sky.

Brent has already completed the amahs, or outer hulls but I had to leave early and missed them.

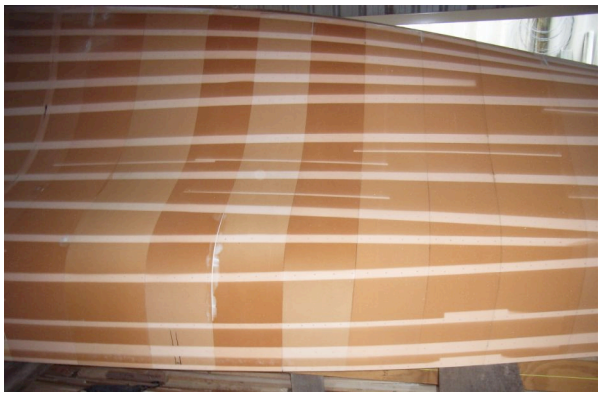
The foam used is Klegecell, a pinkish, fairly stiff closed-cell product which means that water won't permeate through the foam should there be a fracture in the sheathing. In this case it's 12mm thick and comes in sheets 2.4m x 1.2m. Brent has then cut the foam up into strips mostly 30cm wide, usually using a knife. These are then laid transversely around the hull, fastening where necessary with screws from the outside. I should add that for the foam version the shadows of the jig are notched frequently to allow in quite a few longitudinal stringers and giving much more opportunity for fastening screws. Harry Speight's jig doesn't have this feature because his boat is timber cored and holds its shape more naturally. Even though the 30cm panels run around the hull, the result was amazingly smooth and fair, even before cleaning up.

Looking forward over the cockpit and rear cabin

For those unfamiliar with Farrier trimarans the shape is difficult to understand at first, especially while a hull-half is still on its side. Essentially the hull is normal beam across the deck and for above the waterline accommodation. At the waterline it needs to come down to the beam normal for any lightweight racing multihull. It does this with

an arched concavity (when viewed from the outside) between the deck level and the waterline. The same area on the inside is a convenient convexity on which to site bunks, seats, etc. In the case of the 32 the main hull's beam is about 9', say 2.7m, even when folded so Brent will need a special permit to tow it on the road but it is towable.

A curious feature of Klegecell is that it darkens up in daylight, with the result that we could easily see where the jig had been by the light-coloured areas left by contact with the shadows and stringers.


Shadowing of the foam from contact with the building jig

As I said, despite the transverse placing of the foam panels the hull is going to need very little fairing-in and there were few gaps between panels. In just a few areas white Q-cells made a filler with resin to fill up spaces. Brent said he's only had to do a little shaping to fit any new panel to the previous one. I guess any really small gaps will be filled with resin during the sheathing. By contrast, when I built my Victorian riverboat with 10cm wide diagonal ply planks I had to shape ("spiling" it's called) every plank from bow to stern. Most of Brent's foam was bent and laid in cold but some areas were softened with heat first which probably made it possible to accommodate compound curves where necessary.


The cabin top and fore deck from the bow

The resin used is epoxy, of course, specifically R80 Fibreglass International, with micro-balloons or Q-cells mixed where needed as a filler. The inside is sheathed with 450gsm fibreglass while 600gsm will go on the outside. There are extra layers on the inside in all areas of high stress such as outrigger hinges, winches, etc.

Removing from the mould and turning over was largely a matter of muscle in Brent's case. He got several friends around and they lifted it and turned it over. It apparently only weighs 140kg in its present state anyway. I should say that handling it gently would have been the chief challenge. He also had a pair of hoisting tackles fixed to the roof of his semi open shed no doubt for minor adjustments when he's on his own. He's spent about the last two years getting to this stage but confesses the work could be done in around six months

All in all it was a fascinating visit to view a large project in a medium with which none of us is too familiar. We owe a vote of thanks to Brent for making his workshop and the project available to us.

ADMINISTRATION NOTES

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The **NATIONAL HISTORICAL MACHINERY ASSOCIATION** will hold its National Rally at Fairbridge Farm, Pinjarra, from 2nd to 4th of September this year. It hasn't been held in this state since 1997 so this is a good opportunity to catch up. Three local clubs, including the Machinery Preservation Club of WA, are combining to host the rally which will draw visitors from around the country. Two feature days will be the Caterpillar day on Saturday, 3rd, and the Chamberlain day on Sunday, 4th Sept. Since Chamberlains were a WA company that might be the best day to go. Plenty of food will be available, principally from Fairbridge Village itself, catering to both exhibitors and the public, and local Service clubs will have a variety of catering kiosks around the site as well. If you're into old tools or old machinery this will be *the* exhibition to go to.

ANNUAL GENERAL MEETING

Please note that the AGM of ABBA will be held at the South of Perth YC at 8pm on Wednesday, Sept 28. A further reminder will appear in the next newsletter. This early announcement is to make sure we give at least a month's notice in writing, nothing more.

MEMBERSHIP

With the new financial year, these are now due. Subs remain unchanged at $20 with electronic newsletter and $30 for hard copy. They are payable to the treasurer, Chris Davis, either at the evening meeting of July 27 or by post to him at 9 Johnson St, Wembley. Please make your payments early: it makes life a lot easier for Chris.

NEXT TECHNICAL MEETING

This will take place on Wednesday, July 27, as usual at SoPYC at 7.30 for 8pm. The guest speaker will the renowned builder of Australias II, III and IV, Steve Ward, talking about the development and building of these significant 12 metres. Aus II, of course, re-wrote yachting history and changed the face of the America's Cup forever. Don't forget the evening meal if you're so inclined.

NEXT TOOLBOX MEETING

Robert Bingham is restoring a 38' Halvorsen launch, dating from 1943, at the Maylands Boatyard. That's our next Toolbox Visit, at 2pm on Saturday, 13th August. Apparently it's in a space backing onto Hardy Rd, so back from the water. Robert will also take down his 1960-built ski boat, the 16' "Chickadee", so there'll be two of his to see plus the usual ones around the yard. I believe these latter have been reduced somewhat recently, following Arno's loss – those that were going nowhere have gone there. Hopefully allowing space for fresh, going projects. Let's hope the weather's good.

If undelivered, please return to:
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