



AMATEUR BOAT BUILDERS' ASSOCIATION

MARCH/APRIL '07



A delightful launch, but ownerless, at Rod Lines workshop in Mandurah

BUILD IT LIGHT, BUILD IT STRONG

Wed, 24 January saw our first Technical Meeting for '07. About a dozen members and prospective members attended. Apparently unfazed by the moving up of the meeting date.

Mike Rogers described the creation of his Edwardian-style steam launch, Platypus, for us in great detail. Since he designed the boat from scratch, built it, and then built and modified the steam plant, there was a lot to go into. Mike formed the germ of an idea about twelve years ago, but there were several diversions along the way. The major diversion would seem to be a "Sweet Pea", 2.5" gauge, saddle-tank locomotive. This would have been a big project in itself, but it was just passed off as something along the way. I'm not sure if he still has this loco, or whether he runs it often.

Then he made a trip to England (well, a return trip, I imagine), saw the Thames and fell in love with the steam launches he saw thereon. I know the feeling, I've done it myself. It can get you just as badly at Lake Windermere, too. In fact, I'd describe Platypus more as a Windermere launch than as a Thames one. Mike drew up his own design, using old-fashioned long hand techniques,

not computer, to create a transom-sterned hull of fairly rounded sections and 21' l.o.a. He very sensibly tested the design with a 4' model, and I think this even sported a little steam engine, too. John Welsford actually has an article in the current issue of AABB on the building of scale models for this purpose. He suggests a much smaller scale of about 1:10 is OK. From personal experience I'd suggest one needs a model length of at least 24". Then you can consider the actual shape achieved, (most important if you're an amateur designer), test the construction method chosen and play around with the internal fitout, too.

On to the full-size; Mike had decided on strip-planking, and since his hull shape had no hollow garboards this was the easiest. He assembled a building jig of mostly removable frames built from scrap timber, with a couple of permanent bulkheads, before deciding on Kiri timber strips as opposed to Western Red Cedar. These came from High Point Timbers (see last issue) and were finished to 45mm X 15mm. Mike used Epiglu, a good gap filler, for the edge glueing but concedes that one-pack polyurethanes are strong enough in

this application. He hand bored the stern tube through the keel, using a large spanner on the end of the drill, half a turn at a time, I imagine, before completing the deadwood around it in laminations.

The usual technique at this stage is to fibreglass sheath the hull inside and out, but to be doubly sure, Mike then planked his hull on the outside with near vertical planks of 4mm gaboon ply after torture-boarding for fairness. He also planked the inside with horizontal planks of the same material above the waterline, thereby totally encasing most of the Kiri. Only then did he resort to fibreglass sheathing, using this time, HT9000 laminating epoxy. Six months on and the hull was ready for turning over – pretty good going. At this time the hull surprised everyone with its lightness.

With the fitting out Mike was able to pick up waste Kiri from HPT which was then finished to 1" X 1" for framing the superstructure, which includes a dainty, clerestoried aft cabin with a permanent awning ahead. Sheeted areas are done with a Tasmanian oak veneered exterior ply, and the cambered beams supporting the awning are laminated in mountain ash and jarrah. The finished boat, including steam plant, goes to about 800kg, with another 280 for its trailer.

When it came to power plants Mike first considered, then rejected, an existing 3" X 4" single cylinder engine. He finally built his own of the same proportions, using a cylinder and support columns supplied by Doug Baker but doing all the rest himself, including the Stephenson's Link

reversing gear. This drives through to a 22" X 28" prop, derived and modified from a tank mixer paddle – so no big expenses there! The boiler was another story, however. It started life as an all-tubed, flash steam generator but quickly showed itself to be of too high a pressure and prone to bursting. So it was a major re-design to convert it into a humble water tube heating only about 8 -9 litres of water. In this arrangement there's a central water drum with U-tubes leaving and re-entering it in the flame jacket which encases the whole thing. I'm not sure what insulation, if any, is used, but the exterior timber cladding of the whole thing, which makes it look great, has been known to at least smoulder on several occasions! The fuel used so far has been either timber or Collie coal. Mike also has half a ton of Victorian briquettes he's yet to try.

Despite the use of a condenser and a steady boiler feed pump the builder knows his boiler capacity, at the low operating pressure of 40psi, is too light on and so he's planning a much more efficient engine. This will be a double expansion engine with cylinders of 2 ¼ and 3 ¾ inches bore on a stroke of 2 ¾ inches. This should have the same power with only half the consumption of the present engine.

Just to show he's not just a steam nut, Mike is looking for a Stuart Turner inboard putt-putt for yet another project. He never stops. Many thanks for a very interesting talk, Mike

COASTLINES – A BOATBUILDER/RESTORER

On Saturday, Feb 3, we made our long awaited Toolbox Visit to Rod Lines' workshop in Mandurah. His unit is not large but it held two fibreglass runabouts and two larger, wooden boats behind its two roller doors when we called, but it was tight. Outside there was a delightful, larger launch with, sadly, a missing owner, an ageing Hartley T/S and another 'glass runabout. Having experienced some staffing problems in the past Rod now has three people working for him.

Rod started out by warning us that everyone involved with boats should advertise themselves as "problem solvers", not merely boat-builders. He then illustrated this claim, frequently, while describing the progress of the two wooden boats inside. Clearly the love of his life at the moment

is a 28', 50 year old, Arthur Bishop- designed motor launch. It's had about five planks replaced



and several ribs sistered up. Planking is jarrah below the waterline and red meranti above. Rod

explained that he doesn't like jarrah much for boat-building; that it moves and warps too much when it's dried out then wet again. However it's OK below the waterline, where it's constantly wet. Even though fairly small this launch had twin engines and props. The original engines weren't even balanced. One was 12 hp, the other 24! She will be refitted with a pair of new, 30 hp Nanni diesels. She's just about ready for an internal fitout, to be followed by caulking and painting in about a month.



The second wooden boat was both larger and older than the first, and already had external paint applied to the topsides. This had originally been built as a cray-boat, eighty years ago, yet sported a pretty counter stern ending in a beautifully proportioned transom. She had an equally pretty clipper bow and is 32' overall. She'd obviously



spent much of her days as a yacht and is being restored as such. This boat had presumably been an amateur build originally and is actually far from being symmetrical. Rod reckons she must have been built one side before the other! The hull was stacked well down at one end of the shed, with a lot of spare timber stacked around it, so it was impossible to test the theory with the old eyeball, I doubt whether it's that far out – not like a Venetian gondola, for instance.

In this case Rod really wanted to totally replace the jarrah planking but the owners wanted to keep it, so he's sheathed it externally with a skin of triple cold-moulded ply; two diagonal layers followed by the outside, conventional, horizontal,

with well proportioned raking out between the strakes. So much epoxy was required between the skins that Rod strayed from his usual favourite, WEST System (it keeps best) and used cheaper Megapoxy in this instance (it works fine, but has limited shelf life). The three skins are not of equal thickness but total 16mm. A couple of tons of lead has already been cast as an outside ballast shoe and awaits fitting. Rod wants to tie this in to the new outer skin with fibreglass (as well as bolts) but has yet to get the owners' permission for this break with tradition.



At this point Rod explained the economics of restoration, and they're not good. Restoring an old boat can cost as much as double the cost of a building a new replica. The difference is in the labour costs and when you're paying a builder it adds up pretty fast. If you're a backyarder, like us, it's our own time, so it's a question of how impatient one is. I also suspect that more knowledge and expertise, plus extra skills, may be called for on the restoration route. All of which leads to Rod's summarising advice which is "Don't restore an old boat unless she has sentimental value for you".

To this of course should be added the rider, "depending on original condition"

Outside, we all admired the larger, 1950's (?) launch which looks ready to go at first glance but needs complete new propeller gear and internal fitout. The trouble is, the owner's been unreachable for a year and may have abandoned it. Rod may have to sell it to recoup costs – a tragedy.

Once again, it was a very interesting visit, and we are indebted to Rod for showing us over the workshop on a weekend, even if the weather was stinking hot. Many of the group then went on to the cool of Bob Walsh's estancia for afternoon tea.

ADMINISTRATION NOTES

ABBA COMMITTEE

Bob Walsh	President	9537 8570
Alan Coy	Sec/Treas	9204 3043
Mike Beilby	Newsletter	9397 6209
Mike Rogers	Library	9527 7313

NEXT TECHNICAL MEETING

As usual this will be in the Committee Room of S of P Y C on Wed, 28 Mar, 7.30 for 8pm. Those in the know come about 7pm and take the smorgasborg meal which the club puts on.

The speaker will be Steve Green who has a world renowned collection of vintage outboard engines in Mandurah. We hope to actually visit them later in the year.



Two fibreglass repair jobs for Rod Lines

NEXT TOOLBOX VISIT

New member, Terry Langton, has just acquired the sort of project Rod Lines might advise against. He's got an old launch at the Maylands Slipway and is setting out to restore it. It's got several cracked planks which need replacing, and no doubt many ribs, too, plus fitout as well. It's at the first right hand corner inside the Slip area – you might see the name "Southern Cross" very faintly on the stern. Let's go along and offer him some advice and sticky beak at other projects, too. That's where Johnson Rd becomes Hardy Rd, off Peninsula Rd. Saturday 14/4/7, 1400

LIBRARY

Mike Rogers has now taken delivery of all the books and has probably finished his shelves for them, too. At the time of writing it's a bit early to tell if there's a new list of books to go out to all members, but you'll know when it does.



Interior of the ownerless launch at Rod's



AMATEUR BOAT BUILDERS'
ASSOCIATION

If undelivered, please return
to:
6 Stow Court
Wembley Downs 6019

Peter Leggatt
29 North Street,
Mt. Lawley WA 6050