AMATEUR BOAT BUILDERS' ASSOCIATION

MAR/APRIL '01

ABBA COMMITTEE

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Contact any of these four people for clarification of association activities.

ANOTHER SHOW AND TELL - OUR SECOND.

With only three speakers on the agenda for Tuesday 30 January the programmer sounded a bit thin, but what a silly prejudgment that was! Each talk could have filled an evening's programmer on its own, given a bit more time and space, and we had three widely diverse topics to savour. All three talks were well illustrated by photos scanned into a lap-top computer by John Harskamp and then projected onto a screen. I don't know how long this sort of preparation took John - it must have been some time - but the result was extremely professional and added to the enjoyment of the evening. The speaker was able to use a remote control to shift pictures and this even incorporated a laser pointer. Where do we get all this technology? Ask John Harskamp and Chris Davis, they organised it.

The evening started with Hans Harskamp describing his aluminium half-cabin launch, "Water World". This is a Dave Jackman design, stretched a little to 23' long, and the plans came on a continuous roll of mylar measuring 21' x 6'. Hans sounded very happy with the plans but they wouldn't suit everyone because they gave plate shapes only up to the chine line - choice of freeboard and sheerline are up to the builder - whether the finished product resembles an aircraft carrier or a banana, it's up to him.

From the photos Hans seemed to have chosen fairly generous freeboard, giving good accommodation and a dry boat, both useful characteristics when the boat is taken on its favourite fishing run to the west end of Rotto. The all-up build time was an almost record eight weeks at Hans' place of work as a boiler-maker/welder. The entire construction was in 4mm aluminium rather than moving backwards and forwards through 2.5mm and 3mm, resulting in a boat still not too heavy at

about a tonne. A good marine-grade alloy was used, cut simply with a small electric jigsaw and cleaned up with an electric plane. More sophisticated machinery, in the form of a Hydrabend press, was needed to bend the sub-floor sections with a careful choice of radius to avoid cracking the alloy.

The finished boat sleeps three, has no less than 200 litres of fuel below the cockpit floor and is powered by a very economical 80hp Suzuki four-stroke outboard. Hans kept track of all his costs and they were basically $4573 for materials, plus about $2000 for 2-pack paint,etc, with about $10000 in the motor, however the finished boat is worth much more than the sum of those parts. A very professional project.

The next speaker was a workmate of Geoff Leggatt's, Rolf Heidecker, who a couple of years ago completed a Lidgard 35' yacht which he's called "Balance". Like Hans, Rolf started out as a boilermaker, but he now has a degree in mechanical engineering so there's a wide range of ability there. Since he was planning a yacht in strip-plank Rolf experimented first with a 17' Canadian canoe - not a bad project in itself, completing that during his third year Uni exams. The canoe was in Western Red Cedar but for "Balance" end-grain balsa "Duracore" was chosen.

Displaying some lateral thinking, Rolf chose to build the hull's accessories ahead of the main boat - rudder, pulpits, lesser fittings, that sort of thing - rather than have a completed hull sitting around while these components were constructed. He'd spent $6000 on plans so I guess he could be fairly sure all parts would fit. The hull was planked up in Duracore, reinforced appropriately with glass fibre and then sheathed inside and out. Deck and cabin were made up the same way but not fitted until the below decks fit-out was complete. When the deck was finally fitted, this was done with the whole arrangement upside down so that when glassing inside the joint gravity helped, rather than hindered the operation.

I think Rolf must have had access to a nice cheap crane because he used one to turn the hull several times, each time using the crane to lift the shed roof off first! I lost track of the number of times Rolf did this, but it must have been three or four. Rolf's determination to do it all himself even extended to casting the 1.5t ballast keel. Now I know early books of amateur boat building take this activity for granted but with many foundries dotted around the place not many present day builders would tackle it. Modern polystyrene helped in the pattern-making, as did epoxy-sand for the mould, but the casting still took two attempts, the first ending disastrously when the mould burst under the pressure of molten lead, leading to the second mould being buried in the ground on a Kojonup farm before pouring. The fin is extended in timber to meet the canoe-body and even goes further into a centrecase in the hull for stiffness. This yacht could fall sideways off a 20m wave and survive.

The yacht is rigged with a double spreader, fractional mast with diamonds and draws no less than seven feet of water. Although he wouldn't want to go any deeper, Rolf found this draft manageable during an eighteen month north coastal cruise, providing careful attention was paid to tide tables and appropriate calculations made. The cruise started with participation in a Fremantle-Carnarvon race, followed by sailing around "the top" and ended with participation in the Hamilton Island series of races in Queensland before bringing the boat home by road from Brisbane. Spectacular photos taken on the King George River in the Kimberleys served

to illustrate the great versatility of "Balance" as both a cruising and racing yacht.

Following a coffee break, Peter Leggatt rounded off the evening with a summary of his lifetime in boats. He started the saga off with details of a couple of models built when he was a lad, including a rather nice vane-steered example before moving on to his father's construction of the elegant 30 sq metre, "Flame". This must have been a huge project, even back in the early fifties when people were more accustomed to do everything for themselves. "Flame" was planked in paranha pine on karri ribs with jarrah keel, stem, etc. Peter's launch day photos for the 6 Dec, 1953 included shots of towing the jinker through Perth streets to reach the river and the tediousness of launching on RPYC's original and inadequate launching ramp. Although cut down to a masthead rig (originally fractional with two spreaders and diamonds) she is still afloat and sound today.

Peter's own first building project was a dinghy which was entirely appropriate as few yacht club members had pens and almost all kept their yachts on moorings. This was followed soon after by the building of a Gwen 12 when Peter was still only 13. Even allowing for parental assistance it must have been a big project for such a young teenager.

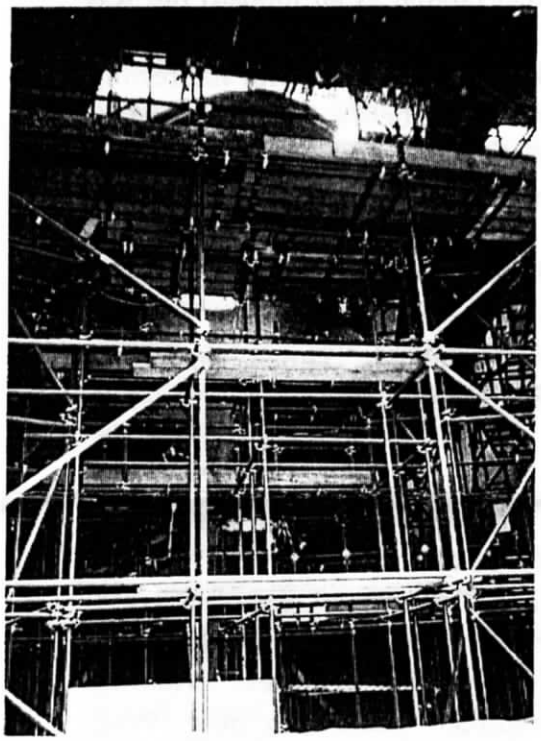
"Flame" was replaced as the family boat by a David Beech-designed launch in the early '60's. This boat was originally built with a converted car engine as an inboard but was later adapted to an outboard motor. Another dinghy followed, this time with interesting outrigger rowlocks, before Peter acquired an older yacht, the 26' rater, "Tuna" which had been drying out for a couple of years. This was an unballasted, open cockpit centreboarder with even the rudder lifting in its own centrecase - great for shallow beaching! Recaulked, "Tuna" became an excellent, lightweight racing yacht.

Eventually, probably under pressures of a growing family, the more solid accommodation of a van der Stadt "Primaat" beckoned and "Buccaneer" was purchased. This offered an excellent compromise between racing and Rottnest cruising. Finally, eighteen years ago now, Peter acquired his present yacht,"Restless III". This is a Swanson 31, "Carmen" class double-ended mast-head sloop, planked in 1 1/4" jarrah and oregon on karri ribs. She is ideal for the cruise to Rottnest and as a twilight racer her visitors' book now boasts over 500 different entries. Although Peter himself retired recently, this is clearly not an option he's prepared to offer to "Restless III". She's going to go on providing pleasure for many years to come.

And so ended our second "Show and Tell" evening. Once again the time passed all too quickly and we are left looking forward to the next occasion in about a year's time.

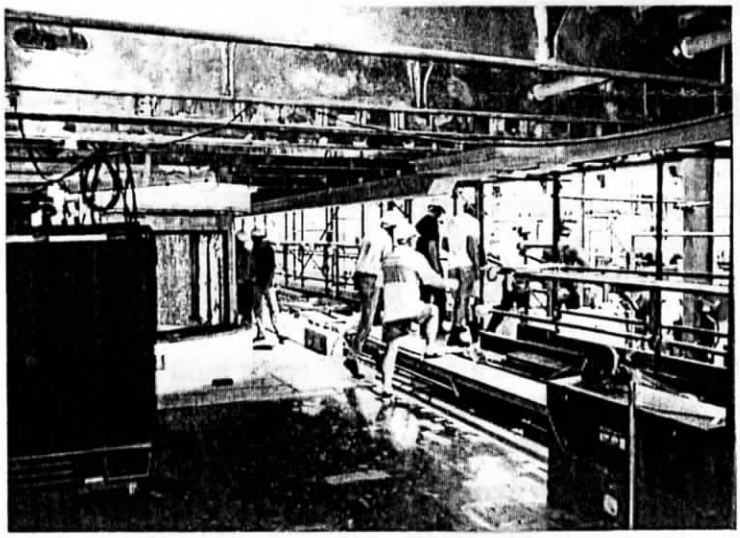
HOW THE OTHER HALF LIVES - LUXURY MOTOR YACHTS.

On Saturday 17th Feb we were treated to a tour of two projects at the Egmont St works of Oceanfast Shipbuilders in Henderson, courtesy of President Geoff. It was all a far cry from backyard boatbuilding, believe me. Available for our perusal was a 30m Sports Fisherman and a 55m yacht being built for a Greek owner. The predecessor of the latter vessel was the victim of the infamous fire of about a year ago. I don't think the owner will be calling his yacht "Phoenix" because it hasn't risen from any ashes - it's entirely new



Scaffolding hides the bow of the 55m yacht.

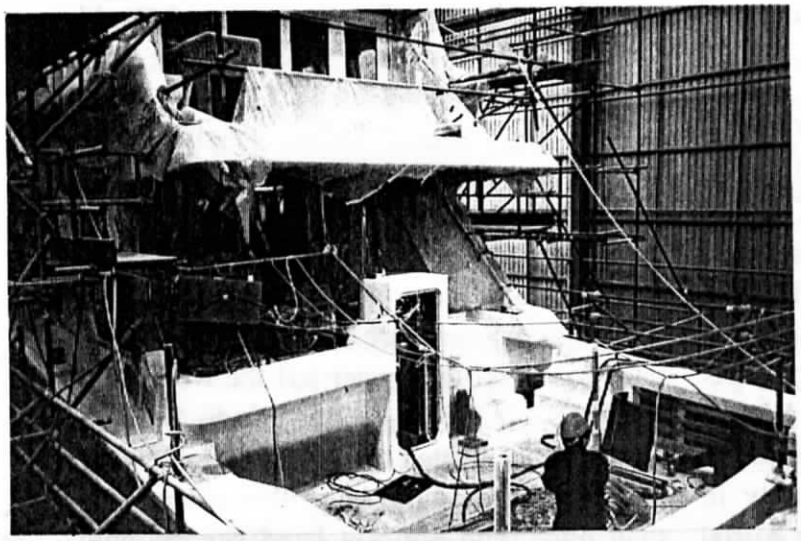
Geoff (far left) addresses some of the group in his office.



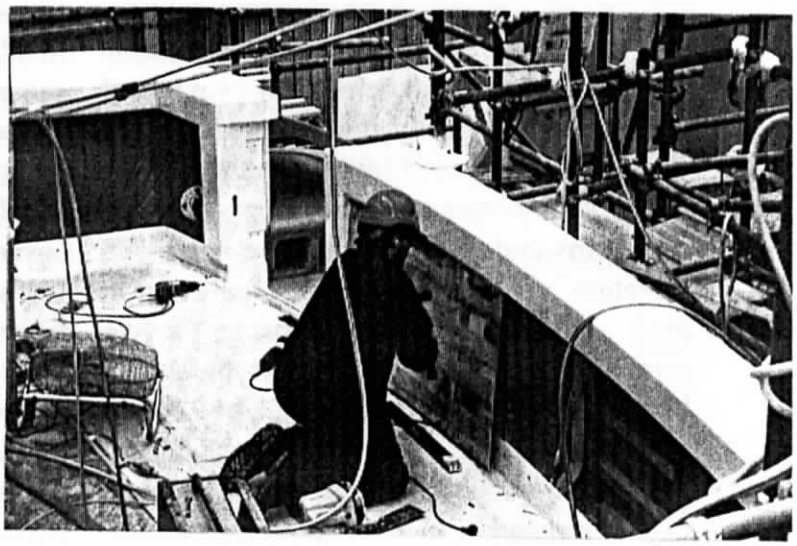
On the stern deck of the 55m. Overhead beams will all be boxed in.

Rudders for the 55m. They're small but shafts are massive.

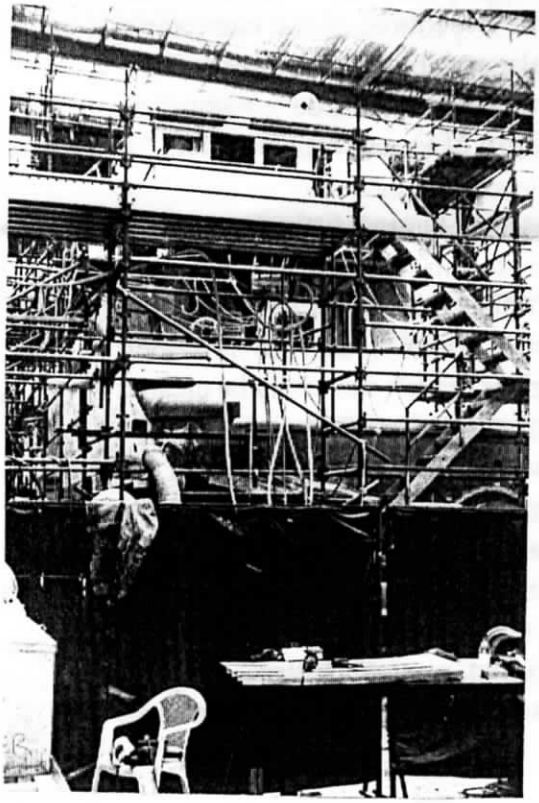
OCEANFAST, HENDERSON



Stern area of the 30m. And this is supposed to be a small boat!



A workman fits a concealing panel at the stern.



Scaffolding also obscures the side of the 30m.

Secondary cosmetic filling on the 30m. That's detail attention for you.

- even the unharmed engines were abandoned in favour of new ones.

The Oceanfast design team, of which Geoff is design manager, has expanded rapidly since the company became a subsidiary of Austal Ships, in line with Austal's policy of doing as much work "in house" as possible. The team now numbers 32 and designs anything larger than 30m on the premises. Smaller projects are still designed out, usually by Dave Woods of Sydney. Most projects are tank-tested in an appropriate tank in Europe, usually in Vienna or the Netherlands - not even Austal is ready to build a 100m tow-tank yet.

The two vessels we saw had many features in common, not the least being their twin tunnel prop drives. Basically each prop operates in a half-tunnel scooped into the bottom of the hull. This allows a generous gap between blade tips and hull, to minimise noise and vibration, while still allowing a reduction in draft. The only difference between the two arrangements was that whereas the larger boat's tunnels terminated well before the stern (rather more abruptly than they started, in fact) the smaller one's ran straight through to the transom - a much better idea, one would think, at higher speeds, and even the larger yacht does a healthy 25 knots despite the props being geared down to about 600rpm. The smaller yacht has a natty retractable bow-thruster whereas the larger has a conventional bow thruster but extends to the luxury of three ride control fins to control pitch and roll - we don't want to spill the martinis, do we?

Another feature the two had in common was the super light panel material used in the internal fitout to save weight and improve performance. It's based on an aluminium honeycomb core faced with a composite plastic material to which is glued a thin natural wood veneer for appearance. I would think plywood panels would be at least double the weight and less stiff.

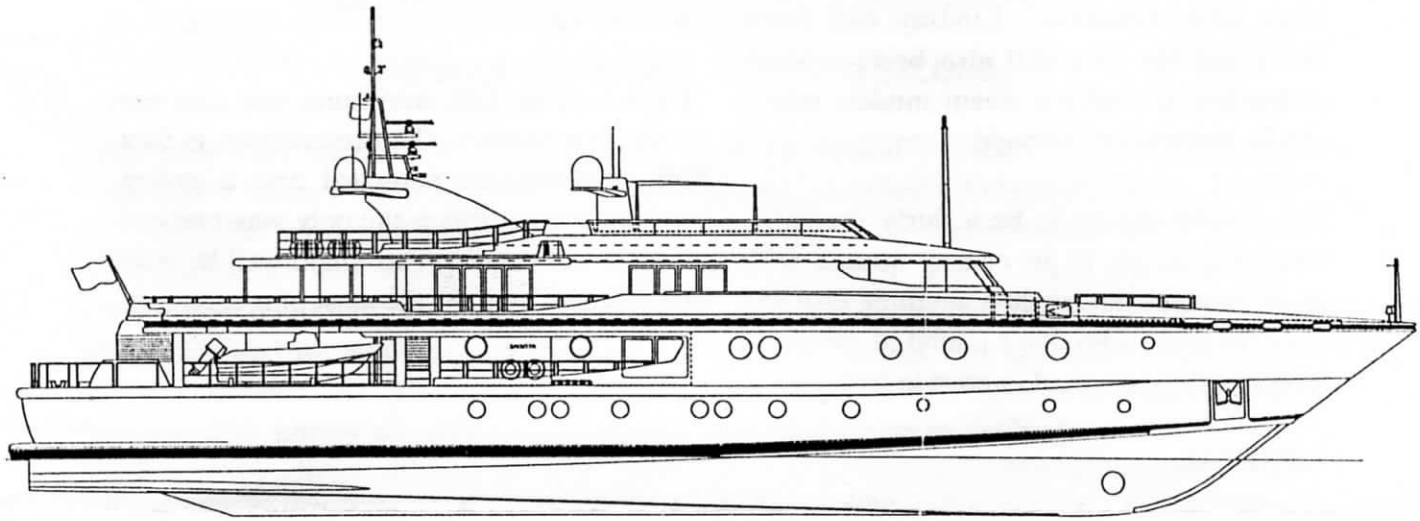
But perhaps the outstanding feature common to both vessels was the attention to detail and standard of finish displayed. Unlike the commercial ferry we earlier viewed at Wavemaster, these are personal possessions intended to let the owner tell the world that HE HAS MADE IT. After grinding off all high spots generated by welding, each hull is entirely sprayed with bog/filler, often more than once, and entirely hand sanded with traditional torture boards to create the perfect finish. Bathrooms and shower recesses are lined with fake (lightweight) marble, or in some cases where performance is secondary, the real (heavy) stuff. On the bridge of the larger yacht the five (count'em, five) video display screens were each mounted in surrounds trimmed in real leather. Unfortunately neither yacht was close to finished in the internal fitout so the full extent of the luxury finish was denied us (but we saw a lot of complicated wiring and plumbing that will later be hidden); however Geoff made available brochures of the company's earlier vessels and believe me, the plush hotels of New York and Paris have nothing on the internal finish of Oceanfast's products.

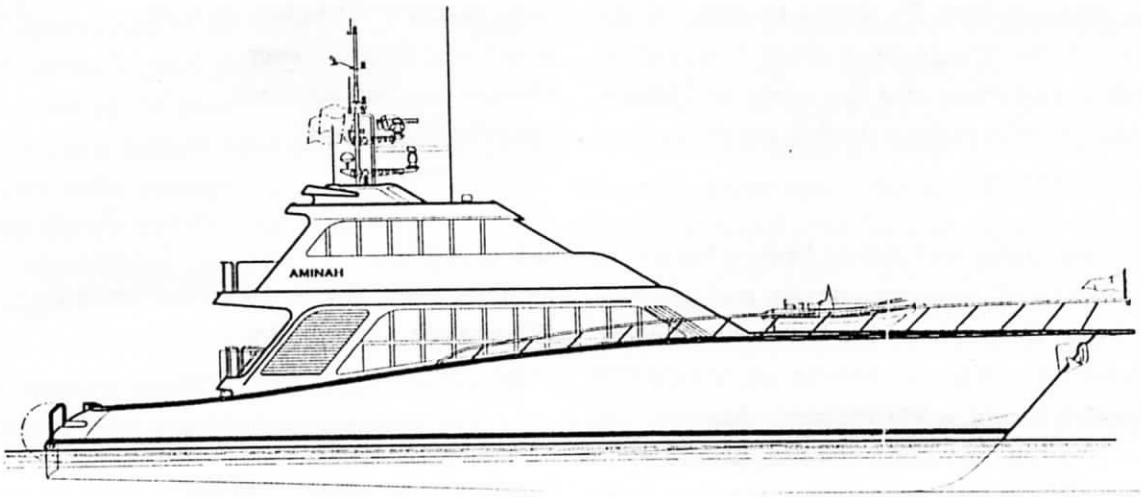
Geoff told us that engine fitting was a tad more complicated in vessels in the luxury market than in the commercial ferry field - in the latter "soft" deck areas are provided above the engines, which can easily be cleared to allow the engines to be hoisted out for overhauls which are fairly frequent in commercial operation. In contrast the yachts don't do many hours of running and so overhauls are infrequent. The decks above the engines are finished according to the internal designer's prescription and are generally quite unsuitable for engine removal.

Instead, while on the hard, a hole is cut in the side of the hull and the engine removed and inserted through that. The hull is then welded up and repainted. In effect the hull side is a softer option than the deck(s). The larger yacht was in the process of having this done for the initial fitting of the engines, in fact.

The fire which earlier devastated the works (and the 55m vessel), although probably a one-off, has led to at least one change. Now hulls are fitted with their working sprinkler systems at the earliest opportunity so that automatic fire fighting can commence straight away should a fire break out on board. It's a sensible precaution with lots of finishing chemicals, fillers and paints around but let's hope it's not needed again anyway.

Once again the visit gave fascinating insights into the world of commercial boat building (and also of luxury yacht ownership; it did suggest some options for when I win Lotto) and we are indebted to Geoff for organising the visit in an otherwise restricted area.





ADMINISTRATIVE

MARCH EVENING MEETING

Tuesday 27th.

Our first guest speakers for the year will be a steam buffs, Doug Baker and Lindsay Adams. Doug operates a small engineering business from his home in Scarborough and is making the steam plants for Alan Maffey's and his own Victorian river launches. We saw Alan's boat, almost finished but sans engine, some months ago at his home in Como. The engine was not available to us at the time. Doug is building a boat out of the same mould as Alan but because of the time he's spent on the engines his hull is not as far advanced. Now with at least one engine complete he is prepared to bring it along to an evening meeting and talk about it. Yes, I've warned him about the stairs and he says that's OK, but I don't think we'll be seeing the boiler the same way, somehow. Lindsay will assist Doug and the pair will also bring a small collection of working steam models which will be steamed on the night.

This would appear to be a fairly specialist topic but steam is an energy source with much more character than anything else and even for those who don't intend to dabble in it there will be much of interest to learn.

APRIL TOOLBOX VISIT

Sat 7th April, 2pm

Our toolbox visit this time will be to the private maritime museum of Barry Hicks at 49 Lacey St, Cannington. Barry, together with his son, Robin, is a traditional ship rigger who has turned his backyard workshop into a museum of traditional nautical memorabilia. I was lucky enough to see it in its early stages some years ago and much has been added since then. These days the collection runs from 6' double ships' wheels through binnacles, lamps, ships' bells, spars, models and rigging blocks in a huge range of sizes. A very extensive collection of traditional woodworking tools is also included. I'm told model builder, Brian Lemon will also be on hand with some more of his exquisite models for us to see.

Unlike some folk museums one can see around the country, the presentation is to a high professional standard and a group booking such as this is the only way one can view the collection. This could well be your only chance, so make the most of it.

GENERAL

Members Clive Jarman and Peter Leggatt will have returned from ES forays by now. Clive attended the Traditional Boat Festival at Goolwa and Peter did the same in Hobart. Perhaps they'd make a double act at the next evening meeting?

Geoff and John will select library books on the subjects of catamaran design and gaff rigs and bring these along for borrowing on the 27th March. In the meantime we're told that "Wooden Boats, a Maintenance Manual" by John Scarlett has been purchased and is in transit. We're also expecting a donation from Doug Baker in the form of a book on propeller design and selection.

CALENDAR

Tues 27 March.
Doug Baker and Lindsay Adams.
Small Boat Steam Power.
Mounts Bay Sailing Club.
Upstairs, Perth end.
7.30 for 8pm.

Sat, 7 April.
Toolbox Visit, Hicks' Maritime Museum
49 Lacey St, Cannington.
From 2pm.

Monday, 16 April.
Committee Meeting, 7.45pm.