



AMATEUR BOAT BUILDERS' ASSOCIATION

April May 2013

ABBA — THE MAKING OF A WEBSITE

Our April meeting was slightly different to our normal tech meetings in that the subject was website development, in fact our very own ABBA website. At the time of promoting this tech meeting, I suggested that this marked the first step in a potentially exciting period in ABBA's evolution. I'm now sure that this is absolutely the case.

The night took the form of a very informative presentation by member Mike Beanland on website design, with a focus on the important considerations in developing a good website for ABBA. Those members who were around in December 2009, will remember Mike as our host when we paid a toolbox visit to his 'project', the ex ferry SS Perth at Henderson. Mike has been a member of our association since that time but unable to attend meetings due to his commitment to other boating committees and to his business, Perth Boat School. Over this time, Mike has gathered both the knowledge and resources to undertake professional website development and he has very generously volunteered to make this available to develop a website for ABBA.

Unfortunately, your editor was unable to attend on the night due to a sudden bereavement in the family that day. However, all reports are that it was a great night enjoyed by all; and an additional thank you to Mike for sending me an informative report on the night's proceedings the very next day. I have taken from Mike's report in the summary of the presentation that follows and then outlined the progress that has been made to date.

The presentation commenced by highlighting the way search engines work and the difference between the results obtained through key words 'abba' versus 'amateur boat builders association' – no prizes for guessing what 'abba' finds. Mike then explained the why's, what's and how's of websites – Why have a website? What might members use the website for? How might the website assist amateur boat builders? How might the website help grow membership? What



CONTENT

COMING

SOON

should be included on the website? How should it be arranged? and finally, 'research' other websites to ascertain what looks and works well and what doesn't. The additional thought triggers on Mike's slides provided a focus for each of these aspects and a great deal of discussion ensued amongst those present.

After Intermission (now there's a good idea for future meetings!), Mike showed the group through a number of different websites that he had researched to demonstrate 'the good, the bad and the ugly'. This included an assortment of websites of styles we don't want, aspects we do want and then (as Mike puts it), the grand finale, the perfect website, the one he thought ABBA should try to emulate.

Since the meeting, Mike has moved forward with the development, bouncing things off Bruce Cadee, Harry Speight and myself along the way. Mike has arranged the domain name, the domain hosting and the web space; and is now creating a draft website. The draft will primarily position us to experience the look and feel of the website and to see progress to date on actual ABBA specific content. When Mike has completed this development work, we will be able to email the draft website address details to all members so that you can provide us with your comments.

Mike is arranging the draft so that we can all look at it but it is hidden from the search engines, spiders etc but you will all be able to see it. When the time comes, I encourage all of you to have a good look at the draft and give me your feedback. It would also assist if any of you can provide good, high quality images that are ABBA specific to use on the banner at the top of the page. Please direct your comments back to me at gonesailing@westnet.com.au .

One of the major parts of the process has been to agree the MENU items that appear on the home page. Mike has recommended that we be careful not to have too many main menu headings but rather group items and have sub categories under the main menu headings. Following some email round robin between Mike, Bruce, Harry and myself, the MENU headings that we are currently favouring are as follows; Mike is currently adding these to the draft and input from members to my email as above when the site address is circulated are welcome.

HOME

who is ABBA? how long has ABBA been around? ABBA's aims, activities etc.

CALENDAR

Upcoming meetings and events, related entities such as wooden boat festivals etc.

TOOLBOX ACTIVITY

Latest toolbox visit and archive of toolbox activities

LIBRARY

Listings of books, plus access to the newsletters and other resources

OUR BOATS

Photos and brief description of members boats, request for info, parts etc

ABOUT US

ABBA contact details, committee member details, membership promo/info etc

GALLERY

Videos as well as images, plans or anything in a visual media.

USEFUL LINKS

Links to related or useful websites. eg KEIWA website, Perth Boat School

BUY / SELL

For redistribution of parts or whole boats or just surplus bits and pieces.

Committee members may also wish to give me their views on inclusion in the About Us page of a short paragraph about each committee member with a photo.

So.....the objective now is to finalise the draft website. Mike is moving onwards with this and in due course will be making the pages, the links and all the integration that is needed to make all these categories work. For each menu item there is a lot of background that occurs - all of this needs to have a 'backend' that will allow editing, will allow things to be added etc - as this is in essence a flexible template that we are creating, so content can change, but the template has to be as good as possible before we go ahead.

Hence, the strong support for an ABBA website which will facilitate many aspects of our association's activities including promotion to potential new members is now becoming a tangible reality. I strongly encourage all members to actively contribute any thoughts you may have, however large or small, in regard to this venture back to me via email as indicated above.

We all thank Mike Beanland for his presentation at the April tech meeting and for his enthusiasm and enormous contribution to the Association in providing his knowledge and resources to bring the ABBA website to fruition.

April Toolbox Visit — Mick O'Shea's 30 Ft Selway Fisher Edwardian Steam Launch (Peter Leggatt reports)

On the 13th of April our members spent another interesting and enjoyable afternoon with Michael and Janice O'Shea in the delightful surrounds of Grandis Cottages at Henley Brook. In the peaceful surroundings, we had the opportunity to marvel at the productivity that takes place in Mick's spacious shed complex and envy his great array of machine tools, recently augmented by a sizeable radial drilling machine. I did also pick-up a mention of a CNC lathe to arrive shortly, then perhaps a CNC machining centre. Jan and her family and friends made sure we were all very well looked after with a delicious afternoon tea while we had time to take in the many aspects of the latest project, a 30ft Selway Fisher Edwardian Steam Launch.



Mick's previous boat, the beautiful Emmamadeline, an Elliott Bay 23ft fantail steam launch which was built on an imported fibreglass hull moulding, provided the back-ground. For this boat, the triple expansion steam engine was completely machined and assembled in-house along with the boiler. Performance has been very satisfying but a little extra

space and speed have been the attraction towards the Selway Fisher design and this time Mick has taken on the complete construction of the hull in strip planked Western Red Cedar. He was fortunate to locate a compound steam engine of suitable size that had worked in a Queensland sugar mill in 1926. This was still in remarkably good condition and restoration work was well advanced with not much more than assembly now being required. In addition, the boiler, a Yarrow design was also under construction. Mick never stops!

THE DESIGNER

Selway Fisher are a very competent design firm run by Paul Fisher. The Selway name is that of his wife's family. From boyhood, Paul took a keen interest in boats and owned a succession of small-craft after his family shifted to a small town near Reading, not far from the Thames. When he was sixteen he designed and built a 14ft racing dinghy for which he even hand sewed the sails. He read a large number of books on boat building and maintenance and after his successful yacht build, his direction was set and he went to the University of Newcastle-on-Tyne to study Naval Architecture and Shipbuilding from 1971 until he graduated in 1974. During his time at university, he managed to design a few large yachts and a National 12 for a fellow student, finishing his course with a final year thesis comparing the various construction methods for ¼ Ton rated racing yachts.

Following his graduation he was very fortunate to get a job as a Naval Architect with McGruer & Co of Clynder on the Garelock in Scotland. Since 1897 this firm had designed and constructed very high class racing and cruising yachts. They had a talented team in the drawing office and also a close association with Ian Nicholson, G L Watson and Murray Cormack Associates. Apart from building yachts of their own designs, McGruers (www.mcgruer-boats.co.uk) also built to the designs of Sparkman & Stevens, Peter Norlin, Dick Carter and others.

Paul left McGruers in 1978 moving a short distance to work at Silvers, a company famous for wooden motor yachts, and for the next 5 years worked on various motor-sailers and fit-out designs. During this time he began his own design work along with a lot of experimentation with the evolving technologies such as the West System coming from the US. In 1982 he moved south to Devon where he started Selway Fisher Design in a relatively small way while also doing some lecturing. Boat design requirements had changed with GRP construction gaining popularity and less individual designs being required. The rather laborious design methods that Paul had grown up with had changed with the use of personal computers and design software allowing design calculations and alterations to be made very rapidly. In 1990, Selway Fisher took on the necessary PC and software needed to accelerate the design process and the business really took off and diversified to all areas of boats, particularly those suitable for home-builders.

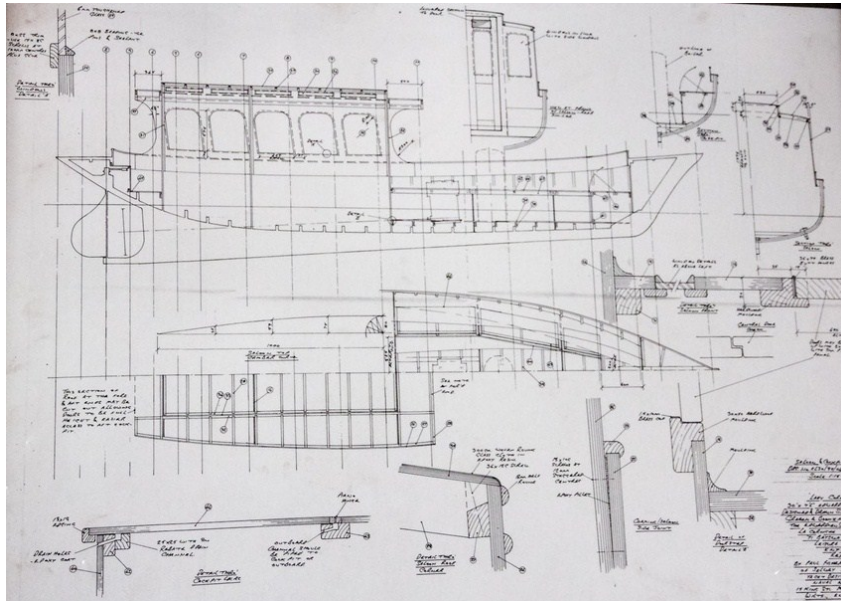
THE DESIGN

Considering the qualifications and experience of the designer, I feel that Mick will be well satisfied with the outcome when JANICE LORRAINE slips into the water, in what I feel sure will be record time. The design is well detailed consisting of 7 x A1 drawings and 5 x A4 instruction/spec sheets.

Basic Particulars for the 30ft Edwardian Steam Launch

LOA	30'	9.15m
Beam	7'6"	2.29m
Hull Mid Depth	3'2"	.97m

Draft	2'7"	.80m
Max. Headroom	6'	1.83m
Approx. Dry Weight	6,615lbs	3,000kgs
Engine	15- 20 IHP	
Hull Shape	Round Bilge	
Construction	Strip Plank	
Major strip wood req. for hull	2,950' of 7/8" x 1¼" Western Red Cedar. (900m of 22mm x 45mm)	
Guidance Use	8 adults	



Rather than using temporary frames with the inherent difficulty of removal and the necessity to brace the shell before fitting permanent framing (perhaps over stringers), Mick is building the hull on about 20mm marine ply frames. When the hull is complete, these will be cut to shape internally to leave a margin for shell stiffening around the hull, along with the appropriate shape to support the internal fit-out such as seats, lockers, shelving etc.



Currently the stem and keel have been fitted and all the frames set up. The skeg is temporarily fitted to facilitate planking, but will be removed to allow sheathing, then will be bolted on and sheathed after fairing. Stringers and the engine beds will also be fitted to the frames before planking. The first two planks of western red cedar had been fitted after convex and concave machining of opposite edges on Mick's spindle moulder with the new cutter head

(the price of which will not be mentioned). The edge radii on the planking allows for a smoother nesting of the planks with a better glued joint and generally a fairer surface inside and outside for final finishing. After planking is complete and fairing and sheathing finished, the outer keel/skeg will be glued and bolted on, faired and sheathed. The sheathing will be finished and possibly painted before drilling the shaft hole and turning over the hull ready for internal fitting out.



The initial work here will involve the cutting out of openings as required in the plywood frames to minimise the additional framing required. The early planking seemed to work out well and I am sure the rest will go ahead like mushrooms growing rather than grass, and much quicker when compared to traditional planking. A final note of interest is that Mick has chosen PURBOND single pack, waterproof, polyurethane adhesive for construction. It has some very impressive properties along with a moderate cost.

- High adhesive strength and no long term creep under stress.
- Suitable for use on damp surfaces.
- Application to one surface only. 200-250 ml/sq metre
- Invisible in close fitting joints.
- Contains no volatile or flammable ingredients.
- Sands easily and doesn't blunt tools.
- 100% waterproof and withstands 72 hr boiling test in 1-2 hrs and fully cured in 24hrs.

The adhesive reacts with surface moisture on any substrate, especially semi-porous, which initiates the curing reaction and in the process, foams and expands slightly, forcing its way into gaps and enhancing contact area. Most timber surfaces have sufficient moisture to initiate cure. Other dry surfaces may be dampened by wiping with a damp cloth. This certainly beats the hassle of mixing most alternative waterproof adhesives and the greater difficulty of application to both surfaces that is usually required. The major limitations noted are where joints are open with a poor mating of surfaces, allowing the glue to expand out of the joint or joints subject to peel or direct tension forces. In these cases, an epoxy glue is recommended.

THE BOILER

Wikipedia tells us that Alfred Yarrow developed his boiler in response to others who had already developed water tube boilers, beginning his work in 1877. The first commercial boiler was supplied 10 years later in 1887 for a torpedo boat. The design consisted basically of an inverted vee configuration with a main steam drum at the point of the vee connected by two sets of water tubes to two smaller drums, one at the end of each leg. The firing then took place about the level of the smaller drums. Compared with early water tube boilers where there was always potential for uneven expansion among constrained tubes, the tubes of the Yarrow are not constrained and

are free to expand. The steam generating efficiency was greatly improved by keeping the temperature of the water tubes relatively low, keeping the tubes full of water and preventing the water boiling and steaming in the tubes which would disrupt the circulation.

Mick has designed his boiler around a proven design which he has scaled up slightly to give an upper steam drum diameter of 12" and length of 2ft rolled up from 3mm copper sheet with a welded joint. The two lower (mud drums) are 6" diameter seamless by 3mm thick. The bottom drums are each connected to the steam drum by a stack of 115 copper tubes, 1/2" in diameter. These are silver-soldered at the joints. The ends of the three drums are closed by heavy steel discs, grooved to accept the drums and a soft sealing packing. Stainless steel, threaded tie-rods are fitted to resist the steam pressure and retain the ends. A housing around the boiler with a grate and fire door low on the tubes and the necessary connection fittings in the main drum, along with a base tray and some refractory material, pretty much completes the picture.

THE ENGINE

Mick has not run the engine since acquiring it and thinks it may have just been used in a static display after leaving the sugar mill, with some obvious defects noted. Running relatively slowly at about 150 rpm and on a steam pressure of around 110 psi saturated steam, these engines have a good lifespan and give little trouble. Most of the replacement parts necessary have been made, and re-assembly is practically all that is required before installation.



This is a compound engine with a high pressure cylinder of 4" diameter and a low pressure cylinder of 8" diameter to use the double expansion energy of the steam. Not quite as desirable as the triple expansion engine built for EMMAMADELINE but still very good and a popular compromise for bigger steam boats of the times.



Most of us overstayed our departure but it was a great afternoon of friendly interaction and admiration of the great achievements that Mick and his family continue to make. The machine shop continues to become more impressive and so does the afternoon tea.



To Mick, Jan and all your family and friends, our sincere thanks for making us all so welcome. Very best wishes for the exciting completion and launching of JANICE LORRAINE.

ADMINISTRATION NOTES

ABBA COMMITTEE

President/Editor	Chris Davis	9387 5042		
Sec/Treasurer	Bruce Cadee	9259 0844		
General Committee	Rob Bingham	9246 0202	Alun Dufty	9272 8905
Library	Rosemary Nayler	9455 1470		

JUNE TECHNICAL MEETING

The next technical meeting of ABBA will be held at the South of Perth Yacht Club as usual 7.30pm for an 8.00pm start on Wednesday, June 5th, 2013.

This will be another very special technical meeting courtesy of Harry Speight's good networks. It struck me that this is about 'aspirations'. What is YOUR biggest aspiration when you choose a boat to build.

We are very lucky that Philippe Peche of "Sailforce" has agreed to present to us on ocean racing multihulls with a focus on the technical, as well as the sailing, aspects of these craft. There will be a short video, followed by a talk accompanied by slides. This is a precursor to a possible toolbox visit to Philippe's workshop at a later time. The toolbox would focus on the subject of modern synthetic rigging and its applications as a replacement for stainless steel on cruising as well as racing sail craft.

And if that doesn't spur you on to put the 5th June in your diary read on;
Philippe P  ch   has a prestigious yachting career. He has competed in three Round the World races, two America's Cups, three Admiral's Cups, three Fastnet Races and holds 12 Metre and 8 Metre World Titles. In 2005, he sailed around the world in a record time of 50 days, 16 hours and 20 minutes and won the prestigious Jules Verne Trophy

JUNE TOOLBOX VISIT

The June toolbox visit on Saturday June 15th, between 2.00pm and 5.00pm, will be to the sail loft of Doyle Fraser Sails. Thanks again to Harry Speight for arranging this visit.

Our host, Will Hammond, is intending to show us through the current choices in sail materials as well as reviewing current technologies available for sail handling (ie furlers and the like).

That's at; Doyle Fraser Sails
82 Stirling Highway
North Fremantle WA 6159
Telephone 9430 5366 if you get lost!

Navigation chart on the last page of this newsletter for those that like pictures!

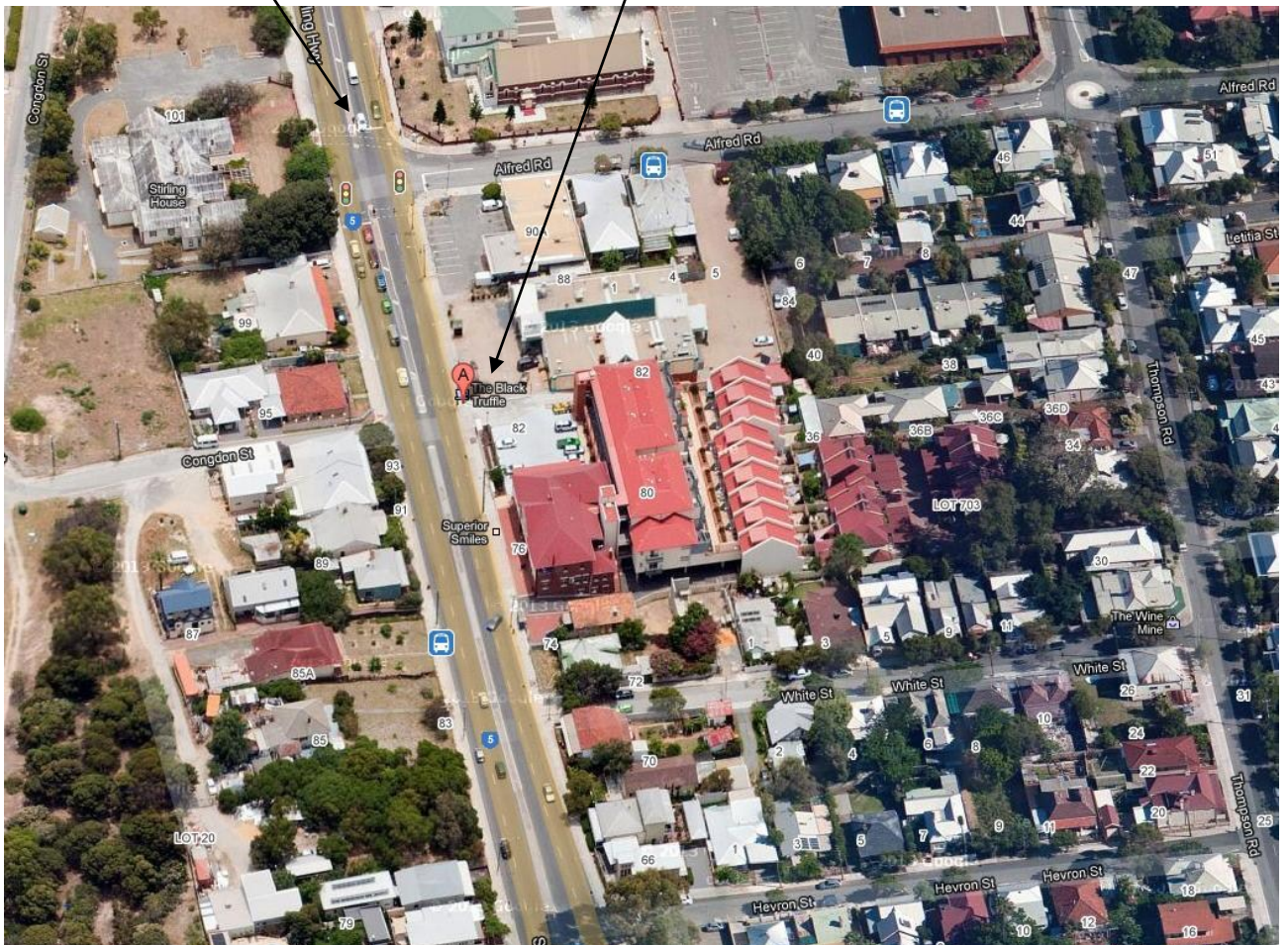
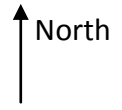
VOLUNTEERS NEEDED to write up the meeting and toolbox visits for the next month.

Please email me before the technical meeting on June 5th or if you want to write up the toolbox visit let me know at the meeting. Remember, this is essential if we are to keep the 'boat' afloat.

June Toolbox Visit — Navigation Chart

Stirling Highway

Doyle Fraser Sails



Old Fremantle Traffic Bridge