

August September 2013

WOOD IS GOOD (and fibreglass doesn't grow on trees etc)

**TECHNICAL MEETING:** A J (Aaron) WOODALL – Shipwright, 13 Lerista Crt Bibra Lake (Peter Leggatt reports)

On a very wet night, the 7<sup>th</sup> August, we were all presented with a very informative discussion on the basic considerations involved for boat building, followed by an overview of the services offered by A J Woodall – Shipwright and A J Woodall's Legacy Nautical Division. These firms, established by our presenter Aaron Woodall, specialise in one-off new builds of traditional and prestige luxury craft to meet the most demanding of specifications by their owners. This results in the production of unique craft that, with appropriate care, will continue to give pleasure and good service for many generations to come.

### **BOATBUILDING ESSENTIALS**

Aaron began his talk with a general discussion of boat building requirements supported by samples of materials that are most readily available in Perth and the difficulty of sourcing materials now that were once quite conveniently available for personal selection.



BS1088 Okoume Marine Plywood



Silicon Bronze fasteners from the USA & New Zealand

#### **TIMBERS**

The four timbers of which Aaron had samples were; TEAK

For decks and bright-work and quality fit-outs. Quarter-sawn teak is the essential choice for decks to minimise warping and also giving the most even appearance. Teak is an expensive timber that must be carefully selected but is durable, attractive and finishes very well, resisting weathering in the marine environment.

#### WESTERN RED CEDAR

This is considerably lighter and softer than teak, being used in strip planked construction where epoxy sheathing is desirable for protection and also for molded timber and again sheathed in this application. Cedar is also used for light-weight and less demanding interior framing. Mick O'Shea has chosen this timber for the strip planking on "Janice Lorraine".

### **DOUGLAS FIR ( OREGON )**

The weight of oregon is greater than western red cedar but so is the strength, making it a good choice for frames, deck beams and laminated beams. Due to the reasonable lengths available it is the most common timber used for traditional timber masts. Sitka spruce would generally be considered superior for this application due to its lighter weight and usually higher strength but it is less durable and now almost unprocurable with most of what remained in the world having been carefully stowed away for replacement of ancient aircraft wing spars and other components.

### **PLANTATION TIMBERS**

Plantation mahogany, as indicated in the sample presented, had a very attractive appearance and is satisfactorily used in high class interior fit-out work. While discussing the choices of timbers for particular applications, Aaron pointed out the difficulty of selecting timbers now, as even if it is held in stock, the merchants are not interested in breaking packs and letting small customers fossick through it. The indication was that due to his importation of some timbers and his own considerable requirements, that he could be a good source of supply for amateur boat builders.

#### MARINE PLYWOOD

The next area on which Aaron spoke at length was marine and other plywood suitable for boat construction. Here the feature that he stressed most was that the ply construction should comply to the British Standard BS 1088 AND carry Lloyd's Certification. This then indicated that a reasonable level of inspection, and quality of manufacturing technique, had been applied. About the only Australian ply available now is hoop pine and this is around 30% heavier than most other marine ply.

There were many samples of marine ply of different construction, timbers, weight and finishes. Some professional advice on choices to be made, particularly for a large project, would be highly recommended. Aaron imports large quantities of Okoume-make ply and would be a great source of product and advice.

Overall, the messages from this section of the talk indicated that materials were available but required some work to select carefully. Less old growth timber is available being more stable to use where plantation timber always moves out from a saw indicating reduced stability in use.

Fastenings used in traditional construction are still copper and silicon bronze with most of these sourced from New Zealand.

Protection of timber for maximum life was improved by use of an epoxy wood preservative although these products no longer contain a biocide that was previously added to minimise rot. Other products such red lead which gave such excellent protection as priming paint in traditional paint systems on timber boats are now almost un-available and their use would now be frowned on due to environmental health concerns.

The company Worldwide Timber Traders was mentioned as a timber supplier worth a visit. Check their offering at <a href="http://www.timbertraders.com.au/">http://www.timbertraders.com.au/</a>

The second section of the talk gave an overview of the restoration work taken on by his company and the various skills that were available to carry through these projects. Probably the most comprehensive was the restoration of the 60 foot Halvorsen built Pollyanna, a vessel almost 60 years old and now in pristine condition once again.



Another interesting restoration was on a traditional Ted Brewer designed cat boat built in Singapore and planked in Chengal, a timber that is extremely resistant to teredo worm. All these significant projects are well presented on his website at <a href="http://www.ajwshipwright.com.au/">http://www.ajwshipwright.com.au/</a>.



Finally Aaron spoke about the other division of his business, Legacy Nautical, which specialises in one-off traditional craft and prestige luxury craft which, with careful maintenance, will provide an enduring nautical legacy to future generations of family ownership or other custodians. He also spoke on Pea Pod, a small-craft boat building training project he is running. This gives people the opportunity to build a very pleasant and useable small-craft while gaining a good grounding in boat-building skills.





All in all the evening was a great success giving useful information and lively discussion. We are indebted to Aaron for his time and effort and look forward to visiting his workshop in a later Toolbox Visit.

# **August Toolbox Visit** — Philippe Peche International SailForce

(Michael Wade reports)

We had a very good turnout at "SailForce" on the 24th of August — sixteen members and one dog. Philippe made us very welcome and gave us free rein of his showroom, workshop and stores.

His presentation of what's new in sail boat rigging was first class. He covered the qualities and short comings of various types of synthetic and more conventional materials including steel rod and wire rigging. His use of grinding paste on Diform wire before swaging was particularly noteworthy. The PowerPoint summary of his informal presentation is included with this newsletter mail out.

The pictures of Philippe's showroom and stores, included in this report, show a very impressive range of fittings, all looking to be superbly made to aircraft standards.....and the racks full of reels of rope and cordage add an impressive splash of colour.





The photos and associated notes that follow give a snapshot of the informal talk that Philippe gave to us as he explained the vast array of synthetic rigging and fittings that substitute for the more metallic variety that we have all been so used to using for a very long time.



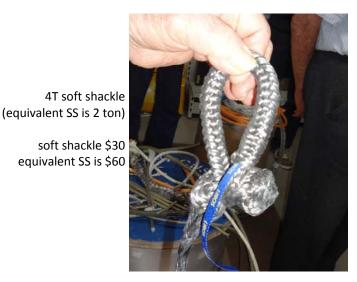
Dog bones



Antal low friction aluminium ring and with Dyneema loop (DYNEEMA and SPECTRA are fundamentally the same thing)



Block with a 4 ton load rating



Soft shackles also come in very small sizes



Overall safety factor for these is 4:1 on breaking load Based on actual load safety factor 2:1 against safe working load Safe working load has safety of 2:1 against breaking load

However, it is best to size to working load of 20% of rated load which gives a long life





Wire Rigging
Rod rigging
Standard round strand wire
Diform wire – strands interlock and wire is more
compact overall
Roll swage on diform – recommend grinding
paste on diform wire before roll swaging



Rolled swages suffer internal corrosion which cannot be monitored. Generally require replacement every 10 years if insurance cover is to be maintained on rigs.





The sequence of applying a furling termination to a braided forestay





### Textile rigging

Stainless steel 8mm wire stays would be replaced with 9 mm Dyneema Backstays still need to be insulated if they are to be used as an HF aerial due to their conductivity when wet

Dynex Dux stays last longer and are better chafe resistant with a casing on them. The braiding is woven over the rope not slid over

When making up textile rigging it is important to know the creep. Dyneema creeps but Vectran does not. This stretch factor for all types of textile rigging is referenced to stretch in rod rigging for the same load

Splices in textile need to be tapered for 50 times diameter

Textile rigging is being used increasingly in racing yachts because the weight of the rigging is everything eg for 80 ft maxi the weight of paint on mast equates to one ton of lead on keel

### Racing Rigging

Carbon is also used for standing rigging and is multi strand and splits at spreaders, doesn't stretch.

## Larger diameters



Blue submarine lifting – 50 ton



Grey – 70 ton - \$60/metre





Various gadgets for joining or terminating synthetic rigging and a range of clutches including inbuilt trimming winches.







Would you like a bigger boom? A photo of a poster on the wall of Philippe's showroom—we believe it is our host on the left hand side of that monster.

A special vote of thanks to Philippe for his time, his expertise and his hospitality. It was an afternoon very much enjoyed by us all.

## Vale Mike Beilby

It is with a great deal of sadness that we record in this newsletter, the passing of life member and newsletter editor extraordinaire, Mike Beilby, in late July.

Mike had a lifetime of involvement with amateur boatbuilding, from his early years in VJ's and moths; and then to his biggest project, a 24 foot Van der Stadt Zeeton in shore ocean racer that he built in Geraldton; followed more recently by his last two boats, a 20 foot Victorian river launch 'Isis' and an Ian Oughtred 15 foot Acorn design pulling boat that he called 'Miss Mosman'.

Mike will be remembered by ABBA members for his enormous contribution to the Association dating back to 1998. He had an uncanny ability to always find and arrange speakers for tech meetings and subject material for toolboxes for the benefit of members over many years. But Mike will be most remembered for the enthusiasm and dedication he put into writing and editing the ABBA Newsletter — once again a contribution he made from August 1999 until ill health forced him to announce his resignation in the September/October 2011 newsletter. This was a task which Mike greatly enjoyed along with wife Margo who provided the production technical support.

At the AGM in July 2009, Mike was awarded honorary life membership of the Association in recognition and appreciation of his dedication to ABBA affairs over such a long period of time.

Mike will be sadly missed by us all. We thank Margo for giving the ABBA President the opportunity to speak on Mike's boating achievements at his funeral and we extend our deepest sympathy to Margo and to Mike's extended family.

We are all very thankful for Mike's great contribution and wish him heaps of fine wood shavings, then fair winds and fine sailing.

# 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

### OCTOBER TECHNICAL MEETING — ANNUAL GENERAL MEETING 2013

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, October 2nd, 2013.

This meeting will be our AGM for 2013 but we will endeavour to make this administrative detail as painless as possible so as to move quickly to more interesting issues. In regard to committee positions, those in the key positions have indicated their preparedness to continue in their roles for another 12 months so don't be afraid to come lest you get a job. Notwithstanding, volunteers are always welcome and nominations can be received from the floor on the night.

Following the close of AGM business, Mike Beanland will provide us with a 'guided tour' to launch the new website which he and his staff have so generously developed for our Association. This will include a briefing on the way forward and a short discussion in which we will be seeking members input/suggestions for ongoing further content and enhancements aimed at spreading the amateur boat building message and attracting further members to our forums.

In keeping with an objective of avoiding inviting external speakers on AGM nights, Ed Essers has volunteered to enlighten us for the remainder of the night on the operation of sextants. This was a tech meeting subject that emerged when we appealed to members for suggestions about 12 months ago. Ed's ability to speak with both knowledge and experience on anything required to successfully build your own boat and go cruising is well respected by members so this should be a very interesting session. It will be informal with an opportunity for everyone to handle a sextant and understand the practical aspects of Ed's advice. We have four sextants to hand which some members have kindly agreed to bring on the night. If you have one also, please bring it along.

### OCTOBER (Actually NOVEMBER this time and on SUNDAY) TOOLBOX VISIT

This November toolbox visit will be on Sunday November 3rd, 2013, between 2.00pm and 5.00pm. This will be a visit to the Freshwater Bay Museum, which at weekends is only open the first Sunday of each month from 2.00 to 5.00pm.

A key part of the Freshwater Bay Museum is the historic boat shed on the Freshwater Bay foreshore. It was donated to the Museum by the Mews family and moved from its Victoria Avenue site to its current location in 1996. This is the same family and location which featured in the Kiewa story before member Ron Lindsay commenced its restoration. The museum is next to Mrs Herberts Park on the shores of the Swan River in Victoria Avenue (at the end of Bay Road) Claremont so a members picnic lunch at around 12.00pm is proposed prior to the toolbox visit. More details and a location map to follow closer to the time.

REMINDER — VOLUNTEERS NEEDED to write up the meeting & toolbox visits for the next month.

Please email me before the technical meeting on October 2nd 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.

### ABBA LOGO

(Bruce Cadee reports)

Following a suggestion from one of our members about a shirt logo, we have made arrangements with Shaun Luong of Image Embroidery at 26 Tulloch Way, Canning Vale (Phone 9456 2324 Mobile 0403 250 389) for an embroidered ABBA logo. Examples of the logo are available for inspection at Technical and Toolbox meetings - See Bruce Cadee. The logo can be applied to your own clothing (assuming it can be accommodated in their equipment) or to shirts, caps or hats purchased through Image Embroidery. Feel free to call in on Shaun to look at the limited range of clothing he has on site or visit the following web sites to choose your preferred style, size and colours. The weblinks below are only examples of the wide range available. Half chest measurements are included on the web sites to help ensure you select the correct size. Ladies styles are also available.

### **Clothing (excluding Logos)**

Style 1300 – Aussie Pacific Mens Murray Polo, Navy/White/Ashe or White/Navy/Ashe - \$20.00 + GST each

**Weblink:** <a href="http://www.aussiepacific.com.au/the-murray-polo-navy-white-s?color=Navy%">http://www.aussiepacific.com.au/the-murray-polo-navy-white-s?color=Navy%</a> 2FWhite%2FAshe&primary color=Navy&secondary color=White

Style 1304 – Aussie Pacific Mens Eureka Polo, Navy/White/Ashe or White/Navy/Ashe - \$21.00 + GST each

**Weblink:** <a href="http://www.aussiepacific.com.au/mens/polos/eureka-polo-sky-navy-s?color=Sky%2FNavy%2FAshe&primary\_color=Sky&secondary\_color=Navy">http://www.aussiepacific.com.au/mens/polos/eureka-polo-sky-navy-s?color=Sky%2FNavy%2FAshe&primary\_color=Sky&secondary\_color=Navy</a>

## Hats/Caps (excluding Logos)

**Style 4199** – Headwear Brushed Heavy Cotton Cap, White/Navy (many other colours available too) - \$6.50 + GST each Weblink: <a href="http://au.headwear.com.au/productDetails.cfm?">http://au.headwear.com.au/productDetails.cfm?</a> &prodID=53&prodCatID=2&pageNumber=1

(Also refer poly/cotton legionnaires hats Styles 4057 or 4126 for maximum sun protection under website sub heading 'Hats, Visor & Beanies' <a href="http://au.headwear.com.au/productList.cfm?">http://au.headwear.com.au/productList.cfm?</a> &pCategoryID=7)

Style 4199 – Headwear Brushed Heavy Cotton Cap, White/Navy (many other colours available too) - \$6.50 + GST each (includes poly/cotton legionnaires hats for maximum sun protection under website sub heading 'Hats, Visor & Beanies')
Weblink:

**Style 4223** – Brushed Sports Twill Bucket Hat, White/Navy (many other colours available too) - **\$8.00 + GST each** 

Weblink: http://au.headwear.com.au/productList.cfm?&pCategoryID=7&page=2

To make your annual membership even more value for money, ABBA will pay for up to 2 logos per financial year to be applied to your items of clothing. The current cost to ABBA is \$7.15 per logo. There is no intention for this to be an ABBA uniform so the choice of style and colour is totally yours. If you are seen wearing the logo while building, working on or using your boat or anywhere for that matter it might get people asking questions and wanting to join our

association. You are free to deal direct with Image Embroidery but please ensure you get an itemised invoice showing a separate price for the logo and present this to Bruce Cadee for reimbursement. Bruce Cadee is happy to take orders and liaise with Image Embroidery if you so wish.

Thanks to Bruce for making these arrangements. The summer is just around the corner, so members are encouraged to get their orders in for shirts and/or hats with the ABBA logo as soon as possible — either directly with Image Embroidery or by contacting Bruce.



Secretary/Treasurer Bruce Cadee shows off the first embroidered shirt at the last toolbox visit.

### REMINDER — MEMBERSHIP FEES NOW DUE

We are now well into the new financial year and membership fees are now due. Subs remain unchanged at \$20 for the electronic newsletter and \$30 for hard copy. They are payable to the treasurer, Bruce Cadee, either at the evening meeting on October 2nd or by post to him at 7 Fifth Avenue, Rossmoyne, WA, 6148.