



AMATEUR BOAT BUILDERS' ASSOCIATION

July August 2012

KIEWA — HOW IT ALL BEGAN

July Technical Meeting

Our July guest speakers were owner extraordinaire Ron Lindsay and his shipwright Kevin Hart talking about the initial stages of restoration of Ron's 40 foot 'gracious colonial' launch Kiewa.

This project had its beginnings when Ron heard about Rod Dickson's book 'They Kept This State Afloat', a history of the shipbuilders, boat builders and shipwrights of Western Australia from 1892 to 1929 (available from Hesperian Press at www.hesperianpress.com). In the book, Ron found reference to W & S Lawrence, a well respected boat builder in Perth during this period. The W & S refers to William & Samuel, sons of William Lawrence Snr, who established the business in the late 1800's. William Snr is Ron's great great grandfather and William of W & S is Ron's great grandfather.



Kiewa at Thomsons Bay Rottne 1945

Ron contacted Rod, asked him about Lawrence boats and sought advice on availability of plans for about a 40 ft launch. Rod's answer – I can do better than that. I know of an original Lawrence of that dimension in a shed at the foot of Chris Mew's property on the foreshore at Claremont. Ron sought advice from several shipwrights, including Bill Leonard from Fremantle Museum, in order to confirm the restorability of the vessel and no doubt to also give himself the necessary assurance

that he really would need deep pockets to complete the task! That was 1999 and as the saying goes – the rest is history.

As is almost tradition in itself in this town, Rohan Chick of Haulcraft was called and Kiewa trucked to Ron's rural property at Mariginiup. Having made the commitment, Ron explained that he then sought out Fremantle Boat Works with a request that he 'wanted a hand'. There he met Kevin Hart.



Kiewa's shed comes down for the second time to exit to Fremantle Boat Manufacturers 5/12/2007

Then it was over to Kevin, who began by giving us some insight into his life journey. He had been fortunate enough to be an apprentice in the New Zealand naval dockyards at a time when traditional wooden boats were still being built and apprenticeships still covered everything from the drawing office to clinker boat building. He described it as 'privileged training' with strong ties to traditional English and Scottish trade skills. In this Government system of the early 1970's, they made everything including their own bolts. The history of the place was of great significance and flowed through to a strong traditional shipwright culture. Unfortunately, like so many similar institutions, the dockyards were then privatised and much was lost.



Kiewa being craned onto Rohan Chick's truck enroute Fremantle Boat Manufacturers 5/12/2007

But Kevin's skills, so fortunately learnt, were not lost. On his first inspection of Kiewa, Kevin 'fell in love with her instantly'. With her NZ kauri planks and jarrah structural members he had no doubt that she was restorable. Rohan Chick transferred Kiewa to Fremantle and Ron, Kevin and his colleagues from Fremantle Boat Works commenced the work.

The first task was to make 10 to 12 frames inside and outside to ensure that she held her shape. Then the keel came out and was fully restored including the addition of 6 inches to its depth and a strengthening keelson to the top which had not been part of the original construction. When the keel was back in place, the frames were marked where all the planks were and the planks were removed six at a time.



External frames to maintain Kiewa's shape

Each plank was then individually restored by planing off any rotten wood on the edge and epoxy gluing new wood to the plank edge similar to a splining process.

More extensive rot was cut out and a new section of plank scarfed to the old at a taper of 12:1. All the old holes were filled with dowels which were epoxied in place. Planks were then re installed with temporary fixings to the frames and at connections to stem, keelson and sternpost, joints were sealed with Sika butyl mastic polymer which remains flexible.

As this process neared completion, a phase of Kiewa's restoration came to an end and once again Kiewa was returned to Ron's property, where the shed roof had been raised to accommodate Kiewa in readiness for the next phase of the restoration.



Internal frames to maintain Kiewa's shape, some planks reattached—halfway through the work at Fremantle Boat Manufacturers

So....the question was asked.....'would it have been better to build a new one?' The answer.....a resounding 'No'.



Kiewa — work completed at Fremantle Boat Manufacturers — ready to truck home again

The restored Kiewa maintains the history of the original and is something that generates great passion amongst those associated with her. And physically, her hull still contains all her original planks, keel and gunwales.

Our presentation then moved to question and answer time which focused some of the discussion on more immediate matters like launching arrangements!

Some history – the building of Kiewa was commissioned by Dr William Trethowan, the head surgeon at Royal Perth Hospital and was launched in 1913. In the same year, Dr Trethowan was made Commodore of the Royal Perth Yacht Club.

Some statistics – Kiewa is 40 feet long and has a beam of 10 feet. Her planks are fixed with between 4500 and 5000 copper nails and roves. She was originally powered by a 3 cylinder, 27HP Ailsa Craig petrol engine which was later replaced by 3 cylinder Lister diesel. Ron has fitted a 75 HP turbo Volvo. The stern tube is original but all the associated engineering is new. Her fitout is predominantly jarrah and teak externally and jarrah and sheoak internally.

Steaming the ribs – the ribs were 40mm x 20mm x 5.5m long green karri battens from Hamilton Sawmills. They were soaked before steaming for 48 hours with a little detergent added to the water in both the soaker and the steamer. Steaming time was

based on the rule of thumb of 1 hour for every square inch of cross section. Following steaming, four ribs at a time were bent around a mould made with steel angle pieces.

Kevlar flat section was inserted between the angle pieces and the ribs to prevent flat spots as the ribs cooled. The ribs were continuous from gunwale to gunwale with kauri wedges inserted under each rib both sides of the keelson.

The rig – Len Randall has kindly donated the sail plan for her steadying rig. She will be two masted with a lug sail and a jib.

Current activity – the 6mm toughened glass has arrived and the panels for the sliding doors on the wheelhouse are to have the name and some decorative work sandblasted onto them. The upholstery is under way and caulking time is not far away. She will be caulked with cotton and linseed oil putty both above and below the water line.

The launching – Given Kiewa's strong original association with Royal Perth Yacht Club, Ron would have liked to launch her there but would prefer to launch her down a slip rather than via a boat lifter. Currently the Perth Flying Squadron in November is the plan.

Ron finished with a few yarns about Kiewa's adventures including a return trip to Fremantle from Rottnest following the explosion of a petrol lamp during the Tomlinson's ownership. The 14 year old son of the owner, who had sustained burns, needed to be returned urgently to the mainland. So despite the gale force conditions that prevailed, it was all hands to the pumps and Kiewa made the journey otherwise uneventfully.

This closed out a most enjoyable presentation on a very special project. We thank Ron and Kevin for sharing so much of their wisdom and experience with us – particularly at such short notice.

‘August’ Toolbox Visit

On Saturday 1 September, Peter Leggatt and I provided the subject material for our ‘August’ toolbox visit in the form of our two boats moored adjacent to each other across a floating finger jetty at Royal Perth Yacht Club Crawley.

Restless III

Peter’s boat, Restless III, is a timber plank 31 ft Carmen class sloop. This is the same Ron Swanson canoe stern design as Cadence that won the Sydney Hobart in the ‘60’s and Carronade that circled the globe and survived an end for ending in the South Atlantic in the same era.

She was amateur built by Mick Lambasa, a BP petroleum engineer, at his property in Cockburn. Mick had support and assistance, particularly in the planking process, from shipwrights trained by the well known Perth boat builder, Arthur Bishop. Whilst the ‘heyday’ of the Carmen Class was the 1960’s, Restless III is of more recent build. She was launched in January 1980 at Fremantle Sailing Club. Regrettably, Mick and his family, all of whom had watched Restless III grow over a number of years, were not experienced sailors and following her launching it soon became apparent that dreams of local or world cruising were not to be. Several years after her launching, she was advertised for sale.



Restless III may possibly be the last significant traditional plank vessel built in Perth and as a near new vessel it is thankful that she passed into the hands of someone who had a full understanding of her true value.



Restless III was constructed in the traditional manner, right way up with the 2 ton lead keel being cast first, the deadwood/keel assembly being attached to the keel bolts and the moulds then being mounted prior to battening out, planking and ribbing. She has $1\frac{1}{8}$ inch planking, jarrah below the waterline and oregon above. Her ribs are two laminations of $1\frac{3}{4}$ inch x $\frac{3}{4}$ inch karri at approximately 6 inch centres. She has a beam of 9 ft and is generally roomier in the cabin than her contemporaries because an additional plank has been added to her freeboard. This also no doubt adds to the original design’s well known characteristic of being a dry boat in a seaway.

In her deck and superstructure, Restless III is an excellent example of the transition to modern materials in a traditional vessel, resulting in significant less need for maintenance than the earlier methods of laid and caulked plank decks and painted cabins. Her deck structure is very solid – laminated from 3 layers of $\frac{3}{8}$ inch marine ply and glassed over with epoxy. Granulated cork has been placed in the upper epoxy layers to form a non slip finish.

Her cabin structure is of solid timber, glassed, epoxied and finished with two pack paint.

All of this good construction is complemented by a beautifully clear finished tiller and a good dose of teak trim that has been fitted around the cockpit area and the cabin below.



Restless III is a powerful masthead sloop under sail and a very capable sea boat in the most boisterous of conditions. However, when there is a need for the 'iron topsail' this department is well served by the Volvo MD2B, 25 HP, 2 cylinder diesel installed below the cockpit sole. Driving a three bladed, 15 inch propeller, this drives Restless III along at hull speed (about 6 knots) whilst ticking over at 1200RPM.



When voyaging, there is a fine piece of furniture in the form of a teak chart table complete with intricately machined brass fittings which Peter has made during his ownership.

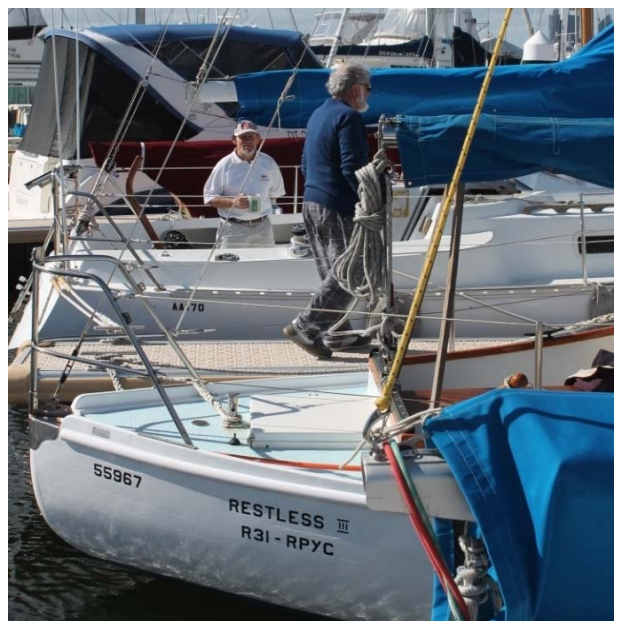
And when you get there, the accommodation is top quality as well. There is a double/V Berth in the forward cabin, two bunks in the cabin and a quarter berth to starboard.

Alternatively, relaxing in the cockpit, one can enjoy the folding cockpit table – another of Peter's masterpieces in teak and brass.

Restless III has now been in the water for 32 years and in the 29 years that Peter has owned her she has sailed countless thousands of nautical miles (logged 16,000) on the Swan, to Rottneest and down the coast. During that time she has provided a taste of the sailing experience to hundreds of people who Peter & Dale have kindly invited aboard.



It is testament to Mick's high quality and professionally authentic construction of the vessel and Peter's meticulous attention to detail in his maintenance of her that she remains in impeccable 'as new' condition throughout.



Sequana

Sequana is an uncharacteristically round bilged Boro designed masthead sloop. She is 28 feet long, has a beam of 10 feet and is shallow draft – drawing three feet with her centreboard up and five feet with it down.

She was amateur built by the late Murray McDonald in the front yard of his house in the 1962 Commonwealth games village in The Boulevard City Beach. She became a local landmark during her 14 year building period and the locals lost all sense of their navigational bearings when she was launched on 31st December, 1991.



Sequana has been in the water now for just over twenty years and I have owned her for the past seven years.

She has a fibreglass hull that was constructed over a male mould. This technique involves the initial construction of a strip plank male mould over timber frames which are assembled on a building jig upside down. The mould is faired and finished to provide a satisfactory surface on the inside of the final hull. After treatment of the surface with a wax or appropriate release agent, the fibreglassing process begins. When complete the outside of the hull can then be faired and finished prior to the entire assembly being inverted to bring the hull right way up. The timber mould is then broken up and removed to leave behind the inside surface of the fibreglass hull reflecting the outside of the mould now removed. Work can then commence on the cabin, deck and fitout below.

The male mould for Sequana included the wide deadwood which is an integral part of the hull. This was subsequently filled with lead ballast separated down the middle with a $\frac{3}{4}$ inch glassed in slot to take the $\frac{1}{2}$ inch steel centreboard which is completely 'housed' in the deadwood when raised.

Sequana's deck, coach house and fitout are constructed of timber along 'WEST' system lines. The deck and much of the coach house are marine ply with a vertical stripping system used to mould the curved surfaces at the forward end of the cabin trunk. The deck is finished with two pack paint with non skid grit over the glassed ply – now due for some TLC. She has a built in anchor locker on the foredeck and four lockers accessible from the cockpit. The largest of these, under the port side cockpit seating, provides climb in access to the diesel below the cockpit sole.



In designing the internal layout of Sequana, Murray applied his skills as a very experienced architect to make the best use of her relatively high beam and freeboard. She has a double/V berth in the forward cabin and two other oversize berths – one formed from a slide out base under the starboard cabin settee and the other a quarter berth to starboard. The settee to port is shorter but suitable as a berth for a small child due to the walk in head aft of the forward cabin. Sequana is slightly different to the norm for this size vessel in that the companion way hatch is off centre to accommodate the design of the galley which has a sink, drainer and large ice box that runs athwartships immediately forward of the cabin rear bulkhead.

At the business end, Sequana's 'iron topsail' department is an almost identical Volvo MD2B, 25 HP, 2 cylinder diesel to that installed in Restless III. However, in Sequana this drives a 16 inch two bladed folding propeller which produces a somewhat lesser result than the same engine in Restless III. This converts to a need for more intensive prayer whilst passing under the old Fremantle traffic bridge with the mast down against a flood tide!



Despite her shallow draft, Sequana has proven to be a good all round performer under sail. Her beamy hull provides her with excellent stability in all but a clearly over canvassed situation. With her plate down, she is only marginally lacking in her upwind pointing ability compared to fixed keelers of similar size. And in an ocean swell, she rides superbly with a balanced helm and an easy motion through the swell. There is no doubt that whilst some will either love or hate the numerous hard chine yachts of Boro design which were typically amateur build several decades ago, Mr Boro knew his naval architecture.

In the twenty plus years since her launch, Sequana has perhaps not sailed quite the distances that Restless had logged in similar time. However, Murray and his wife Rosemary cruised in Sequana down the coast to Geographe Bay and more locally to Rockingham and Rottnest as well as on the Swan.



During the past seven years, Sequana has provided our family and friends with countless opportunities to enjoy the best that sailing on our beautiful Swan River has to offer. We have also enjoyed many holidays on the moorings that Peter and I share near the old army jetty in Thomsons Bay at Rottnest. All in all a testament to Mr Boro's good design and Murray's construction of such a sound vessel.

So that was our August Toolbox. We were lucky to have perfect weather conditions after a wet week that threatened to extend into most of Saturday. I'm sure that all those who came down for a cuppa and a yarn enjoyed the afternoon of time out. I would like to thank Peter for making Restless III available for the afternoon and to members for providing me with a good excuse to at least commence winter maintenance before the new sailing season actually starts. In any event, we both enjoyed being your hosts for the day.



ADMINISTRATION NOTES

ABBA COMMITTEE

President	Vacant	
Vice President	Rosemary Nayler	9455 1470
Sec/Treasurer/Relief Editor	Chris Davis	9387 5042
Asst Editor	Jay Niven	9291 8460
Library	Mike Rogers	9527 7313

ANNUAL GENERAL MEETING 2012

Please note that the AGM of ABBA will be held at the South of Perth YC at 7.30 pm on Wednesday, September 26th, 2012.

The AGM will be a painless affair but we will **start early at 7.30 pm instead of 8.00pm** so we can finish for the real business to start at 8.00pm. Please come on time as the main business is to discuss what you all want out of the association as we move forward. Please don't be afraid to come lest you get a job. Your scribe has been quietly making the necessary arrangements. Volunteers are very welcome but we have keen nominees for all the positions.

Peter Leggatt has kindly been speaking to a contact of his to arrange a night on diesel engines. Unfortunately, his man is so good that he has been head hunted to run a remote mining power station over that period. We are confident of being able to retain him as our guest speaker for the November meeting.

For this meeting we will run the exceptionally good video on the restoration of the iron barque James Craig. This is a really detailed account of the whole project which runs for 90 minutes. So let's all come along, get the AGM finished before 8.00 and enjoy this marvelous story of the rusty iron hulk that has now become a national treasure and fully operational square rigged sailing ship.

OCTOBER TOOLBOX MEETING

Saturday 20th October from 2.00 to 4.00 pm

As promised, our October toolbox will be to Ron Lindsay's workshop to see Kiewa as she approaches her relaunch time. This will be at Ron's property at 23 Honey Street, Mariginiup.

MEMBERSHIP

With the new financial year upon us, 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, Chris Davis, either at the evening meeting on September 26th or by post to him at 9 Johnson St, Wembley, WA, 6014.

LIBRARY

The ABBA Library has an extensive collection of books and magazines. Rosemary Nayler has kindly volunteered to take on the management of the Library and is liaising with Mike Rogers to arrange transfer of the collection into her good care. We take this opportunity to sincerely thank Mike and Patricia for keeping the collection in their good custody for so many years.