RATLINES – NOVEMBER 2024

The official newsletter of the

Wooden Boat Association of Cairns, Inc.

ABN 56 194 994 249

Club and Association Status

Insurance & Incorporation: Up to date.

Christmas Lunch and AGM

Reminder: Saturday, 7th December at **11.15am**. The WBAC AGM and Christmas lunch will be held at the Novotel Cairns Oasis Resort, 122 Lake St.

Items for the AGM agenda should be sent to the secretary at WBACairns@gmail.com

Boatbuilding Projects:

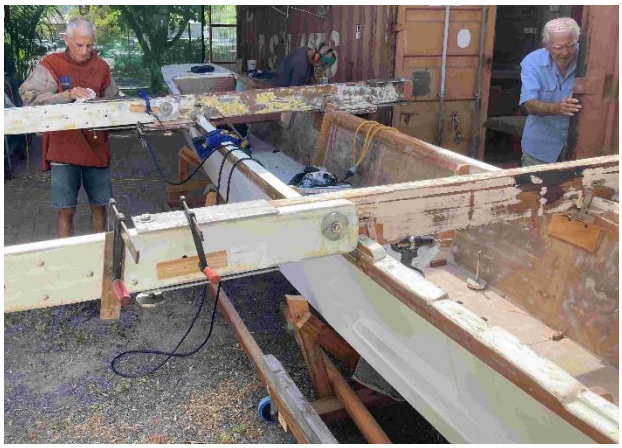
Bitaki Taari

The mast now fits into the tabernacle, a little fine tuning required. (When is it not?). With Glen's able assistance, the mainsail was laid up against the mast and measurements taken, estimates and approximations guessed and a final decision made as to the length of the gaff and the position of the boom. Now to find a sail maker to alter the sail and make a jib!!

The ama's crossbeams have been prepped for painting (several times!) and will be undercoated before you get this. Thank you, Sheila. (A warning to those using the 2 pack Norglass timber sealer, make sure you get the amounts correct, otherwise the sticky residue is impossible to sand and has to be cleaned off with thinners.)

The crossbeam hinges are virtually finished and the pivots for the amas are almost complete. Much welding and drilling was needed, but as usual Keven stepped up.

More of the deck and transom have been undercoated and just need a light sand before a topcoat is applied.



Wayne's Mushulu

Dubbed "Mushy" by Chris, the inside of this boat has been subjected to a heavy-duty sanding operation by Tom, Wayne and Richard. The rest of us have been avoiding the area and trying to look busy elsewhere!

The fibreglass areas are now ready for a topcoat of epoxy to seal in the glass. The other "bits" have been sanded and sealed ready for varnishing. All the gunwale screws have been removed to allow the holes to be prepared and plugged, for a much nicer finish.

A note of warning: Sanding fiberglass and epoxy resin unavoidably causes dust, and this is not only harmful if breathed-in but can cause also significant allergic skin reaction, as one of our members has found out to his cost. All possible measures to avoid this should be taken.

Chris reports on progress with his *Mekong*.....

Mekong's restoration/rebuild has continued sporadically over the past year dependent upon health, time available, family needs and the ever-present need to progress many 'projects' – both mine and others'.

Nevertheless, she has now had her coved & beaded layer of Queensland Maple strip planking (30mm X 4mm) completed, and glued-in with Purbond polyurethane glue – a type of glue I will never use again, for several reasons.

Further, she has now had 80% of her second layer of Queensland Maple glued on (42mm X 4mm) in double-diagonal (D/D) format. This time I reverted to 2-pack epoxy glue in a gel format – a glue I have used many times over the years with great success, and this time was no exception. Easy cleanup, no slumping or running, easy to mix, and very good working time, as opposed to the other stuff.

As you'll see from the pics, the bottom has been trimmed and sanded, with the starboard side trimmed with sanding to come. The port side has a strip being marked after temporary clamping to re-align the layup in prep for the final D/D layer. Should be done this week.

Then it'll be time for the single layer of glass cloth & epoxy (oh, joy upon joy) which will coat both sides and the bottom only, and will then be painted with white Poly U-400. The bow and transom will be clear-coated. Interior will be white Poly U-400 as well, with polished timber trim and white Beech thwarts from the original interior. Then, the fit-out can be done.

Clubhouse refurbishment

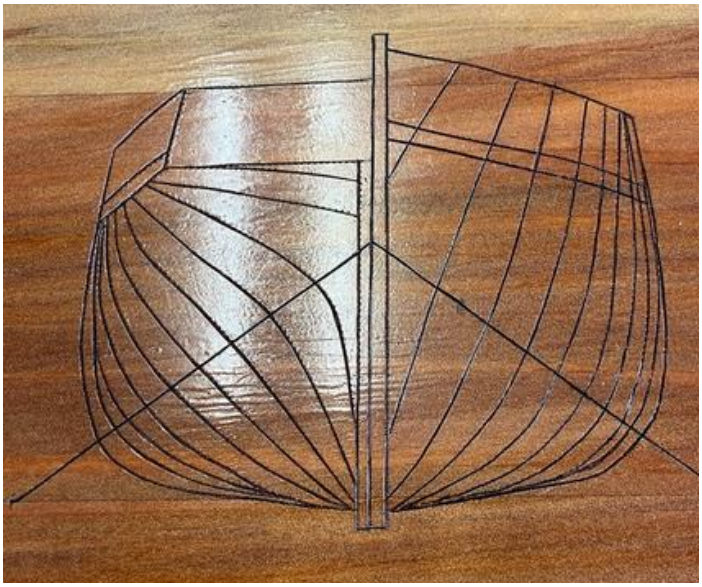
With the library now installed to everyone's satisfaction, (except Roger, who wants the books and magazines swapped over, but is being ignored or shouted down!), the clubhouse is looking great. As a test for Dermot, who had shown much pride in his arrangement of magazines, a couple of the schoolkids who pass for committee members, installed some colourful ring-binders into his arrangements. One per week. One binder, no notice taken. Two binders, no notice taken. Three, no notice taken, until Tom dropped some unsubtle hints and Dermot was pointed in the right direction! (A saga likely to result from excess heat and humidity and/or epoxy poisoning!)

However, having the books and magazines to hand means that they are already being read and more often. A big improvement. The library includes a collection of over 400 books on wooden boat design, building, history, biography, racing, equipment, voyages and many other topics. The library catalogue is available on our website www.woodenboatscairns.com.au

Brendon is cleaning up the ex-library container space, so it can be used for power tool storage and battery charging. The shelf built for the battery chargers will now have the Defibrillator stored on it. A move welcomed by Sheila, who for some reason struggled to reach it when it was on a higher shelf.

The Grand Table

Chris's painstaking, masterful and often painful engraving/inscribing work and final inking/infill have been completed. All that remains to be done is some light sanding before the final clearcoating with a 2-pack water based urethane, and install cover plates for the pocket bolts.

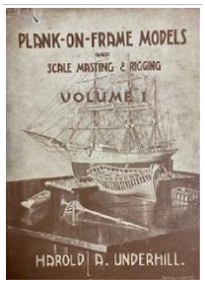


The *Leon*

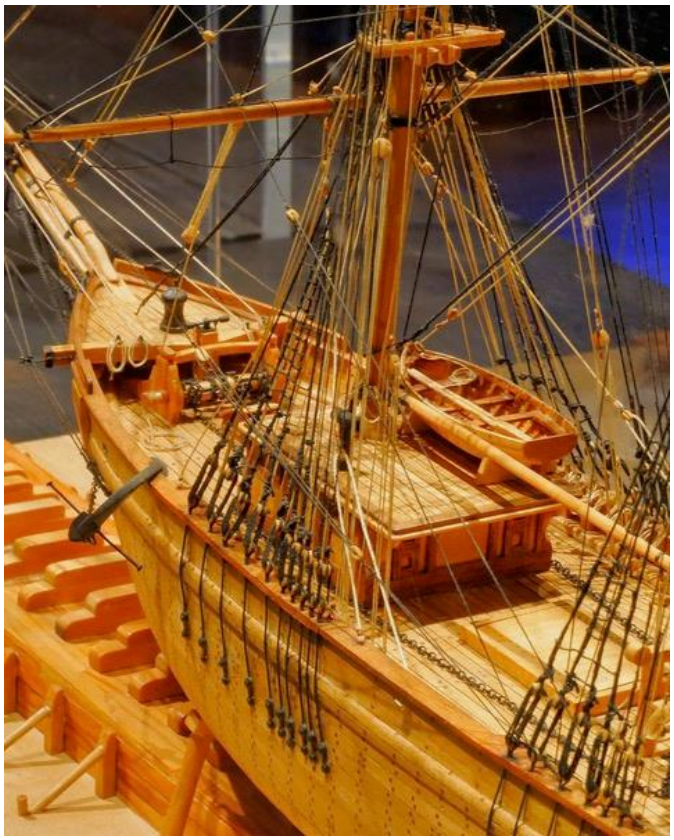
The engraving on the Grand Table is based on the lines of the Norwegian merchant brigantine *Leon*, built in the town of Larvik, in 1880; her home port was Porsgrund. Her most common duty was the trade of goods between the British Isles and Norway. At some point in her career, her rigging was changed that of a schooner. She was a typical sailing merchant ship of the North and Baltic Sea area in the second half of the 19th Century.

As with many innovations, building ships in metal and the use of the steam engine, took a long time to be applied extensively. Wooden, pure sailing ships were still being commonly used in the merchant navy until way into the 20th century. There are mostly two reasons for that: one is a conservative and traditional attitude of many ship owners and builders that distrusted “iron coffins“ - as steam ships were nicknamed by some in the mid-19th Century. The other was the fact that wooden ships were cheaper to build and maintain.

The *Leon* kept carrying cargo until 1915. Her end after 35 years of service was neither related to steamers being more efficient, nor to the back-then raging World War I. On October 30th, while she was sailing with her holds full of coal from Granton to Porsgrund, a leak in her hull broke off. The crew was not able to bring it under control and had to abandon ship before she sank.



The popularity of this ship as a model is due to Harold Underhill's seminal work "Plank-on Frame Models" (1960) - copy of which is in the WBAC library. In the two volumes of this book, Underhill uses the *Leon* as a case study of how to build a wooden scale model from scratch with almost the same technique used to build a real ship.



Perfect Picnicking at Platypus Point

A fleet of seven assorted vessels, powered by wind, sail, paddle, outboards, inboards, petrol and electrons, assembled on the shore of Tinaroo Sailing Club on the morning of Thursday 7th November. The weather was perfect for the crossing to Platypus Point – clear sky and just enough cooling breeze to fill the sails.

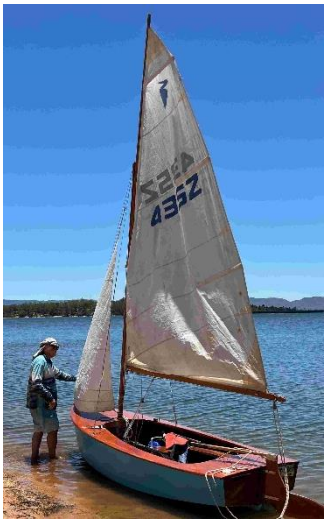
Brian sailing in *Touch-of-Class* and Mark in his sleek transparent kayak were the first to set off and first to set up camp under a shady tree close to the Platypus Point beach. Tom and Keven delayed their departure in *Iona* to help Richard sort out *Ninanji's* rigging, and Glen set up *Flatty* for sailing and motoring. Stew and George got their *River Joy's* inboard motor throbbing and took off for a circuitous transit of the lake with their friend Tim also on board, while Dermot circled around in *Joule* until everyone else got underway.

During the crossing, Glen and Tom cranked up their respective outboards in response to the fickle wind – though *Iona's* motor turned out to be just as fickle thanks to water in the fuel.

The glassy calm water at Picnic Point was perfect for nudging the fleet ashore, though Richard managed to reprise his full-immersion disembarkation routine to entertain the assembled crews.

Kettles were boiled, thermos flasks were opened, and blood sugar levels were restored by a bountiful supply of cakes, muffins and biscuits. Such was the pleasure of being at that lovely spot, under a shady tree, with boats resting nearby and the company of amiable ancient mariners, that smoko transitioned seamlessly over a couple of hours into lunch.

Somewhat reluctantly, the extended picnic wound up around 1pm and the fleet slowly scattered – some heading straight back to the Saling Club and home, while others set off on long, leisurely tacks, keen to make the most of the ideal conditions.



Dermot took the opportunity to put *Joule* through "speed" trials by criss-crossing the lake several time under varying power levels – see his report below.

Everyone made it back to the Sailing Club without incident. The failure of *Joule's* trailer's electric winch was a minor inconvenience, (overcome thanks to Richard volunteering to swing the winch handle) that did nothing to dampen the spirits of another joyful day on the water.

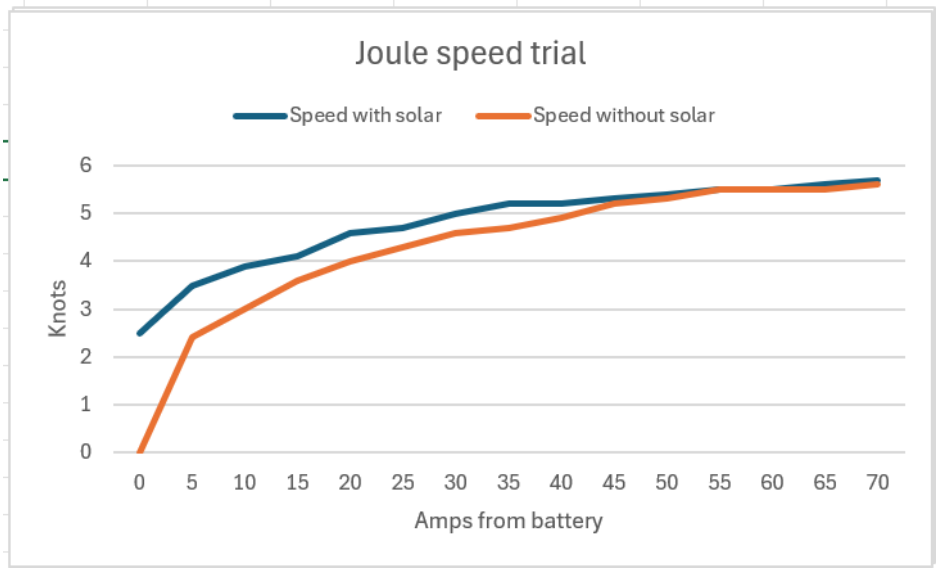
Dermot reports on

JOULE'S ELECTRIC SPEED & ENDURANCE TRIALS

Roger and I recently took *Joule* (a Hartley 5.5 metre half-cabin launch powered by a 6 kw electric outboard converted from a Yamaha 9.9 hp petrol outboard) on her first excursion onto the Coral Sea (see Roger's mostly accurate report below). Having proved that the battery/motor/solar-panels provided sufficient range to visit my favourite islands, I was keen to undertake trials to better understand the relationship to power consumption and boat speed, with the hope that I could travel faster on future excursions, while still ensuring safe return to shore.

The recent club outing on Lake Tinaroo in relatively calm conditions provided an opportunity to undertake speed trials at different power levels. The motor was tested at 5-amp intervals from 0 to 70 amps, with and without contributions from solar power. At the time of the trials around midday, *Joule's* array of four 12-volt flexible monocrystalline solar panels connected in series delivered 5.4 amps to one or other of the 100 amp-hour lithium batteries. Power delivery was held at each 5-amp interval for long enough (2 to 3 minutes) for the speed to stabilise and be recorded.

The graph below shows the result of these trials.



The key conclusions are:

- Maximum speed of the displacement hull is around 5.5 knots.
- Delivery of power over about 30 amps with solar input, and 40 amps without solar input, delivers little additional boat speed.
- With solar input of 5.4 amps, a speed of 2.5 knots can be achieved without using any amps from the battery!

These speed trials were followed up two weeks later when Richard and I took *Joule* on an endurance trial over five nautical miles – the full length of Lake Tinaroo from Tinaburra to Platypus Point. We travelled at 5 knots into a gentle headwind using 35 to 40 amps, which reduced the charge of one battery from 100% to 53%. Which encourages me to think *Joule* can make the 5 nautical mile trip from Hull Head to Dunk Island in one hour next time.

***Joule* met heavier weather on the trip back to Tinaburra**

Battery 1: 12 amps powering *Joule* at 3.5 knots

Battery 2: Solar charging at 5amps

Roger reports on a **Swift Trip to Dunk**

Some readers may not be aware that Dermot, our valued secretary, has a serious, (like a 40 year), interest in Australian Swiftlets. These birds nest in caves on off-shore North Queensland islands, like Dunk, Wheeler and Hinchinbrook. Having been suckered into going Swiftlet caving with Dermot before, you would think I would have learnt my lesson, but NO, there is no fool like an old fool, and the following is an "accurate" account of our latest, and possibly last, caving expedition.

Joule having had her sea trials and her range deemed sufficient, Dermot and I agreed that, given the right weather, it would be a good idea to have an overnight trip to Dunk Island. I thought this would be a long time in the future, but Dermot cornered me and said, "Conditions were ideal this Thursday!" What could I say?

8.30am was agreed as the start time at Hull River to give us plenty of time to get to Dunk and enough water over the bar. Just! We were met by Dermot's friend Marcus, from the local Coastguard group, who cast a skeptical eye over the electric outboard and muttered something about expecting a rescue request over the next couple of days.

With a steep boat ramp, Dermot did not need his fast reverse-and-stop launching technique, and *Joule* self-launched, with me ensuring that I did not get dragged into crocodile infested waters. While I pulled her around the pontoon to begin loading stores, Dermot shot off to wash the trailer down. Hearing a strange dragging sound, I turned and saw Dermot driving into the car park bay with the trailer wheels locked. Aha, I thought. Wheels are meant to turn. Something must be wrong!! I was right.

In his enthusiasm to get underway, Dermot had taken a sharp turn out of the washdown bay and clipped a tree with his trailer mudguards. These being steel, did not bend, and had pulled the wheel and axle out of alignment, tightening the brake lines and locking the wheels. What to do?

Well, at least no one was going to steal the trailer, so the brains trust decided to sleep on the problem, (ignore it for the time being, is another view!). We loaded *Joule* and set off down-river.

It was low tide, so it should come as no surprise that we touched bottom a couple of times, on the way out and over the bar. With *Joule* only drawing about 0.35m of water, that's how shallow the Hull River can be.

Purring nicely along at a sedate 4 knots, course was set for Dunk. Dermot made coffee and served Belgian croissants; life was looking good.

Monitoring electrons, we arrived at Dunk with over 60% left in the main battery so continued around to the Swiftlet caves on the east side of the island. Flat calm, almost, lots of rocks, so Dermot and I transferred to the kayak, which we had towed from Hull River. Shifting from *Joule* to the kayak was not easy. "Just plunk your bum down into the seat" says Dermot. Easy if you have eyes in your bum, which I don't. A tentative bum plunk nearly caused a capsize, but I found I was "safely" on the kayak and was expected to paddle ashore onto barnacle encrusted rocks. The "fun" was just beginning.

Selecting a suitable safe harbour, i.e. space between the aforesaid rocks, getting ashore was a reverse of the bum plunk. Timing the "reverse plunk" between waves was concerning, but luckily the tide was on the rise, so the rocks were dry and not slippery, and we both managed an inelegant scramble to finally get upright. Once the kayak had been pulled well above wave level, I asked the key question "Where is the cave?" "Somewhere on the left, or it could be on the right" answered Dermot definitively!

Thus started a hunt through dense snake and spider infested vine thickets on a 45° bouldery lope. We took one side each.

"Look for the rope" instructed Dermot. Good idea I thought, thinking of a 2" (50mm) heavy hawser. "Can't see it", I called back.

30 minutes later we swapped sides, and Dermot found the ¾" (20mm) rope in a couple of minutes. About 5 metres from where I had been looking!! 1 to Dermot. 0 to Roger.

The rope led to the cave, and we crawled inside to be met by the interesting aroma of bat poo mixed with bird poo. There were several nests, but no young and a few eggs. A little disappointing as it was well into the breeding season and there should have been plenty of youngsters there. Still, we counted and photographed all the eggs and nests, and backed out into the sunshine. Only one more cave to find, and Dermot knew the way.

On the way we retrieved the rope, and a bag left from a previous visit, scrambled about 50 metres and entered another hole in the ground, to again inhale the rich aroma of bat and bird poo. Another round of counting and photographing lots of nests, several roosting adults and some eggs but no young.

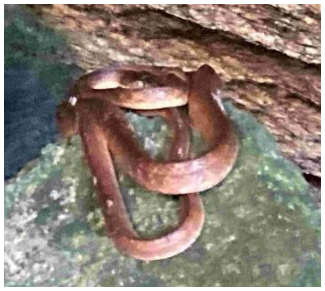
Heading back to the kayak, it was “interesting” to note that it was afloat and, while it was tethered, the paddles were not and were floating among the rocks. Dermot sacrificially immersed himself, while I gave helpful advice, to retrieve the paddles and get the kayak to a place where we could perform the “bum plunk” and paddle back to *Joule*.

Nothing is elegant, or safe, about kayak-to-boat transfers, but once on board, we up-anchored and purred around the other side of Dunk for a calm anchorage and lunch. Both acknowledging that this was probably the last time ageing bones and bodies would allow us to visit these caves.

We briefly considered then rejected the option of walking up the track to the summit of the island – instead choosing an uneventful and pleasant afternoon spent having a short siesta, a walk along the beach, showers in the campground ashore, and drinks on the aft deck watching the sunset. A reward after the morning’s labours.

After a good night’s sleep, sheltered behind the Dunk Island spit, we awoke refreshed and ready to tackle ~~sail to~~ the next Swiftlet cave -Wheeler Island! Can we get there? A battery check confirmed that the main battery had recharged back to about 80% during the previous afternoon, so we had plenty of electrons.

About an hour and a half of gentle purring got us to Wheeler and around to the “Bird Cave”. With the main battery down to 40%, we changed to the second one and anchored just off the cave. Getting ashore was a repeat of the “bum plunk”. Practice had given Dermot confidence in it, but I was still astonished when I ended up sitting on the kayak and not in the sea.



This cave was easier to find, but access was restricted, even more so by the python coiled up on the side as we crawled in. Being hit in the chest by fast flying Swiftlets was disconcerting, especially as I had been told that they could echo-locate like bats. I don’t think anyone had told these ones!

This cave had a much bigger colony. Lots of nests with young and eggs, and the birds were flying about. While we counted and photographed all these, Dermot discovered that the cave was also home to a green ant colony. These had their usual impact, and it wasn't long after that he led the way past the python and back into the fresh air.

I was getting the hang of the kayak and bum plunking, so with less drama and trauma, we skedaddled back to *Joule*. We had had enough of caves for several days, but it was still too early to head back to catch the rising tide into Hull River, so we tucked into the lee of Wheeler Island, anchored up and spent a pleasant couple of hours watching the antics of visiting holiday makers from Bedarra Island Resort on the beach. Sun protection seemed to be at a minimum, so watching them turning red made it all the more interesting!

We had not forgotten the trailer issue and came up with a solution. Dermot rang Marcus and arranged for him to meet us at the ramp with a sledgehammer. All problems can be solved with a big hammer!

Eventually, the tide dictated that we should head back to Hull River. The breeze had stiffened, and on the crossing, *Joule* proved to be rather tender in cross seas, but at no time felt other than safe and secure. Crossing the bar at about 1pm with just enough water under us, we realised that both batteries were showing 60%. The main battery had recharged 20% during the morning. A great result.

Now to face the trailer. Marcus was waiting for us with hammer in hand – we needed a Coastguard rescue after all! We surveyed the problem, decided where to hit, and gave Marcus the go-ahead. In a cacophony of noise, gradually the axle moved back into place, until we were happy that Dermot could safely move the trailer and retrieve the boat.

With the boat unpacked and on the trailer, the kayak was put onto the roof racks, to be promptly blown off again by the wind. Always tie things down immediately!

That was the last incident, and I left Dermot to tidy up and headed for home. Checking once I was there that he had arrived safely and that the trailer had behaved itself.

The trip had proved that it was possible for *Joule* to do a 2-day trip to the islands, and several hours of purring along under battery power, providing the conditions were good. This just supports Peter Rountree's comment from his recent trip to Dunk. "Plan a trip to the weather and not the calendar."

Roger Fryer
Nov 2024

Ladies and Gents, this concludes *Ratlines* for November 2024 and, as always, if there's more you want to see or know about, please contact us by return email.

Likewise, if you have a story or article you'd like included please send it to us at: WBACairns@gmail.com

Clubhouse: **68 Tingira Street, Portsmith, (Cairns) Qld 4870**

Committee is: **President- Roger Fryer;**
Vice President- Chris O'Keefe (WBAC Facebook page);
Secretary- Dermot Smyth (Librarian & Ratlines);
Treasurer- Brendon O'Rourke;
Committee- Tom Sparks, Sheila Sparks (website supervisor),
Keven Muller, and Richard Heazlewood.

Email address: WBACairns@gmail.com

Website: **https://www.woodenboatscairns.com.au**

Facebook: **https://www.facebook.com/Wooden-Boat-Association-of-Cairns-118900728480121/**

Postal Address: **68 Tingira Street, Portsmith, (Cairns) Qld 4870**

Phone: **0417 266 555 (Roger)**

WBAC's Cash For Containers number is: C10026463