

Newsletter of the OGA Western Australia

The Association for Gaff-Rig
and Traditional Sailing



June 2017

www.gaffrigsailinginwa.org



OGA Regatta

photo Hannah Rugg

Upcoming Events

Date	Event	Location	Contact
17 June	Murray River Cruise	Ramp upstream of Ravenswood Bridge	James Bennett jamesb@austal.com
16 July	Swan River Cruise	Bayswater Ramp	Peter Edmonds edmonds@ausstep.com
26 July	OGA AGM 19:00 for 19:30	RFBYC	
27 September	OGA General Meeting 19:00 for 19:30	RFBYC	
22 October	Retro Race 1	RFBYC	
19 November	Retro Race 2	RFBYC	
22 November	OGA General Meeting 19:00 for 19:30	RFBYC	
10 December	Retro Race 3	RFBYC	

Events being planned...

- Another Murray River Cruise
- Lake Wellington Cruise
- Swan River Raft Up
- Lake Dumbleyung Raid

If you want to enjoy any of these events please do not hesitate to get in touch with the contact person. Crewing places are almost always available.



President's Log

The OGA year is drawing to a close and the thoughts of boat owners turn to winter maintenance. I know "Gryphon" has work to be done, largely painting brightwork, however as with all boats there are many small things to be attended to. One that comes to mind is the matter of trailer maintenance for those of us whose boats are more portable than some. I know that this year my bearings will come off for replacement and new seals and while I am under the trailer some adjustment to the rollers will be useful.

The annual OGA Swan River Regatta was postponed due to adverse weather for the scheduled day – Sunday 26th March. I know many were disappointed at the postponement, including my crew which included three generations of Robinsons, my grandson included. It was however necessary to take this action as a matter of duty of care to our sailing members and support personnel.

The Regatta was eventually held on 30th April 2017 under very light conditions for the start, which owing to a handicap start, meant that almost the whole fleet were bunched at or near the start line when the sea breeze finally arrived. My thanks to Jeremy Stockley and Jim Black for officiating on the day as I was incapacitated with an ongoing back injury. Jeremy in particular should be commended on his able handicapping, a difficult task at the best of times. Regatta results are posted later in this newsletter.

The OGA Committee will be discussing the regatta format for future years taking on board comments from skippers.

On 31st March 2017 the OGA lost a stalwart with the passing of Paul Ricketts after a long illness. Paul had been a long time active member of C Fleet.

Paul was a long standing member of the OGA of WA and is known as the person who for many years produced some wonderful photographs of our yachts and displayed them on the OGA website.

Paul started with the OGA in a TS 16 (which

I believe was named *Cowabunga* – was Paul a secret Ninja Turtle fan? I stand to be corrected on these facts) that he was in the process of restoring, later he sailed as part of C Fleet in *Matthew Flinders*, a Welsford Navigator and more recently in *Araluen*, a Pathfinder, also by John Welsford.

What few of us did not know was Paul's background as a graphic artist, a profession he took up after studying graphic design and photography at Art Schools in Wollongong and Sydney.

Paul worked for the ABC in the eastern states then in WA, the latter location being as a result of the impending Americas Cup defence. It was during this time that Paul and Tracey met.

Paul and Tracey were married in 1990 and have two wonderful children, Liam and Madeliene.

Paul's experience with the computer-based graphic arts expanded and he was responsible for the graphics on some well-known TV programs including Beyond 2000.

It was this skill that we have seen demonstrated in the OGA website including Paul's YouTube clips of his and Peter Kovesi's Shark Bay trip (on the OGA website) which are an example of Paul's photographic and editing skills enhanced by Peter Kovesi's photographs and text.

There is much more to Paul's history, including his travels in Europe and Asia, family camping and so on.

As an OGA committee member and an active participant in OGA events Paul's presence will be greatly missed.

Finally, I urge all OGA members to attend the AGM to be held at RFBYC at 19:30 on 26th July. We are particularly keen for members to nominate for committee positions including: Vice President and Webmaster.

Chris Robinson
President
OGA of WA



Paul Ricketts

Canobie goes to the 2017 AWBF

Owen Stacy



When we finished the restoration of *Canobie* in 2010 I knew that sometime I must take her back home to Hobart, at least for a visit and to show her off. The lasting memory in April 2009 of the Hobart sailing community, that had once cherished the boat, was a rather dilapidated hull being loaded onto Macka's truck and heading up the highway to the Devenport ferry, expecting never to see her again.

I tried to take *Canobie* back to Hobart for the 2015 Australian Wooden Boat Festival (AWBF), timed to follow shortly after her 100th birthday. But with work commitments and problematical logistics the stars didn't align. But then in late 2016 the planning started to take sensible shape, so I locked in my festival entry for the February 2017 event and Macka with his truck.

Macka (aka Dave McReady) was pivotal to

the whole logistics. He is one of a kind when it comes to trucking boats long distances, being a very good sailor and a wooden boat fan, plus having a Kenworth rig and air-suspension jinker. Macka originally trucked *Canobie* from Hobart to Perth for me in 2009, so it had to be him again, for me to risk the precious old boat to travel the Nullarbor twice within a 4 week period. And as for getting anyone to insure the exercise.... well that's a story for another time.

Also pivotal to the exercise was Michael Foster (Foss Marine) and his partner Penny. Mike masterminded the restoration of *Canobie* in 2009-10, and to this day he continues to handle the boat with tender loving care. He prepared the boat for the journey and was there for all the lifts in Hobart and Perth. So it was pleasing to able to have Mike, Penny and Macka as crew in Hobart for the events, as they each made a holiday

out of the time we had in Hobart.

Thanks to Dan coming in early on one of his days off, we hoisted and slipped Canobie out of RPYC without fanfare on the 27th of January. A liberal dose of salt water was dropped into the bilge to try and keep the Huon pine planking and ribs as moist as possible for the long haul across the country.

For the next 6 days Macka kept up a running commentary and photos on Facebook to show how the boat and rig was travelling. Fortunately our unusual summer weather played a positive part, with rain and cool weather all the way to Melbourne.

The reception in Hobart was amazing, in part thanks to a small article in the Hobart Mercury announcing Canobie's imminent arrival, and thanks to some very good Hobart friends of mine. Before we had launched the boat at Clean Lift Marine there were past owners, descendants of past owners, past crew, Festival staff and others dropping in to see her.



Canobie on show

We were delighted to be guests of Bellerive Sailing Club (BSC), for the 3 days before the event and the 3 days after, across the Derwent River from Sullivans Cove where the AWBF is held every 2 years. The hospitality at BSC was terrific; with the Club shuffling boats to make sure Canobie had a good pen and a place to make her accessible to visitors.

Past owner Walter Knoop, who sailed Canobie in 1962-1969 with a Marconi rig, spent quite a bit of time with us during our entire stay. It was natural that I gave him the helm when we participated in the official sail-past at the start of the Festi-

val. Walter, a well-known sailing identity and builder of many quarter-tonners, half-tonners and Sydney-Hobart entries and winners, presented to me a 100 year old 'silk' printed regatta programme, a prize traditionally handed to the category winners of the annual Hobart Regatta, and in this case the Div 1 prize which Canobie won in 1917.



Past owners Walter and Neil presenting the silks

The official sail-past was fun, and for show we hoisted our rarely seen topsail. We sailed alongside 'Vanity' (Circa 1911) for a while, one of Canobie's heritage listed sister boats, before mixing it with the James Craig, one of the very prominent tall ships. With thousands of spectators on the sea walls around Sullivans Cove and Constitution Dock, it was a nervous time dropping Canobie's huge mainsail and navigating into the marina, teaming with glorious craft of all types, trying not to make a goose of myself.



Festival in full swing



'James Craig' and the sail past

Neil Houston, another past owner of Canobie (late 1980's-early 1990's), also came to visit and presented to me one of his 'silks' which he won in Canobie. These silks, I sincerely hope, will remain part of Canobie's inventory for decades to come for the future custodians on the boat.



Glorious boats, everywhere

For anyone who has not been to an AWBF event, I highly recommend you do so. It was my 3rd time. It is ranked as the best in the Southern hemisphere, and for very good reason. I counted 7 tall ships, of all types, from various parts of the world, 500 wooden craft, and reportedly over 200,000 visitors. When not manning Canobie over the 4 day event, I was drooling over the other boats, the detail, the finish, the pride of the owners, the

combined spectacle. There was 'Oranje', the Dutch Royal family Dragon, crewed by Royal family members. There was 'Varg', a most spectacularly finished 8 Metre yacht, which will be manned by a Tasmanian crew and shipped to Europe shortly for the World 8M championships. There was something for every type of yachtie, paddler and motor boat fan.

It was pleasing to see a contingent of WA sailors there, touching base with us and sharing the experience. That contingent included a visit by John and Mark Fitzhardinge. With some encouragement it might be that 'Thera' makes the journey for the 2019 AWBF?

All too soon the 4-day event was over, and we wound our way out of the festival area, hoisted sails in a stiff breeze and headed back to BSC. In the following days we sailed down the Derwent and attempted to enter the D 'Entrecasteaux Channel, with the aim of reaching Kettering, where Canobie was kept by the first owner, AJ Cotton from 1912 to about 1917. The breeze died when we drew close to the entrance, just off Iron Pot, so rather than be stranded with virtually no motoring range in Canobie's electric motor/battery system we scuttled back to Belterive.

On the penultimate day of our sojourn we competed in the WAG race. With wind gusting to 30 knots we managed 3rd across the line in the pursuit format race, missing by only 13 seconds, but thanks to a generous handicap we were awarded the win.



Canobie at full tilt on the Derwent

Finally it was time to pack up and head for

the boat lift upriver. With negligible breeze we were towed in the early morning by my colleague Bill Lawson in his grand old Huon pine motorsailer 'Moonraker', under the Tasman Bridge and round the bend in the river to Clean Lift. Macka and Mike swung into action again and packed up the boat for the long journey home.

Canobie arrived back at RPYC in remarkably good shape considering the feat, and was soon back in the water after Mike once more tendered her gently.



Homeward bound

Footnotes:

1. For more information on the history of Canobie and her sister boats, Google "Tasmanian One Design".
2. For more images and information on the 2017 AWBF, see www.australianwoodenboatfestival.com.au



Arietta

Fala

Andrew Bochenek



Fala, the first wooden Bayraider 20 in Perth, has recently arrived in Western Australia. It was built by Denman Marine in Kettering, Tasmania for new OGA of WA member Andrew Bochenek.

It was a 6 month build and Andrew accepted delivery of the boat in Kettering and subsequently displayed Fala at the Australian Wooden Boat Festival in Hobart before towing her home across the Nullabor.



The tow took 4 days. One day from Hobart to Devenport with an overnight trip on the Spirit of Tasmania before landing in Melbourne. It then took 3 days to cross the

mainland, with the 2 overnight stops being Port Pirie and Border Village, before arriving in Perth at 10pm in the evening, the last leg being from the SA/WA border to Perth, a 1450 km drive.

Fala was fitted with a “towable” boat cover, including an under-bow cover to protect her from stone damage. She arrived undamaged, but the tow car suffered a broken windscreen at Merredin after a large convoy of trucks went past heading east. Modern windscreens are expensive! Thank goodness for insurance that covered the \$2500 bill!



The Nullabor was surprisingly green in February due to the massive rain the month before, and subsequently there was little kangaroo or emu road kill as food was plentiful. A great relief to the tow car drivers.



Fala’s structural timbers are of celery top pine and the planking and general hull

construction is composite Lloyds certified BS1088 Gaboon/Okoume Marine Ply with fibreglass and WEST system brand epoxy and associated fillers. There is Western Red Cedar cleating and Huon Pine seat top slats. She has an overall weight of 375kg which is about 75 kgs lighter than the fibreglass boats.



The 2017 OGA Regatta

The postponed OGA Regatta was finally sailed on the 30th April. What a beautiful autumn day! Well worth waiting for after the gale that blew on the original scheduled day.



The lack of wind for the first hour of the race meant that all boats essentially started off at the same time. Consequently the fastest boats were the first home in all fleets, so they took handicap honours as well. All the good efforts of the handicapper were frustrated! The shortened course reduced the effective race duration to between seventy and ninety minutes for all fleets from the time when the wind came in (1100).

The dark horse of C fleet was *Cygnets*, sailed brilliantly by Mike and Joy Lefroy. The smallest boat in the fleet put most of us to shame with their excellent upwind speed.

No boat exhibited any sufficiently aberrant or idiosyncratic behaviour to merit award of the Screwed Up Trophy. No junior crews competed and so the Doug Rickman Trophy was also not awarded.



Mike and Joy Lefroy



Crazy Bird and *Fontana*



Fala and *Kailani* were never far apart.



Kasey



Hakuna Matata



Hero enjoying the breeze when it came in.

The Spirit of the Regatta was awarded to Owen Stacy and the crew of *Canobie* for managing to make the journey from RPYC in light winds and arrive in good time without the aid of her electric motor, having discovered on arrival at the pen that *Canobie's* batteries were discharged. Also for Owen's commitment in taking *Canobie* across the Nullarbor during the summer to where she had been built and exhibiting her at the Hobart Wooden Boat Festival.

Thanks to Hannah Rugg and George Vaskovics for taking the photographs.

2017 OGA Regatta Results

Boat Name	Sail Number	Skipper/Owner	Finishing Position	Awards
A Fleet				
Thera	R11	Mark Fitzhardinge	1	Fastest
Canobie	R97	Owen Stacy	2	1st Handicap
Roulette	RF18	Andrew McMillan & Fred Nagle	3	2nd Handicap
Kasey	RF26	Peter Ferry	4	3rd Handicap
Hebe	R114	Rowan Chick	5	
Hero	R131	David Cappozzalo & David Hand	6	
B Fleet				
Bicton Belle	EF3	Barry Glazier	1	Fastest
Genevieve	RF3	Rory Argyle	2	1st Handicap
Rosen	RF121	Charles Colvin	3	2nd Handicap
Hakuna Matata	RF98	Jeremy Stockley	4	3rd Handicap
Arietta	G3	David Cliff	5	
Vagabond	C1	Robert King	6	
C Fleet				
Kailani	60	James Bennett	1	Fastest
Cygnnet	Red Sail	Mike Lefroy	2	1st Handicap
Crazybird	RF10	John Longley	3	2nd Handicap
Fala	RF53	Andrew Bochenek	4	3rd Handicap
Wee Birlinn	R141	Jim Black	5	
Whimbrel	Red Pennant	Peter Kovesi	6	
Fontana	OGA 98	Tony O'Connor	7	
Gryphon	R183	Chris Robinson	DNS	
D Fleet				
Karoleeya	SP24	Stephen Hill	1	Fastest
Koomela	SP 91	Mark Walters	2	1st Handicap

Wine Trivia

Peter Edmonds

Did you win a bottle of wine at the April OGA Regatta? Did you study the label, and speculate on the significance?

I did, on both counts, and was inspired to do a bit of research.

The “Gig” is a common boat type, particularly Naval, in the latter sailing ships era. No surprises here.

I looked in my street directory, and found the Upper Reach winery off its designated street Memorial Drive, Baskerville.

Immediately to the west is the mouth of the Ellen Brook, and All Saints Church, the oldest church in Western Australia, on Henry St, Henley Brook. I visited this site in 1979, with “Captain Stirling’s Navy” as part of the re-enactment of Stirling’s river voyage as part of our 150th celebrations. We left our boats at Woodbridge and visited the church site by bus.

Now to another source - Nick Burningham’s definitive Swan and Canning Rivers site and history guide *Messing About in Earnest*. This book describes Nick’s 2002 solo voyaging in these rivers aboard his home-built dory EARNEST.

Nick describes meeting Greg Stokes at Baxter-Stokes Winery, shown just south of Upper Reach in my street directory. I quote: “Baxter-Stokes’ vineyards are on the left bank directly opposite All Saints Church where Stirling and I turned round. Greg

and his wife Lucy run an inviting example of a small-scale Swan Valley winery, crushing twelve to sixteen tonnes of fruit per year (0.001 percent of the total Australian crush) and selling all the production through cellar door sales on weekends.” (pages 264-5)

Nick’s discourse on the local wineries continues for a page or so. A further quote:

“Nearly all the vineyards in the Swan Valley are irrigated these days. Greg did tell me of an Italian gentleman who grows superb grenache unirrigated on the gravel-land below the escarpment.” This could well be the Italia Wine Co, Campersic Rd, Middle Swan, where I go to buy bulk grenache. I haven’t shown the “Earnest” source to the elderly (positively ancient) proprietors yet.

Congratulations to whoever in OGA sourced this particular wine, with its strong local associations, and its links with our “OGA” culture and history. I thought we had done well with last season’s wine label *Mr Riggs - The Gaffer* as of last season. Too bad that I haven’t had the occasion to try either wine yet.

Burningham describes his navigational challenges approaching Ellen Brook, and All Saints Church earlier in his book (pages 231-236).

Does this inspire any personal explorations, with or without “Earnest” in hand?

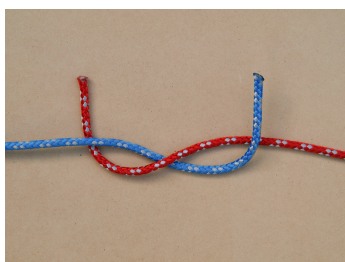
Peter Edmonds ©2017

The Reeve Knot

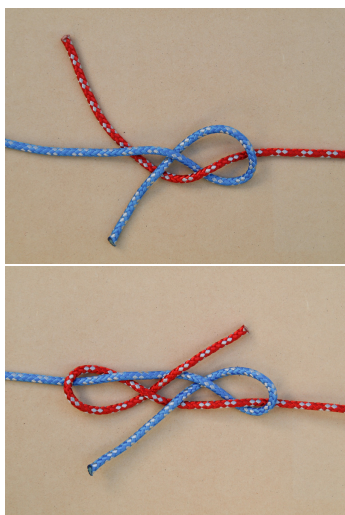
Peter Kovesi

The Reeve Knot is one of my favourite knots, I use it a lot. While it was first published in 1928 it does not appear to have been widely adopted and only became known to some degree when reinvented by Harry Asher (in a subtly different form) in 1989. The knot is not well known, it is not in Ashley's Book of Knots (ABoK), and you will only find a handful of references to it on the Web. Indeed, in writing this piece I realized that the knot was not in Wikipedia, so I wrote an article to remedy that. Look it up if you like! When you write an article for Wikipedia you have to be quite conservative and strictly neutral in what you say. Here I can be more enthusiastic – I love this knot!

Here is the tying sequence.

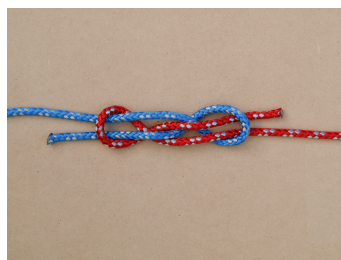


Start as if you were to do a reef knot.



Loop each end anticlockwise around and back through the centre. Make sure the ends cross at the centre as shown, this is the only point where you can go wrong in tying the knot.

At this point we have a Double Harness Bend (ABoK #1420) which is a respectable knot in its own right. However we continue one step further by passing the ends through the outer loops to complete the knot.



Turn it over and admire the result.



There you have it, a secure and compact knot with a very pleasing form.

An important practical attribute is that each line going in and out of the knot is clamped at two points within the knot. This makes it very resistant to being shaken loose, I have used it with complete reliability for joining the ends of jib sheets together. It is also very good for tying shock cord and I believe it is probably a suitable knot for use with spectra/dyneema. Knots for these ropes need to be chosen with care because of their slippery nature. I have only used the knot with dyneema a few times but so far it has proved reliable.

Back to the history of the knot. It seems that the knot was first described in an article *Knots for Climbers* by C E I Wright and J E Magowan in volume 40 of the *Alpine Journal* in 1928. It was introduced as a knot that is recommended for joining two ropes. The knot then seems to lie in obscurity until 1989 when Harry Asher published his book

The Alternative Knot Book (Adlard Coles). In the introduction to his 'New System of Knots' he presents a sequence of three new knots that he had devised, the Simple Simon Over, the Simple Simon Under, and the Vice Versa Bend. The three knots form a developmental sequence that were inspired by aspects of the Sheet bend. In devising the Vice Versa Bend Asher had, in fact, reinvented the Reeve Knot with the slight difference that the working and standing ends of one of the lines were exchanged. This produced a knot where both working ends finish on the same side of the knot rather than on opposite sides.

Finally, the relationship between the Reeve Knot and the Vice Versa Bend was pointed out by Dick Clements in his 2004 article "The Vice Versa Bend and the Reeve Knot" published in *Knotting Matters*, the Journal of the International Guild of Knot Tyers, Issue 85. In his analysis of the two form of the knot he notes that the arrangement of the standing and working ends in the Vice Versa Bend is not strictly symmetric. However the Reeve Knot is completely symmetric and for this reason he suggests that it is perhaps the better version of the knot.

Try the knot, I am sure you will like it!

Gaff Mainsails

Peter Edmonds

WHAT IS THIS ABOUT?

This article will relate to the gaff mainsail, with a gaff with jaws (or equivalent fitting) and throat and peak halyards. It will not address gunter sails (single halyard, jaws), or lugsails and Chinese junk rig sails (yard without jaws, and single halyard).

Many of us seek to set up and rig their boats effectively, and sail them well. For those outside the racing environment, this is a personal thing. For those racing, it is necessary. The "Gaffers" are sailing boats outside the current fully competitive yachting technology. I do not see this as a reason to disregard sailing a boat as well as practicable. Does this make sense? Hence this article.

Sailing gaff mainsails well obviously exists within the racing environment. Probably the most significant area for this in Australia is the cuta boats. These sail as a small fleet on the Swan, but hold national championships in eastern Australia. It is recorded (*Afloat* magazine) that boats were trucked from Melbourne to Pittwater (Sydney area) for such an event. Mixed fleet Club racing cannot be ignored - instanced by BICTON BELLE and

sisters seen on the river on Saturdays.

The knowledge is out there, but doesn't spread readily. The gaff mainsail is too far off the competitive mainstream to make it into the "go fast" sailing books. The big issue that faces me on boats where I am a guest is "What is a fast shape for a gaff main?" Running the photo boat for the recent OGA regatta gave me good opportunity to look at a lot of sails.

RIGGING AND CONTROLS

Gaff and boom lacings, mast hoops if fitted, throat and tack securing, and peak outhaul are effectively static controls - set these up, and leave them permanently set. I mention the gaff and boom lacings as I have recently sailed with a mainsail where I regarded these as too tight, not allowing the sail to take up its built shape.

The clew outhaul is all too often static; not easily adjusted. It could well be rewarding to rig this item so it can be hauled on and eased underway to contribute to sail shaping with changing wind strengths and loads.

The mast lacing, if fitted, is a ready control for the sail shape around the luff.

Many gaff rig boats have fixed height goose-necks. This moves control of luff tension to the throat halyard. What may be adequate in throat halyard purchase (plus winch, tackle, etc) for raising the gaff may well be deficient as a means for tensioning to control sail shape.

Boom jaws simplify the issue of luff tensioning. These will usually require a boom downhaul of some form for positive control of luff tension - gravity just won't do it effectively.

The Cunningham eye (and tackle) is widely used in the Bermuda rigged mainsails as an easy and effective control of luff tension. It would be quite an easy addition to an existing gaff main.

The peak halyard is very much a controller of sail shape. Small adjustments here can be quite rewarding. It is akin to controlling mast bend for a Bermuda main. Tensioning the peak halyard fills out the sail in the vicinity of the throat.

Dropping the peak halyard a bit is a means of depowering the top of the mainsail, by allowing the gaff to fall off a bit. I did see an instance of a slack peak halyard in the latter part of the Regatta. This could well have been depowering in action.

Easing the peak halyard for this depowering was known as "scandalising" the main. It is a quick and short term alternative to reefing.

The boom vang is a means of reducing the sagging off of the gaff, and lifting of the boom, when off the wind. Getting sufficient drift between gooseneck and lower attachment point is difficult in decked boats. Purchase on boom vang is often inadequate to generate the loads to be effective.

Vangs from the peak of the gaff to deck at the quarters have effectively been abandoned as a means of controlling sail twist. I guess that geometry, complexity, and windage were against them.

The mainsheet is the primary control for sail trim angle and twist, with only small influ-

ence on sail fullness. It is usually rigged at or near the boom end, often with a mid-boom takeoff to the sheeting position. The lower end aft is commonly on a horse or traveller, allowing some control of the sheeting position across the boat. If so, some arrangement to allow the block to go fully to leeward, or pull up to boat's centreline or to windward can be rewarding in a search for good mainsail trimming.

Having sufficient purchase on the mainsheet is an important item, as many boats will require the playing of the mainsheet to windward in any significant wind. If you feel that mainsheet trimming upwind is heavy work, consider trying increasing the purchase of the mainsheet, at least on a temporary basis. This can be done by rigging a temporary block near where the standing part of the mainsheet is attached (boom or boat), securing the standing part at the opposite position, then running the mainsheet through the temporary block and then along its previous path to the sheeting position. This may well result in the mainsheet being too short for fully easing when on a run, and a new mainsheet may be required for a permanent arrangement. You may be able to get away with splicing or stitching an additional length of rope onto the free end of the mainsheet, as it will be used only occasionally, and under light load.

MAINSAIL SHAPE

What is a "good shape" for the mainsail on your particular hull configuration is probably fairly sparse knowledge, and rarely promulgated. How high to point the boat for any particular state of wind and waves is also of great importance for best speed made good to windward. I haven't seen anything in a book, and I can't see such a specialised item appealing in the yachting magazines. Will any of our reader members share anything here?

I did find an informative 2015 Practical Boat Owner article on the Web. It is written around the Cornish Crabber

fleet, with illustrations and photos. Well worth a look. A major theme - don't pin things in too tight; keep the boat moving. <http://www.pbo.co.uk/seamanship/getting-to-grips-with-gaff-24017>

BICTON BELLE is the only gaffer I have spotted with shape stripes on her mainsail. For those not familiar with these, they are used by taking photos straight up the mainsail, from mid boom. On the photo the chord and camber can be measured, and their ratio calculated. The photos will also show how far back along the chord the maximum draft sits. At least if you have these, you can start talking to your sailmaker about them. I can't advise effectively here.

There is an alternative and quite simple way of measuring fullness that I have yet to try. Run a light line from throat to clew, or possibly a point on the luff below the throat to a point (such as a reef cringle). When closehauled, tension this line for minimal sag. Record the line's length, and eyeball the distance from the line across to the sail at its deepest point, then calculate the ratio.

I used the opportunity of driving the photo boat for our Regatta to look at mainsail shapes through the fleet. Nearly all were decidedly generous in fullness. How many were fuller than optimum? A lot, I guess. The conventional wisdom is that cotton sails used to go flat as they age, and Dacron sails go full.

REEFING

Many of the lessons learned with the Bermuda rig will apply to most gaff mainsails. The strength of the modern sail will allow the sail to be reefed to luff and leech cringles only, without tying in the reef points. These latter were required to spread the sail load in many of the earlier cotton sails. This allows the option of the jiffy reef.

One of my early additions to NIMBA to suit her cruising mode was a pair of reef cringles on the main. Dropping the jib didn't surrender much area, and sailing on jib only wasn't very effective.

Roller reefing is hard to get right, particularly for an effectively flat sail when reefed. I will leave this technique to history, and to those who are pursuing a particular historical authenticity. The conventional wisdom on the jiffy reef is:

- *When should you reef? When you think about it.*

- *If you can't take in or shake out the reef in a jiffy, there is something wrong with your gear, your technique or both.*

Mainsail reefing is of great importance for gaff rig boats, as mainsails form a large proportion of plain sail (typically 60% to 90%; 100% for cat-rigged boats).

My strong preference is to use a hook at the tack. I have fixed ramshorn hooks on both sides of my boom on NIRIMBA. A floating hook is easy to set up to try and refine this feature. You just partially lower the sail, hook on, and retension the halyard(s) You are normally denied the Cunningham eye tackle when reefed, so luff tension is a halyard item.

A conventional reef pennant, attached to boom one side, through the cringle, and then around a sheave on the boom can be used. If the traditional wooden fittings on both sides of the boom are used (name escapes me), they need to be set up to give full tension across the reefed sail, with reef cringle close to the fittings. This may well need trial and error with temporary fittings before making up the permanent fittings.

The ready tensioning of the reef pennants (only one tensioned at a time) needs consideration. This can be by a tackle on boom, hooking into an eye on the pennant, a winch on the boom, or the pennant(s) led through blocks on boom and mast to a winch on mast or cabin top. NIRIMBA's reef pennant is led to a cabin top winch. This means that hooking on or unhooking the luff cringle is the only reefing operation that involves leaving the cockpit. I believe the simplicity of operation is well worth this minor excursion.

Peter Edmonds ©2017

Hakuna Matata's Electric Motor

Jeremy Stockley

It is now fourteen years since I presented Hakuna Matata with her inboard electric motor. Three years later I described in our newsletter how the whole system was put together and its subsequent performance. When our editor canvassed for more articles on this subject he prompted me to reflect on the more recent years of operation: what has changed and what needs changing.

In 2003 the technology breakthroughs that enabled electric vehicles were relatively new. Key among these were the development of compact high efficiency motors using high-flux-density rare earth permanent magnets; and solid-state DC power controllers, which replaced the clunky old stepped voltage controllers. Packaged electrical marine drives were not available; several suppliers were involved in supplying the various electrical, electronic and mechanical components, notably the motor itself. I visited the Lynch Electric Motor Co. in the UK, then a small start-up struggling to establish its newly developed designs, and came away with one of their prototypes. Lynch is now a major supplier of electric drive systems to a wide range of industries (see <http://lynchmotors.co.uk/index.html>).

The system remains as we installed it in 2003 and it still operates smoothly. The motor itself shows no sign of wear or corrosion and has needed no maintenance. At some stage the brushes may need adjusting or replacing but there is no sign of wear as yet. All the control equipment remains in pristine condition, protected within its waterproof cabinets. Occasionally, one of the reversing solenoid switches will stick, causing a moment of panic when maneuvering, but regular 'stroking' of each switch and the occasional spray with silicon lubricant (also used each winter to protect the motor) seems to deal with the problem. More modern electronic systems integrate forward and reverse with the speed control, which I believe removes the need for the switches.

Although rated for up to 48V, running the motor at 24V obviates the requirement for a reduction gearbox, making for a very compact installation, shown here during last years haul-out. The motor support frame and two bolts securing it to the bulkhead suffer from some galvanic corrosion even though grounded to the boats cathode. No solution has been found so far, and at some stage the bolts will have to be replaced and insulated. Consequently, the motor will probably have to be re-aligned to the drive shaft, a fairly technical task.



I have made improvements in battery capacity and battery charging. I now use two 12V Ultimate UL230 AGM sealed batteries which has increased capacity from 135Ah to 230Ah with only a small increase in size, but a significant increase in weight; they weigh 70kg each, making removal a challenge. The increased capacity equates to increased range, never yet fully tested. On the recent sail back from Mangles Bay we motor-sailed for over six hours as far as Port Coogee before the wind filled in and still had ample 'juice' later to motor up parts of the river and into our pen at RFBYC.

The expensive fully filtered battery charger was not a success. It was big and heavy and sat loose on the cabin floor, lashed to the

mast when sailing. The first one got flooded when my bilge pump retired from service at the wrong moment, and the replacement fried two sets of batteries before I tossed it out. We now have a lightweight solid state charger mounted safely and permanently inside the cabin as shown in the photo; it also provides a better regulated charging regime – a huge improvement.



The motor continues to live up to my expectations. It provides instant, almost silent power (still drawing puzzled looks from on-lookers). It is ideal for motor-sailing; we set it to the desired speed and it draws a varying amount of current just sufficient to supplement the available wind power. Without sails, cruising speed is about four knots and requires 25 to 35 amps in smooth water. A head wind and a bit of chop can more than double this and reduces headway, so range becomes limited. It is possible that a

larger propeller might improve performance in these conditions, providing higher thrust at lower speed.

‘Range anxiety’ remains an issue even with the larger batteries. A trip beyond Rous Head relies on sail power and a few hours tied into electric power every few days. On a larger boat I would install a small diesel generator; solar and wind generators would take many days to recharge even a few hours motoring.

These days there are so many electric motors on the river that they are becoming commonplace, as they are on our roads. I believe they will soon become the preferred source of marine motive power, supported in some cases by auxiliary combustion engines or, longer term by alternatives such as fuel cells. Large power boats and commercial ships already use diesel-electric combinations. For smaller craft, improved battery performance will further reduce ‘range anxiety’. I certainly look forward to the day when clouds of diesel exhaust no longer pervade our rivers and marinas.

Editor’s Note: Jeremy’s two very comprehensive articles on Hakuna Matata’s electric motor installation can be found in the November 2006 and February 2007 issues of the OGA Newsletter. www.gaffrigsailinginwa.org/past-newsletters/



Hakuna Matata (under sail!) at the OGA regatta

SPARS

TIMBER BOOMS

These are available for use as is, for alteration, or as a source of timber and/or fittings. Location Mosman Park.

4.2 m x dia 95, with upper track slot. Likely used for roller reefing.

4.2 m x 50 x 90, rounded corners. Track on top, sliding gooseneck and mainsheet fittings at end; also 2 mainsheet loops.

2.9 m x 60 x 50, rounded corners. Slotted top, gooseneck and end fittings

SAILBOARD BOOMS

Location Claremont

1.7 m, 2.8 m, and telescopic 1.7 m - 2.2 m

NATIONAL E SPARS

Aluminium, location Yunderup

2 masts 5.5 m x 90 x 60; 2 booms 2.7 m

Also available Yunderup - high tech wooden mast, hollow with diamonds and internal hal-yards, around 5-5 - 6 m.

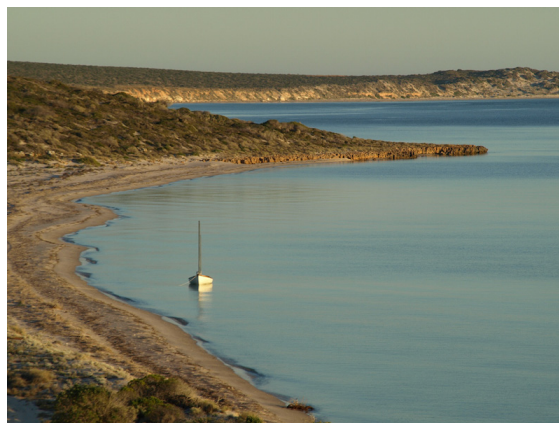
CONTACT

Peter Edmonds 9492 016 064 edmonds@ausstep.com

Shark Bay: Cape Inscription or Bust!

Peter Kovesi

In October last year Stephen Holden and I sailed *Whimbrel* from Denham in Shark Bay to Cape Inscription at the northern tip of Dirk Hartog Island. The occasion was the 400th anniversary of Hartog's visit. If you could not make it to the talk at the OGA general meeting you can read an account of the trip at peterkovesi.com/whimbrel/sharkbay2016/ Enjoy!



Contact the OGA

www.gaffrigsailinginwa.org

www.facebook.com/groups/1733609723588120/

President	Chris Robinson	rockdoctor46@bigpond.com
Vice President	Jeremy Stockley	jeremy@stockleys.net
Secretary	Andrew Bochenek	
Treasurer	Jim Black	
C Fleet Captain	Jim Black	
Membership	Tony O'Connor	
Boat Register	Peter Edmonds	
Web Master	Chris Robinson	
Social	Pauline Dilley	
Newsletter	Peter Kovesi	peter.kovesi@gmail.com

