



The Cutlass

Lowry Bay Yacht Club Quarterly Newsletter



May 2021

From the Editor

Sally Betts

Another weekend of breezy weather and a Port Nic Yacht Club offshore race being cancelled due to increasing winds. Today yachts were due to head off at midday in the race to Ships Cove and while today would have made for a brisk ride over the Strait, coming back tomorrow was not looking pretty let alone sensible. Codebreaker and Amnesty, both who were hoping to compete in this race, pulled our midweek and today the cancellation flags went up.

On the LBYC side of racing, true to form, the Long Harbour race 1 & 2 were held in very light winds (and next weekend is looking the same!). I was out on Amnesty on both races – the first one we managed to (some might say miraculously) find a slim channel of breeze and passed through and out to the front of the fleet heading to Island Bay. Amnesty made it home with ample time for refreshments and relaxing while also missing the container ship berthing while a lot of other boats spent time loitering in no wind and then having to take evasive action due to the container ship. The ironic part of Amnesty winning that day was that we misplaced the course but assumed we would be ‘following the fast boats’ so it wouldn’t matter. And yes, we paid our fine for having to call race control to check the course!

The 2nd long harbour weather was again very light and Amnesty was the first to call it a day and motor home. Some followed but others held their nerve and finally enough breeze filled in to take them over the line and finish the race. Well done to Tesstarosa!

February’s Cutlass was published just at the start of the Prada Cup and Americas Cup campaigns so a big congratulations to Emirates Team NZ for their win.

Feeling like there was a ‘hole’ in the yachting viewing calendar, we tuned in to watch the SailGP racing in Bermuda and while Team NZ did not do well it is fantastic to watch with 8 x 50 ft boats on the course at one time. All foiling, all sailors at the top of their game and really fast racing. If you missed it – there is an app or you can watch via SkySport or YouTube (delayed). <https://sailgp.com/about/2021/>
The next series is in Italy in early June and more exciting – SailGP is coming to NZ in Jan 2022 in Lyttleton.

Stay safe on the water and enjoy your winter sailing / boating.

The deadline for the August Cutlass is the end of July so get any photos and stories through to cutlasslbyc@gmail.com by then.

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From the Executive Committee

The LBYC Executive Committee that consists of the following people:

Max Meyers	Commodore
Jamie Reid	Vice-Commodore
Keith Murray	Treasurer
Lynn Porter	Rear Commodore - House
Guenter Wabnitz	Rear Commodore - Cruising
Ingrid Harder	Planning Team Lead
Brent Porter	
Mary Meyers	

Changes to membership

New members:

Shantanu Kirikaz
Rob Stewart
Peter Green
Irene Muirhead
Ian Keeling
Dan Bishop
Kate Robinson
Richard Thomas

A very warm welcome to you all.

Here is a brief update from the Executive committee meetings in the last quarter:

February meeting

- One new membership application was accepted.
- Chefs for Friday night catering were reduced to one unless required.
- Kitchen cleaning to be carried out in quiet periods.
- Approval was given to a contribution of \$500 for the outdoor screen for the Summer Blast event to view the Americas Cup.
- The Vice-Commodore updated the meeting on sailing committee activities and the upcoming 24-hour Endurance Yacht Race and Rum Regatta.
- Upcoming club events from the Rear Commodores (house and cruising) were reviewed.
- The Commodore and others updated the executive on a recent meeting attended with HCC on the future of Pt Howard Wharf. An engineer's report is being prepared and it may be that the wharf will be permanently closed as there are insufficient funds for its repair.

March meeting

- Seven new membership applications were accepted.
- Financial results for the eight months to end of February showed that finances are tracking well ahead of budget.
- Thanks were recorded to Guenter, Rear Commodore Cruising, for the work he put in to getting the Summer Blast event organised. This was cancelled due to Covid.
- Updates from Flag officers (Sailing, Cruising and House) were received.
- Management of mooring maintenance. Guenter agreed to make initial investigations to identify what is required.
- Thanks were recorded to Lynn (Rear Commodore House) for opening the bar during Americas Cup racing events.

April meeting

- Venue hire bookings are busy. It was agreed to consider increasing the venue hire rates.
- Ongoing discussion on mooring maintenance and a proposed review of how the club manages risk and maintenance protocols.
- Finances for the nine months to 31 March continue ahead of budget.
- A proposal from SML to widen the walkway near the café tables is to be distributed to members for their information.
- The executive expressed some concern about the lack of transparency with the methodology around handicapping for the 24-hour race to be considered by the Sailing Committee.
- Rear Commodore House (Lynn) updated the meeting on upcoming events.
- Planning sessions are being held in April and an update will be available at the next meeting.
- The executive agreed to investigate the club's liabilities and expectations before proceeding with the Learn to Sail proposal.
- Given the work undertaken by the planning group in this current year and the need to have a level of continuity, initial discussion on succession planning for the next incoming executive took place.

The monthly update is not a comprehensive list but covers the main items aside from the day to day running of the club. If members would like clarification on any of the items covered, please email the Commodore directly on commodore@lbyc.org.nz

The Executive Committee meets on the second Thursday each month. Have your say! Send your comments and suggestions to commodore@lbyc.org.nz for consideration at the meeting. We are here for you.



What's the Plan? Update from your planning team

Article by Ingrid Harder.

Thanks to everyone who has provided input so far, we're getting a clear picture of what you as members want for the future of our club.

Last year, the planning team spent a lot of time listening to people to find out what people want our club to be. It's heartening to see that most people want the same thing - a vibrant, sustainable club that is welcoming to new members and where members help each other out and learn from each other. Most importantly, members feel that we are a great little club and everything, including the financials, tell us that we're doing well.

This puts us in a good position to define our own future.

In April, over 40 members turned up to workshops where we drilled into some of the options for different aspects of the club, such as activities, membership, services and the clubrooms themselves. We heard that it's important to members to have a space of our own for social activities, somewhere to eat and have a drink together. A lot of members said it would be great if we didn't have to rely on hiring out our venue in order to pay the lease. There was also a general consensus that membership is ok as it is. We have remained constant at just over 200 members, with new members coming in all the time and some leaving. There was also a lot of interest in exploring another location for the club rooms and most people liked the idea of moving to a higher location, with a deck and a view out over the harbour.

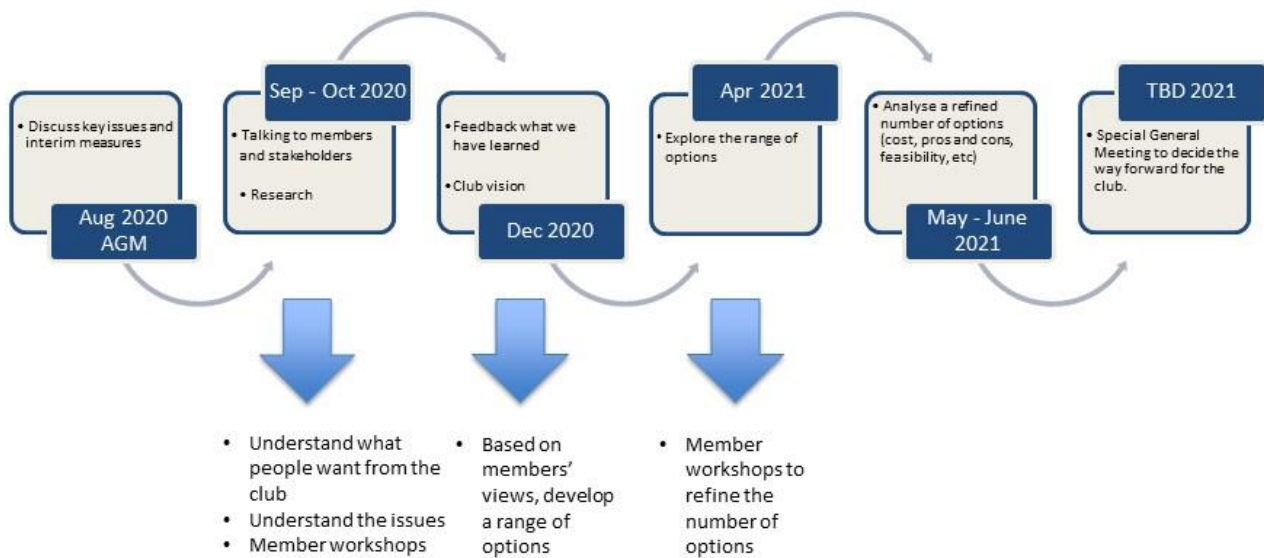
After the workshops, Geoff and I (Ingrid), met with the marina's Chief Executive, Alan, to talk through the options that members were most interested in and ensure there aren't any show stoppers. Alan has been very supportive of the work we're doing and has invited us to meet with the Marina Board later in May to talk about where we're at and get an understanding of the Board's views.

Our next step is to come back to members in June with a clearer picture of the most popular options from the last workshops, including the costs and benefits. Our proposed timeline is below. Any decisions about the future plans for the club will be made by members through a Special General Meeting.

We're getting there! Thanks again for all of your support and great ideas.

The planning team consists of Ingrid Harder, Barbie Mavor, Jennie Darby, Geoff Thorn, Philip Orchard and Dan Benton. If you want to find out more about what we've been doing or if you want to share your thoughts about the future of the club, please email ingrid.harder@gmail.com or talk to any of the other members when you see them around the marina.

LBYC Planning Roadmap





Racing

Full results for all racing is available on the LBYC website: <https://www.lbyc.org.nz/results-20-21>

24 Hour Race



By: Theo Muller, Race Director 24-Hour Endurance Yacht Race.

This year's 24-Hour Endurance Yacht Race was a great success on many fronts. Again, the weather gods were kind to us – more or less – with a northerly wind oscillating between 15 to 22 knots. However, they also made sure that we, as skippers and crew fully understand as to who is in charge. During the early morning of Sunday 28 March, we experienced several gusts of 30+ knots causing us on Freedom to put in a couple of reefs in the main. Yes, hard work but ever so exciting. An endurance race, remember.

Records were smashed: Masterpiece (Beale 45) broke its own records of 2019 by a massive 15.5 NM sailing an actual distance of 142.69 NM over the 24-hour period. Am Meer coming 2nd (125.51 NM) and True Blue 3rd with 117.95 NM under the keel.

Distance on handicap produced a 1st for Tandara at 183.52 NM. Tandara is a Raven 26. Pulse, a Nolex 25 and the only trailer yacht in the fleet, was 2nd, sailing a corrected distance of 179.40 NM and Masterpiece 3rd just over a mile behind Pulse at 178.22 NM.

This year's 24-Hour Endurance Yacht Race produced the biggest fleet since 2017 with 16 entries, including two from RPNYC and two from Evans Bay. The 'word' must be getting 'round.

The start off Rona Wharf produced some excitement for skippers and spectators. Race Officer Bob Rowell and Operations Coordinator Brent Porter took a very creative and innovative approach to the start of the race by getting the fleet sailing a short triangle in front of the wharf, before they set off on the large circuit taking in all corners of Wellington Harbour. Pulse and Freedom hoisted their kites on the short down-wind track in front of the wharf causing some excitement on both vessels; Pulse rounded up to lay almost flat on the water and Freedom dropped the kite in a hurry before even completing the hoist to the top of the mast. There must have been many OMG gasps from the spectators on the wharf.

Race Officer Bob also demonstrated his considerable flair as an event planner by creating a carnivalesque atmosphere on Rona Wharf to entertain the spectators who came to watch the start of the 24-Hour Endurance Yacht Race. A 3-piece band entertained the crowd with their popular tunes and a bagpipe player in full Scottish attire farewelled skippers and crew at the start. Balloons and buntings decorated the long fence on the wharf and spectators were able to taste Countdown-donated sausages, exquisitely barbecued by Richard and Liz Davis. The voluntary *koha* for the sausages goes to Coastguard Wellington.

Releasing helium-filled balloons is no longer acceptable in this age of environmental consciousness, so Bob called a mate who owns a flock of homing pigeons. When local MP Chris Bishop pulled the cord on the cannon to mark the start of the race, several dozen pigeons were released from their travel cage.

Thanks go to Robert Baldock of Shipwreck Trading who positioned a huge mobile billboard near the entrance of the wharf advertising the start of the 24-Hour Endurance Yacht Race.

The 24-Hour Endurance Yacht Race is made possible by the very generous support from our sponsors. For that we are immensely grateful. Also, a huge thanks to the Race Management team; while skippers and crew tried to stay awake on the water, Race Officer Bob and his team did the same in the clubhouse. Once again, they did a sterling job and I hope that we can count on them again next year. The 2022 24-Hour Endurance Yacht race will be sailed on the weekend of **12 and 13 March 2022**.

Sponsors of the 24-Hour Endurance Yacht Race in 2021



Battery bank wiring architecture

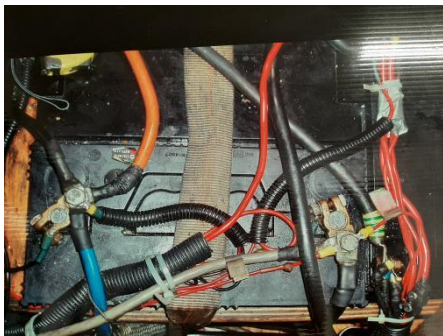


Notes from our BatLab Technician

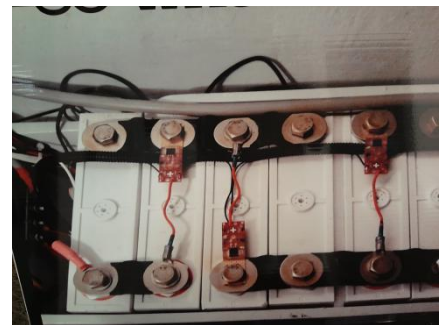
This part is one of two addressing batteries and battery banks in marine and RV applications. Part two will chat about managing and selecting start and cyclic battery options.

I think we would all agree having a healthy battery bank on-board is crucial for safe enjoyable boating.

My 40 odd years as a marine electrician has seen some terrible unsafe birds nests, not only in general boat wiring but also at the heart of it all, the battery banks.



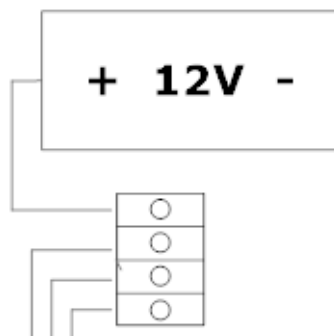
These birds nests are responsible for over-heated wiring, radio interference and low voltages at the consumer end resulting in poor appliance performance and excessive power usage



Do you recognise the picture on the left ?

When it is necessary to have multiple positive or negative battery terminations, please take one cable only from the positive and one from the negative battery terminal to organised busbars. *(not buzz bar. It is a bus as it has multiple seats)* Connect the different circuits to the busbar be it positive and/or negative..

Keep it simple - keep it clean.



A busbar should be used with positive and negative battery terminations when more than one cable is needed

Parallel and Series wiring architecture for battery banks.

Connecting batteries to increase voltage, capacity or both is generally seen in boats, motor homes and off-grid power banks. Be aware, there is a correct configuration that is not always evident.

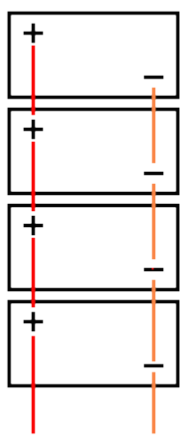
- * Firstly, all cable used when wiring the battery bank should be of the same gauge
- * Each connecting cable should be as short as possible and preferably the same length.

Cable has resistance and keeping batteries in balance will prevent early failure.

Each battery needs to supply the same amount of power. It is also important for each battery to be charged equally. Cable resistance, no matter how little, will effect the current.

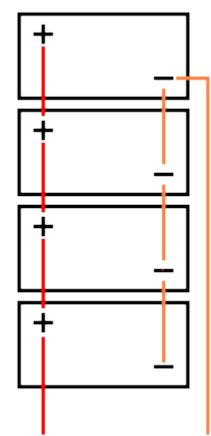
Parallel connections will add the capacity of each battery while maintaining the voltage of each individual battery. *Two 100AH 12volt batteries in parallel will result in a bank of 200AH 12volt.*

Note, contrary to the images, it is recommended parallel configurations should be limited to three batteries only so to reduce battery to battery power transfer while not on charge. It is also clear all batteries be the same model and age.



To installation

Illustrated are two common methods of parallel wiring. However there is a big difference when current draw is calculated from each contributing battery. The correct example on the right is balanced and all batteries contribute equally. Note the negative termination.



To installation

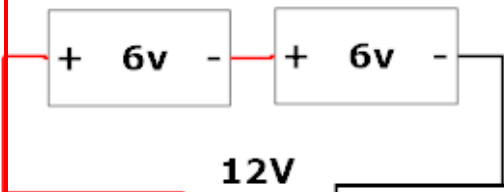
The example on the left is a '**no no**' as it is unbalanced because each battery contributes different current.

Due to the extra length of cable from the bottom to the top, the **top** battery has additional resistance resulting in voltage drop and therefore supplies less current when compared with the bottom battery. In fact, the bottom battery will contribute almost twice the current of the top battery, with the obvious variation of the centre two..

This result can be shown mathematically which I will not go into here.

Series Connection

Used when the battery voltage needs to be increased. The example below will add the voltages of the batteries (in series) but **the capacity will remain that of one of the batteries only**. If this bank has 220AH 6volt batteries, the bank will result 220AH at 12volts.



It is possible to connect as many batteries as necessary to achieve the required bank voltage. However, it is also necessary to ensure they are all the same model and age.

Since batteries in series are links in a chain, the current through the string will be restricted by the battery with the highest impedance.

Note: It is advisable to charge all batteries in parallel prior to the series link up to ensure equal state of charge.

Why in series? The maximum Amp Hour capacity of a battery is governed by the battery wattage. The largest 12v made is 270AH and if you need more capacity - the 6v battery can go to 420AH - 2v battery 3000AH.

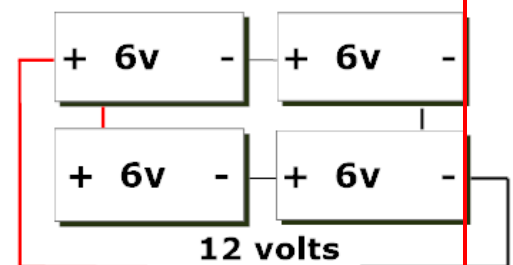
(This restriction is due to the ability the surface area of the battery has to dissipate heat.)

Series / Parallel connections will increase voltage and capacity.

If these batteries are 6v 220AH, this bank will produce 440AH at 12V.

The example is a common bank in a launch with a few home comforts.

Note the take off of the negative cable to balance the parallel connection as noted above..



** The cabling requirements for the series and series/ parallel connections remain as mentioned above.*

There may be several ways to achieve the bank you need. To consider the best option for you may be; cost, size or weight of each battery or consideration of redundancy. ie. Loose a 6 volt battery in a series configuration, you are left with an unusable 6 volt system.

Loose a 12volt battery in a parallel configuration, you still have 12v all be it at half the capacity.

Contributor- John Dale of Battery Technology NZ Ltd

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Surreal II Delivery Trip Report

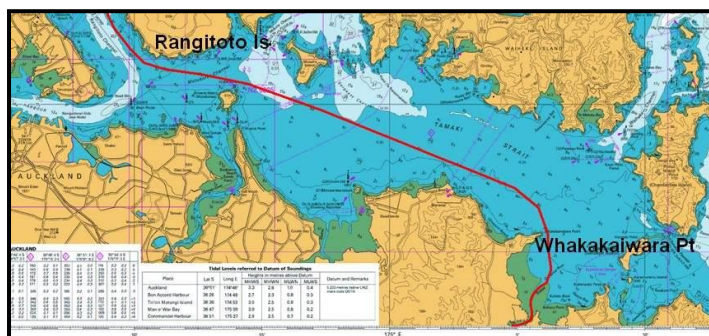
Article by Keith Murray

There are a number of Wairoa Rivers in New Zealand. Surreal II was moored in the one that is near Clevedon. It was muddy, as most rivers are, but the Brooklands Boating Club had good facilities that included a long floating pontoon with fresh water and boats out on two lines of pile moorings.

Lyn and Allan Boyce owned Surreal II and the ship had made passages to Tahiti and other Pacific Islands to the west. They wanted assistance to get the boat to Fiordland and Stewart Island in January 2021. Wayne McEwen and myself were happy to assist and drove up to Auckland on January 15th. After a night's sleep in Whitford, we were driven to the vessel Saturday morning. Surreal II was a large sailing catamaran, fifteen metres long and about seven metres wide she was big and solid. The sail plan was not overpowering for old sailors and for light conditions there were two 75hp Yanmar diesel engines. Each pontoon contained three cabins and two bathrooms(nothing so common as a head). The saloon was spacious with a large galley, dining table, two fridges and two large deep freeze chests.



We loaded and stowed a carload of stores and spent some time to understand how systems worked and by 1700 were back at Allan and Lyn's home after some additional food shopping. Tom joined us at 1000 Sunday and departure was set for high water the next day that would be around midday. Lyn and her granddaughter Amber took care of returning the cars while the men set forth.



It was of course calm getting out of the river estuary. The mainsail was hoisted as we approached Whakakaiwara Point and the engines were shut down once clear of that headland. With 16 knots of wind from the north, Surreal was soon making eight knots heading for Rangitoto Island. We wanted to see some of the Prada Cup racing that would start by the time we arrived at the racecourse. Half an hour later one of the yachts could be seen racing above the water crossing our intended path. Emirates Team New Zealand was out for a practise.



We had a grand sail up to Rangitoto Island with speeds mostly between eight and nine knots. The sky was cloud covered and there were showers of rain. To start with the yacht had been close hauled but soon was on a close reach. As the wind freshened a reef was pulled down on the mainsail. The only disturbing thing for myself was the noise as the waves thumped the underside of the hulls and bridge deck between the hulls. It was not the quiet sailing that I expect.

At the western end of Rangitoto, American Magic was sitting in the water, mainsail hoisted and chase boats in attendance. She would be sailing in the second race. Further ahead in the murk and showers of rain were Luna Rossa and Ineos. The outgoing tide was running against the wind making a messy sea. Our headsail was rolled away and with motor and reefed mainsail we idled north. The visibility was poor, and we did not see a lot of the start except from the on board television. Once the start was over, we headed north and with one person at the helm the rest of the crew watched the television coverage of the race. The first race was abandoned after two legs because of a 90-degree wind shift. It was reraced and won by Ineos. The second race between American Magic and Luna Rossa contained a lot of drama. The Italians won the start but the lead swapped for a while. American Magic did well until the wind freshened while they rounded the fifth mark and gybed. As the bow headed down the yacht struggled for stability and then the bow soared into the air and all of the boat, port foil and rudder came clear of the water. The landing looked OK but the yacht slowly heeled to port and lay on her side wounded and dead in the water. It was several hours later that the boat was recovered. In the meantime Luna Rossa managed the same gybe and powered down to the finish.

By the time the racing was over Surreal was approaching Kawau Island and we were anchored in Schoolhouse Bay in time for dinner. Bon Accord Harbour was far from busy and we had a quiet pleasant night.



I was awake by 0530 Monday. The dawn had lighted my cabin and there was an irritating beep every thirty seconds. It turned out to be a smoke alarm with a flat battery in the engine compartment below my bunk. By 0600 I was out of bed, washed and ready to make breakfast. Allan was up soon after and we were heading out of the harbour a bit after 0700. The wind was from the west so we set both sails. When we were crossing Bream Bay the wind freshened to near twenty five knots so we pulled down the second reef and wound up half of the headsail. Boat speed did not drop but the strain on the vessel did.



The conditions remained constant as we crossed the bay to Bream Head. Once passed there the height of the sea reduced but wind and boat speed remained the same – 20 to 25 and 8 to 9 respectively. It was a bit draughty on deck but warm and dry in the cockpit. We sped north and by 1400 were close to Tutukaka. The sea flattened and the fine sailing continued until we were at Whangamumu. We were anchored by 1830, had covered 80 miles and all crew were happy.

Tuesday's forecast was for northwest winds at twenty knots. It might have been a bit stronger and was directly from where we wanted to go. After bouncing over the waves around Piercy Island we plodded north for an hour with speed forever dropping. The forecast was for a westerly on Wednesday so it was an easy decision to bear away to port and come to anchor in the bay containing Marsden Cross. The sea was flat there with an offshore draught. The plan was to set off at 0600 Wednesday. The rest of the day passed with various jobs. It was warm and the cloud cleared at times so I had some small swims around the boat. It was a lot longer to do that than with Rose.



Based on the weather predictions we agreed that we should head for North Cape at 0600 in the morning. I was awake at 0545, dressed and heated some instant porridge. The boat remained silent, I made a call to the captain's cabin but that produced no action so I started both engines and left them on low revolutions to warm the turbos.

Tom appeared soon after and we lifted the anchor and headed for sea. The wind had moved to the west, which was convenient so both sails were set and provided some drive in the light morning air. It was an easy run up to the Cavallis and then the wind freshened and our course needed to have more of a westerly component. We continued close hauled making 326 degrees but wanting to make 310. The further we went the more the sea became uncomfortable with short steep waves. The wind was supposed to move to southwest but stayed stubbornly from the west. Thus the land slowly vanished from view and as the day went on the waves became closer together and steeper and the boat bounced. The mainsail was reduced to the third reef and half of the jib had been furled. The noise caused by waves crashing against the bridge deck between the hulls continued and at times shook the joinery. Around 1800 while dinner was being prepared there was a bang. Allan reported a gust of wind and the bang was the starboard jib sheet breaking at the knot at the clew. Tom and myself quickly furled the sail. We then thought about repair and decided it could wait until we were in calmer waters. Surreal II was 20 miles west of North Cape so the motors were used to get into the lee of the cape. Three miles from the cape the wind eased and the sea was flat so repair was started. The jib was unrolled and I was able to thread a new sheet onto the sail and sheet that properly. We could then see that both the cleats for the leach and foot cords had been ripped from the sail. We changed tack without releasing the sheet and with the clew by the mast tried to tighten the cords.

With the jib under control we then set about to secure the storm jib and trysail that had come adrift as the bow of the boat had pushed into the waves and sea water had poured over the deck. As we were doing that I looked at the mainsail. A third in from the leach there was a vertical rip of a metre from the third reef points up to the next full

length batten. The sail was setting properly and there was no horizontal stress at that point. The reefing line was only just tight enough and was not the cause. The sail material had delaminated.

We turned the boat to the south and headed back to the Bay of Islands where there were sail makers. It was shame to waste the day's hard earned progress but repair or replacement was essential and the predicted wind not convenient.

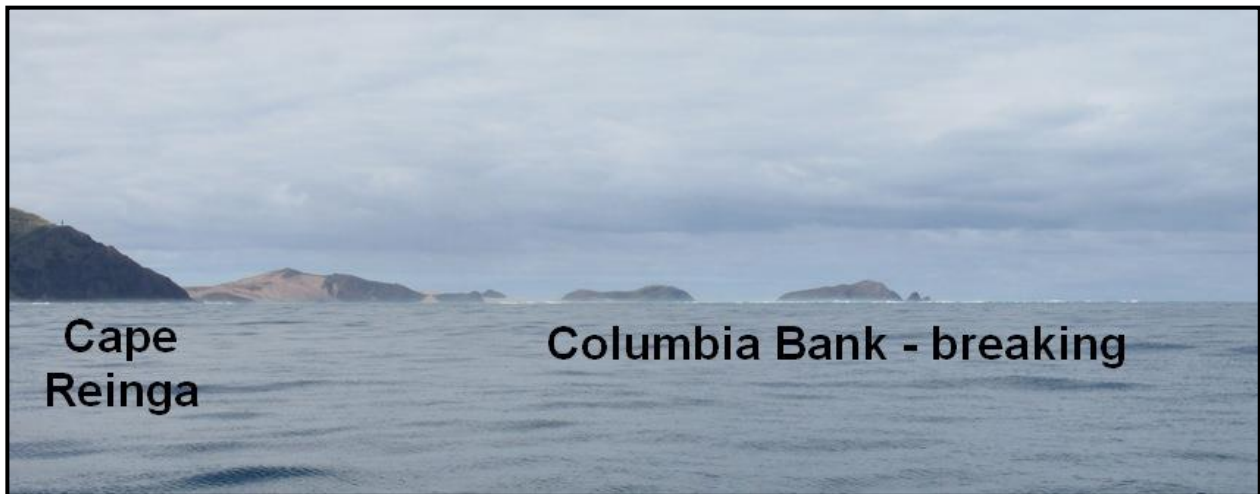


The sail back down the coast during the night was very pleasant. With the wind on or just aft of the beam the boat was sailing easily and the motors were soon silent. I had taken the watch at 1800 and at 2100 handed over to Wayne. The headsail had been unrolled and the motors had been required for about 15 minutes a little after 2030.

The sky had cleared, a quarter moon was lighting the sky and it was a lovely sail. During Wayne's watch through to midnight the wind varied in strength and for a time around 2230 Surreal was making a steady nine knots from three reefs in the mainsail and half of the jib. The wind lasted 15 minutes before it eased and after midnight during Allan's watch the motors were making a slow rumble to gives us an easy six knot ride.

I took over at 0600 and by then we were approaching Cape Wikiwiki. The sun rose behind Cape Brett and the Bay of Islands looked a nice retreat. I set the course to take us directly to the Opuia marina and we were there a little after 0900. A berth would be available for us after midday so in the meantime we retired to anchor and lowered the jib ready for it to be repaired. At 1130 the anchor came aboard, the yacht was steered into the marina and we backed into a berth on the catamaran pier H. When the sailmaker arrived he inspected the damage and said he could do a repair so the end of the afternoon was spent with a struggle to disconnect the mainsail from the slides and then to move the large heavy sail onto the dock and two trolleys. It needed the four of us to control and wheel the sail to the loft. That took two hours out of the afternoon.

Friday morning was waiting time that was used to do laundry, buy stores, buy equipment, wash the deck and windows and make repairs. Mostly everything was completed and the sails were delivered after midday. The jib went up the luff spar with no drama but it took another two hours to get the mainsail back in place. That done Tom fare welled us and his fellow boat owner Steven Bartlesworth took his place. Surreal was then motored down to the fuel wharf and after a short wait for a launch we came alongside and took 150 litres of diesel. The water tanks had already been filled so a bit after 1800 we set off again for North Cape.



It was a pleasant overnight voyage to North Cape and in the early morning along to Cape Reinga. There was no other water traffic, the sea was flat, there was enough wind to enable us to sail and at times the motors were running to top up the speed. By 1000 we were due north of Cape Reinga. The sky had been clear until then but gradually as the day advanced, cloud covered the sky. The sea had a small chop as we turned south and for most of the daylight hours there was a knot of contrary current reducing our speed over the ground. The wind remained light but kept us close hauled on the starboard tack. There was a considerable banging under the bridge deck both from our wash and from the waves. At 0600 Sunday we had the second reef in the mainsail and two turns on the headsail. The conditions did not change much during Sunday night but the current did vanish and the sea eased as we got further from the shore steering 200 degrees true at speeds that at times got to nine knots. As the wind eased one of the motors was used to assist the sails and in the lull we attended to the jib leach cord. It took both Steven and myself to tighten and tie the cord just after 2000 hours. By 2130 both motors were quiet. A pod of small dolphins came and visited but did not stay long.

The wind reports were for 30 knots closer to shore but 150 nautical miles west of Manukau Heads we were delighted to have no more than 8 knots that slowly increased to 15 knots by 1030 Monday and remained steady. We had full sail set and we scorched off steering 200 true at nine knots over a flat sea. That went on for six hours until around 1600. Then the wind increased to 20 knots so the mainsail was reefed and we reverted to steady plodding at six knots. The wind direction had changed from 300 true to 280 so the sea was again banging under the bridge deck.

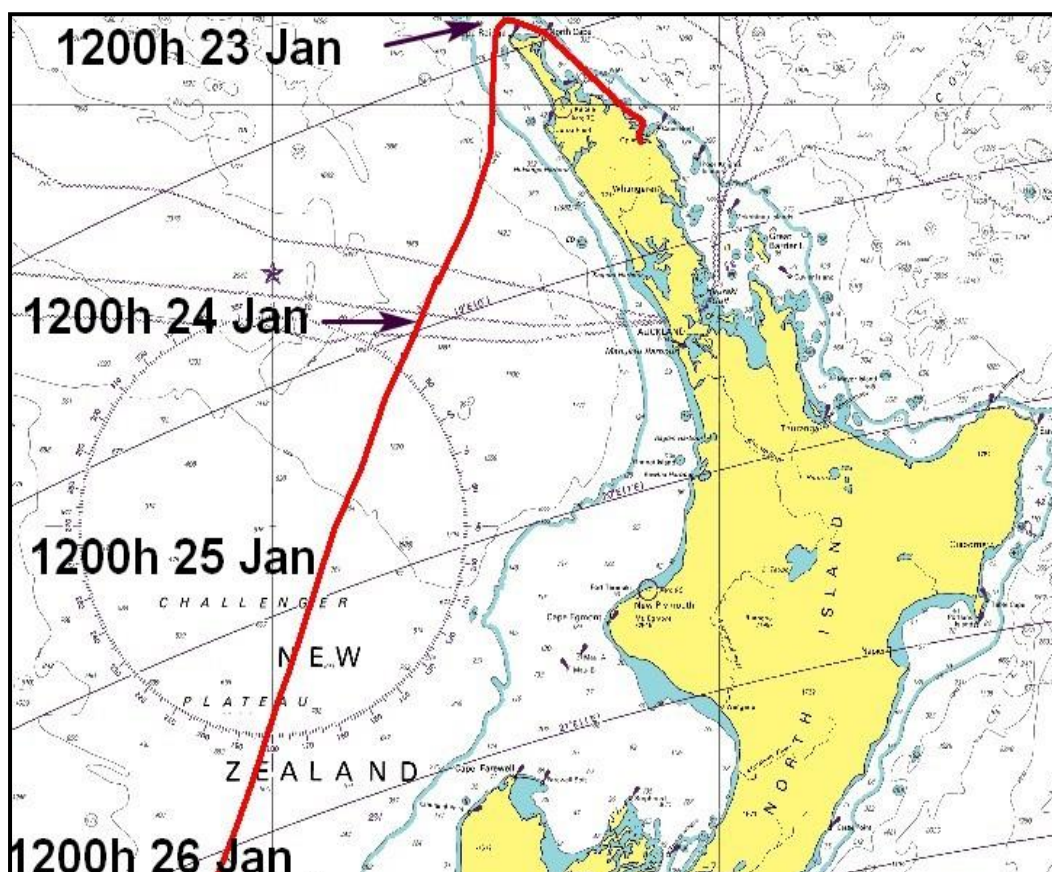
There had been jobs to complete during the day. The Irridium Go manual had been read from cover to cover and we then had phone and text message communication. We were out of range of VHF stations so the phone provided weather information along with faxes from the SSB radio. At lunch time the water pump declared the tank was empty. The water maker was put into action and we then searched for the reason why the starboard tank was full and its pump not working. The starboard pump was found to have a stuck pressure switch. Once that was cleaned it worked just fine and attention was directed to the aft starboard shower drain pump. It had rusted bearings and was thus not turning. Oil was fed to them and the pump was again working.

During the dinner hour the wind remained at 14 knots and our speed slowed. Eventually we let out the reef and the speed climbed for a while but then eased as the wind direction became tighter. By 2000 the choppy sea was again banging under the bridge deck but the wind was easing. At 2400 after I handed over to Steven, the wind returned and without the engines Steve had the yacht at eight knots for a couple of hours. I missed that having immediately dropped off to sleep when I got onto the port aft bed.

Tuesday was again grey. For most of the morning the cloud hovered no more than 20 metres above sea level. An albatross joined us endlessly circling and never once did I see it pause to catch food. A tanker passed ten miles astern heading for Australia. It was impossible to see the boat in the thick murk and it was only the radar and AIS that disclosed her position. The engines worked producing 6.5 knots through the water while a current heading



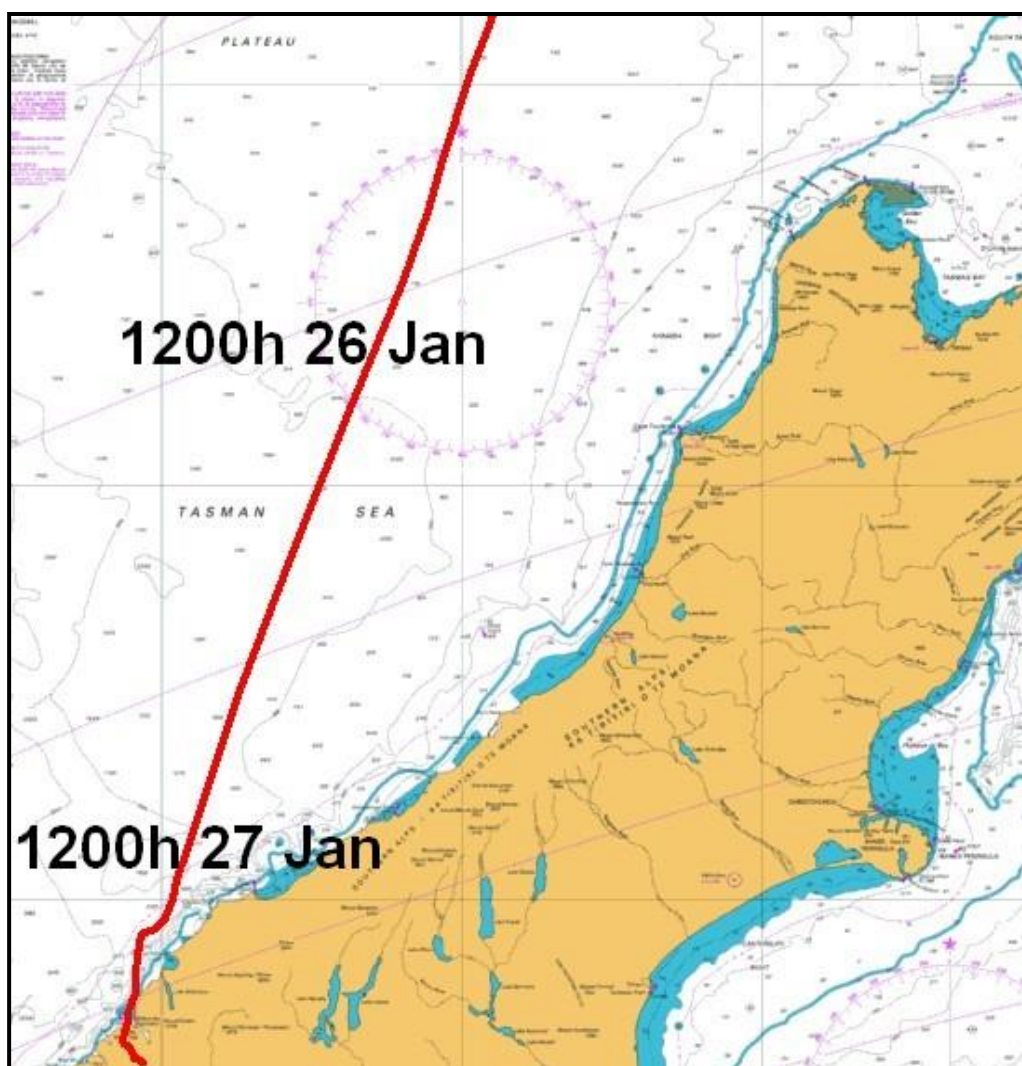
north robbed us of up to one knot. By midday the five knot wind from the starboard quarter needed the sails trimmed for close hauled so we pretended we were racing for the Prada Cup. The wind remained in that direction and speed through the night so for most of the time the engines helped. When the wind freshened only one engine



was required. At 0420 Wednesday morning Steven was on watch and gybed the mainsail as by then the shore was getting relatively closer and the wind was moving to the northeast but still light.

Wednesday had the same murky weather and rain set in after lunch. The cover over the cockpit meant that being on watch was not unpleasant but visibility through the windscreen was limited. The sea was calm with some westerly swell but the wind slowly freshened. Being on the port quarter the wind speed over the deck meant that

we could carry full sail. There was a problem with our speed as it was clear that at six knots we would not make Milford Sound before dark. Both motors were started and set at 1800 revolutions. With the sails that gave us between eight and nine knots and the plotter indicated arrival around 1900 hours.



The conditions lasted until 1500 by which time the true wind speed was 24 knots and the jib had been rolled to half size. Although the yacht seemed to be sailing easily the sea was increasing and our speed was over eleven knots. I called for the mainsail to be reefed. It took three of us and fortunately could be done from the cockpit. At the helm seat I could release the mainsheet, tighten the topping lift, release the main halyard and told the autohelm to bring the yacht 90 degrees to port. On the port side of the cockpit Steven first pulled the luff down and then the leach reefing rope with Wayne assisting. Meanwhile I had tightened the halyard and when the leach was secured, eased the topping lift and tightened the mainsheet. Most of the work was done by the electric winches.

While that was happening the sea was quickly building and I was glad for the reduced sail area. Visibility ahead was at times reduced to 50 metres by rain but there was a clearing at 1550 that enabled us to see land. It was the headlands near Martins Bay little more than five miles away. By then we had put the third reef into the mainsail and the sea was what many would call interesting. The basic westerly swell was present along with the waves generated by two days of 30 knot northeast wind that had been blowing along the coast.

Soon after 1600 the wind was hovering in the mid thirty knot range so the mainsail was pulled down completely as there was a danger of an accidental gybe. Getting the mainsail down required Steven in full wet weather gear to be at the mast and haul on the luff of the sail. The sail tamer and lazy jacks caught the bulk of the sail and that was adequate stowage given the sea conditions. Half the headsail and 1500 revolutions on the motors gave more than enough speed. The sea was a little wild (others might regard it as very wild) but Wayne still prepared and later dished up dinner.



There are dangers on the northern side of the entrance to Milford Sound but fortunately they have an AIS marker. I had been warned that the charts for plotters were not in the past accurate. Thus I checked ours against soundings particularly when we crossed underwater canyons. The depth sounder agreed with the position showed by our plotter and our computers that had the latest LINZ charts so that gave confidence.

At 1800 we were two miles northwest of Brig Rock with little visibility. The wind had eased, switched to the southwest at fifteen knots and the rain became heavier. Yates Point was three miles off the port beam and St Annes Point four miles ahead. None of that was visible but at least the sea flattened making it easier.

At 1930 we had reached the entrance and our end waypoint. We were near Anita Bay but had no intention to stop there, as it was open to the left over northeast sea. We had the length of Milford sound to travel and through the cloud and rain all that was visible were waterfalls. Going only by the plotter we steered for the narrow entrance by Dales Point. The chart says it is 800 metres wide but the steep 1680 metre side of Mitre Peak made it look too small for our 15 metre yacht let alone a cruise ship. The rain eased once passed Dales Point so that meant some damp videos and photos could be attained.

We furled the sails and tidied the ship as we headed up the sound and twisted along the narrow river to the fishermen's wharf in Deep Water Basin. By 2100 the yacht was secured and engines shut down. It had been a successful voyage without major drama and a convenient wind. There had been a knot of current against us for half of the time from Cape Reinga and that had reduced our average speed to 6.4 nmph. It had taken five days and three hours to travel 785 nautical miles from Opuia to Milford. 440 litres of diesel had been used for 176 engine hours. Some of the time only one engine had been used.

