Bilgewater

December 2020



At anchor during the Great Barrier Island cruise









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Bilgewater December 2020 Commodore's Report

It has been an extremely busy month of sailing.

For me it started with the Rotoiti Classic at Lake Rotoiti. Once again this was an excellent event. There was plenty of wind and a massive fleet of trailer yachts ranging from a Farr 6000 to a Farr 940 (aka Noelex 30). There was even an appearance from a folding trailerable trimaran. It was impressive watching the lightning fast sport boats screaming down the lake with Gennakers up and everyone on the rail. I was sailing with my usual crew of my boys Nick and Sam and had some extra help from my brother Ben. We had a reasonable race and were able to keep pace with a few of the Noelex 25s. Downwind, under spinnaker, was especially fun. But as the day wore on, the wind started to build. One particular gust lay us on our side, and there was a general consensus among the crew that it might be time to put the spinnaker away. End of the day we finished mid pack.

Next up was the round Ponui race. After an exhausting weekend at Rotoiti and with a questionable looking forecast, none of my crew were particularly enthused about another weekend sailing, so we had to miss this event. From all accounts it was a challenging event. You can read the race reports in this edition of the Bilgewater.

Then on Monday the 30th and Tuesday the 1st of December I took a group of boys from Hamilton Boys High School to Hamilton lake to have a go at sailing. Kirsten from Waikato Thames Yachting Association was there to coach and as always she did a great job. I had a go at sailing one of the Open Bics and had a great time, I didnt even capsize (despite the best efforts of some of the boys). On the second day I brought my usual crew mates, Nick and Sam, down to the lake for them to have a go at dinghy sailing. They had a great time and it was a huge relief to see them capsize their boats, and get the boat back up again and carry on with smiles on their faces.



And it just keeps coming. Next up was the seamanship training day. A small group of members were on hand to brush up on their techniques. It was great to see new members Chris and Ness Martin bring Suzie along. See below for their report on the day.

AND on the weekend just gone we had the Hooks bay race. Unfortunately, Spring did its thing, and with high winds predicted (the forecast was spot on), only a small fleet were brave enough. We'll have a race report in the next edition.

With Christmas and New Years now upon us, we take a break from competitive sailing. But it is not a complete competitive sailing drought. With the America's cup in full swing I'm sure many of us will be headed down that end to watch some of the action. We will also be having our usual New Years beach gathering, details will be posted closer to the date.

Stay safe on the water and have an enjoyable Christmas and New Years.

James





Bilgewater December 2020 **Upcoming Events**

Sailing Events

New Years eve gathering - Thursday 31st December

Motuihe race - Saturday 30th January

39th Gulf Classic - 26-28th February

Nog n Nater

Christmas party - Tuesday 15th December 6:30pm - Hamilton Yacht Club Nog-n-natter - Tuesday 23rd February 7:30pm







The Waikato Yacht Squadron Presents

The 39th Gulf Classic

February 26-27-28th 2021









Entry Fee: \$60

Maraetai Beach Boating Club

80 mile Keeler Division 40/60/80 mile Trailer Yacht Divisions



Briefing/Registration 8pm Friday 26th Racing from 10am Saturday 27th Prize giving Sunday 28th

Facebook: @Gulfclassicregatta Website: www.waikatoyachtsquadron.org.nz Email: gulfclassic100@gmail.com





















Bilgewater December 2020 Seamanship training day

Saturday the 5th of December

Run by Dean Herrman (Jury's Rig)

This was our first official event as new Members for the WYS and we were excited to practice with some experienced oversight. Launching Suzie for the first time from the Kawakawa Bay Ramp impressed! It really affirmed our decision to store the boat in the compound and, after a previous tricky launch from Pine Harbour - it really was a breeze.

As instructed, at 0930 hours, we registered for the day by using our radio for the first time and, after a wave goodbye and thumbs up from the ramp staff, Ness and I motored out to face the unknown. We were met with 10-15 knots of wind and High Time (Nigel and Linda) and Falkor (Wayne and Russell) were already out, patiently waiting for us.

Everyone was anchored and having a cup of tea so we decided to anchor near them, we wanted to get as close as we could to avoid Dean, who was busy zipping between boats in a dinghy, having to go too far. Confident in our skills, we completely misjudged how light our boat is, and we narrowly missed being blown straight into High Time. After about 5 minutes, we finally achieved our goal of anchoring securely and Dean climbed aboard (after politely seeking approval to do so). Although our anchoring was a little embarrassing, it was great to get a clear understanding of what not to do!

Once settled we had a good chat about what we wanted to get out the day. There were some fantastic drills planned and we were chomping at the bit to get going. However, as this was only our second time out on the boat it was decided that we needed to go over the basics first, particularly for Ness as she is a little anxious about sailing. We worked our way through our engine, VHF radio, and safety gear and then, decided it was time to go for it!

Before we set off, a new challenge loomed, Reefing! Dean was clear and precise about how to put in a reef and his mantra was, "put one in early". Considering there were no reefing lines on our boat, we successfully managed to put one in (which ended up a little makeshift and is a work-on for next time). Although it was suggested that we would hardly need to reef, it was a good exercise. Interestingly, both Suzie and High Time (both N25s) found reefing made almost no difference to our speed and allowed us to gain considerably more control and confidence (even with our stubby N25 masts).

Ness took to the tiller first with only the Main Sail. Although nervous at the start, she quickly progressed in confidence and was fast to learn several points of sail. It was great to see her do so well and, before long, she completed her first fly by between Falkor and High Time.

Not to be outdone, I decided it was my turn, and after a fourth successful tack by Ness, we hoisted the headsail. It was amazing how fast the speed increased in these conditions and I had an excellent time, practicing at several points of sail and tacking several times. We also learnt some old seaman terminology such as "heave ho"!

During our more basic exercises High Time was busy mastering sailing off their anchor and practicing a man overboard drill with great confidence and precision (at least from our perspective). We will look to build up to some of these skills the next time we are out, most of which are outlined in the club handbook and in the and directions emailed out by Dean.

To round things off, we all sailed to McCallum Bay (Shipwreck Bay) on Pakihi island. What a great little anchorage so close to the launch spot! We all ended up on Falkor and had a great debrief with quite a few laughs and stories of miracle escapes after engine failures, de-masted boats and broken rudders. The mast eating tree was discussed and given how many times this tree has been mentioned, we made a mental note to never forget about it. The





conclusion of the debriefing was that our boats are very sea-worthy if they are well maintained and the crew is prepared. As accidents can happen and perhaps a PLB is a

good idea to keep on hand.

Debriefing over Wayne, Russell and Dean on Falkor popped back to the ramp to do a drop-off with Wayne planning on returning to the Bay for the night. Whilst sitting with our wine, cheese and binoculars in the small amount of sun we had that day, we wondered why Wayne was heading in circles near the rocks - eventually heading into the Breakwater. It wasn't until later that evening that we heard about Falkor's engine problems and we are pleased to see that Wayne made it back home safe and sound and that Falkor is fine too. Practicing for engine failures was impressed on us at that very moment!

This highlights our conclusion, that these training days are very important not only to remind oneself of the skills needed in an emergency and in some cases, like ours, practicing sailing, but also to get to know your boat, yourself and your limits and to bond with the others in the club who have a wealth of knowledge and are only too happy to impart it. Through this we have learnt that anything can happen and being prepared is so important and that a big part of this is maintaining your boat and safety gear on a regular basis. You need to know that the items you have on board will work when you need them to.



We were all very grateful of the time volunteered by Dean and the knowledge passed on. It was a stepping-stone for us beginners, but it was a huge help. For myself, soaking in this knowledge and gaining more skills was incredible but best of all, watching my anxious Ness grow in confidence was a real delight. We would highly recommend attending these training days but if you are unable to attend, just practicing some of these drills at the start of each season yourself is a great idea.

It is great to be a part of a Club such as WYS who promotes safety at sea!

Written by Chris and Ness Martin - Suzie







Bilgewater December 2020 CoastGuard and their "App"

We are regularly at sea on our yacht and when we are I would regularly submit a Trip Report (TR) on our VHF radio, either chl 60 or 64 but I also use the App on my phone & tablet regularly, particularly to get wind speed and wind direction updates. By all accounts Coastguard radio doesn't do live weather updates as we are all supposed to be savvy enough to get the data via a weather app. So the coastguard "App" is also a very good way to submit a TR. Its probably just a tad longer in setting up your database and doing the on screen work but I thought I would give an update here on the various screens involved.

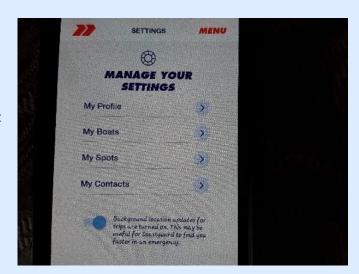
You will need to submit some data which is stored on line and on the App for you to use later.

Profile: Name and contact details, Phone & email

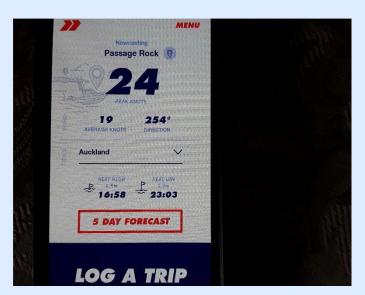
My Boats, you may just have more than one, anyway boat name and VHF call sign

My Spots: This may be your favorite fishing spot, I simply have a list of destinations I use regularly and I can select from that list on the TR.

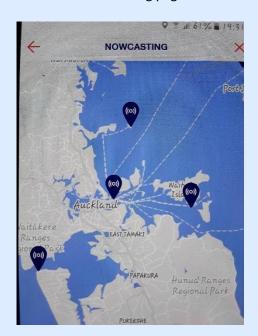
Contacts: Shore contacts that coastguard will ring when they have to advise someone that you have not responded to any contact.



This is the regular home page.



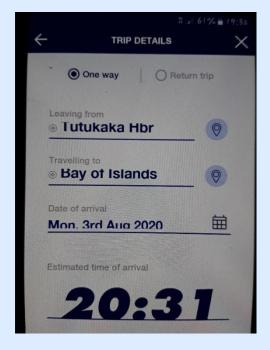
This is the nowcasting page.

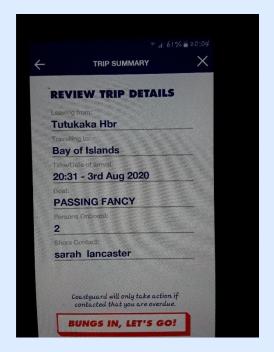






From the nowcasting site one can set the site to default to the home page as shown above left. So every time I open the app it will show the Passage Rock site.





On the left screen the data regarding leaving from and arriving at locations is added either from your spots or the map and let the map decide the name of the location by using the location icon on the right. So in the end, one has all required info entered and its all go, no need to talk to anyone.

There are a couple of things that I would add that I do. I will give a TR (either process,) if we are having a week at Gt Barrier Is. My instructions when closing off on arrival is that we will be in and around Port Fitzroy for a week and will keep them posted as to overnight locations as required.

A final word as noted at the bottom of the last screen above the note "Bungs in, lets go"

""Coastguard will only take action if contacted that you are overdue>"" so not quite sure what the shore contact is about, but good for them to have that detail.

Nigel Lancaster

"Passing Fancy"





Bilgewater December 2020 Testing times for Solar

For most of us, the days when trailer sailers set out with nowt but a chilli bin of cold beer, lockers filled with canned food, paper charts and a sighting compass are gone. Now we have colour displays, auto helms, GPS, VHF radios, fish finders, and fridges that require a zippy supply of sub-atomic electrons to keep the gizmos functioning and the crew happy.

Most of us use a combination of motor with an alternator and/or a solar panel to keep batteries charged and the energy flowing. But what happens when the energy fails? How do you find the fault and fix the problem?

Our systems failed during the last Great Barrier Cruise. The lights flickered, the plotter wouldn't plot and mercy me, the beer warmed.

First we tested the battery with Hugh's wonderful multimeter. Oh dear, down to 11.1 Volts. That's not good. A 12 volt battery is misleadingly named; batteries in good health should hold over 13 volts when fully charged, 12.4 V is partially discharged, $11.1 \, \text{V}$ is discharged ... so either the battery was stuffed (unlikely since it is less than a year old), or the charging system on the boat was not functioning.

We tested the motor charging system. That was delivering 6 amps, but who wants to run the motor to cool a fridge. But we were not able to test the solar panel out on the water.

So, back on shore, I took out the panel, battery and controller, put the battery on charge, bought a new multimeter, and began testing. Voltage is easy, set the dial to V DC, put the probes on the appropriate leads, and take the reading. That was interesting; the panel was connected to the controller via waterproof plugs. At the panel, the V was about 20V, but on the other side of the plugs, the Voltage dropped to 17.5 V. When I looked closely, I found that the contacts in the plugs were corroded, hence the voltage drop. So much for marine grade connecting plugs. I've removed the plugs and soldered the wires in place to ensure the voltage does not drop between the panel and the controller.

However, voltage is just the potential to deliver electrons, like a water tank on the roof has potential to give you a shower. What is important is the current, that is the rate at which electrons move through the system. No movement, no power. Too much movement, blown fuses and other equipment.

Rated Max Power(Pmax)	(W)	55
Power Tolerance Range	(%)	0/+5
Voltage at Pmax(Vmp)	(V)	17.0
Current at Pmax(Imp)	(A)	2.94
Open-circuit Voltage(Voc)	(V)	20.5
Short-circuit Current(Isc)	(A)	3.55
Normal Operating Cell Temp(NOCT)	(°C)	50
Maximum System Voltage(VDC)	(V)	600
Dimension	(mm)	520×690×2.5
Cell quantity and array		32(4×8)

Many years ago, I learnt to measure current between the supply (battery) and a load (light or fridge). But that is not feasible on a solar panel system charging a battery, since the controller (between the panel and the battery) is designed to cut the flow if the battery is fully charged. Hence if the battery is full and you connect a meter between the panel and the controller, the meter will read 0 amps even if the controller reports the battery is charging, and the panel is fully functional. Damn.

On the back of all solar panels, you will find the technical data for power, voltage and current; conveniently, you can

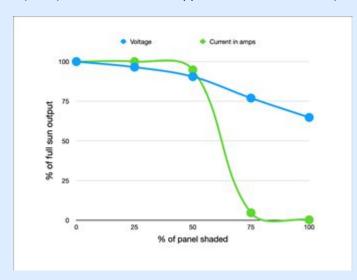
measure what is called the short-circuit current (Isc) simply by selecting the appropriate setting on the multimeter (10 Amp), and connecting the positive and negative wires through the meter. On my panel (55 watts) the lsc is 3.55 amps.





After several false starts and blown fuses (from plugging the leads in to the wrong socket or turning the dial to mA instead of A), I obtained readings between 1.5 and 2.8 amps (late afternoon and full sun). So it looks like panel is delivering current.

Out of interest I took further measurements of voltage and current, first turning the panel from perpendicular to the sun to horizontal. (I mount my panel on the cabin roof). Changing the angle dropped the voltage from 19.4 V to 19.1 V (3.2%), but the current dropped from 2.5 A to 1.5 A (40%). That's interesting.



Second I covered the cells to mimic the effect of shading from the sail and boom. As you can see from the graph, voltage falls fairly steadily with increasing shade, but the current output drops precipitously after about 50% cover.

Last, all panels have diodes (one-way valves) to stop current flowing from the battery into the panel when the panel isn't producing electricity, otherwise your panel would drain your battery at night. The simple test to set the multimeter to resistance, connect the probes first one way, then the other. Resistance will be low in one direction, and out of range in the other.

So now I know the panel is ok; I've recharged the battery; it holds 13.0 V, which is ok, but not pristine; which leaves

the controller.

Alas, there is no simple test to find if the controller is working as specified., Given that new controllers are more than \$100, I will assume it is working at least for now.

Nigel McCarter

"High Time"







Bilgewater December 2020 **Race Report**

Trailer Sailer, Round Ponui Island Regatta - 28th November 2020 - Hugh, E Type 2

A small (6) fleet of trailer yachts formed up at the start line at the Sandspit beacon and, to show how competitive they were, cleared the start line within 15 seconds of the gun (horn) (call). As the fleet disappeared around the corner the start boat(E Type 2) weighed anchor and hoisted sails.

The two leading yachts. Charley and Signs of Life opened up an ever-widening gap as E Type 2 closed up. At Ruthe Passage the two leaders managed to squeeze through with one or two tacks but with the tide coursing out made it more difficult for the others. E Type 2 managed to ease through after 4 tacks, but Charis, Aperitif and Joker had a real bash to get through. From there it was a tacking competition down Waiheke Passage with Charley slowly opening the gap and the other two closing together.

Around Kauri Point and eased sheets to the bottom of Ponui but because it was lunchtime the wind gods downed tools and headed off to the smoko shed. That left the whole fleet wallowing for 40 minutes or eternity (as it seems). After a while Signs of life's crew decided that it would be fun to go paddle boarding which was the cue for the wind to slowly come back in. While the skipper was picking him up E Type 2 slipped past and went on the hunt for Charley. However, Charley had built up a good lead and crossed the finish line by several minutes.

In the meantime, Joker had a problem with their gooseneck and abandoned racing which was a pity as they would have had both line and handicap wins in division 2. The Keeler fleet was on the opposite rotation of the island, so we all passed around Ruthe Passage and Sandspit to Kauri Point. Apart from the period of no wind there was a 10-15 knot SW which produced great sailing conditions. While the keelers headed up to North Harbour for the night most of the TY fleet came off the water after the race as the weather was predicted to deteriorate during the night.

A great time was had by all.

Hugh B.

Division						Boat Handicap		Personal Handicap		
	Boat Name	Design	Owner	Elapsed	Handicap	Corrected	Place	Handicap	Corrected	Place
1	E Type 2	Elliot 7.4 (WK)	Beecroft	3:16:40	0.885	2:54:03	2	1.02	2:57:32	2
	Charley	Noelex 25	Hayward	3:19:33	0.845	2:48:37	1	1.03	2:53:41	1
	Aperitif	Joker 820	Reeve	4:37:21	0.821	3:47:39	5	1	3:47:39	5
	Signs Of Life	Young 77	MacDonald	3:34:06	0.885	3:09:29	3	1	3:09:29	3
	Charis	Noelex 25	Arbuckle	4:39:00	0.811	3:46:19	4	0.97	3:39:32	4
2	Joker	Joker 6.7	Guest	DNF	0.780			0.95		
Keeler	Acushla	Farr 1020	Pasco	4:31:07	0.742	3:21:10	3	1.02	3:25:12	3
	Passing Fancy	Davidson 35	Lancaster	4:13:00	0.736	3:06:12	2	1.04	3:13:39	2
	Audrey	Hanse 38	O'Brien	3:48:02	0.79	3:00:09	1	1.02	3:03:45	1





Bilgewater December 2020 **Race Report**

Keeler, Round Ponui Island Regatta - 28th November 2020 - Jim, Acushla

The weather forecast was for fresh south west wind which would make for a down wind reach. Coming out of the Pine harbour channel to lay the start line I was seeing wind of 22 knots average and gusts to 27 knots. This is the upper limit to which we would normally sail.

For this race there was a very small turnout with only three boats showing up for the start which included me in the start boat. With so few boats calling in we were able to start early at 09:45 hrs for Passing Fancy and Audrey. Following a good start by these two I was able to get underway by 09:51 hrs to follow the so called fleet. However, in this wind strength a six minute lead time start approximates to nearly one nautical mile in distance and as a result I could barely see my opposition at this point or any point during the course of the race.

Down wind races where you cannot see any of the opposition does not leave you with a lot to write about when it amounts to a procession. This may have been OK had the wind stayed at this strength and direction but the wind gods directed otherwise.

Having a broad reach to the Waiheke Channel with boat speeds up to eight knots it was easy sailing. However, entering Ruthe Passage the wind dropped and moved from SW fresh to SE and iffy. This meant having to tack through the passage and maneuver through the fishing fleet and meeting the the Trailer Yacht fleet sailing in the opposite direction. After this slow passage through Ruthe and still in no sight of the other keelers we were eventually able to tack onto port to sail down the outside of Ponui at a rather gentle pace.

Having sailed down to the bottom end and expecting the SE wind to push me round onto a broad reach again I was dismayed to find a flat calm glassy sea round Sand Spit and towards Green Bay with no wind. Fortunately the tide had now changed so at least the current flow kept me moving past Sand Spit until we eventually picked up the new SW wind that allowed us to sail to the finish line off Kauri Point. While we were sitting in a windless hole at Sand Spit and taking the opportunity for a cold one, the trailer yacht fleet that we passed at Ruthes Passage were having the same problem trying to sail to their finish line at Sand Spit with no wind and the adverse tide for them.

The end result was that I didn't see any of the keelers throughout the race, so not much of a race for me, and due to the funny weather no body pitched up for the BBQ at North Harbour. The prizes for corrected time and Handicap are still in the car and will be handed out at the December Nog & Natter.

Well sailed to Audrey who took the Corrected Time and the Handicap prize by a country mile. I guess he got through the flat spots before they were flat.

In hindsight I think that a change in the start procedures would better serve us such that we lay a start buoy at the start line and all of the participating boats including the OOD can start on a time signal together, at least I might be able to see my opposition for some of the race.