

Full moon over Ladysmith marina at Easter.

Sailpast on Saturday and Pub Night in May

This is an interim newsletter to remind you about the upcoming Pub Night in May. The lovely weather we're enjoying as I write today, is not going to last I'm afraid, but it has served to remind us how gorgeous it can be when the sun finally shines on us. Let's hope it comes back to stay in the month of May for Victoria Day is just around the corner.

Those of us at the last meeting who enjoyed **Staff Captain George's** presentation about anchors will be interested (but maybe depressed) to read the revelations **Martin Pengelly** unearthed arising from anchor testing done in the past several years. Read it and weep (if you're a Bruce owner in particular).

Commodore John sent along a fascinating article he came across in *Hakai Magazine*, a fascinating on-line resource that "explores science, society, and the environment from a coastal perspective. The magazine is funded by the Tula Foundation, which also funds the Hakai Institute, but remains editorially independent."

Take note: If your flares have a manufacture date of 2014 or earlier they may have already expired, or they will expire this year. **It is not legal to light them, throw them in the water or in your household garbage to dispose of them.**

Take them to Steveston Marine and Hardware, 1667 W 5th Ave, Vancouver, on April 28th for proper disposal, **free of charge**. CPS-ECP and selected CIL Dealers are hosting a *Safety Equipment Education and Flare Disposal Day*.

We also introduce another of our members, **Liz Reiniger**, who reveals what she gets up to when she's not sailing or helping out the GYC (although it's hard to understand how she has time for it all).

See you all soon,

Suzanne Walker, Editor S/V White Wolf



MAY 14

PUB
Night



The May meeting is a Pub Night at the **Pemberton Station Pub** in North Vancouver. The enclosed, heated patio deck at the back is where we'll all be as in previous years. Plan to get there around 6:00 so you can get your order in early.

Continued p.2 Staff Captain's Report

GULF SAILOR

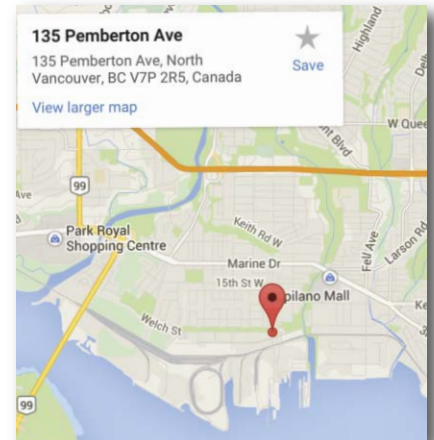
Staff Captain's Report

Monday, May 14th is Pub Night and it will be held at **Pemberton Station Pub** in North Vancouver, 135 Pemberton Ave.



Get there by 6:00 to get your order in before the rush. We will be sitting at the outdoor patio at the back that is covered and heated. Hope to see you there!

Left: Pub Night a couple of years ago saw a big group talking, eating, drinking and enjoying themselves.



Sell the Bruce!

Staff Captain George inspired Martin to investigate the up- and down-sides of his previously trustworthy anchor. The news was not what he (or we) had hoped.

After watching George Bamford's very good presentation at a recent meeting where he discussed the history of anchor development and the merits of different anchors, and showed a brief comparison of the holding power of the various anchors, I was curious to see which anchor was considered the best and why.

Trolling the internet I came upon two different sets of test data from impartial sources that compare the merits of different anchors. I believe that the tests I found are quite accurate as the results are similar even though they were conducted in two different countries.

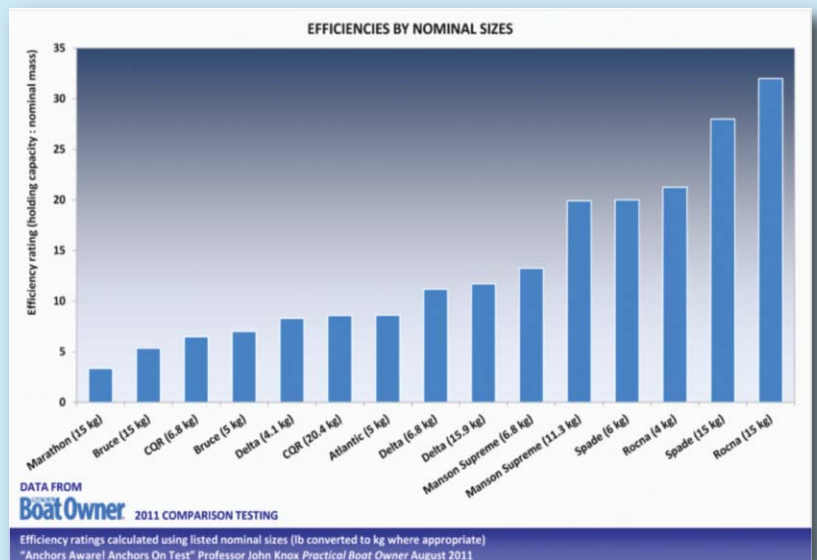
Test design

In the first example the tests were done using a winch and purchase system with a slightly elastic line. The anchors were pulled with intermittent pauses to simulate the real world. The sea bottom in the tests was primarily mud.

This chart shows three different results for each anchor. "Max before releasing" is the only figure presented for all (except two anchors which failed to set): this is the most important, averaged "holding power" or static resistance. "Max pull" is the peak resistance measured by the testers, either static (holding) or dynamic (dragging) – this figure should be higher than "Max before releasing", as a good anchor will give increasing resistance as it is dragged beyond yield. The absence of this figure, where it was lower than the static holding power, does not tell a pleasant tale for that type. It is not known what the sea bottom was.



Martin Pengelly
S/V Kailani

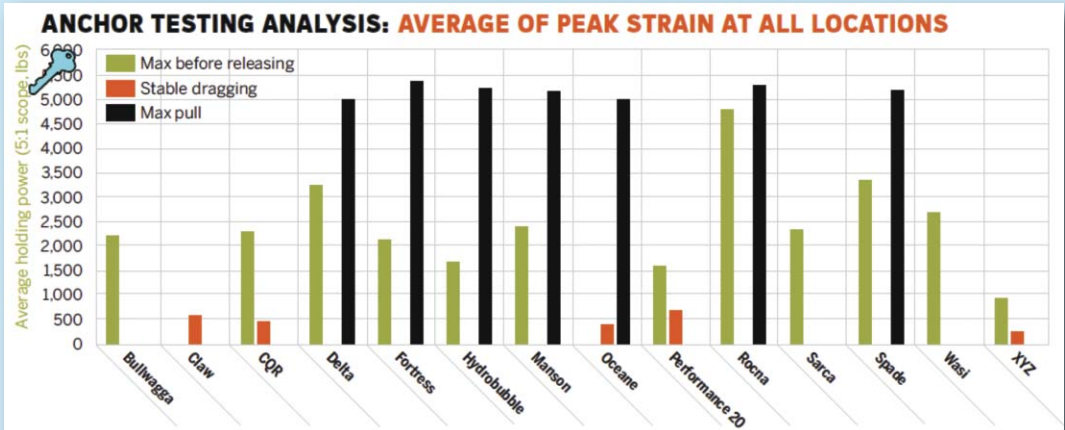


See p.4 for more.

GULF SAILOR

While the results do vary a little, in both tests the following anchors did very well overall, they were the Rocna, Spade and the Manson. In both tests they were better than my Bruce by a factor of 6-10 times, which is an incredible difference.

As I said at the top, *anyone want to buy a Bruce?*



I looked hard for evidence to counter Martin's findings (we have a Bruce, too! Ed.) but found this from a Yachting Monthly way back in 2006 that only serves to bolster his findings. Should point out that all these tests were conducted in mud though.

CLAW

Weight: 36 lb (16.3kg) Price: £58.35

The Claw is Lewmar's version of the Bruce anchor which has been around since 1972.

Used by cruisers the world over, it was developed to secure oil rigs



Beach trials showed the Claw can plough rather than penetrate.

to the ocean floor. Bruce no longer make yacht anchors, hence our testing this version. The Claw is made from a single piece of high-grade steel and stows well on the bow-roller. We were surprised that it was one of the worst performers in our tests. The maximum resistance at 5:1 scope was 886 lb – for a brief spike before breaking out. The tension graphs showed that the anchor never penetrated properly, setting and releasing rapidly or simply scraping the bottom. Was this because the

Claw doesn't share the original geometry of the Bruce design? Were the Claw's flukes simply not sharp enough to penetrate the harder clay-like sand? We recorded similar results at 7:1 scope. The beach-pull trials showed the Claw ploughing a longer trench down the beach than most. Our conclusions were that the flukes of the Claw weren't sharp or weighted enough to penetrate.

Price: £58.35



A Note about Bruce's from a Yachting World 2015 Update

The genuine Bruce has not been made for very many years. It was made from cast steel, a strong and tough material. A huge number of copies have been produced, often in low-grade, brittle and weak materials. The original Bruce had precise fluke angles, unlike many copies. The genuine item sets and holds well in soft-to-medium bottoms, is said to hold on rock, but its long leading edge struggles to cut through weed. Again, big, heavy ones work far better than small ones.

Read more at <http://www.yachtingmonthly.com/gear/different-types-anchor-pros-cons-29473>

West Marine's Latest Anchor Testing Results

West Marine has been testing anchors for over 20 years, usually by joining forces with anchor manufacturers, boating magazines or non-profit boating groups. We even do a number of anchor tests every year on our own using *Showtime*, our Fortier 26' lobster-style boat, as the pulling vessel. However, due to *Showtime's* modest size, bollard pull has been limited to approximately 1000 pounds force (lbf), limiting the size of the anchors that can be tested effectively.

So, when we received a call from Bill Springer, Editor of *SAIL Magazine*, asking us to participate in an anchor test, we jumped

GULF SAILOR

at the opportunity. Our goal was to test anchors that might be used by 35' to 45' cruising sail and powerboats, and we decided to charter a larger vessel that could produce more pull. We could therefore explore anchor holding power up to 5000 lbf. Bill was joined by editors of other yachting magazines including Toby Hodges of *Yachting Monthly*, and Jeff Moser, of *Power and Motoryacht*.

We selected 13 anchors representing a wide variety of the anchors available to boaters. Some were well established, like the CQR and the Delta, while others were relatively unknown in the US market, either due to their relative "newness" or their popularity in Europe but not in the US. The anchors were not chosen to weigh the same amount, but rather chosen based on what a boater might select based on manufacturer recommendations.

What we learned

After dozens of anchor tests in the past, this was by far our best documented and instrumented test. We used a 10,000lb. load cell, which read in 2lb. increments, linked to a computer running Excel. We had cameras, GPS receivers, lots of observers, a powerful boat with a very capable captain, and we still got very confusing results. Here are some of our conclusions:

- The local bottom conditions made an incredible difference. We got dramatically different results testing on one side of Santa Cruz wharf compared to the other. We believe that many of the pulls were in a location with extremely compacted sand that did not allow some of the anchors to get an initial "bite". The anchors, many of them with great reputations, simply skidded on the bottom.
- The mass of the boat changed how the anchors performed. We were as gentle and realistic as possible when performing each pull, but we still got much different results from Shana Ray compared to Showtime. Shana Ray weighs about ten times as much, but we were extremely careful to set the anchors at very low speeds. Still, the results were confounding.
- Many newer designs worked better than the old familiar anchors. In particular, we were very impressed by the "roll bar" anchors like the Rocna, Manson Supreme, and Wasi. And the Spade, one of our favorites, continued to perform well. The two anchors with some aluminum in them, the Hydrobubble and the Fortress, also produced impressive holding power, especially considering their dramatically lighter weight.
- We had a hard time deciding on the best failure mode for an anchor. At some point, an anchor is going to fail (or its rode is going to break.) What's the best way for this to happen? Anchor never sets? Anchor sets but drags at a long tension? Anchor releases without warning? Anchor bends or breaks, and then drags or releases? Anchor sets but releases when the boat veers? The point is that while none of these scenarios are desired, many of our "favorite" anchors set as soon as they hit the bottom, and held to a consistently high tension before releasing quickly. If we had to choose a failure mode, that's what we'd choose.

How we tested

Our 50' research boat was equipped with a 275HP diesel engine and a 34" propeller, and was able to achieve tensions approaching 10,000 lbf. For safety reasons, and because we didn't think that we could gain much additional knowledge exceeding a particular tension, we selected a maximum tension of 5,000 lbf. We did all our pulls off the stern of the vessel, with the engine in forward.

Check out the website for more details: <https://www.westmarine.com/WestAdvisor/Anchor-Testing>

Cont. from p.9 Minutes...

- Canadian Yachting and John has asked Doug McLeod to write our story and liaise with the editor.
- The Executive has been reviewing the awards given at the Dinner Dance and the first one we suggest retiring is the painting by Doug Chadwick, presented as the Editor's Award (frame has no more room for plaques). Club members agreed it would be OK if it was replaced. The executive suggests a glass mug and we will look at etching the mug with a small replica of the painting. It was also suggested we raffle the painting and donate the money to Disabled Sailors. All were in agreement.
 - John asked if anyone had noticed the yellow "mushroom" buoy off Pt. Gray near the river. It is thought to be a scientific research buoy of some kind..

Business Arising from the Reports – • None identified.

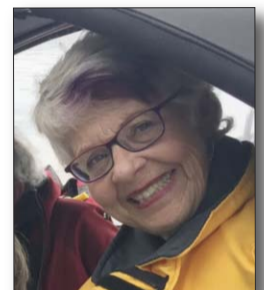
NEW BUSINESS:

- Anne thanked everyone for the boat basket they received at the Easter Rendezvous. If you haven't seen their new (to them) boat *Naida*, Anne welcomes all to come visit at the next couple of rendezvous. She's lovely!

Motion to Adjourn by Lorraine de la Morandière.

Meeting adjourned at 20:00 hrs.

Minutes prepared and respectfully submitted by Honorary Secretary Chris Stangroom, *S/V Christie Cove*.

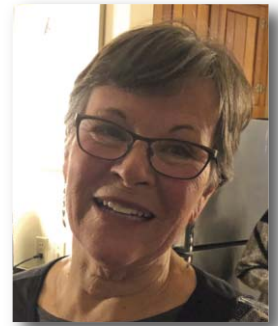


GULF SAILOR

Beyond Sailing – The Things We Do...

What do YOU do when you're not sailing? Lorraine, a relatively 'new' member, realized she knew very little about her fellow sailor friends and wanted to rectify that.

Here's another in a series of articles started by Lorraine. Each month she will be chasing down someone's back story – finding out things that may surprise you, or peak your curiosity. Perhaps something that might lead you deeper into a new friendship. Hoping to enhance the ties we make in sailing and socializing Lorraine is pleased to present the second in the series. Introducing ...



Lorraine de la
Morandiere,
S/V Hypatia



Liz Reiniger

Music has always been a part of my life. As a very young child, I played piano by ear. Sight reading only began in my teens at the insistence of a music instructor who had me read through tons of music pieces until I became proficient.

In a college try-out for a part in a Gilbert and Sullivan production, I sang my audition piece and played my own backup on piano. This astonished the committee as auditioning singers were always provided a separate accompanist. I got the part.

When my daughter was in elementary school, I voluntarily accompanied her school choir at performances and musicals. Eventually, I was hired by other schools as an accompanist.

Approximately 30 years ago I joined a community band for parents at a friend's elementary school. I decided to play drums but quickly learned it was a challenging instrument and took private lessons. With the snare drum somewhat accomplished, I became interested in other percussion instruments. I discovered that each instrument required a specific technique. I continue taking lesson and now play all the percussion instruments including the timpani. Klaus joins me in this band. He plays flute.

I played with the New Westminster Symphony for many years and now play with the Vancouver Philharmonic Orchestra. We have five concerts a year. In February of this year we performed at Centennial Theatre in which there are six timpani's: I played three and a fellow percussionist played three.

I also play chamber music with a group of friends in which I play piano while they play cello, viola and two violins.



And Klaus on his flute.



Liz playing just one of the many instruments
she has mastered.



GULF SAILOR

The Secret Language of Ships

Signs and symbols on the sides of ships tell stories about an industry few outsiders understand. Commodore John thought this would be of interest to us all.

Not many people have an opportunity to get as close to a container ship as we do sailing out in English Bay. Those who do may see icons that impart important information. For example, those black brackets to the right of the company name indicate where the tugboat is supposed to push.



Most of those confined to land will never see what we boaters routinely encounter. We can easily learn a lot about a vessel and some of its features when able to decipher the mysterious numbers, letters, and symbols on a ship's hull. To non-mariners, the markings may look like hieroglyphs. For those in the know, they speak volumes about a particular ship and also about the shipping industry.



John Dixon,
Commodore,
S/V Tantramar

Oceangoing vessels carry over 80 percent of the world's trade, with more than 90,000 merchant ships plying international waters. Tankers, bulk carriers, and container ships—the largest things on Earth that move—are by far the most important modes of transportation of our time. They convey billions of tonnes of goods every year, bringing us everything from cars to crude oil to containers jammed with fidget spinners.

Identity

Most ships have clues to their identity emblazoned on their stern, often in the same order: owner, name, port (or "flag"), and International Maritime Organization (IMO) number. American President Lines (APL) owns this ship, christened the Mexico City, and it sails under the flag of Singapore. The owner, name, and flag may change over a ship's lifespan, but the IMO number stays the same as mandated by an international maritime treaty. Like vehicle identification numbers, IMOs help thwart fraud. Do a web search on an IMO number and the ship's full history pops up. Curious about those yellow-green, fortune-cookie-shaped objects along the lines? They're anti-rat devices, foiling rodent attempts to scabble from dock to line to ship.



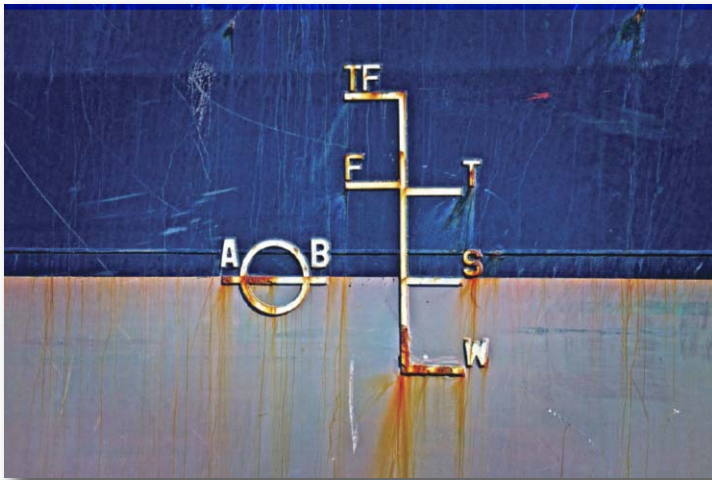
Why would a ship owned by a South Korean company (Hanjin) list its port as Panama? More than 70 percent of the world's commercial ships sail under what's called a "flag of convenience." This means that the ship is registered in a foreign country and sails under that country's flag, usually to reduce operating costs, sidestep taxes, or avoid the stricter safety standards of the owner's country. By far the most popular flag of convenience is Panama, with Liberia and the Marshall Islands fast gaining ground. For these countries, the fees companies pay to fly their flags are a significant source of revenue.

Dummies to fool pirates

There's another thing about this ship worth mentioning. See the crew members up on deck, at the far left and right of the photo? They're actually dummies dressed as mariners, meant to fool pirates into thinking someone is always on watch.



GULF SAILOR



world's cargo ships. The marks and letters to the right of the circle indicate maximum loads under different climatic conditions. Salt water is denser than fresh, cold water denser than warm. Since water density affects ship buoyancy, different conditions call for different load lines. W marks the maximum load in winter temperate seawater, S in summer temperate seawater, T in tropical seawater, F in fresh water, and TF in tropical fresh water, like that of the Amazon River or Panama Canal.

Load Lines

These marks, called load lines, show the maximum load a ship can carry.

Load lines owe much to a British member of Parliament named Samuel Plimsoll. Worried about the loss of ships and crew members due to overloading, he sponsored a bill in 1876 that made it mandatory to have marks on both sides of a ship. If a ship is overloaded, the marks disappear underwater. The original "Plimsoll line" was a circle with a horizontal line through it. The symbol spread around the world; additional marks were added over the years. The letters on either side of the circle stand for the ship's registration authority. AB is the American Bureau of Shipping, one of 12 members of the International Association of Classification Societies, which sets and maintains safety standards for more than 90 percent of the



Bulbous Bow Alert

This ship is equipped with what's called a bulbous bow, a protrusion low on the bow. Contrary to its ungainly appearance, the bulb actually reduces drag, increasing speed and fuel efficiency. The white symbol that looks like the numeral five without the top line alerts tugboats to the presence of the bulb, which under certain conditions may be entirely underwater. Tugs need to be aware of the protuberance to avoid running it over as they maneuver around the ship, possibly damaging both the bulb and the tug. The white circle with an X inside signals the presence of a bow thruster, a propulsion device that helps the vessel maneuver sideways, a boon for getting on and off docks.

Draft Marks

The numbers arranged in a vertical line—called draft marks—measure the distance between the bottom of the hull (the keel) and the waterline. If the water comes up to the 10-meter line, for example, that means 10 meters of the ship is underwater. Where the water hits the draft lines tells sailors if the ship is overloaded, and—when compared to the reading on the opposite side of the boat—if it's listing to one side. To the left of the draft lines are different versions of the bulbous bow and bow thruster symbols. BT | FP tells you the position of the bow thruster: between the ballast tank (BT) and the forepeak (FP), the forwardmost part of the ship. It's important for a tugboat operator to know the location of the bow thruster, as it creates turbulence that the tug would rather avoid.



GULF SAILOR



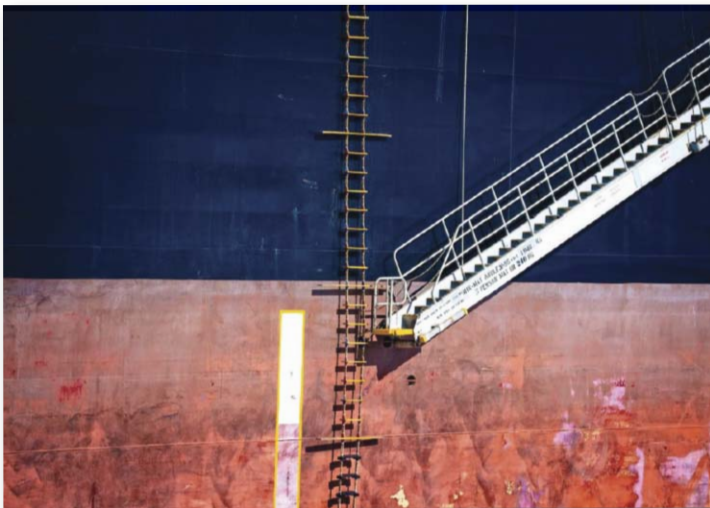
Chocks and Bites

Two tugboats approach an oil tanker as it manoeuvres towards the dock. This photo is taken from a third tug that's moving in on the ship, guided by white arrows pointing to "chocks" that house small but strong posts called "bitts." The tug fastens lines to these bitts. SWL 50t means that the safe working load for each bitt is 50 tonnes. Once the tug has fastened a line to the bitt, it will exert no more than 50 tonnes of pulling pressure as it helps the ship brake or negotiate docking.



Pilot Boarding Marks

The white rectangle edged in yellow—a pilot boarding mark—tells the maritime pilot where to board the ship. Maritime pilots (also called harbour or bar pilots) are experts on the navigational hazards of their home waters and crucial characters in the drama of maritime life. The pilot catches a ride out to the ship on a boat about the size of a tug, scrambles up a ladder hanging off the clifflike side of the ship, and assists the captain just before the ship comes into port. The rope ladder may not yet be deployed when the pilot boat approaches a ship, so the boarding mark is an important guide. The white marks on the red are battle scars, reminders of scuffles with docks, other vessels (mostly tugs), and the sides of canals.



A maritime pilot would board this ship using the two ladders pictured. First, he or she ascends the rope ladder, sometimes called a Jacob's ladder, alluding to the biblical Jacob, who famously dreamed of a ladder connecting heaven and Earth. Partway up, the pilot sidesteps onto the relative security of the diagonal gangplank, called an accommodation ladder. Sometimes the pilot makes do with just the rope ladder. According to IMO regulations, if the distance from water level to deck (which changes according to ship load and sea conditions) is more than nine meters, the ship must deploy an accommodation ladder in addition to the rope ladder. Nine meters or more is a long climb on a rope ladder, especially under difficult sea conditions. Boarding and disembarking are probably the most dangerous parts of the job. Getting off the ship, pilots may let go of the ladder and use what's called a manrope to help them onto the deck of the pilot boat. That way they're less likely to be crushed between the pilot boat and ship.

The next time you see a freighter you can now interpret their secret language.

Hakai Magazine,
Text by Erin Van Rheenen
Photos by David Webster Smith

GULF SAILOR



Minutes

of the General Meeting,
April 9, 2018

The meeting was called to order at 20:37 by Commodore Dixon.

The Minutes of the previous Annual General Meeting were accepted by Ken Buckley and seconded by Phill Little.

Business arising from the Minutes of the previous meeting

- None identified.

REPORTS OF OFFICERS:

Executive Officer –

- Pat reported 31 members present and 3 guests.
- New Burgees available (for Sailpast) for \$25 each.
- Books on the book table have now been date labeled and will be kept for a 3-month period. If no one has taken them by then they will be removed and donated to save us storing them.

Treasurer –

- As of April 1st, 2018, the bank balance is \$9,354 with no outstanding bills.
- The GIC of \$4,047 has been renewed at 2% interest.
- Phill Little has completed an audit of the books and reported that there were no apparent issues and everything added up.

Secretary –

- On behalf of Dar who was absent, Chris thanked Jane and Maryanna for manning the coffee station.
- No report otherwise.

Fleet Captain –

- Klaus reported that 9 boats braved the cold weather in Ladysmith for the Easter weekend.
- Sailpast is coming up soon, Saturday, April 28. Klaus gave a run down of how to proceed once you arrive at Caulfield Cove. Boats should arrive by 10:30 and be monitoring channel 69A for the line up and wait for the (possible) cannon shot signaling the start at 11:00 a.m.
- It was suggested it would be prudent to notify the West Vancouver RCMP of the possible cannon shot.

Staff Captain –

- May will be the Pub Night at Pemberton Station in North Vancouver, start time 6:00 p.m.
- George has invited two people from the Harbour Association of B.C. for the June meeting. They will talk about the old Government Wharves and their usage today.
- In the fall a person from Seaspan will inform us of the interaction of towboats and sailboats.
- Chuck proposed to George that he inquire about having a speaker from International Paint come to

Executive Officers Present:

Commodore	John Dixon
Fleet Captain	Klaus Reiniger
Staff Captain	George Bamford
Hon. Secretary	Chris Stangroom
Hon. Treasurer	Chuck Spong
Executive Officer	Pat Costa
Signals Officer	Martin Pengelly
Absent:	
Vice-Commodore	Dar Farrell
Past Commodore	Andreas Truckenbrodt

inform us about the new kinds of paints on the market today. Ron suggested talking to Bob Hamlin who knows the rep from International Paint. George thanked them for this "first ever this year" suggestion!

- George gave tonight's presentation, an interesting and informative look at the different kinds of anchors from long ago to present day. An example of an early anchor – a rock tied with a rope – caught our interest immediately!

Vice Commodore –

- Absent.

Past Commodore –

- Absent.

Signals Officer –

- No report.

Gulf Sailor Editor –

- No report.

Council of BC Yacht Clubs –

- No report.

Commodore –

- Welcomed new members Iain Begg and Deirdre Monro and presented them with their GYC package.
- Welcomed new member Robert Sinkus, burgee and roster presented. Name tag to follow.
- Reminder to pick up your Roster if you haven't already along with three of the brochures.
- The proposed changes to our Bylaws that are required by the Societies Act will be published in the May and June Gulf Sailor before the Special General Meeting in June.
- The Executive will be putting out a survey to members to get feedback regarding the Dinner Dance. One consideration would be changing the date to get more people to attend before they go to a warm place for the winter
- A second invitation to join our GYC Facebook group will be emailed to members.
- John attended a lunch with the Disabled Sailors (our Charity of Choice). They are looking for funds to replace the pier at Jericho. This will make it easier to lift the people and boats into the water.
- There is a western edition of the on-line magazine

Cont. p.4 Minutes...