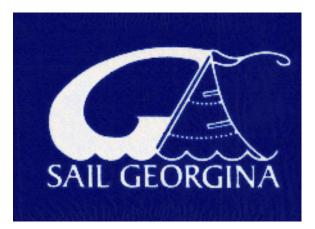
# DOCK LINES

## SPRING 2012



#### CONTENTS:

| From the Bridge                              | . 2 |
|--|-----|
| From the Engine Room                         | . 3 |
| Tips from Tabasco - Nancy Glover             |     |
| In commemoration - Doug Neufield             | . 8 |
| Our Beautiful Lake - Clare Malcolmson        |     |
| Meals on Keels - Mary Pape                   | 13  |
| Did you know?                                |     |
| Finding Your Way on the Water - Neil Kinnear |     |
| The Bosun Locker                             | 19  |
| Cruising Notes - Part 5 - Hessel Pape        |     |

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#### **From the Bridge**

Welcome to sailing season 2012 all from your bridge. By now you will notice a new tent in the compound, thus gaining a dry space for sailing school students and a clubhouse of sorts in the way of this seasonal shelter. The season is packed full of sailing events: namely the three season racing and many fun races, so regardless of your sailing preferences, something for all. Please review the web-site calendar for dates and times.

This year the newly formed F. Rennie Memorial Scholarship begins with a one week sailing school scholarship going to a Big Brother Big Sister of York Region's "little" from the Town of Georgina. With prudent management the scholarship should last for many years to come.

Our club like all is only as good as its member's involvement. Your work hours and harbour watch participation are essential. Sign up to day using the convenience of our web site www.sailgeorgina.ca

We have a special appeal to members to come forward and champion the big roast organizing, so this annual event can continue. Pot luck on the dock will follow racing or just impromptu socializing at member's choice and effort.

The harbour has had a great deal of movement this year with 4 sabbaticals and 2 members leaving SGA. Many on the waiting list have been granted temporary SGA slips for 2012 and the Town lottery has several sail boats in harbour this season. Please extend the usual SGA hospitality to all using and visiting the harbour this season.

The bridge looks forward to sharing another great sailing season with you. See you on the dock and under sail.

Tim Ayerst, Commodore 2011/12



Jackson's Point light welcomes you to safe harbour.



Spring 2012. Jackson's Point harbour awaiting the new season.

#### From the Engine Room By Hessel Pape

So, finally another issue of Dock Lines. Sorry, but last fall's issue did not appear - we were all too busy and my wife and I were out of the country in September. It also seems that sailors just don't get around to writing articles for a newsletter while out enjoying the wind and the waves during summer and fall. It is in the winter, when the boats are laid up that sailors have the time to dream and write about what they like doing best, being out on the water.

I would like to thank all who contributed to this issue. I received some very fine articles, including some good advice from Tobasco if you are considering the Trent-Severn route and Georgian Bay, and another submission which reminds us that, though preserving our lake has much to do with rivers, shorelines, and run-off, we need to be mindful as sailors as well.

So what happens if your course plotter goes haywire? Neil has all sorts of navigational instruments to guide you safely along the way, including a string on a board.

For these as well as the other submission I thank you all again. Without such help this project would not be possible. I cannot do it alone. For us it is Georgian Bay again this summer, weather permitting, just as long as the winds do not blow us to the edge of the world. I remember two years ago when it seemed we had small craft warnings for the Bay nearly daily. So, for this year we hope for light steady air for a leisurely sail. I am getting lazy in my old age. Mary and wish you a great sailing season.



This sign on Dalton Road, Sutton. Have a problem with your LED lighting? A nurse practitioner will fix them for you.

# WE HAVE MOVED TO GEORGINA



# **MARINE CRADLE SHOP INC.**

Marine Cradle Shop has been in business for over 29 years, building quality trailers and custom steel cradles for boats of all kinds, as well as for other purposes. Since we are "factory direct", we can custom design and build according to your unique needs, all at factory direct prices and experienced personal services. Our 4 to 8 day turnaround and delivery by promised deadline, has allowed us to build a solid reputation over the years. Established in 1983 in Markham, two years ago we moved to a new facility along Highway 48, just south of Sutton West, Ontario.

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### **Tips from Tabasco**

By Nancy Glover

It was just a few weeks after Tabasco had been put to bed for the long winter hibernation and I was already dreaming of the next summer's sailing adventures. In 2006, 2008 and in 2010 we ventured out of Simcoe, through the Trent system to Georgian Bay on our way to the North Channel. It is my hope that we'll return to the North Channel for this summer's vacation.

Sailing World magazine named the North Channel, the body of water that connects Lake Huron to Georgian Bay, as one of the top ten best places to sail in the world. Unfortunately, the season is much shorter than for more tropical destinations.

Getting to the North Channel can be a challenge but is worth the trip. De-rigging, rerigging, and going through the Trent will take the better part of a week of your precious vacation time. It is my preference to get out of southern Georgian Bay, with its boating traffic, as quickly as possible. The first trip we took we spent a lot of time motoring through the small vessel route. We now sail out in the open bay as much as we can, saving fuel, time and getting us away from the power boat traffic. Either way, in order to have enough time to enjoy the North Channel you'll need three weeks. If you don't have 3 weeks, consider towing your boat to launch at Britt, Killarney or Little Current. Alternately, you could charter a boat either privately or through Canadian Yacht Charters in Gore Bay. They carry boats as small as 27 feet making it practical for a couple to rent.

I recommend you get the *Ports Guide* for both its tips and its recommended anchorages. I have some of my own suggestions learned through experience.

#### Planning, packing and provisioning:

- 1. Buy and use a Chapstick with an SPF of 15 or higher. Sun burnt lips blister, and crack. Ouch!
- 2. Purchase and bring **liquid** laundry detergent, quarters and loonies.
- 3. Solar showers are a great investment. Often the lake water is quiet cool. The cheap *Canadian Tire* ones work just as well as the expensive ones.
- 4. While at *Canadian Tire* pick up a camp toaster for on your stove top.
- 5. Bring a *Melitta* drip coffee maker or a French coffee press if you like a good cup of coffee without using electricity.
- 6. Line your ice box walls with insulated blanket material, the silver stuff, so your ice will last longer.
- Mast cranes (2010 prices): Barrie City docks \$20 including tax, Hawkestone \$80 and pre-registration is required, Queen's Cove, Victoria Harbour \$75 plus HST plus you get a free bag of ice. Most places now require you pay for a crane operator and many marinas charge over \$200 per use.

#### **Ports of Call**:

#### Killarney, the gateway to the North Channel:

- Buy only what you absolutely can't do without at the General Store. Both Little Current and Gore Bay have a better selection and better prices.
- 2. The *Sportsman's Inn* will allow you to dock on the island across from their main resort with the purchase of fuel and a pump-out (\$11 in 2010). While re-fueling the attendants will dispose of your garbage.
- 3. From the island you can dinghy to the boat ramp next to *Herbert's Fish and Chips*. Take a few strong shopping bags or a backpack to carry your purchases. Once ashore do visit

Herbert's for some fish and chips, purchase some vacuum packed fish from the fishery next door, and if you haven't already, dump your garbage and recycling in the bins at the back of their parking lot.

- 4. Visit Gateway Marine and Bakery for ice cream and fresh bread including a yummy apple, cinnamon bread that's great for breakfast. You can also do your laundry here or in the back of the general store.
- 5. The *LCBO* next to *Herbert's* is small but well stocked unless you happen to visit it the Tuesday after the August long weekend.
- Killarney Mountain Lodge has 5 or 6 mooring balls that are available for \$15 per night and a shuttle to their resort.

#### Little Current, Manitoulin Island:

- 1. Never use the docks closest to the swing bridge even for day use only. The current is very strong.
- 2. Radio ahead, even for day use and you'll get great service.
- 3. If you must get fuel it is near the first set of docks. Assistance is available. Use it.
- 4. Grocery shopping is a fair walk up the hill. There is a good selection with reasonable prices. A delivery and shuttle service is available. Take it so your food stays cool longer.
- 5. Locally made ice cream is for sale on the docks. Expensive but good.
- 6. Laundry, hardware, charts, boat parts, drug stores, restaurants, banks and the post office are all along the shoreline.
- 7. Overnight dockage is expensive everywhere on the island. Anchorages are near by.

- 1. Supplies and fuel are available at the town dock. This is where *Canadian Yacht Charters* is based. Charts, boating supplies and ice are available here.
- 2. If you ask to use the washroom at the dock store they will give you the combination which also opens the showers.
- 3. You can anchor in the harbour bay. There is a dinghy dock for day use. The anchorage is weedy and sometimes busy but very quiet.
- 4. Laundry, groceries, a bank, drugstore and restaurant are all a short walk from the dock. There were plans in place to have laundry available at the dock when we visited in 2010.

Next time I'll share some of my favourite anchorages and tips to enjoy them. Meanwhile, anyone interested in cruising to the Channel with Tabasco next summer?

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#### Gore Bay, Manitoulin Island:

# **SUTTON HOME HARDWARE**



FOR ALL YOUR NEEDS TO ENJOY LAKE SIMCOE

Sutton Home Hardware carries a good line of Stainless Steel Fasteners, Marine Finishes and Waxes, Life Jackets and Safety Equipment, as well as other items, including a selection of rope and electrical supplies, to make your leisure time on the water safe and memorable. We are conveniently located on Dalton Road, just south of Jackson's Point harbour.

## THE HARDWARE STORE UNDER THE WATER TOWER



## **IN COMMEMORATION** Fraser Rennie September 15<sup>th</sup>, 2011

Last year our club lost a fellow member, a sailor, and our friend, one who is sadly missed. The following was submitted in memory of Fraser.

Ladies and Gentlemen, my name is Doug Neufeld. I am Pastor Doug from Egypt Church, located just out of town a wee ways. Since moving to Georgina some years ago our family's bank is the Bank of Montreal on High Street where we have developed good association with Colleen and through whom we have known Fraser. A couple of years ago, this past 5<sup>th</sup> of September, I was privileged to officiate DJ's and Courtney's wedding.

Meeting Fraser meant being greeted with a big smile and a good sense of humour. He seemed to have a warm heart and enjoyed people. He was happy to be a grandpa, speaking fondly of his grandchildren. It was obvious that he loved to sail.

John Lennon said, "*Life is what happens while you're busy making other plans.*" My heart goes out to all of Fraser's family and friends, as this event now becomes some of what the rest of your lives will bear.

In such contexts there's a story that sometimes gets told about a little sparrow one snowy night that, while perched on a spruce bough, it began to count the snowflakes accumulating on it. The little bird had counted all the way up 3,741,952 snowflakes on a single branch. As the next snowflake fell from the sky, landing on the bough making 3,741,953 ... the branch broke off!

Most times the thought is of that single snowflake and the tremendous difference that one can make. You know the power of one! You know the pain of losing one. But ever since hearing of Fraser's unfortunate mishap, the thought that keeps running through my mind has been, "What happens when the branch breaks off?"

Most times one doesn't have to cut the tree down when the branch breaks off, for in time where the limb had been becomes some of the character and rugged beauty of the tree. Unfortunate events such as these add to the character and outcome of our lives too.

At Courtney's and DJ's wedding, we read from <u>Oh, the Places You Will Go</u>, by Dr. Seuss. There's a line in there that goes ... "On you will go though the weather be foul ... on you will go though the Hakken-Kraks howl. Onward up many a frightening creek, though your arms may get sore and your sneakers may leak ..." This seems like some of those times ... and amid heartache, heartbreak, loss and desperate attempts ... as life goes on from here, may you someday have peace and may the wounded family tree bear a brand new kind of unlikely elegance.

A little book entitled, <u>*Tuesdays With Morrie*</u>, written by Mitch Albom, chronicling the declining health and eventual the death of a favourite professor friend by the name of Morrie Schwartz, includes a tiny story about a wave in the ocean that might lend perspective at a time like this. This is how Morrie told it:

"The story is about a little wave, bobbing along the ocean, having a grand old time. He's enjoying the wind and the fresh air – until he notices the other waves in front of him, crashing against the shore.

'Oh no!' the little wave cries out. 'This is terrible! ... Not me, too? Look what's going to happen to me!'

Another wave came along beside him. It saw how terribly grim the wave had become. 'Why do you look so sad?' the second wave asked the first.

'What? You don't understand what's happening?' the first wave answered back. 'We are all going to crash! All of us are going to be washed up on the shore and lose our life form forever! Isn't it terrible?'

That's when the second wave answered and said: 'No, it's you that doesn't understand. You're not a wave; you are part of the ocean!"

Perhaps we can believe that Fraser has now become part of something far bigger, far greater, far more significant, for a ripple on a quiet pond or a wave on the lake or the wind in a sail or a dragonfly dancing may be reminiscent of him and you may sense his spirit everywhere you are!

Go easy on yourselves ... hold loved ones close ... cherish the moment ... live today!

"Go placidly amid the noise and haste and remember what peace there may be in silence ..."

(From "Desiderata" by Max Ehrmann)

Here's to all of you, and especially the next time you set sail!

Pastor Doug

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Editor's note: The following was submitted to our publication with the intent to encourage our ongoing awareness of the health of our lake. As boaters and participating users of the lake, each in our way, we share the responsibility for this invaluable natural resource. While we do not pave our wake, we can take all care it is clear of all harmful chemicals and leave no garbage floating in the water astern.

#### **Our Beautiful Lake**

By Claire Malcolmson Environmental Defence.

Lake Simcoe is a beautiful lake, has a long tradition, and is rich in history both on the part of our Southern Ontario First Nations peoples as well as the early rural settlers. It is said to be the most intensively fished lake in North America, and therefore, I suspect the most loved by anglers and sailors. And, it has certainly stolen the hearts of the owners of the some twelve thousand cottages that dot its shorelines.

# The immediate danger to the current health of our lake:

#### Phosphorus from human activities.

Phosphorus is naturally occurring, and is found in manure, soils, and cleaning products. It acts like a fertilizer in the water, just as it would on your lawn. Unfortunately, due to the increase of human activity around the lake there's a bit more than twice the natural "load" of Phosphorus coming into the Lake every year. The problem is that too much of this chemical leads to algae blooms and excessive plant growth (the linked picture is an extreme example, at Lake Erie). When these plants and algae die, oxygen is stripped from the water. Some of the best fish in Lake Simoce have been on life support (manual fish stocking programs) for decades because there was so little oxygen in the water, they couldn't

survive.

# Four ways to show your respect for the lake.

Here are four things that you can easily do to help reduce your impact on Lake Simcoe:

#### 1. Make the shoreline wild

Lake Simcoe's shoreline is in bad shape. Too many hardened surfaces, like concrete and metal, and not enough plants, make it inhospitable to the wild species that call it home. Not only does a wild shoreline look beautiful, but it also keeps water cool for fish and insects, prevents some pollution from reaching the water, and it prevents soil erosion.

TIP - Do not mow all the way to the shoreline! Plant red osier dogwood on your shoreline and soon other things will start growing there too. You will see more animals and birds; they love natural shorelines.

# 2. Plant native species and protect our greenspace

Scientists tell us that we should protect 40% of the <u>watershed's</u> forests, wetlands and scrublands to protect water quality, biodiversity, and help with the impacts of climate change. We need the amount of green space we protect to go up, not down.

TIP - Where ever you live, you can plant <u>native plant species</u> that our local animals, insects and birds like to eat and live on.

- You can volunteer at tree plantings organized by the <u>Conservation Authority</u> or your municipality.

- Tell your local government that you support protecting green space.

#### 3. Use greener cleaners

From now on municipalities need to make their sewage treatment plants better at



removing Phosphorus if they are going to have lots more people living in their area. Even still, Phosphorus from sewage treatment plants is expected to increase over time because there is so much urban growth planned. What we put down the drain is really important, whether you are on the town sewer or on septic.

TIP - Use phosphate free or biodegradable cleaners of all kinds including soap, detergents, all purpose cleaners. By using greener cleaners not only will you decrease your impact on the Lake, but you will also reduce you and your loved ones' exposure to the toxic substances found in most everyday cleaning products. Look for "phosphate free" or "biodegradable" on the label.

#### 4. Don't make a demon of your lawn

Another related, and huge source of Phosphorus, is <u>urban runoff</u> (what rain and snow carries off lawns and roads). It may be treated by storm water management ponds in new neighbourhoods, but the treatment in most cases is rather ineffective.

TIP - You can reduce this load by keeping your lawn natural by not using fertilizers. It's not just pesticides that are bad for the environment.

If all of us follow these tips, Lake Simcoe will be a healthier place for people, wildlife and fish.

Make a resolution to be part of the solution!

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## WELCOME TO SOBEYS OF SUTTON

WE ARE CONVENIENTLY LOCATED JUST A SHORT WALK FROM JACKSON'S POINT HARBOUR ON DALTON ROAD, RIGHT BESIDE HOME HARDWARE BY THE WATER TOWER.

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WE FEATURE A HOT DELI AND FRESH SEAFOOD BEST QUALITY IN GROCERIES, DRY CLEANING DEPOT AND LOTTO CENTRE 905-722-5671

#### MEALS ON KEELS

As cruising sailors, it is important to know which foods usually keep well on board unrefrigerated, and which do not. Through experience, I have discovered that, for example, pita does not keep long before green fur starts appearing on it. Neither does bread, no matter what kind. I does not last for long, unless it be your "plastic sponge" variety, full of those nasty preservatives, no brands mentioned, which we do not eat anyway! However, soft tortillas keep for days and days. Therefore, we pretty well enjoy living on wraps for lunch each day. Quick and easy to prepare, and along with a mug of beer, a perfect summer mid-day sailing meal!

We usually take along Mennonite sausage, the kind that is wrapped in a sort of canvas and does not need refrigeration. Such sausage was meant to be hung from the rafters in the summer kitchens in the good old days. Thinly sliced it is great in wraps along with lettuce, sliced cheese and tomatoes, mayo and mustard. As for cheese, an aged and hard cheese, such as a Dutch variety, will last a long time, even unrefrigerated. However, cheese is cheese, and I like to store it in the cooler no matter what anybody says. Tomatoes will keep quite a long time also in the cooler.

We found that vegetables that keep the best unrefrigerated are your potatoes, carrots and onions. We store them in bags in lockers. Here is an old Dutch recipe, *Hutspot*, that is a quick and easy one-pot meal on board which is a combination of these three vegetables. Traditionally we eat it on October 3<sup>rd</sup> each year - a 400 year-old custom for Hollanders from the city of Leiden which celebrates the the lifting of a nine month siege and freedom from Spanish domination. However, putting history aside, it is a great meal for anytime! Just cook potatoes, peeled and cut up, carrots peeled and sliced, onions peeled and chopped, about 1/3 the quantity of each. Combine and boil altogether until tender, then strain and mash with butter, a little milk, if you have it, salt and pepper. Save the stock. We serve it with a thin quick- fry steak and use the vegetable stock thickened with a little instant gravy powder to make gravy from the pan juices. Enjoy, and happy cruising this summer!

Mary Pape, Galley slave!

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#### Did you know...

that ethanol in gasoline for outboard motors is not a very good idea? I am told that it plays havoc with rubber tubing, leaves serious deposits in carburetors as well a causing corrosion. Most gas stations ad this product, usually distilled from corn, to the gas, and generally at the rate of 10%. With some brands the percentage varies from 10% in low grade, 5% for medium grade, and none for the premium brand, but is it wise to check first. Ultramar tells me that there is 10% in all their grades.

I am also told that only few of the marinas around the lake carry gas without the alcohol additive. Bonnie Boats, next to our club here in Jackson's Point, is one of them.

The advice is to protect your outboard motor and use straight gas. Check first and avoid the ethanol extender. Not only is corn meant as a food, but the product harms your engine.

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#### Finding your way on the water

by Neil Kinnear

The captain laid down his pencil and stared at the chart. He had reviewed his calculations twice over and there was no mistake. He had double checked the plot and it was correct too. The crossed lines marked their position. They were at the Pefferlaw Liquor Store. Nodoubt about it.

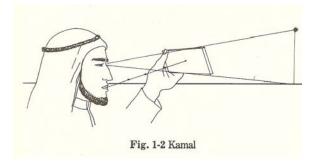
Climbing up from the cabin into the cockpit, he announced the news to the crew. The admiral sat quietly, wearing her usual enigmatic smile. Ensign Billy, loyal crew and trusty challenger to any and all information escaping the lips of the captain, burst out laughing. He pointed out that, in case it had escaped the captain's notice, Stardust was reaching pleasantly across the waters of beautiful Lake Simcoe, afloat in about 25 feet of water, approximately two miles north of the mouth of the Pefferlaw Brook. The liquor store was another two miles further inland.

The captain considered his situation. True, he had just learned how to take a sun sight with his newly acquired sextant and how to calculate a Line of Position using techniques from the Canadian Power Squadron Junior Navigator course. Perhaps he just needed more practice? On the other hand, perhaps he had been too ambitious. Maybe he should have started with a simpler device than the sextant.

He stopped to think for a minute. After dark, he could use his kamal. Modeled after an instrument used by Arab sailors at least as long ago as the 10th century, it would allow the crew of Stardust to maintain a steady course along a specific latitude. The kamal is a very simple instrument made only of a string attached to the centre of a card or a small piece of wood. Navigators held the card outstretched so the base appeared to rest on



the horizon and the top to skirt the North Star, then pulled the string towards their eye. A knot tied in the string where it reached the eye marked the length needed for that latitude. Laden with their cargoes of spices and textiles, Arab traders sailed north or south to the appropriate latitude and then sailed east or west to their destination. Different knots in the string marked the latitudes of various ports of call enabling them to sail confidently across open waters. Shifting with the seasons, the monsoon winds made for easy downwind voyaging from the Arabian peninsula or East Africa to India and back.

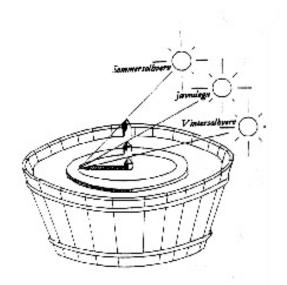


The captain mused. Waiting until dark might not be the best idea. He thought he knew where to find another device that could be used during the day. He recalled that Viking sailors of a thousand years ago sailed the waters of the North Atlantic in summer when nights were short and stars hard to come by. They developed navigation techniques using the Sun as their guide to maintain a course of constant latitude.



One such device is the Sun Shadow Board, constructed of a flat circular piece of wood with a central upright stick - a gnomon. Concentric circles were drawn on the piece of wood which was floated in a bucket of water to keep it level while under way. At noon, the shadow of the gnomon reached to one of the concentric circles indicating a measure of latitude. Different gnomons were used throughout the year, allowing for the varying height of the sun by season.

An ingenious variation of the sun shadow board was the Sun Compass. If the path of the tip of the shadow of the gnomon was marked as the day proceeded, the result was a hyperbolic curve unique for a given latitude and time of year. In use, the board was turned until the tip of the shadow reached the line. Directions were then read from the board within an accuracy of about 15 degrees. The



sun compass also had an inherent selfcorrecting feature so that an overshoot of the course in the morning would result in an undershoot in the afternoon.

While rummaging through the locker in search of his sun compass, the captain remembered another Viking technique. The Norsemen were skilled seaman familiar with the sea birds and whales that inhabited the different waters of their domain. While at sea they also kept crows aboard their long boats. Out of sight of land and unsure of the direction, they would release a crow. If it flew off towards the horizon, they would turn and follow it, knowing that land lay in that direction. If the crow merely circled the boat, they knew land was not in sight.

Ensign Billy was compelled to mention that, at the moment, crows were scarce aboard our vessel. The admiral, more helpful, suggested looking in a different locker.

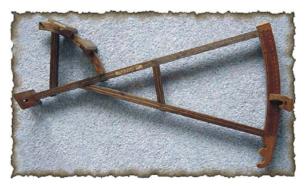
Brilliant, thought the captain. Why hadn't he thought of looking there? He reached in and pulled out a long hardwood stick, inscribed



with markings and complete with a sliding cross-bar - his cross-staff! He immediately set to work measuring the altitude of the sun. Keeping the lower end of the cross-bar on the horizon while sliding it up the stick until its top reached the sun, he was immediately blinded by the glare.

Better off using the back-staff, he thought. The back-staff was developed in Europe sometime in the 17th century. Rather than forcing the navigator to stare into the Sun for daylight measurements, it allowed him to turn his back to it, sight to the horizon, and align the Sun's shadow using a sliding arc. Both instruments were used to measure the altitude of the sun, useful for determining latitude.

The explorer John Davis, after whom Davis Strait in the eastern Canadian arctic is named, developed a refinement of the back-staff that came to be known as the Davis Quadrant. Like the back-staff, it used the Sun's shadow to measure altitude and could make measurements up to 90 degrees. Both the back-staff and Davis quadrant suffer the same



shortcoming - not being useful for sights using the Moon or stars.

There was one more instrument hidden in that locker, thought the captain. If it's not useful for navigation at least I'll be able to foretell the crew's future - pretty grim at the moment.

The astrolabe was invented by the Greeks sometime before 150 A.D. It was a magical device with mysterious properties. In the hands of a skilled user, it was possible to predict the times of sunrise and sunset, the positions of the Moon and stars and solve many other astronomical problems. One author, about 950 A.D., published a book with a title equivalent to "1001 Uses for the Astrolabe". The main face of the astrolabe shows a map of the sky as seen from a specific latitude, marked with the positions of major stars and constellations. A rotating cage-like disk called the rete, would indicate which portions of the sky and which celestial objects were visible for a given date and time.

Despite its utility on land, the astrolabe wasn't used as a tool at sea until much later and, even then, in a stripped-down form called a mariner's astrolabe. By then it was used only to measure the altitude of celestial bodies with a degree scale on the edge and a swinging arm for sighting the sun or stars. With a relatively short swing, accuracy was rough.



The Astrolabe.

Of course, none of these instruments could help determine longitude. Calculating longitude required knowing the exact time. Given that the Earth's circumference is about 25,000 miles and that it rotates once every 24 hours, a vessel at the equator moves about one thousand miles per hour or about one mile every four seconds. Errors in time add up quickly!

Hidden deep in the locker between the snatch blocks and the bung plugs, the cCaptain discovered his Table of Lunar Distances. Now he could figure it out! The Lunar Distance method was used extensively by European navigators until the use of the chronometer became widespread near the end of the 19th century.

The Moon moves quite quickly across the sky - a full circle of 360 degrees in about 30 days or about 12 degrees per day or half a degree, the Moon's diameter, per hour. By measuring the angular distance between the Moon and a nearby star and comparing that to numbers in tables previously calculated for the location of Greenwich, it was possible to determine the time in Greenwich. Knowing the local time, based on the Sun's altitude, longitude could be derived, but only after lengthy calculations.

Adapted designs, metal construction and the addition of mirrors and lenses ultimately resulted in the sextant which allowed for more accurate measurement of altitudes and angles. Progress in mathematics, particularly advances in spherical trigonometry, allowed for simpler calculation methods. Finally and perhaps most important, the chronometer allowed for accurate knowledge of the time upon which the accuracy of the calculations was dependent.

The captain recalled his lessons. He had been taught that there are several methods of reducing sights, the most popular being the altitude-intercept method. It is based on comparing the difference between the calculated altitude of a celestial body at an assumed position with the altitude measured by the navigator using his sextant. The difference, called the intercept, eventually yields a line of position. Two or more lines of position yield a fix. If the azimuth angle to a body, its direction from True North, is also measured, it is possible to calculate a position using a single sight.

The Captian reviewed his steps. The DR, dead reckoning position, was pretty good. They were in sight of the Pefferlaw Brook entrance after all. Calculating the Sun's altitude at that position using the almanac was definitely within his capabilities - he had a calculator on board! The azimuth and sextant sight of the Sun's altitude were less sure but as good as they could be at the moment as was the time he recorded. He had included all the various error corrections necessary allowing for inaccuracies due to the sextant, the height of his eye above the horizon, atmospheric refraction, the offset from the centre to the edge of the Sun and others.

The admiral wondered aloud exactly how accurate they should have expected the result to be. The captain dug deeply into his copy of Bowditch - The American Practical Navigator, a tome so big it should have been considered in his PHRF rating. There it was in the fine print: "Under favourable conditions, a position at sea determined by celestial observation by an experienced observer, should seldom be in error by more than two miles." Other sources were more generous suggesting that within five miles was a good position!

The admiral sat silent, confident in her

position. Ensign Billy was unusually quiet. The captain beamed. They really were at the Pefferlaw Liquor Store!

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#### **The Bosun Locker**

Drinking Water Issues.

So now we have a sailboat big enough to cruise comfortably - our floating cottage that allows us to change our backyard view whenever we please, weather permitting, and complete with all the amenities. I have sailed for a great many years but this is our first boat with running water in our galley and a fresh water tank in the bow. I remember that on Georgian Bay, many years ago, we simply used the lake water for cooking our meals, and for our tea & coffee, but today, well, I don't know.

Along with the convenience also comes a concern, that of the water quality. Problem is that you cannot see what sort of denizens inhabit the water tank. We found that last year, especially as the season wore on, the water from the tap smelled more and more of rotten eggs. Actually, the water from the tap was more of a combination of the remnants of the bleach we used to rinse the tank in the spring *plus* the flavour of rotten eggs. We went back to our usual practice of buying bottled water for our consumption and our tap water strictly for the dishes. This year, while the boat was still in our driveway, we put a generous cupful of bleach into the deck access and used the garden hose to completely fill the tank.

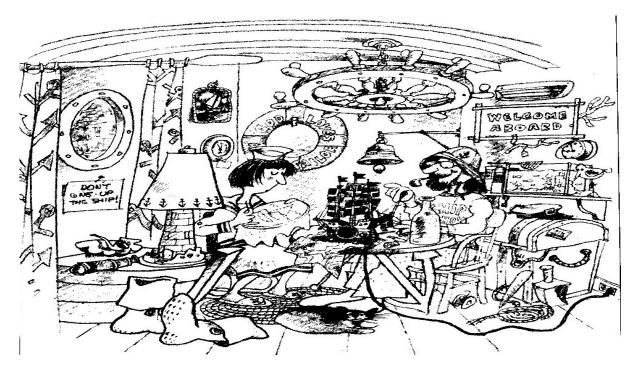
By disconnecting the hose from the pump at the bottom, we allowed the water to flow freely into the bilge. It provided the unique opportunity to give the bilge a good cleaning while the wet/dry shopvac made quick work of mopping up the bilge water.

Someone told us last year that vinegar gets rid of the chlorine smell, so closing off the lower hose to the pump, the process was completed by dumping a cup of vinegar into the tank, followed by another fresh water filling. The latter, too, was allowed to drain into the bilge and vacuumed up.

With the pump hose reconnected, we now hope to have a fresh clean tank, suitable for potable water. We will just be doubly careful about where we fill this summer.

If anyone has any further suggestions, please drop us a line. Email us with your suggestions or comments.

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## THE EXECUTIVE AND MEMBERS OF *SAIL GEORGINA* WISH TO RECOGNIZE AND THANK

### THE RIGGING SHOPPE

## FOR THEIR CONTINUED ENCOURAGEMENT AND ONGOING SUPPORT OF BOTH OUR SAILING CLUB, AS WELL AS ITS INDIVIDUAL MEMBERS.

#### **CRUISING NOTES - PART 5**

The Atlantic 1971 By Hessel Pape

In July 1971 I spent a month cruising New England on board the 26ft Grampian with her "master" Bill. How we ended up some 400 Miles out from shore on way to the Bermudas is the subject of the previous instalments that can be found in past issues of Dock Lines.

#### We turn about.

By Tuesday evening, towards the end of the second full day out, the weather deteriorated. The seas became rough. We put up the storm jib and reduced the main to about fifty percent. The self steering gear remained functioning well, indicating that our rig was reasonably well balanced, and we still made over six knots while maintaining our course, in a south easterly direction toward the Bermudas. It was a rough night, the wind blowing a full gale and the seas high. My shifts at the helm were from 8 to midnight and 4 to 8 in the morning. I had little sleep since Bill called me up twice to look after the sails. What time I spent in my bunk up forward was an unforgettable experience of sleeping in an unending high speed elevator ride, up down, up down, such that there was a feeling of heaviness followed by a sensation of floating weightless, then of being heavy again. Even the sail bags beside me and the top of my sleeping bag seemed to be rising and settling constantly. Flat on my back I was actually quite comfortable but navigating through the cabin to the cockpit was another matter. Once outside the effects of the motion were not so bad, though clambering about to make adjustments on the sails was definitely a chore that required all concentration and every precaution. It was definitely one hand for the boat and one hand to do the work.

And thus it was that I found myself wondering, early in the morning as the dawn broke, what I had gotten myself into. Though the crests of the waves seemed largely to be rounded, from the perspective of the cockpit they appeared to be higher than our mast, and rolling in at several boat lengths apart. I therefore estimated them to be about forty feet high as we sailed up each wave and down into a valley again, then up the next. The salty spume mixed with the driving rain whipped by and found its way into every nook and cranny such that even down below deck things were wet and clammy, while I was soaked to the skin.

Inside the cabin Bill was sequestered in his bunk. He was not feeling too well. In fact he had been seasick several times, and again in the morning after I finished my watch. Breakfast for us consisted of a few crackers.

It was later in the morning that Bill, in his usual noncommittal way, when he did not really want to appear to be the one responsible for having made the decision, suggested that perhaps we should turn back.

"Problem is, Ole boy, we'll get to Bermuda all right, but should there be another storm we'll have to leave the boat there, fly back, and pay someone to bring the boat back."

That was a threat of sorts because according to the arrangements of sharing expenses, I would have to pay my fair share but there was no way I could afford a flight home, let alone having the boat brought back. Besides, Bill decided that he was not enjoying the crossing and did not look forward to another seven to ten days feeling tough on the way back. He also explained that he had always had a second plan, that of cruising inland along the New England coast, and visiting all the quaint old harbours.

"So what do you want to do old chap," he asked.

"It's your boat, Bill. You're the boss."

"No, we are both in it together, so it is up to you," he argued.

I suspected that he wanted to save face and be able to say later that is was I who wanted to turn back. By mid morning we came about and set course for Block Island. In the end it was Bill's decision. He had calculated that we were about 400 Miles out, somewhat over half way to Bermuda and he thought we would reach harbour by Friday morning.

Frankly, I was rather disappointed about missing out on walking ashore of, and spending the week on, Bermuda, which for me represented the mystique of a collection of subtropical coral islands and all that it implies. I had never been that far south, let alone in a place of palm trees and exotic flowers.

Later in the day the sea and weather calmed down a little and by Thursday morning the sky was clear and the winds light. The storm had tracked northward and frankly I regretted even more having turned about to go back. Bill was himself again and said we had work to do. He did some work on the engine in the morning and spent most of the afternoon on wiring while I was at the helm, sometimes under sail then motoring for a spell. The ship to shore radio, as well, was giving him some trouble, perhaps due to moisture. At any rate later in the afternoon he was seriously admonished by the coast guard for using the call/distress channel to do his checking out of the set. Unfortunately, he did not have the crystal needed for the working channel used in the area. It eventually became his raison d'etre for going ashore at every little port that we visited and for searching out a radio store to obtain the required crystal.

"It's good to have a specific purpose to go into town," he explained.

Seemingly worried about his radio, he was in a poor mood which resulted in an stern order to straighten up the fore cabin where I had spread out a couple of things from my duffle bag in an attempt to dry them out. Meanwhile, his own sleeping bag and things were thrown aside on his quarter berth in order for him "to do his work".

By 6:30 Bill informed me that he was giving up and put his tools away. It was time for supper at any rate, and I actually found myself rather hungry, something that had not happened much thus far since we left. Talking about suppers or the disinterest in having a good meal over the last few days, I told Bill,

"Seven days of that would make one weak," but he neither understood or saw any humour in it. He only seemed happy when playing captain.

Another fishing trawler came by, turned off its course and passed us at close quarters. Nosy fellows. Still, it was reassuring to know that they checked in case we were in trouble. It occurred to me that they might have tried to contact us by radio, but Bill did not have the correct working frequency.

By nine in the evening I was alone in the cockpit again. Supper was finished and Bill had retired to his berth. At twelve I would catch a little sleep myself, but it became 12:30 because Bill decided he had to do some navigation first.

By four in the morning of Friday I was back at the helm again. Bill was soon sound asleep down below, and the sea was calm with light air. The sails were up, the motor silent, and a bright moon was just setting in the west. By five-thirty a beautiful sunrise graced the eastern sky and while the self steering vane working adequately, I had time to do some writing to finish a letter home.

The was no sight of any shore lines, though we expected to make landfall that day. We spotted several boats in the area, both freighters as well as the odd fishing vessel. I should have

known that a red sky in the morning meant sailors' warning, but while around seven the sky started to cloud in and a light fog rolled in over the water, the wind remained very light. Under sail we barely made three knots.

One casualty of the stormy days mid week was the black and white film in my camera. It was sticky and would not rewind. Instead I removed it from the camera under the sleeping bag where hopefully it was dark enough to prevent it from being slight-struck. Later it turned out to be completely ruined. The radios, too, continued to have problems for a time as a result of the excessive moisture.

By about noon we detected the sound of the fog horn on the south east point of Block Island. The radio beacon now was also easily picked up on our radio direction finder. We knew where we were and were dead on course. There was no doubt in my mind that Bill was an excellent navigator.

The curious phenomenon was that as we sailed closer to the island, and spotted the lighthouse high up on the cliff, we could no longer hear the fog horn. The sound of it, coming from an elevation of 201 ft., was passing aloft and over our heads.

We tied up in the Old Harbour at about five in the afternoon at the dock in front of New Ballard's Inn, a large establishment complete with dining room, lounge and hotel facilities. We caused a bit of a stir. We were quite the curiosity among the people ashore who came to have a look. We must have looked rather worse for the wear after a week at sea, particularly with all our paraphernalia lashed down on deck. There were a lot of questions about our self steering gear, but I also overheard many such comment as, "Look at that small thing! On your way to Bermuda, you said?"

At one point two attractive looking young ladies walked by and stopped to have a look at us. Just then Bill popped his head out of the main hatch, and smiled,

"Oh hi girls. Would you like to come aboard. I am just washing some dishes. Would you like to come down below to help?"

"No thanks," they replied and quickly walked away. So much for female company on board for the evening.

The harbour was a busy one. Among the many pleasure crafts was a large sailboat tied up further down. Its skipper came over to chat with us and promptly invited us to have supper with them aboard their vessel. At their boat he introduced himself and his wife as George and Mary Diamond from New Jersey. The rest of their party consisted of a Canadian lady from Kitchener, an artist they called Justin and who, they said, hailed from Bagdad, and a younger gal by the name of Mary. We joined them in a meal of Boston blue fish, caught fresh that very day, over rice, together with a large serving of fresh salad, a veritable feast after eating from cans for a week. The visit lasted most of the evening, together with good conversation and a glass of wine. Back at our boat we had our first full night of sleep in a week, though interrupted occasionally by the ruckus outside. The Ballard's Inn, which charged us \$6 docking fee, was, together with various other establishments, doing a thriving business that evening, contributing to much noisy intoxication on shore. We heard the dance band well into the night, while the occasional commotion of summer time revellers outside, often right next to us it seemed, interrupted our otherwise welcome respite. In the morning we were to set out on Bill alternate plan, that of cruising the New England coast and visiting the various ports, but that is the subject of the next instalments. To be continued.

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