



FAIRWIND YACHT CLUB

July 2018

Editor: Ken Hoover

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Commodore's Log

Only Good News To Report As Club Hums Into Summer; Elections Coming Up

By Richard Windebank
Commodore

Our ByLaws require that we hold a Membership meeting at least every quarter and on Saturday, June 9, we held ours for the third quarter of this year. Third, because our financial year runs from October 1 thru September 30.

After much deliberation about the venue, we decided to hold it at Santa Monica Windjammers Yacht Club, in Marina del Rey. We were tempted to find a venue in or near Malibu, but we thought we would have a better chance of a quorum, if we held it concurrently with the MDR Work Day and Open House, which now happens on the third

Saturday of each month.

That plan worked out well, because we had 63 regular members in attendance, well in excess of our required quorum of 48.

Both Port Captains gave very positive updates on their respective harbors. Our Membership numbers are solid, with neither Harbor looking to grow significantly above our current levels. That's always a dilemma because we want others to enjoy the benefits we all enjoy so much but we don't want to grow to a point where the administration becomes unduly burdensome on our volunteers.

Both harbors have great fleets of boats, being well looked after by our Rear Commodores and their teams of Boat Captains and all the support groups they have. Neither harbor has encountered any significant incidents, touch wood, so our safety record is showing positive results from all the efforts that have been put in place.

Cruising is also brisk in both harbors, thanks to the enthusiasm of our Cruise Directors.

Following the Members meeting on Saturday, we have appointed a Committee, under the Chairmanship of Alan MacGovern, to review the By Laws and Standing Rules and make recommendations to the Board. The committee includes Ken Murray, Mike McKinsey and Hal Cohen. Both of these documents would benefit from careful revision because there are a number of inconsistencies, and even conflicts, between them.

Our next quarterly meeting will be held in Calabasas, on Saturday, September 15. This is a new venue for us, which is roughly equidistant between the two harbors. By then, we will have concluded the election for Directors and Officers for the 2018/2019-year. If you intend to run, or want to encourage someone else to run, now is the time to start the nomination process. The Nominations Committee will send out notices shortly, outlining the time frame and the procedure.



The Boys and Girls Club of Venice summer sailing program is in full swing. Fairwind volunteers Uta Buschor, Rich McCarthy and three smiling kids prepare to cast off.

Fairwinders Cast Off For Catalina And a Couple Of Sips Of Fine Wine

By Ron Sasiela and Ken Hoover

A few hiccups failed to deter a group of intrepid Fairwinders from enjoying a club cruise to Two Harbors on Catalina Island and a visit to the 17th annual wine festival.

Two boats cast off Friday morning, June 1. Kestrel, one of the club's Catalina 320s, was skippered by Ron Sasiela, and Tardis, a Catalina 380, was under the command of Ken Hoover.

Both skippers had the advantage of pleasant and competent crews. Kestrel was manned by Joe Carter, James Lathrop and Patrick Mallen. Aboard Tardis, Hoover was ably assisted by Cruise Chair Arlene de Anda, Larry Burch and Bennett Samson. Samson's contribution is worth special mention. His to-die-for brownies ensure he will receive many sailing invitations.

Kestrel's first mishap occurred as Sasiela was passing provisions below. The companionway stairs collapsed beneath him. It turned out the screws fastening the steps to the bulkhead failed, sending the stairs to the cabin floor.

"When I looked down at those stairs lying below me," Sasiela said, "I realized that if I followed them, a broken bone or worse would follow. Three things I had been working on kicked in, balance, reflexes and strength. They all came together, allowing me to avert dropping and instead I grabbed the handholds, got my feet onto the countertop and engine cowling and came safely to rest there."

Harvey Chao, aboard nearby Calpyso, came to the rescue and refastened the screws into epoxy-filled holes. Sasiela rigged a sling to prevent a repeat failure during the cruise.

After an hour's delay, Kestrel was underway in an attempt to catch Tardis.

But Tardis enjoyed a fine sail, her genoa unfurled and her engine shut down right out of the marina entrance. The engine came on for a time off the Palos Verdes Peninsula, before a fair breeze piped up as Catalina's rugged hills



Arlene de Anda needs extra height to steer Tardis on a homeward course.

emerged from the haze. The conditions couldn't have been better, and Tardis was in her element, slicing through the water at 7 knots.

Aboard Kestrel, navigator Carter set a course of 175M and practiced his navigation skills, plotting a course through the often busy shipping lanes that connect Asia with the ports of Los Angeles and Long Beach. No big ships were sighted on this day.



Ron Sasiela extracts a piece of slimy seaweed from Kestrel's raw water filter.

Kestrel's second mishap occurred on the return voyage. She radioed Tardis to say she had shut down her engine because of overheating. No matter. The sailing was good, and the skipper and crew quickly found the problem. A foot-long piece of seaweed had lodged in the raw water strainer. It was removed.

By late afternoon Friday, both boats were comfortably tethered to moorings, nestled on the west side of Isthmus Cove. That's the place to be, sheltered by a bluff from the westerly wind. Snorkelers also find the underwater scenery best there.

Saturday saw a full day on the island. Carter and Lathrop undertook a vigorous hike. In the afternoon, Fairwinders were among attendees at the wine festival. Twenty-two wineries were pouring from two to 20 selections along with two beer breweries. Ample food came with the cost of admission along with a band, which some revelers danced to as the uninhibiting effect of the alcohol kicked in.

Saturday night was dessert night for both crews aboard Tardis, but even that was not without incident. Sasiela leaned back too far in the inflatable dinghy and soaked his back. First mate Patrick had to help him back onto Kestrel. The takeaway: Wear your PDF in the dinghy.

James also lost his prized flashlight boarding Tardis. He braved the chilled water Sunday morning and spent an hour in vain trying to recover it.

"It's given me good reason to return," he said later. "I know it's under mooring Bravo 8."

For Hoover, the cruise was a bit of a milestone. Health problems sidelined him most of last year. The cruise was meant to prove to himself he had recovered enough to handle a big boat on a three-day cruise. As he eased Tardis into her slip in Basin G late Sunday afternoon, he knew he had.

To Turn On The Anchor Light Or Not Turn On The Anchor Light; That Is The Question

By Lenox Grasso
ASA Instructor Coordinator

Every so often, like now, I hear from a sailor who does not switch on his/her boat's anchor light in a designated anchorage. It is always a good idea to switch it on when anchored, but if battery life is a real concern, *The Code of Federal Regulations*, Title 33, Chapter I, Subchapter I, Part 109, Section 109.10 states that, "An Act of Congress of April 22, 1940, provides for the designation of special anchorages wherein vessels not more than sixty-five feet in length, when at anchor, will not be required to carry or exhibit anchorage lights". This authority was transferred over to the Secretary of Homeland Security in 2006 who then delegated it to the Commandant of the USCG who then also delegated it to each USCG District Commander.

Just because an anchorage area is on a chart, even if it is administrated by a municipal or state government, it does not always mean that the Secretary of Homeland Security, or whomever s/he has delegated the authority to do so, has designated it as a special anchorage. It is a decision that is made at the federal level. So, just switch on your anchor light! Doing so may also make your boat easier to find when coming from shore at night in a dinghy.

A Quick Quiz On Sound Signals At Sea

For a sailboat sailing in restricted visibility, such as fog, USCG Rule 35 requires that the following signal shall be sounded:

- A) One long blast followed by one short blast no less often than every two minutes.
- B) One long blast followed by two short blasts no less often than every two minutes.
- C) A bell rung rapidly for five seconds no less often that every one minute.
- D) One prolonged blast no less often than every one minute.
- E) One prolonged blast followed by two short blasts no less often than every two minutes.

The correct answer is (E). There is no such thing as a long blast so answer (B) is incorrect. One way to tell your students to remember this rule is to say, "HHeerrree, I am!". That's one prolonged word followed by two short ones.

--Lenox Grasso

Here's Some Tips To Help You Become A Master Of Docking And Avoid Accidents

Michael Adams

CIH Safety Officer

Many, if not most Fairwind boat incidents occur in the harbor. We obviously would like to avoid any and all incidents. Below are some tips based on past incidents and general observations.

- Start up the engine well before you need it to dock. I recommend doing this while in the channel coming into the harbor and definitely while still under sail. This gives you plenty of time to come up with a plan should the engine not start. Let it warm up for a few minutes so it idles smoothly, and it will be there when you need it. Check the gauges for water temperature, and oil pressure, if an oil pressure gauge is present. We had an incident recently where the skipper dropped the sails, and then tried to start the engine. When the engine didn't start, the boat was blown into other boats.
- I recently heard an old adage used by the 4x4 off-road community that says, "Go as slow as possible, and as fast as necessary". This adage is followed so your Jeep or other off-road vehicle is not damaged by rocks. When I heard this, I thought this is also the perfect adage for docking boats. Going slow prevents damage should contact with the dock occur. Going slow also makes the boat easier to stop with reverse thrust from the engine once in the slip. Going as fast as necessary maintains steerage and a steady course into the slip. If you balance those two, you will prevent docking incidents.
- We have had several incidents where skippers have placed their boats to the far-right side of the channel only feet from docked boats, and were blown into the docked boats by wind gusts. That's about as safe as driving your car on the shoulder of the road. Put your boat just to the right of the centerline of the channel in the middle of the "lane" as you would your car. Give yourself a buffer.
- While it is good to have crew as spotters, ultimately, it is the skipper's responsibility to bring the boat safely into the slip. Ask crew members to change position if they are blocking your forward view.
- Check the wind direction before coming into the slip. Wind from the port side will push the bow to starboard, and vice versa. This information is also helpful for knowing what side of the slip you will be blown into once stopped.
- Never allow your crew to jump off the boat onto the dock to stop the boat. We had a club member seriously injured doing this. Even a Capri 22 with no crew on board weighs over one ton. That's like trying to stop a small car. It is the skipper's responsibility to bring the boat into the slip safely, and to stop the boat with the engine.

- Have a plan should the engine stall going into the slip. Have your boat hook ready. If you are going slowly, this is generally not a huge problem.
- If you are coming into a side tie slip, such as at the fuel dock or pump out dock, put all the fenders on the dock side for maximum protection of the boat.
- Get proficient at using the throttle and gears. Always close the throttle before going in and out of gear.
- If you haven't sailed a particular boat in a while, or are new to a boat, take a few minutes to test how the boat turns in each direction while out in the harbor basin. Practice backing up. I've never heard a crew member complain that a skipper was taking time to get the feel of the boat. If anything, they are probably a bit relieved.
- Finally, if you don't feel comfortable going in and out of the dock and harbor, contact the Rear Commodore for docking training.

You are likely to get praise for identifying your weaknesses and asking for help, which is a lot better than reproach for having an incident. Sailing is a lifelong learning experience, and the club is here to help each of us learn.

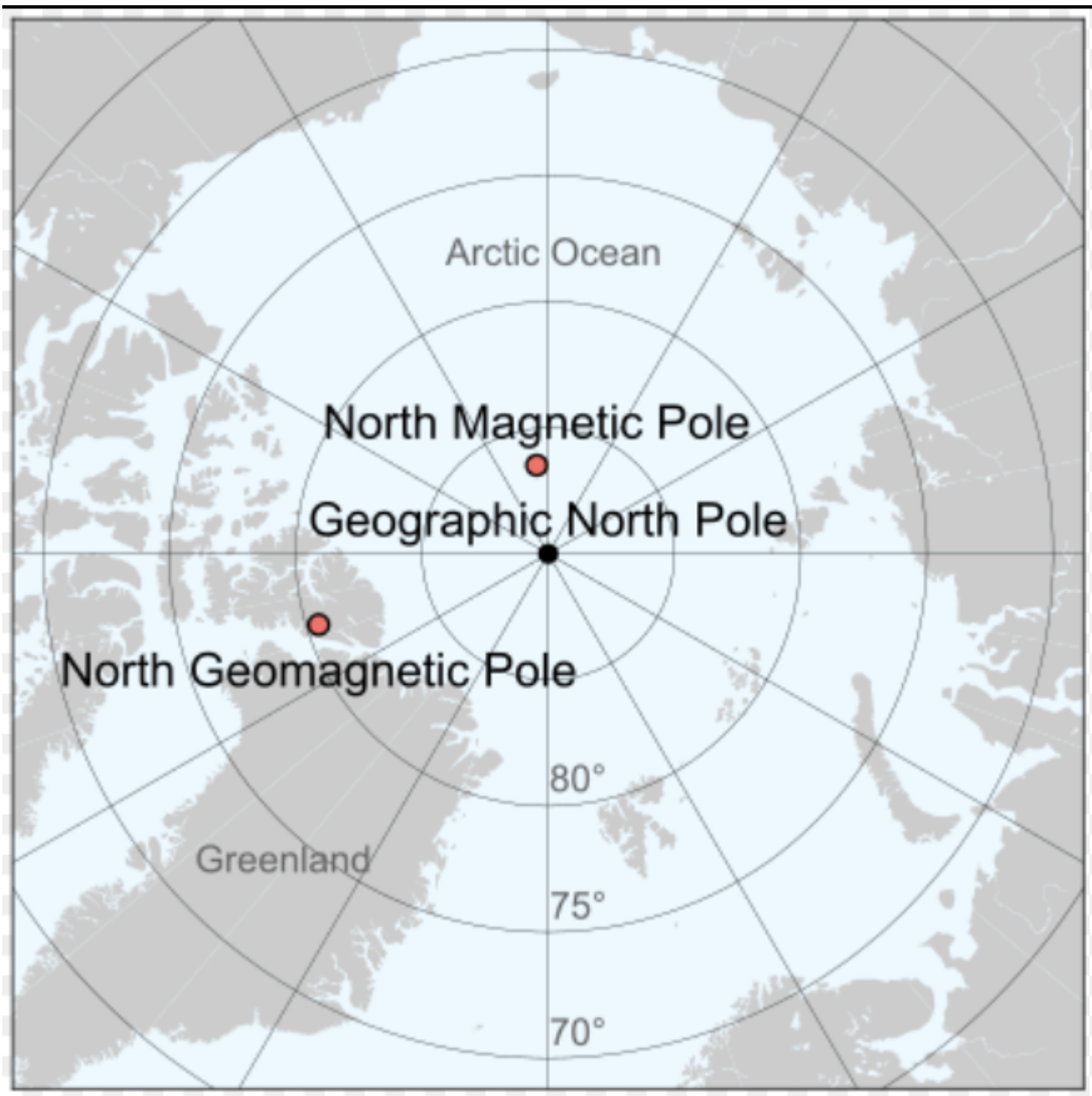
Everything You Didn't Know – Or Forgot – About North

By Lenox Grasso
ASA Instructor Coordinator

In 2018, the Earth's Magnetic North Pole, a wandering location where lines of magnetic force enter the Earth perpendicularly, is predicted by computer modeling of satellite data to pass closer to the Geographic North Pole than at any other time in its recorded history after English philosopher William Gilbert first calculated its existence in 1590 (published in 1600).

Since then, through 1831, when British Naval Officer James Clark Ross became the first to reach it physically, and up until 1898, the Magnetic North Pole has meandered aimlessly through the islands and waterways of northern Canada. But since 1898, it has been moving steadily north-northwestward. At the beginning of the 20th century, it changed about 5 miles each year.

Then in 1970, it began to move faster. Today, the Magnetic North Pole moves about 25 miles each year. Soon, it will be at 86.471 degrees N Latitude and 178.755 degrees W Longitude, a distance less than 212 nautical miles away from the Geographic North Pole. By 2019, the Magnetic North Pole will be across the International Date Line, into the



eastern hemisphere, and falling away from True North toward Siberia.

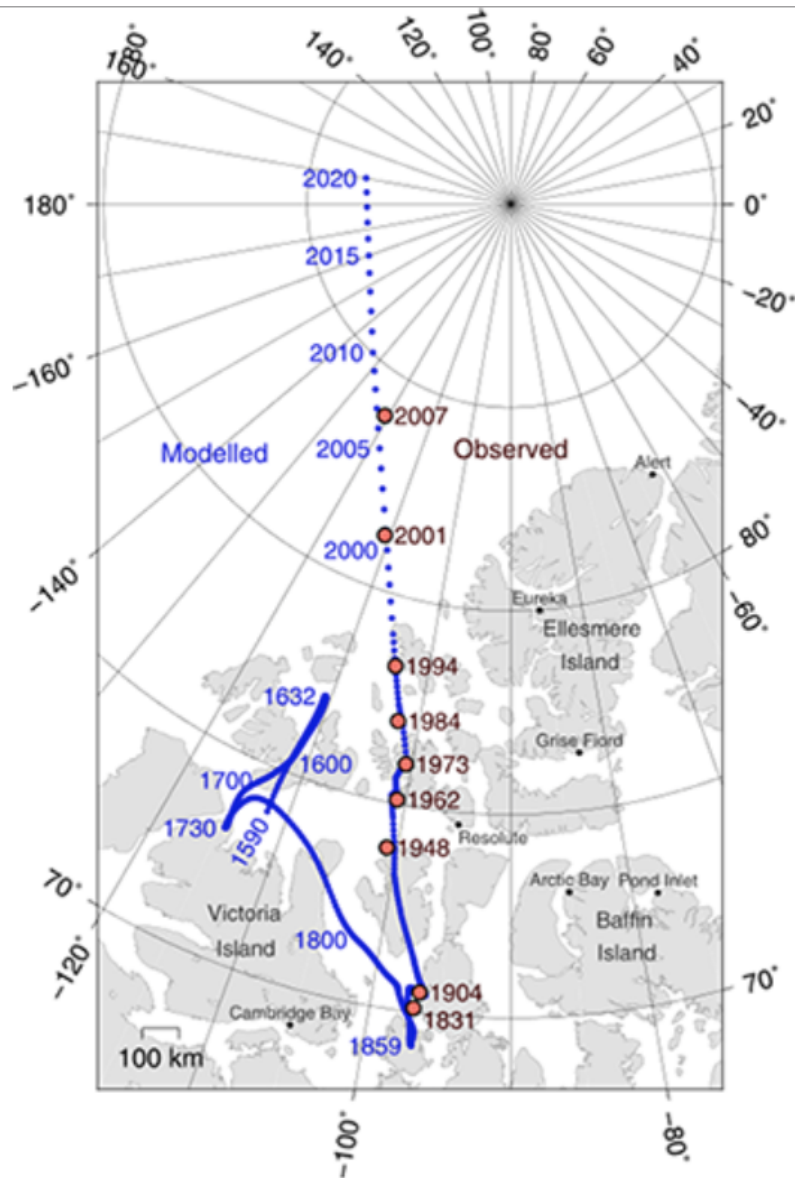
The reason we, as mariners and navigators, are interested in this is because of magnetic variation and its effect on our ship's compass. Variation, the "V" in "add East < T | V | M | D | C > add West", is a force outside our ship, stemming from our position on the Earth's surface. It is the angular difference between our geographic and magnetic meridians, expressed in degrees East or West. More simply, it is the difference in degrees between what our compass "feels" as Magnetic North versus True North. For sailors on the East Coast of the United States, the variation in the compass rose on nautical charts is West. On the West Coast, variation is East. For sailors on western Lake Superior and along the

Gulf Coast off lower Alabama, there is no variation. Boats on these waters are on an agonic line where Magnetic North and True North just happen to line up on the same geographic meridian.

There are actually eight north poles. This discussion disregards five of them: the Instantaneous North Pole, the Celestial North Pole, the North Pole of Balance, the North Pole of Inaccessibility, and North Pole, Alaska. The last is a suburb of Fairbanks far from the other north poles, but it is the one important to American children at Christmas. We care about these three: the Geographic North Pole, the Magnetic North Pole, and the Geomagnetic North Pole.

First, the Geographic North Pole. This is True North, the northernmost point of the Earth as determined by the northern tip of its imaginary rotational axis. It is a mostly fixed point, subject to only thirty feet of wobble every 433 days. This is the top of the world, 90 degrees North Latitude. All the great circle meridian lines of longitude converge here, as do all of the world time zones. Standing (or floating) at this spot, North, East, and West no longer exist! The only way for explorers who vanquish three cardinal points of the compass to leave this place is to step South. It does not matter which way to step because in every direction the only direction is South.

Next, the Magnetic North Pole. The northern end of a magnetized compass needle frequently points here. It is not located at the Geographic North Pole, but it's close enough to be useful in navigation. The reason it moves about 25 miles each year is due



to earthquakes, electrical fluctuations in the Van Allen radiation belts, the ionosphere, and the magnetosphere, but it is mostly due to our planet's internal physical structure. Earth's magnetic field originates in its core. The inner core is probably solid iron. Surrounding the solid inner core is a molten outer core of liquid metal alloys, mostly iron and nickel, that lies about 1,900 miles beneath our feet. Next out is the mantle, which is solid but malleable, and then what we see every day, land and sea, is the crust. As the Earth rotates on its axis, the inner and outer cores rotate too, but each at a different rate, which creates a geo-dynamo effect. Immense heat from the inner core, hotter than the surface of the sun, caused by radioactive decay and the conversion of potential energy in heavy metals sinking down to the inner core, drives the motion of the liquid metals in the outer core. Convection currents of moving molten metals generate electrical currents that produce the Earth's magnetic field. And because the source of the Earth's magnetic field is moving, the Magnetic North and South Poles move as well. If the Earth's magnetic field were generated by a large, powerful, solid, dipole (two poles), bar magnet within the solid inner core, instead of by moving molten metal alloys in the liquid outer core, the Magnetic North and South Poles would remain mostly static.

Anyway, Earth's magnetic field emerges from the outer core vertically at the Magnetic South Pole, extends out into space, and re-enters perpendicularly, at the Magnetic North Pole. A compass needle dips there, trying to point straight down. Accordingly, this pole's alternate name is the Magnetic Dip Pole, not to be confused with dipole. At the Magnetic South Pole, a compass needle jumps upward. I was there once by boat - the Magnetic South Pole has been off the coast of Antarctica since 1962 - and a compass needle really does try to point upward!

Last, the Geomagnetic North Pole. The electrical currents created by the convection currents of moving molten metals that generate Earth's magnetic field are not evenly distributed throughout the liquid outer core. Due to this, the strength of Earth's magnetic field varies from place to place underground. It is also the reason that the Magnetic North and South Poles are not antipodal, meaning that the imaginary line connecting the two does not pass straight through the center of the Earth. All of these factors combine in such ways that the parts of the Earth's magnetic field that emerge from the bottom of the world that are not perpendicular, do not also emerge at the Magnetic South Pole as the perpendicular lines of force do. Instead, the spot where they do emerge, at the South Geomagnetic Pole, and the spot where they re-enter the planet, at the North Geomagnetic Pole, are derived mathematically as a best fit for the imaginary ends of a solid, dipolar, bar magnet that account for the properties of the Earth's magnetic field, both on the surface and around the planet.

Once up out of the ground and above the Earth, the magnetic lines of force from the Geomagnetic South Pole, even out more uniformly. They are not perpendicular nor even all that vertical. Extending out into space, they curve northward to surround and protect

the Earth from the solar wind as the magnetosphere, the northern part of which glows in the solar wind as the Northern Lights of the *Aurora Borealis*. North of the Arctic Circle, they curve downward once again and re-enter the Earth as the Geomagnetic North Pole, located on Ellesmere Island in Canada, northwest of Greenland, to form closed loops of magnetic force. The Geomagnetic North Pole also moves around from year to year, not as much as the Magnetic North Pole, but for the same reasons.

Although a mathematical derivation, the Geomagnetic North Pole is real enough. Like the Magnetic North Pole, the north end of a compass needle likes to point there too. Truth be told, most of the time, compass needles actually point to somewhere near the top of the world between the Magnetic and Geomagnetic North Poles. One last point, if the Earth's magnetic field were generated by a large, imaginary, solid, dipolar, bar magnet that passed through the center of the Earth inside its solid inner core instead of by electrical currents from moving molten metals in the outer core, the Magnetic North Pole and Geomagnetic North Pole would be at the same location. The perpendicular lines of magnetic force would be at dead center of the ones that are curve away (not perpendicularly).

Most compasses sold are devised to work best in the northern hemisphere. A magnetic binnacle compass has a free-spinning compass card that aligns with an agonic line or an isogonic line of the Earth's magnetic field. Electronic fluxgate compasses measure the relative strength of electromagnetic flux passing through two coils of wire arranged perpendicularly to deduce the direction of the Earth's magnetic field. The Earth's magnetic field intensity is between 25,000 and 65,000 nano-teslas (0.25 to 0.65 gauss). By comparison, a strong refrigerator magnet has an intensity of about 10 million nano-teslas (100 gauss), some 150 to 400 times stronger than the Earth's magnetic field.

Finally, about the elephant in the room. On that day back in grammar school when we sprinkled iron filings on white paper laid over a dipole magnet, we learned that magnetic lines of force flow from a magnet's north pole to its south pole. Also, we learned that opposite poles attract and like poles repel. So, why would the Earth's magnetic field emerge from its Magnetic South Pole and re-enter the planet at its Magnetic North Pole? And why would the north ends of magnetized compass needles all over the world want to point North? Well, it does not, and they do not! The Magnetic North Pole of the Earth is really its Magnetic South Pole! Scientists prefer to side step this misconception by referring to the Magnetic North Pole as the Magnetic North Seeking Pole, as if to say that the magnetic patterns of force emanating from the Magnetic South Pole (really the Magnetic North Pole), are seeking the pole in the northern hemisphere, regardless of its polarity. The same is true of the Geomagnetic North and South Poles as well.

If this is disillusioning, it may be gratifying to learn that some scientists believe the increased rate of movement of the Magnetic North Pole may signal the early stages of a geomagnetic field reversal where the Magnetic North and South Poles would flip and

exchange places, perhaps back into their "correct" positions. Rocks have revealed that at least 184 geomagnetic field reversals have occurred over the last 83 million years, roughly between every 100,000 to one million years, and that these reversals have each required between 1,000 and 10,000 years to complete. The last complete and enduring geomagnetic field reversal occurred 786,000 years ago, and it may have occurred within the span of a single human lifetime! A brief temporary reversal occurred 41,000 years ago during the Ice Age but lasted only 440 years before reverting. The hypothesized triggers of these geomagnetic field reversals are extra-terrestrial extinction-level impact events, continent-size rock slabs sinking down into the boundary between the mantle and the liquid outer core, plate tectonic subductions, or any other event that may have caused a large-scale disruption of the moving molten metal geo-dynamo running in the liquid outer core, weakening the Earth's magnetic field, making a re-arrangement of the Earth's magnetic field more likely, leading even to a complete geomagnetic field reversal.

Membership Guide: Where To Go For What

Update Contact Information for Membership Roster – Lynn Erickson for CIH, Bruce Gale for MDR

Pay Dues – Fairwind Yacht Club, P O Box 12684, Marina del Rey, CA 90295

Training and checkout - Fleet Captain (Sean Comstock for MDR, Kelley Henaghan for CIH)

Report an Accident - Safety Officer/Rear Commodore (Ron Sasiela/Steve Fenster for MDR; Michael Adams/Hal Cohen for CIH)

Gear broken on boat - Specific Boat Chief (from Fairwind Website) + Rear Commodore (Steve Fenster for MDR; Hal Cohen for CIH)

Cruising: Cruise Chair (Arlene de Anda for MDR; Scott Kelly for CIH)

Racing: Race Chair (Mike McKinsey for MDR, TBD for CIH)

Submit Articles for Newsletter – Editor, Ken Hoover kenhoover@me.com

FYC Officers - www.fairwind.org

Coast Guard - Channel 16 or [310-732-2043](tel:310-732-2043)

VHF Calling Channels – Channel 16 or DSC call to group 032479463 (programmed in all club radios, should reach all boats in range)

Updates to website: webteam@fairwind.org

Fairwind on Facebook: www.facebook.com/Fairwindyc

Next CIH Open House – Sunday, July 15

Next MDR Open House – Saturday, July 14