

THE DRUM

From the Commander

Charlie Fausold, N-IN



I have changed my photo at the top of this column (for one time only!) to illustrate how much boaters are impacted by change. Just as the technology of boat construction, propulsion, and personal flotation devices (today's designs are just a bit more stylish!) have evolved, so too must our boating institutions including the Seneca Sail and Power Squadron.

As reported previously in this space, your squadron leadership has been hard at work during the past year developing a Strategic Plan for 2014-2018. Key to the process has been input and ideas gleaned from innumerable informal dockside conversations, a survey of general members, a Saturday brainstorming session, and several spirited discussions at

Executive Committee meetings where we tried to make sense of it all.

The result is a roadmap for the future. Not radical change, but commonsense things we can do to keep our squadron strong and vital in the years ahead, as USPS enters its second century. A common thread running through many of the action steps involves creating opportunities for more members to get involved in squadron activities, guided by their interests and availability.

There will be a special presentation of the highlights of the strategic plan at our Change of Watch celebration on January 19th (see elsewhere in this issue for details). I think it is fair to say that those of us who have been working together on the plan have been infused with a new spirit of renewal and excitement, and I hope you will join us to see what it is all about. If you cannot make it then, the plan will be posted on our website after the meeting.

Finally, as we prepare to close the logbook for 2013, I would like to thank the Bridge Officers, Executive Committee

JANUARY 2014



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<http://www.SenecaPowerSquadron.US>

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<http://facebook.com/SenecaPowerSquadron>

members, course instructors, event organizers, and everyone else who volunteered on behalf of the squadron this year. I wish all of our members an enjoyable holiday season and smooth sailing in 2014!

Fair winds,

- Charlie

Squadron Burgee Heraldry

By Charlie Fausold, SV Morning Glory

Ever wonder why our Squadron Burgee looks the way it does? There is a great deal of symbolism, tradition and history that goes into the design of a burgee. Here are the facts around Seneca's:

The blue background of our pennant represents the deep blue waters of Lake Seneca, the deepest of all the Finger Lakes, and denotes loyalty to the principles of the United States Power Squadrons. The golden compass rose is symbolic of the mariner's compass and indicates that knowledge is more precious than gold in sailing a true course. The red semicircles represent the Squadron's place in the Sun, divided into the Eastern and Western Hemisphere, illustrative of the origins in the East,

its spheres of activity in the West, and so positioned to suggest the letter "S" for Seneca.



From the Executive Officer (XO)

By Mark Erway, Executive Officer

The days are getting longer already!!! My list of maintenance items, repairs and upgrades continues to grow and at some point I've got to make the decision to keep some things on the list and move other ones to my



2015 list. Highest on my list is making sure safety items are up to date, such as flares, fire extinguishers, first aid kit, and CO₂ cartridges for the inflatable life vests. Last summer Annie and I took "Partner in Command" and among things I learned there was that the standard red flare really can't be seen that well in bright sunlight, but that the orange smoke flare was highly visible. While not cheap, we have added the orange smoke flare to our update list for 2014. These are all listed on the Vessel Safety Check and when you get your safety check this spring you'll want to make sure everything is set to go. Please encourage your dock-mates to get a vessel safety check as well; they're free and non-binding, and may help you uncover an issue you weren't aware of.

Our Commander, Charles Fausold, has led our Squadron in developing a strategic growth plan for the next four years, and it is a very well thought out plan. Keeping our focus on education, training, safety, and personal connections, the plan should help us grow and remain a viable resource as "America's Safe Boating Club". We will continue to share information about the plan throughout the year after it is rolled out at the Change of Watch on January 19th. I want to encourage every Squadron member to come to attend this special event, and bring a friend or another boating person you know. With our boats up on the hard, this is the time of year to plan how we can enjoy summer boating fun even more.

The U.S. Coast Guard publishes boating statistics yearly, and the stats for 2012 were made available in May of 2013. They are a reminder of where the biggest dangers are. The one that really stands out is that 71% of fatalities were drownings and that 85% of those victims were NOT wearing a life jacket. We don't like wearing them because we don't look cool, or they're not comfortable, but we all know it takes only a second to trip and fall, or to have a wave or wake make us lose balance and go overboard. Annie and I both wear West Marine

From the Executive Officer (con'd)

Coastal self-inflating vests all times that we are underway. Nobody wants to get stuck wearing those gaudy orange things (especially our guests and even more with the kids), but if we'd make an investment in something that is a bit more stylish and very effective, perhaps this statistic could be lowered.

2012 EXECUTIVE SUMMARY - United States Coast Guard, published May 13, 2013

- In 2012, the Coast Guard counted 4,515 accidents that involved 651 deaths, 3,000 injuries and approximately \$38 million dollars of damage to property as a result of recreational boating accidents.
 - The fatality rate was 5.4 deaths per 100,000 registered recreational vessels. This rate represents a 12.9% decrease from last year's fatality rate of 6.2 deaths per 100,000 registered recreational vessels.
 - Compared to 2011, the number of accidents decreased 1.6%, the number of deaths decreased 14.1% and the number of injuries decreased 2.6%.
- Almost seventy-one (71) percent of all fatal boating accident victims drowned, and of those, almost eighty-five (85) percent were not reported as wearing a life jacket.
- Almost fourteen percent (14) of deaths occurred on boats where the operator had received boating safety instruction. Only nine (9) percent of deaths occurred on vessels where the operator had received boating safety instruction from a NASBLA- approved course provider.
- Seven out of every ten boaters who drowned were using vessels less than 21 feet in length.
- Operator inattention, operator inexperience, improper lookout, machinery failure, and excessive speed rank as the top five primary contributing factors in accidents.
- Alcohol use is the leading contributing factor in fatal boating accidents; it was listed as the leading factor in 17% of deaths.
- Twenty-four children under age thirteen lost their lives while boating in 2012. Ten children, or approximately forty-two (42) percent of the children who died in 2012, died from drowning. Two children or twenty (20) percent of those who drowned were wearing a life jacket as required by state and federal law.
- The most common types of vessels involved in reported accidents were open motorboats (47%), personal watercraft (19%), and cabin motorboats (15%).
- The 12,101,936 recreational vessels registered by the states in 2012 represent a 0.59% decrease from last year when 12,173,935 recreational vessels were registered.

SAFE BOATING!

- Mark, SV A Fresh Breeze

From the Treasurer

By Dawn Dowdle, Squadron Treasurer

Seneca Sail and Power Squadron continues to be solvent.

The Squadron's annual audit is scheduled to occur in January.

- Dawn, SV Irish Wake



Educational Updates

By Tom Alley, Education Officer

Hi, Everyone! I hope all of you had pleasant and restful holidays this past Christmas and New Year's!

In early January we will start Advanced Piloting. I'm pleased to report that we have nine students signed up already. It's not too late to sign up. Details are below, but don't wait! (Shipping textbooks overnight to get them here on time gets expensive!)

I'm still looking for some feedback from our membership for elective courses and seminars that you would like to see offered. What interests you? Send me your requests and, if we have several folks that share a common interest, we'll run a class or seminar on the topic!

Details as to what's queued up in our schedule so far:

Advanced Piloting

The second course in a series of four dedicated to the art and science of navigation. Advanced Piloting builds upon the topics covered in Piloting and builds them to where the student can navigate with confidence in coastal and tidal waters. As before, GPS is assumed to be the primary tools but traditional navigational skills are honed to meet the demands of coastal environments.

- Prerequisites: Piloting & Seamanship
- Begins: Friday, January 10th, 2014
 - Meets on various Thursday and Friday evenings based on room availability.
- Duration: 9 weeks
- Where: Big Flats Community Center
- Instructors: Charlie Fausold and Jim Morris
- Cost: \$75/student (USPS rate)

Instructor Development

A fun class that will help hone your public speaking skills along with giving you the knowledge you need to become a certified USPS instructor.

- Prerequisites: None.

- When: Starting at the conclusion of AP
- Duration: 4 weeks
- Where: TBD
- Instructor: Charlie Fausold
- Cost: \$0

Seamanship

A course which takes subjects mentioned in the ABC class and covers them in greater detail along with providing practical, hands-on, on-the-water instruction and experience.

- Prerequisites: None.
- When: Fridays starting mid-June 2014
- Duration: 9 weeks
- Where: Big Flats Community Center & Watkins Glen Village Marina
- Instructors: Tom Alley & Others
- Estimated Cost: \$90

Junior Navigation

The first of two offshore navigation classes that will prepare you to cross oceans. While still utilizing GPS, this course provides the fundamentals of celestial navigation and shows you how to obtain your position utilizing the sun.

This course requires classroom work as well as fieldwork during which you will collect celestial observations needed to complete the course. The squadron will provide sextants if you do not have one.

- Prerequisites: Advanced Piloting
- When: Fall 2014
- Duration: 10-12 weeks
- Estimated Cost: \$140-\$150

◦ ◦ ◦ ◦ ◦

Information about all of our courses is available on the squadron web site or by contacting me via e-mail at seo@SenecaPowerSquadron.US or by calling me at 607-377-6262.

The Digital Marine Frontier

Laptops, smart phones and tablets have saturated our lives to the point of becoming ubiquitous and as common as a wristwatch. These ultra-portable devices offer capabilities not even dreamed of a decade ago and are finding an increasing number of applications in all facets of our lives, including boating.

We want to make this column a regular one in this newsletter. To do so, we need your help. So, what's your favorite app? Tell us about it! - Ed.

Compass

By Tom Alley

OK, you've taken the Piloting and Advanced Piloting courses and now you want to practice what you learned in the classroom.



All you need is a hand-bearing compass, right? Look one up in the catalogs and, yikes! They're costly! But wait, doesn't your iPhone or iPad come with a compass app? Yes it does!

With iOS 7, the compass app has been updated and has some useful features for mariners. Open the app, calibrate the compass by following the directions on the screen, and then point it at the object you want to take a bearing of. Tap the center of the compass and then read the recorded bearing from the compass rose. Simple! And best of all - free with iOS. What could be better?

App Specifics:

- Requires: iOS 7 or later.
- Comes with iOS 7.

SENECA SQUADRON NEWS

Dates to Remember

January 19: Change Of Watch, Holiday Inn, Elmira

March 1: D6 Spring Council, Newark American Legion

March 28-30: D6 Spring Conference, Batavia

2014 Nominees

The following individuals have been presented by the Nominating Committee to serve as officers and executive committee members in the coming year:

Cmdr: Charlie Fausold, N

Exec Ofcr: Mark Erway, P

Admin Ofcr: Ray Margeson, P

Edu Ofcr: Tom Alley, SN

Asst. SEO: Jim McGinnis, P

Secretary: Jim Morris, JN

Treasurer: Dawn Dowdle, P

Exec. Committee:

Denis Kingsley

Jerry Tinz

Tom Taylor

Terry Stewart

Pat Jackson

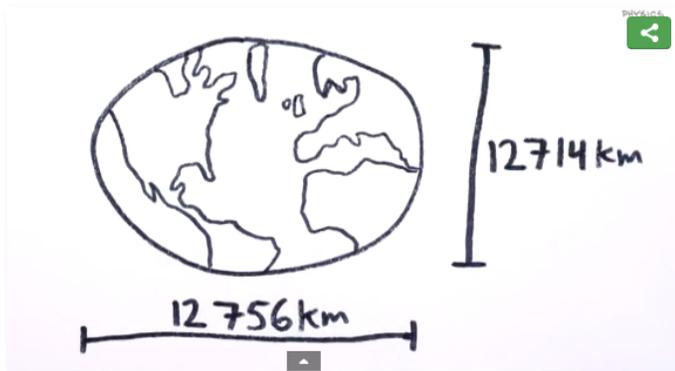
A Bunch of Stuff You Never Knew About Sea Level

As posted on Watts Up With That? By Anthony Watts

Sea level seems like a pretty easy concept, right? You just measure the average level of the oceans and that's that. But what about parts of the Earth where there aren't oceans? For example, when we say that Mt. Everest is 8,850 meters (29,035 ft) above sea level, how do we know what sea level would be beneath Mt. Everest since there's no sea for hundreds of kilometers?

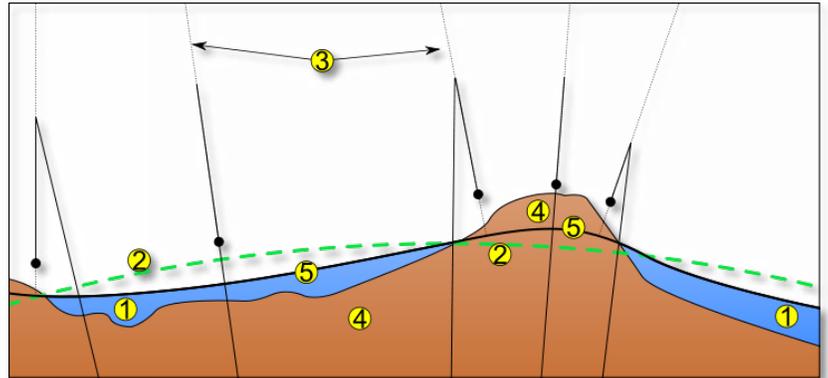
If the Earth were flat then things would be easy – we'd just draw a straight line through the average height of the oceans and be done with it. But the Earth isn't flat.

If the Earth were spherical it would be easy, too, because we could just measure the average distance from the center of the Earth to the surface of the ocean. But the Earth isn't spherical – it's spinning, so bits closer to the equator are "thrown out" by centrifugal effects, and the poles get squashed in a bit.



In fact, the Earth is so non-spherical that it's 42 kilometers (26 miles) farther across the equator than from pole to pole. That means if you thought Earth was a sphere and defined sea level by standing on the sea ice at the North Pole, then the surface of the ocean at the equator would be 21 km (13 miles) above sea level. This bulging is also why the Chimborazo volcano in Ecuador, and not Mt. Everest, is the peak that's actually the farthest from the center of the Earth.

So how do we know what sea level is? Well, water is held on the Earth by gravity, so we could model the Earth as a flattened and stretched spinning sphere and then calculate what height the oceans would settle to when pulled by gravity onto the



surface of that ellipsoid.

Except the interior of the Earth doesn't have the same density everywhere, which means gravity is slightly stronger or weaker at different points around the globe, and the oceans tend to "puddle" more nearer to the dense spots. These aren't small changes, either – the level of the sea can vary by up to 100 m (328 ft) from a uniform ellipsoid depending on the density of the Earth beneath it.

And on top of it, literally, are those pesky things called continents moving around on the Earth's surface. These dense lumps of rocks bump out from the ellipsoid and their mass gravitationally attracts oceans, while valleys in the ocean floor have less mass and the oceans flow away, shallower.

And this is the real conundrum, because the very presence of a mountain (and continent on which it sits) changes the level of the sea: the gravitational attraction of land pulls more water nearby, raising the sea around it.

So, to determine the height of a mountain above sea level, should we use the height the sea would be if the mountain weren't there at all? Or the height the sea would be if the mountain weren't there but its gravity were?

The people who worry about such things, called geodetic scientists or geodesists, decided that we should indeed define sea level using the strength of gravity, so they went about creating an incredibly detailed model of the Earth's gravitational field, called, creatively, the Earth's Gravitational Model. It's incorporated into modern GPS receivers so they won't tell you you're 100 m below sea level when

Sea Level (con'd)



you're in fact sitting on the beach in Sri Lanka which has weak gravity, and has allowed geodesists themselves to correctly predict the

average level of the ocean to within a meter everywhere on Earth. Which is why we also use it to define what sea level would be underneath mountains... if they weren't there... but their gravity was.

This article is a transcript of a video posted on <http://wattsupwiththat.com/2013/11/26/a-bunch-of-stuff-ill-bet-you-never-knew-about-sea-level>

Member Profile: Mark Erway

Hi, I'm Mark Erway, a life-long resident of Chemung County. I was a Navy Radioman, 3rd Class Petty Officer from 1969-1973, serving first for ComCruDesLant in Newport, R.I., and finishing up on the U.S.S. Little Rock CLG-4, with a Bluenose certificate for operations above the Arctic Circle. Annie and I were high-school sweethearts that got married in June 1970. We raised two boys, one of whom lives in Horseheads and the other is a missionary in Ghana, West Africa. I played bass guitar in rock bands and country music bands for 30 years. Worked for General Crushed Stone/Lycoming Silica Sand in the office and as an Operating Engineer, running a crushing plant and operating heavy equipment. Had a stint in Production Control for Ingersoll Rand, ultimately retiring from Hilliard Corporation as Manager of Production Control for the Hilco Division. My current occupation is serving as a United Methodist Pastor at the Pennsylvania Avenue United Methodist Church in Pine City and volunteering as leader of a local chapter of Celebrate Recovery. I have been involved in prison ministry and have led numerous mission trips to Honduras for Border Buddies Ministries, Inc., a 501(c)3 corporation, for whom I serve as Vice President.

My dad's family had a cottage on Starkey Point in the 40, 50's and 60's where I learned swimming, rowing, canoeing, small boating, fishing and the love of Seneca Lake. An amateur interest in geology grew from those surroundings as well, as we wondered about the layers of rock, and the incredible thought of ice being more than a mile

thick in that area, and listened for the Seneca drums. Over the years I became a Ham radio operator, holding a general class license as N2RZZ. Annie and I were deeply involved in historic reenactment of the fur trade era (pre-1840), which led to the founding of Land of the Senecas Muzzle Loaders Club, as well as being a founding member of the Chemung Valley Living History Association.

In 2011 we got into sail boating, my life long dream, when my good friend Scott Stevens told me all about the fun he was having and introduced me to Terry Stewart. It was all over then! We did lots of research, looked around the Village Marina and purchased and refurbished a 1974 CAL 25 that had been on the hard a few years. Together, Annie and I took Basic Seamanship and Sail offered by Seneca Sail and Power Squadron, and met tons of wonderful and helpful people. In 2013 we bought a 1986 Hunter 28.5 named *A Fresh Breeze* and are having a ball. Since then I've completed Piloting, Marine Electrical Systems and Marine Communications and am looking forward to the Advanced Piloting course coming up shortly. Annie and I also took "Partner in Command" which we found to be extremely helpful.

We love boating on Seneca and can't wait for spring, and to see the "gang" again. And though we get precious little time on our boat, every moment is as sweet as can be. This year we want to do some lake cruising, eventually navigating the locks and getting into Lake Ontario and beyond.

-Mark

Seneca Squadron 2014 Calendar (Proposed)

By the Seneca Squadron Executive Committee

January 2014

-
- 19 Change of Watch
Holiday Inn, Elmira
- 26-2/2 USPS Annual Meeting
Jacksonville, FL

February

-
- 18 Bridge Meeting (1900)
Kingsley's, Horseheads
- 21 Deadline for Drum Articles

March

-
- 01 D6 Spring Council
American Legion, Newark
- 18 Bridge Meeting (1900)
Location TBD
- 28-30 D6 Spring Conference
Batavia, NY

April

-
- 5-7 Spring Conference
Ramada Inn, Ithaca
- 15 Bridge Meeting (1900)
Location TBD
- 25 Deadline for Drum Articles

May

-
- 5 Dinner Meeting
Location TBD
- 20 Bridge Meeting (1900)
Location TBD
- 18-24 Safe Boating Week

June

-
- 17 Bridge Meeting (1900)
Location TBD
- 27 Deadline for Drum Articles

July

-
- 15 Bridge Meeting (1900)
Fausolds, Valois

August

-
- 19 August Bridge Meeting (1900)
Location TBD
- 29 Deadline for Drum Articles

September

-
- 03-08 USPS Fall Governing Board
San Antonio, TX
- 9 Monthly Dinner Meeting
Location TBD
- 16 Bridge Meeting (1900)
Location TBD
- ??-?? D/6 Fall Council
Location TBD

October

-
- 21 Bridge Meeting (1900)
Location TBD
- ??-?? Nominating Committee
Location TBD
- 24 Deadline for Drum Articles

November

-
- 03 Monthly Dinner Meeting
Location TBD
- ??-?? D/6 Fall Conference
Date and Location TBD
- 18 Bridge Meeting (1900)
Location TBD

December

-
- 03 Nominating Committee
Location TBD
- 16 Bridge/COW Planning (1900)
Location TBD
- 19 Deadline for Drum Articles

Calendars tend to be "living documents." For the latest information on squadron activities, please check our web site:

<http://www.SenecaPowerSquadron.US>

or our Facebook page:

<http://facebook.com/SenecaPowerSquadron>

for any last-minute changes.

Seneca Squadron – Who's Who?

Not sure who to contact with questions or suggestions for *your* squadron? Well, here's a list to get you started!

Commander: Charlie Fausold
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607-725-0373

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607-358-4409

Treasurer: Dawn Dowdle
treasurer@senecapowersquadron.us
607-769-8604

Membership Chair: Carrie Sproul
info@senecapowersquadron.us
607-562-3334

Public Relations Officer: (Volunteer needed!)

Executive Committee Members:
Dennis Kingsley Terry Stewart
Pat Jackson Jerry Tinz

The Seneca Sail & Power Squadron, a unit of the United States Power Squadrons, is an organization dedicated to the advancement of responsible and safe boating through continuing education and social interaction.

THE DRUM

Attn: Editor
38 Woodland Drive
Big Flats, NY 14814

Seneca Sail & Power Squadron Members