



December 2004 Vol XXXVIII No 10

Newsletter of the Northern Virginia Sail & Power Squadron



NVSPS BRIDGE



Officers & Chairs

COMMANDER Cdr Keith B. Segerson, P

(703) 670-2270

EXECUTIVE OFFICER

Lt/C Richard P. Davis, AP (571) 436-7607

ADMIN OFFICER

Lt/C Glenn A. Fahey, S (703) 421-0662

ASST: 1/Lt Yean-Ming Sheu,AP (301) 277-5035



EDUCATION OFFICER

Lt/C G. Jay Nelson, AP (703) 437-0064

ASST: P/C Dick Durgin, JN (703) 560-9106



TREASURER

Lt/C Joel P. Bailey, AP (703) 444-5169 ASST:1/ Lt Judy Soballe, AP

(202) 337-0960



SECRETARY

Lt/C Cathy F. Sheffield, AP (703) 370-4331

MEMBERSHIP CHAIR

(703) 239-0551 D/Lt Martha J. Dodd, P

AT LARGE

(703) 620-1821 D/Lt Walt Lazear, AP Lt Russell Grasso, P (703) 499-8557 D/Lt Martha J. Dodd, P (703) 239-0551 Lt Ron Larson, P (703) 922-7094 P/C John Shivik, AP (703) 273-3351

প্থ <u>squadron calendar</u>

DECEMBER

- Holiday Boat Parade of Lights Baltimore Harbor
- 5 Squadron Holiday Dinner Party Holiday Inn, Sterling/Dulles VA
- 11 Holiday Boat Parade of Lights Spa Creek, Annapolis MD
- oT&T submissions due for January 15 send them to: peter.soballe@verizon.net
- 21 Winter Solstice shortest day of the year

JANUARY 2005

- 5 9USPS® Annual National Meeting Orlando FL
- 12 All Hands Meeting BoatUS, Alexandria
- oT&T submissions due for February 15 send them to: peter.soballe@verizon.net

NVSPS All-Hands Meetings

Monthly on the 2nd Wednesday at 1930. **Changes** will be posted here and on our web site.

At BoatUS 880 S. Pickett St., Alexandria VA.

From I-495 take Van Dorn St. exit #173 (old #3). North to S. Pickett. Turn left.

From I-395 take Duke St. exit #3. East to Van Dorn, turn right. South to S. Pickett, turn right.

Then...

Go less than 1/2 mile and turn in at the BoatUS sign. Enter lighted parking lot behind building.



of TARS & TERNS

Official Publication of

Northern Virginia Sail and Power Squadron

In District 5 of
The United States Power Squadrons®

www.usps.org/localusps/nva

www.usps.org/localusps/d5

Articles and advertisements are not USPS policy or endorsement unless so designated. Published ten months per year. July & August, October & November are combined

EDITOR

Lt Peter Soballe, AP (202) 337-0960

peter.soballe@verizon.net

DISTRIBUTION

Lt Manette B. Lazear, AP D/Lt Walter D. Lazear, AP (703) 620-1821



SHIP'S STORE



Need a new burgee, tote bag, sport shirt or squadron name tag?

Contact P/C Paula Bailey, AP (703) 444-5169

Editorial

Our commander, Keith Segerson, P, is deeply involved in family business right now. Our condolences and those of the entire squadron go out to him and his family. We're sorry for your loss, Commander.

This is our fourth attempt to put out the oT&T, so we feel pretty sure about what the commander would have said: "thanks for working hard, get even more involved, figure out a way to get new folks involved, and -- above all -- have fun and take advantage of the excellent opportunities the NVSPS has to offer.

A lot of those opportunities are listed in this edition: the holiday party, a series of harp concerts, a co-op charting day, the all-hands meeting at BoatUS, our advanced and basic educational programs, and the District 5 Spring Conference in Williamsburg. There's something – in fact lots of things – for everyone.

A lot of ink has been spilled at the national, regional and oT&T level about the future of the Power Squadrons®. Most would agree that we're in an era of transition and therefore of intense self-evaluation – some would say self-doubt. All would agree that changes are imminent and that they'll be disruptive. So members are asking themselves the most basic question: "what's in it for me?" (see above).

Many have focused on our perceived disincentives. Especially uniforms and our quasi-military structure. These are certainly divisive issues, but at least we can all agree that their impact and significance is very different today than they were when we were a struggling, upstart minority within the New York Yacht Club!

Here's a perspective that I've not seen in print yet: your editor was assigned the rank of "lieutenant" and I'm proud of it. Yet it startles me every time I see that, since in my other life I haven't been a lieutenant for about 30 years. P/C John Shivik, AP, took a similar "demotion" when he became a commander.

For the many current and former sea-service members, our rank structure can be a rather dubious honor.





The NVSPS winter course schedule begins 03 January 2005. We're conducting 5 public boating courses, 4 courses for Sea Scouts, and 4 Advanced courses:

- Marine Electronics 03 January 05 Mondays @ 1900 E Loudoun Library
 Contact Dwight Bues at (703) 404-8728 or dbues@aol.com
- Weather 08 February 05
 Tuesdays @ 1900, Robinson Secondary
 Contact John Shivik (703) 273-3351 or
 jshivik@cox.net
- Seamanship 28 February 05
 Thursdays @ 1900 Fairfax High School Contact Rick Baker at (703) 318-5899
 or rickbaker@cox.net
- Advanced Piloting ? early March Thursdays @ 1900 Fairfax High School Contact Jay Nelson at (703) 437-064 or gjaynelson@aol.com

USPS BASIC Boating Courses

Start: JAN 04, 2005 @7 pm Contact: Jay Nelson (703) 437-0064 or gjaynelson@aol.com Location: Sterling Community Center 1115 West Church Road, Sterling, VA 20164

Start: MAR 28, 2005 @ 7 pm (703) 228-4747 Contact: Arlington County Parks & Recreation Location: Thomas Jefferson Middle School 125 S Old Glebe Rd, Arlington, VA 22204

Start: MAR 28, 2005 @ 7 pm (703) 222-4664 Contact: Fairfax County Parks and Recreation Location: West Springfield High School 6100 Rolling Road, Springfield, VA 22152

Start: MAR 29, 2005 @ 7 pm (703)790-0123

Contact: McLean Community Center Location: McLean Community Center

1234 Ingleside Avenue, McLean, VA 22101

Start: **MAY 03, 2005** @ 7 pm (703) 790-0123

Contact: McLean Community Center Location: McLean Community Center

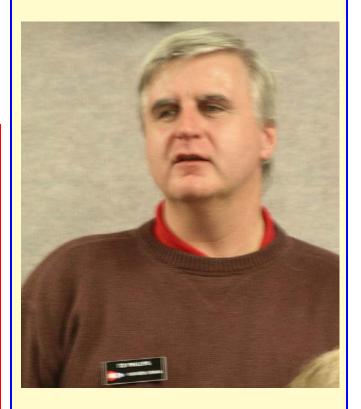
1234 Ingleside Avenue, McLean, VA 22101

Marker Recovery Day

Saturday 4 Dec 2004

I attended the Co-op Charting (CoCh) Workshop during the Fall Conference in Ocean City. A lot of practical information was presented and I'm eager to get our CoCh program underway.

We'll be having a Geodetic Marker Recovery Day 04 December on the VA side of the Potomac River near the Fairfax Yacht Club. The details aren't yet worked out, but if you're interested please contact me at novaspscoch@yahoo.com. (703) 771-7096



Cooperative Charting

Ed Phillips, AP, CoCh Chair

Guiol/Time** and a TEF (LZN) decompresso are needed to use this picture



Fall brought some of the best boating days of the year. I was able to sit on my deck in 70+ degrees and look at picture perfect skies with hardly a cloud. A great day to be out on ones boat! Fall also brought the District 5 Educational Conference in Ocean City and the start of our squadron boating courses. Several are already underway and more will come as you members show an interest in taking courses.

We gain in many ways by advancing our knowledge of boating. Boaters versed in Weather, Seamanship, Piloting, Engine Maintenance and other boating skills are far less apt to find themselves in harms way. We also save ourselves money, as we are less apt to run up boat repair bills after putting the boat up on rocks or suffer major engine damage due to improper or inadequate maintenance. We may even feel more capable of performing some of those maintenance items ourselves. We also gain when both members of a relationship take courses together and break down the Captain vs. First-mate syndrome. Both members of the boating adventure become true partners. They're able to discuss on an equal footing the options and decisions involved in an afternoon fishing excursion, a week long cruise in the bay, or a cruise along the coast. Family members become more pro-boating when they have taken courses that allow them to talk on an equal footing with the best of the "old salts".

The Squadron is not only looking for students that wish to sign up for courses offered or desired, we also need the other key ingredient found in every classroom: instructors. Members should not feel that they have to be the best teachers in the world or have sailed around the world to participate as an instructor. Your experience on the water is what really counts.

You ask "why teach a class?" The answer will be different for different people. For some it may be the love of transferring knowledge about a favorite topic. For others it may be a way of showing appreciation for those instructors who volunteered

their time to teach us over the years. For still others it may be a way to deepen our own understanding of a subject, for as we teach a subject we come to see things in a different context and develop a deeper understanding. Whatever your reason please consider calling up our Squadron Educational Officer Jay Nelson and volunteer to teach a course in the near future. Jay is unlikely to turn you down.

Encourage your friends to take a Safe Boating course if they have not previously done so,

Join the fun, share the knowledge.

Administration



Lt/C Glenn A. Fahey, S

Hope all of you had a great boating season. Many of us squeezed in a final few weekends in late October and early November. It was 23° here in Herndon this morning (Nov. 15), so it looks like cold weather has finally arrived.

After winterizing your boat, your boating activities don't need to end. You can take advanced boating classes, you could volunteer to help our squadron.

The National Capital Boat Show will be in Chantilly VA in March. We need volunteers to staff our booth for 2-hour shifts from Thursday, March 10 to Sunday, March 13, 2005. Volunteers get free admission, and you can enjoy the show before or after your shift. This is a popular and fun event. For this, or other volunteering opportunities, contact me or another Bridge member.

The International Pot-Luck dinner on 13 October was a big success. The chefs of our squadron showed off their stuff. Dishes ranged from Polish Kielbasa to Italian stuffed shells and many other tasty foods and lots of delicious desserts.

Our annual Holiday Dinner Party will be held on Sunday, December 5 at 1900 at the Holiday Inn - Washington Dulles. You should have received an invitation postcard back in early November.

Have a safe and happy holiday season!

"CAPTAIN"S CORNER"

With the colder weather upon us it is time to revisit our knowledge of hypothermia and water rescue. Try your hand at the questions below.

- 1. How long does it take for unconsciousness due to hypothermia to occur in 40° water?
 - a. 10 minutes
 - b. 30 minutes
 - c. 60 minutes
 - d. 5 minutes
- 2. When rescuing someone from the water, you should approach the victim slowly _____
 - a. in an upwind direction
 - b. in a downwind direction
 - c. across the wind
 - d. at an angle across the wind
- 3. The proper way to warm a hypothermia victim is to
 - a. Rub the victim's skin vigorously
 - b. Pour warm water over the victim
 - c. Wrap the victim in warm clothing or blankets
 - d. Allow the victim to sip alcohol to warm themselves
 - e. all of the above

answers on page 7



Welcome Aboard!

To all our new members. We're glad you're here and we want to see a lot more of you!



Lemon Laws for Boats?

Attorney Stephen L. Swann made a case for them at the NVSPS all-hands meeting on 10 November. There are pitifully few consumer protections for boat owners at present!



"Tip of the Spear"

This retired A3D Photo Surveillance plane now guards the transient housing in Rota Spain, America's gateway to the Mediterranean.

District 5 SPRING CONFERENCE

31 Mar – 3 April 2004 Williamsburg VA

Be There

Aloha!

The Sailor's Right Sky



D/Lt Charles H. Olin, AP

RADIATION: Dangerous Particles I

Our sun is a source of dangerous energy particles. I am limiting this article to radiation from space; not from reactors, bombs, or medical equipment, though all are the product of the same forces: strong, weak, and electromagnetic. Physics today does not differentiate between particles and radiation: it's all energy.

Except when exposed for long periods to near-ultra violet, we are not harmed by this radiation. Earth's magnetic field and atmosphere protect us from most of the other radiation. It wasn't always so: 3.5 - 4.6 billion years ago the atmosphere contained no oxygen. High-energy ultra-violet filtered through the nitrogen, sulfur compounds, carbon compounds, and water vapor that made up Earth's atmosphere, and this radiation may have been the spark for life itself. After cyanobacteria formed, they released oxygen into the atmosphere and it now comprises 21% of air.

There are two kinds of radiation from the sun: light and solar wind. Solar wind has a density of 3-10 ions/cm³ with equal numbers of electrons and protons. This is mixed with a few alpha particles and other nuclei to form a plasma that travels toward Earth at up to 560 miles/sec. These charged particles are deflected by the earth's magnetic field. Light and neutrinos travel at 186,000 miles/sec, taking about 8 minutes to reach us; neither is deflected by the magnetic field.

Daylight has been referred to as "white radiation", the complete visible spectrum. But it's not quite complete. Some is lost by scattering and a few wavelengths are absorbed by gasses around the Sun. The short, high-energy, blue waves scatter when interacting with air. Thus the sky appears blue and the white light is now slightly yellow, like the Sun.

In 1871 Lord Rayleigh discovered that the shorter the wave the higher the oscillation and the greater the scattering. So near-ultra violet, more than 320nm and less than blue's 380nm, are thoroughly dispersed when they enter the atmosphere. So you can get burned even on a cloudy day under an umbrella. High-energy waves are absorbed by proteins and by nucleic acids, so a single photon can lead to a somatic mutation (skin cancer or melanoma) -- or kill a bacterium. Longer wavelengths are not so dangerous. Chlorophyll in plants has a maximum absorption around 680 nm; not coincidentally this is the peak radiation from the Sun.

Ozone, a molecule of three oxygen atoms formed in the upper atmosphere by energetic radiation, protects us from far-ultra violet and x-ray radiation.

Although solar wind is deflected to the magnetic poles or filtered out by atmosphere, there's other radiation that reaches Earth's surface from more distant sources and at a much higher energy. Relativistic protons from supernovae in distant galaxies may reach energies of 10^{20} eV, over a billion times more energetic than those from the sun. These particles are too powerful to be deflected by our magnetic field and come crashing through our atmosphere. In fact, relativistic protons are only slightly deflected even by the Milky Way's magnetic field; but since they are, their exact origins can't be determined.

Next: high energy radiation beyond ultra-violet: gamma rays, relativistic protons, and neutrinos. Their cross sections, densities, velocities, energies, and probabilities: how they determine radiation dangers.





Seasons Greetings from "Blue Skies"

Dick and Jean Durgin

Noel from the crew of "Kathy El"

Bill & Kathy Eldridge

Happy Holiday and Safe Voyages in the New Year

Walt and Manette Lazear

Happy Holidays and Happy New Year

Al Sheetz and Elaine Cohen

Seasons Greetings from the crew of "KIM"

Gale and Evelyn Alls

Merry Christmas and Happy New Year

P/C Ed and Martha Jane Dodd

Happy Holidays

Cathy & Lin Sheffield

Seasons Greetings from the "Chesapeake Bay Leeway"

Joel, Paula, Melissa and Marianne Bailey

Seasons Greetings from "Sea Amigo"

Helen and Bill Alberts

Happy Holidays and a Wonderful New Year

John & Robie Shivik, "Grey Eagle III"

God bless you in all your endeavors Especially your boating!

Hank & Lucille Trochesset

Heavenly Holidays from "Celestial"

Pete & Judy Soballe



from D/Lt Walt Lazear, AP

Three FREE holiday concerts will be presented by The Heatherwood Harp Ensemble (7-9 harps), in which I play.

The first is Monday 6 Dec @ 1900 at the Lake Anne Community Center in Reston, VA (1609-A Washington Plaza). It'll be part of the "Reston Presents" monthly series. We played there earlier this year and I would warn you to get there early if you want to get a seat! For this concert, we've added some handbells to complement the harps.

The second & third are Wednesday 08 Dec @ 1900 & again at 2000 at the Mormon Temple visitor center in Kensington, MD (9900 Stoneybrook Drive). For these concerts, we've added a flute and cello to go with the harps.

You're all invited, SEE YOU THERE!

CAPTAIN'S CORNER ANSWERS

- 1. B and death can occur in 30 90 min depending on the victim's weight
- 2. A head into the wind and you can approach more slowly and have more maneuverability
- 3. C rubbing the skin can damage it, pouring warm water on the victim can actually cause cardiac arrest, and alcohol actually causes the body to loose heat.



www. usps.org/localusps/nva

: in sn aas

Alexandria, VA

880 S. Pickett St.

BoatUS Headquarters

Northern Virginia Sail & Power Squadron AMERICA'S BOATING CLUB

Lt W. Lazear, AP 2014 Lakebreeze Way Reston, VA 20190

ADDRESS SERVICE REQUESTED



NON-PROFIT ORGANIZATION U.S. POSTAGE PAID PERMIT NO. 6586 RESTON, VA

