



# of TARS & TERNS



Newsletter of the Northern Virginia Sail & Power Squadron

Oct -Nov 2004  
Vol XXXVIII No 9



## NVSPS BRIDGE Officers & Chairs



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Lt Ron Larson, P (703) 922-7094  
P/C John Shivik, AP (703) 273-3351



## SQUADRON CALENDAR

### OCTOBER

- 9 - 10 Alexandria Seaport Day, NVSPS Booth  
Check it out: [www.alexandriaseaport.org](http://www.alexandriaseaport.org)
- 13 NVSPS International Potluck Dinner  
1830 - Fairfax Yacht Club  
Brief Membership Meeting to follow
- 16 Tilghman Island Day, NVSPS rendezvous  
Knapp's Narrows: by car or boat  
[tilghmanmd.com/tilghmanday.htm](http://tilghmanmd.com/tilghmanday.htm)

### NOVEMBER

- 5 - 7 D/5 Fall Conference
- 10 All Hands Meeting  
BoatUS, Alexandria
- 13 Operational Training / Leader Development  
0830 - 1630: BoatUS, Alexandria
- 15 oT&T submissions due  
send them to: [peter.soballe@verizon.net](mailto:peter.soballe@verizon.net)
- 17 ? Executive Committee Budget Review  
time & place TBD

## NVSPS All-Hands Meetings

Monthly on the 2<sup>nd</sup> 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.

*Or...*

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](http://www.usps.org/localusps/nva)

[www.usps.org/localusps/d5](http://www.usps.org/localusps/d5)

*Articles and advertisements are not USPS  
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October & November are combined*

### EDITOR

Lt Peter Soballe, AP  
(202) 337-0960

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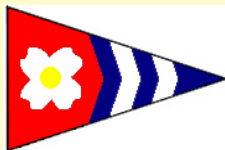
### DISTRIBUTION

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

[lakematesw@comcast.net](mailto:lakematesw@comcast.net)



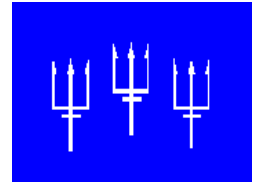
## SHIP'S STORE



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

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

# From the Commander



**Cdr Keith B. Segerson, P**

As time passes by..... Certainly, this seems to be the theme as Summer quickly vanishes and thoughts converge on the approaching Fall season. New classes kick off this time of year and NVSPS members look to the excitement of learning and exploring about our vessels, course planning, weather, and engine maintenance. It is wonderful to learn from our very experienced instructors and from our fellow students. One very important part of our NVSPS membership experience is that of networking with our fellow members discussing many issues relating to our common boating interests. I've learned more about boating, vessel maintenance, weather, and safety issues from others in the Squadron than I have from any other source. Your membership in the NVSPS makes you part of a very select group of boating enthusiasts that work together to raise the bar on overall boating safety, enjoyment, and friendship.

**Come to the next All-Hands Meeting** and strike up a conversation with someone you have not yet met. Sign up for a class and roll up your sleeves. Participate in one of our upcoming membership social activities – like the International Potluck Dinner in October. Volunteer to help on a committee or activity. Your involvement in the NVSPS will not only strengthen your commitment and enjoyment of boating, but also strengthen your overall commitment to boating safety. Remember that a weekend outing with friends and support for any boating question is only a phone call or networking conversation away! Hopefully, you will be as rewarded as I have through my participation with the Northern Virginia Sail and Power Squadron! For more information on upcoming courses, please refer to the NVSPS web site or go directly to the list of courses by typing in the URL: <http://www.usps.org/localusps/nva/educ/schedmem.htm>

## Merit Marks!

### Officers and Chairs:

Recommendations are due to Jean  
Durgin ([rjdurgin@aol.com](mailto:rjdurgin@aol.com)) by 15  
October 2004. Best submission will  
win a bag of M&M's!





# Education

**Lt/C G. Jay Nelson, AP**

Engine Maintenance and Piloting have just begun so there's still time to join; contact the instructor and we'll make sure you get caught up.

This winter you'll be able to take both Seamanship and Advanced Piloting or two electives in the same season. If you can help as an instructor or assistant please e-mail me— [gjaynelson@aol.com](mailto:gjaynelson@aol.com) — or call (703) 818-5364 (daytime) or (703) 437-0064 (evenings). It'll be greatly appreciated

**Engine Maintenance**, Mondays @ 1900  
13 Sep – 27 Dec 2004 Loudon County Library  
Instructor: Dwight Bues AP  
[dbues@aol.com](mailto:dbues@aol.com) (703) 404-8728

**Piloting**, Thursdays @ 1900  
14 Sep – 30 Nov 2004 W. Springfield HS  
Instructors: Jay Nelson, AP

[gjaynelson@aol.com](mailto:gjaynelson@aol.com) (703) 437-0064  
Gale Alls, SN  
[Galeandev@aol.com](mailto:Galeandev@aol.com) (703) 569-1511

**Marine Electronics**, Tuesdays @ 1900  
6 Jan – 24 Mar Loudon County Library  
Instructor: Dwight Bues AP  
[dbues@aol.com](mailto:dbues@aol.com) (703) 404-8728

**Advanced Piloting**, Thursdays @ 1900  
6 Jan – 24 Mar Fairfax High School  
Instructor: Jay Nelson, AP  
[gjaynelson@aol.com](mailto:gjaynelson@aol.com) (703) 437-0064

**Weather Course**, Tuesdays @ 1900  
8 Feb – 26 Apr Robinson Secondary School  
Instructor: John Shivik, AP  
[jshivik@cox.net](mailto:jshivik@cox.net) (703) 273-3351

**Seamanship**, Mondays @ 1900  
28 Feb – 16 May 2005 Fairfax High School  
Instructor: Rick Baker, AP  
[20rjbaker04@cox.net](mailto:20rjbaker04@cox.net) (703) 318-5899

## USPS BASIC Boating Courses 2004 – 2005

Start: **SEP 14, 2004** Time: 07:00PM  
Contact: Fairfax County Park Authority  
Phone: (703) 222-4664  
Location: **Robinson Secondary School**  
5035 Sideburn Street, Fairfax, VA 22032

Start: **SEP 16, 2004** Time: 07:00PM  
Contact: Fairfax County Parks and Recreation  
Phone: (703) 222-4664  
Location: **South Lakes High School**  
1140 South Lakes Drive, Reston, VA 20191

Start: **SEP 21, 2004** Time: 07:00PM  
Contact: McLean Community Center  
Phone: (703) 790-0123  
Location: **McLean Community Center**  
1234 Ingleside Avenue, McLean, VA 22101

Start: **JAN 04, 2005** Time: 07:00PM  
Contact: Jay Nelson  
Phone: (703) 437-0064 [gjaynelson@aol.com](mailto:gjaynelson@aol.com)  
Location: **Sterling Community Center**  
1115 West Church Road, Sterling, VA 20164

Start: **MAR 28, 2005** Time: 07:00PM  
Contact: Arlington County Parks & Recreation  
Phone: (703) 228-4747  
Location: **Thomas Jefferson Middle School**  
125 S Old Glebe Rd, Arlington, VA 22204

Start: **MAR 28, 2005** Time: 07:00PM  
Contact: Fairfax County Parks and Recreation  
Phone: (703) 222-4664  
Location: **West Springfield High School**  
6100 Rolling Road, Springfield, VA 22152

Start Date: **MAR 29, 2005** Time: 07:00PM  
Contact: McLean Community Center  
Phone: (703)790-0123  
Location: **McLean Community Center**  
1234 Ingleside Avenue, McLean, VA 22101

Start: **MAY 03, 2005** Time: 07:00PM  
Contact: McLean Community Center  
Phone: (703) 790-0123  
Location: **McLean Community Center**  
1234 Ingleside Avenue, McLean, VA 22101

**TELL YOUR FRIENDS !**



# Exec's Moment

Lt/C Richard Davis, AP

**Good News !!** NVSPS will underwrite the cost of the Operations Training & Leadership Development Courses for all members. So if you're interested in how USPS works or you might like to hold a bridge position someday, you can take these now for free. Even if you've no desire to go to the bridge, you need these courses for a full certificate. Brown bag working lunch (bring your own). Sign up by 30 Oct in order to insure delivery of course materials.

**The National Governing Board** was in Jacksonville, FL 7-9 Sept. This is one of 3 held every year that include each national directorate and many displays and vendors. Items of interest:

1. USPS is financially solvent even with this year's 20% loss of member renewals. In fact much of this loss has already been recovered.
2. Headquarters Anniversary Billing (HAB) is progressing. There were some glitches at first, but at least 9 Districts have now gone to HAB. Individual Squadrons may also join.
3. Three squadrons dissolved and their members

moved to others; 1 new squadron was formed. One Squadron received a 50-year burgee.

4. Our D/5 forced a vote against an amendment based on spending authority. After National made some assurances, the amendment passed.
5. Of particular note: SeaVester was sworn in as a USPS member. He and mascot, D/C Drex Bradshaw, AP, were much in demand in Jacksonville.

**Hurricane season** is underway with a bang! Be sure you have all your plans in place now.

**Deteriorating lifelines were to blame** in 2 recent mishaps. Rope lanyards used to take up the slack at the ends of wire lifelines parted suddenly, throwing crew members into the water. Fortunately there were no serious injuries, but the incidents draw attention to the importance of regular inspection and maintenance of safety equipment -- also required by Offshore Special Regulations. A cursory glance at rope lanyards may not be good enough. Although not a guarantee against failure, annual replacement is a wise and inexpensive precaution.

**Encourage** friends to take a Safe Boating Course.

*Join the fun, share the knowledge.*



## Operations Training and Leadership Development Program

Yes, I want to enroll in the courses:  
13 November, 2004  
0830 – 1630 at BoatUS

**Registration must be received by 30 Oct 2004**

Name: \_\_\_\_\_

Member # \_\_\_\_\_

Mail to:  
Lt/C Richard Davis, AP  
11654 Gilman Lane  
Herndon, VA 20170

E-mail:  
[rpdavis1702@comcast.net](mailto:rpdavis1702@comcast.net)  
Phone: 571.436.7607



# Administration

Lt/C Glenn A. Fahey, S



Autumn offers the finest weather – blue skies and low humidity -- for Chesapeake boating. But with the sun setting earlier, a quick ride after work could mean being out after dark. And then there's the hurricane season. A few days after the remnants of Frances went by, Janet and I went for a ride on the Potomac, and it was an obstacle course of debris. Keep a sharp eye on the water after a heavy storm passes.

Join us for Tilghman Island Day 16 Oct! This annual event at Knapps Narrows features work- boat races, a docking contest, a rowboat race, crab picking and oyster shucking contests, good food, and beer.

[www.tilghmanmd.com/tilghmanday.htm](http://www.tilghmanmd.com/tilghmanday.htm)

Come by boat or car. Make slip reservations ASAP at Tilghman-on-Chesapeake or Knapps Narrows. Meet NVSPS members @1200 at the fire station or 1400 at Tilghman-on-Chesapeake marina. Call Joel Bailey (703) 444-5169 with questions & to let us know you're coming.

The International Pot Luck Dinner is Wed, 13 Oct, at 1830 at the Fairfax Yacht Club. A short meeting will follow dinner. We're hoping to get a variety of dishes with an international theme -- like the Polish Kielbasa P/C John Shivik has promised. The squadron will provide, wine, beer, soda, chips, and setups. Send in your reservations by 8 Oct. Pay now or at the door.

See you there!



Wed 1830, 13 October 2004.

Fairfax Yacht Club. 10721 Old Colchester Rd. Mason Neck, VA

# International Pot Luck Dinner & All-Hands Meeting

\_\_\_\_\_ Adults @ \$5.00      \_\_\_\_\_ Children @ \$2.50      Total Enclosed: \_\_\_\_\_

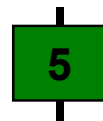
(Make checks payable to "NVSPS")

Item/Dish you're bringing: \_\_\_\_\_

Questions: Glenn Fahey (703) 421-0662 or GandJFahey@aol.com

Mail this by 08 October, please, to

**Glenn Fahey**  
**1323 Shallow Ford Rd.**  
**Herndon, VA 20170**





### ***Cruise Kayaks***

***Robin Roberts, AP & P/C Paula Bailey, AP  
In the harbor at Solomons Island***



### ***"Celestial" joins NVSPS at St. Michaels***

***Via the back door: hitching a ride from fellow  
Chesapeake Bay Tartan Club members***



### ***"Gray Eagle III"***

***Commanded by P/C John Shivik AP & Robie***



### ***Not your father's Coast Guard!***

***.50 cal machine guns instead of search & rescue in Guantanamo Bay, Cuba***

## “CAPTAIN”S CORNER”

Arguably, the compass is the most important navigation tool on your boat. This month we are going to test your knowledge on compass facts.

1. A \_\_\_\_\_ is used to develop a variation table for your boat.
  - a. fluxgate compass
  - b. sextant
  - c. pelorus
  - d. none of the above
  
2. The sum of variation and deviation is known as \_\_\_\_\_.
  - a. compass error
  - b. present position
  - c. deviation correction
  - d. none of the above
  
3. \_\_\_\_\_ is caused by magnetic interference, such as electrical wiring or ferrous metals found on your boat.
  - a. Titration
  - b. Deviation
  - c. Induction
  - d. Compass cohesion

*answers on page 9*

## Merit Marks !

Officers & Chairs: your recommendations are due to Jean Durgin by 15 Oct 2004.

[rjdurgin@aol.com](mailto:rjdurgin@aol.com)

Members: after 25 merit marks you no longer pay national dues (you pay only local dues).



**Welcome  
Aboard!**

**Richard E. Unis**

Leesburg, VA

**Malcolm N. Maclellan**

Herndon, VA.

**Katherine W. Bergstrom**

Purcellville, VA

(reinstated from Portsmouth NH PS)

**David J. Cohen**

Herndon, VA

**John VanSenden**

Alexandria, VA

(transfer from Mobile, AL PS)

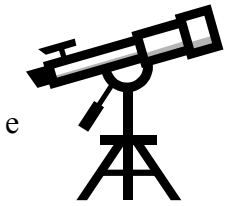


**Bill & Clara Blanding**  
**Alexandria VA**

**Owners of the 35' Silverton**  
**“Tesoro” @ Occoquan harbor**

*NVSPS All Hands' meeting*  
*08 Sep 2004*

# The Sailor's Night Sky



D/Lt Charles H. Olin, AP

## Radiation: PARTICLES

“Particles” form a large portion of radiation from space; any understanding of our world requires their detection and study. The Earth’s atmosphere and magnetic field absorb or deflect most of these charged particles. So NASA and other space agencies, send detectors into space like Hubble (visible), Spitzer (infrared), Chandra (x-ray), Swift (gamma), Map (micro-wave), Fuse (far ultraviolet spectrographic explorer), and James Webb (near infrared & red). There are also sophisticated arrays of multi-million-dollar detectors being established on the Earth’s surface that will give us a more complete understanding of how stars and galaxies develop. But there is a detector available to all of us at no cost. Lightning follows the ionized paths of these particles like thin threads through the atmosphere leading the built-up friction charge.

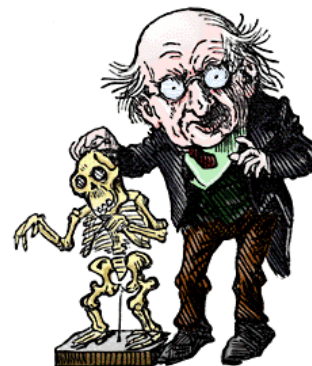
The sun is a large source of these particles; when sunspot activity increases, particles disturb radio communication and cause “northern lights” (aurora borealis). The sun produces a stream of low-energy protons and electrons at about  $10^9$  eV. Ultrahigh-energy cosmic rays (UHECR), by comparison, are  $10^{19} - 10^{20}$  eV – tens of millions of times more.

It’s often difficult for a physicist grounded in Newton to discuss 20<sup>th</sup> century physics with a 21<sup>st</sup> century audience. My close friend Doug, a PhD in high-energy particles, doesn’t even differentiate between electromagnetic and particle radiation, it’s all energy to him: waves act as particles and particles act as waves. But a recent article (*Science* 305:1393, Sept 2004), differentiates between gamma (electromagnetic) and UHECR particles (relativistic protons).

UHECR do not come from the sun. In past articles I’ve described explosions that form neutron stars and black holes and which produce high-energy protons

and gamma rays. These high energies accelerate particles, usually nuclei of atoms or single protons, to relativistic velocities. What happens when one of these UHECR collides with an air molecule? A large shower of perhaps 100 billion secondary and tertiary particles (mostly pions which form muons and neutrinos or high-energy photons which in turn form electrons or positrons – the source of ultraviolet fluorescence) rains down on Earth’s surface, covering an area of more than 1200 mi<sup>2</sup> – all from one relativistic proton. These showers bombard you and me day and night. We don’t seem to suffer from this radiation unless we spend an inordinate amount of time at very high altitudes.

Another particle of note is the neutrino. Billions go through us every second! 98% of the neutrinos we experience are produced in proton fusion reactions in the sun. It takes about 2 seconds for these to leave the center and reach the surface of the sun. By contrast it takes a photon a million years to make the same trip. Neutrinos from cosmic rays are hundreds of times more energetic than those from the sun. They have no electric charge and therefore react only to the “weak force” (about 1/10,000<sup>th</sup> the diameter of a single proton). They’re not affected by electromagnetic forces (electrons) or the strong force (atomic nuclei). The neutrino’s penetration through matter is staggering; it enables us to reach into the depths of space where we will never be able to see and learn of hidden reactions. The neutrino’s mass is very small, estimated to be around  $10^{-15}$  eV but its energies can exceed  $10^{18}$  eV. As I reported in an earlier article, neutrinos account for 99% of a supernova’s energy. We are fortunate indeed that they go right through us! Particle radiation is everywhere around us; some is harmless, some is not – next!







# HAPPY HOLIDAYS

*From P/C Chuck Eby  
Flower Power  
Chairman*

I'm not kidding! The time is here! Send in your season's greetings NOW for the December oT&T

Our squadron's Flower Power trust fund was established in 1988 by a generous donation of \$5000 from Dr. and Mrs. Lloyd Hazelton, to support "optional" activities.

**Only the interest** earned on this money may be spent each year. Last year we contributed \$1700 for Power Point® for our squadron education programs.

*Send greetings & donations to:*

***Joel Bailey  
20817 Waterbeach Pl  
Sterling VA 20165-7409  
By 01 November***

To encourage donations, we've set up a program whereby you may send seasons greetings to fellow members through the oT&T. Just send your greetings and a contribution to Joel Bailey, our treasurer, by 01 November. Joel will credit your donation and forward your greetings to oT&T for the December/holiday issue.

The advantage to you is you can reach all our members without buying cards or stamps. And **Flower Power donations are even tax deductible !**



## ♪ Holiday Harps

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. d. – none of the above. Variation is a function of your location in reference to the agonic line and has nothing to do with your boat. (Deviation of course, can and should be calculated for your boat).
2. a. – compass error
3. b. – deviation. Any magnetic object or significant amount of ferrous metal will distort your compass reading

www.usps.org/localusps/nva

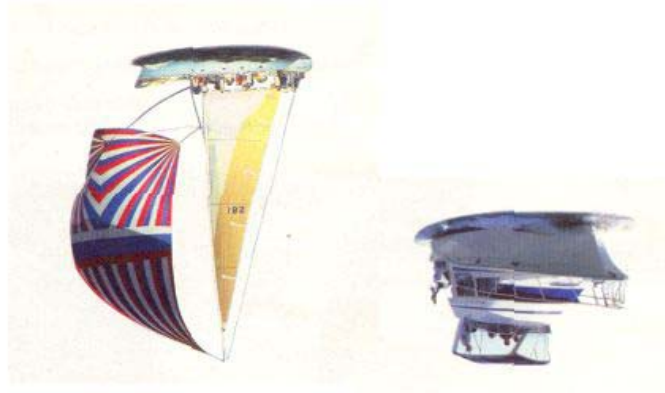
See us at:

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**



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**of TARS & TERNS**

