

Official newsletter of the  
Atlanta Sail and Power Squadron

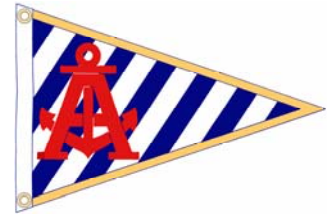
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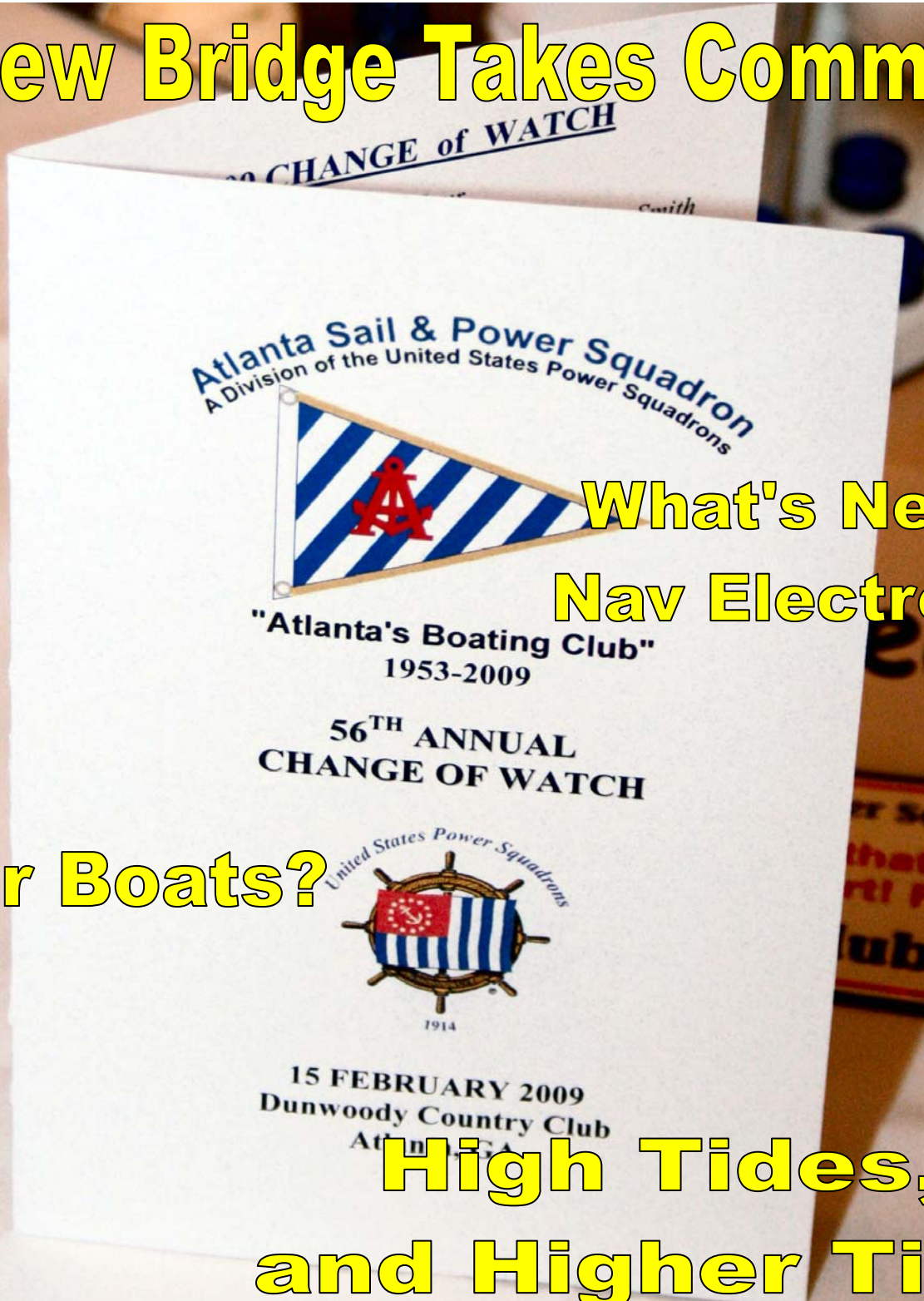
# WATERLOG

United States Power Squadrons  
Sail and Power Boating - America's Boating Club®

## Safe! Smart! Fun!



# A New Bridge Takes Command



# What's New in Nav Electronics

# Paper Boats?

# High Tides, and Higher Tides

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**Commander's Corner**



*Cdr. Carol Jordan AP*

I never knew a COW could be so beautiful, funny, inspiring and delicious. What a great day and a great way to kick off our 56th year. The Dunwoody Country Club welcomed us back after a year of remodeling, and proved to be the perfect place for such a wonderful and special occasion.

Our own District Commander Danny Tompkins delivered the Chief Commander's message from National headquarters, as we retired last year's Bridge and installed the new Bridge for 2009.

This past year's Bridge and Executive Committee have done an exceptional job under the leadership of our previous Cdr. Dave Herndon. As your new Commander, although I may be short, I stand tall on the shoulders of my predecessors. They laid down solid foundations and built bridges to other boating organizations that we will continue to pursue. Our boating initiatives of Safe, Smart, Fun will still resonate in all that we do. Instead of reinventing the wheel, or trying to find a new direction, we will maintain the charted course previously set out before us. We do a lot of things very well in this organization, and we will continue to do so. Growing our membership has always been a priority, while still keeping our current membership involved in interesting and challenging activities and educational opportunities.

We have an exciting year of social events and on-the-water activities ahead of us. Next month we kick off the boating season with our traditional Blessing of the Fleet combined with a fire extinguisher workshop. At the moment Tom Haas is busy planning our sixth ICW trip to the Gulf in Orange Beach, AL. Barbara Tyson will be heading up our Tennessee River cruise this fall, as we explore another new section of that beautiful river. Frank Taylor has more than a few on-the-water surprises lined up for us. As long as there's water in the lake, we will be on our boats having a blast with other members, making new friends and memories to share.

Through the talented efforts of our new Marketing Chairman Hans Meier and our renowned Public Relations columnist Greg Clark, we will be spreading the word as to who we are and what we do - getting our "brand" out there, so to speak, by increasing our visibility in the public arena.

At our Change of Watch I offered a personal challenge to all of our members: not to ask of our Power Squadron "What's in it for me?" but rather "What's in ME for the Power Squadron?" I hope you will find that your passion and enthusiasm lets others see the Squadron more clearly through you, as you share your knowledge and experiences.

This year we will continue our liaison with the Sea Scouts, University Yacht Club, U S Coast Guard Auxiliary and area sailing clubs as we continue to strengthen bridges while building new ones. This does not happen overnight or over the course of a year. It takes foresight and planning, solid construction and maintenance to build strong relationships and structure that will last into the future. Not only will we continue to build the bridges, but this is the year we're going to ROCK the Bridge, ramp up the fun factor and let the good times roll!

The Waterlog

The Waterlog is published at least 6 times per year along with an abbreviated companion the Watertwig.

It is published by and for the squadron members by the staff of the Squadron Secretary and is mailed to the listed address of all current members and advertisers.

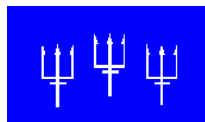
All members in good standing, and approved non-member advertisers may submit articles and items for publication. They receive no gratuity.

The editor reserves the right to revise, change or reject any materials submitted to the Waterlog, consistent with standards of accuracy, fairness, good taste and available space, subject to the approval of the Squadron Commander.



*Waterlog Editors  
Lt/C Lisa Herndon  
and  
P/C David Herndon*

Cover photo by Lisa Herndon—2009 Change of Watch





# Squadron Happenings

## ASPS CELEBRATES 56<sup>TH</sup> CHANGE OF WATCH

The Squadron celebrated their 56<sup>th</sup> annual Change of Watch on Sunday, February 15, at the Dunwoody Country Club. Approximately 75 members and guests attended the event.

Following a social hour and a superb buffet lunch, outgoing Commander David Herndon called for the presentation of the colors to open the official ceremonies. P/C's Don Williams and Norm Oien served as the color guard. Lt/C Lisa Herndon sang the national anthem and F/Lt Tim Tyson led the Pledge of Allegiance.

P/C Herndon recognized Ike Grove as a Life Member and presented three major awards.



*Dave Herndon recognizes Ike Grove as a Life Member*

Governor's task force on boating safety, his scouting trips prior to the ICW cruises and his general support for Squadron activities.

P/C Herndon recognized Tim and Barbara Tyson with the 2008 Commander's Award. The Commander's Award is given annually at the discretion of the Commander to the member(s) who played a major role in the progress of the Squadron. Tim served as Flag Lieutenant and unofficial concierge for the Squadron. He was the force behind the Silent Auction at the Seafarer's Ball for the sixth consecutive year and he has kept us focused on our responsibilities to the community around us. Barb served as Social Committee Co-Chair and coordinated the fall Tennessee River cruise. Together, the Tyson's hosted and coordinated the Garage Sale this past summer, the proceeds of which went to charitable causes.



*Ed Troncalli receives 2008 Nelle Moon Award*



*Barbara and Tim Tyson receive the 2008 Commander's Award*

Resurrecting an old tradition, P/C Herndon instituted the Bent Prop Award, to be given annually to the member demonstrating the best negative example of on-the-water behavior. The initial winner was an easy choice. While most members had their challenges on the water at some time or other, only the "winner" could claim running out of fuel on

the ICW, fouling both props at the same time on a charter cruiser in the BVIs, and bringing an uninvited rodent to a raft-up - all in the same season! P/C Herndon awarded the Bent Prop Award to himself.

In his remarks, Dave thanked the 2008 officers, Executive Committee and committee chairs for their leadership and service. He recapped the two major initiatives of the past year - marketing and building bridges to other recreational boating organizations - and challenged the incoming leaders to continue to focus in these areas. In closing, he recognized the extraordinary commitment and service of the cadre of Past Commanders of ASPS.

D/C Danny Tompkins delivered the Chief Commander's message, which outlined initiatives in the Educational arena targeted at increasing membership. Following his remarks, P/C Herndon thanked the 2008 Bridge for their service and dismissed them. D/C Tompkins then administered the oaths of office to Cdr-elect Carol Jordan, and to her Bridge.

The 2009 Bridge consists of Kevin Schoonover, Executive Officer; Patricia Price, Squadron Education Officer; Lisa Herndon, Administrative Officer; Margaret Haas, Treasurer; Stephen Hendrix, Secretary; and Marla Hendrix, Assistant Secretary.



*Newly installed Commander Carol Jordan*

In her remarks, Cdr Jordan stated her intention to stay the course on the major initiatives in progress for the Squadron. Echoing another great leader, she challenged us not to think in terms of what the Squadron could do for us, but what we could do for the Squadron. She then presented an engraved silver ship's bell to outgoing Commander Herndon in appreciation for his service.

Cdr Jordan then called for the color guard to remove the colors to the accompaniment of Lisa Herndon singing "God Bless America".



*The 2009 Bridge takes their oath. L to r: D/C Danny Tompkins, Cdr Jordan, SEO Patti Price, XO Kevin Schoonover, AO Lisa Herndon, Treasurer Meg Haas, Secretary Stephen Hendrix*

# Squadron Happenings



*ASPS was once again well represented at the Atlanta Boat Show. P/C's Margaret Sherrod and Dave Herndon were on duty at our booth featuring our display boat and our Safe! Smart! and Fun! banners.*

## EXPANDED OFFERING FROM NATIONAL SHIPS STORE

*By Tom Kemp*

The National Ship's Store in conjunction with Headquarters Marketing has developed a program for squadrons and districts that allows members to purchase squadron emblem merchandise from a company that will provide a 10% rebate on each item purchased. The rebate will be issued to each squadron on a monthly basis.

The company is [yourboatsname.com](http://yourboatsname.com), a division of UMSCO Corp. in Dallas. They have been in business for 17 years and have developed a reputation for quality work with personal service and extremely quick turnaround. They are a current supplier to the Ship's Store.

This is purely voluntary. While some squadrons will want to keep their own programs, many will opt for this one. Here are some of the advantages of the program:

- ASPS receives a 10% rebate on all purchases on a monthly basis
- No need for squadrons to stock squadron emblem merchandise that could go unsold or out of date
- No minimum orders
- A one-step, easy-to-use store that offers hundreds of quality products and quick order fulfillment
- A secure encrypted checkout site to protect your credit card details
- Products that allow for personalization of multiple logos (for example, USPS logo, squadron burgee, the name of your boat, and other logos)
- All squadron burgees are on file
- Special order merchandise: if you can't find it, they will.

The principal of the company is a life-long boater and knows what you want.

To participate in the program, you can go to the USPS welcome page at [www.yourboatsname.com/35.html](http://www.yourboatsname.com/35.html) and **sign up for membership**, identifying yourself as a member of **YOUR** USPS Squadron. Once you've registered, you're done with the details. Just shop and your squadron will receive a 10% rebate check at the end of each month.

Again, this is a strictly voluntary program. If you have any questions, you may contact the owner, Robert Fielder, at 214-221-0532 or HQ Marketing at 888-367-8777 x 228.

## SEASON'S FIRST RAFT-UP, BLESSING OF THE FLEET AND FIRE EXTINGUISHER DRILL—MAR 14

The ASPS, in conjunction with the Forsyth County Fire Department, will hold a seminar on the use of fire extinguishers on Saturday, March 14. The training will be held at the Headquarters building north of Cumming starting at 11:00 am.

The training will be conducted by Lt. Bob Westbrook, Fire Safety Education Officer, of the Forsyth County Fire Department.

This will be a great opportunity to gain hands-on experience in handling a fire extinguisher on our boat or at home. For members interested in the new Boat Operator Certification, this training will be useful in completing those requirements as well

Directions to the facility are:

- Go north on GA 400 PAST Exit 17 to the third traffic light.
- Turn left onto Settingdown Road.
- Go through the four way stop, and past Coal Mountain Park. The Training Facility will be on the left.

Following the fire extinguisher seminar, the first raft-up of the 2009 season and the annual Blessing of the Fleet will take place on Lake Lanier. Watch the website and DR mails for details.



*In attendance at the 2009 COW, ASPS and other Squadron Commanders and ASPS members who are P/D/C's. L to r: Bob Bruhns-1984, Don Williams-2001, Frank Taylor-2007, Ed Troncalli-2003, Margaret Sherrod-2005, Danny Tompkins-2002, Carol Jordan-2009, Hans Meier-2004, Jeff Wise-2006, D/C Bob Ginsberg-2000, Dave Herndon-2008, D/C Norm Oien-1993. In attendance, but not pictured are John Fowler-2000, Gary Meinken-1995,1998, and Ed Schwartz.*



# Squadron Happenings

## 2009 GICW CRUISE

by Tom Haas



We have exciting plans for this year's cruise on the Gulf Intra-coastal Waterway. The dates are Saturday, May 2, through Saturday, May 9, 2009. This year's format is a little different; but there will be lots of boating, dining, partying and activities. Instead of going from one point to a destination and back, we are taking the "hub and spoke" approach. This means we will

have a base from which we will

make several shorter trips. One big advantage to this is for those who could not attend the week-long event, and who can now leave early or join up with us later and participate in part of the week's fun.

With guidance from P/C Troncalli and our able navigator, Lt/C Schoonover, we have zeroed in on Orange Beach, AL as our base harbor. This different approach gives us some new options for "bag draggers" and others who may not wish to stay on their boats the whole time. These options make it necessary for us to have an accurate head count much earlier than in the past, as we will have to make firm commitments for facilities soon.

An initial Captains' Meeting was held February 9, 2009, at the Heskell School to cover some preliminary issues that needed resolution. There will be another Captains' Meeting closer to the cruise date. Please plan to attend and let other folks who may not see the DR know about it.

You can contact me with questions. E-mail is best, [haas\\_tom@hotmail.com](mailto:haas_tom@hotmail.com), or phone (404) 846-7952.

Let's go cruisin'!



6' 8" Past Commander Frank Taylor sets the bar for incoming Commander Carol Jordan

## GENERAL MEETING UPCOMING SPEAKERS

By Lisa Herndon, Administrative Officer

Plans for general meetings are shaping up with a list interesting programs for 2009. Here's a highlight for the next few months.

**March 26:** Wright Gres, author of *Macedonia Passage: Dangerous Cargo*. Wright grew up in Tampa, Florida, sailing on Hillsborough Bay, Tampa Bay, and the Florida gulf coast. To help finance college expenses at University of Florida, he worked as a deckhand on private yachts, and at other summer jobs. While working a regular nine-to-five, he served as a crewmember assisting in sail training on the brig *Unicorn*. He spent several years delivering yachts up and down the east coast and around the Caribbean. He was Marine Coordinator in the Robert Altman film, *The Gingerbread Man*. He crewed six months on a stays'l schooner, making a transatlantic and cruising in the Mediterranean. This trip was the basis for *Macedonia Passage*.

**April 16:** Army Corps of Engineers Water Management Division. Come hear plans for water management on the lake.

**May 21:** Chartering in the British Virgin Islands with Glenn LaBoda. A recap of a weeklong cruise in the BVI's—a boater's dream vacation.

## WELCOME NEW MEMBERS

Suzanne (Sue) and Conrad Fischer (left) have a 459 Meridian on the Gulf Coast that they are planning to move to the Tennessee River.



Dave Herndon displays the Bent Prop Award



**The Stowaway**  
When a member recently relocated his boat from one marina to another, he discovered some uninvited guests aboard—feral cats. One managed to remain undiscovered until the boat was settled into her new berth. Following the capturing the wily creature, it was returned to its original home.

# From the Bridge



## THE 2009 BRIDGE SQUADRON OFFICERS

Commander	Carol Jordan	commander@usps-atlanta.org
Executive Officer	Kevin Schoonover	xo@usps-atlanta.org
Education Officer	Patti Price	edu@usps-atlanta.org
Administrative Officer	Lisa Herndon	admin@usps-atlanta.org
Secretary	Stephen Hendrix	secretary@usps-atlanta.org
Treasurer	Margaret Haas	treasurer@usps-atlanta.org
Asst Secretary	Marla Hendrix	



*Cdr Carol Jordan  
Commander*



*Lt/C Kevin Schoonover  
Executive Officer*



*Lt/C Patti Price  
Education Officer*

## EXECUTIVE COMMITTEE

Cdr Carol Jordan, Chairman  
Lt/C Kevin Schoonover, Vice Chairman

Jonathan Blackwood	David Herndon	Frank Taylor
Charlie Cox	Lisa Herndon	Barbara Tyson
Richard Dukes	Sheryl LaBoda	Patti Watson
Margaret Haas	Michael Litke	
Stephen Hendrix	Patti Price	



*Lt/C Lisa Herndon  
Administrative Officer*



*Lt/C Stephen Hendrix  
Secretary*



*Lt/C Margaret Haas  
Treasurer*

## EDUCATION UPDATE

*By Lt/C Patti Price, Squadron Education Officer*

Congratulations to our newest Advanced Piloting (AP) graduates:

Dennis Abell, Julia Haas, Frank Kruse and Douglas Townes. Each one is ready to navigate and plot courses. Tides and currents are no problem for them!

### GPS Seminar March 2 and March 9, 2009

Learn the ins and outs of GPS. If you have a unit, bring it to class!

### Radar Seminar March 30, 2009 \$30

Learn how radar works. Topics covered include operation, interpretation and collision avoidance.



*1st/Lt Marla  
Herndrix  
Assistant Secretary*

## **D I S T R I C T** 17 **D-17 SPRING MEETING MAR 20-22 IN PIGEON FORGE**

The District 17 Spring Meeting will be held Mar 20-22 at the MainStay Suites in Pigeon Forge, TN. Details at <http://www.usps-d17.org/D17Activities.htm>.

ASPS's own P/C Jeff Wise will be installed as District Executive Officer and P/C Margaret Sherrod will become District Education Officer.

See you there!

## ???FEBRUARY PUZZLER ???

New Year's Day follows Christmas by one week. For example, if Christmas is on a Wednesday, New Year's Day is the following Wednesday. What is the most recent year in which Christmas and New Year's Day fell on different days of the week?

## ???JANUARY PUZZLER ANSWER???

In a boat dealership with 200 new and used boats for sale, no boat has more than 100 hours on the engine(s) and none has less than 1 hour. What is the probability that two boats will have exactly the same number of hours? (Engine hours are recorded as whole hours, no fractions or decimals.)

*Answer: The probability is 100%. Think of the problem as placing a slip of paper containing each boat's engine hours into a series of 100 "pigeon holes" where each pigeon hole is labeled sequentially 1-100. When all the slips of paper are placed in their appropriate pigeon hole, several of the slots will have two or more slips of paper.*

# The Bulletin Board

**Send email changes to the Waterlog editors! And clear your spam filters for the following address: herndons@bellsouth.net Don't miss the news!**

**GPS Seminar March 2 and March 9, 2009**  
Learn the ins and outs of GPS. If you have a unit, bring it to class!

**Radar Seminar March 30, 2009 \$30**  
Learn how radar works. Topics covered include operation, interpretation and collision avoidance.  
Location: Heiskell School

**Check out the latest District 17 Newsletter at <http://www.usps-d17.org>**

**ARE YOU INTERESTED IN MEETING BOATERS FROM ALL OVER THE SOUTHEAST?**  
Volunteer for District service committees and get to know other squadrons!  
Contact Margaret Sherrod

**LATE BREAKING NEWS!!**  
The *Waterlog* is recognized with the National "Distinction in Journalism" Award for the 7th consecutive year.

**Mark these dates!!**  
March meeting is the 4th weekend March 26!! NOTE the CHANGE this month only!!  
The GICW trip is May 2-9 Orange Beach AL - we need headcount RSVP!! See Tom Haas  
TN River trip is Sept 25-27

## USPS EVENTS: MAR 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	8	10	11	12 Excomm meeting	13	14 Raft-up Blessing of the Fleet
15	16	17	18	19	20 District Spring Conference Pigeon Forge, TN	21 District Spring Conference Pigeon Forge, TN
22 District Spring Conference Pigeon Forge, TN	23	24	25	26 General Membership Meeting - NOTE CHANGE!	27	28
29	30	31				

## USPS EVENTS: APR 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9 Excomm meeting	10	11
12	13	14	15	16	17	18 Local shore sweep
19	20	21	22	23	24	25 joint raft-up w/ UYC; Vessel Safety Checks
26	27	28	29	30		

**ExComm location :** ExComm Meetings are at Also's Restaurant at the intersection of Roswell Rd and Abernathy Dr.

Check the website or you DR-Mails for the General Meeting location.





# Life on the Water

## THE TIDES, THEY ARE A-CHANGIN'

The tide table below is for a location on the southeastern U.S. coast for December, 2008. Note that typical high tides are in the 5.5-6.0 feet range, and typical lows are in the 0.0-1.0 feet range. However, look at the period Dec 9-19. The high tides are substantially higher and the lows lower in this time period. Why?

Part of the explanation is a full Moon that occurred on Dec 12, but doesn't fully explain the differences. A full Moon usually causes about a 0.3-1.0 foot higher high tide at this location. On Dec 12-14, the high tides were more than two feet higher than usual, and the lows about a foot lower.

What caused these unusual tides?

Date	Day	Time	Ht	Tide	Time	Ht	Tide	Time	Ht	Tide	Time	Ht	Tide
12/01/2008	Mon	03:18AM	0.8	L	09:43AM	6.0	H	04:04PM	0.9	L	09:56PM	5.1	H
12/02/2008	Tue	03:56AM	0.9	L	10:23AM	5.8	H	04:42PM	0.9	L	10:40PM	5	H
12/03/2008	Wed	04:36AM	1	L	11:06AM	5.6	H	05:23PM	0.9	L	11:28PM	5	H
12/04/2008	Thu	05:22AM	1.1	L	11:53AM	5.5	H	06:09PM	0.9	L			
12/05/2008	Fri	12:19AM	5.2	H	06:15AM	1.2	L	12:44PM	5.5	H	07:00PM	0.9	L
12/06/2008	Sat	01:13AM	5.5	H	07:17AM	1.2	L	01:36PM	5.5	H	07:55PM	0.7	L
12/07/2008	Sun	02:07AM	5.7	H	08:24AM	1.1	L	02:31PM	5.5	H	08:52PM	0.4	L
12/08/2008	Mon	03:03AM	6.1	H	09:30AM	0.9	L	03:28PM	5.5	H	09:49PM	0	L
12/09/2008	Tue	04:00AM	6.5	H	10:31AM	0.5	L	04:27PM	5.6	H	10:44PM	-0.3	L
12/10/2008	Wed	04:58AM	6.8	H	11:30AM	0.1	L	05:25PM	5.7	H	11:40PM	-0.7	L
12/11/2008	Thu	05:54AM	7.1	H	12:27PM	-0.2	L	06:21PM	5.9	H			
12/12/2008	Fri	12:35AM	-0.9	L	06:49AM	7.3	H	01:21PM	-0.4	L	07:15PM	6	H
12/13/2008	Sat	01:29AM	-1	L	07:44AM	7.4	H	02:14PM	-0.6	L	08:09PM	6	H
12/14/2008	Sun	02:23AM	-1.1	L	08:38AM	7.3	H	03:06PM	-0.6	L	09:04PM	6	H
12/15/2008	Mon	03:16AM	-0.9	L	09:33AM	7.1	H	03:57PM	-0.5	L	10:02PM	5.9	H
12/16/2008	Tue	04:09AM	-0.7	L	10:29AM	6.7	H	04:47PM	-0.3	L	11:03PM	5.8	H
12/17/2008	Wed	05:03AM	-0.3	L	11:25AM	6.4	H	05:39PM	0	L			
12/18/2008	Thu	12:03AM	5.7	H	06:01AM	0.2	L	12:20PM	6	H	06:32PM	0.2	L
12/19/2008	Fri	01:01AM	5.7	H	07:03AM	0.6	L	01:14PM	5.7	H	07:28PM	0.4	L
12/20/2008	Sat	01:57AM	5.7	H	08:07AM	0.8	L	02:06PM	5.4	H	08:24PM	0.5	L
12/21/2008	Sun	02:51AM	5.7	H	09:10AM	0.9	L	02:58PM	5.2	H	09:18PM	0.5	L
12/22/2008	Mon	03:43AM	5.8	H	10:06AM	0.8	L	03:50PM	5.1	H	10:08PM	0.5	L
12/23/2008	Tue	04:34AM	5.9	H	10:57AM	0.7	L	04:41PM	5	H	10:55PM	0.4	L
12/24/2008	Wed	05:23AM	6	H	11:43AM	0.6	L	05:30PM	5.1	H	11:39PM	0.4	L
12/25/2008	Thu	06:09AM	6	H	12:27PM	0.5	L	06:16PM	5.2	H			
12/26/2008	Fri	12:22AM	0.3	L	06:51AM	6.1	H	01:09PM	0.4	L	06:58PM	5.2	H
12/27/2008	Sat	01:03AM	0.2	L	07:31AM	6.1	H	01:48PM	0.3	L	07:38PM	5.2	H
12/28/2008	Sun	01:43AM	0.2	L	08:08AM	6.0	H	02:26PM	0.3	L	08:16PM	5.2	H
12/29/2008	Mon	02:21AM	0.2	L	08:44AM	6.0	H	03:02PM	0.2	L	08:53PM	5.2	H
12/30/2008	Tue	02:58AM	0.3	L	09:18AM	5.9	H	03:38PM	0.2	L	09:30PM	5.1	H
12/31/2008	Wed	03:35AM	0.4	L	09:53AM	5.7	H	04:14PM	0.3	L	10:09PM	5.2	H

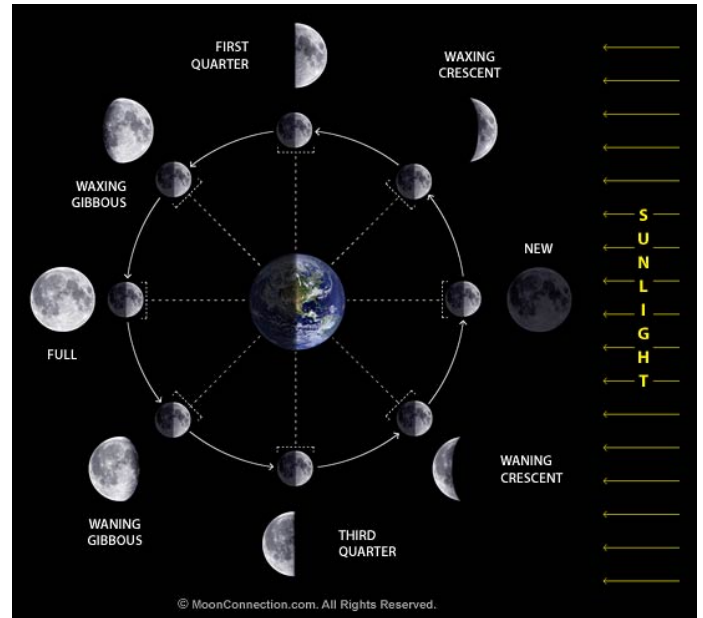
The tides on Dec 12 and 13 are called "proxigean spring tides." They occur every couple of years when the lunar phase is new or full at or nearly the same time that the Moon's orbit is at its perigee (point closest to the earth).

Higher high and lower low tides are typical when there is a new or full Moon because the gravitational pull exerted by the sun and Moon on the oceans is in the same direction. In other lunar phases, the direction of the gravitational pull of the Moon is at an angle to that of the sun.

Unless you ditched school to go fishing the day they talked about such things, you may recall from physics that the force of Moon's gravity on the oceans - its tidal pull - decreases with the cube of the distance between the Earth and Moon. You may also recall that the Moon's orbit around Earth is not a perfect circle, as shown above, but is actually elliptical. That means that at some points in its orbit the Moon is closer to the earth than at other points. The point when it is closest to Earth - and therefore, when its gravitational influence on the oceans is greatest - is called the perigee. At the perigee, the Moon is about 222,000 miles from Earth; at its farthest point, or apogee, it's about 251,000 miles away. That closer distance at perigee means a lot more pull on the water in the oceans, and a significantly higher high tide and lower low tide. And as you've no doubt guessed by now, the lunar perigee occurred nearly coincidentally with the full Moon on December 12, 2008.

It is the combination of Moon at perigee and in full phase that caused the unusual tides.

OK, now it's time for more vocabulary. We've already learned "apogee" and "perigee". Here are some more cool terms you can use to impress your friends on the dock.



When three or more celestial bodies in the same gravitational system are in a straight line, it's called a "syzygy" (pronounced SIJ-a-gee). At the time of a full or new moon, the Earth, Sun and Moon are all in alignment, so it's a syzygy. If a syzygy occurs simultaneously with the perigee of the Moon's orbit, the results are "proxigean spring tides."

Here are the dates when this phenomenon will occur over the next ten years:

- 1/30/2010 Full Moon
- 3/19/2011 Full Moon
- 5/6/2012 Full Moon
- 6/23/2013 Full Moon
- 8/10/2014 Full Moon
- 9/28/2015 Full Moon
- 11/14/2016 Full Moon
- 5/25/2017 New Moon
- 1/2/2018 Full Moon
- 7/13/2018 New Moon
- 8/30/2019 New Moon
- 10/16/2020 New Moon

Interesting, you say, but why do I care? Because these unusually high tides can cause coastal flooding, and unusually low lows can create navigational difficulties. Think about what could happen if a major hurricane came ashore simultaneously with a proxigean spring tide. The storm surge could be as much as 25% greater than otherwise. That makes what would have been a twelve-foot storm surge into a fifteen foot surge, and that's a lot more water to deal with. The 2015, 2019 and 2020 events shown above are all in prime hurricane season.

*When the Sun, Moon and Earth form a syzygy  
 And the Moon dips down to its perigee  
 I'll stay off of the beach  
 To avoid the tide's reach  
 And hope there's no hurricane near to me.*





# Life on the Water

## PAPER BOATS

*Excerpted from article by Brad Dunn,  
Power and Motoryacht magazine, January 2009*

A chemistry discovery that earned scientists a Nobel Prize in 1996 may forever change boat designs by 2010.

The scientific discovery was the existence of buckminsterfullerene, named for R. Buckminster Fuller.

Richard Buckminster “Bucky” Fuller (1895 – 1983) was an American architect, author, designer, futurist, inventor, and visionary. Throughout his life, Fuller was concerned with the question “Does humanity have a chance to survive lastingly and successfully on planet Earth, and if so, how?” Considering himself an average individual without special monetary means or academic degree, he chose to devote his life to this question, trying to identify what he, as an individual, could do to improve humanity's condition, which large organizations, governments, and private enterprises inherently could not do.

Pursuing this lifelong experiment, Fuller wrote more than thirty books, coining and popularizing terms such as “Spaceship Earth”, ephemeralization, and synergetics. He also worked in the development of numerous inventions, chiefly in the fields of design and architecture, the best known of which is the geodesic dome. Carbon molecules known as fullerenes or buckyballs were named for their resemblance to geodesic spheres.

Buckminsterfullerene consists of carbon molecules arranged in a certain way to create an incredibly strong material called buckypaper. Buckypaper is ten times lighter than steel, but up to 500 times stronger. Buckypaper was first created more than a decade ago, but only this past October researchers at Florida State University announced a significant step forward in turning buckypaper’s potential into reality.

The military is also interested and the Army Research Lab has given funded substantial research grants to create a buckypaper product as strong as its potential, and a way to manufacture it economically.

So what does all this have to do with boats?

If the current research to produce a super-lightweight, super-strong material comes to fruition, every aspect of boat design could improve drastically. When can we expect this breakthrough?

“By the end of 2009, we should have a composite as strong as IM7 [the strongest composite material currently available], and its 35% lighter,” said Ben Wang, professor of industrial engineering at FSU and pioneer of nano-materials science. “Our plan is that perhaps in the next 12 months we’ll begin to have some commercial products.”

*[Editor’s note: The Rules Committee for the Annual Cardboard Boat Race is following these developments closely to determine if buckypaper is an acceptable substitute for old packing boxes.]*



## GETTING THE MOST FROM YOUR GPS/CHARTPLOTTER

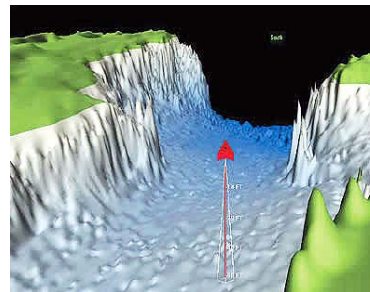
*Excerpted from an article by Glenn Law  
in Motorboating magazine, March 2009*

Coastal cruisers have a dizzying array of opportunities and options to equip their boats for safe and accurate navigation. What was a simple and straightforward chartplotter just a couple of short years ago has now morphed into a personal computer with extensive capabilities.

The key to this rapid change is the evolution of the multi-function display. Current displays can handle inputs from sonar, radar, satellite imagery, and engine functions—not to mention video feeds and Automatic Identification System (AIS). While all this data at your fingertips is appealing, the prudent captain must not forget the basic and most critical reason of a GPS/chartplotter: to get you, your boat and its contents safely and efficiently from one point to another..

According to Jim Hands, senior marketing manager for Raymarine, “Something that is very cool for cruising is the option to build two independent chart windows. They provide the helmsman with a broad view of the route for planning, and in an adjacent window, a real-time quarter of half-mile scale rotated to head-up orientation.”

Raymarine has revamped its C-series with the addition of wide-screen plotters. These wider aspect-ratio displays dramatically improves readability and enables the display of more data.



Paul Comyns, director of marketing at Simrad, sees the plotter as the key to safety and situational awareness on board. He says that the C-Map Max Pro-3D cartography in Simrad’s GB40 chartplotter is especially valuable on his home waters in the Pacific Northwest. It can be

invaluable when cruising in waters where the vertical element of geography is an important consideration., such as in fjords or areas with many small islands.

Over at Garmin. Greg DeVries, the company’s marketing director, says, “Fuel is on a lot of people’s minds these days, and they know that a fuel flow meter is a fantastic tool that works with a chart plotter. XM Radio weather overlay is another service Garmin delivers that can prove invaluable on a coastal cruise.





# AFTerthoughts

## BOATERS, FLOATERS, PADDLERS AND SAILORS

Boaters are a strange breed.

They come in several varieties: Paddlers, Fisherpersons, Skiers, Racers, Sailors, Cruisers, and Houseboaters to name a few. All exhibit unique characteristics, but all share at least one underlying common trait.

Paddlers like the peaceful excursions up and down the creeks and rivers in their kayaks or canoes. Their entertainment is the soft sound of the oar dipping into the water, the birds' songs in the trees or marsh grass, and the occasional whoosh of a dolphin sounding or splash from a fish jumping.

Fisherpersons tend to favor outboard-powered boats or big sports cruisers to get them to where the fish are and back quickly. Their entertainment is partly in the ride, but mostly in the catch.

Skiers - and I include wakeboarders and wind surfers here - are into the physical watersports. Skiers and wakeboarders favor small, fast runabouts that are highly maneuverable on the water. Their entertainment comes from the thrill of being towed across the water at fast speeds.

Boat racers are the NASCAR drivers of the water. They love speed, the deafening roar of enormous engines and the exhilaration of being aboard the relatively small and lightweight boat propelled by all that horsepower.

Sailors consider themselves the only true boaters - and frankly they have a strong argument. Whether maneuvering a 10-ft catboat along tidal creeks or

captaining a 30-m sloop across the Atlantic, sailors get their kicks in handling their boat. Unlike most other types of boaters, to a sailor being on their boat is the end; it's not the means.

Cruisers are a lot like sailors, except they don't like to work as hard. They also feel that being on their boat is the important thing and where they're going or why they're going there is somewhat secondary. They'd just rather point the bow in the right direction and shove the throttle levers forward instead of having to do all trimming and furling and tacking (I got tired just thinking about it).

Some have said, "Houseboaters are floaters, not boaters," but I disagree. There are some very competent skippers whose vessel of choice happens to come with a washer and dryer. If you don't believe me, watch someone dock a 75-footer in a tight slip. Add a light cross-wind and it's not an easy task. Houseboaters simply like to feel at home when they are out on the water, or enjoying a beautiful sunset at their dock.

So with all this variety, what is the common thread that binds us together? It's a love of the water - more specifically, a love of being on the water. It may be feeling the spray in your face as you jump the wake behind your ski boat. It may be getting the trim just right as you set out on a new tack. Or it may be taking pictures of turtles sunning themselves on a piece of driftwood. Whatever it is, it can only happen on the water.

Happy boating!!

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STAMP