

# TORPEDO ALLEY



Vol. 5, No. 11

November 2009

## Newsletter of Charleston Base, United States Submarine Veterans, Inc.



### USSVI Creed



*“To perpetuate the memory of our shipmates who gave their lives in the pursuit of their duties while serving their country. That their dedication, deeds, and supreme sacrifice be a constant source of motivation toward greater accomplishments. Pledge loyalty and patriotism to the United States Government”*



Base web page: [www.ussvicb.org](http://www.ussvicb.org)  
 National web page: [www.ussvi.org](http://www.ussvi.org)

#### Base Meeting:

November 12, 2009  
 Social hour 1800, General Meeting 1900

#### Location:

Fleet Reserve Association Branch 269, Low Country Home  
 99 Wisteria Rd.  
 Goose Creek, South Carolina. Phone 843-569-2962

Special Officers		Phone Number
Chief of the Boat	Rick Wise	843-875-5559
Public Affairs	Ed Stank	843- 569-6012
Veterans Affairs	Jim Morrison	843-832-9716
Chaplain	John Nichols	843-873-5897
Membership	Carl Chinn	843-875-3098
Holland Club	John Lookabill	843-797-2991
Scholarship	Jim Yates	843-873-0246
Newsletter	Carl Chinn	843-875-3098
Storekeeper	Ken Fuhr	803-413-3657
Webmaster	John Nichols	843-863-8474
Historian	George Scharf	843 873-3318

Base Officers		Phone Number
Commander	Paul Viering	843-797-2623
Vice Commander	Carl Chinn	843-875-3098
Secretary	Rick Collins	843-851-3490
Treasurer	Terry Trump	843-873-9563



## Minutes of the October 2009 meeting

Attendance for the October 8, 2009 meeting was 110

**Opening Ceremony:** Base Commander called the meeting to order. A Quorum was present and the meeting was commenced at 1900.

Guest Speakers were Denise Phillips and Rebecca Jordan. They were introduced by Mike Karriker. The subject was ALS, Lou Gehrig's disease. Military veterans are 2X more likely to die from ALS than the general population and ALS is now listed as a service connected disability. Our POC with the local support chapter is Mike Karriker and their website is: [www.SCALSA.ORG](http://www.SCALSA.ORG)

**Introductions:** New people were introduced; Bob Call (MT), Doug Pratt (MM2), and John E Traxler (ETC). Welcome aboard.

**Secretary:** Secretary Rick Collins asked for a motion to approve the meeting minutes from last month. A motion was made and seconded. Minutes approved.

**Treasurer:** Rick Collins gave the treasurer's report.

**Storekeeper:** 2010 USSVI calendar on sale for \$7.

**Chaplain:** September Report: *The family of K. Russ 'Pappy' Cline acknowledges with grateful appreciation your kind expression of sympathy. Thank you very much for the support of the Sub Vets. Their presence was noted by many, and remarked on. Their presence, kind words and prayers assures me I am not alone. God Bless, Judy A. Cline.*

*The family of Richard Lee Horton, III acknowledges with deep appreciation your kind expression of sympathy. Mary, Danny, Lee, Brandy and Nick Horton*

Cards were sent as follows to:

**Family of Dave Harnish.** Dave departed on Eternal Patrol on September 19th. He was a retired QMCM (SS) and the past Western Region Director, Subvets RV club wagon master, Perch and Bremerton Base member.

**Family of Richard Horton.** Rich departed on Eternal Patrol on September 18th. He was a retired RMC (SS). He was not a member of Charleston Base.

**Family of Gerald Mosseau.** Gerald departed on Eternal Patrol on September 13th. He served on the Simon Bolivar and was not a member of Charleston Base.

**Ben McDonald** who had knee replacement on September 15th. His surgery went well and he is expecting full recovery.

**Ken Hutchinson.** He received the results of PET scan and needle biopsy for the spot on his lung and even though the results were not definitive, there appeared to be abnormal cells present. Ken has chosen to have surgery on October 15th at 0530 at MUSC.

**Scholarship:** Jim Yates was not present. Tickets are being sold for a drawing for a Hunley print that is already framed. Tickets are \$1 or 6 for \$5. Drawing at the Christmas party. Do not have to be present to win. Challenge coins are being sold by the base to support the scholarship fund.

**Public Affairs:** Having problems getting certain newspapers to put our meeting notices in them. Asking for a POC for the base paper.

**Webmaster:** The website is constantly updated. If you have anything you want posted send it to Nick Nichols.

**Veteran's Affairs:** No report

**District Commander:** Nov. 4th thru the 7th in Kings Bay is the WW2 SubVets memorial. Get your reservations in. The SE regional convention is 25 thru 29 April in Panama City, FL.

**Fleet Reserve:** No report

**Holland Club:** Has compiled a list of people who will be eligible in the coming year, see him.

**Membership:** Pay your dues!

**Little David:** Thank you all who were at the Tractor Pull.

**Newsletter:** Your name will be in the newsletter if you don't pay your dues.

**Base Historian:** Looking for names of Charleston Base plank owners. He has the names of the base officers but needs the list on regular members.

**After Battery:** Donated \$50 to the Honor Flight. He has hats for sale; you can get whatever you want on them.

**Chief of the Boat:** 1. WW11 meeting @ Ryan's in Summerville be there at 11:30.

2. Hog roast @ 1300 Saturday, 24 October. \$5 bring a dish but we do not need hash, slaw, or rice.

3. Veterans Day celebration at the Taste of Summerville. We will do a Bell Tolling like last year. Come and wear your vest.

4. Veterans Day ceremony on 11 November @ 1100 in Summerville.

Amberjack Memorial dedication 1400 at Patriots Point. We need two volunteers for the reading of the "Lost Boats".

5. Christmas party at the "Gatherings" in Dorchester Dec. 5th

**Base Commander:** Asked for a motion to donate \$1000 to the Swamp Fox chapter WW2 to help pay for the Lost Boats Memorial at Patriots Point, (Amberjack). Motion made, seconded, no discussion, passed.

**Family of Ronald Gossen.** Ronald departed on Eternal Patrol on September 29th. He was a retired Submariner Chief Petty Officer and was not a member of Charleston Base.

Several follow-ups were made on those who've had surgery or illnesses in the last couple of months along with the base sending additional cards.

If you know of shipmates or spouses from other bases who are having a difficult time, had surgery, etc. and would like for USSVI Charleston Base to send them a card please send their name and address to the Chaplain via email or phone call.

**Vice Commander Report:** Panama Jack Stevenson has received the Charleston Base "Distinguished Submariner Award" for 2009. We are waiting on pictures.

**Sub Vets WWII:** Stacy Power invited everyone to the next Swamp Fox Chapter meeting at Ryan's Family Steak House 1314 North Main Street in Summerville on the 15th, the 3rd Thursday in Oct, at 1200 (noon). We need to raise some money to pay for the Amberjack memorial that we are putting up at Patriots Point. Lee Allison has WWII calendars and Lost Boat cards for sale at a great low price of \$18 for the two.

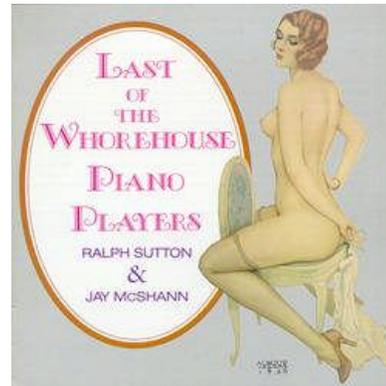
**Nuclear Historian:** No report

**Old Business:** None

**New Business:** Hats were passed to collect money to cover remaining cost of the Lost Boats Memorial. \$1,431.43 was donated for a combined total of \$2,431.43. Good Job All!!!! Remember this will be our memorial also.

**Good Of The Order:**

Depth Charge drawing to winner Gary Samples who donated \$110 back to scholarship fund. Thanks Gary!  
The Base Commander adjourned meeting at 2010.



*"Don't tell mom I'm a submariner, she thinks I play piano in a whorehouse."*



Barnette, G	Bergamo	Buxton	Campbell, G
Gomez	Hubert	Kerstetter	LaForce
Langley	Lehmann	Leonhardt	Litzenberger
Luttrell	McKanna	McLochlin	Miller, M
Morrison	Mueller	Munoz	Narowski
O'Brien	Pease	Power	Rader
Seal	Skinner	Starland	Stevenson
Versprill	Viering	Wells	Wilson, M
Wolfe	Wright	Yates, W	

**NOVEMBER HAPPENINGS!**  
myspacejunks.com

- November 8 – Patriotism In The Park, Azalea Park, Summerville. 1200 to 1600. We will have a Boat Tolling at 1400.
- November 11 – Veterans Day Ceremony, Summerville County Services building on Main Street. Starts at 1030.
- November 11 – WWII Lost Boat Memorial dedication, at the Cold War Memorial, 1400

**November Submarines Lost:**

USS Corvina	SS 226	November 16, 1943
USS Sculpin	SS 191	November 19, 1943
USS Capelin	SS 289	November 23, 1943
USS Albacore	SS 218	November 7, 1944
USS Growler	SS 215	November 8, 1944
USS Scamp	SS 277	November 9, 1944

**The Final Patrol**

*Lord, these departed shipmates with dolphins on their chest,  
Are a part of an outfit known as the very best.  
Make them welcome and take them by the hand,  
You'll find without a doubt they were the best in all the land.  
So, heavenly Father, add their names to the roll,  
Of our departed shipmates still on patrol.  
Let them know that we who survive,  
Will always keep their memories alive.*

November 11 – British submarine Seraph memorial and wreath laying. The Citadel at 1600

November 12 – Regular meeting, 1900; social hour 1800



## Membership Dues

2010 membership dues were payable on 1 October 2009.

If you're not sure what you owe, contact Carl Chinn at [membership@ussvicb.org](mailto:membership@ussvicb.org) or 875-3098.

The following members are **ON THE DINK LIST**:

Allegretto	Guido
Attaway	Edwin
Baker	Tim
Bonow	David
Cahall	Gene
Campbell	Gary
Clark	Jeffery
Cowman	Joseph
Davis	Christopher
Davis	Danny
Edwards	Kyle
Fletcher	Stephen
Griggs	Dewey
Gunnis	Glenn
Habegger	Dean
Heber	Benjamin
Hensarling	Wayne
Hudgins	James
Johnson	Edwin
Langley	Robert
McMullin	Atha "Mac"
Miller	Marvin
Novak	Mark
Ougourlian	Gregory
Peterson	Thomas
Riley	Thomas
Smith	Mike
Smith	Pinckney
Spagone	Daniel
Spear	John
Stump	Richard
Upchurch	Walter
Van	
Swearingen	Joseph
Votta	Alan
Waller	Rick
Wardean	John
Wieland	Ralph
Williams	Richard
Yingling	Thomas



## Charleston Base Boat Tolling Ceremony at 1400

### Veteran Appreciation Nights

Active duty, and veterans can have a free entree at Applebee's restaurants on 11 November.

<http://applebees.com/>

The same is available at the Golden Corral restaurants on 16 November.

### Military Appreciation Monday Free "Thank You" Dinner Monday, Nov. 16, 2009, 5 p.m. to 9 p.m.

Golden Corral's 9th annual Military Appreciation Monday dinner will be held on Monday, November 16, 2009, from 5 to 9 pm in all Golden Corral restaurants nationwide. The free dinner meal is a special "thank you tribute" to any person who has ever served in the United States Military. If you are a veteran, retired, currently serving, in the National Guard or Reserves, you are invited to join us for Golden Corral's Military Appreciation Monday dinner.

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## Yes, It's Still Our N A V Y

This is a copy of the speech that our Honored Guest, Harry Levins, made to the members of the St. Louis Council of the Navy League of the United States at our Annual Dinner Meeting. John Kane, USNA '44:

My thanks to Capt. Kane for inviting me here tonight. You ought to know how honored I am. After all, I'm an old soldier. To me, the Navy is a mysterious institution. It's an institution in which the NCOs dress like the officers, and the officers almost never get their hands dirty. It's an institution whose people call a rope a line, and a stairwell a ladder, even though it's as plain as the nose on your face that you're looking at a rope or a stairwell. It's an institution that never warns you about wearing a hat into the wardroom - and then glares at you when you wear a hat into the wardroom. It's an institution in which people take frightfully brief showers. I've gotten damper in the predawn dew. And it's an institution that sometimes speaks and behaves as if we're all Englishmen living in, oh, 1880 or so, and Queen Victoria is now and forever on the throne. I guess I'm saying that to me - and to millions of my countrymen - the Navy is the least American of the services. Now, nobody would ever say that about the Air Force. Hell, Americans invented air power. The airplane, too. The Air Force is high-tech, high-speed, zoom-and-boom. It's as American as hot rods and forward passes. I'm aware that the Marines are a part of your Navy. And yes, they have their own odd vocabulary. They call a hat a cover, for God's sake. But maybe they're even more American than the Air Force. Who's the all-time No. 1 Marine? No, it's not Chesty Puller, and it's not Smedley Butler, and it's not even Ted Williams. It's John Wayne - and you just can't get more all-American than John Wayne.

And then there's the Army, my Army. One author wrote a book about the cultural differences among the services. This author - he was once a sailor, by the way - said that the Air Force's first loyalty is to technology, to its airplanes. He said the Navy's first loyalty is to the Navy itself. And he said the Army's first loyalty was to the Republic, of which the Army views itself as the loyal servant. By the way, he added, this is why the Army so often gets screwed. But the Army is America, from Audie Murphy to Beetle Bailey. That leaves us with the Navy, and the question of why it seems to be outside the rest of society.

For one thing, physically speaking, the Navy is outside the rest of society. No carrier task force ever made a port call in St. Louis, or Des Moines, or Evansville. By definition, the Navy does its work out of sight, somewhere out there beyond the hazy horizon. Even along the coasts, few Americans pay attention. The United States is a maritime nation. We depend on seaborne commerce. But how many

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## Tricare Flu Shots

Tricare covers the following vaccines for the seasonal flu:

- Flu shot: an inactivated vaccine containing a killed virus and given with a needle. This form of the vaccine may be used in all age groups.
- Flu mist: nasal-spray flu vaccine made with live, weakened flu viruses. This form of the vaccine is limited for use in people who are between the ages of 2 and 49 years, and who are not pregnant at the time they receive the vaccination.

Tricare covers the Seasonal and H1N1 flu vaccines as long as the vaccine is obtained from a Tricare-authorized provider. Understand that pharmacists are not recognized by Tricare as authorized providers to administer immunizations. Certain people should get vaccinated each year because they are at high risk of serious flu-related complications or because they live with or care for high-risk persons. According to the Centers for Disease Control and Prevention (CDC), the following people should be vaccinated each year:

- All children aged six months to 18 years
- Adults aged 50 years and older
- Persons with underlying chronic medical conditions
- All women who are be pregnant during the influenza season
- Health care workers involved in direct patient care
- Child care and elderly care workers
- Persons at high risk of severe complications from influenza

The CDC has determined that the H1N1 virus is contagious and spreading from human to human. The vaccine is expected to be available in OCT/NOV 09 and beneficiaries are strongly encouraged to get vaccinated. To ensure Tricare Prime enrollees can receive the vaccine as quickly as possible, Tricare is suspending requirement for them to have a referral and authorization from their primary care manager allowing them to receive the H1N1 vaccine from any Tricare-authorized provider, including non-network providers. The requirement is suspended from 1 OCT 09 thru 30 APR 10. This will allow Tricare Prime enrollees to receive the H1N1 vaccine from any Tricare-authorized provider without being subject to point-of-service charges for visiting a non-network provider. Again, understand that pharmacists are not recognized by Tricare as authorized providers to administer immunizations. For more information about the seasonal and H1N1 flu and to learn about preventing the flu, refer to the Tricare Flu Resources Page [www.tricare.mil/flu](http://www.tricare.mil/flu)

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Americans ever pause to consider that fact? We like to think of ourselves as self-sufficient -- as alabaster cities and amber waves of grain. We're wrong, of course. But even in major ports like New York, residents ignore what the oceans mean to America.

A few years back, I asked a friend in the Bay Area to take me by the Oakland docks. My friend had some trouble finding his way in. He'd lived on the East Bay for almost his entire life, and he'd never toured the docks. What we saw was as fresh to him as it was to me - mile after mile of cranes and containerized cargo, Subarus and Sonys and God knows what. And all of it got here by sea. But most of us think the stuff just shows up in showrooms and stores in St. Louis. When we think about it at all. And if our maritime-nation status is way off in the back of our minds, so is the Navy that protects that status.

Oh, sure, America has its Navy towns - but not nearly so many as it once did. And a lot of those Navy towns are stuck off in some coastal corner. Bangor, Washington. Kings Bay, Georgia. Those places aren't exactly Brooklyn, or Philadelphia, or Boston, or San Francisco.

The only sailors most Americans ever see is the chief at the recruiting station. Think about it. Here in St. Louis, we see a lot of the Army, thanks to the kids in ill-fitting uniforms who come and go from Fort Leonard Wood through Lambert Field. And although we see less of the Air Force, we're aware that it's just across the river, at Scott Air Force Base. But the sea services? The Marine Corps is small, and far away. The Navy is big, but it, too, is far away -- on the coasts, in places like Norfolk and San Diego, places we rarely visit. And then, as I said, when we do make contact with the Navy, we're up against an institution that draws most of its vocabulary and traditions from the Royal Navy of a century and half ago - from Victorian England. To people like me, sometimes, it seems quaint - people saying Aye aye, sir; instead of Yes, sir, and talking about port and starboard, instead of left and right. But sometimes, it seems downright alien. On a sunny day in December 1991, I was chatting with some lookouts on the battleship Missouri, bound for Pearl Harbor for the 50th anniversary observance. We were on the flying bridge, or whatever it is that you people call the open bridge on top of the enclosed bridge. Like most young military people dealing with reporters, they asked whether I had prior military experience. Yes, I told them, I had once been an infantry platoon leader in the Army in Germany. They asked me what I thought of the Navy. I said, Good chow. They nodded. And I said, but I can't get over the class system. They asked what I meant. I said, Well, in the Army, I wore the same fatigue uniform as the enlisted men. When they got muddy, I got muddy. When they got cold, I got cold. And when the chow truck came

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## Annual Christmas Party



The Charleston Base Christmas Party will be on 5 December 2009. It will be held at the same location as the past 3 years; *Gatherings* in beautiful downtown Dorchester, SC.



Same rules as always...

**you must have a ticket to attend and THERE WILL BE NO TICKET SALES AT THE DOOR!**

Cocktails at 1700, Dinner at 1830

Dress is not prescribed, come comfortable, as you desire. Coat and tie, slacks and shirt, etc.

Tickets will be available starting September meeting.

**Last day to buy tickets is 12 November meeting.** Buy early! Ticket price: \$15 per person for member and spouse/girlfriend. \$20 per person for all other guests.



To all our USSVI Sub Vet brothers from the WWII Swamp Fox chapter, our thanks.

What an outpouring of love you made in helping the World War Two Submarine Veterans by your generous donations of monies, both as an organization and individually. Words can't express the heart felt feelings we all received. Our goal is to pass on to our grandchildren a bit of history that they may see that liberty is not free.

The Swamp Fox chapter has 17 members remaining from about 268. Our USSVI members comprise 34 as associate members and we will ensure their memory will not be lost or forgotten.

The plaques are in and look beautiful they will be mounted on a blue gray granite which really offsets the colors on the plaques. I think every one will be pleased. Again thanks to all who helped the World War Two veterans, Roger, Lee Mike, Stacy and Abe.

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out to the field, the other officers and I stood at the end of the line. If the chow ran out, we went without. The sailors' eyebrows rose. I continued, if I'd ever had an enlisted man wait on me the way they do in the wardroom, I'd have been court-martialed. And don't the officers ever talk to you guys? Does everything go through the chiefs?

Just then, the lookout with headphones barked, XO on the bridge! Away flew the cigarettes. Up shot the binoculars. I don't know if those kids could have spotted a Soviet submarine ambush. But the XO never had a chance. Later, back on the fantail with a cigar, I ruminated about the officer-enlisted relationship. I concluded that on a crowded ship - even on a ship as big as the battleship Missouri -- it probably has to be that distant and aloof. Still, I felt odd every time I saw those signs that said Officers' Country -- Official Business Only. Think about it - all the great Army novels are enlisted-man novels, and all the great Navy novels are wardroom novels. And most Americans are enlisted men at heart.

Ah, well. I won't change the Navy. If Franklin D. Roosevelt couldn't, I can't. Roosevelt once said that trying to change the State Department was all but impossible - but that trying to change the Navy was even worse, like punching a feather pillow. No matter what you do to the feather pillow, he said, it always returns to its original shape. But - and here's the serious part of this speech - this era seems to be the perfect time for America and its Navy to get to know each other. If you kept up with Washington rumors before Sept. 11, you know about the talk in the Pentagon of cutting back on carriers. Defense Secretary Rumsfeld's people were talking up something called transformation -- and for the Navy, that meant mothballing a couple of carriers, maybe more. After all, the thinking went, in an age of cheap and accurate missiles, the carriers are big fat targets. And in an age of precision weapons, the carriers' air power can be replaced by cruise missiles and long -range Air Force bombers with smart bombs. Well, after Afghanistan, that kind of talk sure went away, didn't it? I think Afghanistan showed that in a messy age with no clear-cut big enemy, expeditionary forces are utterly and absolutely priceless. And by definition, a Navy and a Marine Corps are expeditionary forces. You folks seem to own the franchise on the future. You'll get an argument from the airpower people on that one. In fact, you are getting an argument from the air power people.. The Air Force Association pumps it out daily. But the Air Force is also putting all of its money into short-range fighters. They're nifty, but only when you have runways in the neighborhood. Otherwise -- as we have learned in Afghanistan, only the carriers will do. They're expensive -- no, they're frightfully expensive -- but it's beginning to look as if they're indispensable. Same thing with the Marines. A Marine Expeditionary Unit is a



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### **Neutrinos May Someday Provide High-Speed Submarine Communication**

By Jeremy Hsu, Popular Science, October 6, 2009

Submariners should brace for some crazy science to match those Crazy Ivan maneuvers. A physicist says that ghost-like neutrinos that pass easily through just about everything could provide a future method of communication with deep sea submarines.

Neutrinos represent the ghost particles of the physics world that typically pass through about every form of matter without a trace. That solves one half of the problem in communicating underwater, where radio waves travel poorly and even very low frequency (VLF) waves can only go so far. But it leaves open the other half of the issue in that submarines have no way of receiving communications via neutrinos.

Physicists have typically studied such particles by detecting the secondary particles or electromagnetic waves that result from rare neutrino collisions. They have also used an experiment at the Fermi National Accelerator Laboratory in Chicago to beam neutrinos more than 435 miles to a Minnesota mine, where a giant underground detector can easily pick up the muon particles that result from neutrino collisions--although even that detector has only found 730 muons over the past two years of operation.

Patrick Huber, a physicist at Virginia Tech, believes that the next generation of muon detectors will dramatically improve in sensitivity to the point where a submarine could possibly carry one. Covering a submarine hull in thin muon detector modules could possibly work, but an even easier method might involve looking for the Cerenkov light radiation left by muons moving through seawater. That large signature could represent an easier target for detection, despite interference from the usual light in an underwater environment.

There are several ifs, and yet the idea of receiving data at rates of up to 100 bits per second must sound appealing to naval forces. Submarines that want to communicate without surfacing must currently trail a long radio antenna behind them, and can only receive up to 50 bits of data per second.

But even if a neutrino communication method arises, Technology Review points out that there's still no way for submarines to phone home in reply. So for the near future, submariners may have to settle for the usual: run silent, run deep.

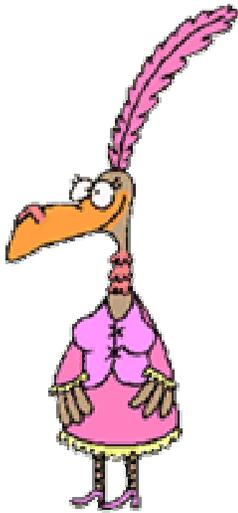
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frightfully expensive way to put a reinforced battalion of infantry on the scene. The Army is cheaper, but without staging bases, the Army is irrelevant. Now, the Association of the United States Army makes less noise than the Air Force Association. The Army people tend to sigh, and then to hope that when they're needed, the nation will remember them. And someday, they will be needed. Remember: Afghanistan is almost the last war - and you know what they say about getting ready to refight the last war. Still, I think you folks are wonderfully positioned. If we have to do Somalia, or Sudan, or the Philippines, or Indonesia, we'll turn first to the sea services. In the Cold War, you folks took a back seat to the Air Force and Army. Now, it's your turn to shine - and in Afghanistan, you shone. Don't be shy about it. Let your fellow Americans know that a big Navy has its uses, after all. Capt. Kane told me that I should speak briefly, and I'm pushing the brevity envelope, so I'll sit down and shut up. But not without one last question:

Why do you call it a brow instead of a gangplank?

Thank you very much.

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### **Admiral Osborne Scholarship Fund**

How about helping out the scholarship fund? We are offering a Charleston Base Challenge Coin for sale. ALL proceeds go into the scholarship fund.

Coins only cost \$7 each. Available for an additional \$1 is a protective plastic capsule.

To get your coin(s) see Jim Yates, Julian Villegas or Carl Chinn.

Make sure you have one for "when you get challenged"!

Buy several for great gifts!

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### **Deep-sea communication with neutrinos**

Physics World, Oct. 7, 2009

Communicating with nuclear-powered submarines – which can remain underwater essentially indefinitely – is a major challenge because seawater is opaque to most of the electromagnetic spectrum. Neutrinos have previously been proposed as a solution to this problem, because these subatomic particles can pass easily through all matter, but it was thought to be impossible to generate beams of sufficient intensity. However, a physicist in the US has now calculated that the extremely intense beams of a neutrino factory would do the job.

Nuclear-powered submarines can remain submerged for months at a time and only need to resurface to replenish food stocks or carry out maintenance. However, submarines' movements are restricted by the need to receive messages to direct their actions. Seawater is transparent only in part of the visible portion of the electromagnetic spectrum (blue and green wavelengths) and at frequencies below about 100 Hz. Using lasers in the visible is not practical and low-frequency radio transmissions result in extremely low data rates – around one bit per minute. As a result, nuclear submarines currently communicate by floating a wire antenna close to the surface of the ocean. While this supports data rates of about 50 bits per second, it restricts the depth and speed of operation of a vessel.

### **Sent through the Earth**

Patrick Huber of Virginia Tech believes that these problems can be overcome by instead using neutrinos. Because neutrinos interact extremely weakly with other matter, a beam of such particles can be sent through the Earth with very little loss of intensity. So a submarine could in principle pick up information encoded in a neutrino beam sent from anywhere else on the planet by detecting the neutrinos that approach it from below. Unfortunately, neutrinos interact very weakly with matter and, therefore, generating a measurable signal requires an extremely intense beam. There are currently a number of experiments around the world that involve the transmission and detection of neutrino beams in order to measure how neutrinos "oscillate" as they travel through space, an important area of study in fundamental physics. But such facilities would be unsuited for carrying out long-range communications. For example, a beam sent from Fermilab outside Chicago to a mine around 700 km away in Minnesota results on average in just one neutrino being registered in the detector every 12 hours. As Huber points out, this rate would need to improve by a factor of about one

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## Women In Subs

How, Where And When Female Sailors Would Join The Silent Service

By Andrew Scutro and Mark D. Faram, Navy Times, Oct. 12, 2009

(Editor's Note: The following story will appear in the Oct. 12 edition of Navy Times, which explains the publication date in the byline above.)

A handful of female seniors at the Naval Academy or in the Naval Reserve Officers' Training Corps could very well be the first women to be assigned to a U.S. submarine.

And if initial plans fall into place, those women – joined by some seasoned supply and surface nuke lieutenants already in the fleet – will be included in four crews assigned to two Ohio-class submarines by late 2011. In exclusive interviews with Navy Times, the heads of Fleet Forces Command and the Submarine Force laid out near-term plans for integrating women into the undersea fleet. The plans, which must be approved by senior Navy and Pentagon leadership, underscore how quickly the service is pushing the initiative.

The interviews also produced a surprising amount of detail, since the statements came less than one week after the chief of naval operations and Navy secretary told Navy Times that they wanted to end the ban on assigning women to submarines. Plans are so far along, admirals said, because they have been working this issue for years. And after leaping one legislative hurdle, the first steps toward integration could happen fast.

The Pentagon must notify Congress of the intent to change policy to allow women on subs, then wait 30 days before moving ahead, and before spending any money. The Navy's working on that notification right now, said Vice Adm. Jay Donnelly, head of the Submarine Force.

"I would think that would start making its way from the Navy, through the secretary of the Navy and the secretary of defense in the month or so ahead," he said.

million if neutrinos were to be used to send messages. Huber, however, has worked out that a new kind of neutrino source that physicists hope to build within the next decade – a neutrino factory – would provide sufficient intensities. A neutrino factory would work by slamming high-energy protons into a target made of liquid mercury, with the collisions producing pions, which decay into muons, which in turn decay into muon neutrinos.

## Detecting Cerenkov radiation

Huber calculates that data encoded in beams of such neutrinos could be picked up by detectors wrapped around the hull of a submarine at rates of between 1 and 100 bits per second. These detectors would either pick up the muons produced when muon neutrinos interact with the water or, more indirectly, measure the Cerenkov radiation generated by the passage of such muons through the water. Data would be encoded by chopping time up into many different slots and then sending a pulse of neutrinos within a particular slot, so that one second divided up into 16,000 slots, for example, would be equivalent to transmitting one letter out of a 16,000 letter alphabet or 14 bits (2<sup>14</sup>). A neutrino factory would not come cheap – it would cost several billion dollars. And adapting it for telecommunications might, says Huber, roughly double this price; the extra expense required to make the device rotatable so that it could point to wherever a submarine is located. But Huber believes that this price should be seen in the context of the money already spent on nuclear submarines by the US, with the 14 Trident vessels, including missiles, costing some \$150bn. "There are many things I would not have thought a government would spend very large amounts of money on," he adds. "So I would not expect anyone to actually build such a system. But I would not be surprised if someone wanted to do more research on it."

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## Medicare Reimbursement Rates 2010 Update 01

Despite a strong push from The Military Coalition (TMC), the American Medical Association (AMA) and others, the Senate failed to muster enough votes this week to repeal the flawed statutory formula that will impose a 21% cut in Medicare and Tricare payments to doctors this coming January unless the law is changed. Earlier this week on 20 OCT, Military Officers Association of America (MOAA) President VADM Norb Ryan Jr. (USN-Ret) was one of three major association leaders invited by Sen. Debbie Stabenow (D-MI) to speak at a press conference in the U.S. Capitol building to highlight the importance of passing Stabenow's bill to protect against repeated cuts in 2010

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The first women assigned to submarines will be junior officers, said Adm. John Harvey, head of Fleet Forces Command.

"We'll start with the officers because you can get to it soonest," Harvey said. "I am very certain that you will start with junior officers that will come in right to the submarine force."

Both Harvey and Donnelly said bringing female sailors aboard will be more complex due to manning requirements – and more expensive because of berthing modifications. Adding junior female officers to subs will require no money for modifications, they said.

The admirals also said that, in the near term, integration will occur only in the Navy's Ohio-class submarines, which consist of 14 ballistic-missile subs and four guided-missile subs.

The Navy's three classes of smaller, fast-attack subs – Los Angeles, Seawolf and Virginia – are another story.

"When you look at the one we're building now, the Virginia class, that's what I'd call a mature design," Harvey said. "Now that we're in serial production, to go back and undo things to make it viable for females in the crew, that's a pretty tall order.

"Can it be done? I just don't know where we are on that and at what cost, etc.," he said. "But I know we can get at it much more rapidly with the SSGNs and SSBNs, so that's where the focus will be."

### *Choosing the first to go*

Donnelly was careful to point out that he was speaking about how the sub force "might" integrate quickly and not how it "will."

The plan to be submitted to leadership for approval will likely involve integrating four crews at first: the blue and gold crews of a ballistic sub on one coast and the blue and gold crews of a Tomahawk shooter on the other, officials said.

The first group would come from the Class of 2010. Seniors interested in surface and undersea nuclear careers are already under-going personal interviews with Adm. Kirkland Donald, head of Naval Reactors. Right now, women being interviewed are eligible only for nuclear propulsion billets aboard aircraft carriers. The men are eligible for carriers and subs.

and subsequent years. Speaking at the press conference Ryan said, "The current flawed formula for Medicare doctor payments puts every military beneficiary at risk, because military Tricare payments are tied to Medicare's. Access to health care already is the single biggest problem for military beneficiaries of all ages. The 21% cut to Medicare and Tricare payments called for under current law would make that problem exponentially worse by causing large numbers of doctors to stop seeing elderly and military patients. The last thing troops in combat should have to worry about is whether their sick spouse or child can find a doctor to treat them." Ryan noted that MOAA members had generated more than 16,000 messages in the space of four days urging their legislators to support Stabenow's legislation.

Current law requires not only a 21% payment cut in 2010, but a cumulative 40% cut over the next six years. Stabenow said she introduced her bill "Medicare Physician Fairness Act" (S.1776) to get Congress "to rethink how we look at physician care and physician payments. She said Congress has acted to stop such cuts seven times in the past, but most have only been one-year fixes that necessitated reversing even bigger cuts the following year. "We need to stop the band-aid approach, be honest about [future budgets], and lay a foundation for real physician payment reform." Ryan signed MOAA letters to every senator on 20 OCT, urging them to vote for S. 1776, but the vote failed after several senators expressed concern about how to pay for the bill, which would cost \$250 billion over the next 10 years. After the failed vote, Senate leaders pledged to find a way to approve and fund at least a one-year fix before the end of December to ensure the 21% cut in Medicare and Tricare payments won't go into effect. The problem with this approach is that current law requires compounding annual cuts - forcing a 26% payment cut in JAN 2011 - so putting off a permanent fix only increases the cost of doing that later.

On 30 OCT House Democrats introduced H.R.3961, the Medicare Physician Payment Reform Act of 2009, which would repeal Medicare's ineffective Sustained Growth Rate (SGR) formula and replace it with a more reliable system. The SGR is used to determine physician reimbursement rates for doctors providing services in Medicare and TRICARE programs. First established in 1997 to constrain healthcare costs, the SGR sets spending caps for the entire Medicare program each year, and if overall spending exceeds that level (which it has, every year, since 2002), physician reimbursement rates are cut to bring expenditures in line with established targets.

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Donnelly said the first female officer cadre would depend on volunteers this school year.

It's already a healthy pool. In the academy class that graduated last spring, half of the 32 ensigns headed to nuclear propulsion school were women. That bodes well for finding volunteers among this year's crop of seniors.

"I think it would be possible to go back to that pool [of senior midshipmen] that has been accepted into the nuclear propulsion program with the intent of going into the surface community, to go back and say, 'Are there any of you that would care to volunteer for submarine duty?'" Donnelly said.

After graduation in May 2010, they would enter the submarine officer pipeline with their male classmates.

"They'd go to six months nuclear power school in Charleston, S.C., followed by six months of prototype training, followed by three months at the basic submarine officers' course we teach," he said.

"That's 15 to 16 months of training before women officers from that class get to their ships. So we're talking some time in late 2011 the earliest, or into early 2012."

### *Big subs only*

The Navy's three classes fast attack subs are tightly packed, making Ohio-class subs roomy by comparison. The modifications to berthing areas to accommodate women on attack boats would be exceedingly expensive and maybe not even possible, according to experts. On the other hand, aboard the larger Ohio's, officer berthing for department heads and below makes integration simple, as it is limited to two staterooms with three bunks and three with two bunks.

The officers would share their existing head, and just use a flappable sign on the door denoting whether women or men or in the head.

"There is no modification," Donnelly said. "There is no cost."

As far as crew composition, Donnelly said, the surface fleet's 16- year experience in gender integration found about 10 percent to 15 percent of officers and enlisted need to be women. The initial female cadres – in this case, as few as two to four officers per crew – need to have one member who is senior in order to mentor the junior.

"I might be able to find some women supply officers who have been to sea in a mixed-gender crew who kind of

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## **We Are A Submarine Sailor**

by Mike Hemming

We are not the first of them and we will not be the last. Our heritage runs back to the first submarine. This heritage line continues forward into an unseen future. Each generation is trained by the one before. This will remain so until there is no more use for submarines, which will be never.

If one of us goes aboard a new or old submarine, we are comfortable with the men there. For they are us and we are them. Stand us in a line in all our dress uniforms or naked in our coffins, we are the same. We are and forever will be submarine sailors. We are one.

We can have everything taken from us, uniforms, medals, our sanity and our lives, but we will always be recognized by others and ourselves as a submariner. This status can not be removed from us. Our Dolphins worn on our chests then, hung on our walls now, or later pinned on moldering uniforms in our graves mark us forever. We are first, last, and always men that stepped forward and worked long and hard to become what we are. We are unique among sailors for we sail down deep into dark and always dangerous waters. We do this not with foolhardy go-to-hell bravery, but with cool calculation and care. We challenge the dangers with training and practice. We know that the time for bravery will come when two shipmates close themselves in a flooding compartment, knowing that the whole boat and crew depends on them to control the flooding.

We believe in each other, because we must. Alone at sea, the crew and a pressure hull are all we have to reach the surface again. Men with confidence in each other dive and surface submarines countless times. Each man trained by others holds the lives of those shipmates in his hands. Dolphins are the symbol of this tradition.

Submarine hulls have numbers and men have hearts and souls. We carry those numbers in our hearts in life, and they mark our souls in death. Silver or Gold, Dolphins are the symbol of this.

To us Dolphins are it, no other symbol matters or means anything as important as they do.

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## **USS Squalus**

It was dark. The air was foul. The only light came from the beams of a few flashlights.

On the other side of the bulkhead was a tomb. In those cold, dark spaces were 26 men who had died an agonizing death, drowned by water gushing through an air induction valve nearly three feet in diameter.

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know the ropes," he said, "and put them in that initial cadre along with some nuclear-trained ensigns coming out of sub school."

Female surface warfare officers coming off an initial sea tour and headed into the nuclear pipeline to be nuke-SWOs might be another source of senior cadre.

### *Officers will be phased in*

"I think it would be probably multiple ships, not the entire force initially; we need to ramp this up. I'd look to do this on BNs and GNs, multiple crews, in both home ports, Kings Bay [Ga.] and Bangor [Wash]."

### *The enlisted issue*

Bringing in enlisted women is a tougher issue. It's going to take money, modifications and careful training, both admirals said. "We're not going to see a young female sailor swinging her seabag on her shoulder and walking aboard the USS Maryland next month," Harvey said. "But we will – it will be a couple of years. We have to recruit, bring them in the program."

Having that lead time, he said, will give manpower planners a chance to move forward "in a thoughtful, very controlled, very deliberate manner."

Probably the most critical lesson learned in the surface force, Harvey said, is the need to have strong officer and senior enlisted leadership in place before bringing in junior enlisted women.

That's because incidents of pregnancy and fraternization are less frequent in crews with strong female leaders onboard.

"It can't be 'I'm the woman on the submarine' – that's just a terrible burden to put on everybody, particularly that young woman," Harvey said.

He said it will take some time to build a "critical mass" of female leadership needed to seed the integrated crews.

"You'd have to get at least a small cadre of female chiefs or first-class petty officers, and those, of course, would have to come from other parts of the Navy initially," Donnelly said. "Then they would have to have sufficient time to qualify in submarines in order to have, I think, the credibility as leaders on the ship, and that takes some time."

Converting into the submarine community at the E-7 or above level would be difficult, according to a retired

Warren Smith wasn't on the deadly side of the bulkhead. He was on the lucky side, where 33 survivors were breathing air pressurized to double the atmospheric pressure at sea level, fighting for every breath.

The morning of May 23, 1939, started out routinely enough. The submarine U.S.S. Squalus left port on its way to the 19th dive of its sea trials.

The U.S.S. Squalus in 1938, a year before the fateful dive when she sank.

The drill this morning was to submerge rapidly in a simulated enemy attack. The captain ordered the boat to dive just as he had 18 times before, but this time something went terribly wrong.

Two valves, one nearly three feet in diameter, had stuck open -- letting a torrent of water into the boat.

"We dove and we went down to 50 feet in 55 seconds, and then we got word the engine room was flooding. So the old man dropped down out of the conning tower ... and said blow all ballast. And when they did the forward ballast raised the bow up about a 45-degree angle and stuck her nose out of the ocean probably.

"But there was so much water that went into the engine rooms ... she went down. She stuck her tail in the mud ... sat on the bottom and that's where she was."

She was in 240 feet of water off the coast of New Hampshire. In the dark. In an ocean whose temperature was two degrees above freezing. And with the terrible knowledge that no one had ever been rescued from a sunken submarine.

The one thing the submariners had going for them was a radical new technology pioneered by a Navy maverick named Charles "Swede" Momsen. The new technology was the McCann Rescue Chamber, a diving bell. The Squalus rescue would be the first time it was used.

The chamber made four trips to the bottom that day. Smith, who now lives in Twin Falls, came up in the second trip, after 26 hours underwater. He got the early exit because he was sick.

A portrait taken of Smith in Hawaii in 1942.

"I'd been up in that conning tower and I got sicker than a dog up there. The air was bad, and Arthur Booth and I was hammering on the goldam bulkhead and tearing off insulation and everything."

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senior submariner familiar with the Navy's plans. He asked not to be named because of his continued ties with the Navy.

"Really, to be in the chiefs' mess on a submarine you already need to be qualified in submarines – if you're not, you would be a burden more than an asset," he said. He said it would make sense to convert experienced petty officers and grow them into submarine chiefs.

But even as they're building the enlisted leadership picture, officials also must work on the other piece – recruiting junior female submariners from the street.

For many of the nontechnical ratings such as yeoman and culinary specialist, that could be fairly easy and quick, as it would require only about six months at "A" school and the six-week submarine school in Groton, Conn., as happens today with male sailors.

Donnelly said it was too early to say which ratings will be open to women. But over time, all submarine ratings could be open, the retired sub source said.

But to truly build a proper representation of women in the submarine force, the source said, women must be recruited and trained in technical ratings, too.

Training female sailors in highly technical ratings has been a challenge on the surface side. Of the 12,845 nuclear-power-qualified sailors, just 752 are women and 241 of those are in training. Only 22 are chiefs, and two are senior chiefs; there are no female master chief nukes. Growing female enlisted nukes will take time. It takes about 18 months once a sailor reports to nuclear power school in Charleston for that person to join a sub crew.

#### *Enlisted modifications*

The other issue, besides personnel, will be to modify enlisted berthing on the Ohios. Donnelly said the volume of that hull allows for relatively uncomplicated modifications. But fairness is key to any change.

"I would not entertain a solution that forced the men to hot-bunk on one of those ships. So we'll do this right, and the right answer is give the women their own head," he said, "and make sure the men aren't inconvenienced or treated unfairly in any way."

As they exist now, the modification plans are little more than drawings, as money can't be committed prior to congressional notification.

Smith and his shipmate had spent hours in the conning tower, beating out a message in Morse code in hopes the ships hovering above would hear them. The captain ordered Smith to go to the forward torpedo room and wait for rescue.

"We moved up into the torpedo room and I crawled up into a bunk and went to sleep. I said, well, I'll either get out of this son-of-a-gun or I won't.

Did Smith ever have the feeling he wouldn't survive?

"No, I didn't have that feeling 'cause I'd had things happen to me before -- not that bad, of course. I figured I was either going to get it or not."

But that attitude didn't temper his reaction when the diving bell bobbed to the surface.

"... when I came out of that bell I couldn't believe the air was so easy to breathe."

Warren Smith is 87 years old and still breathing easy.

#### Warren W Smith

Passed away on 7/23/2001

Twin Falls ID: Shipmate Warren W. Smith departed on eternal patrol July 23, 2001. Warren was a member of SUBVETS WW2 and USSVI, Hawkbill Base. He qualified on the S-1 in 1934 as a Seaman 2/c.

He served on the USS CACHALOT, USS BASS, and USS S-37. In 1939, Warren was a SM2/c aboard the USS SQUALUS when she sank. He was one of 33 survivors. He made war patrols on the USS GRAYBACK.

Warren retired as a LTjg after 22 years service. He is survived by his son Arthur A. Smith of Twin Falls, Idaho.

He will be missed by his family and shipmates at Hawkbill Base. Sailor rest your oar.



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"We haven't actually gone to the ship design engineers," Donnelly said.

The timeline is somewhat flexible for enlisted berthing modifications, which could be completed on the boomers during their refueling overhauls. The four SSGNs already completed their midlife overhaul and conversion. There are also shorter yard periods when the work might be done, depending on the complexity.

Donnelly estimates the cost of those modifications at \$8 million to \$10 million. But he offered a warning.

"Those prices never go down," he said. "They always go up."



Remember,

If you haven't got a smile on your face

And laughter in your heart,

Then you're just a sour old fart!

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