

# TORPEDO ALLEY



Vol. 10, No.10

November 2014

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

### Base Meeting:

BOD: 6 November, 1800

Membership: 13 November, 1900

### Location:

Fleet Reserve Association Branch 269

Low Country Home

99 Wisteria Rd.

Goose Creek, South Carolina. Phone 843-569-2962



Base Commander	<u>Ed Stank</u>	843-568-2148
Vice Commander	<u>Don Mook</u>	843.499.5727
Secretary	<u>Rick Wise</u>	843.875.5559
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Chief of the Boat	<u>Rick Sparger</u>	843.553.5594
Veterans Affairs	<u>Ken Curtis</u>	843.797.1268
Membership	<u>Don Mook</u>	843.499.5727
Scholarship	<u>Julian Villegas</u>	843.871.6135
Storekeeper	<u>Ken Hutchison</u>	843.553.0935
Historian	<u>George Scharf</u>	843.873.3318
Public Affairs	<u>Tom Clark</u>	843-871-8923
Chaplain	<u>Nick Nichols</u>	843.452.3189
Holland Club	<u>Bill Freligh</u>	843.553.1115
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[ussvicb.org](http://ussvicb.org)

## BOATS LOST IN NOVEMBER

BOAT	HULL	LOSS DATE	SOULS LOST
USS Albacore	(SS-218)	07 Nov 1944	86 Officers & Men
USS Growler	(SS-215)	08 Nov 1944	84 Officers & Men
USS Corvina	(SS-226)	16 Nov 1943	82 Officers & Men
USS Scamp	(SS-277)	16 Nov 1944	83 Officers & Men
USS Sculpin	(SS-191)	19 Nov 1944	20 Officers & Men; 41 became POWs; 21 survived the war

### Chaplain's Corner — CHARACTER COUNTS

*But also for this very reason, giving all diligence, add to your faith virtue, to virtue knowledge.*

2 Peter 1:5

Character is the sum of every right decision, every honest word, every moral thought, and every heartfelt prayer. It is forged on the anvil of honorable work and polished by the twin qualities of generosity and humility. And character is built slowly over a lifetime.

Character is a precious thing – difficult to build but easy to tear down. We must endeavor to live each day with discipline, honesty, and faith. When we do, integrity becomes a habit. And God smiles.

*Every time you refuse to face up to life and its problems, you weaken your character.*

*E. Stanley Jones*

--A Prayer for Today--

*Heavenly Father, Your Word teaches me to walk in honesty and in truth. Make me Your worthy servant, Lord. Let my words be true, and let my actions lead others to You. Amen*

### USSVI Charleston Base Meeting Minutes

The attendance for the October 2014 meeting was 101.

**Opening Ceremonies:** The meeting was called to order by Base Commander Ed Stank. A quorum was present and the meeting started at 1906. Following the Pledge of Allegiance, the Invocation and the Tolling of the Boats lost in October was given by Base Chaplain Nick Nichols. The USSVI Creed was read by Base Vice-Commander Don Mook. Ed welcomed the members and guests to the meeting and called on Charleston Base Holland Club Chairman Bill Freligh to officiate the Holland Club Inductions.

**Holland Club Induction:** Bill Freligh gave introductory remarks on the origin and importance of the Holland Club. He then read the USSVI Holland Club and Charleston Base certificates and with the assistance of Base Commander Ed Stank presented the certificates to Billy Buntin, Elmer Fesser, Robert McNeigh and John Sharer. After those members returned to their seats, he turned and presented the Holland Club Certificates to the daughter and son-in-law of Dennis Keane. He then turned the podium over to Base Chaplain Nick Nichols.

### Dennis Keane Memorial Service:

Base Chaplain Nick Nichols performed our standard Memorial Service for SKCS(SS) Dennis Patrick Keane who departed on Eternal Patrol on August 31, 2014. Following the service the family and guest left the room so that the Business Meeting could continue.

**Introductions:** The following guest introduced themselves at the meeting:

ETCM(SS) Pete LaPierre, Qual Boat: Gato SSN 615;  
 FTB1(SS) John H. Lauac, Qual Boat: Casmir Pulaski SSBN 633;  
 ETCS(SS) Len Schuncmeyer, Qual Boat: Casmir Pulaski SSBN 633;  
 TMCM(SS) Bill Pindell, Qual Boat: Casmir Pulaski SSBN 633;  
 ET2(SS) William Barlow, Qual Boat: Casmir Pulaski SSBN 633;  
 MMCM(SS) Buz Boyce, Qual Boat: Casmir Pulaski SSBN 633;  
 MM1(SS) Joe Morales, Qual Boat: Casmir Pulaski SSBN 633;  
 MS2(SS) Dean Barnhart Qual Boat: Casmir Pulaski SSBN 633;  
 MMCS(SS) Paul Derrick, Qual Boat: John C. Calhoun SSBN 630;  
 LT(SS) Chuck Jensen, Qual Boat: Entemedor SS 340

and Charleston Base member Richard Pasnak LT (SS), Qual Boat: Diodon SS 349.

**Secretary:** Base Secretary Rick Wise called for a motion on the August Meeting minutes. Ron Snyder made a motion to accept the minutes as published. The motion was seconded and passed on a voice vote. Rick then asked for a motion on the September minutes. Steve Everett made a motion to accept the minutes as published. The motion was seconded and passed on a voice vote.

**Treasurer/Newsletter:** Base Treasures gave a report on the base finances. The report is available on the Charleston Base website [www.ussvicb.org](http://www.ussvicb.org). He reported that the newsletter should be available soon.

**Vice-Commander/Membership Chairman:** Base Vice-Commander Don Mook had no report but as Membership Chairman reported that there are 339 members of Charleston Base. He reminded members that 2015 dues are now due. Please pay your dues as soon as possible. He will be available to take dues for 30 minutes after the meeting.

**Chaplain and Webmaster:** Base Chaplain and Webmaster Nick Nichols gave the following report:

### October Report

Highlighted boat of the month:

Seawolf was sunk at the beginning of her 15th war patrol with the loss of 82 officers and men, and 17 US Army troops. She was sunk just north of Moritai by USS Rowell, a destroyer Escort. In this tragic error, Rowell mistook Seawolf for a Japanese submarine that had just sunk another destroyer. Seawolf ranks 7th for enemy ships sunk.

- QMCS(SS) Tom Van Patten departed on Eternal Patrol this past Sunday from a sudden heart attack. Tom was not a member of USSVI or Charleston Base. He will be buried at Fort Jackson National Cemetery.
- Glenn Fleming had his 3rd series of chemo this week. He has been real tired and is prepared for feeling lousy for the next 2-2 1/2 weeks. He can't talk very well so phone calls are out for now but visitors are welcome as long as the person doesn't have a cold or flu symptoms. Give my best to all my shipmates at this month's meeting. May GOD bless all.
- Art Hance had a heart procedure mid-September and is doing well.
- Frieda Miller, Marvin Miller's wife, was admitted this morning to MUSC for lung biopsy to check dark spot.

Both tissue samples were negative for cancer. She will be there two more days for observation.

- Steve Morawiec continues to have some weakness from his heart surgery and it will take time for everything to heal.
- Doc Hill had emergency surgery for bladder cancer last week. He was released yesterday and is home. Visitors are welcome but please call first to ensure he's not at a doctor appointment.
- Doc Hill's granddaughter's husband, James Poston, died unexpectedly on Sunday. He just turned 50. Her name is Stephanie Poston. They live close to Beetle Bailey. Doc was not told about the death until he was getting ready to leave the hospital yesterday.
- "Frenchy" Fuqua is doing better. Barbara told me he is learning to be able to take care of himself. There is a possibility that they will need some assistance when he comes out of rehab and goes home. She'll let us know if help is needed.
- Joe Hayes is home recovering from his heart surgery. Gary Semler's burial at sea has been completed. Pictures are posted on our website.

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.

**WEBMASTER NOTES:** Website is updated constantly.

**Veterans Affairs:** Ken Curtis reported the Cost of Living Allowance (COLA) for next year has been passed by congress but not yet signed by the President. The increase is set at 1.8%.

**Storekeeper:** Base Storekeeper Ken Hutchison stated that he still had 2015 calendars for sale for \$9 each and that he had some bolo ties which will hold a standard challenge coin for \$22.50 each (the cost to the base is \$22.30 each).

**FRA:** Larry Cox told the base that the FRA was holding a Halloween Party on Saturday October 25.



**Submarine Veterans of World War II:** Swamp Fox Treasurer Mike Emerson reminded the base that Swamp Fox will have a meeting on Thursday, October 16 at 1200 at Ryan's in

Summerville. Arrive by 1130 for choice seating. Mike reminded the Associate Members dues have been reduced to \$10/year and are now due.

**Recreation Committee:** Charlie Hudson reminded the base that the Butt Roast is scheduled for Saturday, October 18 at the Cooper Rivers Rartners facility at Bushy Park. The charge is \$5/person. Charleston Base Christmas Party tickets are now on sale for \$25 each. The Christmas party will be held at the Red Bank Club on December 13. Charlie Hudson asked that the WWII submarine veterans and their wives who wish to attend to please let him know. There will be no charge for their tickets.

**The After Battery:** Steve “Buddha” Nelms reminded the base of the After Battery in Dorchester, SC. The website with a map and information is [www.theafterbattery.com](http://www.theafterbattery.com). The annual Hog Roast will be Saturday, April 11, 2015.

**Chief of the Boat:** Rick Sparger reported that the float is at Terry Trump’s house in Summerville. He will send out a call for a working party to get the float parade ready for the next parade which is on Tuesday, October 21. This is the Summerville Homecoming parade. He reported that Al Stoll had noted that the work to refurbish the Cold War Submarine Memorial has started.

**Base Commander:** Ed Stank reminded the base of the WWII Memorial Service in Kings Bay Submarine Base, St. Mary’s, GA November 5 – 9, Information is on the Charleston Base website, [www.ussvicb.org](http://www.ussvicb.org).

At the September Base meeting \$250 was allocated to be health and welfare of the residents of the Victory House in Walterboro, SC. Earlier this week, Charlie Hudson, Don Mook and Ed visited the Victory House to determine how to make the donation. The only way they could determine to use the money so it went to the residents was to use it to purchase items from a list they received of things the residents needed and that is how they will use the donation. The wish list they received is posted on the Charleston

Base website [www.ussvicb.org](http://www.ussvicb.org). We will collect item from base members at the November Base meeting and at the Charleston Base Christmas Party. Ed mentioned that he thought it would be nice if the donations at the Christmas Party be gift wrapped or in a gift bag. He also stated that the one thing the residents need most was not on the list and that was company. He wants to set up a visit to the Victory House monthly and he is willing to drive. He will put out the dates of the visits later.

**Old Business:** None.

**New Business:** Walt Deal talked about the Fisher House to be built in association with the VA Hospital in Charleston, SC. The Fisher House provides a place for the families of patients to stay who live more than 50 miles from the hospital. There will be a 5K run and one mile walk on November 8 to help support the effort to build the Fisher House and organizations who donate \$1000 will have their emblems on the race t-shirts.

A motion was made to collect the \$1000 by passing the hat. The motion was seconded and passed on a voice vote. After the motion passed, Marvin Smith made a motion that if \$1000 was not collected that the base makes up the difference. The motion was not seconded. The motion was put on hold until after the collection was made. \$1000 was collected.

**(Base Commander’s Comment:** Although Walt Deal’s motion was well intentioned, a further review by the Base Commander of the subject walk/race indicated that the funds would be provided for training and administrative purposes. He directed that the funds be put on hold until the next base meeting so the membership could determine the use of the funds.)

**Good of the Order:**

Base Member Richard Pasnak told the base of the WWII museum in New Orleans, LA. One section is devoted to the USS Tang.

Base Member Jeff Reuer reminded the base of the election on Tuesday, November 4.

**Depth Charge:** The depth charge was won by Art Hance. He donated \$60 to the General Fund.

**Meeting Adjourned:** Following the benediction by Base Chaplain Nick Nichols, the Base Commander adjourned the meeting at 2039.

## CHARLESTON BASE NEWS

### Christmas Party

The Christmas Party will be held on December 13th at the Red Bank Club. The cost of tickets will be \$25 each and will be available starting at the October Base Meeting. The cost of the tickets includes two drink tickets that may be used for whatever drinks the ticketholder desires, including water or soda. Additional drinks may be purchased at the bar. Tickets will be on sale until 24 November. We will have music available for dancing and listening pleasure.

**This will be a walk in, sit down,  
have a drink & have a great time  
party. No work involved!!**

Depth charge tickets will be available for purchase.  
Flyer and map to Red Bank Club will be out shortly.

Schedule of events for party:

1800 – 1900 Social Hour  
1900 – 2000 Dinner  
2000 – 2200 Party

I will be taking a survey for the main course on the buffet i.e., chicken, pork, turkey, HC, etc.

Rick

**UPCOMING EVENTS FOR NOVEMBER**

**Tuesday, November 4th**

**Military Appreciation Reception** – RSVP COB by Nov 3rd Holiday Inn Mount Pleasant, 1600 – 1800. CashBar/ Hor D'oeuvres, Free Food & 2 free drinks. Great time for reasonable price!

**Tuesday, November 9th**

We will be taking the float to the Summerville Coffee Roasters on Sunday, Nov 9th for their fund raising event. All of the money raised goes to veteran's organizations. SCR is located at 108 E. 3<sup>rd</sup> North St. between N. Magnolia and N. Main St. They want to be set-up by 1100. Hope to see a good crowd of us there.

**Tuesday, November 11th**

**Veterans & Active Duty Concert**  
Stratford High School at 1900

**Veterans Day Ceremony** Held at the front, Main Street side, of the Dorchester County Admin Bldg, 500 N. Main Street (corner of Main St. and Highway 78), Summerville. The inclement weather alternate site is the Council Chambers inside the Admin Building. Ceremony will begin at 1000. Schedule of events:

**VETERANS DAY 2014 CEREMONY SOE**

Held at the front, Main Street side, of the Dorchester County Administration building, 500 N. Main Street (corner of Main St. and Highway 78), Summerville. The inclement weather alternate site is the Council Chambers inside the Admin Bldg.

**Tuesday, November 11**

1. 10:00 Set up completed, seat audience, etc
2. 10:15 Scottish–American Military Society (SAMS) bagpipe procession
3. 10:30 Ring bell 3 times MC announces the Parade of Flags, then states each flag's service/organization Parade of Flags by SHS Cadets
4. Bell struck once
5. MC: Ed Burns - open and welcome
6. Knights of Columbus Honor Guard Posts the Colors
7. National Anthem (Liz Sammons, SHS Senior/ NJROTC Cadet)
8. MC introduces the Chaplain, Deacon Shane Graham Moment of remembrance at start with 8 bells, then invocation
9. MC: Pledge of Allegiance
10. MC introduces the speaker: State Rep Joseph S. Daning
11. Speech for 15-20 minutes
12. Wreath is carried to monument by DAR Bell is struck 11 times until wreath is placed
13. Chaplain gives benediction
14. Retire the colors by Knights of Columbus
15. MC adjourns the ceremony.
16. Move to VFW Post 3433 for food/fellowship. Veterans and non-veterans invited.

**Thursday, November, 13th**

Charleston Base monthly meeting at the FRA, 99 Wisteria Road, Goose Creek. Kitchen opens at 1700. Social hour starts at 1800. Meeting starts at 1900. Hope to see everyone there.

**FRA Newsbriefs from Charleston Base VA Rep**

**Cost of Living Adjustment for 2015**

The Bureau of Labor Statistics (BLS) recently released the 2015 Cost of Living Adjustment (COLA) increase. **The COLA for 2015 is a 1.7 percent increase**, which means that for the third straight year, federal retirees, along with millions of Social Security recipients and disabled veterans, will receive historically small increases in their COLA. 1.7 percent is an increase over last year's, which was 1.5 percent, and there were two years (2010 and 2011) in which there was no COLA increase at all. The new COLA rate is effective December 1, 2014 and the adjustment will first appear in the December 30, 2014 payment.

**Know the Candidates and How they Voted on Key Issues—Vote on Tuesday!**

On Tuesday, November 4, 2014, the U.S. Midterm Election will be held for all 435 members of the U.S.

House of Representatives and 33 of the 100 members of the U.S. Senate. In addition, 36 states have elections for governor, as well as numerous state legislative and local government election contests. FRA believes that democracy is not a spectator sport, and urges Shipmates to learn where their election candidates stand on important issues and vote accordingly.

Members can use the FRA Action Center as a reference to learn more about their legislators and how they voted on key legislation. Go to the website ([www.fra.org](http://www.fra.org)) and click on the "Advocacy" tab (Orange square) and then click on "Action Center." Scroll down to "Elections and Candidates." Enter your zip code, click "Go," and scroll up to find information on candidates. Shipmates can also review key votes by their federal legislators by going to Action Center, scrolling down to "Bills of Interest," and clicking "Go," then scrolling down to "Key Votes." The first vote listed in Senate and House sections is the vote on H. J. Res. 59, which cuts the military retiree COLA increase by one percent.

Voting does not guarantee that your candidate will win, but choosing not to vote denies a person one of the key tools of having a say in a democracy.

#### **Nurse Advice Line Available for Travel**

The Defense Health Agency (DHA) wants to remind TRICARE beneficiaries that if they and their families have a medical problem while traveling, they can call the Nurse Advice Line (NAL) while on the road for all health concerns and needs.

The NAL is the DHA's new initiative to improve ready access to safe, high quality care. Calling the NAL gives you access to the advice you need at the right time. Call 1-800-TRICARE (874-2273) and select Option 1 to talk to a registered nurse (RN) who can answer your urgent care questions, give health care advice, help you find a doctor, or schedule a next-day appointment at a military hospital or clinic.

If you or a member of your family gets ill while traveling, calling the NAL can help you figure out what steps to take. The nurse will ask you questions about the symptoms that you or your family member are experiencing and provide advice on whether you need to seek care and when. When you are traveling, the NAL nurse will help you find a safe, high-quality health care facility in the TRICARE network. If you are a military hospital or clinic enrollee, the NAL will send a follow-up note to your primary care manager and medical team back home so they know how you are doing.

You can safely travel with TRICARE and the NAL.

The NAL is available 24 hours a day, 7 days a week. For more information on accessing the NAL while on the go, visit [www.TRICARE.mil/NAL](http://www.TRICARE.mil/NAL).

#### **FRA Hosts Marine Legislative Fellow Training**

FRA staff this week gave a legislation process brief to the CY 2015 Marine Corps Fellows, 11 Officers and five Enlisted Marines, in the new FRA NHQ conference room. The Marine Corps Congressional Fellowship Program offers participants the opportunity to work in the legislative branch of the federal government for one session of Congress. The program consists of three components: (1) training and education through the Government Affairs Institute at Georgetown University; (2) work on Capitol Hill in the personal office of a Senator or Member of Congress; and (3) a two-year utilization tour immediately upon completion of the fellowship. FRA has provided both the Marine and Navy Legislative Fellows their legislative process brief in recent years. The Navy Fellows legislative process brief is scheduled for next month.

### **SUBMARINE SERVICE NEWS**

#### **Farmer Builds Himself a Submarine** **web.orange.co.uk, Oct 28**

A Chinese farmer has achieved his lifetime's ambition of building himself a fully working submarine.

Tan Yong, 44, from the city of Danjiangkou in Hubei Province, always wanted to see what life looked like underwater with his own eyes. Welding sheets of scrap metal together and using bits and pieces from old cars, Tan put together the DIY sub in five months and called it the 'Xiyangyang'.

He said: "I have always loved wildlife programmes, especially those about the sea and underwater. I have no engineering experience and no knowledge of buoyancy or anything like that, I had to learn it all. And the biggest problem of course was how to keep air inside so I wouldn't die."

After a failed debut in August this year, he was forced to go back to the drawing table. But he fixed navigation and lighting problems and has finally given the one tonne sub its maiden voyage in nearby NV'er Lake where it dived to a depth of 10 metres.

"I know its not the deepest submarine dive, but it's good enough for me at the moment," he said.

Pal Song Chia said: "They say men never stop being boys and Tan's a good example. He has a boyhood dream and now he's made it happen. I've never seen him happier."

## **Kings Bay opens new cable repair and testing facility that will pay for itself in a year**

**Terry Dickson, Jacksonville.com, Oct 20**

*The Trident Refit Facility's encapsulation staff will repair cable from around the world, save time for sub fleet, commander says*

The Navy brass at Kings Bay Naval Submarine Base cut a ribbon Monday on a new building where civilian employees will save a lot of Defense Department money, but more importantly drastically reduce the time subs sit waiting for repairs.

The new \$515,000 encapsulation building is nondescript from the outside, but inside it has high tech equipment and highly skilled workers who will repair cables in-house rather than sending them to an outside company.

As he toured the new facility Monday after its ceremonial opening, Sub Group 10 Commander Chas Richard summed up encapsulation simply.

“The Navy has worked hard for so long to keep the electricity on the inside and the water on the outside,” he said.

That’s what encapsulation is, enclosing electrical cables in tough, waterproof sheaths and making sure the connecting ends also keep out water.

Before his tour, Richard said the facility will repair and refurbish cables from ships all over the world.

“I’ll try to get right to the point. It’s going to save us money ... What you can do for \$30,000 used to cost us \$160,000,” Richard told the staff.

Indeed, the Trident Refit Facility says of that “cost avoidance,” that the building will pay for itself in a year.

Richard said he is more interested in the time the facility will save.

“It’s the time involved. We have to get a ship out the door every three weeks ... That’s more important than the money saved,” he said.

After he, Trident Refit Facility commander Capt. Larry Hill and other Navy officers cut a ceremonial ribbon, Richard was given a tour of the building by Jessica Braddock who explained how the systems work.

The daughter of a Navy retiree, Braddock grew up in Camden County and came through the apprenticeship program at Coastal Pines Technical College.

She was the valedictorian of her class, Hill said.

As Braddock stopped by the separate work stations, Richard said “Impressive,” several times.

Asked how she described the jobs, Braddock said the staff members who can be called encapsulators are cable fabricators.

She said later that the new building will at least give employees room to work.

They had previously worked on very long cables in a 18-foot-by-20-foot room.

The new building has doubled the number of work stations to 10 and has two stations dedicated to longer cables.

The facility can make a number of repairs, but Braddock said not all cable can be saved.

Asked about the life expectancy of a refurbished cable compared to a new one, Braddock said, “We’ve been told our product is top notch. Once we repair it, it shouldn’t fail,” she said.

The Trident Refit Facility is the Navy’s only Naval Sea Systems Command, or NAVSEA, certified outboard electrical cable manufacturing facility, the Navy said.

Among its capabilities are:

The manufacture or repair more than 130 separate types of electrical cables.

Quality control testing of manufacturers’ cable prior to delivery to the fleet.

The ability to repair photonics mast variant, or PMV, cables for the fleet at savings of \$130,000 for each cable. Photonics masts use sensors and digital technology and have replaced periscopes on submarines.

Identifying manufacturer defects in PMV cable prior to the expiration of 6-month warranties.

The facility is scheduled to repair 10 PMV cables during the 2014 fiscal year and already has completed eight repairs, the Navy said.

## **Doves Want Nuke Cuts Back ON Agenda Politico, Oct. 16**

Barack Obama has been a critic of nuclear weapons since he was a college student, and then a funny thing happened – he was elected president of the United States.

Now a leader who created huge expectations among strategic disarmament advocates has put the Defense and Energy departments on the verge of spending nearly \$1 trillion over the coming decades to modernize the U.S. nuclear arsenal. Nearly everything is due for an upgrade or replacement, from bombs to missiles to bombers to submarines.

What’s more, despite the president’s early push to create a nuclear-free world, his administration has actually cut the fewest warheads of any administration in the nuclear era, according to a newly released report.

“It’s a funny thing: the administrations that talk the most about reducing nuclear weapons tend to reduce the least,” wrote Hans Kristensen, director of the

Nuclear Information Project at the Federation of American Scientists.

The study is the latest offering in a push by arms-control advocates to get strategic weapons back onto Washington's agenda. Starting with last month's NATO summit, backers have used reports, columns and other ways to try to draw attention to what they call the unsustainable costs that Obama's policies would incur. They want him to rein in the nuclear weapons enterprise.

"It's a zero-sum budget game, and there's no getting around that ... but the Pentagon hasn't been forced to make any choices" said Tom Collina, director of policy for the Ploughshares Fund. "Right now, they're still in fantasy world of 'we can have it all,' so until someone comes to them and says, 'no you can't,' they're going keep planning for having it all. The adult in the room needs to stand up and force some budget decisions."

One example is the Navy's plan to replace its Ohio-class ballistic missile submarines. The service can't afford both a \$93 billion sub program and the non-nuclear surface and other ships it wants to build, leaders warn. So they want Congress to either kick in extra funds to do both or create a special fund.

Navy Secretary Ray Mabus told reporters the other day that if Congress only funds the Ohio replacement, "we're going to break something else." Building only the Ohio-replacement could mean the Navy can't build 30 or more other ships.

The Air Force is in a similar fix, hoping to buy 80 to 100 new Long-Range Strike Bombers for about \$55 billion, even as it also plans to buy F-35 Lightning II fighters, KC-46A Pegasus tankers, new ground-surveillance aircraft and other weapons – all in full-rate production, all at the same time.

Plus, the Pentagon plans to refurbish its stock of B61 nuclear bombs, which requires factories and laboratories, as well as sustain and eventually replace the Navy's Trident and Air Force's Minuteman III missiles.

Part of the problem is beyond Obama's control, as Kristensen wrote – Russia's armed incursion into Ukraine has caused the worst chill in relations with the U.S. and the West since the Cold War. So it's unlikely Obama or even his successors will have much of a partner in Russia to pursue additional disarmament treaties.

Critics also blame what a New York Times editorial called Obama's "Faustian bargain" with Senate Republicans in 2010. In exchange for supporting the New START treaty with Russia, Obama had to agree to

new nuclear spending. But that doesn't mean he can't change his mind, they argue.

"There was no promise to do as much as is being done now," Collina said. "I think the president still has some leeway and flexibility to scale back the current plans."

Not so fast, say hawks and defense officials.

On Tuesday, Chief of Naval Operations Adm. Jonathan Greenert called "sea-based strategic deterrence" the Navy's most important mission, and as such replacing its Ohio-class submarines remains its top priority. As long as the U.S. is committed to maintaining its triad of Navy submarines and Air Force bombers and land-based missiles, all the pieces must be as safe and secure as possible.

And each piece of each leg of the triad, from nuclear labs to weapons-builders to shipyards, has its own advocates in Congress. Taken together, they make for a system from which it's nearly impossible to pull a single thread.

"It would be extremely difficult to cut one system or another in isolation," said Adam Mount, the Stanton Nuclear Security Fellow at the Council on Foreign Relations. "The Navy would've said, our submarines are retiring, we need a replacement. The Air Force would say, we need a replacement bomber – well that seems reasonable ... but rejecting any of those specific requests would be contentious and politically difficult."

Disarmament advocates have as much as given up calling to remove one of the three legs. Instead, they argue a more plausible reform would be to shrink the entire enterprise – delay or cancel giving the F-35 nuclear capability, buy fewer new submarines, delay the bomber or make some other changes.

The president could order some reforms on his own authority, Kristensen wrote, including withdrawing excess warheads from the Navy's stockpile or scrapping a planned Air Force nuclear cruise missile.

"Achieving some or all of these reductions would free up significant resources more urgently needed for maintaining and modernizing non-nuclear forces," Kristensen wrote, freeing up budget dollars the Pentagon could use to replace, for example, its Reagan-vintage ships and aircraft.

One thing Washington must not do, Mount said, is put off decisions as it so often does and then find itself in a strategic weapons budget crunch. The cost and nature of nuclear weapons makes that a very bad idea, he said.

"The worst possible outcome is if we had to make changes to the nuclear triad based on congressional infighting or on cost overruns," he said. "You don't



want to do nuclear strategy by accident. So it's important they do take a concerted look at the figures, think about what's affordable and think about what our strategy needs really are."

### **U.S. Navy Commissions Virginia-class Submarine North Dakota**



The U.S. Navy will commission its newest Virginia-class attack submarine North Dakota (SSN 784) during a ceremony Saturday, Oct. 25, 2014, at Submarine Base New London in Groton, Connecticut, according to a Navy press release.

North Dakota is the second ship named in honor of the state of North Dakota, and the 11th Virginia-class submarine. The first USS North Dakota (BB 29), was a Delaware-class battleship commissioned into the U.S. Navy in 1910, displacing 24,320 tons with a main armament of 10 12-inch guns. She was decommissioned in 1923.

The North Dakota will be able to attack targets ashore with Tomahawk cruise missiles and conduct covert long-term surveillance of land areas, littoral waters or other sea-based forces, among many other missions, including anti-submarine and anti-ship warfare, special operations forces delivery and support, and mine delivery and minefield mapping.

Chief of Naval Operations Adm. Jonathan Greenert will deliver the principal address during the commissioning. In a time-honored Navy tradition, the ship's sponsor, Katie Fowler, will give the order to "man our ship and bring her to life!" She is the wife of retired Vice Adm. Jeff Fowler.

"USS North Dakota and her crew represent the finest we have to offer in our Navy's undersea force," Greenert said. "They will continue a legacy of heroism and rich tradition since the earliest days of our submarine program. This fine crew will benefit from the

steadfast dedication and commitment of its sponsor, Katie Fowler; she has devoted herself to the service life of this fine ship and whose spirit and presence will serve as a guide for both ship and crew."

The Virginia-class attack submarines replace the Los Angeles class attack submarines, and are planned to provide the Navy with the capabilities required to maintain the nation's undersea supremacy well into the 21st century, including improved stealth, sophisticated surveillance capabilities and special warfare enhancements that enable them to carry out multiple missions.

### **CNO on Ohio Replacement Submarine: 'We're Going to Build It' Sea Power, Oct. 23**

ARLINGTON, Va. — The chief of naval operations (CNO) affirmed to a fraternity of current and former submariners that the Navy is committed to building the next generation of ballistic-missile submarine (SSBN).

Speaking Oct. 23 to an audience of the Naval Submarine League in Falls Church, Va., ADM Jonathan W. Greenert said the replacement to the Ohio-class SSBN "is our No. 1 program. That is the one we have to get right."

"There is a strong commitment for Ohio Replacement," said James Thomsen, principal civilian deputy to the assistant secretary of the Navy for research, development and acquisition, noting that the Navy-industry team has the strong peer-to-peer relationships necessary to build and run a stable program.

Greenert acknowledged the budget challenges of building the first Ohio Replacement (OR) SSBN, noting that the approximate cost to design and build the first boat will be \$9 billion, and \$6.5 billion for the second, but that the third and follow-on SSBNs will be held at \$5 billion each, a third of the Navy's shipbuilding budget.

"But we're going to build it," he said, noting that the strategic nuclear deterrence that the SSBN provides is the Navy's primary mission for the nation. "The pressure is on the other shipbuilding programs."

Fifty percent of U.S. nuclear weapons reside in the current SSBN force, a number that will increase to 70 percent when the New Strategic Arms Reduction Treaty is implemented in 2018.

The future shipbuilding programs also putting pressure on the budget include the LX(R) amphibious warfare ship, a replacement for the current dock landing ships, for which the Navy has stated its preference for a ship based on the hull of the San

Antonio-class amphibious dock ship; a new large surface combatant, needed to follow the current cruisers and destroyers; and the Gerald Ford-class aircraft carriers.

“We’ve got to control the cost of the Ford aircraft carrier,” Greenert said.

Funding and controlling cost in the OR program “is a tough problem that will require our best efforts,” said RADM Dave Johnson, program executive officer for submarines.

The first OR will be started in 2021 and have to be built in 84 months, with the submarine in the water by 2028, and a 36-month post-delivery period before beginning its first patrol.

The OR needs to begin its first ballistic-missile patrol in 2031, Johnson said.

The OR will be the first U.S. submarine with a fly-by-wire control system and the first since USS Albacore to use X-plane control surfaces. It also will be powered by an electric drive system without reduction gears.

Johnson said the Navy is starting to look at the concept of the next-generation attack submarine, SSN (X), that will follow the current Virginia-class SSN after the Block V versions are built.

### **Contract Modification To Build Ohio Replacement Submarine Missile Tubes Awarded** **Team Submarine Public Affairs, Oct 30**

**WASHINGTON** - The U.S. Navy awarded a contract modification to General Dynamics Electric Boat Corp. to fund joint United States and United Kingdom Common Missile Compartment (CMC) missile tube manufacturing on Oct. 29.

The \$84 million cost-plus-fixed-fee modification contract authorizes the start of tactical missile tube manufacturing. In total, 17 missile tubes will be manufactured; 12 for the U.K. Successor lead ship, four for the OR First Article Quad Pack and one for the Strategic Weapons System - Ashore (SWSA) test facility.

At about 45 feet tall and just over 50 tons, one CMC missile tube is equal to the height of a four-story office building and about two-thirds the weight of the space shuttle.

This contract modification represents over five years of design and prototyping efforts between the U.S. and U.K. governments and their respective industry partners, and marks a key transition point for the joint CMC effort. To support construction of OR and U.K. Successor ships, a total of 241 missile tubes will be manufactured; 192 for OR's 12 ships, 48 for Successor's four ships, and one for the SWSA. The SWSA, located

in Cape Canaveral, Florida, is an integration and test facility that validates Strategic Weapons Support Systems (SWSS) performance, validates installation and test procedures, and provides operational documentation prior to on-hull testing.

The OR program will provide the nation with its most survivable leg of the strategic deterrence triad. The program is harnessing 50-plus years of SSBN design and operational experience with the cost-control and production lessons of the Virginia class attack submarine program, thereby providing the nation and its allies with an assured sea-based strategic deterrent at the best possible cost.

### **Virginia Subs to Get Berthing Changes for Female Crew**

Sub designers are puzzling out how to fit enlisted women into the berthings on the Virginia-class attack submarines already in the force.

“Right now we are doing the work to do the design changes for the in-service Virginias,” said Rear Adm. David Johnson, the program executive officer for submarines, in a Thursday speech.

“Frankly the tough part is to integrate the enlisted berthing and the chief's quarters. The officers are fairly easy to adapt to, but the enlisted berthing and the chief's quarters you have to do a little bit of work on the ships and we're trying to do that as affordably and non-disruptively as possible,” Johnson said.

Johnson, speaking at the Naval Submarine League's annual conference in Fairfax, Virginia, said that getting mixed-gender crews on as many subs as possible was a priority. The sub force began its integration in late 2011 with the arrival of female officers — roughly 50 of them now serve aboard 14 boomer crews — and officials are now moving towards the next steps of integrating attack boats and enlisted crews.

“We are looking forward to mixed-gender officer, chief petty officers and enlisted on our submarines going forward,” Johnson said. “It's a must, it's the right decision and we're moving forward.”

A task force led by the recently disbanded Submarine Group 2 recommended that enlisted women and chief petty officers begin serving on attack boats as the Block IV Virginia-class subs begin fleet service around 2020; these vessels are being designed with fully integrated crews in mind.

Rear Adm. Phillip Sawyer, head of Submarine Force Pacific, said retooling the current Virginias would not move up the timeline for getting women into attack boat crews.

The first Virginia-class attack subs to be integrated are the Virginia and Minnesota, which are slated to receive female officers in early 2015. Enlisted women will begin serving on the Ohio-class boomers as soon as 2016.

The U.S. Navy's top uniformed officer said that while he does not expect an autonomous unmanned strike aircraft to emerge in the coming decades, autonomous unmanned underwater vehicles (UUV) might prove to be very useful.

"I don't think we're a couple of decades away from an unmanned aerial vehicle strike fighter," Adm. Jon Greenert told an audience at the Naval Submarine League Symposium on Oct. 23.

Greenert had initially said "never" but quickly corrected himself. The reason Greenert is pessimistic is because of the complexities of autonomously employing weapons from such a war machine.

However, Greenert emphasized that applies strictly to unmanned combat aircraft—not to submarines. "I think we have to go there," Greenert said. "We can't build enough submarines." That would be the case even if the Navy has "billions and billions" more dollars.

Even at a build rate of two Virginia-class submarines per year, the attack boat fleet is set to steadily decline over the coming decades as the Los Angeles-class begins to leave the fleet. There simply are not enough Virginias being built to replace those one-for-one.

Greenert said there are technologies in the "black" world that are a "little exquisite" that could be pulled into the general purpose Navy. Greenert said that by the end of the decade, the Navy ought to be deploying an autonomous large-diameter underwater-unmanned vehicle on missions.

"Maybe not in the most complex area of the world, but we've got to get it out there," Greenert said

### **Set Cyber Zebra: Navy Shipboard Cybersecurity Breaking Defense, Oct. 22**

FALLS CHURCH, VA – Sure, everyone's sick of the word "cybersecurity" and endless discussion of "attacks," Vice Adm. William Hilarides said today, making prominent air quotes with his fingers. Navy submariners in particular, safe beneath the waves, tend to think of cyber as someone else's problem – but "not so fast," he told the annual Naval Submarine League conference here today.

Hackers can remotely hit the brakes on a late-model, highly computerized automobile, Hilarides said: "We're just like that car."

As head of Naval Sea Systems Command (NAVSEA), Hilarides has come to the unpleasant

realization that seemingly mundane data-collection for maintenance purposes has created vulnerabilities that could, in theory, be used to shut down key components on a sub.

"The very nice caterpillar diesel [generator] on the Virginia class" – America's most advanced nuclear submarine – "has a chip on it," Hilarides said by way of example. "That chip runs Windows XP." Because the chip records all sorts of performance measurements, he said, it's plugged into the machinery control system that lets sailors monitor – and control – components all over the sub.

Wait, it gets worse. "We really like to have that data ... so somebody off the ship can do the trend analysis, can tell you when the bearings are going bad and it needs a change of oil," Hilarides said. "So it's on an unclassified network at one of my warfare centers."

That means a virus that gets onto the unclassified network could work its way into crucial systems on a submarine.

"There're some really simple things" the Navy can do to fix some vulnerabilities in the near term, Hilarides said. One is "cyber hygiene," he said. "If you have a USB port on your computer that's not disabled, you can take any device" and upload malware, intentionally or otherwise: "A sailor looking for a place to plug his cellphone in and get a text from his wife is the biggest insider threat," the admiral said.

In the longer term, "our control systems need to be built to be secure in this environment – which is the way it's going to be for the rest of time: We've opened a new era of warfare and it ain't going back in the tube," Hilarides said. "This is going to be something that touches pretty much everybody," he told the room full of contractors. Specifications and standards for every kind of equipment need to close potential weak points, he said, and "somebody's got to write those specs and standards so I can give them to the vendors [and say], 'put this in those systems right from the beginning.'"

With cybersecurity, Hilarides told me after his public remarks, "What we done in the past is bolt it on afterwards. We've got to build it in."

But you can't make every system maximum security all the time: You need to be able to choose when it's worth the risk of connecting and when to lock down. So, Hilarides said, sailors need to start applying the same kind of precautions – and damage control – to cybersecurity that they've long used to combat flooding.

"When you think you're going to have flooding on your ship, you set [Condition] Zebra, and you shut

every hatch, every bulkhead,” Hilarides said. Now we need to formulate a way, when necessary, to “set Cyber Zebra: pull the plug, disconnect yourself from everything but the ship.”

### **Sub Boss Urges Better Crew Rest In The Fleet** **Navy Times, Nov. 3**

The fleet’s top submariner said getting sub crews the sleep they need is a necessary culture change inside a force that has long viewed sleep as a luxury.

“There is a huge body of evidence that says people perform better if they get enough sleep and they get it at about the same time every day,” said Vice Adm. Michael Connor, head of Submarine Forces. “Pretty simple and it’s been generally ignored for the entire history of the nuclear submarine force.”

Connor, who spoke Oct. 23 at the Naval Submarine League’s annual conference before an audience of hundreds of submarine sailors, vets and contractors, said he’s “avoiding being prescriptive,” but added a big part of getting crews more rest is delivering a message to sub skippers: It’s OK for sailors to rest. Adequate sleep is a prerequisite before aviators fly and tiredness often is a factor in mishaps, like the 2012 collision between cruiser San Jacinto and attack sub Montpelier.

“Part of it is telling these COs ... it’s OK that the measurement of success isn’t that everybody on your ship is working as hard as they possibly can to the point that they are exhausted,” Connor said. “It’s that they work hard enough to learn their jobs – to be effective – but still give them enough time to think and relax, and maybe give them enough time to think about how they can make your ship better.

“And that sounds simple to say, but those of you in the business know that there is a certain chunk of our force that is only satisfied if they have worked themselves to complete exhaustion. And we forget about that once we leave the ship but many of you were basically tired from age 22 to 42, sound about right?” continued Connor, a former commanding officer of the attack sub Seawolf.

Among the watchbills tried: three eight-hour watch rotations. These are two-hours longer than the typical six-hour watch cycle and have the benefit of allowing sailors to sleep at the same time during every 24-hour cycle.

The key is, he said, to say crew rest is a priority and to let sub leaders figure it out on their own.

“This is new to a lot of people, it’s not what they did their whole career,” he said. “We can’t give a one size-fits-all, but we wanted them to adopt the principles.”

Connor said that, so far, boats have responded well. He noted one ship that did the eight-hour rotation but the morning shift got tired of eating breakfast before getting on watch. “So their solution was – and I would never have thought of this – the watches stay the same but the meals change. So, we’re leaving it up to them.”

The submarine force has made sleep a higher priority in recent months, and there are signs that the surface Navy may be coming around as well, though manning shortfalls and a work-till-you-drop culture remain obstacles.

Dr. Nita Shattuck, a professor at the Naval Postgraduate School who is one of the Navy’s foremost experts on fatigue and human performance, said in early October that fighting fatigue sometimes means fighting leadership.

“There are chiefs and [surface warfare officers] who either don’t encourage or don’t allow their sailors to get enough sleep,” Shattuck said. “They think, ‘Well, this is the way it was for us, so this is how it should always be.’” On one ship, Shattuck discovered that some chiefs were forbidding sailors delinquent in their qualifications from hitting their racks until they had gotten signatures and studied.

“It’s counterproductive,” she said. “If you are sleep-deprived, you’re not creating the right conditions to retain what you are learning.”

### **Underwater Drones Join Microphones to Listen for Chinese Nuclear Submarines** **The Wall Street, Oct. 24**

SINGAPORE—Last November, an unusual experiment took place in the congested waters of Singapore just a few weeks before a Chinese nuclear attack submarine passed through the adjacent Malacca Strait.

U.S. and Singaporean researchers used an underwater drone named Starfish to explore ways to monitor subsea activity in an experiment sponsored by the U.S. military and Singapore’s defense ministry, say people involved.

The goal of the operation, named Project Mission, was to link a Singaporean underwater surveillance system to an American one that is designed to track potentially hostile submarines. The trial was also part of a broader U.S. effort to use its own underwater drones, combined with data from friendly countries, to enhance a sub-snooping system that dates back to the early years of the Cold War.

From the 1950s, the U.S. listened for Soviet subs entering the Atlantic and Pacific oceans by stringing underwater microphones across the seabed around its

coast and in strategic chokepoints, such as between the U.K. and Iceland. These cable-linked “hydrophones” were part of a secret global network called Sound Surveillance System, or Sosus. The U.S. declassified Sosus in 1991, making it available for civilian purposes such as tracking illegal fishing or whales.

But in recent years, the U.S. and its allies have reactivated or upgraded elements of the system in Asia, partly in response to renewed Russian undersea activity, but also to monitor China’s expanding submarine capabilities. “It never went away per se, and so we—if you will—revitalized all the attributes or assets,” says Adm. Jonathan Greenert, the U.S. Chief of Naval Operations.

The U.S. is now attempting to combine those fixed seabed systems, as well as sub-hunting ships and aircraft, with mobile networks of sensors, some mounted on underwater drones that can be deployed by ships, planes or subs, say officers familiar with the plans.

At the same time, those officers say, the U.S. Navy is exploring ways to tap data from sensors used by other countries in the region, especially around chokepoints that Chinese subs must pass to reach the Pacific and Indian Oceans.

“We’re very close with the Australians in this regard, very close with the Japanese in this regard, working to a greater degree with the Koreans in this regard, the Singaporeans,” says Adm. Greenert. “The Malays, the Indonesians, are increasing their interest and willingness.”

The exact location of Sosus hydrophones in Asia remains classified. Researchers and former submariners familiar with the system say there are several arrays around Japan, which played a key role hunting for Soviet subs in the Cold War, and around Australia’s Christmas Island.

The problem with cable-based hydrophones is that they require regular maintenance and shore stations in friendly countries. Fixed seabed hydrophones can only act as a virtual trip wire, signaling that a sub is passing at that moment. They are also most effective in relatively deep water with little congestion.

Recent U.S. efforts have focused on developing mobile undersea surveillance networks for congested and shallow waters like those near China’s coast.

The U.S. Navy has deployed one such network—the Persistent Littoral Undersea Surveillance, or PLUS, system—which uses seabed sensors and unmanned vehicles that relay data via satellite. “We’ve deployed PLUS,” says Adm. Greenert. “We sent it out on a mission—I can’t tell you where—and it was effective.”

He says that PLUS requires further testing but that the Navy is already using some small undersea drones for anti-sub warfare.

The biggest obstacles: Most underwater drones run on batteries that last only a few hours, and communicating with them is tough, given how slowly data passes through water.

Both of those issues were demonstrated when the U.S. Navy deployed an undersea drone called the Bluefin-21 in the search for missing Malaysia Airlines flight MH370.

“You can think of underwater telecommunications as being roughly where the Internet was 30 years ago,” says Mandar Chitre, an expert in underwater acoustics at the National University of Singapore who took part in the November experiment.

Singapore has made significant advances in underwater acoustics in recent years, developing a system called UNET that monitors undersea activity off Singapore using a network of seabed sensors, undersea drones and surface nodes that relay data over a mobile-phone network.

Singaporean waters are considered especially challenging because of varying depth, busy shipping and the snapping shrimp—a creature whose distinctive noise has long troubled undersea-warfare specialists.

The experiment in November was to link the Singaporean network to a U.S. system called Seaweb, which is being developed by the Naval Postgraduate School with funding from the Office of Naval Research. “The results were very good,” Prof. Chitre says.

A spokeswoman for Singapore’s Defense Ministry confirmed that it had co-sponsored the experiment on linking UNET to Seaweb, but didn’t respond to questions about its broader purpose or applications to anti-submarine warfare.

Public information about Seaweb shows that it aims to create a new global network of submarine sensors from the U.S., its NATO allies and other friendly countries.

“The idea behind Seaweb,” says Rear Adm. Philip Sawyer, commander of U.S. submarine forces in the Pacific, is “to network various nodes through the undersea environment and be able to tap that data and bring it where you want, whether it’s Singapore or San Diego.”

“To be able to watch and monitor everything, we need a networked system,” he says.