

MINUTES OF THE USSVI NORTHERN VIRGINIA BASE MEETING HELD ON SATURDAY, 8 APRIL, 2017

The Base CDR, Chuck Martin, called the meeting to order at 1104 on 8 April 2017 at American Legion Post 162, Lorton, VA and welcomed all members and guests.

MEMBERS AND GUESTS IN ATTENDANCE

Steve Bishop, Cathy Chatham, Howard Chatham, Ed Ettner, Mary Ettner, Brian Haller, Steve Jaeger, Chuck Martin, Doug MacFarlane, Mike Naughton, Mary Lou Naughton, Tim Oliver, Mike Varone, George Wallace, Penny Wallace, and Woody Woodworth. (16 attendees)

■ Holland Club Member

■ Associate Member

■ Guest

The COB, Mike Varone, led all hands in the Pledge of Allegiance.

The Chaplain, Steve Jaeger, delivered the Invocation.

The list of boats lost in the month of April and a historical moment were not read due to the nature of today's Tolling of the Boats ceremony honoring all lost boats. Woody Woodworth asked to speak to the membership about the USS Thresher (SSN-593). Woody then related that forty four years ago today, (April 8, 1963) he was topside reporting aboard the USS Thresher in Portsmouth, NH to ride her during sea trials. Woody wanted some extra at-sea time, but a good friend and chief aboard the USS Thresher convinced him to drive back to Groton and join the Thresher there as the crew was still very green – about 1/3 were not yet qualified in subs as they exited the overhaul at Portsmouth Naval Shipyard. That very good friend of Woody's spared Woody's life as the Thresher departed the next day at 0800 and went missing on the second day while off Cape Cod, MA. That chief's son went on to qualify in subs and become a Command Master Chief. The Base CDR thanked Woody for sharing.

MEETING MINUTES

The minutes of the March meeting were distributed by e-mail. No discussion.

TREASURER'S REPORT

The Base Treasurer reported:

Starting balance: \$ 6,726.83

Receipts: \$ 1,080.28

Expenditures: \$ 412.19

Ending balance: \$ 7,394.92

Minus remaining Walmart Grant restricted use funds of \$ 1,754.21

Grand total (discretionary) \$5,640.71

Steve Jaeger and Steve Bishop clarified that the Walmart Community Funds for Kap(SS) 4 Kid(SS) are kept in our NFCU account with other Base funds. All Kap(SS) 4 Kid(SS) donations and expenses are kept on our NOVA Base USSVI books as formal line items. However, the use of these Walmart funds is restricted by the wording in our Kap(SS) 4 Kid(SS) grant applications to Walmart. Walmart reserves the right to inspect / audit how their donated funds have been spent and accounted for.

COMMITTEE REPORTS

The Base CDR noted that the main topics of discussion at the March 29th Executive Board Meeting were the preparations for today's Tolling of the Boats ceremony, committee reports, discussion of meeting-related items, old business, new business, and meeting/event planning.

VCDR: Nothing to report

COB: Nothing to report

PUBLIC RELATIONS: Nothing to report

MEMBERSHIP REPORT: Steve Jaeger reported:

With the addition of new member James Huck, the current membership stands at 82. This includes:

- 40 Holland Club Members, including three World War II members*,
- 32 regular members, and
- 10 Associate members.

(post meeting note*: Immediately after today's meeting, Steve Jaeger initiated correspondence with the USSVI National office and provided proof **that Ed Ettner was commissioned during WW II, and therefore is now our third member of the Base to be recognized as a WW II veteran.** The USSVI National office has accepted the proof and now shows Ed as a WW II veteran.)

Kap(ss) 4 Kid(ss): Steve Bishop reported that the K4K Team visited Fairfax INOVA's pediatric oncology and hematology ward last month and will visit UVA's Medical Center in Charlottesville, VA, on April 18th. The Walmart store in Woodbridge, VA just contributed \$500 to our K4K program. This brings our fundraising total to \$1000 for 2017 from three Walmart stores. These monies help us to bring joy and comfort to children in medical need (and their attending families) at three hospitals during our planned nine visits this year. We are working on drafts of a USSVI NOVA Base submarine-themed coloring book for distribution bedside to these special children

NJROTC/SCHOOL PROGRAM COORDINATOR: Nothing to report

SCOUTING RECOGNITION: The Base CDR reported that the Eagle Scout Court of Honor (COH) for Blake Hall was conducted on April 1st in Richmond, VA. The Base CDR and COB attended and presented him with a USSVI patch honoring his achievement and a certificate during the COH ceremony.

STOREKEEPER: Howard Chatham reported that we still have USSVI NOVA challenge coins, 20th Anniversary shot glasses, and 2017 USSVI calendars available for purchase.

NSL: Tim Oliver reported that:

1. The next Capitol Luncheon will be held April 28th with featured speakers CAPT John Newton PMS 399 Special Operations Forces Mobility and CAPT Chad Nuse PMS 340 Naval Special Warfare.

2. The Submarine Technology Symposium will be held May 9th – May 11th
3. The History Seminar (The Hunt for Red October Fact/Fiction) will be held at the U. S. Navy Memorial on Oct 31st, and
4. The 35th Annual Symposium will be held November 1st-2nd.

Eastern Region (North) Director (ERND): The Base CDR reported that the ERND attended the midyear USSVI Board of Directors meeting in Dallas, TX. The Capitol Base's Tolling of the Boats Ceremony will be held at the F-4 gravesite in Arlington National Cemetery on May 20th.

AMERICAN LEGION POST 162: The Post's monthly General Meeting will be held on April 19th.

OLD BUSINESS

1. The National Awards Manual is posted on the USSVI National web site under the Awards tab. All Members are encouraged to review the Manual and submit their nominations to the National Awards Committee Chairman. Remember that the nomination period begins on February 1st, and ends on April 30th, 2017. The only exception is the Newsletter Awards, which ends on May 15th, 2017.
2. The 3rd Annual SUBFEST is being held on July 7th -9th, 2017 at Manitowoc, WI. Thursday night is SUB VET night. USS Cobia and the museum's Sub Pub will be open for Sub Vets.
3. Howard Chatham reported that the location and time for next month's Holland Club Induction Ceremony will be: Amphora Diner Deluxe at 1151 Elden Street, Herndon, Virginia, 20170 **from 11:00 AM to 2:00 PM on Saturday, 13 May. RSVP with your menu choices** to our Past Base Commander, Howard Chatham at (703) 573-1523 or pastcdr@ussvinova.org by May 8.
This will be a joint ceremony for the NOVA Base and the Capitol Base with inductees: CAPT David Cooper and RADM David Oliver from the NOVA Base, and CS2 David Lorms and LCDR Michael Naughton from the Capitol Base.
The scheduled guest speaker is ADM Frank Caldwell, Director Naval Reactors

NEW BUSINESS

1. USSVI is temporary limiting approval of any new Associate membership applications to individuals who met the IRS criteria for war veteran until USSVI reaches the criteria for War Veteran organization. Currently we need about 170 more war veterans to accomplish the goal.
2. The 2017 Western Regional Roundup is being held at Sam's Town Resort & Casino, Las Vegas, NV, April 23rd thru April 28th, 2017
3. Hampton Roads Submarine Birthday Ball is being held at Waterside Marriott 235 E Main St, Norfolk, VA on April 22nd
4. The USSVI National leadership is seeking an associate editor for its quarterly publication American Submariner. Contact the Base CDR if interested.

THE BINNACLE LIST currently includes:

Paul Nelson, Richard Lowry, Steve and Darlene Jaeger for Darlene's mom, Tony Poblete, Mike Naughton, and David Cooper.

In Memoriam: CDR Robert L Smith, USN, Ret; Margaret Williams, wife of VADM Joe

Williams Jr.

For the Good of the Order, the CDR read the list of birthdays for April: Ed Ettner, Robert Frick, Richard Laulor, Paul Nelson, Tim Oliver, Patrick Peterson, Willie Petruy, and the U.S. Submarine Service.

The 50/50 raffle was won by the Base CDR, Chuck Martin, who donated his winnings back to the base treasury. Thank you, shipmate!

TOLLING OF THE BOATS:

“The "Tolling the Boats" ceremony was originally established by the U.S. Submarine Veterans of World War II. It is a unique and time-honored memorial service and is in keeping with the finest traditions of the Navy. Custom has established that this ceremony be formal, and it honors the memory of those submariners who lost their lives in the line of duty, and especially those who perished during World War II. In the heart of the ceremony the names of each of the U. S. submarines lost, along with the fate of its crew, are read aloud as a bell is tolled for each in turn.”

The solemn Tolling of the Boats ceremony was conducted using the Base presentation with candles being extinguished at tables by the attendees after each boat's name was read. The COB rang the ship's bell for each boat, as the VCDR read the script. The ships bell was then rung for the NOVA Base members on Eternal Patrol.

After the ceremony, a champagne / cider toast to the past, present, and future U.S. Submarine Service was offered by the Base CDR.

The next meeting will be at 1100 on May 13th for the 2017 Holland Club Induction and Luncheon Ceremony at Amphora Diner Deluxe in Herndon, VA. Dress is Service Dress Blue, Equivalent Civilian Business Attire, or USSVI vest and tie.

The Benediction was delivered by the Chaplain.

The CDR adjourned the meeting at 1205.

Meeting Minutes Respectfully Submitted by
Stephen C Bishop
Secretary, USSVI Northern Virginia Base

NSL Capitol Chapter lunch 28 April 2017 with featured speakers CAPT John Newton and CAPT Chad Muse

Please make your reservations for the Spring luncheon to be held Friday, 28 April 2017 at the Army-Navy Country Club, Arlington, VA from 1130-1330. Thanks to all who provided advance notice about attendance, we have had a tremendous response and will be using a larger room -- everyone still needs to complete the formal reservation.

Our featured speakers are CAPT John Newton, Program Manager Special Operation Forces Mobility (PMS 399) and CAPT Chad Muse, Program Manager Naval Special Warfare (PMS 340).

Step 1 -- Make your reservation - send your reservation request by email to Chapter Secretary, Dixon Hicks, CapitolNSL1@outlook.com, no later than 1600, 20 April.

- Include name(s) as you would like to see it on the preprinted nametag.
- Guests and spouses are welcome (same rate as members). The NSL is the professional organization for submariners and submarine advocates and I strongly encourage non-members to join (go to <http://www.navalsubleague.com/>). The cost is as low as \$10/year.
- Cancellations are required by 1600, 20 April so that we can set the number of chairs. No refunds will be processed after this date. Of note, \$35.00 will be collected from individuals with reservations who intended to pay at the door and "no-show".
- Reservation requests received after the due date are at risk of not being accommodated if seating capacity has been reached.

Step 2 -- Select a payment option - payments do not need to be made at the time of reservation.

- Payments can be made by check or credit card (via PayPal) and must be received by 1600, 27 April to receive the advance rate. Payments are \$30 in advance or \$35 at the door per person for the luncheon. JO's/Enlisted personnel pay \$22 in advance or \$26 at the door. There is no charge for Midshipmen.
- To pay by credit/debit card or online bank, go to link: https://www.paypal.com/cgi-bin/webscr?cmd=s-xclick&hosted_button_id=FFGZWGHQK3YNU and select how many reservations you desire (may have to paste the link depending upon your firewall). This will log into your PayPal account which you can use to pay. If you don't have an account, click the link on the bottom of the PayPal screen "Pay with Debit or Credit Card" and process your payment. For JO's/Enlisted personnel, email Dixon and he will send you a link for the lower rate.
- To pay by check, make payable to the "Naval Submarine League" and send to Dixon Hicks, 15161 Stillfield Place, Centreville, VA 20120-3914. Provide the following information with your check: Names of attendees, email, phone number.

USSVI BOD Mid-term Meeting Highlights

We had both a USSVI meeting, and a Charitable Foundation meeting. In addition the Regional Directors and the DCOY conducted an audit of all the accounts within USSVI. The results were overall good. However, some comments were made that will result in some changes in the way USSVI conducts some of its financial matters. This is intended to strengthen up our overall financial way of doing business. We have been hearing for the last 6 years or so that we are no longer a “Mom and Pop Shop” and these changes will get us to being more like a business regarding our finances.

Some of the results are:

- 1) The Rust Insurance that USSVI has purchased the last couple of years was voted to be allowed to lapse this summer when it runs out. Reason is it really does not provide the coverage that most of us thought it did. Since an overwhelming amount of the bases meet at places that have their own insurance for whatever goes on there (i.e., VFW, American Legion, restaurants, etc.) it was felt that we are covered there. Regarding the coverage for a parade, the towing vehicle provides the minimum necessary insurance in most cases. You were not covered in the transport to and from the parade in the first place. Each state/parade has different requirements so if you are to participate in a parade, I suggest you check to make sure you are covered. A base can purchase a one-time insurance to cover a given parade if you find that it is necessary. As far as base outings, such as a picnic, I make the same suggestion to you. When talking District and/or Regional Conferences, I feel it is a cost of that meeting to have the appropriate insurance for that event. And remember, once you included liquor/beer, the game can change on you. Just do a little homework to make sure you are not putting yourself into a bad position.
- 2) Base Ownership of titled or deeded property: The USSVI Ways and Means Committee will be looking into that and coming back at some point in the near future with a recommended way forward on that. The biggest issue here are floats and who they should be titled to. Since a base is not normally a “legal entity” there is a possibility that a base should not have a float/trailer titled in the base name. That would really mean it is titled to USSVI and the BOD really is not interested in dealing with those associated responsibilities. But before you get too excited about that, just wait and see what the committee comes back with.
- 3) Holland Club Funding. The NSVC will now put in the budget a given amount each year for all the Holland Club expenses (this does not include this year). That should eliminate the call each year for funds to be contributed. I know my base gives at least \$100.00/per year for our Holland Club members and we provide that in January each year. Now that does not mean you cannot contribute as in the past, just means it will not be necessary.
- 4) Conventions. Check the website for information regarding the convention this year. I know it is being continuously updated with good information, but I see not notice

go out to the membership as such. Recently a tag was added for discount tickets to Disney World was put in there as an example. So check in there for any/all information you may need. I also recommend that you not wait until the last minute to make your reservations. 2018 Convention: will be a cruise. Now I find out we are not sure of a whole lot of information regarding it. And don't expect any until sometime this summer. Prices are just not available. Last word I had was it would be out of Fort Lauderdale (but that might change). Stay tuned on that one and once I get anything, I will get it out to you for planning purposes. But It is planned for the October 2018 timeframe. 2019 Convention. The Bod approved a convention in Austin, TX. Dates are 15 Aug – 20 Aug 2019. Room rates are \$119 (with a 15% tax, currently). They currently plan only two tours, one to the Alamo in San Antonio to the south, and one to Fredericksburg to the east. The rest will be up to you.

The bases associated have done a good job on their homework and this looks to be a good one. As usual, there are some negatives , like transportation from the airport,. They are working on making it as best they can, but it just is not like some have been at other hotels. If you want to look it up, the hotel is the Renaissance Austin Hotel (www.renaissanceaustin.com). Convention 2020: the committee is looking at the Kansas City area, but we will see on that one.

5) War Veteran Status. We are around 137 members short as of sometime last week. As most know, the impact of not being considered a war veteran organization is that outside organizations/individuals cannot contribute tax deductible money to the base (generally speaking). The best way to fix that problem is to get more war veterans to join. There are some strange percentages that we must maintain for both the organization to exist in general, and one for the war veteran status. For you folks, just recruit us a few war veterans at each base and we will be good.

6) Associate Membership. Along with the war veteran status, this type of member comes into play. Having associate members does not help us out unless that happen to be a war veteran. Consequently, the NJVC has placed a moratorium on new associates. If they are a relative (IAW C&B) then that is okay. If they are a war veteran themselves, that too is okay. Anything else will probably be denied for a while. There will be an article put in the American Submariner and a POC (USSVI Official Business) e-mail sent out on this shortly.

7) There will be a Base Handbook developed this year. I will be contacting the District Commanders and Base Commanders regarding this. But the plan is to have it on the street prior to the end of the year.

8) A new C&B for the organization is also in the works. The Parliamentarian has rewritten our C&B . First the BOD will review (and provide comments) and then will approve it. Then it will be put out to the organization for review. The new version will be voted on at the Annual Business Meeting in Orlando this summer. Now don't get excited just yet. For the most part, it is still the same document. The wording was cleaned up mostly. I have no idea if there are any major changes in it, that is why I will sit down and not only review it, but compare it to the old one to make sure we don't have some major (unknown) change in it. We will see how that goes.

9) New Website. It should be completed within the next month or so. Once that is done, the BOD will get a chance to play with it (kind of like a document review) and comment on areas that are of concern. Once that process is complete, then we may be implementing it. I say "may" because as any major change with software, it might have more corrections/additions to be made once it really gets looked at. There is some question as to how certain statistical data is calculated and things of that nature. But the reports are a little promising for a change. We will just have to wait and see. Once of the enhancements made will allow you to pay your National Dues online with a credit card. That can make is much easier for the membership. Base dues will still have to go to the base as that is just not a simple process aa one might expect. You will also be allowed to make contributions to the CF using your credit card on the website.

10) CF meeting. The CF is in the process of finally getting around to making that organization function a little tighter. By that I mean documentation is being developed to better guide the leadership and even membership as to what goes on there. Please remember, this part of our organization (even though it is really a separate organization) is a place where charitable functions go on, such as the scholarships we issue each year, assistance provided for our memorials, and assistance to members needing financial assistance, just to name a few. It depends on contributions for outside sources. Yes, it has a lot of money invested and the money earned on those investments is distributed throughout the various funds, but it can always use more contributions. One way is for those that shop on Amazon is to use Amazon Smile instead and designate the USSV-CF as the one for them to contribute to. This does not cost you anything and yet the CF can gain funds. Nothing really changes for you. Check it out. If you need more help on that, just let me know. And if you just want to contribute directly to the CF, send your check to the National Office, made out to USSV-CF and note on the check (and maybe even a note in the envelope as well) which fund you want your money to go to. This is us taking care of us.

3rd Annual Subfest

WW II ON THE HOMEFRONT



MANITOWOC, WI  JULY 7-9, 2017

Discounted Museum
Admission just for
Submarine Veterans!
Only \$5!

Live music * Food Vendors * Boat pond with R/C submarine models *
Educational Programs * Fireworks * Venetian Boat Parade * Sidewalk
Sales * Water Ski Show * Sub Eating Contest * Guest Speaker Sam Mihara *
Boat & Bus Tours * Much More!



Special Perk: for Sub Vets too!



Thursday night is Sub Vet night! USS *Cobia* and the museum's Sub Pub will be open for our exclusive Sub Vet only open house! Explore the sub on your own without the public present and then relax on the roof deck with a cold drink and a gorgeous view of Manitowoc and Lake Michigan.

For those who want to really relive the old days, you can spend the night aboard the boat! Sub Vets and a guest can spend the night aboard USS *Cobia*, Thursday, July 6th. The cost is just \$25 per person and all proceeds benefit the *Cobia* Dry Dock Fund.



Visit our website for more information www.wisconsinmaritime.org

USSVI OFFICIAL BUSINESS: SubVet News - #2017-010

NEWS-01: Western Region Roundup info
Submitted by: Bob Bissonnette on 3/17/2017

Have you registered for the 2017 Western Regional Roundup? Time is running out!
Sam's Town Resort & Casino, Las Vegas, NV, April 23 thru April 28, 2017.

Click here to visit the Western Regional Website located at
<http://www.wrroundup.com/index.html>

It's FIVE days of Great Fun, Fellowship, and Special Activities for USSVI members and guests.

Look at some of the great activities planned for YOU!

- Cruise on board the Desert Princess and the Desert Princess Too. The Desert Princess is an authentic, three -level, Mississippi-style paddle wheeler. Tours depart from the Lake Mead Cruise landing, just minutes from Hoover Dam.
- The National Museum of Organized Crime and Law Enforcement, is a dedicated to the history of organized crime and law enforcement. It is a world-class destination in downtown Las Vegas. The Mob Museum provides an interactive journey through true stories of the Mob Years in Vegas.
- Fun Nite: Bar, Snacks, Memorabilia Auction (Bring Memorabilia or new Item to Donate)
- Joint Men & Women's Lunch (Speaker)
- Tolling of the Boats (Speaker)
- Group Picture to remember this event in the years to come
- Banquet – Chuck wagon Buffet with live entertainment featuring the...
- "Sun City Aliante Songsters" which is a 40+ member Senior Choir performing hit songs from their week-earlier sold-out concerts titled, "Little Bit Broadway; Little Bit Country"; along with a Patriotic Tribute to the US Navy Service.

To find more information about these activities, and to register for the 2017 Western Regional Roundup, go to: <http://www.wrroundup.com/index.html>

USSVI OFFICIAL BUSINESS: SubVet News - #2017-011

NEWS-01: Associate Membership

Submitted by: William C. Andrea on 4/3/2017

IMPORTANT! In order to regain War Veteran status for USSVI, we will no longer be accepting Associate members UNLESS they have been military members from any of the services, and they served during the specified war datesy the IRS, which are: Dec 7, 1941 to Dec 31,1946June 27, 1950 to Jan 31, 1955; A 5,1964 to May 7, 1975, or Aug 2, 1990 to present. This is a TEMPORARY moratorium until we qualify for War Veteran status again, which is: 90% of our membership must have served during those specified periods.We will then again open up membership for associates.
Until that time, donations or contributions made to USSVI will not be "tax deductible" for the donors, but any donations or contributions made to the USSVCF (USSVI Charitable Foundation)Will be "tax deductible" for the donors.
Again, this is a TEMPORARY moratorium.

Hampton Roads Submarine Birthday Ball

Celebrate the Submarine Force's 117th Birthday!

SATURDAY, APRIL 22 at 6 PM

Waterside Marriott
235 E Main St., Norfolk VA, 23510

To Purchase Tickets
Contact your Command Representative

Logos on the right: USS ALBANY SSN-755, USS CLAWSON SSN-791, USS INTONDA, USS JOHN WARREN SSN-587, USS BOISE SSN-596, USS KILPATRICK SSN-765, USS LA JOLLA SSN-794.

Logos on the bottom: 6th Submarine Squadron, CROSAZ TFW, NAVY SUBMARINE 48, USS BRIDGES SSN-598, USS LA JOLLA SSN-794.



*The Commander, Northern Virginia Base, and the Commander, Capitol Base,
United States Submarine Veterans, Incorporated,
request the honor of your company
at a Holland Club Induction Ceremony and luncheon for
CAPT David Cooper CS2 David Lorms
RADM David Oliver LCDR Michael Naughton
on Saturday, the Thirteenth of May 2017
at eleven o'clock.*

*Amphora Diner Deluxe
1151 Elden Street, Herndon, Virginia 20170*

Scheduled Guest Speaker ADM Frank Caldwell, Director Naval Reactors

Menu choices: (\$35/person, tax & tip included, cash bar) Tri Peppercorn Petite New York Strip Steak, Poached Atlantic Salmon with Dill Crème Sauce, and Chicken Breast Piccata with Lemon and Capers. All served with Wild Rice, Baby Asparagus, Coffee, Tea, or Soft Drinks, and Dessert. Vegetarian meal available upon request.

*R.S.V.P. (including meal selection)
by 8 May to 703-573-1523 or
pastcdr@ussvinova.org*

*Service Dress Blue Uniform
Equivalent Civilian Business Attire
or USSVI vest and tie*

U.S. Undersea Warfare News

Navy Acquires New Software For Submarine Sonar

Katherine Owens, Defense Systems, March 14

Navy submarine mine detection and covert tracking capabilities will be strengthened through the procurement of the latest Acoustic-Rapid-Commercial-Off-The-Shelf Insertion (A-RCI) systems, sonar systems designed to take advantage of the rapid pace of commercial software development.

As part of the Technical Insertion-16 (TI-16) program, updated A-RCI software, pre-cable kits, and spare hardware will be provided by Lockheed Martin Rotary and Mission Systems through a \$100,443,937 contract modification.

According to a report by the Department of Defense, the A-RCI sonar system is used in Ohio-class, Los Angeles-, Seawolf-, and Virginia-class submarines that synthesize data from the submarines' acoustic hull arrays, sphere arrays, and two towed arrays, called the "fat line array" or the TB-16 and the "thin line array" or the TB-23.

These arrays are acoustic sensory modules attached to the surface of the submarine or towed behind it that feed sonar data to the A-RCI software. The data is delivered to a multipurpose processor that digitally formats and analyzes the sonar data, while other monitoring systems work to refine this data by identifying the acoustic feedback generated by the submarine itself; this distinguishes it from emissions surrounding submarines and surface vessels.

Submarines with A-RCI systems installed are designed to engage in search and tracking missions of other submarines or surface vessels in open water or littoral zones without being detected. They are also able to locate and avoid undersea mines and other obstacles as well as perform under-ice operations. These capabilities render A-RCI systems essential to submarine intelligence, surveillance, and reconnaissance (ISR) operations and secret naval special warfare missions.

The A-RCI TI-16 program is distinctive because it uses commercial, off-the-shelf software and hardware to upgrade submarine sensor processing, which means acoustic performance can be almost continuously improving.

The upgraded A-RCI systems, spares, and pre-cable kits are expected to be fully procured by December 2022. This recent modification of the original 2015 contract is a cost plus incentive fee and cost reimbursement modification, meaning that Lockheed Martin will receive a fee for fulfilling the contract that will increase or decrease depending on whether work is completed within or above the given budget. Funding will come from the FY17 Navy shipbuilding conversion, FY16 and FY17 Navy Other Procurement, and FY17 Navy Operations and Maintenance budget categories, with \$40,000 expiring at the end of this fiscal year.

Irish-American Heritage, John Holland, and The Mighty Submarine Force

Lt. j.g. Daniel Mongiove, Dolphin News, March 23

GROTON – March is Irish-American Heritage Month, and while we celebrate it with parades and corned beef dinners, the United States Navy submarine program also has a reason to commemorate the special month. The roots of the U.S. submarine force can be traced back to its Irish "Father of the U.S. Submarine Force", John P. Holland.

Holland was born Feb. 24, 1842, in Loscannor, County Clare, Ireland. The son of a coast guardsman, Holland was attracted to the sea and its lore. He passed the merchant mariner navigation exam, but was ultimately rejected from being a coast guardsman due to his nearsightedness. So at the age of 17, Holland entered the Irish Christian Brothers Monastery School to become a teacher.

During his early teaching career, Holland became interested in both flight and submarines. He even prepared a preliminary concept for a one-man submersible, which he was able to test as a clockwork-driven model.

At this same time, the struggle for Irish freedom from Britain had escalated, and two of Holland's brothers and his mother fled to the United States.

In 1873, Holland emigrated to America at the age of 32. Taking a teaching post in Patterson, N.J., Holland continued to refine his thoughts and designs of submarines.

Upon catching the eye of a political group, the Fenians, that wanted Ireland to overthrow British rule, Holland was able to finance a working prototype of the evolving design.

In 1878, Holland launched a 14-foot iron craft, subsequently known as "Holland Boat No. I," in the Passaic River, in New Jersey.

By 1895, his Holland Torpedo Boat Co. had won a Navy contract to build the "Plunger."

To meet the Navy's requirements, (a surface speed of 15 knots and a correspondingly large propulsion plant,) the boat emerged as a real behemoth: 85 feet long and nearly 12 feet in diameter, with submerged displacement of 168 tons.

Desiring to incorporate many of the concepts he had developed over his past designs, Holland became dissatisfied with Plunger requirements.

Convincing his colleagues at the Holland Torpedo Boat Co. to build a new submarine prototype as a private venture, independent of Navy requirements and in strict accordance with his own conception, Holland laid the keel for the "Holland VI," at the Crescent Shipyard in Elizabethport, N.J., in 1896.

After a number of successful upgrades and iterations, then Assistant Secretary of the Navy Theodore Roosevelt wrote to Navy Secretary John D. Long on April 10, 1898: "I think the 'Holland' submarine boat should be purchased. Evidently she has in her great possibilities for harbor defense."

But Holland was near bankruptcy. He needed a capital infusion from financier Isaac L. Rice and lawyer Elihu B. Frost, and in 1899, he saw his Holland Torpedo Boat Co. absorbed into the newly formed Electric Boat Co.

After two years of refinements and promotion of the submarine to Navy leadership, Holland VI's capabilities were demonstrated March 14, 1900, on the Potomac River to the Navy's General Board and many senior government officials.

Finally on April 11, 1900, the Navy bought Holland VI for \$150,000.

Newly commissioned USS Holland, the U.S. Navy's first submarine had a 1,500-mile range (40 miles submerged), could dive to 100 feet, and had a top speed of seven knots.

On Aug. 12, 1914, Holland died of pneumonia at age 73. Today's submarine design and innovations owe much to this son of Ireland.

As World War I and World War II saw the ever advancing and significant role of submarines and submarine warfare, the Cold War and nuclear age saw a look back to Holland's innovative designs.

With his enduring accomplishments and lasting influence, the bespectacled, bowler-wearing, former school teacher of County Clare, Ireland, John P. Holland, is indeed "Father of the U.S. Submarine Force."

Tennessee Gold Changes Command

Lt. Lily Hinz, Navy.mil, March 27

KINGS BAY – The Ohio-class ballistic-missile submarine USS Tennessee (SSBN 734) (Gold) held a change of command at the Naval Submarine Base Kings Bay Chapel, March 24.

Cmdr. Christopher Bohner was relieved by Cmdr. Jon Schaffner as commanding officer of Tennessee (Gold). Bohner, a native of Trevorton, Pennsylvania said, "I am convinced there is not a finer crew who executes our nation's most important military mission of strategic deterrence," said Bohner of the Tennessee's Gold Crew. "It was my distinct honor and privilege to call myself your commanding officer. Sailors like you give me unwavering faith and confidence for the future security of our great nation."

Bohner spoke of his crew's diverse backgrounds and impressive ability to come together as a team. "The strength in their diversity is the metal that forged the strongest of blades, capable of piercing through any barrier, slashing through every challenge -- solid, balanced, reliable; our strongest weapon," Bohner said.

Capt. T.R. Buchanan, Commodore, Submarine Squadron 20, served as the guest speaker for the event. "I was underway on Tennessee Gold about one year ago to observe my first tactical readiness exam as commodore. Chris [Bohner] and his team demonstrated exactly how it should be done," said Buchanan. "The tactical prowess of the crew was something to behold. It is obvious that Chris knows exactly how to employ his submarine as to maximize its capability and he knows how to keep the priorities in the right perspective."

Schaffner, a Casper, Wyoming native, was last stationed at Undersea Warfighting Development Center where he was the executive officer. His most recent operational assignment was as executive officer

aboard USS Santa Fe (SSN 763) where he completed a Western Pacific deployment, earning the boat a Navy Unit Commendation.

During his remarks, Schaffner expressed his enthusiasm to work with his Sailors. "To the crew of USS Tennessee (Gold), you are America at its best," said Schaffner. "Every day we will strive to be the best at protecting our allies and fellow Americans with the credible, reliable, and survivable nuclear deterrent capability of USS Tennessee. I look forward to serving as your captain and promise to give you my best as we accomplish our nation's highest priority mission of strategic deterrence together," said Schaffner.

For his next tour, Bohner will report to Commander, Submarine Group 10 as the operations officer.

Tennessee is the fourth U.S. Navy ship to be named for the State of Tennessee and the ninth of 18 Ohio-class submarines. USS Tennessee was commissioned Dec. 18, 1988.

USS Thresher: Never To Be Forgotten

D. Allan Kerr, Foster's Daily Democrat, April 2

The month of April is usually considered a period of rebirth and renewal, but for a lot of folks in Kittery, Maine, it tends to be somber time.

It was 54 years ago this month the Navy submarine USS Thresher sank more than 200 miles off the New England coast. It remains the worst submarine disaster the world has ever known.

Here in the Seacoast, and especially in Kittery, the Thresher's hometown, the tragedy still resonates on an intimate level. One hundred and twenty-nine Navy sailors and civilian workers were lost that morning of April 10, 1963, including local employees of Portsmouth Naval Shipyard.

The Thresher disaster was worldwide front-page news when it occurred, and led directly to the creation of an enhanced submarine safety program to prevent similar accidents. But too often with historic tragedies, names and faces tend to be overshadowed by dates and numbers.

While it doesn't seem fair to single out a couple of the 129 heroes lost when there isn't space to mention them all, there seems to be a distinctly local flavor to this epic catastrophe. After all, the Thresher (SSN 593) was designed and built at the shipyard in Kittery during the early 1960s, and had just completed a nine-month overhaul here when it departed for that fateful sea trial.

This Saturday on April 8, the annual Thresher memorial service will be held at Traip Academy for the surviving families of these Cold War casualties. Which is fitting, because two of the men lost aboard the Thresher were hometown boys and graduates of Traip, Kittery's local high school.

Fred Philip Abrams, class of 1938, went on to serve in Europe with the Seventh Army during World War II, seeing action in Northern France and the Rhineland. He returned home after the war to marry his neighborhood sweetheart, Sherley, and went to work at the shipyard.

Abrams was aboard the Thresher as a mechanical system inspector when it sank, having been called in as a last-minute replacement. He took part in submarine sea trials despite claustrophobia and a fear of water because, his daughter Carol says, he felt it was his duty to do so.

The World War II veteran was 42 years old when he died during the Cold War, leaving his wife with a teenage daughter and son. That son, Jim Abrams, still lives in town, just a few minute's walk from the back gate of the shipyard where his dad worked.

Richard DesJardins grew up just across the street from that same shipyard entrance. He graduated from Traip in 1948 and served as a lieutenant in the U.S. Army, including a tour of duty in Greenland. Following his discharge he worked as an engineer at the shipyard, where his father had also worked for more than two decades.

DesJardins was just 32 years old when he went down aboard the Thresher, and his wife Elizabeth was five months pregnant with the couple's only son. She raised their three children — including two young daughters — on her own, and still lives in Kittery Point today.

And if you want to make her day, just ask about her grandkids.

Julius Marullo Jr. was an Italian-American from Galveston, Texas, but he met and married a Seacoast girl while serving in the Navy. A quartermaster and Korean War veteran, Marullo was a member of the Thresher's original commissioning ceremony.

He was a first-class petty officer when he went down with the doomed submarine, after almost a dozen years in the Navy. His bride was widowed at age 22, and left with two small children under the age of 3.

Think about that for a moment.

Today, Debby Ronnquist lives in Kittery and seems nearly as spry as she must have been when Marullo – known to all as Buddy – fell in love with her. Their daughter, Marcy Philbrook, is president of Kittery's non-profit resale boutique The Fabulous Find, one of the most amazing organizations I've encountered in this or any community.

On Saturday the 8th, the Kittery Historical & Naval Museum, which is normally closed this time of year, will hold special hours of operation from 10 a.m. to 2 p.m. There will be a discount rate for visitors in town for the day's memorial service. The museum has a pretty cool USS Thresher display, including photos of all those who died that morning.

The museum has also graciously asked me to give a little talk about the men of the Thresher on the evening of the disaster's anniversary. The April 10 event was organized in coordination with Kittery Adult Education.

It starts at 5:30 p.m. in Memorial Park adjacent Town Hall, and will then move to the nearby museum building. Registrations can be made at www.kittery.maineadulted.org or by calling Kittery Adult Education at (207) 439-5896.

But even if you can't make these events, at some point take the time to check out the park. It includes a bronze plaque listing the names of all the heroes who died aboard the Thresher, and an interpretive marker detailing the tragedy.

Or view the display at the Kittery museum. (Along with the other remarkable exhibits housed there, of course.)

The main point here is to just take a moment to consider the sacrifice of these guys and the loved ones left behind. And then never, ever forget.

Clamagore Submarine Likely To Remain Open At Patriots Point For Another Year

Dave Munday, Post and Courier, April 3

Visitors to Patriots Point can expect the submarine Clamagore to remain open for another year or so, despite talk that it might be hauled off and sunk at a Florida reef by the summer, according to executive director Mac Burdette.

"No way," Burdette said when asked if he expects the sub to be moved this year.

The reason: Patriots Point Development Authority, a state agency, owns the World War II submarine near the Yorktown, but the Navy retains oversight and would have to approve the move.

"The Navy never gives up ultimate control of ships, even though we own it," Burdette said. "We are responsible for that ship until the Navy says we aren't, but the Navy can tell us what we can and cannot do with her."

The fact that the sub is a National Historic Landmark makes the relocation even more complicated. Section 106 of the National Historic Preservation Act of 1966 requires the Navy to get input from the Advisory Council on Historic Preservation, the State Historic Preservation Officer and the public.

Other federal agencies would also have to be given a chance to weigh in, including the Environmental Protection Agency, the Fish and Wildlife Service and the Coast Guard.

The Department of Interior may also require a video documentary and other records before the sub is sunk, since only divers will have access after it's submerged under 90 feet of water about a mile off Juno Beach.

There has been talk for at least five years that the Clamagore could become a Florida reef because Patriots Point can no longer afford to maintain it. The talk took a step toward reality earlier this year when the Palm Beach County Board of Commissioners voted to hire Artificial Reefs International of Key West to move the sub, remove all the contaminants, sink it, secure it to the bottom of the ocean and open it up for an underwater museum.

Palm Beach County kicked in \$1 million for the transfer earlier this year, and Artificial Reefs has been raising another \$3 million.

Palm Beach County Environmental Resources Management is coordinating the project. Deputy director Dan Bates recently said he's hoping to have the sub in the water off the coast this summer. Artificial Reefs also has said they hope to move the sub by summer, according to Bob Howard, Patriots Point's operations director.

They may raise the money by summer, but there's no way they're going to move the sub that quickly, Burdette said.

"It just takes time," he said.

Patriots Point recently finished a survey of the Clamagore's fuel tanks and found about 100,000 gallons of contaminated water. That contaminated liquid would have to be removed and the tanks cleaned and sealed and filled with fresh water for ballast before the sub is moved. It's likely the tanks would have to be drained anyway because of the threat of a hurricane, Burdette said.

Submarine Squadron Four Holds Change of Command Ceremony **MCC Owsley, Navy.mil, March 31**

GROTON – Submarine Squadron Four held a change of command ceremony on Thursday, March 30, aboard the Virginia Class, fast-attack submarine, USS California (SSN 781) at Naval Submarine Base New London, Conn.

Capt. Brian Sittlow relieved Capt. John McGunnigle as Commander, Submarine Squadron Four (CSS-4).

Under McGunnigle's leadership CSS-4 trained, manned and equipped 13 nuclear-powered, fast attack submarines, from 2015 until 2017, nine of which, are currently assigned to the squadron and homeported at Naval Submarine Base New London.

Commander, Submarine Forces, Vice Adm. Joseph E. Tofalo, who served as the ceremony's guest speaker, told those in attendance how much he enjoyed being back in the submarine capital of the world, Groton, Conn., which certifies an average of one deployment-ready, fast-attack submarine a month.

"All of this success isn't an accident," said Tofalo. "Consistently and successfully generating readiness and getting these warships to sea is a credit to their crews, the supporting commands and the highly capable staff at SUBRON FOUR, but it starts at the top with the squadron commander. Congratulations John on a job extremely well done."

Tofalo spoke to Sittlow when he said, "Commodore Sittlow, congratulations! I know that you are ready to hit the decks running in your new assignment as Commander, Submarine Squadron Four. Your career to date has prepared you well for this extremely important assignment."

When McGunnigle spoke he thanked those he worked with as CSS-4 Commodore and throughout his career. He thanked his leaders who, "gave me a vision and a standard, and more importantly the maneuvering room to execute. They were always there to provide advice, support and counsel and always held me accountable to meeting the high standards, which make our submarine force the best in the world."

He thanked the commanding officer of each CSS-4 submarine by name as well as the major commanders in the area that make up Team New London.

McGunnigle also praised the staff and leadership of General Dynamics Electric Boat, which he praised as, "the best shipbuilders in the world."

The outgoing commodore also recognized the staff members of CSS-4 as, "experts in the submarine force, fun to work with and they simply do their jobs."

McGunnigle thanked his family for their support when he said, "You are all the reason why I serve and why I am who I am."

Sittlow started his speech by addressing McGunnigle, "You have been a mentor, friend, leader, advisor and even a wolf-pack brother to me throughout my career. I am very excited to be on the stage with you today, to celebrate all of your accomplishments."

CSS-4's new commander emphasized the importance of people in the submarine force, "...building and operating our submarines is a people game, and a team sport, and not necessarily a course of instruction in metallurgy, nuclear physics, tactics or weaponeering."

Sittlow closed his remarks by saying, "Finally for the reason we are all here today-SUBRON Four. Your collective accomplishments, which include the full spectrum, from dedicated ship building right here in the submarine capital of the world, to far away deployed areas all across the world-are eye watering! I am very proud to be a part of this team, to lead this team, with all my dedicated effort and professionalism. I can't wait to get started!"

[Navy Contract for XLUUV Development Expected This Year](#)

[Richard Burgess, Seapower Magazine, April 3](#)

NATIONAL HARBOR, Md. — The Navy expects to award a development contract for the Extra-Large Unmanned Underwater Vehicle (XLUUV) this year with the initial mission focus of mine warfare, a Navy official said.

“By the end of 2017 we expect to award [a contract],” said Howard Berkof, deputy program manager for Unmanned Maritime Systems, speaking to reporters at the Navy League’s Sea-Air-Space Exposition.

The long-endurance XLUUV will be a UUV too large to be carried by a platform such as a submarine or a littoral combat ship, for example, compared with the smaller Large-Diameter UUV (LDUUV), which will be able to operate from those platforms. The XLUUV will be able to deploy independent of another platform.

The LDUUV — the Snakehead — is being developed by the Naval Undersea Warfare Center in Newport, R.I., which is the government system integrator.

Berkof said the LDUUV program “was recently designated for accelerated acquisition ... to get it into the water as quickly as possible,” the goal of which is 2019. He said the XLUUV is not an accelerated program, “but we’re following a similar model” as with the LDUUV.

Potential missions for the XLUUV include strike, anti-submarine warfare, anti-surface warfare, electronic warfare, mine countermeasures, mining, and intelligence, surveillance and reconnaissance, Berkof said.

[Helping Submarines "See": UTC Aerospace Systems Begins Production Of](#)

[First Large Vertical Array For Virginia Class Subs](#)

[Staff, Yahoo Finance, April 3](#)

CHARLOTTE, N.C. — UTC Aerospace Systems, a unit of United Technologies Corp. (UTX), announced today that manufacturing has begun on the first Large Vertical Array (LVA) for Virginia Class submarines at its Aerostructures Engineered Polymer Products (EPP) division in Jacksonville, Florida. The start of production follows several years of collaboration between EPP, the U.S. Navy and prime contractor General Dynamics Electric Boat on a design and development program.

EPP's LVA is a hull-mounted acoustic array which, along with other onboard systems and sonar processing capabilities, allows a submarine to "see" other submarines and surface ships in its vicinity. The LVA develops a detailed tactical picture that allows the submarine to perform its full array of missions.

"Our proven ability to provide advanced acoustic products that maximize sonar system performance gives our sailors a significant at-sea advantage," said Aerostructures President Marc Duvall. "Our dedicated team of engineers and manufacturing experts is committed to delivering superior acoustic technologies while exceeding expectations on cost, quality, schedule and performance. We look forward to building on our longstanding relationship with the U.S. Navy and General Dynamics Electric Boat."

For more than 50 years, EPP has developed expertise and gained experience supporting the U.S. Navy's undersea warfare mission. Initially, the legacy rubber expertise of the B.F. Goodrich Company was utilized in surface warship sonar domes. Then in the 1990s, EPP began designing and manufacturing a wide variety of polyurethane products for the commercial, space and defense industries. This newly developed expertise in polyurethane design and manufacturing allowed EPP to begin supporting U.S. Navy efforts in 2000 by conducting early studies of hull array materials and technologies. In 2008, EPP began working alongside the Navy to build two prototype LVAs designed for two different classes of submarines. Lessons learned from the prototypes were then leveraged in the design and manufacture of the Virginia Class LVA.

[Ohio-Class Subs Could Be Unfit Underwater In A Decade, STRATCOM Warns](#)

[Leo Shane III, Military Times, April 4](#)

WASHINGTON — Navy officials may have as little as a decade before their Ohio-class submarine fleet

won't dive beneath the waves anymore, the head of U.S. Strategic Command warned lawmakers on Tuesday.

"Each submarine is built to go down, under pressure, a certain number of times. Once you reach the end of life, you can't go down any more," said Air Force Gen. John Hyten, STRATCOM commander, in testimony before the Senate Armed Services Committee. "And a submarine on the top of the water is not an effective deterrent."

The comments came as Hyten detailed the need for stable and sufficient funding for nuclear modernization efforts, including the military's submarines. Navy officials have already begun a \$100 billion-plus plan to replace the aging Ohio-class submarines with the Columbia-class in coming years, but the STRATCOM commander warned that recent budget fights could jeopardize that progress.

"Every year [of] that program, if it slips one year then the future commander of STRATCOM is down one nuclear submarine," he said. "Two years, two nuclear submarines."

"We know that because there's a certain time in the future where Ohio-class submarine just will not go under the water anymore, just the pressure on the vessel itself will not allow it to go down. (The Columbia-class program) has to stay on time."

Hyten would not detail exactly when military officials predict the older subs will become obsolete, but said the problem will start "towards the end of the next decade."

Lawmakers at the hearing called that alarming. Sen. Roger Wicker, R-Miss., called it "a very precipitous risk" for the country if a replacement isn't prioritized.

Hyten's comments were the most recent of a series of dire predictions from military officials about looming defense budget issues, as lawmakers try and find a solution for federal spending for the remainder of the fiscal year.

Most federal agencies, including the Department of Defense, have been operating off fiscal 2016 spending levels since last fall as Congress tries to work out a long-term spending plan for the government. If a solution is not found before the end of April, the country will face another partial government shutdown.

In recent days, lawmakers have discussed the possibility of another continuing resolution to push the funding fight to October, but military leaders have warned that plan will leave them short on a number of multiyear procurement and planning priorities, including the Columbia-class subs

Last week, Marine Lt. Gen. Jon Davis, deputy commandant for aviation, said he would be forced cut all flying hours for several F/A-18 Super Hornet and Harrier squadrons under a continuing resolution. Service officials are expected to outline other possible training and personnel cuts at a House Armed Services Committee hearing Wednesday.

Hyten said the continued budget confusion is taking a toll on his service members.

"They are dealing with very old equipment," he said. "We have a commitment to them, as a nation, that we need to give them the tools they need in order to do their job. Their enthusiasm can only last a certain amount of time, and if we don't follow through on that commitment, that morale will be brought into question."

Lawmakers have been unable to reach a long-term funding deal balancing military and non-defense funding since 2011, when they passed 10 years of budget caps designed to reign in the federal budget.

Strategic Deterrence More Than Nuclear, Stratcom Commander Says

Terri Moon Cronk, Defense.gov, April 4

WASHINGTON — Strategic deterrence has been the foundation of U.S. security for decades, and today's nuclear force remains safe, secure, reliable and ready, the commander of U.S. Strategic Command said on Capitol Hill this morning.

But in the 21st century, strategic deterrence is more than nuclear, Air Force Gen. John E. Hyten told the Senate Armed Services Committee. Strategic deterrence is integrating all capabilities in all domains across all of the combatant commands, government organizations and alongside U.S. allies, he said.

A Changed Security Environment

"The global security environment we operate in has changed; our adversaries are developing advanced nuclear and conventional weaponry that rivals our systems in capability and capacity," Hyten said. "They fully understand the warfighting capability that cyber and space can enable."

The United States must stay ahead of its adversaries -- such as Russia, China, North Korea and Iran -- and maintain its technological and operational superiority by adapting and modernizing, he said.

And the primary focus of U.S. deterrence and modernization must address the entire nuclear infrastructure, Hyten said.

"First, the platforms -- the [intercontinental ballistic missiles], the submarines [and] nuclear-capable heavy bombers with their associated tankers. Second, the actual nuclear weapons themselves, and finally, the nuclear command-and-control architecture that enables the entire enterprise; they're all essential to the security of our nation," he said.

Nuclear Triad Strained

At a time when the nation's adversaries have significantly modernized and continue to upgrade their nuclear forces, nearly all elements of the nuclear triad are operating beyond their designed service life, the general said.

"Any recapitalization program delays will further diminish these capabilities and affect our ability to execute our mission," he told committee members.

Space is a warfighting domain just like air, ground, maritime and cyber, Hyten said, noting that the United States must normalize how it plans and operates in space.

Advancing Missile Defense

"Ballistic missile proliferation is increasing as more countries acquire greater numbers of ballistic missiles while simultaneously advancing technical sophistication to defeat U.S. defense systems," he said. "In response, we must continue to advance our missile defense capabilities and forces to assure allies and deter adversary aggression."

While the morale of the force is very high, the general said, its personnel understand the critical importance of the missions. Nevertheless, the nation faces significant challenges in sustaining the critical capabilities that underpin its strategic deterrent, he added.

"Our nation's strategic capabilities must be a core focus of our national security spending," Hyten said, "and I'm sure that sustained congressional support from this committee, combined with the hard work of the exceptional men and women who support U.S. Strategic Command, will ensure that we remain ready, agile and effective against both current and future threats."

Navy Accelerating Work on 'Snakehead' Large Displacement Unmanned Underwater Vehicle **Megan Eckstein, USNI, April 4**

NATIONAL HARBOR, Md. — The Navy's Large Displacement Unmanned Underwater Vehicle (LDUUV) effort has split into two concurrent programs, one to continue experimenting with software and autonomy and the other as an accelerated acquisition program intended to put a boat in the water quickly.

The Program Executive Office for Littoral Combat Ships' (PEO LCS) Unmanned Maritime Systems program office (PMS 406) designated its rapid acquisition program the "Snakehead LDUUV" a couple months ago and is aiming to put a prototype UUV in the water in 2019, deputy program manager Howard Berkof said Monday at the Navy League's annual Sea-Air-Space exhibition.

"We are leveraging existing technologies out there -- mature, proven technologies out there -- and building this first Phase 1 vehicle to get it in the water as quickly as possible," he said.

"The objective is to get the first Phase 1 prototype wet in '19. So get it in the water as quickly as possible, get it into the hands of our sailors, enable them to use it and get those lessons learned and that feedback, and that will feed our future LDUUV acquisition program. In fact, it will feed our family of UUV programs."

The Phase 1 Snakehead LDUUV will focus on intelligence and preparation of the environment (IPOE) and intelligence, surveillance and reconnaissance (ISR) mission sets, and Phase 2 would seek to add extended ranges to both missions. The eventual program of record Snakehead Increment 1 would include additional payloads, potentially including electronic warfare, mine warfare, mine countermeasures, anti-submarine warfare and anti-surface warfare, according to a UUV Systems Vision chart included in Berkof's presentation.

The Navy last year decided to use the Naval Undersea Warfare Center- Newport as the government lead systems integrator for the Snakehead effort to save time. Industry is engaged in the program and working

on the power system, sensors and other aspects, but the Navy itself will design and integrate the vehicle that will end up in the water, Berkof explained.

Additionally, the project timeline will be boosted through its selection by Navy leadership as one of three rapid acquisition projects to test out new authorities – in LDUUV’s case, the authorities in the Maritime Accelerated Capabilities Office. Berkof explained that Snakehead LDUUV will still have to reach traditional acquisition milestones, but the Navy will be “waiving some of the traditional program of record requirements, with leadership approval, and we have a direct line” to senior service leadership to help remove any roadblocks that pop up.

At the same time, Berkof told USNI News after his presentation, the Office of Naval Research will continue with its LDUUV Innovative Naval Prototype effort. The first two ONR LDUUV INP vehicles will go to the unmanned systems program office, Berkof said – one of which is an empty hull that will be put on display and the other which will go to a “UUVron” squadron out of NUWC-Keyport, Wash., to learn operational lessons that will feed the Snakehead program.

With its two remaining vehicles, ONR will continue research and development efforts on “specifically software and autonomy and all that. Command and control. So ONR will continue maturing the two other vehicles, and then at some point they will transition to 406 in the future,” Berkof said.

The Navy has a similar multi-pronged approach for the Extra Large UUV (XLUUV) – a 54-inch diameter UUV, compared to the 48-inch diameter LDUUV, which would likely be launched from a pier instead of from a ship at sea. ONR is in the process of building its second XLUUV INP boat, and at the same time PMS 406 has already released a request for proposals for construction that should be awarded by the end of the year. This mine warfare asset will go through the same dual-pronged learning effort from ONR and the unmanned systems program office – though not as a rapid acquisition program – and ultimately all the prototyping work will lead to an unmanned system with multiple payloads for multiple mission areas.

Berkof said the Navy set up its LDUUV and XLUUV programs in a similar fashion, and the only reason LDUUV was chosen for rapid acquisition was the fact that it was farther along.

SLC Selects 2016 Civilian of the Year

William Kenny, Navy.mil, April 3

GROTON – The Submarine Learning Center (SLC) named Donald C. Fauver as the 2016 Civilian of the Year during an awards presentation ceremony March 31.

Fauver is the manager for the Defense Property Accountability System at SLC headquarters in Groton and for the training sites in fleet concentrations areas from Norfolk, Virginia to Guam. He supports the training professionals and the devices and classrooms required to deliver timely and time-sensitive training to all non-nuclear enlisted and officer submarine Sailors.

SLC Commanding Officer, Capt. Andrew Jarrett, characterized the selection process as very competitive noting Fauver's recognition was both well-deserved and hard-earned.

"I'm always pleased to recognize stellar performers and Don Fauver is definitely one of ours," said Jarrett. "Working jointly with our learning sites and their staff members, he achieved the SLC's first ever, domain-wide 100% accurate property inventory. His efforts established accountability for over 660 assets valued at approximately \$850 million dollars. His procedures will ensure continued asset control into the foreseeable future."

A retired Navy Senior Chief Operations Specialist, Fauver has worked at SLC for four years.

"I'm both honored and humbled," said Fauver. "It is nice to be recognized for years of consistent improvement to a program that needed a lot of attention. I could not have done this without the hard work of those Sailors and civilians from Groton to Guam who help me manage the inventory at our various learning sites."

"Don is a wonderful reflection of the caliber, depth and variety of talents and skills we have at the SLC working to build tomorrow's Submarine Force," said Jarrett.

"I really enjoy being part of a team like ours," said Fauver. "I'm honored that so many of my colleagues and the SLC leadership have this level of regard for the job I do and the support I provide."

The Submarine Learning Center's primary function is to create, coordinate and execute the future training and education vision for the Submarine Force. It is accountable for all undersea curriculums, training delivery methodologies, and for developing and maintaining professional development continuums for all

undersea warfare officers and ratings to include Electronics Technician (communications and navigation), Fire Control Technician, Sonar Technician, Machinist's Mate (auxiliary and weapons), Missile Technician, and all nuclear training ratings.

International Undersea Warfare News

Russian Submarine Patrols Match Cold War-era Intensity

Staff, The Canadian Press, April 1

MOSCOW – Russian submarines have increased combat patrols to the level last seen during the Cold War, the navy chief said Friday.

Adm. Vladimir Korolyov said that Russian submarine crews spent more than 3,000 days on patrol last year, matching the Soviet-era operational tempo.

"It's an excellent level," he said in remarks carried by state RIA Novosti news agency.

The Russian military had fallen on hard times after the 1991 Soviet collapse when it was forced to scrap many relatively new ships and keep most others at harbor for lack of funds. The military has revived its strength thanks to a sweeping arms modernization program amid tensions with the West over Ukraine.

Korolyov spoke after attending the launch of a new Yasen-class nuclear-powered attack submarine called the Kazan. He hailed the new ship as the most modern in the world, emphasizing its low noise level making it hard to track it.

"It represents the cutting edge of nuclear submarine design," Korolyov said in televised remarks.

The navy plans to commission seven Yasen-class submarines that are armed with torpedoes and long-range Kalibr cruise missiles, which for the first time have been tested in combat during the Russian campaign in Syria.

Russia Launches Most Powerful Nuclear Attack Submarine Yet

Loulla-Mae Eleftheriou-Smith, Independent, April 5

Russia has unveiled its army's most powerful submarine to date, capable of carrying hundreds of torpedoes and reaching speeds of up to 31 knots.

The new Yasen-class nuclear powered attack submarine, called the Kazan, is armed with torpedoes and long-range Kalibr cruise missiles. The ship was launched at the Sevmash shipyard in Severodvinsk, northern Russia.

According to Russia's state news agency TASS, the new submarine has been designed to destroy an enemy's submarines, surface ships, naval bases and ports, among other targets.

The ship reportedly carries a crew of up to 90 men and can be at sea for 100 days. It measures at around 139 metres long and can reach depths of around 600 metres underwater.

The vessel has space for eight Oniks and Kalibr cruise missiles and 300 torpedoes, and can reach speeds of up to 31 knots.

A single-shaft steam turbine nuclear power unit is understood to be part of the ship's design, giving it a capacity of 43,000 horse power, and its arsenal is thought to be capable of hitting targets up to 1,500 miles away, The Mirror reported.

The Russian military had fallen on hard times after the 1991 Soviet collapse when it was forced to scrap many relatively new ships and keep most others at harbor for lack of funds. The military has revived its strength thanks to a sweeping arms modernization program amid tensions with the West over Ukraine.

At the launch of the new submarine, Admiral Vladimir Korolyov claimed the new ship is the most modern in the world, emphasising how hard it is to track due to its low-level noise.

"It represents the cutting edge of nuclear submarine design," he said.

The launch comes at a time when Russian submarines combat patrols have reached levels not seen since the Cold War. Crews spent more than 3,000 days on patrol last year, which Admiral Korolyov called "an excellent level".

The submarine is expected to be placed in service by next year and Russia's navy intends to commission a total of seven of the submarines to be put into service by 2023.

N. Korea Still Years Away From Developing Submarine Missiles: U.S. Pacific Fleet Chief

Lee Chi-dong, Yonhap News Agency, April 4

SEOUL – A top U.S. naval commander said Tuesday that North Korea appears to still be years away from fully developing the technology needed for submarine-launched ballistic missiles (SLBMs).

“To launch those missiles from under the water is very, very complicated,” Adm. Scott Swift, who commands the U.S. Pacific Fleet, said in an interview. “I think it’s still years away before that technology is developed.”

He cited what the U.S. military has “seen and knows” but would not specify the grounds of his assessment.

The admiral stressed the seriousness of the North’s general ballistic missile capability coupled with its nuclear program. It has carried out five known underground nuclear tests and stated the goal of miniaturizing nuclear bombs to fit on to various types of missiles in stock.

“That’s what main concern is,” he said, speaking at a meeting with a small group of reporters at the U.S. military base in the Yongsan district of Seoul on his third trip here as the leader of America’s naval forces in the Pacific.

His remarks indicated the Pentagon’s move to focus, for now, on countering growing threats from nuclear and ground-based ballistic missiles, rather than being distracted by the Kim Jong-un regime’s possible bluff.

Last year, the North’s media announced the success of a ballistic missile launched from a submarine, releasing some photos of the experiment.

Swift reassured South Korea and other allies about the U.S. security commitment to Asia under the Donald Trump administration.

Aides to Trump have distanced themselves from the Barack Obama administration’s policies to “pivot” or “rebalance” to Asia.

It does not mean an end to the U.S. focus on the defense of Asia itself, and the Pentagon maintains a plan to deploy 60 percent of U.S. naval assets to the Asia-Pacific area by 2020, the admiral said.

There has been no change to any guidance from Washington for him and Adm. Harry Harris, the commander of the U.S. Pacific Command, he added.

“We are still being robustly resourced and we will remain committed to the whole Indo-Asia-Pacific region,” he pointed out.

He added that probably 57 or 58 percent of U.S. naval firepower was already positioned in the theater.

Swift said his fleet plans to introduce more strategic and most modern weapons, including the USS Zumwalt (DDG-1000), a guided missile destroyer designed as a multi-mission stealth ship with a focus on land attacks.

Among others are the EA-18G Growler, a carrier-based electronic warfare aircraft, E-2D Advanced Hawkeye airborne early warning and control aircraft, and new littoral combat ships.

He was cautious about South Korean media reports that a Zumwalt-class destroyer may be ported in the country’s naval base in the southern island of Jeju.

In a meeting with Adm. Harris, who heads the Pacific Command, in Hawaii earlier this year, some South Korean lawmakers proposed the deployment of the American Navy’s newest destroyer there. They later told media that Harris showed a positive response, if not a clear yes.

“As a naval officer, I think it is little premature to discuss what the future plans are” for Zumwalt, said Swift.

He said it would take several years to complete the weapon systems of the “very unique” ship and decide on the details of its tactical use after testing. The U.S. Navy plans to have only three Zumwalt destroyers deployed.

Asked about the likelihood of the state-of-the-art warship being deployed in or near South Korea in the future, he said, “Anything is possible.”

He also did not rule out the possibility of sending more high-profile warships to East Asia in addition to the two nuclear-powered super carriers, USS Carl Vinson and the USS Ronald Reagan, in Japan.

“There might be three sometimes, there might be four,” he said. “One of the great advantages of naval power is its flexibility to deploy.”

The challenge, though, is the capacity of the facilities that the Pacific Fleet has for maintaining and sustaining warships, he said.

The admiral has commanded the Hawaii-based Pacific Fleet for nearly two years. He describes his troops as the “most capable, ready and significant naval force in the world.”

He met with South Korean Defense Minister Han Min-koo on Monday and attended the annual Pacific Amphibious Leaders Symposium (PALS).