

**MINUTES OF THE USSVI NORTHERN VIRGINIA BASE
MEETING HELD ON SATURDAY, MAY 13, 2017**

The Base CDR, Chuck Martin, called the meeting to order at 1118 on May 13, 2017 at Amphora's Diner Deluxe Restaurant, 1151 Elden St, Herndon, VA., and welcomed ADM Caldwell, Holland Club inductees, Les Altschuler (USSVI Regional Director Northeast), Ron Olson (USSVI District Commander NE4), Holland Club members, regular members, and guests. This was a joint Holland Club Induction ceremony/luncheon for the Capitol Base and the NOVA Base.

MEMBERS AND GUESTS IN ATTENDANCE

Les Altschuler, Joyce Altschuler, Stephen Bishop, Debbie Bishop, Art Bivens, Cindy Boyko, ADM Frank Caldwell (guest speaker), Kim Caldwell, Bonnie Casper, Howard Chatham, Cathy Chatham, Hank Chiles, Bill Clement, Dave Cooper, Suzanne Cooper, Jeanne Deliese, Ed Dempsey, Kathy Dempsey, Delbert Ennis, Linda Ennis, Ed Ettner, Mary Ettner, Bob Frick, Art Glover, Carole Glover, Bob Glover, Earl Griggs, Mary Lou Griggs, Brian Haller, Pat Haller, Ginger Haskell, Jim Huck, Steve Jaeger, Darlene Jaeger, Roxanne Johler, David Lorms, Alberta Lorms, Jennifer Lorms, Chuck Martin, Mike Naughton, Mary Lou Naughton, Michelle Naughton, Dave Oliver, Linda Oliver, Tim Oliver, Ron Olson, Marlyn Olson, LCDR Brian Ross, Ross Sargent, Lorraine Sargent, Gary Smith, Ann Smith, Ray Stone, Mike Varone, Anita Varone, George Wallace, Penny Wallace, Mark Winston, and Woody Woodworth. (59 total)

■ 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 CDR read the list of boats lost in the month of May. These were:

USS Lagarto (SS-371)	May 3, 1945
USS Squalus (SS-192)	May 23, 1939
USS Stickleback (SS-415)	May 30, 1958
USS Scorpion (SSN-589)	May 22, 1968

The COB tolled the ship's bell twice in remembrance of the 21 members of the USSVI NOVA Base on Eternal Patrol.

REGIONAL DIRECTOR Les Altschuler / DISTRICT CDR Ron Olson:

- The Capitol Base Tolling of the Boats Ceremony will be conducted at the F-4 Memorial at Arlington National Cemetery on Saturday, May 20, 2017, at 1100.
- The 2017 National USSVI Convention in Orlando will be Sep 1-6, 2017. Check the Convention website often for updates, e.g. offering a side trip to Kennedy Space Center on Saturday, September 2nd.

BINNACLE LIST: Please keep the following in your prayers: Al Anceravage, Barbara Harmody, Richard Lowry, Steve & Darlene Jaeger for Darlene's mom, and Tony Poblete.

FOR THE GOOD OF THE ORDER: The CDR read the list of birthdays for May: Bill Clement, Mike Harmody, Robert Miller, Joanne Pasquinnelli, Mark Riethmeier, Noland Smith, Sue Shannon, Anita Varone, Penny Wallace, Ron Williams, and Ruri Wooten.

The Base CDR turned over the podium to the Master of Ceremonies for the Holland Club Induction, Immediate Past Base CDR, Howard Chatham.

Howard then introduced our guest speaker Admiral Frank Caldwell.



Admiral Frank Caldwell received his commission graduating with distinction from the United States Naval Academy in 1981 with a Bachelor of Science in Marine Engineering. He also holds a Master of Science in Operations Research from the Naval Postgraduate School.

ADM Caldwell commanded USS Jacksonville (SSN 699) homeported in Norfolk, Virginia; Submarine Development Squadron (DEVRON) 12 in New London, Connecticut; Submarine Group 9 in Bangor, Washington; and the Submarine Force, U.S. Pacific Fleet, Hawaii. His sea tours include service in both the Atlantic and Pacific Fleets. His Operational assignments include duty as a division officer on USS Boston (SSN 703), engineering officer on USS Alabama (SSBN 731) (GOLD), and executive officer on USS Buffalo (SSN 715).

Ashore, ADM Caldwell served on the Pacific Fleet Nuclear Propulsion Examining Board and later as Undersea Warfare (USW) Requirements officer on the staff of Commander in Chief, U.S. Pacific Fleet. He also served as senior member of the Naval Submarine Force's Tactical Readiness Evaluation Team; on the Joint Staff as deputy director for Politico-Military Affairs for Europe, the North Atlantic Treaty Organization, Russia and Africa; and deputy commander for U.S. Strategic Command's Joint Functional Component Command for Global Strike in Omaha, Nebraska and as Naval Inspector General, Washington Navy Yard, D. C. His most recent tour was on the (Office of Naval Operations) OPNAV Staff as the Director, Navy Staff.

He assumed his duties as the Director, Naval Nuclear Propulsion Program in August 2015.

ADM Caldwell's awards include the Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal, Navy Commendation Medal, Navy and Marine Corps Achievement Medal, and the Naval Submarine League's Charles A. Lockwood Award for Submarine Professional Excellence.

ADM Caldwell's remarks were centered on the entire submarine family. He said that back in 1981 Ensign Caldwell was attached to Squadron 6 in Norfolk before going to Nuclear Power School when CAPT Dave Cooper was the Commodore. He commented on Dave's hospitality and warm welcoming into the submarine community. Then he said he wears his father's dolphins every day when he wears his khakis to work. He sees that act, much like the work of USSVI, as a vital connection to our submarine heritage.

Fifty years ago, when these men of today's Holland Club Induction were qualifying, we were deep into the Cold War, and the Viet Nam War was raging. Also, we were learning about nuclear power, SUBSAFE, and nuclear deterrence. And, we built the "41 for Freedom" from 1959 to 1967 – a remarkable feat.

Flash ahead 50 years and we have changed to all nuclear submarines (52 SSNs, 14 SSBN, and 4 SSGN), and women in submarines. However, some things are still the same fifty years later: John McCain is still in the news, the Middle East is still at war, and we still worry about the USSR / Russia.

Three main threads run through all we do in submarines today.

1. The importance of the Navy and the submarine force in the Maritime Domain. The Combatant Commanders always want more submarines to do more and more missions.
2. The submarine force is moving forward with a purpose
 - a. We are commissioning ships at a rapid pace and delivering two VA class subs per year.
 - b. We are in the process of building 13 ships today.
 - c. The next ballistic missile submarine will be the Columbia and will have a reactor core that will last for 42 years. Electric drive is coming.
 - d. The CNO wants 66 operational submarines.
3. At the center of our success and our ability to deliver is the quality of our people.
 - a. He still interviews all nuclear power officers face to face.
 - b. There is the same pride, professionalism, and commitment in today's sailors as we enjoyed in previous generations.
 - c. We continue to pass down the lessons learned.
 - d. To quote a recent CNO on the submarine force: "There is tradition and a future, and we look with pride in both directions."

In closing, the Admiral said we can all take pride and have confidence that the submarine force can and will deliver. He thanked us all for our service.

Howard thanked Admiral Caldwell for his presentation and presented him with a USSVI NOVA Base challenge coin.

The Master of Ceremonies stated that the reason for this special meeting is to show our appreciation, to recognize, and to thank four of our shipmates by inducting them into the

prestigious United States Submarine Veterans Holland Club: **RADM Dave Oliver, CAPT David Cooper, LCDR Michael Naughton, and CS2 David Lorms.**

Before the Induction, all Holland Club members in attendance were asked to stand so they too could be recognized. **Holland Club members Altschuler, Bivens, Chiles, Ennis, Ettner, Frick, Glover, Griggs, Sargent, Smith, Stone, and Woodworth** all stood and received a round of applause.

The Master of Ceremonies called the four inductees forward to the head table. Then, he read their biographies, the VCDR read and presented the USSVI Holland Club certificates and cards, the Secretary presented the Holland Club ball cap, the COB presented the coin, and the Treasurer presented the patch. The Capitol Base CDR, Art Glover, assisted in passing out the hat and certificate to Michael Naughton and David Lorms.



Pictured from left to right: Dave Oliver, Mike Naughton, Dave Cooper, and Dave Lorms

RADM DAVID OLIVER

Dave graduated from the Naval Academy in 1963 and originally served as a JO on the USS Trumpetfish (SS-425). In 1964 he went through Nuclear Power training and transferred to USS George Washington Carver (SSBN-656) where he earned is gold dolphins in 1965. In 1969 he was assigned as Engineer on the USS Nautilus (SSN-571) serving under Holland Club member Earl Griggs. His XO tour was onboard USS Haddo (SSN-694) and he took command of USS Plunger (SSN-595) in 1977. Subsequently he commanded submarine squadrons in Yokosuka and San Diego and served as Chief of Staff for the 7th Fleet. His final naval assignment was as the Principal Deputy to the Assistant Secretary of the Navy for Research, Development and Acquisition retiring from the service as a Rear Admiral in 1995. His military decorations include Defense and Navy Distinguished Service medals and six awards of the Legion of Merit.

Not to take retirement literally, Dave worked in the Defense Industry for Westinghouse Electric and Northrop Grumman, as well as serving as a division CEO, Executive VP and COO for European Aeronautic Defense and Space Company (North America division).

He was appointed by President Clinton as the Principal Deputy for the Undersecretary of Defense for Acquisition, Technology and Logistics. Subsequently, President Bush tasked him with going to Iraq as the Finance Manager and Director of Management of Budget for the Coalition Forces.

His civilian awards include the Department of Defense Award for Distinguished Public Service and the Army and Navy Public Service Awards. In addition, he has a Master of Arts in Political Science and International Affairs from American University.

As if that wasn't enough he is also the author of four books: *Making it in Washington*; his wife's biography – *Wide Blue Ribbon*; a leadership book entitled *Lead On*; and what we all know best - his 2014 leadership memoir about Admiral Rickover – *Against the Tide*.

CAPT DAVID COOPER

This Dave graduated from the Naval Academy in 1957 in the top 15% of his class, played on the varsity soccer team for three years, and was a company commander. As he hadn't seen the light yet, his first assignments were surface ship related – destroyers, staff, and minesweepers with duties ranging from Division Officer to XO. In 1962 he received orders to the Naval Postgraduate School in Monterey CA. Within two years he earned a Master of Science in Electrical Engineering although he had to leave early to attend Nuclear Power training and transfer to the submarine service. His first boat was USS Sturgeon (SSN-637), followed by USS Dace (SSN-607) where he served as Navigator, and then USS Skate (SSN-578) as XO.

His command tour USS Pogy (SSN-647) was very eventful. It included one unscheduled three month WESTPAC and a six month WESTPAC deployment. The Pogy conducted the evaluation of the first AN/BQQ-5 sonar systems and a SINKEX using a Mk 48 warshot torpedo on the ex-USS Carbonero. The boat received a NUC, two CINCPACFLT Golden Anchor awards, and Battle 'E's for three consecutive years.

From 1977 to 1980 Dave was the Director of the Special Projects Division for the Office of Naval Intelligence where he managed a submarine intelligence collection program. Some of you will understand what was going on during that period. He then became the Commander of Submarine Squadron Six in Norfolk and then, in 1982, he became the Commanding Officer of the Naval Intelligence Support Center. Following this tour he retired from the Navy in 1984 after 27 years of service. We don't have a list of his various medals/awards but we do know of at least one Legion of Merit and we're sure there were a few more.

Dave began his "retirement" years working for TRW as the ASW Project Manager and then Business Development Manager. He became a volunteer for the United Way of Fairfax County and then a member of the BOD of the United Way for the Greater Washington Area. Most notably for us was his time as Vice Chairman for the National Submarine Centennial Committee responsible for organizing and fundraising for the yearlong celebration of the 100 years of the US Naval Submarine Service in 2000. This included sponsorship of the Smithsonian National History Museum exhibit of "Fast Attacks and Boomers, Submarines of the Cold War".

In the 1990's, Dave served 10 years as Vice President of the USNA Class of 1957. Not to be outdone, he then served 10 years more years as Class President. If that wasn't enough, he got himself elected again in 2015 for four more years.

LCDR MICHAEL NAUGHTON

Mike joined the USS Silversides (SS-236) Navy Reserves in Chicago after graduating from High School as a step towards get into the Naval Academy. Unfortunately he didn't make the cut. However, after serving four years in the Reserves he began his two-year required active duty. In 1966, after Sub School, he reported aboard USS Baya (AGSS-318) which was homeported in San Diego – a very enjoyable change of climate from the cold of Chicago. He earned his silver dolphins in July 1967. A year later he was selected for NESEP (Navy Enlisted Scientific & Education Program). This program offered selectees a full 4 year College scholarship (Tuition, Books, Lab Fees, and a Pay Check!) and, upon graduation, an Officer Commission in US Navy. This was a really significant time in his life as he also married the love of his life on 26 July 1969. He graduated in 1972 from Miami University (Ohio) and after Officer Basic Training in Groton, reported aboard USS Wahoo (SS-565), as he puts it “back in paradise”, as Weapons Officer. In March of 1974 he earned his gold dolphins. After that tour he was assigned to USS Francis Scott Key Gold (SSBN-657) to relieve their Weapons Officer. He extended his time onboard the Key so he could conduct the first underwater launch of the TRIDENT C4 missile. It was not successful; but it was a first. Next he got a shore duty assignment in Nebraska at the USAF's Strategic Air Command (SAC) Headquarters as a Planner for the Joint Strategic Target Planning Staff (JSTPS). Back to the cold weather but it was a happy time as his daughter was born during this tour. After four years in America's Mid-West, he left for duty as Navigator aboard the USS George Bancroft Blue (SSBN-643). In 1986, rather than serving time onboard the Bancroft during an overhaul he transferred to Dam Neck, VA, to serve as Department Head of Navigator Training. Naturally the Navy wanted to get more from him and offered to send him on another Navigator tour. He declined and retired as a Lieutenant Commander in 1989.

After retirement he went to work for Vitro and its various incarnations (Vitro Engineering, GK Technology, Tracor, etc.). He completed his time as a defense contractor at EG&G retiring from the workforce in 2012.

He delayed a bit after his Navy retirement in joining USSVI (2001) but has made up for it since then. He is a member of the Chesapeake, Capitol, Cyberspace, and Northern Virginia Bases. He served as the Capitol Base CDR, Northeast District 4 CDR, and most recently as Regional Director of the Eastern Region North.

Commissaryman 2nd Class DAVID LORMS

Dave enlisted in March 1966. He attended Boot Camp at Great Lakes and was 2nd platoon leader for the company. He acknowledges that it was a little strange to him that with a mechanical score of minus 3 (on a 1 to 100 scale) the Navy decided he would be a good fit for

submarines and sent him to SubScol as a Fire Control Tech striker. Upon graduation in November 1966 he was assigned to the USS Diodon (SS-349) homeported in San Diego. The boat made two six month WESTPAC runs and conducted a major overhaul in Mare Island during his time on board. He met his wife, Alberta, while in Mare Island.

Dave qualified in October 1967, during his first WESTPAC, and recalls it was a wonderful experience of both an internal and external 'quiz' as Diodon was in drydock in Yokosuka at the time. During this run he also moved up from seaman gang and mess cooking to full time cook (instead of FT). In January 1970 he accepted an early out and was honorably discharged as a Commissaryman 2/C (a long time before there were Mess Management Specialists or the current CS – Culinary Specialists).

After leaving the Navy, Dave obtained a Bachelor of Science in Public Administration from California State University, Chico. He has worked as the Director of Development and Field Operations for the American Heart Association of IL, Executive Director of the American Heart Association in KY, Executive Director of the Autism Society of America, Washington, DC, and Director, Association Management Development and Regional Liaison American Society of Health-System Pharmacists, Bethesda, MD. In 1991 he earned his Certified Association Executive (CAE) certification and is currently the principal for Core Concept Solutions, LLC. He remains an active member of the American Society of Association Executives (ASAE), the International Association of Facilitators (IAF), and the Mid Atlantic Facilitators Network (MAFN). His charitable work includes experience as a board member for Beacon House DC. He is also a philatelist and member of the Universal Ship Cancellation Society.

After this induction ceremony, each inductee spoke briefly.

RADM Dave Oliver said how great it is that we were able to find a career and be a part of something so important to our country that remains so important each and every day. Submarines and what they do are still very important. This submarine life we had made our lives richer. We are all very lucky and fortunate.

CAPT David Cooper said as shipmates we can all be very proud of our accomplishments.

LCDR Mike Naughton said he has had some physical setbacks recently and that he really appreciated how the USSVI community stood by him and encouraged him. He thanked us all.

CS2 David Lorms said that the best 4 years of his life were spent on submarines.

The Benediction was delivered by the Chaplain, Steve Jaeger.

The Base CDR thanked Penny and George Wallace, and Cathy and Howard Chatham for coordinating this Holland Club Event. Thanks also to the anonymous donor who picked up the luncheon tab for the Holland Club attendees.

The CDR reminded ALCON that the next meeting will be on June 10th at 1100, at American Legion Post 162 in Lorton, VA. The guest speaker will be Mr. Donald Jagoe of Liquid Robotics speaking on the Sensor Hosting Autonomous Remote Craft (SHARC) Wave Glider Platform Program.

The meeting was adjourned at 1201.

All attendees then enjoyed an Amphora Deluxe Diner served luncheon of: salad, Tri Peppercorn Petite New York Strip Steak, Vegetarian Kabob, Chicken Breast Piccata, or Poached Salmon and a scrumptious chocolate dessert.

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

Regular Meeting Committee Information and Other Information

MEETING MINUTES

The minutes of the April meeting were previously distributed by e-mail.

TREASURER'S REPORT

The beginning cash on hand was	\$7,394.92
-Receipts from donations to the Charitable Foundation, donations from Walmart, interest and raffle were	\$1,850.31
-Expenditures as payment to the Charitable Foundation were	\$50.00
-Ending sub total	\$9,125.93
(Minus remaining Walmart Grant restricted use funds)	\$3,504.21
-Grand total (discretionary)	\$5,621.72

COMMITTEE REPORTS

Executive Committee: Topics of discussion at the most recent Executive Board Meeting were: recruiting efforts; final plans for the Holland Club event; meeting-related items; old business; new business; and meeting/event planning.

Membership Report:

We have 82 members:

- 40 Holland Club members
 - 3 are World War II members
- 32 Regular members
- 10 Associate members.

K4K Program:

1. Mike Naughton, Terry and Paul Nelson, Mike Varone, Steve Bishop, and Jim Lencalis from the USS Virginia Base visited 26 kids and siblings at the UVA Charlottesville Medical Center on April 18th.
2. Our next visits are:
 - a. Walter Reed National Medical Center in Bethesda, MD on Thursday, June 15, 2017 at 10:00 am.
 - b. Fairfax INOVA in Falls Church, VA on Thursday, July 13, 2017 at 2:15 pm.
3. We are on our fourth iteration of a coloring book draft for K4K. We intend to have two versions to provide to the children bedside: one for the younger children (crayon) and one for the older kid(ss) (colored pencil) .
4. Steve Bishop will follow up with USSVI's artist Tom Denton to obtain appropriate submarine-related drawings for the older kid(ss) version.
5. It is our intent to provide to each child we visit a nice folder containing both the "Honorary Submariner" certificate and a coloring book. The folders and the coloring books will clearly show all appropriate credits to USSVI NOVA Base, Walmart, and the artists. The crayons and colored pencils will go to the hospital staff – not the children.
6. Another donation from Walmart's Community Fund has arrived, bringing this year's total to \$2,250.

Scouting Recognition:

The Base will be recognizing the below Eagle Scouts. Contact the Base Commander or COB if you wish to participate or attend.

- Eagle Scout Ryan Sabisch of Troop 897 Court of Honor is being held at Mt. Pisgah United Methodist Church in Midlothian, VA on Saturday June 3, 2017 at 3:00 pm.
- Eagle Scout Ethan Daniel Wheatley of Troop 165 Court of Honor is being held at St Mary of the Immaculate Conception Roman Catholic Church in Fredericksburg, VA on Sunday, June 11, 2017 at 3:00 pm.
- Eagle Scouts Daniel Mullenax and Phillip Mullenax of Troop 162 Court of Honor is being held at Church of Christ in Upper Tract, WV on Saturday June 17, 2017 at 3:00 pm.
- Eagle Scout Thomas Karl Davis of Troop 162 Court of Honor is being held at Lutheran Church in Franklin, WV on Saturday July 15, 2017 at 3:00 pm.

Storekeeper: We have 11 challenge coins, 1 calendar and two NOVA Base twentieth anniversary shot glasses in inventory.

PAO: Mike Varone has submitted a shortened version of his recent submission to the American Submariner editor on our recent USS Barb (SS-220) speaker Tim Richard's presentation.

NJROTC/SCHOOL PROGRAM COORDINATOR: Nothing to report

NSL: Upcoming NSL events are:

- 2017 Battle of Midway (75th Anniversary) Dinner is being held on Sunday June 4, 2017. The speaker for the dinner is writer and independent scholar, Ian W. Toll (<http://www.bomcommemoration.org/Speaker.htm>). ADM Bill Moran, the Vice Chief of Naval Operations (<http://www.navy.mil/navydata/bios/navybio.asp?bioID=483>), will provide opening remarks. The event is at the Arlington Army-Navy Country Club and the cost is \$75 per person. The main website for dinner details is <http://www.bomcommemoration.org/>. The website to register is <https://navysnaevents.org/midway/registration.html>.
- The next Capitol Luncheon will be held Friday, July 28, 2017 with featured speaker RDML Bill Merz, Director for Undersea Warfare on the CNO's staff (OPNAV N97).
- The History Seminar (The Hunt for Red October Fact/Fiction) will be held at the U. S. Navy Memorial on October 31, 2017.
- The 35th Annual Symposium will be held November 1-2, 2017.

American Legion Post 162:

During the General Membership Meeting nominations for our next membership year's leadership for Post 162 was accepted. The results are below. All of these positions went unopposed so there will not be a need for Post elections next month.

Post Officers:

Commander: Juan Rodriguez

1st Vice Commander: Vacant at this time

2nd Vice Commander: Steve Leo

3rd Vice Commander: Vic Machalec

Chaplain: Houston Smith

Finance Officer: Vacant at this time

Service Officer: Confirmation of Tony Husen and appointed by Post Commander needed to be official

Historian: Vacant at this time

Sergeant-at-Arms: Vacant at this time

Board of Directors:

Patty Veld
Sam Ramseur
Vic Graulau
Mr. Bowser
Tony Androsky
George Frank
(2 Board of Director positions still vacant)

Trustees:

Vic Graulau
(Already in place: Patty Veld and Sam Ramseur)

OLD BUSINESS

- 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.
- The USSVI National leadership is seeking an associate editor for its quarterly publication American Submariner. Contact the Base CDR if interested.

NEW BUSINESS

- The Base Vice CDR George Wallace confirmed that our October guest speaker will be Mr. Vladis from SEA 073.
- George Wallace is making two wooden plaques to display 1. the USSVI NOVA Base members on Eternal Patrol, and 2. the elected Base Officers since our commissioning in 1996. When completed with brass plaques attached, they will be presented to the base and displayed on the wall in the hall where we meet at Post 162.
- USSVI National leadership sent an e-mail on the recent flooding and its damage to the property / lives of eight brothers in the Baton Rouge Base. The USSVI National Community Fund has given \$1000.00 to each of the members. The Executive Committee voted to donate \$50.00 to this cause via the USSVI Charitable Foundation.
- On 20 April 2017, the "Old North State" Base was commissioned and joined our ranks within USSVI. The home port for the base is Bailey, NC. Base Commander is Jerry Emerson, Vice Commander is Franz van Baars, and the Base Secretary/Treasurer/Tools Manager is Vince Sievert. We welcome the new base and wish them the best of success in the future.
- The 2017 USSVI National Convention is rapidly approaching. As we all know, time seems to move by much faster. If you plan, or even think you plan, to attend the Convention this year being held in Orlando, FL between 1 September 2017 and 6 September 2017, you need to consider at least getting your hotel reservations made at the Rosen Shingle Creek Resort. If you can, it would be appreciated if you would get your registration in as well. All the necessary information can be found on the USSVI website under Conventions (towards the bottom of the webpage). We are less than 4 months away from this event and the planners are working really hard to make sure this will be a memorable event for you. For those Bases/Districts that would like to submit an

advertisement (individuals or companies as well), the information for doing this is also on the convention website under “vendor information”. Time for those submissions is much shorter and you need to get those in really soon. Again, see the website for details.

- Richard Lowry transferred to VA Hospital in Washington DC. He is in VA/DC, Building 6 - The Community Living Center, K2 - Room 110, Bed 1. Richard welcomes visitors.
- The Biennial District Commander election process is underway. The nomination period is now open and closes on 30 June 2017. To be nominated for North East Region District Commander (the Base is in NE4 District) follow the directions in the attached file. The voting period will begin in early July (approximately July 5th) until August 15. Your vote must be received by August 15. Votes can be submitted by either United States Postal Service (USPS) or email.
 - Vote by USPS:
Les Altschuler
228 N Pondview Blvd
Monroe Twp., NJ 08831-5541
 - Vote by email: CdrNJNorthbase@hotmail.com



USSVI
Director North East Region Director
Les Altschuler
228 N Pondview Blvd
Monroe Twp., NJ 08831-5541
CdrNJNorthbase@hotmail.com

North East Region District Commanders;

Forward the information below the line to all your District Commanders with instructions for them to forward the information to all the Base Commanders/POC's

Current District Commanders: Please inform me as to your interest in remaining as District Commander.

Call for Candidates for:
North East Region District Commanders
Districts 1, 2, 3, 4 & 5
2017-2019

Nomination Period:

Opened 1 March 2017, closes 30 June 2017

Voting Period

July 5? –August 15, 2015 (Will email to DC's as early in July as I can)

Vote by USPS:

Les Altschuler
228 N Pondview Blvd
Monroe Twp., NJ 08831-5541

Vote by email: CdrNJNorthbase@hotmail.com

Votes must be received by 15 August 2017.

Base Commanders and Candidates will be informed of results:

Prior to the 2017 National Convention

As Per the USSVI ByLaws:

Article VII, Section 6: BIENNIAL ELECTION FOR DISTRICT COMMANDERS

- A. The appropriate Regional Director shall conduct the District Elections every two (2) years during the odd numbered years.
- B. The District Commanders shall be the candidate receiving the most votes of the regular voting members in good standing within the district. The call for candidates to begin on March 1st and the results shall be announced on September 1st of the election year. The Region Director will set the start and close date for the election.
- C. Each Base member must have at least thirty (30) days to cast his written or electronic ballot.
- D. In case of a tie vote, the outcome shall be decided by a run-off election conducted by the Regional Director. The Regional Director shall retain the ballots for inspection until January 1st of the following year.
- E. The region Director and any regular member in good standing within a District may nominate any other regular member in good standing living within the same District for District Commander of the District providing that:
 - a. The nominee is currently serving or has served as a Base officer. Currently serving District Commanders are eligible to continue to serve in their position irrespective of this requirement.
 - b. The nomination is accompanied by a letter from the Nominee indicating that he has read and understands the requirements of the position and indicates his willingness to accept the nomination and willingness to serve if elected.
 - c. The nomination letter includes details of the nominee's qualifications in less than one hundred (100) words.
- F. Prior to or following the nomination, the Region Director shall discuss the needs of the District with the candidate(s).
- G. In the event no nominations are received, or if a vacancy occurs during the term of a District Commander, that vacancy shall be filled by the appropriate Regional Director appointment, normally within ninety (90) days, to run until the next election cycle.

Also From the USSVI ByLaws:

ARTICLE V -- DUTIES OF OFFICERS

Section 7. DISTRICT COMMANDERS:

The District Commander is directly responsible to the Region Director for the conduct of organizational business within his district.

The duties of the District Commanders shall include but not be limited to:

- a. Serve as non-voting members of the Board of Directors
- b. Assist the Base Commanders within their respective districts in the performance of their duties, to include providing assistance as required to insure the proper operation of base meetings and events, recruiting and retention.
- c. Appoint all District committees, committee chairman and appointed officers as required to conduct District business.
- d. Represent his respective District at official functions.
- e. Assist the Region Director with the oversight of the performance of all Base Commanders within his district; the performance guidelines having been established by the Region Director.
- f. Approve Base Constitution and Bylaws, insuring compliance with National and State laws regulating the operation of the organization within his district (i.e. chartering, maintaining non-profit status, etc.)
- g. Actively promote the establishment of new bases with the assistance of the New Base Development Committee (NBDC), including, with the assistance of the NBDC sending to the Regional Director and National Junior Vice Commander a report on the well-being of any new base six months after it has been formed.
- h. Coordination with his Region Director, to act, if needed, as liaison with other veteran organizations.
- i. Annually prepare a written report on the 'state of his district' to be given to his Regional Director with copies for publication in each of the District's Base Newsletters.
- j. If selected, may serve as a member of the New Base Development Committee.
- k. Working up, keeping current and passing on immediately to his/her relief a "Turn Over" including all official correspondence, records and official materials assigned to his/her care..
- l. **Creating a newsletter for the Base Commanders within his district on a quarterly basis.**

UNDERSEA WARFARE NEWS

[10 Things To Know About U.S. Navy Submarines](#)

[Staff, Navy Live Blog, April 11](#)

Happy birthday to our Silent Service!

117 years ago today, John Holland sold the 64-ton submersible Holland VI to the Navy, marking the beginning of our submarine force. Several months later, the submarine was commissioned as USS Holland (SS 1).

Here's a look at how submarines have continuously adapted in both quantity and quality to address more complex and rapidly evolving challenges.

Then...

1. The world's first submarine used in warfare, the 8-foot-long Turtle, debuted during the American Revolution. With an oak made, walnut-shell-shaped casing, it bobbed just below the water's surface. The one-person craft was paddled using a hand crank. Its objective was to attach an explosive to the hull of an enemy ship and get away before the explosion. In its one combat use, it failed to successfully attach the explosive, however it gave the Royal Navy enough of a scare that they moved their ships to safer distance from American Forces.

2. Experimentation in subsurface craft continued after the American Revolution, including a Confederate boat, Hunley, that sunk a Union warship. Still, it wasn't until 1900 that the Navy finally commissioned a sub. Even then the technology was rudimentary but continued to improve into World War II where the submarine came of age through legendary acts of heroism and warfighting excellence. Fleet Adm. Chester Nimitz said, "We shall never forget that it was our submarines that held the lines against the enemy while our fleets replaced losses and repaired wounds."

3. Research and development to enhance the firepower, survivability and endurance of submarines continued after the war, culminating with perhaps the most significant technological advance in submarine history: the advent of nuclear propulsion. On Jan. 17, 1955, the crew of USS Nautilus (SSN 571) cast off lines and signaled the memorable and historic message, "Underway on Nuclear Power."

4. Late in 1955, Chief of Naval Operations Adm. Arleigh Burke established a special project office charged with developing a fleet ballistic missile for sea launch. Just four years later, USS George Washington (SSBN 598) was commissioned. Within six months of commissioning, the ship successfully test fired two Polaris missiles and, within six months of that, deployed for the Navy's first strategic deterrent patrol. As of June 2014, U.S. submariners have completed more than 4,000 such patrols.

Now...

5. Today's Navy submarines are 100 percent nuclear powered – patrolling the depths of our oceans, taking the fight to our enemies and providing maritime security around the world.

6. We have 69 commissioned submarines – attack (SSN), fleet ballistic missile (SSBN) and guided missile (SSGN).

7. Our submarine force includes approximately 28,000 officers, enlisted Sailors, civilians and Reservists. In 2011, female officers began serving aboard U.S. submarines. On June 22, 2015, the Navy announced the selections of the first enlisted female submariners, marking a key milestone in the continued integration of women into the Submarine Force.

8. Our submarines are responsible for the #1 mission within the Department of Defense – strategic deterrence – accountable for approximately 50 percent of nuclear warheads.

Future...

9. The 12-ship Columbia class will replace the existing Ohio-class nuclear ballistic submarine force; the first patrol of the lead ship, SSBN 826, is scheduled for Fiscal Year 2031.

10. The Columbia class reached Milestone B Jan. 4, enabling the program to move into the engineering and manufacturing development phase, where the attention is on achieving an 83 percent design maturity prior to construction starting in 2021.

[Taking The Heat: Navy Tests New Submarine Steam Suits](#)

[Staff, Seapower Magazine, April 11](#)

Machinist's Mate 1st Class Nathan Lindner was testing the newest suit designed to protect Sailors

from steam leaks on nuclear-powered submarines. He pulled on thick gloves and boots, and donned a face shield for a self-contained breathing apparatus. Then he slid into the sleek, silver prototype steam suit, hoisted an air tank onto his back and connected a regulator to the breathing apparatus. Total time: a little more than two minutes.

Meanwhile, Machinist's Mate 2nd Class Cameron Sebastian wrestled with the current, older steam suit used Navy-wide. First, he put on boots and a set of firefighters' coveralls, followed by the air tank and breathing apparatus. Finally, he wriggled into a bulky, HAZMAT-style chemical suit. His time: more than double Lindner's.

"It was pretty dramatic seeing the differences between the old and new steam suits—especially how they affect the speed getting into it, as well as mobility," said Sebastian.

Both men served on the Los Angeles class-attack submarine USS Toledo (SSN 769)—and were among Sailors attending a recent demonstration of the prototype steam suit at Naval Submarine Base New London. Sponsored by the Office of Naval Research's (ONR) TechSolutions Program, the new suit was developed by the Naval Sea Systems Command (NAVSEA) and Navy Clothing and Textile Research Facility (NCTRF), and currently is being tested at sea by the Toledo's crew.

If pressurized steam lines aboard a submarine rupture, they can leak steam at extremely high temperatures, potentially resulting in severe injury or death. To make emergency repairs or rescue crewmates, Sailors must wear protective suits.

"In the unlikely event this piece of damage control equipment is needed, time is of the essence to protect not only the individual, but the entire boat," said ONR Command Master Chief Matt Matteson. "The new steam suit provides enhanced flexibility, maneuverability and ease of donning during such an emergency."

Although the current steam suits used Navy-wide have performed well since being introduced a decade ago, NAVSEA regularly receives suggestions from Sailors on how to improve them—so the command contacted TechSolutions about designing a better suit. TechSolutions is ONR's rapid-response science and technology program that develops prototype technologies to address problems voiced by Sailors and Marines, usually within 12-18 months.

With TechSolutions' guidance, NAVSEA partnered with NCTRF to implement several key suit improvements. It's one piece and nine pounds lighter—cutting donning time while still maintaining protective strength. The air tank and hose for the breathing apparatus are worn on the outside, instead of under a chemical suit, allowing better access to oxygen. And there are gel ice packs to keep cool.

Then there's the unique style of gloves. While the current steam suit has mittens, the new prototype features "lobster claws" with thumbs and two fingers, making it easier to grasp tools, climb ladders and navigate the close confines of a submarine. They also have leathery fabric for wiping the face shield if steam fogs it up.

For the next few months, the prototype suits will be tested during at-sea drills aboard the Toledo and two other submarines. Afterward, NAVSEA will make suggested improvements and, hopefully, see the suit issued throughout the fleet in the next couple of years.

"Our goal was to create a lighter suit that enables users to get around better, quicker and easier," said Bob Bassett, NAVSEA's branch head for in-service submarine propulsion and electrical systems. "It's an all-around improved suit, and we can't wait to get feedback from the Sailors after the trials."

[Navy Suspends Electronic Nicotine Delivery Systems \(ENDS\) on Ships, Subs, Aircraft](#)

[Fleet Forces Public Affairs, Navy.mil, April 14](#)

NORFOLK – Commander, U.S. Fleet Forces (USFF) and Commander, U.S. Pacific Fleet (PACFLT) released a joint message April 14, that suspends the use, possession, storage and charging of Electronic Nicotine Delivery Systems (ENDS) aboard ships, submarines, aircraft, boats, craft and heavy equipment.

The prohibition applies to Sailors, Marines, Military Sealift Command civilians and any personnel working on or visiting those units.

The Fleet commanders implemented this policy to protect the safety and welfare of Sailors and to protect the ships, submarines, aircraft and equipment.

The prohibition will be effective 30 days from the release of the policy May 14, and will remain in effect until a final determination can be made following a thorough analysis.

This new policy is in response to continued reports of explosions of ENDS due to the overheating of

lithium-ion batteries. Multiple Sailors have suffered serious injuries from these devices, to include first- and second-degree burns and facial disfigurement. In these cases, injuries resulted from battery explosions during ENDS use, charging, replacement or inadvertent contact with a metal object while transporting.

Deployed units may request extensions on device removal until their next port visit. Supervisors should ensure that removable lithium-ion batteries are removed from the units and stored according to the ENDS manufacturer instructions, in plastic wrap, in a plastic bag or any other non-conductive storage container.

Sailors on shore will still be allowed to use ENDS on base, but must do so in designated smoking areas ashore while on military installations.

Sailors are encouraged to use available tobacco cessation resources and programs offered through Navy medical services and Navy Alcohol and Drug Abuse Prevention (NADAP) programs.

For more information, please see ALFLTFORCOM/ALPACFLT 141300Z APR 17.

[Vice Adm. Al Konetzni Appointed to Spaceport Committee](#)

[Gordon Jackson, Golden Isles News, April 21](#)

WOODBINE — The former commander of the U.S. Pacific Submarine Fleet is the newest member of the Spaceport Camden steering committee.

Retired Vice Adm. Al Konetzni will advise Camden County officials on ways to attract sailors transitioning from the Navy at Naval Submarine Base Kings Bay.

Camden County Administrator Steve Howard, who is also the spaceport project leader, said Konetzni will be an “invaluable resource” to the team.

“People often forget that we have some of the best trained engineers in the world already stationed here at Kings Bay,” Howard said. “We envision Spaceport Camden providing employment opportunities for transitioning military. Launch providers need a highly skilled workforce and retiring sailors from Kings Bay can fill that need while allowing them to continue to live and work in Camden County.”

Sheila McNeill, former national Navy League president and director of Camden Partnership, said Konetzni will likely do more than recruit the highly trained missile technicians and machinists from Kings Bay.

“There’s going to be a lot of coordination with the Navy and the FAA,” she said.

McNeill said she also expects Konetzni to help in the effort to convince state officials to fund construction of a technical college in Camden County.

“I’m pleased he came back here to retire,” she said. “I think it’s great.”

Konetzni, who was nicknamed “Big Al, the Sailor’s Pal,” created a program that reduced young sailor attrition in the Pacific Submarine Force from 25 percent to 7 percent. The Navy adopted his model, which now has the highest retention rate and the lowest attrition in its history.

“After retiring from Naval Service in 2004 my personal success in the commercial nuclear cleanup industry and high tech submarine repair business was a direct result of hiring Navy veterans,” Konetzni said. “These men and women are technically competent, problem solvers, great leaders, and team players. Camden County will continue to flourish and grow under their tutelage.”

Konetzni was a highly decorated officer during his 38 years in the Navy. He earned the Distinguished Service Medal twice, the Legion of Merit six times, the Meritorious Service Medal three times and the Coast Guard Distinguished Service Medal for his commitment to Homeland Security.

“You’d be hard pressed to find a more distinguished military career in all of Georgia, if not the entire United States,” Howard said. “We are fortunate to have Admiral Konetzni as a member of our community, but even more privileged that he is willing to serve on the Spaceport Camden Steering Committee.”

[Converse Next Commander of Submarine Group Nine](#)

[Ed Friedrich, Kitsap Sun, April 21](#)

BANGOR — The Navy announced Friday that Capt. Blake Converse, nominated for promotion to rear admiral, will take over command of Submarine Group Nine. No date has been set. He’ll relieve Rear Adm. John Tammen, who arrived only 10 months ago, on June 23. There is no word yet on where Tammen, who was awarded his second star in March, is bound.

Converse is currently serving as director of N3 Joint and Fleet Operations, U.S. Fleet Forces Command, in Norfolk, Virginia. Subgroup Nine, at Naval Base Kitsap-Bangor, includes eight of the nation’s 14 ballistic-missile submarines and two guided-missile subs.

[Submarine Squadron 19 Welcomes New Commodore](#)

[MC1 Amanda Gray, Navy.mil, April 24](#)

BANGOR, Wash. – Submarine Squadron 19 (CSS-19) held a change of command ceremony at Bangor Chapel, April 21.

Capt. Michael Lewis, from Bend, Oregon, relieved Capt. Brian Humm, from Park Ridge, Illinois, as commodore, currently overseeing guided-missile submarines USS Ohio (SSGN 726) and USS Michigan (SSGN 727), ballistic-missile submarines USS Maine (SSBN 741) and USS Nebraska (SSBN 739) undergoing overhaul periods, and fast-attack submarines USS City of Corpus Christi (SSN 713) and USS Houston (SSN 713) who are undergoing inactivation.

"Submarine Squadron 19 is responsible for the submarine force's most diverse inventory and most diverse mission sets, with responsibility for attack submarines, guided-missile submarines, and also ballistic-missile submarines," said the event's guest speaker, Rear Adm. Frederick J. "Fritz" Roegge, commander, Submarine Force, U.S. Pacific Fleet. "Captain Humm and his Submarine Squadron 19 teammates have done this exceptionally well. Suffice it to say that Brian was asked to perform at least one minor miracle every day, and let the record show that he has done just that."

During Humm's tour, he led the team through two ballistic-missile submarine engineered refueling overhauls, two guided-missile submarine major maintenance periods, and the inactivation of three fast-attack submarines.

"This is a change of command ceremony, but it is really more about celebrating the illustrious 30-year naval career of Captain Brian Humm," said Lewis. "Few are as passionate and as dedicated as Brian, and I know he is sad to be saying farewell and hanging up his uniform for the last time. Today, we as a Navy are saying farewell to a great leader."

Humm is retiring after 30 years of service, having served as commanding officer of Ohio Blue crew from 2010 to 2012 and USS Buffalo (SSN 715) from 2005 to 2007.

"I could not be more pleased to be relieved by Captain Mike Lewis," said Humm. "I have worked closely with him over the last 30-months, first as the outstanding commanding officer of USS Ohio Gold, and then as my deputy. He is a caring leader with amazing tactical skills, and a great friend. CSS-19 is in good hands."

Submarine Squadron 19 is responsible for manning, training and equipping two guided-missile submarines (SSGNs) and all ballistic-missile submarines (SSBNs) undergoing maintenance in the Puget Sound Naval Shipyard and Intermediate Maintenance Facility.

[Submarine Forces Executive Director receives VADM Charles E. Weakley Award](#)

[Commander, Submarine Force Atlantic Public Affairs, April 28](#)

NORFOLK, Va. – The National Defense Industrial Association (NDIA) Undersea Warfare Division has announced the recipients of the 2017 Vice Adm. Charles E. Weakley award, presented at the annual Joint Undersea Warfare Technology Spring Conference held at Naval Base Point Lorna, Calif., April 25.

Mr. Donald Hoffer, Commander, Submarine Forces' Executive Director, and

Mr. Donald McCormack, Naval Surface Warfare Center and Naval Undersea Warfare Center's Executive Director received this year's award. The Vice Adm. Weakley award is given in recognition for meritorious service and noteworthy contributions to effective government and industry communication, in the field of undersea warfare.

"I'm thankful to be recognized by NDIA," said Hoffer. "I have always been impressed by the commitment of industry to our Sailors and their desire to always deliver the best possible undersea warfare systems."

As the Executive Director of the Submarine Force, Mr. Hoffer is the principal advisor to the Submarine Force Commander on all matters relating to undersea warfare programs and requirements. Prior to this posting, he led submarine new construction and undersea warfare acquisitions at the Naval Sea Systems Command. During his career he has contributed to development projects and programs responsible for implementing undersea technologies and systems through Navy and industry collaboration.

"Good communication is a key attribute of excellent program execution and I encourage it between the government and industry," said Hoffer.

Mr. Hoffer shared his philosophy and approach on building a team with teams and the importance of aligning efforts across organizations.

“As we move forward, more teaming between the Systems Commands, industry, academia and the Fleet is important to rapidly implement emerging technologies and the future undersea capabilities that our forces require,” said Hoffer.

For this unwavering motivation Hoffer is being recognized with this award, commending his efforts of encouraging collaboration across the undersea warfare community.

[US Navy Considers UAVS To Maintain Visual On Sailors At Sea](#) [Staff, Naval-Technology, May 4](#)

US Pacific Fleet (PACFLT) sailors have developed a new use for unmanned aerial vehicles (UAVs) to maintain a visual on the sailors at sea, especially during man-overboard situations.

Since 2006, more than 110 sailors and marines have fallen overboard with eight losing their lives, stated the Naval Safety Center.

Conducting operations during rough sea conditions and low visibility increase the risk of a crew member going overboard, and are the most difficult times to maintain a visual on the sailor.

Submarine Force, US Pacific Fleet (SUBPAC) lieutenant commander Christopher Keithley said: “Being on the sail of a sub during a night transit in stormy weather made me think about what if someone were to fall overboard, how hard would it be turn around and find them.

“As a submarine officer, I have done numerous man-overboard drills at sea where I gained an appreciation for the difficulty in keeping track of low-profile objects in even the calmest of seas. It was this background that I brought to one of our innovation Lab [iLab] events where the discussion of UAVs occurred.”

During the initial proof of concept pilot program event, Keithley and his team from iLab worked in collaboration to move on with their plan.

Keithley added: “My UAV concept isn't meant to replace current man-overboard procedures but work with them. Because of this program, I was able to present my idea and hopefully contribute to solving this challenge.”

The idea has been selected to be presented at the next PACFLT Commander's Conference in June.

Keithley added: "I'm grateful for this opportunity and hope one day I can see the man-overboard UAV used on every ship and submarine that operate in open water."

[Iran Attempted Missile Launch From Submarine, US Officials Say](#)

[Lucas Tomlinson, Fox News, May 3](#)

Iran attempted to launch a cruise missile from a submarine in the Strait of Hormuz on Tuesday but the test failed, two U.S. officials told Fox News.

An Iranian Yono-class “midget” submarine conducted the missile launch. North Korea and Iran are the only two countries in the world that operate this type of submarine.

In February, Iran claimed to have successfully tested a submarine-launched missile. It was not immediately clear if Tuesday’s test was the first time Iran had attempted to launch a missile underwater from a submarine.

This incident comes on the heels of other recent provocations from Iran.

In April, the U.S. Navy's guided-missile destroyer fired a warning flare after an Iranian Revolutionary Guard vessel came within 1,000 meters of the USS Mahan.

The USS Mahan "made several attempts to contact the Iranian vessel by bridge-to-bridge radio, issuing warning messages and twice sounding the internationally recognized danger signal of five short blasts with the ship's whistle, as well as deploying a flare to determine the Iranian vessel's intentions."

Iranian officials announced late last month that the country's defense budget had increased by 145 percent under President Hassan Rouhani and that its military is moving forward with a massive restructuring effort aimed at making it a "forward moving force," according to reports in the BBC.

Iran's official IRNA news agency also announced recently that the country has become self-sufficient in producing the amount of gas that it requires on a daily basis.

North Korea in 2015 conducted a successful ballistic missile test from a submarine for the first time.

[Navy Sub's Overheating Motor First Glitch in \\$126 Billion System](#)

[Tony Capaccio, Bloomberg Government, May 4](#)

The first known glitch in a \$126 billion nuclear-armed submarine program -- overheating of a prototype motor -- was disclosed by a key U.S. lawmaker this week and confirmed by the Navy, which said it has fixed the problem.

The flaw in the main propulsion motor was discovered earlier this year, the Navy said in a statement Thursday. Still, it was a milestone, of sorts: an early setback for the submarine being built by General Dynamics Corp. and top subcontractor Huntington Ingalls Industries Inc.

"It's a technical hiccup in the performance of a motor," Representative Rob Wittman https://www.bgov.com/us_legislators/BB23810, the Republican chairman of the House Armed Services seapower panel, told reporters Wednesday. "There's a motor that didn't perform properly. It overheated."

The Navy said in its statement that the issue with the motor designed by a General Dynamics subcontractor isn't expected to delay planned delivery -- anticipated for around 2028 -- of the first of 12 submarines that the service needs to have on patrol by 2031. Construction of the vessel is set to begin in fiscal 2021.

"Recovery from this manufacturing problem will result in late delivery of the prototype motor to the test facility" but "sufficient margin exists in the test program to accommodate" recovering from the issue "without impacting delivery of the shipboard motor" to the first ship, Captain Thurraya Kent, a Navy spokeswoman, said in an emailed statement.

Lucy Ryan, a General Dynamics spokeswoman, referred inquiries about the overheating motor to the Navy.

Wittman said he planned to meet with the head of the Navy's Nuclear Propulsion division Admiral James Caldwell and some of the contractors to ask "why did this happen?"

Trillion-Dollar Modernization

The Columbia-class submarine will replace the aging Ohio class. It's part of a trillion-dollar program to modernize the U.S.'s sea-air-land nuclear arsenal over the next 30 years, including maintenance and support. President-elect Donald Trump has said "the United States must greatly strengthen and expand its nuclear capability until such time as the world comes to its senses regarding nukes."

The new submarine class ranks among the Pentagon's most expensive programs. The projected \$126 billion acquisition cost, an estimate that includes expected inflation, is third behind the \$379 billion F-35 aircraft and the \$153 billion ballistic-missile defense network.

The Congressional Research Service said in a report on the submarine that its schedule "currently includes little or no slack between now and 2031 for absorbing delays" due to funding shortfalls, or "problems in developing and testing new technologies intended for the Columbia class, such as its electric-drive propulsion system."

[Navy & UK Manufactures 17 Tactical Nuclear-Missile Tubes for "Columbia-Class" Submarines](#)

[Kris Osborn, Scout Warrior, May 4](#)

The Navy has recently advanced development of a new class of nuclear-armed ballistic missile submarines to be used as undersea strategic deterrents -- by signing a deal to being the manufacture of 17 new tactical missile tubes able to fire nuclear-armed Trident II D5 missiles.

A 95-million modification to a Naval Sea Systems Command deal with Electric Boat, a subsidiary of General Dynamics, is a key part of the Navy's broader deterrence strategy to ensure a second-strike nuclear ability from beneath the ocean around the world in the event of a catastrophic first-strike on the continental US.

The effort, which has been preceded by "tube and hull" forging work underway for several years, is part of a collaborative US-UK Common Missile Compartment program.

The US and UK are together immersed in a common missile compartment effort. In fact, the US and UK have been buying parts together for the common missile compartment and working on a \$770 million contract with General Dynamics' Electric Boat. This recent contract modification includes foreign military sales to the United Kingdom. Work will be performed in Quonset Point, Rhode Island, and is expected to be

completed by December 2023. United Kingdom foreign military sales funding in the amount of \$22,957,933 will be obligated at the time of award, a Pentagon statement said.

The US plans to build 12 new Columbia-Class Submarines, each with 16 missile tubes, and the UK plans to build four nuclear-armed ballistic submarines, each with 12 missile tubes.

Earlier this year, ship specifications for the new Columbia-Class submarines were completed and the program is now in detailed design phase and initial production contract, service officials said.

In acquisition terms, development of the new submarines have passed what's termed "Milestone B," clearing the way beyond early development toward ultimate production. Production decisions are known as "Milestone C."

"The program was approved to proceed to Milestone B Jan. 4, authorizing it to enter into the engineering and manufacturing development phase and permitting the transition from preliminary design to detail design," William Couch, spokesman for Naval Sea Systems Command, told Scout Warrior earlier this year.

Ultimately, the Navy hopes to build and operate as many as 12 new nuclear-armed submarines, to be in service by the early 2040s and serve well into the 2080s.

The Navy has begun early construction and prototyping on a new class of nuclear-armed ballistic missile submarines designed to help ensure global peace by deploying massive destructive power under the sea.

The Ohio Replacement Program, a so-called SSBN, is scheduled to begin construction by 2021. Requirements work, technical specifications and early prototyping have already been underway at General Dynamics Electric Boat.

Designed to be 560-feet– long and house 16 Trident II D5 missiles fired from 44-foot-long missile tubes, ORP will be engineered as a stealthy, high-tech nuclear deterrent able to quietly patrol the global undersea domain.

The new submarines are being designed for 42 years of service life.

Construction on the first submarine in this new class is slated to be finished up by 2028, with initial combat patrols beginning in 2031, service officials said.

Strategic Nuclear Deterrence

Detailed design for the first Columbia-Class submarine is happening now. The new submarines are being engineered to quietly patrol the undersea domain and function as a crucial strategic deterrent, assuring a second strike or retaliatory nuclear capability in the event of nuclear attack.

The Navy is only building 12 Columbia-Class submarines to replace 14 existing Ohio-class nuclear-armed boats because the new submarines are being built with an improved nuclear core reactor that will better sustain the submarines, Navy officials have said.

As a result, the Columbia-Class submarines will be able to serve a greater number of deployments than the ships they are replacing and not need a mid-life refueling in order to complete 42 years of service.

With the life of ship reactor core, there is not a need for mid-life refueling, Navy developers explained.

By engineering a "life-of-ship" reactor core, the service is able to build 12 SSBNs able to have the same at sea presence as the current fleet of 14 ballistic missile submarines. The plan is intended to save the program 40 billion savings in acquisition and life-cycle cost, Navy developers said.

Electric Boat and the Navy are already progressing on early prototype work connecting missile tubes to portions of the hull, officials said. Called integrated tube and hull forging, the effort is designed to weld parts of the boat together and assess the ability to manufacture key parts of the submarine before final integration.

In 2012, General Dynamics Electric Boat was awarded a five-year research and development deal for the Ohio Replacement submarines with a value up to \$1.85 billion. The contract contains specific incentives for lowering cost and increasing manufacturing efficiency, Navy and Electric Boat officials said.

Next-Generation Technology

Columbia-Class submarines are being designed with a series of next-generation technologies, many of them from the Virginia-Class attack submarine. Leveraging existing systems from current attack submarines allows the Columbia-Class program to integrate the most current technologies and systems while, at the same time, saving the developmental costs of beginning a new effort, officials said.

The Columbia-Class will utilize Virginia-class's fly-by-wire joystick control system and large-aperture bow array sonar.

Sonar technology work by sending out an acoustic ping and then analyzing the return signal in order to discern shape, location or dimensions of an undersea threat.

Navy experts explained that the large aperture bow array is water backed with no dome and very small hydrophones able to last for the life of the ship; the new submarines do not have an air-backed array, preventing the need to replace transducers every 10-years.

The submarines combat systems from Virginia-class attack submarines, consisting of electronic surveillance measures, periscopes, radios and computer systems, are also being integrated into the new submarines. The new Columbia-class subs will also utilize an automated control fly-by-wire navigation system, a technology that is also on the Virginia-Class attack submarines. A computer built-into the ship's control system uses algorithms to maintain course and depth by sending a signal to the rudder and the stern.

The shafts of the new submarines are being built to last up to 10 or 12 years in order to synchronize with the ships maintenance schedule. Existing shafts only last six to eight years, developers said.

The Columbia-Class will also use Virginia-class's next-generation communications system, antennas and mast. For instance, what used to be a periscope is now a camera mast connected to fiber-optic cable, enabling crew members in the submarine to see images without needing to stand beneath the periscope. This allows designers to move command and control areas to larger parts of the ship and still have access to images from the camera mast, Electric Boat and Navy officials said.

The Columbia-Class submarine are also engineering a new electric motor for the submarine which will turn the shaft and the rotor for the propulsion system. The new motor will make propulsion more efficient and potentially bring tactical advantages as well.

In total, the Navy hopes to buy 12 of the new submarines to serve into 2085 and beyond.

Production for the lead ship in a planned fleet of 12 Ohio Replacement submarines is expected to cost \$12.4 billion — \$4.8 billion in non-recurring engineering or development costs and \$7.6 billion in ship construction, Navy officials have said.

The Navy hopes to build Ohio Replacement submarine numbers two through 12 for \$4.9 billion each in 2010 dollars.