

STEEL VALLEY DOLPHINS USSVI REQIUN BASE NEWSLETTER



Sponsors





The USSVI Requin Base supports the National Creed

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

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Meeting Information

Meetings are held on the second Saturday of the month, normally at the Baden PA American Legion. Quarterly meetings are held around our membership area.

Our next meeting will be

January 8, 2022 @ 1230 hours

At Baden American Legion

Base Location



American Legion Post 641 271 State St Baden PA 15005

From the Editor

Please send ideas for articles or copies of articles, with full credit information to me for consideration of submission in the SVD.

We are a SUBMARINE group. As such, the articles should be SUBMARINE or NAVY related.

Lou Hamill - itgeek8088@gmail.com

MAKE A DIFFERENCE, ATTEND A MEETING!

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Our Website

For additional information about what is happening at **YOUR** base, go to https://www.requinbase.org/



USSVI National Officers

Office National Commander	Officer Wayne Standerfer	Phone 972-298-8139	eMail lwaynes@charter.net
Senior Vice Commander	Jon Jaques	615-893-7800	jjaques@bellsouth.net
Junior Vice Commander	Steven Bell	704-824-3510	usnret82@carolina.rr.com
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USS Requin Base Officers

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1st Vice Commander	Chad Underkoffler	724-809-6830	candj981@verizon.net
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Secretary	Jeff Simon	724-502-4505	jeffsimon@zoominternet.net
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Asst. Holland Club	Dick Geyer	724-637-2995	dgdiving@gmail.com
Technology Chair	Lou Hamill	412-445-3998	itgeek8088@gmail.com
Eagle Scout Chair			
Awards Chair	Dick Geyer	724-637-2995	dgdiving@gmail.com
Master at Arms			
Public Affairs Chair	Ed Derr	724-854-0781	rredde@gmail.com





Tolling of the Boats for December

USS Capelin (SS-289)

Lost on Dec 2, 1943 with the loss of 76 men. She was on her 1st war patrol, but her exact location, date and cause of loss remain a mystery. She may have been lost to mines or an operational casualty.

USS Sealion (SS-195)

Lost on Dec 10, 1941 with the loss of 4 men. To prevent her from falling into enemy hands, she was scuttled in Manila Bay after incurring severe bomb damage during the initial Japanese attack. One other Sealion man was later captured and died in POW camp.

USS F-1 / Carp (SS-20)

Lost on December 17, 1917 with the loss of 19 officers and men when it was sunk after collision with the USS F-3 (Pickerel(SS-22)) off San Clemente, CA.

USS S-4 (SS-109)

Lost on December 17, 1927 with the loss of 40 officers and men when it was sunk after being rammed by USCG Paulding. Salvaged in 1928 and recommissioned.







Eternal Patrol



In Remembrance

All hands present and accounted for.

Dick Simpson's Mother

Hazle Naomi (King) Simpson Weikart

Calvin Boring
Wilfred Carlton
David Chatlos
Henry Collings
George Denny
Robert LaDone
Dan Robbins

		Barritossine
Member	Birthdays Spouse	Anniversaries
James E. Phelan Daniel R. Phelps Robert J. Schmidt Brian A. Siege Aubrey Allen Smith Thomas W. Strang Paul J. Wassenberg	1/20 Barbara Farina 9-Jar 1/06 Sandra Morgan 10-Jar 1/15 Michelle Deichler 14-Jar 1/23 Tina M. Siege 15-Jar 1/20 Sheila McCullough 19-Jar 1/21 Julie May May 31-Jar 1/27 1/14	Patricia & Frederick G. Nelson III 26-Jan Diana & David L. Howton 27-Jan Karen & Richard Keys 29-Jan In
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Commanders Corner

Your officers wish everyone a Merry Christmas, Happy New Year & Hanukkah!

As of 12/11 the Idaho Fund stands at 93%. This past week, we made a presentation and delivered five (5) submarine beer tap handles. Joey Campisi graciously gave up some of his valuable time and assisted me with the delivery and ceremony. Thanks to Lou Hamill for making, it all happen!

Our first visit was to Verdetto's Tavern on the North Side. The second visit of the week was to American Legion Post 80 in Laurel Gardens (West View) section of Pittsburgh. That was the SECOND Tap Handle that they bought. The next one was delivered to the VFW in Mars, Pa. We met the gentleman at the Mars VFW but he bought it for the VFW in Butler, Pa., where he lives. While we were at the Mars VFW Post 7505, the Senior Vice Commander ordered one for his Club – which also was delivered this past week. Again, I made a delivery to the German Club on the North Side of Pgh. They ordered a beer tap handle with the numbers U96, which are the numbers of Das Boat (from the movie).

Shipmate Eric Bookmiller has been working tirelessly to make our coin holders and cribbage boards. At the meeting he sold three coin holders and one cribbage board – KUDOS Eric!

Place your order for a beer tap handle, cribbage board and coin holder for the holidays or whenever you want!

Our Shipmate Lt Brian Peltier is retiring on January 15th at Soldiers and Sailors Memorial Hall at 12:00 hours. (Arrive at 11:30 hours). The address is 4141 Fifth Ave, in Oakland section of Pittsburgh 15213. Reception to follow at Peltier Farms, 6127 Garver's Ferry Rd, Leechburg, Pa. 15656. Please e-mail Brian and let him know that you plan on attending – opspirt@hotmail.com. Also drop me a line to let me know.

It's been a very bad year for members of the base. With our Chaplin Carl passing and members families who have passed on eternal patrols, the only way is up and stand strong. Speaking of members who have had setbacks – Tom Strange and his first mate are making the most of living in a motel since their house was destroyed by fire. They will be living in the motel for the next four months. The base is sending Tom and his wife a check to help him get back to normal. Tom is in a wheelchair.

We also sent the crew of the Idaho a check to help defray the cost of the festival that they will be having for the holiday season. On behalf of all our base members, we wish them a great holiday. FYI – the COB of the Pgh and Idaho has been relieved and assumed a new duty station in San Diego – he will be missed. Chief Pope was instrumental on having us as supporters of the Idaho.

REQUIN BASE OFFICERS FOR 2022

Base Commander	Huey Dietrich	Webmaster	Lee Bookwalter
1 st Vice Commander	Chad Underkoffler	COB/Historian	Eric Bookmiller
2 nd Vice Commander	Chuck Bat Masterson	Photographer	Rick Flaugh & Jack Sutherin
Secretary	Jeff Simon	Holland Club Chairman	Joe Campisi
Treasurer	Lee Bookwalter	Asst. Holland Club Chair	Dick Geyer
Storekeeper	Frank Nicotra	Technology Chair	Lou Hamill
Chaplain	OPEN	Eagle Scout Chair	OPEN
Past Base Commander	Joe Campisi	Awards Chair	Dick Geyer
Newsletter Editor	Lou Hamill	Master at Arms	OPEN
		Public Affairs Chair	Ed Derr





USS IDAHO COMMISSIONING COMMITTEE

https://ussidahocommittee.org/

USS Idaho Support Fundraiser Dec 11, 2021 Thank You, to everyone who has helped us reach our initial goal of \$10,000. Our fundraising efforts are going so well that we decided to increase the goal to 15,000. We are Submariners and by nature, we are over achievers. Keep it up. The crew and their families appreciate the support. \$15,000



https://www.facebook.com/SSN799



American Legion Post 80

Here is the link to the customer photos.

https://requinbase.org/customer-photos/



VFW Post 7505



93%





If you would like to order a submarine beer tap handle [with or without the stand], a challenge coin holder or a newly added cribbage board.

contact Huey Dietrich or

Place your order for these and other USS Idaho items at

https://requinbase.org/product-category/uss-idaho/





Month in Review



Our December meeting.

A GREAT time was had by all.



















Chaplain's Column





A bad attitude is like a flat tire.
You can't go anywhere until you change it.



Store Keepers Report

Please visit our online store at https://requinbase.org/shop/



You can have your items shipped to you at home via USPS [for a small fee], or pick them up at the next USSVI meeting.



Meeting Minutes

December 11, 2021 Baden, PA

Huey Dietrich called the meeting to order.

Attendees: Willard Ashmore, John Bistolos, Eric Bookmiller, Lee & Patsy Bookwalter, George & Cindy Brown, Joe Campisi, Ed & Mary Jane Derr, Huey & Edie Dietrich, Rick & Judy Elster, Rick Flaugh, Gerry & Linda Gaylor, Dick & Beverly Geyer, Bob & Lynn Gourley, Bill & Donna Greenlee, Lou & Alex Hamill, John Held, James Kontier, Bill & Sandra Lindsay, Bat Masterson, Vince Metz, Frank Nicotra, Brian Peltier, Jim & Sandra Schwarz, Chuck Shrump, Harry Sills, Jeff & Eileen Simon, Jack & Karen Sutherin, Chad & Judith Underkoffler, Charlie & Gale Warren.

Huey Dietrich: Quotes of the day: "He who loses his head is the last to miss it."

Huey Dietrich gave the quote of the day: "He who loses his head is usually the last to miss it."

Requin History On December 1, 1948 the USS Requin left shipyard with new radar equipment and reported to New London CT for duty in Submarine Squadron 8. On December 3, 1968 USS Requin was decommissioned and on December 20, 1971 USS Requin was struck from the Navy Register.

Boats Lost:

USS CAPELIN (SS 289) December 2, 1943 USS SEALION (SS 195) December 10, 1941 USS F-1 (SS 20) December 17, 1917 USS S-4 (SS 109) December 17, 1927

Let us also remember our fellow shipmates of the Requin Base, Calvin Boring, Wilfred Carlton, David Chatlos, Henry Collings, George Denny, Robert LaDone and Dan Robbins, who were lost in December. Finally let us remember all the brave submariners who died performing their duties aboard submarines, some individually and some in groups, but where the submarine itself was not lost.

Shipmate Bill Lindsay gave the Invocation

MIA/POW ceremony was performed.

Members introduced themselves and the boats they qualified on.

COB Chad Underkoffler lead the base in the Pledge Of Allegiance

A motion to suspend normal meeting activities was approved by the members present.

Base Officers running unopposed are Commander – Huey Dietrich, First Vice – Chad Underkoffler, Secretary – Jeff Simon, Treasurer – Lee Bookwalter. Election for Second Vice between Bat Masterson and George Brown was won by Bat Masterson

Good of The Order:

Donation was sent via Captain Deichler to the Idaho crew.

Obituary for Hazle Naomi King Simpson Weikart, mother of Dick Simpson was read.

New member Scot Thomas from Farmington PA

Members are invited to retirement for Brian Peltier being held on January 15, 2022. Details will be published in the SVD

Dink list for 2022 dues was read

Christmas grab bag, monthly raffle, and yearly raffle were held

Shipmate Bill Lindsay gave the Benediction and blessing of today's meal.

Adjournment: The meeting was adjourned.

Next meeting: American Legion Post 641, Baden, PA at 1230 hours on January 8, 2022





Upcoming Events

Base Meetings

Events

January 8, 2022 at Baden American Legion

Peltier's Retirement Ceremony

February 12, 2022 at Baden American Legion

January 15, 2022 Details on page 12

MEMBER		Membersh	nip		
Regular Members	181	Holland Club	89	USSVI Life Members	75
Associate Members	13	WWII	5	Base Life Members	50
Total Members	195				

WELCOME ABOARD

New Members

Scot Thomas qualified on the USS Henry L Simpson SSBN-655 as a QM. He left the navy in 1977 as a QM2(SS). Scot lives in Farmington, Pa. with his first mate Laurie. Please e-mail Scot and welcome him aboard – sirthomas@msn.com

Our goal is to recruit 20 new members this year, Scot is the first. We will be losing some members who are leaving the area or retiring. The shipmates that chose to move on are – Kieler, Sampson, Corcoran, Mears, Johnston, Crocker, Stass and Associate members – Trip and Rogers. If you know any shipmates above, reach out to them and recruit them back into the base. Please check with some of your old shipmates and recruit them. Scot is #1– only 19 more to go! Remember if you recruit a shipmate, your next year base dues will be covered by the base.



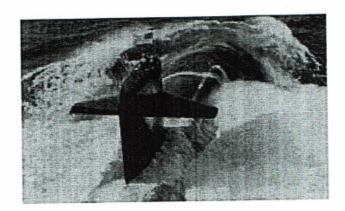
Eagle Scouts

Please direct all Eagle Court of Honor requests to https://requinbase.org/eagle-coh

Congratulations to:

John David Butler Troop 560
Jacob Stephen Kosak Troop 173
Ethan Scott Wyman Troop 173
Luke Edward Wilhelm Troop 173
Dino Iasella Troop 173





What:

Peltier's Retirement Ceremony

When:

Saturday, January 15, 2022

Arrive:

1130

Ceremony:

1200-1300

Where:

Soldiers and Sailors Museum

4141 Fifth Ave.

Pittsburgh, PA 15213

Garage parking is \$5 (4390 Bigelow Blvd)

Ceremony Attire:

Military Ceremony Members: Khakis

Military Guests (separated, retired or current): Any Uniform

Civilian Guests: Casual

Please RSVP by January 7th to Lola Peltier <u>via both opspirt@hotmail.com</u> and <u>opspirt@aol.com</u> (both emails are preferred as we sometimes have trouble receiving emails)

Lola Peltier (cell) 603-568-7764

Brian Peltier (cell) 603-568-7763

Other details

Friday, the day before ceremony I plan on going out to a local bar for a less formal celebration and to have more time to spend with out of town guests. Please let me know if you are interested!

Following the ceremony a reception will be held at my farm. I have a dining hall / bar in one building and will have my house open for guests as well.

Address - 6127 Garvers Ferry Rd. Leechburg, PA, 15656

I expect that the ceremony will be done around 1300. My farm is 40 minute to an hour drive away based on traffic. I recommend dressing down before coming to the farm because you are welcome to visit my animals.

Hotels – I recommend the Springhill Suites as its location is right off the highway and is 15 minutes from my house and 25 minutes from Soldiers and Sailors Memorial Hall (provided no traffic). Address – 3015 Pittsburgh Mills Blvd. Tarentum, PA 15084. We would like to help friends who may be unable to afford a room through the use of our reserve of hotel timeshare points. Please reach out to Lola.





Featured Boat - <u>USS Henry Clay SSBN-625</u>

NavSource Naval History

		NavSource Navai History		
	History	General characteristics		
Name	USS Henry Clay	Class and type	Lafayette-class submarine	
Namesake	Henry Clay (1777–1852), an American statesman and orator	Туре	Ballistic missile submarine (hull design SCB-216)	
Ordered	3 February 1961		7,250 <u>long tons</u> (7,370 t)	
Builder Newport News Shipbuilding and Dry Dock Company		Displacement	surfaced 8,250 long tons (8,380 t) submerged	
Laid down	23 October 1961	Length	425 ft (130 m)	
Launched	30 November 1962	Beam	33 ft (10 m)	
Sponsored by	Mrs. Green B. Gibson	Draft	31 ft 6 in (9.60 m)	
Commissioned 20 February 1964 Decommissioned 5 November 1990		Dian	1 × S5W reactor	
		Propulsion	2 × Westinghouse geared tur- bines=15,000 shp (11,000 kW)	
Stricken	5 November 1990		20 knots (37 km/h) Surfaced	
Motto	Preservation of the Nation	Speed	25 knots (46 km/h) Submerged	
Fate Scrapping via Ship-Submarine Recycling Program completed 30 September 1997		Complement	Two crews (Blue and Gold), 13 officers and 130 enlisted men each	
		Sensors and pro- cessing systems	BQS-4 sonar	
		Armament	4 × 21 in (530 mm) Mark 65 torpedo tubes with Mark 113 firecontrol system, for Mark 48 torpedoes 16 × vertical tubes for Polaris or Poseidon ballistic missiles	







This month in US submarine history

12/01/1943

USS Bonefish (SS 223) sinks Japanese transport Nichiryo Maru in the Celebes Sea while USS Pargo (SS 264) sinks the Japanese transport Shoko Maru north of Ulithi. Also on this date, USS Peto (SS 265) sinks Japanese transport Tonei Maru.

12/02/1944

USS Sea Devil (SS 400) attacks a Japanese convoy in the East China Sea and sinks merchant tanker Akigawa Maru and passenger-cargo ship Hawaii Maru, while USS Gunnel (SS 253) evacuates 11 rescued aviators from Palawan, Philippines and turns over all available stores to Filipino forces ashore.

12/03/1943

USS Tinosa (SS 283) sinks the Palau-bound Japanese fleet tanker Azuma Maru northwest of Sonsorol.

12/04/1944

USS Flasher (SS 249) sinks Japanese destroyer Kishinami and damages a merchant ship in the South China Sea. Flasher is the only U.S. submarine to sink more than 100,000 tons of enemy shipping in World War II.

12/05/1943

USS Narwhal (SS 167) embarks nine evacuees at Alubijid, Mascalar Bay and then sinks Japanese cargo ship Himeno Maru off Camiguin Island.

12/05/1944

USS Hake (SS 256) evacuates downed aviators and turns over all supplies that can be spared to Filippino guerilla forces ashore at Libertad, Panay, Philippines.

12/08/1943

USS Sawfish (SS 276) sinks Japanese transport Sansei Maru southeast of Chi Chi Jima. Also on this date, TBFs sinks Rabaul-bound fishing boats No. 3 Yusho Maru, No.7 Fukuri Maru, No.2 Takatori Maru, and No.1 Hoko Maru.

12/09/1941

USS Swordfish (SS 193) makes initial U.S. submarine attack on Japanese ship, torpedoing a ship 150 miles west of Manila. Her claim of sinking, though, is not confirmed in enemy records.

12/10/1982

The nuclear powered USS Ohio (SSBN 726), first Trident-Class submarine, returns from its first deterrent patrol.

12/11/1944

USS Gar (SS 206) lands 35 tons of supplies at Darigayos Inlet on the west coast of Luzon and picks up secret intelligence documents. Also on this date, USS Sea Owl (SS 405) sinks Japanese auxiliary submarine chaser Cha 76 in the East China Sea.

12/13/1943

USS Sailfish (SS 192) sinks Japanese cargo ship Totai Maru east of Tokara Strait while PBY aircraft sink Tokiwa Maru in the Bismarck Sea.

12/15/1944

USS Hawkbill (SS 366) sinks the Japanese destroyer Momo west of Luzon.



12/16/1944

USS Swordfish (SS 193) attacks a Japanese convoy south of Hainan Island and sinks Japanese army transport Atsutasan Maru.

12/17/1942

USS Grouper (SS 214) sinks the Japanese army passenger cargo ship Bandoeng Maru about 15 miles northwest of Cape Henpan, Buka Island, Solomons and survives the counterattack by submarine chaser Ch 29

12/18/1943

USS Aspro (SS 309) attacks a Japanese convoy in Sakishima Gunto, damaging fleet tankers Sarawak Maru and Tenei Maru, and escapes counter attacks by destroyer Shoikaze. Meanwhile, USS Grayback (SS 208) sinks Japanese freighter Gyokurei Maru east-northeast of Naha, Okinawa and escapes counter attacks by destroyer Numakaze.

12/19/1943

USS Grayback (SS 208) sinks the Japanese destroyer Numakaze 50 miles east-northeast of Naha, Okinawa.

12/19/1944

USS Redfish (SS 395) sinks the Japanese carrier Unryu 200 nautical miles southeast of Shanghai, China. In the course of this engagement, Redfish is damaged and terminates her patrol early.

12/21/1942

USS Seadragon (SS 194) sinks Japanese submarine I-4 between New Britain and New Ireland while I-4 is engaged in a resupply mission to Guadalcanal.

12/22/1942

On board USS Silversides (SS 236), Pharmacists Mate 1st Class Thomas A. Moore performs an emergency appendectomy on Fireman 3rd Class George M. Platter while the submarine is submerged and on war patrol in the Solomon Islands. Platter returned to duty within a few days of the operation.

12/23/1944

USS Blenny (SS 324), despite an escort vessel close by, sinks the Japanese merchant tanker Kenzui Maru off San Fernando, Luzon, Philippines.

12/25/1944

USS Barbero (SS 317) attacks a Japanese convoy and sinks transport Junpo Maru.

12/27/1943

USS Flying Fish (SS 229) sinks the Japanese fleet tanker Kyuei Maru in the South China Sea west of Luzon Strait. Also on this date, USS Ray (SS 271) sinks the Japanese fleet tanker Kyoko Maru (ex-Dutch Semiramis) west of the Celebes.

12/29/1943

USS Silversides (SS 236) sinks the Japanese transport Tenposan Maru, the army cargo ship Shichisei Maru, and the freighter Ryuto Maru while also damaging the army cargo ship Bichu Maru off Palau.

12/30/1942

USS Greenling (SS 213) attacks a Japanese convoy 180 miles northeast of Manus, Admiralty Islands and sinks Army cargo ship Hiteru Maru and damages cargo ship Ryufuku Maru while USS Thresher (SS 200) sinks the Japanese freighter Haichan Maru west of Mata Siri Island, off the southern tip of Borneo.

12/30/1943

USS Bluefish (SS 222) sinks Japanese oiler Ichiyu Maru in the Java Sea.



12/30/1944

USS Razorback (SS 394) attacks a Japanese convoy going from Manila to Takao, about 60 miles southeast of Formosa, and sinks the destroyer Kuretake in the Bashi Channel. The Japanese cargo ships Brazil Maru and Oi Maru are also damaged during this attack.

12/30/1959

The first fleet ballistic missile submarine, USS George Washington (SSBN 598), is commissioned.





Articles of Interest



Sweden (Yes, Sweden) Makes Some of the World's Best Submarines

November 8, 2020 by Sebastien Roblin

https://nationalinterest.org/blog/reboot/sweden-yes-sweden-makes-some-worlds-best-submarines-172074



Hint: a silent, powerful new engine.

Here's What You Need to Know:

Sweden's submarines are affordable, deadly, and stealthy.

For decades, submarines came in two discrete flavors: traditional diesel-electric submarines that need to surface every day or two to recharge their noisy, airbreathing diesel engines, and nuclear-powered submarines that could quietly hum along under the sea at relatively high speeds for months at a time thanks to their nuclear reactors.

The downside to the nuclear-powered variety, of course, is that they cost many times the price of a comparable diesel submarines and require nuclear propulsion technology, which may not be worth the trouble for a country only interested in defending its coastal waters. A diesel submarine may also run more quietly than a nuclear submarine by turning off its engines and running on batteries—but only for a very short amount of time. Still, there remains a performance gap in stealth and endurance that many countries would like to bridge at an affordable price.

One such country was Sweden, which happens to be in a busy neighborhood opposite to Russian naval bases on the Baltic Sea. Though Sweden is not a member of NATO, Moscow has made clear it might take measures to 'eliminate the threat,' as Putin put it, if Stockholm decides to join or support the alliance. After a Soviet *Whiskey*-class submarine ran aground just six miles away from a Swedish naval base in 1981,



Swedish ships opened fire on suspected Soviet submarines on several occasions throughout the rest of the 1980s. More recently, Russia has run an exercise simulating <u>a nuclear attack</u> on Sweden and likely infiltrated Swedish territorial waters with least one submarine in 2014.

Back in the 1960s, Sweden had begun developing a modernized version of the Stirling engine, a closed-cycle heat conversion engine first developed in 1818. This was first used to power a car in the 1970s, then the Swedish shipbuilder Kockums successfully retrofitted a Stirling engine to power a Swedish Navy A14 submarine *Nacken* in 1988. Because the Stirling burns diesel fuel using liquid oxygen stored in cryogenic tanks rather than an air-breathing engine, it can quietly cruise underwater at low speeds for weeks at a time without having to surface.

Kockums went on to build three *Gotland*-class submarines in the late 1990s, the first operational submarines designed with Air-Independent Propulsion systems. The *Gotland* became famous for sinking a U.S. aircraft carrier in a 2005 military exercise: its characteristics and operational history are further described in this earlier article. Stirling AIP technology has subsequently been incorporated into numerous Japanese and Chinese submarines, while Germany and France developed more expensive fuel-cell and steam-turbine based AIP submarines instead.

Sweden, meanwhile, converted her four late-80s vintage *Västergötland* diesel-electric submarines between 2003 and 2005 to use Stirling AIP engines—refits which involved cutting the submarines in two and stretching them out from forty-eight to sixty meters! Two of these submarines were re-designated the *Södermanland*-class, while the other two were sold to Singapore. The latter *Archer*-class boats are climatized for operations in warmer waters and boast improved navigation and fire control systems.

Enter the A26: Sweden's Ghostly Super Sub of the Future—On Paper

Sweden intends to retire its *Södermanland* boats between 2019 and 2022. Since the 1990s, Kockums had been bouncing around a concept for a next-generation AIP submarine designated the A26 to succeed the *Gotland*-class but encountered numerous setbacks. Stockholm canceled A26 procurement in 2014, and at one point there was even a raid by the Swedish government attempting to confiscate blueprints from the German parent firm Thyssen-Krupp which was confronted by company security.

Since then, Kockums has been purchased by the Swedish firm Saab. Finally in June 2015, Swedish defense minister Sten Tolgfors announced Stockholm was finally committing to procure two A26s at a price equivalent to \$959 million—less than a fifth the unit cost of a nuclear-powered *Virginia* class submarine of the U.S. Navy.

The A26 has also been marketed abroad at various times to Australia, India, the Netherlands, Norway, and Poland, but so far without success, due to competition from French and <u>German AIP submarine-makers</u> and an apparent reluctance from smaller European states to commit to submarine purchases at this time.

Kockums claims the A26 will achieve new levels of acoustic stealth thanks to a new 'GHOST' (Genuine Holistic Stealth) technology which involves acoustic damping plates, flexible rubber mountings for hardware, a less reflective hull with a lower target strength and degaussing to lower the submarine's magnetic signature. Supposedly, the A26's hull will also be unusually resilient to underwater explosions.

The Swedish firm has unveiled <u>concept art</u> depicting a submarine with a 'chinned' sail, X-shaped tail fins for greater maneuverability in rocky Baltic waters, and four 533- millimeter torpedo tubes can fire both heavy-weight torpedoes, back up by two 400- millimeter tubes, all of which would use wire-guided torpedoes. The vessel's four Stirling engines apparently allow allowing for higher sustainable underwater cruising speed of 6 to 10 knots.

Kockums has emphasized the new designs' modularity, which should lower development costs for specialized variants, such as one configuration accommodating up to eighteen Tomahawk land-attack cruise missiles in a vertical launch system. This is a feature likely meant to appeal to Warsaw, which would like cruise missile equipped submarines.

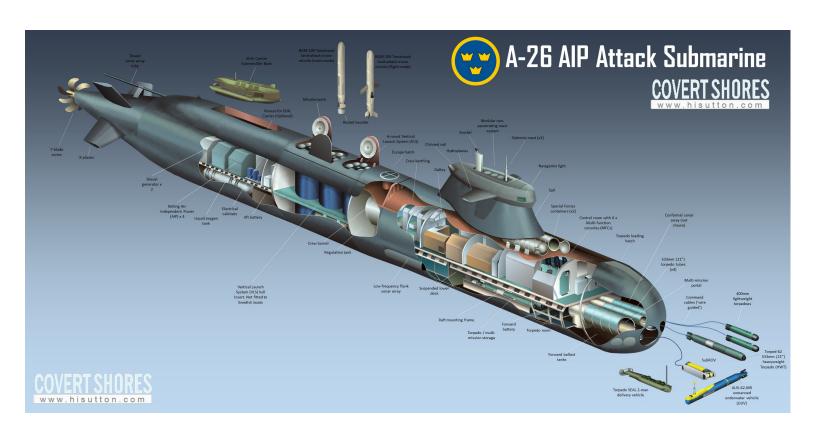


Another important feature is a special 'multi-mission' portal for deploying special forces and underwater vehicles, a much-in demand feature for contemporary submarines. Situated between the torpedo tubes in the nose, the portal can also be used to recover the AUV-6 underwater drone, which can be launched from the torpedo tubes. The A26 would typically belly down on the ocean floor when employing the portal—a maneuver which could also aid it in escaping detection.

Kockums is now marketing three different versions of the A26. The 'medium' model intended for Swedish service would measure 63-meters long and displace roughly 2,000 tons surfaced. It would typically have a crew of around twenty-six, and a maximum endurance of forty-five days, including eighteen to thirty days (sources differ) submerged, generally sustaining a speed of 10 knots. This endurance, including a typical range of 6,500 miles, should give it capability for operations in the Atlantic Ocean—in contrast to the *Gotlands* which are not designed for transoceanic deployments.

There is also a smaller 51-meter 'Pelagic' version for short-range patrols, and an Extended Range model stretched to eighty meters long and displacing 4,000 tons that might appeal to operators in the Pacific Ocean due to its 10,000-mile range and 50- day endurance.

Sweden's two A26s should be completed between 2022 and 2024, at which point it will be possible to gauge whether they can meet their ambitious performance parameters. In general, advancements to AIP submarines are allowing countries across the globe to acquire capable short and medium-range submarines at an affordable price.





SSN(X): The Navy's New Submarine Built To Fight Russia And China

By Brent M. Eastwood Published 12/16/2021 https://www.19fortyfive.com/2021/12/ssnx-the-navys-new-submarine-built-to-fight-russia-and-china/



US Navy Virginia-class Submarine Under Construction.

Advanced SSN(X) Subs Will Have Even More Torpedoes Than Virginia-Class: You've heard "Run Silent, Run Deep" as one of the main mottos used by American submariners to explain what they do for a living. And coming in roughly a decade, a new submarine can add additional firepower to that rallying cry as it has room for even more torpedoes. The next-generation SSN(X) attack submarine is designed to dominate undersea warfare.

Are You Ready for an Improved Virginia-class?

However, we'll have to wait until 2031 for this sub to hit the water. How could the SSN(X) be better than the existing Virginia-class? The <u>Virginia-class</u> is already dominant. It's loaded with four torpedo tubes, Tomahawk cruise missiles, and <u>Harpoon anti-ship</u> missiles. The Virginias have an electromagnetic signature reduction system that enables the submarines to sneak around and attack without warning.

Now the U.S. Navy wants to improve on the Virginia-class with a sub that will need less maintenance, hold more than 50 torpedoes, and set speed records. Those torpedoes could have <u>ranges longer than 200 nautical miles</u>.

Yes, the SSN(X) Has Fighting China and Russia In Mind

The Virginia-class can also creep close to shore and insert Navy SEALs. The SSN(X) will remain farther out in deeper ocean environments to overawe new Russian and Chinese subs that also have noise reduction improvements and newer ballistic and cruise missiles. The two near-peer navies may even be working on a new stealthy-sub-together.



The SSN(X) Could be a Drone Mothership

Interestingly, the SSN(X) will play a <u>big role with undersea drones</u>. It may be able to control more than one from the sub. The undersea drones could have their own sonar systems for early warning of enemy vessels. Also, the SSN (X) could be integrated with an unmanned aerial craft that flies out ahead and create targeting data for the new sub – the aerial drone could then guide the torpedo to paydirt.

Anti-Submarine Warfare Capability a Must

The SSN(X) will also have a mission to eliminate enemy submarines, not just surface warfare. It is supposed to thrive in "contested environments" that are full of adversarial subs. It will have better sensors and sonar than the Virginia-class and be quieter.

Congress Has to Cut Loose Substantial Funding

All of this technology will require years of considerable funding. The Navy just asked Congress for \$98 million for research and development for the SSN(X). The <u>FY 2022 National Defense Authorization Act gave it only \$30 million</u>. That lower number is not a show-stopper. Funding will likely ramp up in future years since the submarine is so far away from reality.



US Navy Virginia-class Submarine Under Construction.

What Kind of Nuclear Plant?

The <u>Congressional Research Service recommends</u> that the Navy figure out whether the SSN(X) nuclear reactor plant will be comprised of <u>low-enriched uranium rather than high-enriched uranium</u>. A low-enriched reactor would have to be larger, and a new high-enriched uranium supply facility may be needed for future nuclear submarines.

SSN(X) Is the Future

The SSN(X) is an intriguing project and something for the U.S. submarine community to look forward to, assuming Congress keeps up with funding requests. It is a natural progression on existing technology with up-to-date plans for innovations such as undersea drone warfare. The SSN(X) is assured to be a difference -maker and able to adroitly run silent and run deep.





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The task of perpetuating the memory of our lost shipmates is forever and cannot be done alone. This task takes time, money, dedication and patriotism from all walks of life both veteran and civilian. USS Requin Base would like to recognize all those that help us fulfill the task of remembering and honoring those we have lost to secure the freedoms we enjoy.









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