Virginia-Class SSN Team Awarded $12 Billion Contract Modification for Two Submarines

GROTON, Conn., and NEWPORT NEWS, Va.– General Dynamics Electric Boat, a business unit of General Dynamics, announced today it has been awarded a total of $12.4 billion in contract modifications for construction of two fiscal year 2024 Virginia-class Block V attack submarines (SSNs), the 11th and 12th of the block.

Electric Boat is teamed with HII, whose Newport News Shipbuilding division is teamed to build the Virgina class.

“Additionally, the award funds investments to improve productivity at the shipyards and workforce support as detailed in the Department of Defense contract award announcement (https://www.defense.gov/News/Contracts/Contract/Article/41708

27/). This contract includes options which, if exercised, would bring the cumulative value to $17.2 billion," the April 30 General Dynamics release said.

"Over the past two years, we successfully worked with the Navy, Congress and the administration to secure funds that enable us to increase wages for the nuclear-powered vessel workforce and allow for significant additional investments in capacity, shipyard processes and systems," said Mark Rayha, president of General Dynamics Electric Boat. "This contract modification validates the unique and important role submarines and submarine shipbuilders play in our national defense."

"We appreciate the teamwork that resulted in these critical national security assets being put under contract," said Jason Ward, NNS vice president of submarine construction, in an April 30 release from HII. "We understand the advantage *Virginia*-class submarines bring to the sailors who operate them, and our shipbuilders are working with diligence to deliver them to the fleet."

Virginia-class submarines are designed from the keel up for the full range of 21st-century mission requirements, including anti-submarine and surface ship warfare and special operations support. General Dynamics Electric Boat is the prime contractor and lead design yard for the Virginia-class submarine series and constructs them in a teaming arrangement with HII's Newport News Shipbuilding in Virginia.

NNS and GDEB have built and delivered 24 *Virginia*-class submarines to date.

SECNAV Phelan Visits Shipyards in South Korea

From SECNAV Public Affairs, April 30, 2025

REPUBLIC OF KOREA – Secretary of the Navy John Phelan visited shipyards at Hanwha Ocean Shipbuilding and HD Hyundai Heavy Industries during a scheduled visit to the Indo-Pacific area of operations, April 30.

Secretary Phelan's visit included meetings with industry leaders and underscored the importance of the Indo-Pacific region and the Republic of Korea's expertise in vessel maintenance, repair and overhaul that is crucial to enhancing naval operational capabilities.

"Working with leading shipyards like Hanwha Ocean Shipbuilding and HD Hyundai Heavy Industries is essential to ensuring deployed U.S. ships and systems remain fully operational in the Indo-Pacific," said Secretary Phelan. "Leveraging the

expertise of these highly capable shipyards enables timely maintenance and repairs for our vessels to operate at peak performance. This level of large-scale repair and maintenance capability strengthens our combat readiness, sustains forward deployed operational presence, and reinforces regional stability."

Hanwha Ocean Shipyard successfully completed the repair of the Lewis and Clark-class dry cargo ship, USNS Wally Schirra (T-AKE 8), marking the first Military Sealift Command ship repair conducted in the Republic of Korea. Additionally, the USNS Yukon (T-AO 202), a Henry J. Kaiser-class underway replenishment oiler, is currently undergoing maintenance at the shipyard. Meanwhile, HD Hyundai Heavy Industries recently signed a Memorandum of Understanding with Huntington Ingalls Industries to explore collaborative opportunities in both commercial and defense shipbuilding. These developments highlight their capability to support U.S. naval operations in theater, reducing downtime and costs while increasing operational readiness in the Indo-Pacific region.

"The relationship between the U.S. Navy and the Republic of Korea's maritime industrial base goes far beyond ship maintenance; it is a cornerstone of our shared commitment to a free and open Indo-Pacific and strengthens the overall bond between our nations," said Secretary Phelan. "It fosters innovation, enhances national defense and drives economic prosperity for all. Our united efforts are a powerful reflection of the deep trust and ironclad commitment to the enduring alliance between the United States and the Republic of Korea."

Secretary Phelan's first visit to the Indo-Pacific region highlighted his top priorities including Naval shipbuilding in support of President Trump's Executive Order on restoring America's maritime dominance.

Coast Guard to Begin Full Production Activities for PSC Hull 1, LRIP for WCC

From U.S. Coast Guard Headquarters, May 1, 2025

WASHINGTON – The Department of Homeland Security approved full production of the first U.S. Coast Guard Polar Security Cutter (PSC), April 30, 2025. The Service also received approval for low-rate initial production of the the Waterways Commerce Cutter (WCC). This is a significant milestone for the Nation, as it brings the Coast Guard closer to renewing and enhancing operational capabilities in both the American heartland and the polar regions.

Approval for full production enables the Coast Guard and U.S. Navy integrated program office to maintain production momentum, and for the shipbuilder to accelerate hiring to deliver this critical asset as quickly as possible to support national security initiatives. The PSC is the first heavy polar icebreaker to be built in the U.S. in nearly five decades. The Coast Guard is the sole federal agency responsible for icebreaking. Accordingly, the Service must replace, modernize, and grow its fleet of icebreakers to assure U.S. access and sovereignty in the polar regions. The U.S. Coast Guard is committed to working with the Administration and Congress to fulfill the President's direction on icebreaker acquisition.

The production decision for the WCC program entails the first eight hulls of the River Buoy Tender (WLR) and Inland Construction Tender (WLIC) – WCC variants that are being

acquired under a single contract, due to significant design and systems commonality. The Coast Guard plans to acquire 16 WLRs and 11 WLICs to recapitalize the Service’s aging and increasingly obsolescent inland tender fleet, which supports the Nation’s Marine Transportation System, facilitating the safe movement of over $5.4 trillion in annual commerce and 30 million jobs. Deliveries of both the lead WLR and WLIC are planned to occur in fiscal year 2027. A third WCC variant, the inland buoy tender, will be acquired under a separate contract.

For over 234 years, the American people have relied on the special authorities and unique capabilities of the Coast Guard to assure the safety, security and stability of America’s maritime zones and borders and to foster responsible maritime governance around the world. The PSC and WCC programs demonstrate the breadth of these commitments, and the enduring need for the Coast Guard to deliver vital services the Nation.

Coast Guard Cutter Liberty, Final Island-Class Cutter, Decommissioned After Over 35 Years of Service

From U.S. Coast Guard 17th District, April 30, 2025

ANCHORAGE, Alaska – The Coast Guard decommissioned Coast Guard Cutter Liberty (WPB 1334) during a ceremony in Valdez, Tuesday.

“This decommissioning marks the end of an era for the Coast Guard,” said Cmdr. Jordan Bogosian, a former Commanding Officer of Liberty and the ceremony’s presiding official. “I am proud of Coast Guard Cutter Liberty and her faithful service to our nation for more than three decades.”

Commissioned on December 19, 1989, Liberty was the 34th Island-Class cutter to join the fleet and the final Island-Class cutter to be decommissioned from Coast Guard service.

Liberty is a 110-foot, Island-Class patrol boat, a multi-mission platform that conducted operations to support search and rescue response, marine environmental protection, and national defense.

The Coast Guard is replacing the aging Island-Class patrol boats with Sentinel-Class Fast Response Cutters (FRCs) which feature enhanced capability to meet service needs. There are currently four FRC's homeported in Alaska, with two more scheduled for delivery in the near future.

"It has been a profound honor to serve as the final commanding officer of USCGC Liberty," said Lt. D. Toler Alexander, Commanding Officer of Liberty. "I am incredibly proud of this crew and all they have accomplished. LIBERTY leaves behind a legacy of over 35 years of exceptional service to the people of the United States and the great state of Alaska. I would like to extend my heartfelt gratitude to the communities of Valdez – and Auke Bay before it – for their unwavering support and for being such welcoming homeports to the cutter and her crew."

Virtual Tools Help Real-World Suicide Prevention Efforts

A Sailor assigned to Mid-Atlantic Regional Maintenance Center tests the Oculus headset utilized for sexual assault prevention and suicide prevention virtual reality training onboard Naval Station Norfolk, November 14, 2024. *Photo credit: U.S. Navy | Harrison Cox*

Veterans, service members and military family members have significantly higher rates of suicide than the general population. The demands of military life can cause anxiety, depression, interpersonal conflicts and emotional distress. Exposure to combat and traumatic experiences can lead to post-traumatic stress disorder and other mental health issues; chronic pain and disability from service-related injuries can worsen these challenges. Access to and familiarity with weapons increases the risk.

Reducing the risk of suicide among service members and their families is the chief mission of the Defense Suicide Prevention Office, a division of the U.S. Department of Defense. It works with military branches, veterans' organizations and mental health professionals to enhance

suicide prevention resources. As part of its mission, it is constantly exploring new technology to support or expand existing programs.

Emerging technologies show great promise in the mission to reduce suicides among active-duty forces and veterans. Artificial intelligence, machine learning and advanced algorithms can help identify high-risk individuals and connect them with early intervention resources. Virtual reality technology is enhancing suicide prevention training, while VR-based therapy and online gaming provide veterans with tools to cope with PTSD and foster community engagement.

Early intervention aims to identify service members and veterans who are experiencing an elevated risk of suicide and proactively connect them with prevention resources. AI-powered algorithms can help improve early intervention efforts. These programs can analyze an individual's speech patterns, social media activity and biometric data to detect warning signs of suicidal thoughts.

One example is the Recovery Engagement and Coordination for Health – Veterans Enhanced Treatment, or REACH VET, program used by the Department of Veterans Affairs. It uses predictive analytics to identify at-risk veterans and offer early intervention before a crisis occurs.

REACH VET uses sophisticated AI and machine learning techniques to review and assess a veteran's medical history, psychiatric records and prescriptions. It also considers nontraditional indicators such as chronic pain diagnoses, sleep disorders and major life stressors. The system then runs complex statistical models, evaluating each individual's data and flagging those whose health patterns resemble others who have attempted or died by suicide.

If the system identifies an individual as high-risk, a VA healthcare provider contacts them for a wellness check and

assessment. To mitigate risk, the provider offers personalized care plans, therapy sessions, medication adjustments and peer support programs. Studies show veterans enrolled in REACH VET experience lower hospitalization rates and improved mental health engagement, a point in favor of proactive, data-driven intervention.

Programs like REACH VET may see additional improvement by integrating data from wearable devices like smartwatches and fitness trackers. These devices monitor sleep patterns, heart rate variability and stress levels. Incorporating this data could offer another layer of early detection and support, alerting caregivers or medical professionals if a veteran's vitals indicate distress or elevated risk.

Real actors portray Sailors in realistic environments to allow trainees to have significant conversations. *Image credit: Moth + Flame*

VR Tech and Suicide Prevention Training

Traditional suicide prevention training is derisively and ironically referred to as "death by PowerPoint." These boring presentations convey information about available resources but do little to help service members learn what to actually do to

help a friend, comrade or family member in crisis.

New York City-based Moth+Flame, a leading developer of immersive VR training solutions, partners with the U.S. Navy and other military branches to provide state-of-the-art training programs. Although it offers many types of interactive simulations, one area of focus is suicide prevention. It provides customized training modules for each branch of service, addressing their specific environmental stressors.

Its VR training encompasses many suicide prevention strategies, including leadership development, crisis response and mental resilience. Officers can improve their ability to foster a better atmosphere for everyone's mental well-being as well as learn how to support individuals in crisis.

Unlike traditional classroom-based training, VR immerses service members in lifelike conversations where they must recognize distress signals, respond to struggling comrades and practice de-escalation techniques. Participants engage with AI-driven, emotionally responsive avatars in realistic, high-pressure scenarios. The avatars are based on real actors, which the Navy helps select to make sure they look, sound and interact as authentically and realistically as possible.

These scenarios simulate interactions with colleagues, subordinates and family members. Using VR technology, participants can rehearse difficult conversations, building their empathy and confidence in handling real-life crisis situations. As the participant responds, the program provides real-time feedback and suggestions. It also provides post-session feedback and analysis.

"So, in this goggle is a character that is a peer in crisis that the shipmate has to talk to using his or her own voice. … They will have a practical application that they guide hopefully to a successful outcome," said Matt Frost, an

account executive for Moth+Flame, speaking at the Surface Navy Association meeting in January. “We’re not making a video game. This is a real actor in a real environment.”

The biggest users of the technology in the Navy are OPNAV N-17, the Navy Culture and Force Resilience Office; Naval Surface Force, U.S. Pacific Fleet; Naval Surface Force Atlantic; and Naval Special Warfare Command, Frost said.

Studies show that VR-based training improves knowledge retention and engagement compared to PowerPoint-based instruction. Trainees must actively interact with avatars, ensuring a hands-on learning experience. Early reports suggest that VR enhances readiness and significantly boosts confidence in suicide prevention efforts among active-duty service members.

Improving Mental, Physical Wellness

Virtual reality therapy is also transforming mental health care for service members and veterans. It is especially beneficial because it offers a customizable, controlled environment to help process PTSD, anxiety and depression.

A leading program is Bravemind, which was developed in collaboration with the VA Innovation Center and the SoldierStrong charitable organization. It uses VR to facilitate prolonged exposure therapy, a treatment that helps individuals confront and reprocess traumatic memories in a safe setting.

Bravemind creates virtual environments based on real-world combat settings, allowing therapists to guide individuals through difficult memories while helping them develop coping mechanisms. Though exposure therapy is challenging, it has been proven effective in reducing PTSD symptoms and improving emotional resilience.

In addition to structured therapeutic uses, VR can help

service members manage stress during long deployments or offshore missions. VR relaxation programs can transport users to peaceful, calming environments, such as beaches, forests or familiar cities to help manage anxiety and promote well-being. Providing these tools to active-duty service members can help improve their overall health and wellness, another building block in fostering readiness and reducing psychological distress.

Legalman1st Class Alejandra Lozada, assigned to Commander, Naval Surface Force Atlantic, dons virtual reality equipment to complete training at SURFLANT, Aug. 6, 2024. *U.S. Navy | Mass Communication Specialist 1st Class Sophie A. Pinkham*

Gaming the (Mental Health) System

First-person shooter video games can be unexpectedly helpful for individuals coping with PTSD. Hyperrealistic games like Call of Duty, Battlefield and Escape from Tarkov allow combat

veterans to experience combat-like scenarios in a safe, controlled manner, which can help them process trauma and manage stress.

These games can help players regain a sense of control and desensitization to triggers. They can also induce an adrenaline rush similar to real-life combat, allowing players to practice self-regulation in high-stress situations without real-world consequences.

However, there is another surprising benefit to FPS games, one that has nothing to do with their technological wizardry but is likely far more powerful. Service members and veterans often struggle with isolation and loneliness, feelings that sharply increase suicide risk. They may be reluctant to seek therapy or discuss their issues with their command, family members or real-world friends. Online gaming communities can provide crucial support in ways traditional resources can’t, reaching individuals who slip through the cracks of conventional support systems.

Multiplayer gaming fosters teamwork, communication and camaraderie, mirroring the bond of military units. Organizations like MilitaryGamers.com, Stack Up and Warfighter Engaged provide gaming communities centered around service members and veterans. Twitch streamer GrndPa Gamer, a veteran himself, has built a supportive online community where service members and fellow veterans can share experiences, find camaraderie and use gaming as a mental health tool.

As technology advances, VR therapy, AI-powered analytics and other developments will continue to change the landscape of suicide prevention efforts. The integration of biometric tracking, real-time clinical feedback and AI-driven therapy solutions has the potential to make suicide prevention efforts even more effective. By combining cutting-edge technology with compassionate care and community involvement, the military and veteran support organizations can provide life-saving

resources and a path toward better mental health.

Jamie L. Pfeiffer was a lawyer in Illinois, Oregon and Washington states before retiring. She is currently based in Chicago. This story first appeared in the May issue of Seapower *magazine.*

Navy Awards Contract Modification for Two Additional Virginia-Class Submarines

A Virginia-class submarine. *Photo credit: U.S. Navy*

WASHINGTON – Naval Sea Systems Command has awarded a two-ship contract modification on the existing Virginia-class submarine Block V contract to General Dynamics Electric Boat for the construction of two fiscal year 2024 Virginia-class submarines.

The award signals the Navy's commitment to maintaining its warfighting advantage in the undersea domain and continues the Virginia-class's teaming arrangement between prime contractor General Dynamics Electric Boat in Groton, Connecticut, and the major subcontractor Huntington Ingalls Shipbuilding, Newport News (HII-NNS) in Newport News, Virginia. To date, the Navy has taken delivery of 24 Virginia-class submarines, with an additional 16 now under contract.

"We recently renegotiated the planned contract to deliver this

critical capability, and appropriately share risk between the Navy and industry," said Secretary of the Navy John C. Phelan. "We will be looking at all future contracts with a similar lens to ensure the appropriate level of risk sharing and value to the American taxpayer."

Contract modifications were also awarded to both Electric Boat and HII-NNS to increase workforce support and investment across nuclear shipbuilding programs.

"By investing in the nuclear shipbuilding workforce – which is a national strategic asset – we are working with our industry partners to deliver on this most critical future requirement," said Dr. Brett Seidle, acting assistant secretary of the Navy for Research, Development & Acquisition.

"The contract award is the result of a highly coordinated contracting effort across the nuclear shipbuilding enterprise, to promote stability at critical suppliers as the submarine industrial base ramps up to meet a historic increase in demand for submarine production," said Program Executive Officer, Attack Submarines, Rear Adm. Jon Rucker. "We are continuing to work closely with the shipbuilders to improve construction schedules to support the Navy's need for a larger more lethal force."

"We appreciate the teamwork that resulted in these critical national security assets being put under contract," said Jason Ward, NNS vice president of submarine construction. "We understand the advantage Virginia-class submarines bring to the sailors who operate them, and our shipbuilders are working with diligence to deliver them to the fleet."