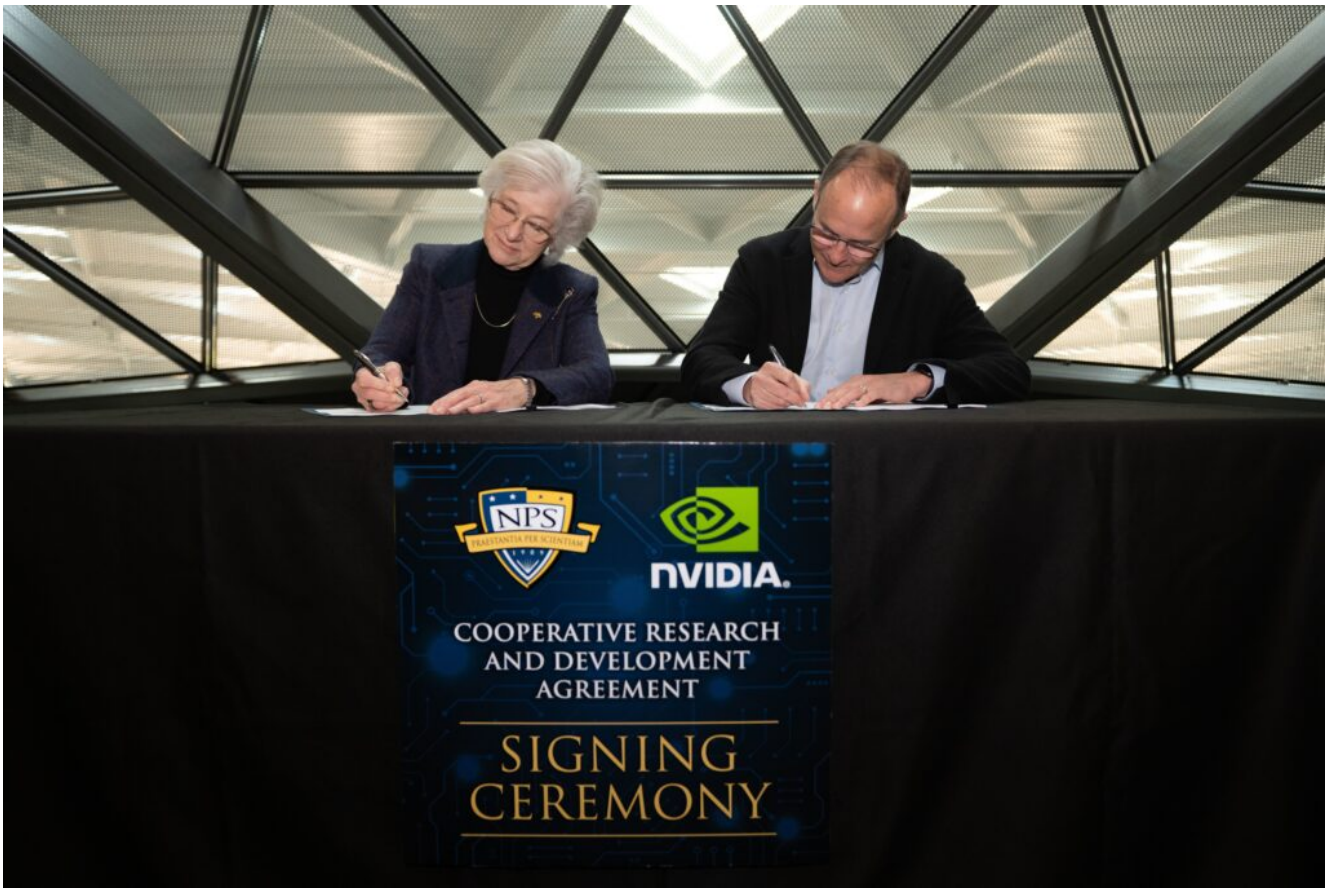
NPS, NVIDIA Sign New CRADA



President of the Naval Postgraduate School (NPS) retired U.S. Navy Vice Adm. Ann Rondeau, left, and NVIDIA Vice President of External Affairs Ned Finkle, right, sign a Cooperative Research and Development Agreement (CRADA) at NVIDIA Corporation's headquarters in Santa Clara, California. The CRADA between NPS and NVIDIA outlines plans for collaboration on the development of artificial intelligence-based technologies for learning and other real-world applications.
From The Naval Postgraduate School

ORLANDO, Fla. (NPS) – The Naval Postgraduate School (NPS) and NVIDIA are pleased to announce a new Cooperative Research and Development Agreement (CRADA) to collaborate on the development of AI-based technologies for learning and real-world applications leveraging NVIDIA's AI Technology Center Program.

In a ceremony held last month at NVIDIA's headquarters in Santa Clara, California, NPS President retired U.S. Navy Vice

Adm. Ann Rondeau and NVIDIA Vice President of External Affairs Ned Finkle signed the new CRADA. NPS and NVIDIA will collaborate on research, educational efforts, and industry talks. The first project will focus on ‘Non-Physics Modeling and Scenario Generation’ to create a tool for simulation and mission planning purposes specific to naval end-user domain requirements.

NPS students and faculty will meet with NVIDIA team members at the Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) in Orlando, Florida, Dec. 3 to share current research and kick-off discussions of technology applications that will form the cornerstone of the CRADA partnership.

GA-ASI Awarded Next-Generation HF Modem Contract

SEAPOWER
The Official Publication of the Navy League of the United States

From General Atomics Aeronautical Systems, Inc.

SAN DIEGO – Dec. 4, 2024 – General Atomics Aeronautical Systems, Inc. (GA-ASI) was awarded a contract on October 4, 2024, to develop a next generation high-frequency (HF) modem for the U.S. Naval Information Warfare (NAVWAR) Program Executive Office Command, Control, Communications, Computers and Intelligence (PEO C4I). The task order was issued by the Naval Information Warfare Center (NIWC) Pacific.

GA-ASI will develop a cost-efficient, software-defined Generation 2 HF modem that meets U.S. Navy ship, sub, and shore environmental requirements and supports a rapid fielding schedule. GA-ASI will provide waveform and modem development, test and evaluation, as well as onsite technical assistance for the NAVWAR PEO C4I program.

“The Gen2 Modem delivers the security and resilience the U.S. Navy needs for its tactical radio fleet modernization efforts,” said Jeff Hettick, GA-ASI vice president of Agile Mission Systems. “These modems will be the heart of the HF system, providing high-speed, long-range HF communications that meets the Navy’s demanding program of record requirements, which includes beyond-line-of-sight

communications in a satellite-denied environment.”

The work will be performed by GA-ASI over a 16-month base development timeline.

General Atomics Awarded Navy Contract to Advance Long Range Maneuvering Projectile

SAN DIEGO – Dec. 2, 2024 – General Atomics Electromagnetic Systems (GA-EMS) announced today that it has been awarded a contract from the U.S. Navy via Advanced Technology International (ATI) for its Long Range Maneuvering Projectile (LRMP) Common Round. GA-EMS received the award under the Naval Surface Technology Innovation Consortium (NSTIC) Other Transaction Authority (OTA) contract vehicle to mature and further demonstrate the company’s LRMP prototype system to perform the Navy’s Common Round offensive strike capabilities

at increased range using fielded 155 mm artillery systems.

“The LRMP is truly an innovative design, delivering greater range and maneuverability, precision, and payload flexibility to support a variety of missions, including strike and Intelligence, Surveillance, and Reconnaissance missions,” said Scott Forney, president of GA-EMS. “The LRMP’s capabilities have the potential to deliver lethal effects to defeat static and moving targets at 120 km and beyond. This represents a factor of 4 increase in range from conventional artillery systems beyond what is currently available today.”

The LRMP’s simplified design and unique projectile shape enables very long glide ranges without the need for auxiliary propulsion or rocket assist. It is scalable for use in all existing artillery systems, ensuring compatibility with legacy launchers, autoloaders and handling equipment. With greater maneuverability, accuracy, and payload options, LRMP offers additional cross range benefits to increase the engagement zone without having to reposition the launcher.

“GA-EMS has conducted successful LRMP testing to ensure survivability, performance, and aerodynamics,” said Mike Rucker, head of GA-EMS Weapon Programs. “We are in preparations for upcoming LRMP Common Round glide testing at Dugway Proving Grounds in Utah as part of the first contract task order. Additional milestone testing and follow on tasks will be completed throughout the contract’s five-year period of performance to design, manufacture, assemble and test LRMP rounds for 155 mm artillery systems as well as other platforms.”

CENTCOM Forces Defeat Houthi Attacks on U.S. Navy and U.S.-Flagged Ships in Gulf of Aden

From U.S. Central Command, Dec. 1, 2024

TAMPA, Fla – U.S. Navy destroyers USS Stockdale (DDG 106) and the USS O'Kane (DDG 77) successfully defeated a range of Houthi-launched weapons while transiting the Gulf of Aden, Nov. 30 – Dec. 1. The destroyers were escorting three U.S. owned, operated, flagged merchant vessels and the reckless attacks resulted in no injuries and no damage to any vessels, civilian or U.S. Naval.

The destroyers successfully engaged and defeated three anti-ship ballistic missiles (ASBMs), three one-way attack uncrewed aerial systems (OWA UAS), and one anti-ship cruise missile (ASCM), ensuring the safety of the ships and their personnel, as well as civilian vessels and their crews.

These actions reflect the ongoing commitment of CENTCOM forces to protect U.S. personnel, regional partners, and international shipping, against attacks by Iran-backed Houthis.

U.S. Navy Selects X-Bow

Systems to Modernize and Automate Energetics Industrial Base

PACIFIC OCEAN (Oct. 24, 2023) The littoral combat ship USS Savannah (LCS 28) launches an SM-6 missile from a containerized launching system at a designated target during a live-fire demonstration in the eastern Pacific Ocean, Oct. 24, 2023. (U.S. Navy photo)

Initial $60 Million Award to Expand Solid Rocket Motor Production Capacity

INDIAN HEAD, MD, Dec. 3, 2024 – X-Bow Systems Inc (X-Bow), a leading non-traditional producer of advanced solid rocket motors (SRMs) and defense technologies, and Naval Surface Warfare Center Indian Head Division (NSWC IHD) today announced five contracts to-date totaling $60 million for phase 1 design, development, and long-lead procurement to advance the readiness and capacity of the energetics industrial base. The contracts have a period of performance of up to two years.

X-Bow is working several OTA efforts as a key partner to NSWC IHD focused on modernizing and automating key facilities and capabilities related to SRM production. As part of the U.S. Navy's $2.7 billion 15-year modernization plan for NSWC IHD (a piece of the Department of Defense's national defense strategy), this work will help unlock, expand and modernize the nation's energetics manufacturing capabilities while strengthening the Organic Industrial Base's ability to meet solid propellant rocket motor propulsion needs.

Under this initial phase, X-Bow will design, develop, and procure long-lead equipment to modernize and automate several capabilities at Indian Head including inert preparation facilities, propellant casting, automated propellant ingredient feeding, live rocket motor processing, and prototype premixing and curative slurry operations.

"Ensuring our warfighters are prepared for any situation requires a robust organic industrial base," said Jason Hundley, CEO of X-Bow Systems. "Our work to help modernize NSWC Indian Head will increase production capacity of solid rocket motors and other energetics systems to meet the growing needs of the U.S. military."

"Partnerships such as ours with X-Bow are vital in helping us reenergize and ultimately bolster the nation's munitions industrial base," said Dr. Phillip J. Cole, Energetics Manufacturing Department Head of the Naval Surface Warfare Center Indian Head Division.

X-Bow has assembled a team of industry subject matter experts, each with decades of experience in all areas of SRMs, working to help unlock NSWC IHD's latent capacity as a world-class facility for energetics processing and manufacture. X-Bow has already successfully completed several milestones, including completion of the design phase for inert preparation facility and automated propellant ingredient feeding facility on time and within budget, earning a reputation as a trusted partner

for NSWC IHD.

In addition to its work at NSWC IHD, X-Bow supplies new SRMs in both strategic and tactical sizes to multiple armed services and commercial customers, while also nearing completion of the world’s most affordable production campus for SRMs coming on-line in early 2025.

The United States Navy has awarded X-Bow both the Mk 72 booster and Mk 104 dual-thrust SRM development contracts to further enhance performance and increase capacitance for the service’s Standard Missile program. The Office of the Assistant Secretary of Defense for Industrial Base Policy also selected X-Bow to provide boost propulsion for the Navy-designed hypersonic All Up Round utilized by the Navy’s Conventional Prompt Strike weapon system and the Army’s Long Range Hypersonic Weapon System.

Ready to Dive: ROV Pioneer Shares Seafaring Stories in New Book

A remotely operated vehicle prepares to go on a dive. *Credit: Curt Newport*

Curt Newport spent his career as a member of an elite club — as an underwater salvage expert, he has participated in more than 150 undersea operations, ranging from the recovery of astronaut Gus Grissom's Liberty Bell 7 suborbital spacecraft to salvaging Air India Flight 182, the space shuttle Challenger and even sending images back from the RMS Titanic.

After 47 years as a trailblazer for using robotics for underwater salvage, Newport retired in 2022 and is the author of a new memoir, "Ready to Dive," about his career, published by Purdue University Press. (He has also been a race car driver and musician, but there is only so much room in the magazine.)

Underwater explorers such as Jacques Cousteau and TV shows such as "Sea Hunt" helped stoke Newport's early interest in the undersea world. He got a job building ship fenders for $3.50 an hour, then graduated to building and maintaining saturation diving systems before deciding to attend commercial

diving school in California.

When he graduated, the company Ocean Systems had purchased a remotely operated vehicle (ROV) named Scorpio One, and Newport was hired to work on that team. He worked on oilfields with ROVs, did submarine cable work for communications companies such as AT&T, “and eventually graduated up into doing deep-ocean search and recovery, mostly for the Navy,” he told *Seapower*. With that, he was off to the races for a career stretching nearly five decades.

Undersea Technology

Technology has long been used in deep-ocean work, from towed sonar arrays to ROVs, each with their own strengths and weaknesses.

Towed arrays or camera sleds are useful and can provide real-time data but have a sizable turning radius. “The downside of those towed systems is if you’re working in deep water you’re going to have some very long turnaround times. When you get to the end of a search line, you’re going to make a turn, and in deep water, that can take anywhere from nine to 12 hours,” he said.

ROVs are nimbler to deploy and have gotten larger and more capable over the years, being able to dive anywhere from 300 meters down to 7,000 meters (almost 23,000 feet). They have been joined by autonomous underwater vehicles that require no tether.

There are also manned submersibles, which hit the news again last summer when the Titan submersible imploded during a dive to the ruins of the Titanic. Newport has done two dives in the Russian Mir 1 manned submersible, to 4,800 meters (including a dive to a sunken ship) but now it and the Mir 2 have been decommissioned and are displayed in museums.

“Really for the deep work, the advantage of an autonomous

vehicle is you don’t have those long turn times. And actually, the quality of the side-scan data is better because you’re not being towed by a ship. It’s a very stable imaging platform,” he said. “The problem is, you can’t see any of the side scan data until you’ve recovered the vehicle and downloaded the data. That’s a disadvantage. And they tend to be kind of complicated.”

In the early days, the crews spent as much time wrestling with the vehicles as they did diving, Newport said.

“When I first started out with the Scorpio One vehicle, we spent most of our time broken down as opposed to diving because they were just complicated vehicles there, it was a new technology and we had a lot of problems with them. And you still have problems with it, but they’ve gotten to be a lot more reliable,” especially with their communication systems and sensors.

“And the imaging systems were nothing like what we have now,” he said. “I mean, the first vehicle I worked with, we didn’t even have a colored camera. We had a black and white. We had one black and white SIT camera, SIT means silicon, silicon intensified target. It’s a low-light camera,” Newport said.
“And you know, nowadays vehicles will have four or five, six cameras. You got cameras all over the place. And we didn’t have that. And the manipulators we had back then were fairly crude. But, you know, for the type of salvage work we were doing, you don’t need a really sophisticated manipulator. In fact, it’s better to not have one.”

Newport suits up for a dive in 1977. *Credit: Curt Newport*

Now there are also sophisticated acoustic tracking systems that can operate as deep as 11,000 meters. In a nutshell, the differences between now and when Newport started in the diving business are “reliability and the ability to tell where the heck the vehicle is relative to the ship,” he said.

The Subsea Bounty

There are a great many things at the bottom of the world’s oceans waiting to be recovered or discovered.

It’s “just limitless,” he said. “When you think about human history, how long humans have been using the ocean to go from one place or another, thousands of years, and the things that are lost in deep water are generally well preserved.”

At one wooden shipwreck in 16,000 feet of water, he found silk fabric still intact and gold wrapped in newspaper that was still readable. In the deep ocean environment, “it’s only 36 degrees down there forever, pretty much. There’s no light. There’s no oxygen. So, everything is really well preserved. …

Airplanes, ships, whatever, it’s all down there, but it costs money to do that stuff.”

Newport said the most interesting salvage of his career “has got to be Grissom’s Liberty Bell 7 spacecraft.”

That cramped vehicle was launched on July 21, 1961, in the early days of the space race with the Soviet Union. It conducted a short, sub-orbital flight and made Virgil “Gus” Grissom the second American to fly in space, but it started to sink after splashdown and nearly drowned him. It stayed below the waves for nearly four decades until Newport’s team found it in an expedition funded by the Discovery Channel.
“It’s one of those things that no one really expected us to ever be able to find it,” he said. “You know, the thing is only nine feet tall, six feet in diameter, is lost in deep water, about 6,000 feet. And everybody who knew anything about this said, ‘well, it’s lost and gone forever.’”

The salvage team was just starting their work “and it was the first target we dove on. It just came out of the gloom down there, there it was. So that, that was the most amazing ever,” he said.

Now that he’s retired, one thing Newport doesn’t do is spend time on boats.

“Ever since I started in this business, I have very rarely ever got on a boat for recreation. It just seems too much like work,” he said. “If you’re a bus driver, and then [on] your vacation time, you don’t go on a cross-country trip. You stay home. The same thing with boats, with ships, you know. People can go out in little liners and whatever all they want, I’ll just stay here and have my cocktail or something.”

Curt Newport, author of “Ready to Dive.” *Credit: Curt Newport*

Book Excerpt from ‘Ready to Dive’

On Finding the Wreck of the Challenger

I was in California visiting my brother when Challenger was lost. Like other Americans, I watched with a heavy heart as another American spacecraft was lost at sea. Unlike Liberty Bell 7, this one did not remain intact, and its location would be marked by tangled debris drifting in the Gulf Stream currents. Tons of wreckage peppered the seafloor, much like the Air India jetliner, and once again, it would be up to people like me to help find the one piece of wreckage that provides conclusive proof of the cause of the disaster. The salvage of Challenger was the largest search and recovery operation in history and required the use of a mixture of underwater technologies: side-scan sonars to map the debris field, manned submersibles to identify wreckage, and divers and remote vehicles to recover the evidence.

The task confronting the Navy was overwhelming: Search an area encompassing about 470 square nautical miles and identify all targets as being Challenger or non-Challenger, inspect and categorize the targets, then recover all wreckage that might bear evidence of the disaster. Unfortunately, the location where Challenger went down was heavily traveled by ship and air traffic and drug smugglers, and it had been the repository of a large percentage of NASA’s launch failures. There was a lot of space junk littering the seafloor.

The Navy set up their priorities as follows. First, they simply had to find the smoking gun. While it was strongly suspected that a segment of Challenger’s right-hand booster had failed, NASA had to be sure. In the tons of debris stuck on the bottom, we had to find that one piece. Second, for humanitarian purposes, the Navy had to recover the astronauts’ remains. Based on my Air India experience, I knew there would not be much left to recover. Challenger’s crew compartment had

struck the ocean at over 200 miles per hour and broken up into several pieces. Third, we had to find and recover the tracking and data relay satellite located in the shuttle’s cargo bay. If it was not found, the government would have to spend millions of dollars to change satellite communication codes so the Soviets could not find the TDRS and subsequently monitor our military communications.

And finally, we found what everyone wanted to see: a 6,000-pound chunk of steel. On one edge was an opening unlike what we had seen before. It was rounded and melted, not broken and sharp. This was how Challenger had perished.

First Forward-Deployed Virginia-Class Submarine Arrives in Guam

USS Minnesota (SSN 783) arrives at U.S. Naval Base Guam. (MC1 Justin Wolpert)
From Lt. James Caliva, Nov. 26, 2024

NAVAL BASE GUAM (Nov. 26, 2024) – The Virginia-class fast-attack submarine USS Minnesota (SSN 783) arrived to its new homeport of Naval Base Guam, Nov. 26, as part of the U.S. Navy's strategic laydown plan for naval forces in the Indo-Pacific region.

The Virginia-class fast attack submarine USS Minnesota (SSN 783) arrives at U.S. Naval Base Guam, Nov 26, 2024. Minnesota, the first Virginia-class fast-attack submarine to be forward deployed to Guam, joins four Los Angeles-class fast-attack submarines forward deployed in the Pacific. Regarded as apex predators of the sea, Guam's fast-attack submarines serve at the tip of the spear, helping to reaffirm the submarine forces' forward-deployed presence in support of a free and

open Indo-Pacific. (U.S. Navy photo by Mass Communication Specialist 1st Class Justin Wolpert)

Minnesota arrives as the first Virginia-class fast-attack submarine to be forward deployed to Guam.

“The entire crew is thrilled to be in Guam,” said Cmdr. Isaac Pelt, commanding officer, USS Minnesota. “Minnesota is composed of exemplary individuals who represent some of our brightest Sailors in the Fleet. They’re eager to get out into the local community and stand ready to contribute to our strategic objectives and maintain warfighting readiness in the Pacific.”

Commissioned Sept. 7, 2013, in Norfolk, Virginia, Minnesota was the 10th Virginia-class submarine commissioned for service. Virginia-class submarines are the Navy’s next-generation attack submarines and are set to replace Los Angeles-class submarines as they retire. Minnesota has a crew of approximately 140 Sailors and is capable of supporting various missions, including anti-submarine warfare, anti-surface ship warfare, strike warfare, and intelligence, surveillance, and reconnaissance.

The security environment in the Indo-Pacific requires that the U.S. Navy station the most capable units forward. This posture allows flexibility for maritime and joint force operations, with forward-deployed units ready to rapidly respond to deter aggression and promote a peaceful and prosperous Indo-Pacific region.

“I would like to personally extend a warm welcome to the Sailors and families of Minnesota,” said Capt. Neil Steinhagen, commander, Submarine Squadron 15. “Guam serves as a strategic outpost in the Western Pacific, playing a vital

role in maintaining stability across the region. With its motto, ‘From the North, Power,’ Minnesota embodies the strength and resolve that will make it an exceptional addition to our forward-deployed submarine force. Its presence will enhance our operational capabilities and further strengthen deterrence efforts throughout the Indo-Pacific. We are excited to have Minnesota as part of the team and look forward to the great accomplishments it will achieve while deployed forward.”

Minnesota joins four Los Angeles-class fast-attack submarines forward deployed in the Pacific. Regarded as apex predators of the sea, Guam’s fast-attack submarines serve at the tip of the spear, helping to reaffirm the submarine forces’ forward-deployed presence in support of a free and open Indo-Pacific.

For more information about Commander, Submarine Squadron 15, visit www.csp.navy.mil/css15/

USS Indianapolis returns from four-fleet deployment

SEAPOWER
The Official Publication of the Navy League of the United States

NAVAL STATION MAYPORT – The Freedom-variant littoral combat ship USS Indianapolis (LCS 17) returned to Naval Station Mayport, Fla. following a deployment to the U.S. 5th Fleet, 6th Fleet, and 2nd Fleet areas of operations, Nov. 26.

Indianapolis deployed in March 2024 as a dual-crewed command, conducting two exchanges of command between LCS Crew 112 and LCS Crew 118. This final deployment marked LCS Crew 118's second 5th Fleet deployment in 2024 and the consolidation of the crews into a single command. LCS Crew 118 deployed on May 5, 2024 to the U.S. 5th Fleet operating area to support the U.S. Navy's mission to promote freedom of navigation and the rules-based international order.

"What this team of amazing Americans achieved over the course of this deployment will pay dividends in the maintenance planning and tactics development arenas for years to come," said Cmdr. Matthew Arndt, USS Indianapolis' Commanding Officer. "As the workhorse of the Arabian Gulf, Indy executed the lower tier missions necessary to maintaining good diplomatic relations in the Middle East which allowed Standard Missile shooters to reposition to deal with bad actors in the Red Sea. I think it's pretty special that we were able to provide the 5th Fleet commander with more tools and options to

aid in the free flow of commerce through a contested waterway."

Shortly after arriving at Naval Support Activity Bahrain, LCS crews 118 and 112 merged and integrated a detachment from the "High Rollers" of Helicopter Sea Combat Squadron (HSC) 28 into the crew. Indianapolis and HSC 28 supported operations as part of Task Force 52. The ship also worked with Task Force 59, the Navy's first unmanned and artificial intelligence development force, to validate crewless technology and mesh networks. Indianapolis also supported other interoperability initiatives and aviation training events with regional partners.

"This deployment clearly marks a significant chapter in the ship's history and serves as proof the LCS class is capable of fulfilling operational and strategic goals across all theater of operations, but most of all, this deployment records the mountainous amount of teamwork, dedication and grit from our Sailors and their friends and families who support them – without them none of this would be possible," said Cmdr. William Green, USS Indianapolis' Executive Officer. Indianapolis validated the littoral combat ship concept both operationally and through administrative successes. During the final months of an 18-month deployment, Indianapolis completed a Mobility Aviation Reset, two Initial Ship Aviation Team Training events to support HSC 28.7 and HSC 28.9, certified in Explosive Safety and Cyber Security, and demonstrated navigational excellence during a mobility navigation assessment.

The ship's deployed maintenance and repair experiences were supported by Forward Deployed Regional Maintenance Center (FDRMC) and included maintenance availabilities in locations throughout the Middle East region, and Rijeka, Croatia.

"The resilience and flawless performance of this crew during this historic deployment have exemplified the highest standards of naval excellence," said Command Senior Chief

Darrell Shelton, USS Indianapolis' Senior Enlisted Leader. "Their unwavering dedication and skill ensured mission success and strengthened our maritime capabilities."

LCS is a fast, agile, mission-focused platform designed for operation in near-shore environments yet capable of open-ocean operation. It is designed to defeat asymmetric "anti-access" threats and can support forward presence, maritime security, sea control, and deterrence.

U.S. 5th Fleet area of operations encompasses about 2.5 million square miles of water area and includes the Arabian Gulf, Gulf of Oman, Red Sea, and parts of the Indian Ocean. The expanse comprises 20 countries and includes three critical choke points at the Strait of Hormuz, the Suez Canal and the Strait of Bab al Mandeb at the southern tip of Yemen.

U.S. Sixth Fleet, headquartered in Naples, Italy, conducts the full spectrum of joint and naval operations, often in concert with allied and interagency partners to advance U.S. national interests, security and stability in Europe and Africa.

U.S. 2nd Fleet, reestablished in 2018 in response to the changing global security environment, develops and employs maritime forces ready to fight across multiple domains in the Atlantic and Arctic to ensure access, deter aggression, and defend U.S., allied, and partner interests.

Truman Strike Group Concludes High-North Operations with

Strait of Gibraltar Transit

Caption: USS Harry S. Truman (CVN 75) transits the Strait of Gibraltar. (MC3 Logan McGuire)
From Story by Lt.Cmdr. Courtney Callaghan, Lt. Brandon Dedmon and Lt. Camila Healey, Nov. 27, 2024

MEDITERRANEAN SEA – The Harry S. Truman Carrier Strike Group (HSTCSG), including Italian Navy Carlo Bergamini-class frigate Carabiniere (F 593), and the Spanish Navy Álvaro de Bazán-class frigate Méndez Núñez (F-104) transited the Strait of Gibraltar for the Mediterranean Sea, Nov. 25, following over a month of operations with Allies and partners in the North and Norwegian Seas.

"Two months into deployment, and the Harry S. Truman Carrier Strike Group has experienced an unprecedented amount of operations with our NATO Allies and partners," said Rear Adm. Sean Bailey, commander of the HSTCSG. "It is truly impressive to watch the seamless integration of the armed forces of so

many countries and multitude of ships and aircraft all operating as a unified fighting force. It is an absolute testament to the strength and versatility of the NATO Alliance."

HSTCSG arrived in the North Sea on Oct. 15, immediately engaging with Allies and partners, starting with the Portuguese Navy Frigate NRP Francisco De Almeida (F 333) and Royal Norwegian Navy replenishment oiler HNoMS Maud (A-530). Almeida seamlessly integrated into the carrier strike group as an immediate force multiplier, where the ship served as a horizon reference unit for the carrier and conducted Helicopter, Visit, Board, Search, and Seizure (HVBSS) operations.

During that time, Maud provided the needed fuel for the Arleigh Burke-class guided-missile destroyers USS Jason Dunham (DDG 109) and USS Stout (DDG 55) to detach as a surface action group to conduct maritime operations in the Barents Sea, where the ships enhanced domain awareness, deterred adversaries, and practiced campaigning in the Arctic. On the way back, both ships pulled into Tromsø, Norway, for fuel, supplies, and rest and relaxation for the crew.

"It is important that U.S. naval forces demonstrate a calibrated presence in the Arctic by conducting routine operations in the region," said Cmdr. Desmond Walker, commander officer of Stout. "We must take on all opportunities to enhance our capabilities toward potential campaigns around the world."

In a display of transatlantic military cooperation and power projection, HSTCSG units conducted dual carrier strike group operations with the United Kingdom Royal Navy's aircraft carrier HMS Prince of Wales (R09) for the 7-day NATO-led maritime vigilance activity Neptune Strike (NEST) 24.2, Oct. 24-31. The two carrier strike groups transferred operational

authorities to NATO to conduct coordinated surface and air operations, including complex air defense, anti-submarine warfare, and maritime strike operations.

Vigilance activity provides an example of the long-standing strategic partnership between the United States and its NATO Allies over the last 80 years. Today, upholding the international, rules-based order is more important than ever. Harry S. Truman participated in the first Neptune Strike vigilance activity, then called Neptune Shield, in Feb. 2022, shortly after Russia's invasion of Ukraine; marking the first time the United States placed a carrier strike group under NATO's control since the Cold War.

Before and during NEST, Carrier Air Wing (CVW) 1 squadrons flew a multitude of missions with several countries to include Czech and Swedish Air Force JAS-39 Gripens, Danish F-16 Fighting Falcons, Royal Navy and Royal Norwegian Air Force F-35 Joint Strike Fighters, Finish F/A-18C Hornets. The ability to plan and fly tactical missions with Allies and partners explicitly demonstrates NATO's combat credibility in the air, expanding the striking range of any carrier strike group.

Following NEST, the strike group disaggregated to conduct port visits across the region. Harry S. Truman and Carabiniere navigated the Oslofjord with the Norwegian Fridtjof Nansen-class frigate Thor Heyerdahl (F 314) to visit Oslo, Norway. At the same time, the Ticonderoga-class guided-missile cruiser USS Gettysburg went to Helsinki, Finland, and Stout went to Gothenburg, Sweden.

While at anchor in Norway, Harry S. Truman, Vice Adm. Jeffrey Anderson, commander of U.S. 6th Fleet, and Chargé d'Affaires a.i. Eric Meyer of the U.S. Embassy to Norway, hosted a 700-person reception featuring Prime Minister Jonas Gahr Støre as the distinguished visitor. Gettysburg and Stout also hosted

receptions and office calls with host nation civilian and military leaders.

At the conclusion of their port visit, Harry S. Truman and the Norwegian Fridtjof Nansen-class frigate Roald Amundsen (F 311) headed north into the Norwegian Sea to operate above the Arctic Circle, echoing the 2024 Department of Defense Arctic Strategy's "Enhance, Engage, and Exercise" tenants by enhancing our ability to campaign in the Arctic, engaging with Allies, and exercising with calibrated presence.

"Operating in the Arctic requires comprehensive coordination and adaptability," said Capt. Dave Snowden, commanding officer, USS Harry S. Truman. "Our ship is no stranger to these waters and, while these conditions are a proving ground that tested the ship, crew, and air wing, Team Truman and Tarbox demonstrated that we are capable of operating anywhere and anytime as a combat ready team."

In an increasingly dynamic region, Harry S. Truman's integration and collaboration with Allies and partners is a testament to NATO's combined force interoperability, combat-credible collective defense, and flexibility of threat response in a region seeing increased strategic importance due to climate shifts and global competition.

The carrier strike group consists of the flagship USS Harry S. Truman (CVN 75); Carrier Air Wing (CVW) 1 with nine embarked aviation squadrons; staffs from CSG-8, CVW-1, and Destroyer Squadron (DESRON) 28; the Ticonderoga-class guided-missile cruiser USS Gettysburg (CG 64); and two Arleigh Burke-class guided-missile destroyers, USS Stout (DDG 55) and USS Jason Dunham (DDG 109).

HSTCSG's mission is to conduct prompt and sustained combat operations at sea and remain the cornerstone of the Navy's forward presence through sea control and power projection

capabilities. You can find them on DVIDS at https://www.dvidshub.net/unit/CVN75.

USS Beloit Commissioned

Sailors aboard USS Beloit (LCS 29) man the ship and bring it to life during its commissioning ceremony in Milwaukee. (EJ Hersom)

From Lt. Ayifa Brooks, Nov. 25, 2024

MILWAUKEE, Wis. – The U.S. Navy commissioned its newest Freedom-variant littoral combat ship USS Beloit (LCS 29) November 23, 2024, in Milwaukee, Wisconsin.

“I take great pride in representing Wisconsin’s manufacturing economy and the workers who power it,” said the Honorable Tammy Baldwin, U.S. Senator, State of Wisconsin. “When it

comes to our ship building industry our workers have helped sustain America's security for our national defense for generations. We boast a successful history of building ships and the city of Beloit has long played an essential role in that."

Guest speakers for the event also included the Honorable Tony Evers, Governor of Wisconsin, who delivered the commissioning ceremony's principal address. Remarks were also provided by Adm. James Kilby, Vice Chief of Naval Operations; the Honorable Gwen Moore, U.S. Representative, Wisconsin's Fourth District; Secretary of the Navy, the Honorable Carlos Del Toro; and Mr. Ali Ruwaih, Vice President, Lockheed Martin Rotary and Mission Systems, Small Combatants and Ships.

"Today we commission the Navy's newest freedom-class littoral combat ship, the first ever to bear the name of the best city in Wisconsin, USS Beloit." said Kilby. "Beloit will play a key role in implementing the Chief of Naval Operations' strategy as a platform with a crew ready with the right capabilities, weapons, sustainment, and training deterring our adversaries and ready to fight."

Beloit completed 19 certifications in just seven weeks after moving onboard and successfully passed each certification the first go round, scoring above the Navy's standards for the LCS community including completing their Light off Assessment (LOA) in less than a week with flying colors.

"I would like to thank our employees and our industry partners for their resiliency and dedication to Littoral Combat Ship Freedom Class who demonstrated exceptional commitment and delivered outstanding results," said Ruwaih. "The USS Beloit has been designed to protect and guide the crew as they carry forth the ship's motto Forward for Freedom. I could not think of a more fitting description of an LCS Sailor who displays the most versatile set of skills to help ensure freedom of the

seas.”

The audience was honored with the presence of veterans from World War II, the Korean War, Vietnam, the Iraqi war and many other significant battles. The Sailors, family and friends and community of Beloit were reminded of the profound responsibility that comes with such a legacy that the officers and crew of Beloit will undoubtedly uphold with honor, integrity and valor.

“Today is about the commissioning of a ship. But it’s also a ceremony about a calling, a calling to serve and a calling to sacrifice,” said Moore. “I am proud that this ship is being commissioned in the state where it was built. It will be the first commissioned ship named after Beloit, Wisconsin in honor of that city’s contributions to the US Navy, especially the ship engines built in that city.”

The ship’s sponsor, retired Army Maj. Gen. Marcia M. Anderson, gave the first order to “man our ship and bring her to life.”

“The commissioning of the USS Beloit is not merely a naval event – it is a celebration of American industrial might, a testament to the enduring spirit of the American people, and a tribute to the city of Beloit and the state of Wisconsin,” said Del Toro. “Everywhere you go, you will sail Forward for Freedom – serving as a beacon of our nation’s enduring commitment to independence and security for all and a reminder of the many thousands of Sailors and Marines who have gone before us.”

“We are making history! Our Badger crew and the city of Beloit have worked and waited for this moment.” said Kissinger. “We are incredibly blessed and humbled to celebrate the commissioning of the USS Beloit with the cities of Milwaukee and celebrating Beloit. Forward to Freedom!”

LCS class ships like Beloit will be equipped with Over the Horizon – Weapons System (OTH-WS) Naval Strike Missile (NSM). The OTH NSM provides the U.S. and its allies with long range anti-surface offensive strike capability as well as increased coastline defense, deterrence, and interoperability. This will include the MK 70 Payload Delivery System (PDS) which uses combat proven MK 41 Vertical Launching System (VLS) technology to provide mid-range precision fires capabilities. The MK 70 enables rapid deployment of offensive capability to non-traditional platforms and locations.

The ceremony featured early successes, future developments, milestones, fair winds and following seas while showcasing a weeklong series of events celebrating the ship, its crew, community and namesake city.

Beloit is the 15th Freedom-variant littoral combat ship (LCS) commissioned in the United States Navy and the first to be commissioned in naval service to bear this namesake.

USS Beloit (LCS 29) was built by the Lockheed Martin and Fincantieri Marinette Marine in Marinette, Wisconsin, the named on Feb. 10, 2018, and authorized on Oct. 10, 2018. It was christened May 7, 2022, and completed acceptance trials the following year. The ship was delivered to the U.S. Navy on Sept. 30, 2024.

LCS is a fast, agile, mission-focused platform designed for operation in near-shore environments yet capable of open-ocean operation. It is designed to defeat asymmetric “anti-access” threats such as mines, quiet diesel submarines and fast surface craft. They are capable of supporting forward presence, maritime security, sea control, and deterrence.

USS Beloit will be homeported at Naval Station Mayport, Florida.

The mission of CNSP is to man, train, and equip the Surface Force to provide fleet commanders with credible naval power to control the sea and project power ashore.

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