

Navy Demonstrates 'Game-Changing' System to Rearm Warships at Sea



Sailors from the Navy Expeditionary Logistics Support Group and USS Chosin (CG 65) carefully guide a missile canister using the U.S. Navy's Transferrable Rearing Mechanism as they demonstrate the ability to reload a Vertical Launching System cell on July 10 at Naval Surface Warfare Center, Port Hueneme Division's Underway Replenishment Test Facility. (U.S. Navy photo by Dana Rene White)

From Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD)

Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD) successfully conducted the first land-based demonstration of the Transferrable Rearing Mechanism (TRAM), which will enable U.S. Navy surface combatants to reload missile canisters into their MK 41 Vertical Launching Systems (VLS) at sea.

Secretary of the Navy Carlos Del Toro has made TRAM one of his top priorities. In a speech at Columbia University in New York City in December 2022, the secretary set out the goal that, “during my tenure, we will set the Navy on track to deliver the game-changing capability to rearm our warships at sea. Being able to quickly rearm our warships’ vertical launch tubes at sea will significantly increase forward, persistent combat power with the current force. No longer will our combatants need to withdraw from combat for extended periods to return for vulnerable in-port reloading of weapon systems.... My intention is to perfect this capability and field it for sustained, persistent forward-strike capacity during wartime.”

The Naval Sea Systems Command (NAVSEA) and NSWC PHD team delivered on the secretary’s call for speed at the Sea-Air-Space Exposition in National Harbor, Maryland, in April, where Del Toro said, “The at-sea demonstration will take place later this year – an unheard-of pace for a capability with such revolutionary strategic potential. If we had waited to Program Objective Memorandum, or POM, for it, we wouldn’t see it demonstrated for at least another two or three years. Instead, we’re on track to begin fielding it in two or three years.”

The test’s execution underscored the versatility and rapid adaptability of the Navy’s sailors and engineers. Tim Barnard, director of the NAVSEA Technology Office (05T), praised the speed at which the sailors of the Navy Expeditionary Logistics Support Group and USS Chosin (CG 65) became acquainted with TRAM in order to execute the demonstration.

“This team has been remarkable,” Barnard said. “Without previous familiarity with TRAM, the sailors got spun up for this week’s shore demonstration with just a week of training. They understand TRAM is a game-changer that will allow our ships to reload missiles just like they refuel – using connected underway replenishment, steaming at speed and in open ocean.”

This week's land-based test incorporated, for the first time, real-time analytics and direct monitoring through instrumentation, which facilitated real-time assessment and modifications that would otherwise take weeks or months. This unique approach will inform the upcoming at-sea demonstration and follow-on engineering updates.

Ryan Hayleck, technical director for NAVSEA 05T and technical lead for the demonstration, emphasized during the test that "as we introduce new improvements based on the sailors' inputs this week and in the upcoming at-sea test, TRAM will only get better and faster from here. I am very excited to take TRAM to sea."

NSWC PHD Commanding Officer Capt. Tony Holmes stressed the importance of the Navy's support behind the test.

"NSWC PHD appreciates this opportunity to further such a critical and essential capability for the warfighter and the U.S. Navy, thanks to the efforts and focused interest of the secretary of the Navy," Holmes said. "We look forward to continuing to work on the next steps."

Technical Director Jeff Koe added that the resourceful spirit of NSWC PHD's Underway Replenishment Team has demonstrated that innovation is alive and well in the Navy.

"Our enterprising teammates years ago saw the need to rearm surface ships at sea and took the initiative to design a way to materialize that vision," Koe said. "Now, our Navy will benefit from that ingenuity as NSWC PHD and its partners bring TRAM to fruition."

Rich Hadley, director of NSWC PHD's underway replenishment division which designed TRAM, explained that "by solving key relative motion challenges, TRAM is a capability enabling reloading operations while underway in significant sea states. TRAM will greatly expand the fleet's logistical flexibility, resilience, as well as volume and tempo of long-range fires."

Thanking the NAVSEA-NSWC PHD leadership team and the sailors from the Navy Expeditionary Logistics Support Group and USS Chosin who carried out the demonstration, Steven Brock, senior adviser to the secretary of the Navy, noted the historic import of the occasion.

“This demonstration that you superbly delivered on the secretary’s aggressive timeline sends a powerful message,” Brock said. “This revolution in surface warfare will make our existing fleet even more formidable, both in sustained forward presence and lethality – and will create a powerful new near-term deterrent that will disrupt the strategic calculus of our adversaries.”

Hunter Stires, maritime strategist with the Office of the Secretary of the Navy, added, “TRAM will enable us to do the modern-day equivalent of firing two broadsides to the enemy’s one. The U.S. Navy’s very best are making this capability real.”

NAVCENT Units Awarded Navy Unit Commendation



By U.S. Naval Forces Central Command Public Affairs | July 25, 2024

MANAMA, Bahrain – The Secretary of the Navy recently awarded the Navy Unit Commendation (NUC) to several units assigned to

or operating within U.S. Naval Forces Central Command.

The award recognized the commands for their outstanding performance during the period from October 19, 2023, to May 30, 2024.

Commands include:

Commander, U.S. 5th Fleet (COMFIFTHFLT); Commander, Task Force (CTF) 53; CTF 54 Bahrain Team; CTF 54 Japan Team; CTF 55 / Destroyer Squadron (DESRON) 50; CTF 56, Task Group (TG) 56.1 Explosive Ordnance Disposal (EOD), TG 56.9 Intelligence Exploitation Team (IET), TG 56.3 Expeditionary Reload Team (ERT); CTF 57; Task Force (TF) 3; Commander, Submarine Squadron (CSS) 21; Commander, Submarine Group (COMSUBGRU) 7; COMSUBGRU 7 NCCS; Anti-Submarine Warfare Forces; TF 51 / 5th Marine Expeditionary Brigade; Amphibious Ready Group (COMPHIBRON) 8; 26th Marine Expeditionary Unit (Special Operations Capable); Antiterrorism Security Team Company-Central Command (FASTCENT); 1st Battalion, 6th Marines (BLT 1/6); Marine Medium Tiltrotor Squadron (VMM) 162; Combat Logistics Battalion 22; Tactical Air Control Squadron (TACRON) 21; Fleet Surgical Team (FST) 8; Naval Beach Group (NBG) 2; Beachmaster Unit 2; Assault Craft Unit 2; Assault Craft Unit 4; USS Laboon (DDG 58); USS Mason (DDG 87); USS Florida (SSGN 728) (Blue Crew); USS Thomas Hudner (DDG 116); USS Bataan (LHD 5); USS Carter Hall (LSD 50); USS Lewis B. Puller (ESB-3); USS Stethem (DDG 63); USS McFaul (DDG 74); USS Gravely (DDG 107); USNS Alan Shepard (T-AKE-3); USNS Amelia Earhart (T-AKE-6); USNS Kanawha (T-AO-196); USNS Supply (T-AOE-6); Detachment, Deployable Joint Command and Control (DJC2) Rotation 23.2; DJC2 Rotation 24.1; Fleet Logistics Support Squadron (CRC) 40; Tactical Operations Control Squadron (TOCRON) 10; Patrol Squadron (VP) 5; VP 9; VP 10; VP 40; Fleet Air Reconnaissance Squadron (VQ) 1; Helicopter Sea Combat Squadron (HSC) 26.

Established by the Secretary of the Navy on Dec. 18, 1944, and awarded by the secretary with the approval of the President, a

unit commendation is conferred on any ship, aircraft, detachment or other unit of the U.S. Navy or Marine Corps that distinguished itself for extremely meritorious service in support of military operations, which were outstanding when compared to other units performing similar service.

The U.S. 5th Fleet area of operations encompasses approximately 2.5 million square miles of water space and includes the Arabian Gulf, Gulf of Oman, Red Sea, parts of the Indian Ocean and three critical choke points at the Strait of Hormuz, Suez Canal and Strait of Bab al-Mandeb.

July 24 U.S. Central Command Update

From U.S. Central Command, July 24, 2024

TAMPA, Fla. – In the past 24 hours, U.S. Central Command (USCENTCOM) forces successfully destroyed two Iranian-backed Houthi missiles on launchers in a Houthi-controlled area of Yemen. It was determined these weapons presented an imminent threat to U.S., coalition forces, and merchant vessels in the region. These actions were taken to protect freedom of navigation and make international waters safer and more secure.

SECDEF Announces Two Flag Nominations for SOUTHCOM, NDU



Vice Adm. Alvin Holsey



Rear Adm. Peter Garvin

Secretary of Defense Lloyd J. Austin III announced today that the president has made the following nominations:

Navy Vice Adm. Alvin Holsey for appointment to the grade of admiral, with assignment as commander, U.S. Southern Command, Doral, Florida. Holsey is currently serving as military deputy commander, U.S. Southern Command, Doral, Florida.

Navy Rear Adm. Peter A. Garvin for appointment to the grade of vice admiral, with assignment as president, National Defense University, Washington, D.C. Garvin is currently serving as president, Naval War College, Newport, Rhode Island.

Coast Guard Cutter James Returns Home Following South Atlantic Ocean Deployment to Counter Illegal, Unreported and Unregulated Fishing



The U.S. Coast Guard Cutter James (WMSL 754) and the Brazilian navy Amazonas (P 120) conduct a passing exercise at sea in the southern Atlantic Ocean, May 25, 2024. (U.S. Coast Guard photo by Petty Officer 3rd Class Logan Kaczmarek)

NORTH CHARLESTON, S.C. – The crew of the Coast Guard Cutter James (WMSL 754) returned to their home port in North Charleston, July 11, after completing a 98-day patrol in the South Atlantic Ocean and the Caribbean Sea.

James' crew patrolled in support of Operation Southern Cross, promoting maritime governance with partners in the South Atlantic by working to illuminate and monitor illegal, unreported, and unregulated fishing (IUU-F) activity in the region.

While on patrol, James interacted with partners in Uruguay, Argentina and Brazil, strengthening relationships by focusing on shared interests in countering illicit maritime activity. Through several subject matter expert (SME) exchanges and joint engagements, James demonstrated counter IUU-F capabilities to promote the rules-based order and advance

White House initiatives to further advance Atlantic Cooperation.

During the patrol, James' crew conducted port visits to Montevideo, Uruguay; Buenos Aires, Argentina; and Rio de Janeiro and Fortaleza, Brazil. At each city, Coast Guard personnel engaged with their international counterparts to promote partnership. Notably, James' command cadre met with senior leadership from the Uruguay Navy, the Argentine Prefectura Naval, and the Brazilian Navy, holding roundtable discussions to tackle the global impacts of IUU-F while devising strategies to enhance maritime domain awareness, improve information sharing and combat the threat together.

Additionally, James' small unmanned aircraft system (UAS)-contracted team presented their system and capabilities to senior naval leadership, illustrating the sizable benefits of UAS in detecting and monitoring IUU-F activity. The visits included community relations events and tours of the ship, and culminated in diplomatic receptions aboard James, bringing together key civilian and military leaders from each respective country.

Showcasing law enforcement expertise and dedication to joint efforts against illicit maritime activity, James' crew organized and hosted in-port SME exchanges and at-sea mock boarding engagements with the Argentine Prefectura Naval and the Brazilian Navy. James crew members conducted a mock counter-IUU-F engagement with the Argentine Prefectura vessel Mantilla (GC-24), demonstrating the procedures of a high seas boarding inspection on a foreign-flagged fishing vessel. James also organized multiple demonstrations of visit, board, search and seizure procedures to exercise interoperability with the Brazilian Navy.

During the cutter's visit to Buenos Aires, James's crew received a presidential welcome from Argentina's President Javier Milei. Coast Guard Capt. Donald Terkanian welcomed

President Milei on board and provided him with a tour of James. This historic event initiated several other key engagements with Argentina's Vice President Victoria Villarruel, senior military and civilian leaders.

During the deployment, James' crew members also had the unique opportunity to join U.S. Navy Carrier Strike Group 10 to execute Operation Southern Seas 2024 with the Brazilian Navy and celebrate the bicentennial of U.S.-Brazilian diplomatic relations. Promoting interoperability with the Brazilian Navy and simultaneously advancing the Tri-Service Maritime Strategy through U.S. sea-service engagement, James completed formation steaming and close quarters maneuvering exercises with Brazilian Navy frigates BNS União (F 45) and BNS Independência (F 44) alongside the USS George Washington (CVN 73) and USS Porter (DDG-78). James conducted a joint live-fire exercise, utilizing its onboard 20mm close-in-weapon system to engage a target flare in tandem with Independência, União and Porter. Finally, James and Independência exchanged crewmembers for five days.

After departing the Southern Atlantic Ocean, James patrolled the Caribbean Sea to execute Operation Martillo in support of Joint Interagency Task Force-South, collaborating with fellow Coast Guard units as well as the Department of Defense, Department of Homeland Security, and international partners to counter illicit trafficking in the region.

James is a 418-foot, Legend-class national security cutter. The cutter's primary missions are counter-drug operations and defense readiness. James falls under the command of the Coast Guard Atlantic Area in Portsmouth, Virginia. Atlantic Area oversees all Coast Guard operations east of the Rocky Mountains to the Arabian Gulf. In addition to surge operations, Atlantic Area also allocates ships to deploy to the Caribbean Sea, Eastern Pacific Ocean, and South Atlantic Ocean to combat transnational organized crime and illicit maritime activity.

Coast Guard Offloads More Than \$96 Million in Illegal Narcotics Interdicted in the Caribbean Sea



Crew members from Coast Guard Cutter Forward offload more than \$96 million in illegal narcotics at Port Everglades, Florida, July 22, 2024. (U.S. Coast Guard photo by Petty Officer 3rd Class Nicholas Strasburg)

From U.S. Coast Guard 7th District, July 23, 2024

MIAMI – The crew of Coast Guard Cutter Forward offloaded more than 7,302 pounds of cocaine with an assessed street value of approximately \$96 million in Port Everglades, Monday.

Coast Guard crews, working alongside interagency and international partners, interdicted the illegal drugs in the international waters of the Caribbean Sea during three separate cases.

“This was another vital success of our combined drug interdiction efforts,” said Lt. Cmdr. Juan Ramirez, a Coast Guard District Seven staff attorney. “These drug offloads underscore our continued partnerships with the U.S. Navy and the Royal Netherlands Navy in combating the flow of illicit narcotics across the Caribbean. The success of our joint efforts to save lives by reducing the availability of these harmful drugs is dependent on our cooperation with regional and international partners.”

The following assets and crews were involved in the interdictions:

- Royal Netherlands Navy ship HNLMS Groningen (P 843)

- USS St. Louis (LCS 19)

- U.S. Coast Guard Tactical Law Enforcement Team Pacific (PAC-TACLET) Law Enforcement Detachments 110 and 105

- U.S. Coast Guard Helicopter Interdiction Tactical Squadron (HITRON)

- Joint Interagency Task Force South (JIATF-South)

- U.S. Customs and Border Protection Air and Marine Operations (CBP-AMO)

Three suspected smugglers will face prosecution in federal courts by the Department of Justice.

PAC-TACLET is part of the Coast Guard's deployable specialized forces program, with advanced training in high-risk interdiction operations in the maritime environment, including non-compliant vessel pursuit missions. Law enforcement detachments from PAC-TACLET and HITRON aircrews deploy aboard Coast Guard, U.S. Navy and foreign allied ships to augment their capabilities and authorities to perform counter drug missions under U.S. law.

Detecting and interdicting illegal drug traffickers on the high seas involves significant interagency and international coordination. The Joint Interagency Task Force South in Key West, Florida conducts the detection and monitoring of aerial and maritime transit of illegal drugs. Once interdiction becomes imminent, the law enforcement phase of the operation begins, and control of the operation shifts to the U.S. Coast Guard throughout the interdiction and apprehension. Interdictions in the Caribbean Sea are performed by members of the U.S. Coast Guard under the authority and control of the Coast Guard's Seventh District, headquartered in Miami.

These interdictions relate to Organized Crime Drug Enforcement Task Forces (OCDETF) designated investigations. OCDETF identifies, disrupts, and dismantles the highest-level criminal organizations that threaten the United States using a prosecutor-led, intelligence-driven, multi-agency approach. Additional information about the OCDETF program can be found at <https://www.justice.gov/OCDETF>.

USCGC Forward (WMEC 911) is a 270-foot Famous-class, medium endurance cutter homeported in Portsmouth, Virginia. The cutter's primary missions are counter drug operations, migrant interdiction operations, enforcement of federal fishery laws, and search and rescue in support of Coast Guard operations throughout the Western Hemisphere.

July 23 U.S. Central Command Update

From U.S. Central Command

July 23, 2024

TAMPA, Fla. – In the past 24 hours, U.S. Central Command (USCENTCOM) forces successfully destroyed three Iranian-backed Houthi missile launchers in a Houthi-controlled area of Yemen.

It was determined these weapons presented an imminent threat to U.S., coalition forces, and merchant vessels in the region. These actions were taken to protect freedom of navigation and make international waters safer and more secure.

IFS Enterprise Software Supports Shipbuilding, Aviation Management and Maintenance

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. – A global Information technology company has expanded its products in recent years to provide tailored digital enterprise software to shipbuilders, ship repair

yards, air arms, and airlines.

IFS is a global enterprise software company “working with some of the biggest, advanced shipbuilders in the world, across portfolio products,” said Matt Medley, IFS global industry director for Aerospace and Defense (A&D), during an interview with *Seapower*.

“We focus on asset-centric and service-centric industries that tend to be highly regulated like aerospace and defense, one of our six core industries,” Medley said. “Shipbuilding here gets a special focus because we actually have two units that work on shipbuilding: the “gray” ships for defense that fall under Aerospace and Defense codes [and] the commercial – the “white ships” – under Engineering and Construction.

“Shipbuilding is always complex, and of course when you add the defense angle onto it, with working with the federal government with all of the contracting rules, [it] becomes incredibly complex,” he said.

IFS, a privately held company based in Sweden, has more than 6,000 employees. Topline revenues topped \$1 billion in 2022, and are set to go to \$2 billion in 2025, said Medley, a former Air Force C-130 pilot. The company’s North American headquarters is based in Chicago. The company’s products are used by more than 10,000 customer organizations.

The IFS A&D sector is headquartered in Ottawa, Canada. Medley said the company has been growing by a mixture of internal growth and acquisition of other companies, with the A&D sector formed by the 2017 acquisition of a company called MXI, which had developed an asset-management software product called Maintenix used by airlines such as Southwest Airlines. IFS A&D sells its products directly to government, militaries, and defense contractors.

IFS is teamed with Lockheed Martin beginning in 2021 to

provide digital transformation of U.S. Navy's maintenance, repair, and overhaul (MRO) legacy systems into "a single, fully modernized and responsive logistics information system," according to a company release. IFS software enhances planning and execution of maintenance by using artificial intelligence, digital twins, and predictive analytics.

IFS is now in the limited-deployment phase for introducing its solutions for the U.S. Navy's aircraft fleet.

"The Navy decided to start with one of IFS's different applications for its first limited deployment," Medley said. "The final solution will be an IFS product. They wanted to crawl before you walk before you run, because Maintenix is incredibly complex, and complex for a reason and that's why it's the Number One in the world in this market, because it has come very, very sophisticated guardrails to make sure that you don't do things incorrectly."

The company's core ERP (enterprise resource planning) IFS Cloud software is used by the shipbuilding and ship repair industry.

"The prime OEMs [original equipment manufacturers] and the prime contractors are our biggest customers," Medley said, noting that the list included the three General Dynamics shipbuilders – NASSCO, Bath Iron Works, and Electric Boat – and BAE Ship Repair, Vigor Shipyards, and Austal.

IFS's solutions for the ship industries include not only the core ERP functions such as accounting and management, but also materials management, subcontracting, project management, product development, engineering, procurement, constructed out-fit, operations, repair, and maintenance.

"We code these solution sets across the breadth of the life cycle of the large asset – everything from design all the way out to sea trials and commissioning, integrating your operations out the entire value chain, forward and backward,

and then internally as well with all of your processes all the way down to the shop floor,” Medley said.

Medley said that the sale of a product is the beginning of a relationship, not the end, noting that it’s never “a sale and walk away.”

Like most software companies, IFS uses an “evergreen model” to provide subscription-based ongoing updated software to its customers. The company issues major updates twice per year, in the spring and the fall.

U.S. Navy Conducts Successful Live-Fire Demonstration at RIMPAC 2024



A Common Unmanned Surface Vehicle (CUSV), heads out to sea for the Poniard launching test from ROKS Cheon Ja Bong as part of

the Rim of the Pacific Exercise (RIMPAC), 12 July.

By From: Program Executive Office Unmanned and Small Combatants (PEO USC) Public Affairs, July 22, 2024

HONOLULU, Hawaii – The U.S. Navy achieved a significant milestone at the Rim of the Pacific (RIMPAC) 2024 exercise with the successful launching and testing of Poniard rockets from a Common Unmanned Surface Vehicle (CUSV). The 12 July test is part of the Navy's mission to continually enhance and expand its maritime capabilities and operational flexibility via security cooperation and innovation with allies and partners.

Multiple Poniard rockets, low-cost guided munitions, were fired from the CUSV during a series of exercises conducted off the coast of Hawaii. The live-fire demonstration was the culminating event of an ongoing Foreign Comparative Test (FCT) project under the auspices of the Office of the Under Secretary of Defense for Research and Engineering (OUSD R&E). This innovative capability test demonstrates the Navy's commitment to integrating mature cutting-edge technology into its operations to maintain maritime superiority and readiness.

"The successful live fire demonstration from the CUSV showcases our ability to rapidly deploy and use low-cost guided munitions from unmanned platforms," Capt. Matthew Lehmann, program manager of the Littoral Combat Ship (LCS) Mission Modules Office. "This capability enhances our operational reach and effectiveness, ensuring the Navy remains a dominant force in maritime operations."

This live fire demonstration was part of the RIMPAC exercise, held biennially in and around the Hawaiian Islands, which is the world's largest international maritime warfare exercise hosted by U.S. Third Fleet. It provides a unique training opportunity for participating nations' navies to foster and sustain cooperative relationships that are critical to

ensuring the safety and security of the world's oceans. This year's exercise includes 29 nations, 40 surface ships, three submarines, more than 150 aircraft, and 25,000 personnel.

"The Rim of the Pacific exercise has grown over the years to be the world's largest and premier joint combined maritime training opportunity," said Vice Adm. John Wade, commander, U.S. 3rd Fleet and RIMPAC 2024 Combined Task Force (CTF) commander. "The exercise's purpose is to build relationships, to enhance interoperability and proficiency and, ultimately, contribute to the peace and stability in the vitally-important Indo-Pacific region."

For more RIMPAC 2024 information and updates, visit <https://www.cpf.navy.mil/rimpac/>. Any additional questions or queries should be sent to rimpac.media@gmail.com.

The Navy's LCS mission modules program is a part of the Program Executive Office, Unmanned and Small Combatants portfolio, which designs, develops, builds, and delivers the Navy's unmanned maritime systems; mine warfare systems; special warfare systems; expeditionary warfare systems; and small surface combatants.

New DOD Strategy Calls for Enhancements, Engagements, Exercises in Arctic



The USS Pasadena breaks through the ice in the Beaufort Sea, March 12, 2022, during Ice Exercise, an exercise that allows the Navy to assess operational readiness in the Arctic. (Photo by: Navy Petty Officer 2nd Class Trey Hutcheson)

July 22, 2024 | By C. Todd Lopez, DoD News

The Defense Department today released its [2024 Arctic Strategy](#). The strategy acknowledges how environmental changes are affecting the Arctic region, details the implications for U.S. security and spells out how the department plans to be ready to meet new challenges there.

“The Arctic region of the United States is critical to the defense of our homeland, the protection of U.S. national sovereignty and the preservation of our defense treaty commitments,” Deputy Defense Secretary Kathleen Hicks said today during a briefing at the Pentagon. “Our Arctic strategy will guide the department’s efforts to ensure that the Arctic remains a secure and stable region.”

Eight nations have a presence in the Arctic, including Canada,

Denmark, Finland, Iceland, Norway, Sweden, the United States and Russia. All have interests there for both commerce and security.

Climate changes have meant the melting of ice in the Arctic and the opening of new sea routes, which means new opportunities for commerce and resource exploitation, but also increased risk to nations whose borders were previously protected by the region's inaccessibility.

"Climate change is fundamentally altering the Arctic, and with it, geopolitics and U.S. defense missions," Hicks said. "The readiness of our forces for those missions is always foremost on our minds, and that's why for decades, across Republican and Democratic administrations, the department has been seeking to ensure our military capabilities can meet the mark, even in the face of a changing climate."

Climate change and the shifts in the operating environment, Hicks said, mean the U.S. must rethink how to protect warfighters and prevent conflict.

The People's Republic of China, not an Arctic nation, is increasing its presence in the Arctic. The PRC operates three icebreakers in the Arctic, for instance, and has a military presence there as well. The Chinese military has also demonstrated its ability to operate in the Arctic by conducting operations with the Russian navy, for instance.

"While not an Arctic state, the PRC seeks greater influence in the region, greater access to the region, and a greater say in its governance," Hicks said. "That's concerning given that it's the only strategic competitor with the will and increasingly the wherewithal to remake the international order."

Russia's presence in the Arctic, including its military presence – the largest of all Arctic nations – can hold U.S. and allied territories at risk. At the same time, Russia is

increasing its presence in the Arctic by reopening Soviet-era military installations.

“Russia continues to pose an acute threat to security and stability in the region,” Hicks said. “Russia has continued to build up its military infrastructure in the Arctic and assert excessive claims over Arctic waters.”

Russia is also partnering with China, Hicks said, and this presents additional concerns for U.S. defense.

“We’ve seen growing cooperation between the PRC and Russia in the Arctic, commercially, with the PRC being a major funder of Russian energy exploitation in the Arctic, and increasingly militarily, with Russia and China conducting joint exercises off the coast of Alaska,” Hicks said. “All of these challenges have been amplified because the effects of climate change are rapidly warming temperatures and thinning ice coverage, and it’s enabling all of this activity.”

The DOD’s 2024 Arctic Strategy addresses these concerns in the Arctic with three lines of effort, including enhancing the capabilities of the joint force, greater engagement with allies and partners and exercising U.S. presence in the Arctic.

“Our Arctic strategy adopts a ‘monitor and respond,’ approach in the region,” Hicks said. “It is underpinned by robust domain awareness and intelligence, surveillance and reconnaissance capabilities, cooperation with our allies and partners and deterrent power enabled by the agility of the joint force. The strategy focuses on enhancing our domain awareness and Arctic capabilities, engaging with our allies and partners and exercising calibrated presence in the region.”

Iris Ferguson, the deputy assistant secretary of defense for arctic and global resilience, said mission enhancement includes, among other things, a focus on domain awareness in

the Arctic.

“We must improve our domain awareness and enhance our ability to detect and respond with our Canadian allies to threats to the homeland,” Ferguson said. “A key focus for my office is championing investments that will enhance our awareness of threats in the region. We want to make sure that we have the right sensing architecture and the right communications architecture for command and control.”

Also, a target for operational enhancements in the Arctic are enhancements to communications and data architecture; intelligence, surveillance and reconnaissance capabilities; infrastructure; and cold weather equipment and mobility.

With seven of the eight Arctic nations also members of NATO, the U.S. has great partnership opportunities in the region. The strategy directs the U.S. to take advantage of those partnerships and others, as a way to strengthen U.S. security.

“Our strong network of partners, including Arctic allies, federal, state, local and tribal partners, are key stakeholders in securing the Arctic and our homeland,” Ferguson said. “From the communities that host our bases and troops in Alaska, to our colleagues in the U.S. Coast Guard and the Department of Homeland Security, we all have a role to play to maintain the stability of the Arctic Region.”

Finally, the 2024 Arctic Strategy directs the department to enhance U.S. security through increased presence in the Arctic, including increased operations and military exercises.

“Exercising tactics and equipment is a prerequisite not only for success but for survival in the unique Arctic environment,” Ferguson said. “To this end, one of my office’s key implementation priorities will be ensuring that the joint force is equipped and prepared to operate there.”

The strategy calls for continued service-specific, joint, interagency and combined exercises as well as war games, simulations and tabletop exercises that focus on the Arctic. The strategy also calls for military services to conduct training in the Arctic to build experience operating there.