

U.S. Navy Increases Contract for Sarcos Guardian DX Mobile Robotic Avatar System



The Sarcos Defense Guardian DX tele-operated robot at work.
SARCOS DEFENSE

SALT LAKE CITY – Sarcos Defense said Oct. 12 the U.S. Navy has exercised a contractual option to expand testing, evaluation and demonstrations of the Guardian DX teleoperated dexterous robotic system for Navy-specific tasks, with a focus on maintenance, modernization and sustainment requirements.

Sarcos Defense is a wholly owned subsidiary of Sarcos Technology and Robotics Corp., which develops robots that augment humans to enhance productivity and safety.

The Guardian DX robot is the defense-specific variant of the GuardianXT highly dexterous mobile robotic system, itself is a variant of the award-winning Sarcos Guardian XO full-body, battery-powered industrial exoskeleton. The Guardian DX robot is a teleoperated, dual-armed dexterous robot designed to perform tasks with human-like dexterity while keeping the operator at a safe distance in challenging and hazardous conditions, including at height. Its modular design enables the Guardian DX robot to be mounted to a variety of mobile bases.

“Consistent with the chief of naval operations’ readiness and modernization priorities announced earlier this year, we couldn’t be more proud to partner with the U.S. Navy to deliver innovative and cost-effective solutions to enhance our nation’s readiness at sea,” said Tom Jackson, president of Sarcos Defense. “The Navy’s exercise of this contract option is an important step in our efforts to

commercialize the Guardian DX consistent with the Navy's requirements."

India, Japan Conclude Joint Naval Exercises in Arabian Sea



Navy ships from India and Japan take part in JIMDEX, a bilateral exercise in the Arabian Sea. *INDIAN NAVY*

A significant bilateral naval exercise just completed in the Arabian Sea. The navies of Japan and India conducted JIMDEX 2021, the fifth iteration of their joint maritime exercises, which ran Oct. 6-8.

The exercise was led by Rear Adm. Ajay Kochhar, flag officer commanding the Western Fleet of the Indian navy, and Japanese maritime Self Defense Force (JMSDF) Rear Adm. Ikeuchi Izuru, commander, Escort Flotilla Three.

India's guided missile destroyer INS Kochi (D64) and guided missile frigate INS Teg (F45) operated with Izumo Class-multi-purpose destroyer Kaga (DDH 184) and destroyer JS Murasame (DD 101).

According to an Indian ministry of defense press release, the forces were engaging in a high tempo of operations focused on air, surface and sub-surface dimensions of maritime operations as well as the air domain.

"The complex maritime exercises undertaken will enable the two navies to further strengthen their already wide-ranging

strategic partnership and, when required, to jointly safeguard their maritime interests and ensure peace, security and stability in the region.”

Both navies share some similar platforms and systems, like the P-8 maritime patrol aircraft. Both navies operate indigenous ships and aircraft, like the Kochi and Izumo, which looks more like a helicopter carrier than a destroyer (at 27,000 tons fully loaded, Izumo is the largest ship in the JDMSF fleet). India’s and the Russian designed stealth frigate Teg and MiG 29 fighters might be representative of potential adversaries.

During the exercises the units conducted over-the-horizon targeting, antisubmarine warfare, naval gunnery and underway replenishment. The ships’ embarked cross-deck landings to demonstrate interoperability. The exercise involved what the Indian MoD statement described as “a high tempo of flying operations with MiG 29K fighters coming in for multiple simulated air strike on surface units.”

India’s cooperation with other navies may be seen as statement to an increasingly competitive China.

“The IOR [Indian Ocean Region] is quickly becoming the home of a contest between India and China,” wrote Aman Thakker in *New Perspectives in Foreign Policy*, published by the Center for Strategic and International Studies. “China has made aggressive moves to advance its strategic interests in the region, particularly by gaining access to military bases and strategic ports by employing illiberal and predatory economic practices.

“India now recognizes that it cannot allow China to replicate the playbook it used in the South China Sea and challenge territorial claims and international norms of freedom of navigation, overflight, and unimpeded commerce in the IOR,” Thakker wrote.

It is also significant for Japan in that it is conducting exercises far from home waters and with a nation other than the U.S., which can also be interpreted as a signal to China.

“The complex maritime exercises undertaken will enable the two navies to further strengthen their already wide-ranging strategic partnership and, when required, to jointly safeguard their maritime interests and ensure peace, security and stability in the region,” the Indian navy said in its statement.

Australia's Request for More MH-60R Helicopters Approved By State Dept.



An MH-60R Seahawk helicopter assigned to the Swamp Foxes of Helicopter Maritime Strike Squadron (HSM) 74 flies in front of the guided-missile cruiser USS San Jacinto (CG 56). The U.S. State Department has approved a possible Foreign Military Sale of 12 MH-60Rs. *U.S. NAVY / Chief Petty Officer Bruno Gaudry*
WASHINGTON – The U.S. State Department has approved a possible Foreign Military Sale to Australia of MH-60R Seahawk multi-mission helicopters and related services and equipment, the Defense Security Cooperation Agency said Oct. 8.

The deal has an estimated cost of \$985 million. Australia has requested 12 MH-60Rs along with their engines, mission systems, guns, space parts, technical documentation, logistics support and others, the release said.

“This proposed sale will improve Australia’s capability to

perform antisurface and antisubmarine warfare missions along with the ability to perform secondary missions including vertical replenishment, search and rescue, and communications relay,” said a release announcing the approval. “Australia will use the enhanced capability as a deterrent to regional threats and to strengthen its homeland defense. Australia will have no difficulty absorbing this equipment into its armed forces.”

Australia previously ordered 24 MH-60Rs, the last of which was delivered to the Royal Australian Navy in July 2016.

The principal U.S. contractor will be Lockheed Martin Rotary and Mission Systems, Owego, New York.

Royal Navy Looks to Canadian Coast Guard for Arctic Training and Expertise



The U.K. Royal Navy’s HMS Lancaster recently returned from a deployment to the Arctic. *U.K. ROYAL NAVY*

The U.K. Royal Navy is learning the cold facts about operating in the Arctic from shipmates in the Canadian Coast Guard, who have a great deal of cold weather experience.

British sailors are training with Canadians to learn how to navigate through icy waters and how to break ice where necessary, while Canadian Coast Guard personnel will have operational training opportunities and gain experience with crewless technology with the Royal Navy, according to a press release from the Royal Navy.

An agreement to formalize the arrangement was signed between the two NATO nations at the Canadian Coast Guard's (CCG) headquarters in Ottawa by its commissioner, Mario Pelletier, and Second Sea Lord Vice Admiral Nick Hine on Oct. 8.

"I am delighted to sign this agreement that will see the Royal Navy and Canadian Coast Guard work even closer together in the Arctic, sharing and developing our ice experience, as we strive to become ever more interoperable and interchangeable," said Hine.

"The Canadian Coast Guard welcomes the opportunity to build on the existing close relationship between Canada and the United Kingdom. Through this memorandum of understanding, we will benefit from the Royal Navy's operational experience and expertise, and we look forward to sharing our skills and knowledge of the Arctic," said Pelletier.

The two services have worked together before. In 2020, several Royal Navy watchkeeping officers from HMS Protector, the UK's sole ice patrol ship, sailed with a CCG vessel to gain experience in ice operations.

"The sharing of the Canadian Coast Guard's wide experience and expertise will mean British sailors are better equipped when sailing to the frozen region," the Royal Navy statement said.

Canadian Coast Guard icebreaking vessels, from hovercraft to heavy and light icebreaking and long-endurance ships, keep Canadian ports open year-round, freeing ice-bound vessels, escorting ships through ice-covered waters and maintaining a constant presence the High North during the navigable season.

The Royal Navy has shown a renewed interest in the Arctic region in recent years because of its key strategic importance to the security of the U.K.

"Warships are a regular presence in the region, while Royal Marines train in Norway annually as the U.K.'s specialists in

the cold weather warfare,” said the Royal Navy statement. “HMS Lancaster recently returned from a on a 3,000-mile round-trip through the Norwegian Sea and into the Arctic Circle – the latest Royal Navy vessel to head to the High North over the past few years.”

BAE Systems Successfully Tests APKWS Laser-Guided Rockets Against UAS



An artist's conception of an APKWS strike against an unmanned aircraft. *BAE SYSTEMS*

HUDSON, N.H. – BAE Systems Inc. has successfully tested APKWS laser-guided rockets in precision strike tests against Class 2 unmanned aircraft systems at Yuma Proving Grounds, Arizona, the company said Oct. 11.

The 2.75-inch test rockets combined standard M151 warheads and Mk66 motors with APKWS precision guidance kits and a newly developed proximity fuze, enabling them to engage and destroy airborne drones at a fraction of the cost of traditional counter-UAS strike capabilities.

“Unmanned aerial vehicles of all sizes are a growing threat increasingly deployed by adversaries around the globe,” said Greg Procopio, director of Precision Guidance and Sensing Systems at BAE Systems. “The flexibility and affordability of APKWS rockets make them a good choice for taking out small, tactical military drones. Our successful test strikes demonstrate the creativity of our engineers and an innovative and economical use of existing DoD materiel to address an

emerging threat.”

BAE Systems conducted test fires and engineering tests to develop a capable system for U.S. armed forces and allies. The key to APKWS rockets’ counter-UAS capability is the innovative proximity fuze jointly developed by L3Harris Technologies and Technology Service Corp. The fuze combines target proximity detection and point detonation capabilities, and is a drop-in replacement for existing M423 fuzes, allowing APKWS rockets to destroy UAS without the need for a direct hit.

Unlike expensive C-UAS missiles, APKWS rockets do not need to lock on the target before launch, instead relying on semi-active laser guidance optics that activate on launch, saving warfighters precious seconds when it counts.

APKWS guidance kits transform unguided rockets into precision-guided munitions with explosive effects and range capabilities that make them well-suited for today’s dynamic military engagements. APKWS rockets have proven combat capabilities and the flexibility to strike a variety of stationary and moving targets from planes, helicopters, ground vehicles, boats, and remote weapon stations.

Coast Guard Contracts Ameresco for First Battery Energy Storage System Project at Training Center Petaluma



An aerial photograph of Coast Guard Training Center Petaluma,

the enlisted school for the service's food service specialists, health service technicians, storekeepers, yeomen, information technicians, electronics technicians, and operations specialists. *U.S. COAST GUARD*

FRAMINGHAM, Mass. and PETALUMA, Calif. – Ameresco Inc. has entered into a \$43 million Energy Savings Performance Contract with the U.S. Coast Guard at the service's largest west coast training facility, Training Center Petaluma.

The project will be the USCG's first battery energy storage system project and the Department of Homeland Security's largest solar renewable energy project integrated within the USCG's first fully functional, renewable energy-powered microgrid, the company said in a release.

Training Center Petaluma faces a range of energy security and resiliency challenges endemic to the climate and regional power infrastructure in northern California. In light of the regularity and severity of weather events and utility interruptions affecting the site, USCG competitively selected Ameresco in February 2021 to fast-track development of a comprehensive Energy Savings Performance Contract to enhance the site's electric infrastructure and resiliency posture. The microgrid will integrate existing distributed backup generators with a new 5 megawatt (MW) solar array and an 11.6MWh battery energy storage system to power the entire site in the event of a loss of utility. Planned improvements also feature the deployment of new power distribution transformers, Smart controls in 10 buildings across campus, LED lighting improvements for over 8,000 fixtures, installation of new electric vehicle charging infrastructure and heating, ventilation, and air conditioning equipment upgrades.

"This contract award enables continuity of operations in an environment of unpredictable climate hazards and will increase Training Center Petaluma's relevance throughout the region, while sustaining our Coast Guard mission ready total workforce," said Capt. Steven Ramassini, commanding officer

for the training campus.

Once completed, Training Center Petaluma will realize a cost savings of more than \$1.2 million in the first year alone. The project will also reduce the site's annual electricity and propane consumption by 8.7M kWh and 50.8 kgal, respectively.

"We are so honored to lead the design and development of this historic project for the United States Coast Guard," said Nicole Bulgarino, executive vice president, Ameresco. "The upgrades outlined integrate energy efficiency and clean onsite energy with advanced microgrid controls and significantly enhance the training facility's energy resiliency. The finished project will set a strong precedent for future Federal renewable generation and battery storage projects."

Construction on the project is set to begin in October 2021 and be complete by fall 2023.

Coast Guard Cutter Juniper Completes Patrol in Oceania



The crew of the Coast Guard Cutter Juniper (WLB 201) return to Honolulu after completing a 45-day patrol in Oceania in support of Operation Aiga, Oct. 1. During the 10,000 nautical-mile patrol, the cutter's crew conducted operations to counter illegal, unreported, and unregulated fishing and strengthened relations with foreign allies while promoting maritime sovereignty and resource security of partner nations in the Indo-Pacific. *U.S. COAST GUARD*

HONOLULU – The crew of the Coast Guard Cutter Juniper (WLB 201) returned to Honolulu after completing a 45-day patrol in Oceania in support of Operation Aiga Oct. 8, the Coast Guard

14th District said in a release.

During the 10,000 nautical-mile patrol, the cutter's crew conducted operations to counter illegal, unreported, and unregulated (IUU) fishing and strengthened relations with foreign allies while promoting the collective maritime sovereignty and resource security of partner nations in the Indo-Pacific.

Operation Aiga, the Samoan word for family, is designed to integrate Coast Guard capabilities and operations with the United States' Pacific Island Country partners in order to effectively and efficiently protect shared national interests, combat IUU fishing and strengthen maritime governance on the high seas.

"During our deployment in Oceania, Juniper conducted fisheries enforcement in an effort to counter and deter illegal fishing activities in the Central Pacific," said Cmdr. Chris Jasnoch, the Juniper's commanding officer. "We were able to establish a presence on the high seas and in the U.S. Exclusive Economic Zone [EEZ] in American Samoa while also patrolling our partner nation's EEZs."

The Juniper's crew worked under the Western and Central Pacific Fisheries Commission (WCPFC), which strives to protect the region's fish stocks on the high seas. The WCPFC has 26 member nations and seven participating territories, 18 of which have enforcing authority. The United States is both a WCPFC member and an enforcing nation.

"We get to take part in a unique, rewarding mission in the Pacific," said Lt. j.g. Ryan Burk, the operations officer on the Juniper. "We have the privilege of building and strengthening relationships with our Pacific Island partners, while protecting and preserving global resources."

During the patrol the Juniper embarked a Mandarin linguist

from the U.S. Marine Corps to query 11 foreign fishing vessels and board four fishing vessels, generating vital information reports for IUU fishing in the region.

The crew also conducted joint operations with a French navy Falcon 200 aircraft to identify and intercept vessels on the high seas. They also conducted a fueling evolution with the Coast Guard Cutter Oliver Berry's crew, another participant in Operation Aiga.

"We strengthened our joint capabilities with the French Navy in the fight against IUU fishing activities on the high seas in support of the WCPFC," said Jasnoch.

To promote American Samoa's maritime transportation system, the Juniper crew serviced vital aids to navigation in Pago Pago Harbor and in neighboring islands, demonstrating the cutter's multi-mission capabilities.

In addition to normal buoy maintenance, Juniper accomplished the first Waterways Analysis and Management System Report for Pago Pago since 2003. This report integrates the opinions of Pago Pago Harbor's regular users to review the relevance of existing aids and reevaluate where new aids would be useful, ensuring the sustainability and safety of the waterway.

Juniper's crew also put together a donation box for the children in Pago Pago, including sporting equipment, books and toys for the Boys and Girls Club of American Samoa.

"Despite COVID restrictions preventing an in-person event, it felt good to know that we made a difference," said Ensign Elaine Weaver, the Juniper's community relations officer.

The Juniper is a 225-foot seagoing buoy tender home ported in Honolulu and is responsible for maintaining aids to navigation, performing maritime law enforcement, port and coastal security, search and rescue and environmental protection.

SECNAV: Developing Capabilities to Deter China is Navy Department's Top Governing Concept



Secretary of the Navy Carlos Del Toro delivers remarks at the christening ceremony of the Arleigh Burke-class guided-missile destroyer USS Carl M. Levin (DDG 120) Oct. 2, at General Dynamics Bath Iron Works shipyard. His new strategic guidance says China is the “pacing challenge” for the U.S. maritime services. *U.S. NAVY / Mass Communication Specialist 2nd Class T. Logan Keown*

ARLINGTON, Va. – The U.S. Navy’s and Marine Corps’ top priority will be to develop capabilities to deter China, the secretary of the Navy said in his strategic guidance to the service.

In a document released Oct. 8, “One Navy-Marine Corps Team: Strategic Guidance from the Secretary of the Navy,” Secretary Carlos Del Toro named China as the top challenge facing the Navy and Marine Corps.

“Since my confirmation as the 78th Secretary of the Navy, I have characterized the most pressing challenges facing the Department of the Navy as the ‘Four Cs:’ China, Culture, Climate Change, and COVID,” Del Toro wrote. “The People’s Republic of China represents the pacing challenge against which we must plan our warfighting strategies and investments.”

Of the four, Del Toro wrote, “the long-term challenge posed by

the People's Republic of China is the most significant for the Department. The People's Liberation Army Navy [PLAN] has radically expanded both its size and capabilities, growing to become the world's largest fleet. Complementing its modern surface combatants are hundreds of coast guard and maritime militia vessels that Beijing employs to compete in the 'gray zone,' the contested arena between routine statecraft and conflict. For the first time in at least a generation, we have a strategic competitor who possesses naval capabilities that rival our own, and who seeks to aggressively employ its forces to challenge U.S. principles, partnerships, and prosperity.

"Similarly, Russia, Iran, and other authoritarian states use gray-zone aggression and coercion to challenge the rules-based international order. The Department of the Navy will be expected to contribute our unique warfighting potential to compete in the gray zone, deter further aggression, and prepare to prevail in conflict as part of an integrated warfighting approach with our fellow services.

"As our central governing concept, the top priority for the Department of the Navy will be to develop concepts of operations and capabilities that bolster deterrence and expand our warfighting advantages vis-a-vis the People's Republic of China," he wrote. "We will ensure our Fleet and Fleet Marine Forces [FMF] are organized, trained, equipped, and employed in support of this priority, and that we are able to campaign and win now and in the future. In doing so, we must remain able to deter the full range of threats to our nation's security from other authoritarian states and transnational challenges that will continue to threaten our national security and economic interests. The Department of the Navy must always stand ready to address the multitude of crises that develop globally."

Del Toro listed four measures to enable strategic advantage: Expand forward presence; enhance warfighting readiness; innovate and modernize ; and combat climate change.

To read the entire document, click here: https://media.defense.gov/2021/Oct/07/2002870427/-1/-1/0/SECNAV%20STRATEGIC%20GUIDANCE_100721.PDF

NATO'S Naval Mine Warfare Centre of Excellence Leverages Institutional Knowledge, Expertise



Standing NATO Mine Countermeasures Group One (SNMCMG1) is one of four standing maritime groups composed of ships from various allied countries. These vessels are continuously available to NATO to perform different tasks ranging from participation in exercises to operational missions. *NATO*

The NATO Naval Mine Warfare Centre of Excellence (NMW COE) in Ostend, Belgium, is NATO's main source of expertise regarding all aspects of NMW, leveraging the collective knowledge and expertise from the entire NMW community in support of the alliance.

Like the 26 other COEs accredited by NATO, the NMW COE focuses four main pillars: education, training, exercise and evaluation; analysis and lessons learned; doctrine development and standardization; and concept development and experimentation.

The center brings mine warfare experts together for an annual symposium. Although its two previous conferences were canceled for COVID-19 and other reasons, the 2021 conference was held virtually in June.

“Our focus was how we can learn from each other – not only from military, but also from civilians, and how we can work together in the future,” said Cmdr. Herman Lammers of the Royal Netherlands Navy, director of the NMW COE.

In addition to holding its own conference, the NMW COE participates in a long list of working groups, training courses, conferences and exercises.

“We’re part of NATO’s naval armament, standardization and defense planning working groups, as well as any conference where Naval Mine Warfare is on the agenda. Those meetings are paramount to ensure efficient networking and exchange of expertise and knowledge,” Lammers said. “If we want to be a hub, we need to be present at all those meetings.”

The NMW COE is collocated with EGUERMIN (Ecole de Guerre des Mines), the Belgian-Netherlands Naval Mine Warfare School at Ostend, and assists with their national and international courses when required. Belgium and the Netherlands are founding “framework nations,” with Poland and Italy joining the COE as sponsoring nations. Germany participates via EGUERMIN, through a memorandum of understanding. Lammers said other nations are welcome, too.

Lammers said the center serves as a “hub of knowledge.” The Lessons Learned and Analysis (LL&A) branch is actively involved in collecting and analyzing lessons learned and lessons identified that are forwarded through the NATO Lessons Learned portal, the NATO Allied Maritime Command (MARCOM) at Northwood, United Kingdom, or directly to the NMW COE. After analyzing the problem, a remedial action is proposed and sometimes even tested, so necessary improvements can be made. Lammers said the NMW COE shares this knowledge with MARCOM, The NATO Joint Analysis and Lessons Learned Centre in Lisbon, Portugal, and among the other maritime COEs.

“It’s important to identify what works, as well as understand

what doesn't work and learn from our mistakes," said Belgian Navy Cmdr. Ward De Grieve, the center's chief of staff. "It's the only way to improve."

As a COE, Lammers said his team is constantly monitoring and evaluating the future trends and technologies.

"Staying on top of all the new developments in a continuous task. By enabling the exchange of information and experience throughout the maritime community, we can help identify synergies," Lammers said. "I refer to maritime instead of naval because mines and unexploded ordnance in the maritime domain are no longer exclusively a military issue."

The COE actively contributes to and participates in exercises like BALTOPS and Bold Move by providing advice and scenario inputs. They develop and evaluate new operating concepts and adapt existing doctrine, as well as establish experimentation with new technologies.

The center conducted experiments during BALTOPS 50 to test and validate experimental tactics involving the use of unmanned underwater and surface vehicles and implemented them into the existing naval mine countermeasures planning and evaluation software tool MCM EXPERT.

The center helps to achieve interoperability among NATO navies through understanding and promoting standardization proposals and updates.

"We are actively participating and contributing to the various working groups and syndicates within NATO to provide balanced advice and proposals to adapt, improve and update existing doctrine," Lammers said.

Lammers said the NMW COE's team of seven subject matter experts and small support staff has extensive NMW knowledge and expertise, and can use its relationships, partnerships and connections to assist in many ways.

“If we don’t have an answer to a question, we can rely on our extensive network to provide the necessary answers,” he said. “The NATO NMW COE is the hub of knowledge within NMW. Our focus is not only on the long term, assisting NATO in transformation, but also on real-time practical support to the units at sea.”

Italian army Gen. Paolo Ruggiero, the deputy supreme allied commander transformation, said, “the alliance has been successful because it has constantly adapted and transformed into what was needed to be relevant.”

He credits part of that success to the 27 accredited NATO COEs, including the NMW COE, and the work they do on the four pillars.

According to Ruggiero, the COEs belong to the participating nations, not NATO per se, but are accredited by NATO. There are a set of prerequisites and a rigorous process for a center to be accredited and periodic assessments are required for a COE to maintain its status.

The COEs provide all of the nations a venue to share what they do best. “Each one of them has unique expertise,” Ruggiero said. “They can cover similar areas of interest in terms of domain – for instance, maritime, land, air – but they’re specific in one specific military area and expertise.”

The COEs may not involve every NATO nation, but most represent more than one country, and in some cases, they are joined by partner nations such as Sweden, Finland, Switzerland and Austria.

“Our partners benefit from this sharing of information, and we benefit from them,” Ruggiero said.



A meeting of the NATO Naval Mine Warfare Centre of Excellence, based in Ostend, Belgium. *NMW COE*

Contributing to the Alliance

Ruggiero said the COEs have provided a way for NATO's post-Cold War member nations to visibly contribute to the alliance.

"A new country could contribute to NATO by hosting a center of excellence, while at the same time raising the flag of NATO in their country," he said, adding that COEs are an extraordinary force multiplier for NATO.

"The COEs provide the alliance with a community of nearly 1,000 military and civilian experts that provide their knowledge and experience," Ruggiero said.

Capt. Robert A. Baughman, USN, mine warfare division director at the U.S. Naval Surface and Mine Warfighting Development Center (SMWDC), presented at the recent conference. He said the NATO NMW COE is analogous to SMWDC as a warfighting development center working on tactics, doctrine development, experimentation and integration of new technologies.

"NATO officers can truly specialize as career mine warfare experts," Baughman said. "The NATO NMW COE provides a unique opportunity for us to leverage all that institutional knowledge and expertise. They're also co-located with EGUERMIN, their schoolhouse, and we're plugged in with both of those organizations.

"We leverage their courses of instruction – specifically the staff officer and principal warfare officer courses, for our warfare tactics instructors training pipeline, and take part in their exercises for staff training. We also participate in the NATO Naval Mine Warfare battle rhythm, conferences and in their working groups," he said. "Mine warfare is a team sport, so it's critical for us to understand how our allied and partner mine countermeasures systems work, and to integrate into combined operations to build interoperability."

Multiple Allied Carrier Strike Groups Operate Together in 7th Fleet



The United Kingdom's carrier strike group led by HMS Queen Elizabeth (R 08), and Japan Maritime Self-Defense Forces led by (JMSDF) Hyuga-class helicopter destroyer JS Ise (DDH 182) joined with U.S. Navy carrier strike groups led by flagships USS Ronald Reagan (CVN 76) and USS Carl Vinson (CVN 70) to conduct multiple carrier strike group operations in the Philippine Sea. *U.S. NAVY / Mass Communication Specialist 3rd Class Gray Gibson*

PHILIPPINE SEA – U.S. Navy carrier strike groups led by flagships USS Ronald Reagan (CVN 76) and USS Carl Vinson (CVN 70) joined with Japan Maritime Self-Defense Force's (JMSDF) Hyuga-class helicopter destroyer JS Ise (DDH 182) and the United Kingdom's carrier strike group (CSG 21) led by HMS Queen Elizabeth (R08) to conduct multiple carrier strike group operations in the Philippine Sea, Oct. 3, Commander, Task Force 70 Public Affairs said Oct. 8.

The integrated at-sea operations brought together more than 15,000 Sailors across six nations and demonstrates the U.S. Navy's ability to work closely with its unmatched network of alliances and partnerships in support of a free and open Indo-Pacific.

Carrier Strike Group (CSG) 5 from Ronald Reagan is operating with CSG 1 from Carl Vinson for the first time during its 2021 deployment and marks the second time operating with UK CSG 21 and JS Ise this year.

"We are picking up right where we left off in 5th Fleet with the Queen Elizabeth team and building on what we started with the JMSDF after first leaving Japan," said Rear Adm. Will Pennington, commander, Carrier Strike Group 5/Task Force 70. "Adding the fantastic Vinson team to this potent force dynamically displays our capabilities across all domains, keeping us ready to respond to a range of maritime challenges."

The strike groups conducted flight operations and air defense exercise scenarios as well as simulated strikes against maritime targets. The operations brought together F/A-18 Super Hornets from Carrier Air Wing (CVW) 5 aboard Ronald Reagan, along with F-35Bs from both Royal Air Force and U.S. Marines operating from Queen Elizabeth, and F-35Cs from Carrier Air Wing (CVW) 2 aboard Carl Vinson.

"Interoperability across air platforms, to include the addition of the Air Wing of the Future, is just one way we have integrated operations for enhanced lethality, readiness and maneuverability across our collective forces," said Rear Adm. Dan Martin, commander, Carl Vinson Carrier Strike Group (VINCSG)/CSG 1. "This is Carl Vinson strike group's fourth exercise with allies and partners since entering 7th Fleet, and we have continued to improve our ability to conduct prompt and sustained operations at sea with a more mobile, agile and flexible force. Through alliances and partnerships, we have developed the right operational concepts, plans, proficiencies and capabilities to bolster our maritime advantage."

Vinson and U.K. CSG conducted joint interoperability flights together in 7th Fleet in August, the first time CSG-21 engaged with the F-35 "C" model, assigned to CVW-2. The two F-35B squadrons have been deployed together aboard HMS Queen Elizabeth for her inaugural, global deployment, demonstrating the interoperability the F-35 provides.

“The UK Carrier Strike Group offers the largest 5th Generation air wing afloat today and working with our close allies to develop operating procedures and capabilities while concurrently showcasing the agility of land and carrier-based aviation in the Indo-Pacific demonstrates our commitment to the region,” said Commodore Steve Moorhouse, OBE Royal Navy, Commander U.K. Carrier Strike Group.

The training and events provided commanders the chance to practice capabilities across the maritime domain, as participating forces focused on anti-air, anti-surface, and anti-submarine warfare tactics and procedures.

“In addition to the two carrier strike groups of the U.S. Navy, I feel very honored to be able to train with the Royal Navy’s most advanced carrier strike group, which is an extremely valuable experience,” said Rear Adm. KONNO Yasushige, commander of JMSDF Escort Flotilla 2. “Through this training, we enhanced our tactical skills and interoperability with the participating navies. In order to realize a free and open Indo-Pacific, the JMSDF will work closely with the naval forces of the U.S., Britain, the Netherlands, and Canada, which share the same objectives, to respond to global challenges and defend maritime order based on the rule of law.”

Joining the JS Ise from the JMSDF were the destroyers JS Yamagiri (DD 152) and JS Kirishima (DDG 174). The frigates HMCS Winnipeg (FFH 338) from the Royal Canadian Navy and HMNZS Te Kaha (F 77) from the Royal New Zealand Navy, represented their countries in the operations.

In addition to the carrier, the Queen Elizabeth Strike Group is comprised of anti-submarine frigates HMS Richmond (F 239) and HMS Kent (F 78), guided-missile destroyers HMS Defender (D 36) and HMS Diamond (D 34), Royal Fleet Auxiliary’s RFA Fort Victoria and RFA Tidespring, U.S. guided-missile destroyer USS

The Sullivans (DDG 68), and Dutch frigate HNLMS Evertsen (F 805).

CSG 1 includes aircraft carrier USS Carl Vinson (CVN 70), the squadrons of Carrier Air Wing (CVW) 2, Destroyer Squadron (DESRON) 1, Arleigh Burke-class guided-missile destroyers USS Chafee (DDG 90), USS Stockdale (DDG 106) and Ticonderoga-class guided-missile cruiser USS Lake Champlain (CG 57).

CSG 5 includes the U.S. Navy's only forward-deployed aircraft carrier USS Ronald Reagan (CVN 76), the embarked staffs of Task Force 70 and Destroyer Squadron (DESRON) 15, Ticonderoga-class guided-missile cruiser USS Shiloh (CG 67), and aircraft from Carrier Air Wing (CVW) 5.

The Ronald Reagan Carrier Strike Group and CSG 1 are deployed to the U.S. 7th Fleet area of operations in support of a free and open Indo-Pacific region.

U.S. 7th Fleet conducts forward-deployed naval operations in support of U.S. national interests in the Indo-Pacific area of operations. As the U.S. Navy's largest forward-deployed fleet, 7th Fleet interacts with 35 other maritime nations to build partnerships that foster maritime security, promote stability, and prevent conflict.