U.S. Coast Guard encounters People’s Republic of China military naval presence in Bering Sea

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

U.S. Coast Guard 17th District, July 10, 2024

JUNEAU, AK –The U.S. Coast Guard encountered multiple People’s Republic of China military ships in the Bering Sea, Saturday and Sunday.

The crew of U.S. Coast Guard Cutter Kimball (WMSL 756) detected three vessels approximately 124 miles north of the Amchitka Pass in the Aleutian Islands, and an HC-130J aircrew from U.S. Coast Guard Air Station Kodiak detected an additional vessel approximately 84 miles north of the Amukta Pass.

All four of the People’s Republic of China vessels were transiting in international waters but still inside the U.S. Exclusive Economic Zone, which extends 200 nautical miles from

the U.S. shoreline.

“The Chinese naval presence operated in accordance with international rules and norms,” said Rear Adm. Megan Dean, Seventeenth Coast Guard District commander. “We met presence with presence to ensure there were no disruptions to U.S. interests in the maritime environment around Alaska.”

The Chinese vessels responded to U.S. Coast Guard radio communication and their stated purpose was “freedom of navigation operations.” Coast Guard cutter Kimball continued to monitor all ships until they transited south of the Aleutian Islands into the North Pacific Ocean. The Kimball continues to monitor activities in the U.S. Exclusive Economic Zone to ensure the safety of U.S. vessels and international commerce in the area.

The Coast Guard, in coordination with U.S. Northern Command, was fully aware of and tracked the Chinese naval presence. In September of 2021 and 2022, Coast Guard cutters deployed in the Bering Sea also encountered Chinese surface action groups.

The Kimball patrolled under Operation Frontier Sentinel, a Coast Guard operation designed to meet presence with presence when strategic competitors operate in and around U.S. waters. The U.S Coast Guard’s presence strengthens the international rules-based order and promotes the conduct of operations in a manner that follows international norms.

Coast Guard Cutter Kimball is a 418-foot Legend-class national security cutter homeported in Honolulu, Hawaii.

U.S. Navy Purchases Persistent Systems Networking Devices to Support Littoral Operations

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

July 9, 2024

MPU5 networking devices on unmanned surface vehicles (USVs) enable real-time sensor data streaming for expeditionary warfare.

Persistent Systems, LLC (“Persistent”), a leader in mobile ad hoc network (MANET) technology, announced today that the U.S. Naval Information Warfare Center (NIWC) Pacific awarded the company a $1.3 million contract to supply the U.S. Navy with MPU5 networking devices and Integrated Sector Antennas in support of expeditionary/littoral warfare operations.

The sector antennas and MPU5s will establish a secure network among unmanned surface vehicles (USVs), individual operators,

ships, and ground control stations (GCSs). This network will consolidate data to enhance situational awareness and expedite operations in littoral domains through a unified communications and command center.

“By integrating unmanned systems with our wireless Wave Relay® MANET technology, the U.S. Navy obtains real-time data, including radar, sonar, Chemical Biological Radiological Nuclear and Explosive (CBRNe) information, in any littoral theater to get their users to shore safely and maintain shipboard situational awareness in an area of operations (AO),” said Ed Leopold, Director of Business Development, U.S. Navy, for Persistent Systems.

Leopold noted, “wireless real-time data collection via the MPU5s is a dramatic improvement over current procedures, which require operators to manually recover a USV containing critical Area of Responsibility (AoR) data on an SD card, which they must then remove and insert into a designated computer to analyze the data.”

According to company officials, the U.S. Navy has been testing Persistent’s MANET technology in support of expeditionary warfare and other CONOPS for almost five years. However, this recent contract is the service’s largest USV-centric MANET purchase to date.

“Our Wave Relay® MANET technology is currently employed on Navy USVs, rigid inflatable boats (RIBs), patrol boats, and other ships. Moving forward, testing will scale up with a larger number of MANET nodes within Line of Sight (LOS) and Beyond LOS (BLOS),” said Leopold.

This is the second contract with NIWC Pacific, Persistent Systems has been awarded. Earlier this year, the company announced it had been awarded a $3.6 million contract to integrate MPU5s with Navy sensors.

July 10 U.S. Central Command Update

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

From U.S. Central Command

July 10, 2024

TAMPA, Fla. – In the past 24 hours, U.S. Central Command forces successfully destroyed two Iranian-backed Houthi uncrewed aerial vehicles (UAV) over the Red Sea and one Iranian-backed Houthi uncrewed surface vessel (USV) in the Red Sea.

It was determined the UAVs and USV 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.

USS John C. Stennis Leaves Dry Dock, Begins Second Phase of Refueling and Complex Overhaul

From Program Executive Office Aircraft Carriers Public Affairs, 10 July 2024

WASHINGTON NAVY YARD – USS John C. Stennis (CVN 74) undocked from drydock April 8, completing a significant milestone during its multi-year Refueling and Complex Overhaul (RCOH) at HII-Newport News Shipbuilding (NNS) in Newport News, Virginia.

Commissioned in December 1995, the nation’s seventh Nimitz-

class nuclear-powered aircraft carrier entered RCOH in May 2021, under a $3 billion contract with NNS. The overhaul is now more than 65 percent complete and tracking for redelivery in October 2026.

Aircraft carriers enter refueling complex overhauls at the mid-point of their 50-plus-year lifespan, incorporating upgrades to propulsion equipment, infrastructure and electronic systems. After NNS flooded the dry dock with more than 100 million gallons of water, the ship moved to the shipyard's outfitting berth, where shipyard workers and crew will complete the installation and testing of major components and combat support systems.

Rear Adm. Casey J. Moton, Commander, Program Executive Office Aircraft Carriers, recognized the important milestone, adding that the next phase of the ship's overhaul will deliver impressive new technologies to support the Navy's warfighters, enabling John C. Stennis to meet operational taskings during another 25-plus years of service.

"When John C. Stennis redelivers, she'll be the most technologically advanced Nimitz-class aircraft carrier in the Navy," Moton said. "She'll bring to the fleet the highest level of capability across all mission sets."

Moton also acknowledged that the shipyard and Navy team have been navigating several challenges and working under an extended redelivery schedule due both to mandatory growth work following ship condition assessments, as well as industrial base challenges.

"The Navy-Industry team is dealing with the lingering effects of a post-COVID industrial base—one that includes a reduced or unstable capability and capacity along with challenges in workforce recruitment, retention and proficiency. However, the bottom line is that fleet operators need us to deliver these

capital assets to our warfighters ready for tasking, so we are working on a daily basis with our industry partners and within the Navy to accelerate problem solving and to speed production on the deck plates—all focused on delivering readiness. I am proud of our entire team for achieving this important production milestone towards redelivering USS John C. Stennis to the fleet."

Capt. Mark Johnson, manager of the PEO Aircraft Carriers In-Service Aircraft Carrier Program Office, said that the Navy-Industry team is leveraging lessons learned from the Navy's previous RCOHs, especially on USS George Washington (CVN 73), which was redelivered in May 2023.

"Recognizing the changing workforce demographics coming out of the COVID pandemic, the combined Navy/Shipbuilder team has taken measurable steps to improve the level of support to the mechanic or sailor actually performing work on the ship by leveraging new digital management tools and processes," said Johnson.

More than 25 million total man-hours of work will go into John C. Stennis' RCOH, with crews refitting and installing a new square and tapered mast, accommodating state-of-the-art defense and communications systems, updates to the ship's shafts, refurbished propellers, and modernized aircraft launch and recovery equipment.

"RCOH construction enhances nearly every space and system on the carrier, beyond the most critical requirement to defuel and refuel the ship's two nuclear reactors and to repair and upgrade the propulsion plant," Johnson said. "We work on every part of the ship, from the hull, screws and rudders to more than 600 tanks; thousands of valves, pumps and piping components; electrical cables and ventilation; as well as combat and aviation support systems. It's demanding, complex work that challenges every member of the planning team,

shipyard crews and ship’s force.”

During the upcoming outfitting and testing phase, shipbuilders will complete the overhaul and installation of the ship’s major components and test its electronics, combat and propulsion systems. This period will also focus on improving the ship’s living areas and the general quality of life for the sailors, including crew living spaces, galleys and mess decks.

U.S.-Australian Interchangeability: VMFA-214 leaders fly RAAF F-35A

U.S. Marine Corps Lt. Col. Robert Guyette, an F-35B Lightning II pilot and commanding officer of Marine Fighter Attack Squadron (VMFA) 214, Marine Aircraft Group 13, 3rd Marine Aircraft Wing, places an American flag and an Australian flag in the cockpit of a Royal Australian Air Force F-35A Lightning II aircraft assigned to RAAF No. 75 Squadron before a bilateral training flight at RAAF Base Tindal, Northern Territory, Australia, June 20, 2024.(U.S. Marine Corps photo by Cpl. Nicholas Johnson)

By Cpl. Nicholas Johnson, 3rd Marine Aircraft Wing, July 8, 2024

TINDAL, NORTHERN TERRITORY, Australia – Northern Territory – In a demonstration of the ever-increasing interchangeability between U.S. Marine Corps and Royal Australian Air Force aviation, two F-35B Lightning II pilots with Marine Fighter Attack Squadron (VMFA) 214, Marine Aircraft Group 13, 3rd Marine Aircraft Wing, flew RAAF F-35A Lightning II aircraft, June 13, 2024.

“Interoperability is two different organizations figuring out ways to work together; interchangeability means the entire

allied F-35 force can pool parts, maintainers, weapons, tactics – and now pilots and aircraft – to accomplish any mission," said U.S. Marine Corps Lt. Col. Robert Guyette, commanding officer of VMFA-214.

In May 2024, VMFA-214 deployed more than 200 Marines and eight F-35Bs from Marine Corps Air Station Yuma, Arizona, to RAAF Base Tindal, to conduct bilateral training with RAAF No. 3 Squadron and No. 75 Squadron and participate in the RAAF led exercise Diamond Storm. This training iteration enhanced each air wings' "fight together" mindset.

Guyette and Maj. John Rose, executive officer of VMFA-214, took part in the bilateral training. The pilots flew RAAF F-35A jets alongside RAAF and USMC pilots in their respective platforms.

"Our formations are completely blended, and our pilots pull the same lessons learned from this incredibly realistic training," Guyette said. "When the XO and I flew in the RAAF F-35As, we spent zero time briefing procedural differences in execution, because we have been adhering to the same standards as the RAAF from day one."

Guyette flew alongside his counterpart, Wing Commander Andrew Nilson, commanding officer of No. 75 Squadron.

"The most impressive aspect of the exercise has been the depth of interoperability and interchangeability between our two nations," Nilson said. "It was a further demonstration of our cooperation that Marine Corps pilots were able to fly RAAF F-35A aircraft during the exercise, allowing the RAAF to share and learn tactics, techniques and procedures at a level of complexity that has truly tested the F-35's capability."

Incorporating two aircraft variants, pilots and maintainers from both teams introduced additional planning complexities at every organizational level.

“The mission planning factors for each event are very challenging, realistic, and relevant for high end conflict against the peer adversary,” Rose said.

Such integration was made possible through previous training exercises between VMFA-214 and RAAF F-35 squadrons. VMFA-214 has trained directly with all three RAAF F-35 squadrons over the past year, building on the tactical, technical and personal coordination between the two aviation forces.

“This ‘fight together’ mindset has also been enhanced by the personal relationships established between the Marine Corps and the RAAF,” Rose said. “VMFA-214 and RAAF No. 75 squadron were on the same tactical page from day one.”

VMFA-214’s transpacific deployment was preceded by a similar one executed by Marine Fighter Attack Squadron (VMFA) 314, Marine Aircraft Group 11, 3rd MAW, in the summer of 2023. VMFA-314, an F-35C Lightning II squadron from MCAS Miramar, deployed four F-35C aircraft across the Pacific to RAAF Base Williamtown, New South Wales, and trained alongside RAAF No. 3 Squadron.

“VMFA-314’s detachment to Australia last year provided a winning template and really did an excellent job of setting the proper conditions for VMFA-214 to be successful this year,” Rose said. “They passed on lessons learned, which VMFA-214 leveraged to efficiently deploy the squadron from MCAS Yuma across the Pacific to RAAF Base Tindal, Australia.”

After reviewing VMFA-314’s deployment, VMFA-214 was prepared to deploy an additional four jets this year, expanding the latitude of training options for both Marines and the RAAF. Beyond professional growth, the Marines of VMFA-214 forged personal connections and friendships with RAAF aviators during the deployment.

“I have some long-time friendships within the RAAF that go back to my first Marine Corps fleet tour,” Rose said. “It has

been such a cool experience to see my old Australian friends and get the opportunity to fly in such high-level events with them.”

VMFA-214’s deployment honed combat readiness and strengthened enduring friendships that underscore the U.S.-Australia military alliance. Marine Corps and RAAF aviators will continue to “train together, fight together,” preparing for any challenge to the Indo-Pacific region.

July 9 U.S. Central Command Update

From U.S. Central Command

July 9, 2024

TAMPA, Fla. – In the past 24 hours, U.S. Central Command (CENTCOM) forces successfully destroyed one Iranian-backed Houthi uncrewed aerial vehicle (UAV) in a Houthi controlled area of Yemen.

It was determined the UAV presented an imminent threat to U.S., coalition forces, and merchant vessels in the region. This action was taken to protect freedom of navigation and make international waters safer and more secure.

U.S. Navy Funds Mercury to Advance Chip-Scale Technologies

ANDOVER, Mass., July 10, 2024 (GLOBE NEWSWIRE) — Mercury Systems, Inc. (NASDAQ: MRCY, www.mrcy.com), a technology company that delivers mission-critical processing power to the edge, today announced an agreement with the U.S. Navy to advance sensor processing technologies that will allow radar and electronic warfare (EW) capabilities to be designed on much shorter timelines.

For decades, increasing system and software complexity has extended the timelines for developing and fielding military platforms. The Office of Naval Research's Open Rapid Chipletized Approach (ORCA) program aims to reduce the time needed to design edge processing solutions by increasing the modularity of components at the chip level. Under a $13.2 million contract, Mercury will develop a next-generation RF System-in-Package (SiP) that integrates the latest commercial chips from major semiconductor providers within a smaller and lighter footprint.

This work will build on Mercury's RFS1140 SiP, which integrates an AMD Versal FPGA, Jariet Electra-MA high-speed data converters, and Micron memory for a truly advanced solution to support sensor processing.

"ORCA represents a significant evolution of the Mercury Processing Platform that will drive down radar and EW system development timelines, allowing next-generation capabilities to be fielded much faster," said Tony Trinh, Mercury's Senior Director of Advanced Packaging. "The ORCA approach opens up incredible opportunities to integrate mission-specific pre-processing chiplets to rapidly upgrade systems on a wide

variety of existing platforms and stay ahead of evolving threats."

"Mercury is pioneering the way for on-shore advanced secure microelectronics integration and packaging capability with DMEA-certified full product lifecycle support, including concept, design, assembly, and test, to rapidly deliver application-tailored system solutions to the warfighter," said Adam Miller, Office of Naval Research Program Officer.

Navy Accepts Delivery of Future USS John Basilone

By Team Ships Strategic Operations, July 8, 2024

BATH, Maine- The future USS John Basilone (DDG 122) was delivered to the U.S. Navy, July 8.

Delivery represents the official transfer of a ship from the

shipbuilder to the Navy. Prior to delivery, the ship conducted a series of at-sea and pier-side trials to demonstrate readiness.

The ship is named after United States Marine Corps Gunnery Sergeant John Basilone, who received the Medal of Honor for his extraordinary heroism during the Battle of Guadalcanal.

“The future USS John Basilone will bring significant capability to the fleet and strengthen our advantage at sea,” said Capt. Seth Miller, DDG 51 Class program manager, Program Executive Office (PEO), Ships. “DDG 122 and all of its Sailors will be a living reminder of the perseverance and sacrifice exhibited by its remarkable namesake.”

As a Flight IIA destroyer, DDG 122 will serve as a multi-mission surface combatant capable of conducting Anti-Air Warfare, Anti-Submarine Warfare and Anti-Surface Warfare.

General Dynamics Bath Iron Works has six additional future Arleigh Burke-class destroyers under construction, Harvey C. Barnum Jr. (DDG 124), Louis H. Wilson Jr. (DDG 126) Patrick Gallagher (DDG 127), William Charette (DDG 130), Quentin Walsh (DDG 132) and John E. Kilmer (DDG 134).

PEO Ships, one of the Department of Defense’s largest acquisition organizations, is responsible for executing the development and procurement of all destroyers, amphibious ships and craft, auxiliary ships, special mission ships, sealift ships and support ships.

Austal USA Breaks Ground in New Final Assembly Facility

MOBILE, Ala. – Austal USA celebrated the start of construction for the company's newest final assembly facility with a groundbreaking ceremony today. The infrastructure expansion, which will be to the south of Austal USA's current waterfront facility, will include a new assembly building, waterfront improvements, and a new shiplift system. The project is scheduled to be complete and fully operational by summer of 2026.

The construction of this new building and waterfront support area continues the expansion Austal USA began in March 2021 with the groundbreaking of the steel panel line. This latest expansion provides a new assembly bay which will enable the erection of large steel modules for Navy and Coast Guard ships, including the Offshore Patrol Cutter (OPC) and TAGOS-25 programs. In addition to the manufacturing capacity of the new

buildings, the expansion includes a shiplift that will provide a safe and reliable system to launch ships as they are completed in the assembly buildings. The shiplift will also enable bringing ships back on the land-side facility for repair and maintenance.

Secretary of Commerce Ellen McNair was the principal speaker at today's ceremony representing Governor Kay Ivey. In her remarks, Secretary McNair highlighted the long-standing partnership of Alabama and Austal USA and the important role that partnership has played in Austal USA's 25-year history.

"As evidenced by this major expansion, Austal USA continues to be both an economic engine to Alabama and a driving force behind U.S. Naval modernization," said Governor Kay Ivey. "It is fitting that during its 25th anniversary year in Alabama, Austal breaks ground on its third final assembly facility that will usher in more jobs for Mobile and the Gulf Coast. We are proud to be home to one of our U.S. Navy's most relied upon shipbuilders."

"Austal USA is poised for significant growth, and this infrastructure expansion plan reflects that," commented Austal USA President Michelle Kruger. "Austal USA's investment in this latest facility expansion project reflects our commitment to supporting the implementation of the National Defense Industrial Strategy and our commitment to investing in the Mobile region."

The new assembly building will occupy four and a half acres and will be approximately 400 feet long by 480 feet wide providing over 192,000 square feet of new covered manufacturing space. It will consist of three bays enabling erection of the Coast Guard's Offshore Patrol Cutter and Navy's TAGOS-25 ocean surveillance steel ships as well as provide flexibility to manufacture modules for submarine and other surface ship programs. Austal USA has partnered with Pearlson & Pearlson Inc., program manager and owner's

representative; Kiewit Infrastructure South Co., lead for design and construction; and, Pearlson Shiplift Corporation, designer and builder of the shiplift system, to execute the project.

The Pearlson-designed shiplift system will feature an articulated lifting platform approximately 450 feet long by 125 feet wide, capable of lifting and launching vessels in excess of 18,000 long tons. This capacity will facilitate the launch and docking of the U.S. Navy Constellation-class Frigates, TAGOS-25 class Ocean Surveillance Ships, Independence-variant Littoral Combat Ships, and the U.S. Coast Guard Heritage-class Offshore Patrol Cutters.

When this expansion is complete, Austal USA’ s Mobile, Ala. facility will include a 117,000 square foot steel panel line, two module manufacturing facilities totaling over one million square feet of covered manufacturing space optimized for serial production, and seven assembly bays providing over 400,000 square feet of indoor erection space. In all, the Mobile facility covers 180 acres and, when this project is complete, over 1.5 million square feet of indoor manufacturing space.

Raytheon Technologies Awards CAES $172M Multi-Year Contract

Arlington, Va. – CAES, a leading provider of mission-critical advanced electronics, has received an award of $172.7 million

from Raytheon Technologies (RTX) in support of a major international missile program. This award covers the next three lots of follow-on production for the missile data-link assembly.

“CAES is at the forefront of RF electronics and advanced EW capabilities, supplying critical components that our customers rely on,” said CAES President and CEO Mike Kahn. “CAES has been a long-time partner of RTX and we value our continued relationship supporting their mission and advancing capabilities to defend and defeat future threats.”

CAES is a critical subsystem provider to the missiles and munitions market on almost all key platforms covering a broad range of advanced electronic capabilities, including antennas, flight termination receivers, telemetry assemblies, preselectors, RF processors, converters, RF heads, RF front ends, receivers, and data links.

Partnering with customers, CAES designs and manufactures complex microwave and millimeter wave solutions for electronic warfare, radar, and other mission-critical needs. Learn more about CAES’ advanced capabilities here.