

Coast Guard orders additional waterways commerce cutters



From Headquarters, U.S. Coast Guard, Sept. 30, 2025

WASHINGTON – The Coast Guard is moving forward with the acquisition of the new Waterways Commerce Cutter (WCC) class, designed to replace the legacy fleet of inland tenders and facilitate commerce vital to the nation’s economic security and strategic mobility.

The service has ordered production of the first river buoy tender (WLR) and long lead time material (LLTM) for the second inland construction tender (WLIC), with construction to take place at Birdon America, Inc.’s shipyard in Bayou La Batre, Alabama.

In addition, the Coast Guard has placed an order for three sets of LLTM to support future production. The total value of the production and LLTM orders is approximately \$110 million.

Funding includes \$51 million provided by Public Law 119-21,

the One Big Beautiful Bill Act, which covers production of the second WLIC and two sets of LLTM. The balance of the order is funded through regular appropriations.

“Our nation’s marine transportation system facilitates over \$5.4 trillion in economic activity every year and supports millions of jobs throughout the United States,” said Rear Adm. Mike Campbell, the Coast Guard’s Director of Systems Integration and Chief Acquisition Officer. “Putting new waterways commerce cutters on contract ensures we have the capabilities needed to support the safe and efficient flow of commerce in our inland waterways systems.”

Inland construction tenders play a critical role in constructing, repairing, and maintaining fixed aids to navigation (ATON) along the Eastern Seaboard and Gulf Coast. These cutters are uniquely equipped to drive and remove piles, erect towers, and perform major structural modifications. Construction of the first WLIC, ordered in June 2025, is expected to be completed in 2027.

River buoy tenders service short-range ATON on the Western Rivers, setting, relocating, and recovering buoys to mark navigable channels as water levels fluctuate. They also establish and maintain fixed aids, lights, and daybeacons. Construction of the first WLR is expected to be completed in 2027. Both WLICs and WLRs are being acquired under the same contract due to their substantial design similarities.

The WCCs will replace the legacy inland tender fleet, which has an average vessel age of nearly 60 years, including ships still in service at 81 years old. The Coast Guard inland fleet maintains more than 28,200 marine aids across 12,000 miles of inland waterways, facilitating the movement of approximately 630 million tons of cargo annually.

Modernizing this fleet will bolster the Coast Guard’s capacity to control, secure and defend U.S. ports and waterways,

ensuring the safe and efficient flow of commerce vital to the nation's economic and strategic interests. This modernization is aligned with Force Design 2028, a blueprint introduced by Secretary of Homeland Security Kristi Noem to transform the Coast Guard into a more agile, capable and responsive fighting force.

Coast Guard Offloads Nearly \$94.5M in Illegal Narcotics from Operation Pacific Viper



The crew of USCGC Seneca (WMEC 906) stand for a photo during a drug offload at Port Everglades in Fort Lauderdale, Florida, Sept. 30, 2025. The crew offloaded more than 12,750 pounds of cocaine and marijuana with an approximate street value of

\$94.5 million. (U.S. Coast Guard photo by Petty Officer 1st Class Diana Sherbs)

From U.S. Coast Guard Southeast District, Sept. 30, 2025

MIAMI – Coast Guard Cutter Seneca’s crew offloaded more than 12,750 pounds of cocaine and marijuana with an approximate street value of \$94.5 million in Port Everglades, Tuesday.

Seneca was deployed in support of Operation Pacific Viper. Coast Guard crews worked alongside interagency partners to interdict illicit narcotics in the international waters in the Eastern Pacific Ocean.

Through Operation Pacific Viper, the Coast Guard is accelerating counter-drug operations in the Eastern Pacific Ocean, where significant transport of illicit narcotics continues from Central and South America. In coordination with international and interagency partners, the Coast Guard is surging additional assets—cutters, aircraft and tactical teams—to interdict, seize and disrupt transshipments of cocaine and other bulk illicit drugs. Operation Pacific Viper continues the Coast Guard’s efforts to protect the Homeland, counter narco-terrorism, disrupt foreign terrorist organizations, transnational criminal organizations and cartels seeking to produce and traffic illicit drugs into the United States. Since launching this operation in early August, the Coast Guard interdicted over 80,000 pounds of cocaine.

“I’m incredibly proud of the teamwork and adaptability displayed by my crew and our partners during this patrol to stop illicit drug flow from entering the United States,” said Capt. Lee Jones, commander, Coast Guard Cutter Seneca. “Our crews sacrifice time away from their families, and when necessary, put themselves in harm’s way to secure our borders and protect the American people.”

The following assets and crews were involved in the

interdictions:

- Coast Guard Cutter Venturous

- Coast Guard Cutter Hamilton

- Coast Guard Cutter Midgett

- Coast Guard Cutter Stone

- Joint Interagency Task Force-South

- Coast Guard Southwest District

- Coast Guard Southeast District

29 suspected smugglers were transferred to federal custody.

Detecting and interdicting narco-terrorism on the high seas involves significant interagency and international coordination. Joint Interagency Task Force-South based in Key West 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 Eastern Pacific Ocean are performed by members of the U.S. Coast Guard under the authority and control of the Coast Guard's Southwest District, headquartered in Alameda, California.

The Coast Guard is the United States' lead federal maritime

law enforcement agency with authority to enforce national and international laws on the high seas and waters within U.S. jurisdiction. 80 percent of all U.S.-bound narcotics seizures occur at sea, underscoring the impact of Coast Guard maritime interdiction efforts.

Coast Guard Cutter Seneca is a 270-foot Famous-class medium-endurance cutter with a crew of 100 homeported in Portsmouth, Virginia.

Editor's note: See related [U.S. Coast Guard Cutter Seneca interdicts suspected drug smuggling vessel in the Pacific Ocean](#)

**VX-31 conducts its final
AV-8B Harrier II Flight**



From Naval Air Warfare Center Weapons Division, Sept. 30, 2025

CHINA LAKE, Calif. – Air Test and Evaluation Squadron (VX) 31, the Dust Devils, concluded the AV-8B Harrier's service with a sundown ceremony Sept. 23, when the squadron flew the jet for the final time and shut it down on the China Lake flight line.

The final sortie, flown by Jim "Jimbo" Coppersmith, VX-31 technical director, brought veterans, Sailors, Marines, government civilians, industry partners and family members to

the flight line to watch a traditional water salute and to say goodbye to a platform that served the fleet for more than four decades.

U.S. Marine Corps Lt. Col. Timothy "Little Buddy" Burchett, VX-31 commanding officer, described the Harrier as one of the most challenging and rewarding aircraft to fly.

"It's the most fun airplane I've ever flown," said Burchett. "There are no computers. It's cables, pulleys and skill that keep that thing in the air."

He called the Harrier "a uniquely Marine Corps aircraft" and praised the China Lake test team for keeping the program safe and mission capable to the finish.

"We did not coast into the finish line. It was a triumphant finish for the team partnership," Burchett said.

Coppersmith highlighted the squadron's role in strengthening the aircraft's combat effectiveness and safety record through decades of testing at China Lake.

"It's the most successful attack aircraft in Marine Corps history. No doubt about it," he said. "We lost many great Marines along the way. Those treatments and those material fixes, the procedures we wrote, the engineering changes we made, saved lives and limbs."

Burchett pointed to VX-31's testing culture as a model for the entire community.

"You truly were the gold standard of testing," he said.

Coppersmith closed his remarks by reflecting on the Harrier's history at China Lake and the teamwork that kept it flying until the end.

"That jet right there flew its very first flight off the production line 33 years ago," he said. "Today we completed

AV-8B flight operations. We shut it down full mission capable, and it flew flawlessly. It's a testament to what we've done to this aircraft as a team."

RTX's Raytheon Delivers 500th ESSM Block 2 to U.S. Navy



From RTX, Oct. 1, 2025

Missile provides reliable ship self-defense against air and sea-surface threats

TUCSON, Ariz., Oct. 1, 2025 /PRNewswire/ – Raytheon, an RTX (NYSE: RTX) business, has delivered its 500th ESSM Block 2 missile to the U.S. Navy. The company is investing in infrastructure and material to continue deliveries, with plans to nearly double production rates by June 2026.

ESSM Block 2 is an advanced surface-to-air missile that has proven effective against a variety of air and sea-surface threats. It features an upgraded guidance system with a dual-mode active and semi-active radar seeker, increased maneuverability, and improved performance over its Block 1 predecessor.

“ESSM plays a crucial role in helping to ensure both ship self-defense and local area defense for U.S. and allied navies around the globe,” said Barbara Borgonovi, president of Naval Power at Raytheon. “The continued delivery of this capability is a testament to the strong partnerships and shared commitment among our team, our customers, and our allied nations to equip our servicemen and women with the best defense solutions.”

ESSM is managed by the NATO SEASPARROW Consortium composed of 12 nations: Australia, Belgium, Canada, Denmark, Germany, Greece, the Netherlands, Norway, Portugal, Spain, Türkiye, and the United States. The consortium is NATO’s largest and most successful cooperative weapons project and represents over 50 years of international military-industrial cooperation.

Ships Announced to Participate in Navy and Marine Corps 250th Birthday Celebration



From U.S. Fleet Forces Command, Sept. 24, 2025

NORFOLK, Va – The cities of Philadelphia and Camden will host the Navy Marine Corps 250 celebration October 9-16, 2025, with four U.S. Navy ships, two Coast Guard cutters, and four U.S. Navy Academy Yard Patrol boats (YPs) and sailboats. These vessels will participate in the Parade of Ships on Thursday, Oct 9.

USS **Arlington** (LPD **24**) – <https://www.surflant.usff.navy.mil/LPD24/>, USS Lassen (DDG 82) – <https://www.surflant.usff.navy.mil/ddg82/>, USS Cooperstown

(LCS 23) – <https://www.surflant.usff.navy.mil/lcs23/>, USS Billings (LCS 15) – <https://www.surflant.usff.navy.mil/lcs15/>, USCGC Lawrence Lawson (WPC 1120), and USCGC James Rankin (WLM 555) will be available for public ship tours Oct 10-15.

Ship and pier locations include:

Philadelphia, Penn's Landing: (Ship public tours Oct 10-14 from 10 a.m. to 4 p.m. and Oct 15 from 10 a.m. – 1 p.m.)

- Freedom-class littoral combat ship, USS Cooperstown (LCS-23) from Mayport, Florida
- USCGC Lawrence Lawson (WPC 1120) from Cape May, New Jersey and USCGC James Rankin (WLM 555) from Baltimore, Maryland
- U.S. Naval Academy Yard Patrol boat and Sailboat from Annapolis, Maryland

Philadelphia, Pier 4: (Ship public tours Oct 10 from 10 a.m. to 1 p.m., Oct 11-14 from 10 a.m. to 4 p.m. and Oct 15 from 10 a.m. to 1 p.m.)

- San Antonio-class amphibious transport dock USS Arlington (LPD-24) from Norfolk, Virginia
- U.S. Naval Academy Yard Patrol boat and Sailboat from Annapolis, Maryland

Gloucester City, NJ, Gloucester Marine Terminal: (Ship public tours Oct 10-14, from 10 a.m. to 4 p.m. and Oct 15 from 10 a.m. to 1 p.m.)

- Arleigh Burke-class Aegis guided missile destroyer USS Lassen (DDG-82) from Mayport, Florida

Camden ex-Battleship New Jersey: (Ship public tours Oct 10-14 from 10 a.m. to 4 p.m. and Oct 15 from 10 a.m. to 1 p.m.)

- Freedom-class littoral combat ship USS Billings (LCS-15) from Mayport, Florida

Media interested in covering any NMC250 events can contact the Regional Public Affairs Office at (757) 322-2853 for more

information.

Vice Admiral John Gumbleton, Acting Commander, U.S. Fleet
Forces Command –
<https://www.navy.mil/Leadership/Flag-Officer-Biographies/Search/Article/2236432/vice-admiral-john-gumbleton/>

For up-to-date information on all NMC250 events, visit the
official website: <https://www.navy.mil/Navy-250/Events/>

Join the conversation on social media by using the hashtags
#NMC250, #NavyBirthday

**USS Benfold Departs U.S. 7th
Fleet after 10 years of
Forward-Deployed Service**



YOKOSUKA, Japan (Sept. 29, 2025) – Sailors assigned to the Arleigh Burke-class guided-missile destroyer USS Benfold (DDG 65) man the rails as the ship departs Commander, Fleet Activities Yokosuka, Japan, Sept. 29, following 10 consecutive years of forward-deployed service in the U.S. 7th Fleet area of operations. Benfold is forward deployed and assigned to Destroyer Squadron (DESRON) 15, the Navy’s Largest DESRON and U.S. 7th Fleet’s principal surface force. (U.S. Navy Photo by Chief Mass Communication Specialist Taylor DiMartino)

[By Lt. Victor Murkowski, Destroyer Squadron 15 Public Affairs](#)

YOKOSUKA, Japan – The Arleigh Burke-class guided-missile destroyer USS Benfold (DDG 65) departed Commander, Fleet Activities Yokosuka, Japan, Sept. 29, following 10 years of forward-deployed service to U.S. 7th Fleet.

Benfold’s decade of service was recognized by senior leadership at a farewell ceremony with Commander, Destroyer Squadron (DESRON) 15. “Benfold successfully stood the watch in the Western Pacific for 10 years,” said Capt. Dave Huljack, commodore, DESRON 15. “This ship leaves with an amazing legacy

as a workhorse for the fleet and a stalwart friend to our allies and partners. Over the last decade, Benfold and her crew have executed our nation's tasking with strength and excellence. We will miss Benfold's grit and determination but look forward to her crew's continued success in DESRON 31."

Benfold is scheduled to relocate to Everett, Washington, to support U.S. 3rd Fleet operations. Benfold will also shift from DESRON 15 to the "Ke Koa O Ke Kai" (The Warriors of the Sea) of DESRON 31 after its transit across the international date line.

Benfold arrived in Yokosuka and joined Forward-Deployed Naval Forces – Japan (FDFN-J) in October 2015. During the ship's decade-long tenure, it participated in numerous multilateral maritime exercises, such as: Malabar, Maritime Counter Special Operations Forces Exercise, Pacific Griffin, Valiant Shield, Keen Sword, Annual Exercise, and Resolute Dragon, working alongside allies and partners to ensure a free and open Indo-Pacific.

"Through tenacity and teamwork, Benfold's decade assigned to the Western Pacific has allowed our crew to build on the ship's great accomplishments," said Cmdr. Rich Mayer, commanding officer of Benfold. "Benfold is leaving the 7th Fleet family on a high note. Our families will miss Japan, and we will miss sailing alongside one of our nation's strongest allies."

Throughout the tenure, Benfold maintained uncompromised combat readiness, conducting numerous patrols and demonstrating U.S. commitment to the region.

While assigned to FDFN-J, Benfold earned three Battle Efficiency "Battle E" Awards, the Marjorie Sterrett Battleship Fund Award, the Arleigh Burke Fleet Trophy, the CNO Afloat Safety Award, multiple Retention Excellence Awards, and 10

consecutive Fleet Health Promotion and Wellness, or Green "H," awards. While assigned to DESRON 15, Benfold sailed more than 4 million miles across the Indo-Pacific.

"Operating alongside partners and allies in 7th Fleet has been a highlight for Benfold crewmembers over the past decade," said Mayer. "Our Sailors have made lasting memories, and Benfold's successes are a testament to the U.S. Navy's long-term commitment to a free and open Indo-Pacific."

U.S. 7th Fleet, the U.S. Navy's largest forward-deployed numbered fleet, routinely interacts and operates with allies and partners in preserving a free and open Indo-Pacific region.

General Dynamics Electric Boat Awarded \$642M for Virginia-Class Submarine Work



[Release From General Dynamics Electric Boat](#)

GROTON, Conn. (September 26, 2025) – General Dynamics Electric Boat, a business unit of General Dynamics (NYSE: GD), announced today it has been awarded a \$642 million contract modification to a previously awarded contract supporting submarine production. This modification is for a cost-plus-fixed-fee modification to a previously awarded contract (N00024-20-C-2120) for Lead Yard Support and Development Studies and Design efforts related to Virginia-class submarines, as detailed in the U.S. Department of War [contract award](#).

“This contract modification supports our efforts to deliver the submarines our Navy needs as quickly as possible,” said Mark Rayha, president of General Dynamics Electric Boat. “This funding allows us to continue our design and development efforts in order to sustain and extend our nation’s operational overmatch against any potential adversaries. With the support of the administration, the Navy and Congress, we are prepared to deliver the advantage to protect our sailors, our families and our freedom.”

CTF-66 Showcases RAS Capabilities With Partners in Unmanned Systems Demonstration

[By Mass Communication Specialist 1st Class Cameron C. Edy](#)

TROIA, Portugal – Commander, Task Force (CTF) 66 conducted a live robotic and autonomous systems (RAS) demonstration with Allies and partners during the experimentation exercise Robotic Experimentation and Prototyping with Maritime Unmanned Systems (REPMUS) / Dynamic Messenger 2025, in Troia, Portugal, Sept. 25, 2025.

Nations that participated in the live RAS demonstration include Belgium, Denmark, Estonia, France, Germany, Norway, Portugal, Spain, Sweden, Ukraine, United Kingdom, and United States.

“We continue to advance our robotic and autonomous systems through ongoing testing and combined training with partners and their unmanned systems,” said Adm. Stuart B. Munsch, commander, U.S. Naval Forces Europe and Africa (NAVEUR/NAVAF). “We deeply appreciate our Ally, Portugal, for their leadership in maritime experimentation and unmanned systems. Our collective capability is only getting stronger.”

Taking place near the Portuguese Navy’s Operational Experimentation Centre (CEOM), the live RAS demonstration deployed two groups of unmanned surface vessels (USVs) simulating a swarming attack, with CTF-66 deploying three Global Autonomous Reconnaissance Crafts (GARC) in response to

disrupt the attacking USVs and protect critical infrastructure from harm.

This routine demonstration tests and validates U.S. and partner robotic and autonomous systems' ability to protect critical infrastructure, and enhances interoperability within the NATO's allied and partner nations in employing unmanned systems to execute national tasking.

"CTF-66 is focused on adaptation, which enables a warfighting edge and warfighting advantage," said Rear Adm. Michael S. Mattis, commander, CTF-66. "Sharpening that warfighting edge is pushing the capabilities and limits of our RAS with Allies and partners, and that's exactly what we're doing during REPMUS/Dynamic Messenger 2025."

REPMUS 2025 is a Portuguese-led experimentation exercise that focuses on maritime unmanned systems experimentation, capability development and interoperability, highlighting NATO's ability to trial and integrate uncrewed systems into the operational environment.

REPMUS 2025 is combined with exercise Dynamic Messenger (DYMS), an operational experimentation exercise led by NATO's Allied Maritime Command to promote adaptation of capabilities, support agile modernization of Allied Maritime forces, and gain operational advantage across the Alliance.

REPMUS / Dynamic Messenger 2025 integrates unmanned systems into NATO's standing Naval Forces, resulting in both national maritime capability development and an exponential growth in RAS capability across the Alliance. The exercise also supports NATO's broader Digital Transformation goals by improving information sharing, data management, and the integration of advanced technologies into command structures.

Established in 2024 to deploy and employ RAS with Navy, joint, and NATO partners, CTF-66 utilizes RAS in conjunction with conventional manned platforms and space-based capabilities to

expand Maritime Domain Awareness, develop defense measures against adversarial use of RAS, innovate asymmetric fighting, and in the future, deliver lethal effects, if necessary.

Commander, U.S. 6th Fleet, headquartered in Naples, Italy, conducts the full spectrum of joint and naval operations, often in concert with allied and interagency partners to advance U.S. national interests, security and stability in Europe and Africa, and freedom of navigation in and around the Mediterranean.

For over 80 years, NAVEUR/NAVAF has forged strategic relationships with Allies and partners, leveraging a foundation of shared values to preserve security and stability. Headquartered in Naples, Italy, NAVEUR/NAVAF operates U.S. naval forces in the U.S. European Command and U.S. Africa Command areas of responsibility.

Lockheed Martin Begins Critical Testing on Aegis System Equipped Vessel Antennas

[Release From Lockheed Martin](#)

In partnership with the Japan Ministry of Defense (JMOD) and Missile Defense Agency, Lockheed Martin completed initial light off of the Aegis System Equipped Vessel (ASEV)'s shipset 1 radar system on schedule, including all four AN/SPY-7(V)1 antennas in Moorestown, New Jersey's Production and Test Center (PTC).

This initial light off marks the beginning of a comprehensive testing phase, crucial to supporting the ship construction and commissioning schedule. The testing will validate the full SPY-7(V)1 radar system's performance, integrated with the Aegis, to ensure that it meets the highest standards of quality and capability.

Dive Deeper Into Testing

"By testing the complete SPY-7 radar system in a land-based facility, we're able to verify the SPY-7 radar's Ballistic Missile Defense and Integrated Air and Missile Defense capabilities meet warfighter needs ahead of shipboard installation, significantly reducing program deployment risk," said Chandra Marshall, vice president and general manager at Lockheed Martin.

Marshall added, "The complete SPY-7 radar system will be installed on Japan's ASEV ships, serving as a critical component of Japan's homeland defense."

What's Next

Following the completion of shipset 1 testing, Lockheed Martin, JMOD and the MDA will continue to drive progress on the program with milestones.

- Shipset 1 will perform further tracking exercises before being physically delivered to Japan next year.
- Shipset 2 will be sold off to the JMOD and begin testing and verification.

In a significant milestone, Lockheed Martin officially handed over all four AN/SPY-7(V) radar antennas for the first ASEV shipset to the JMOD in June. Although the antennas remained at our facility for testing, that on-time delivery demonstrated

the maturity and production capacity of the SPY-7 radar, highlighting our commitment to delivering on schedule.

Across the globe, coming off the success of the first live track in December 2024, Navantia successfully integrated SCOMBA consoles end-to-end with Lockheed Martin's SPY-7(V)2 radar at the Aegis SCOMBA Integration Center in Moorestown, New Jersey. The SCOMBA combat system is now fully integrated with Aegis and SPY-7 and performing simulated engagements of live tracks.

On the domestic side, Lockheed Martin and the MDA successfully executed [Flight Test Other-26a](#) (FTX-26a). During FTX-26a, the Lockheed Martin-built Long Range Discrimination Radar successfully detected, tracked, and reported ballistic missile target data in a complex environment, demonstrating its ability to provide critical data to homeland defense systems.

In December 2024, Lockheed Martin's land-based version of the SPY-7 radar, known as TPY-6, successfully intercepted a mid-range ballistic missile as part of the Aegis Guam System during a flight experiment [Flight Experiment Mission-02](#).

The Big Picture

SPY-7 is growing and capable. As a highly adaptable, and scalable radar, it's being produced for multiple international partners, including Canada's River-Class Destroyers, Spain's F-110 Multi-Mission Frigates, and the US Missile Defense Agency's transportable, land-based Aegis Guam System (TPY-6) and land-based Long-Range Discrimination Radar.

The customer collaboration and successful milestones underscore the radar's versatility and ready-now capability, solidifying its position as a cornerstone of modern missile defense. As the SPY-7 radar continues to demonstrate its capabilities, it's clear that it will be providing 21st Century Security around the world to ensure our customers stay ahead

of emerging threats.

Coast Guard Awards Contract for New Heavy Weather Surf Boats

[Release From Headquarters, U.S. Coast Guard](#)

SEATTLE – The Coast Guard awarded an indefinite delivery, indefinite quantity (IDIQ) contract on Sept. 29 to Rozema Boat Works, Inc. of Mount Vernon, Washington to acquire up to six second-generation special-purpose craft – heavy weather (SPC-HWX II) boats.

The total potential value of the contract is \$70.9 million and the first SPC-HWX II is anticipated to be completed in fiscal year 2027. The SPC-HWX II will replace the 52-foot first generation of special-purpose craft – heavy weather boats, which entered service in the 1950s and 1960s.

These vessels were retired in 2021 due to increasing maintenance challenges. Like their predecessors, the SPC-HWX IIs will serve in the Pacific Northwest.

These next-generation vessels are designed to perform a wide range of Coast Guard missions in extreme weather and challenging surf conditions that exceed the capabilities of other boats, such as search and rescue; disabled vessel towing; and law enforcement and ports, waterways and coastal security missions.

Measuring 64 feet in length, the SPC-HWX II will feature self-righting capability and be capable of operating in 35-foot

seas, 25-foot surf, and winds up to 60 knots. Powered by twin 1,200-horsepower diesel engines, it will reach speeds of 20 knots, tow up to 300 tons, and operate up to 150 miles offshore. With accommodation for a relief crew, the SPC-HWX II will have an endurance up to 48 hours, a critical feature for long-range heavy-weather operations.