Carrier Air Wing 8 Returns from Historic 11-Month Deployment

Strike Fighter Squadron (VFA) 213, the “Blacklions,” returned to Naval Air Station Oceana, Virginia, May 11, 2026, following a historic eleven-month deployment to U.S. 2nd, 4th, 5th and 6th Fleets as part of the Gerald R. Ford Carrier Strike Group assigned to Carrier Air Wing (CVW) 8. CVW-8 logged more than 5,500 flight hours in support of Operation Epic Fury alone, and more than 11,800 launches throughout the 11-month deployment. (U.S. Navy photo by Zachary wickline)
From Commander, Naval Air Force Atlantic, May13, 2026

Aircraft of the Gerald R. Ford Carrier Strike Group’s Carrier Air Wing (CVW) 8 returned to their home naval air stations May 11, following an historic and successful 11-month deployment to the U.S. Central Command, U.S. European Command and U.S. Southern Command areas of operations.

Before returning after 322 days, breaking the post-Vietnam War record for days deployed, CVW-8 conducted more than 11,500 aircraft events launched from the Electromagnetic Aircraft Launching System (EMALS) and recovered with Advanced Arresting Gear aboard the world's largest aircraft carrier, USS Gerald R. Ford (CVN 78).

"The officers and Sailors of Carrier Air Wing 8 have served their nation with distinction," said Rear Adm. Rich Brophy, commander, Naval Air Force Atlantic. "Throughout their record-breaking deployment, these aviators successfully conducted worldwide operations, embodying the highest ideals of resilience, courage, and selfless service to the nation."

The Gerald R. Ford Carrier Strike Group deployed as an integrated naval force in support of economic prosperity, national security, and national defense. The force conducted combat operations in support of Operation Southern Spear and Operation Absolute Resolve from the Caribbean Sea in U.S. Southern Command, and Operation Epic Fury from the Mediterranean Sea in U.S. European Command and the Red Sea in U.S. Central Command.

"The men and women of Carrier Air Wing 8 performed admirably and projected power on a global scale," said Adm. Karl Thomas, commander, U.S. Fleet Forces Command. "From major combat operations to exercising alongside our allies and partners in multiple regions, Carrier Air Wing 8 demonstrated to the world that they have the technical expertise, work ethic, and grit to accomplish the mission anywhere it is needed. I couldn't be more proud of the team."

The Gerald R. Ford Carrier Strike Group operated with 20 ally and partner nations throughout deployment, conducting interoperability exercises to increase combined air power projection with Norway, United Kingdom, Germany, Finland, Italy, France, and Tunisia. The flagship conducted port visits in France, Norway, Spain, Croatia, Greece, and the U.S. Virgin

Islands.

CVW-8 includes Strike Fighter Squadron (VFA) 31, VFA-37, VFA-87, all flying the F/A-18E Super Hornet aircraft and based out of Naval Air Station (NAS) Oceana, Virginia; VFA-213 that flies the F/A-18F Super Hornet aircraft based out of NAS Oceana, Virginia; Electronic Attack Squadron (VAQ) 142 that flies the E/A-18G Growler aircraft based out of NAS Whidbey Island, Washington; Airborne Command & Control Squadron (VAW) 124 that flies the E-2D Advanced Hawkeye aircraft based out of Naval Station (NS) Norfolk, Virginia; Fleet Logistics Support Squadron (VRC) 40 that flies the C-2A Greyhound aircraft based out of NS Norfolk, Virginia; Helicopter Maritime Strike Squadron (HSM) 70 that flies the MH-60R Seahawk helicopter based out of NAS Jacksonville, Florida; and Helicopter Sea Combat Squadron (HSC) 9 that flies the MH-60S Knighthawk helicopter based out of NS Norfolk, Virginia.

Gerald R. Ford, a first-in-class aircraft carrier and deployed flagship of Carrier Strike Group (CSG) 12, incorporates modern technology, innovative shipbuilding designs, and best practices from legacy aircraft carriers to increase the U.S. Navy’s capacity to underpin American security and economic prosperity, deter adversaries, and project power on a global scale through sustained operations at sea.

Thomas Releases Command Vision at U.S. Fleet Forces

Command Commander’s Conference

By U.S. Fleet Forces Command Public Affairs, May 13, 2026

SUFFOLK, Va. — U.S. Fleet Forces Command concluded its annual Commander’s Conference May 7, bringing together senior military leaders to ensure the delivery of the world’s most ready, capable, and adaptive force—one fully integrated across all domains and prepared to deter, fight, and win in a dynamic battlespace.

Hosted by Adm. Karl Thomas, commander, U.S. Fleet Forces Command, the two-day event centered on the theme “Bridging the Foundry to the Fight.” The discussions focused on strengthening our capabilities by restoring readiness and building a powerful Fleet from a resilient industrial base to maintain a decisive global warfighting advantage. During the event Thomas released his vision for the command, addressing how the Fleet should generate global warfighting advantages to drive his vision into execution and lethal performance:

To deliver the world’s most ready, capable, and adaptive force that is integrated across domains, driven by innovation, and prepared to deter, fight, and win in a dynamic battlespace.

“Our charge is to ensure the Navy remains the world’s most ready Fleet,” said Thomas. “That means transforming our processes into a world-class foundry where data-centric decision-making and innovation accelerate our ability to deliver combat-ready Sailors and ships to the point of need.”

Throughout the conference, Thomas emphasized high-end warfighting through the “Foundry and Fleet” lens. This approach ensures that every aspect of force generation—from maintenance and modernization to advanced training—aligns to the demands of a contested environment. His vision is meant to achieve four Overarching Objectives:

- Forging the Total Sailor: A better-supported Sailor is a more lethal Sailor. Investing in our Sailors as warfighters, maintainers, individuals, and providers for their families; commending their willingness to sacrifice in the defense of our nation.
- Rehearsing the Fleet: Recognizing that platforms and supporting systems are becoming more complex, we must provide the doctrine, training, and protection, and rehearsal

necessary across domains to ensure a ready Fleet capable of responding when our Nation demands.

- Optimizing Force Generation Readiness: Our Fleet must stand ready. We must maximize the number of trained, rehearsed, and certified personnel, platforms, and payloads when our Nation calls.
- Preparing for a Global Fight: Our goal is to deter by being better prepared and by presenting unsolvable dilemmas to our adversaries. Should deterrence fail, we will be ready to fight a high-end war and provide a range of military capabilities from restrained show of force, to surgical strikes, to sourcing overwhelming firepower.

Additionally, Thomas outlines that this will all be built upon three underlying principles:

- High-End Warfighting: utilizing and embracing technologies to best see and sense the battlespace, confuse the adversary's understanding, quickly promulgate orders to forces, aggregate firepower across domains at critical points, then maneuver in time and space to resupply and reattack, all while actively preventing the adversary from attempting the same.
- The Bedrock of Sailors and Families: Our advantage comes from the men and women we recruit, train, and retain. We must understand and support their needs and provide the tools, support, and time to ensure they are prepared to do our Nation's bidding.
- Data-Centric Decision Making: The speed and scale of warfare is expanding and accelerating. This transformation requires more informed and quicker thinking leveraging authoritative data sources compiled to enhance evaluation, assessment, and speed of decision.

Chief of Naval Operations Adm. Daryl Caudle addressed conference attendees and reinforced U.S. Fleet Forces

Command’s role as both a force provider and as a critical driver in ensuring that today’s force is ready to fight and decisively win.

“U.S. Fleet Forces Command is not just a force provider; it is the engine of our naval power,” said Caudle. “In today’s security environment, U.S. Fleet Forces Command sits at the center of how we generate combat power, allocate it across global demands, and manage risk to ensure our force remains the bedrock of national security.”

A parallel spouse program focused on the bedrock of the force: Sailors and their families. Spouses from across the Fleet engaged with leadership on quality-of-life initiatives, cyber awareness, and the resources essential to maintaining family readiness during increased operational tempos.

The conference reinforced the imperative to adapt how the Navy mans, trains, equips, and sustains the force to ensure it remains adaptive and capable of prevailing in any conflict.

“This period for the Navy is unique at multiple levels,” said Thomas. “It is a unique time filled with opportunity to impact the Fleet for decades to come. Our senior leadership has provided clear, aligned guidance and this vision provides the guidance with which U.S. Fleet Forces Command will lead the way at seizing this opportunity.”

U.S. Fleet Forces Command trains, certifies, and provides combat-ready naval forces to combatant commanders worldwide to conduct prompt, sustained operations at sea in support of national security objectives.

Leidos to Accelerate Hypersonic Weapons Production for U.S. Army, Navy

RESTON, Va. (May 12, 2026) – Leidos (NYSE: LDOS) has been awarded a $2.7 billion U.S. Army contract to advance hypersonic weapons from prototyping to production. This

contract unifies the Thermal Protection Shield (TPS) and Common Hypersonic Glide Body (CHGB) programs, with the goal of streamlining development and accelerating delivery of this critical capability in alignment with Army acquisition reform initiatives.

By integrating these programs, Leidos will work to help the warfighter achieve greater efficiency, reduce production timelines and support a reliable supply of components to meet operational demands. Leidos brings proven expertise in guidance systems, sensor technologies, and precision munitions integration to this effort, helping to advance the nation's hypersonic capabilities and strengthen its integrated air and missile defense.

"This contract is a major step forward in delivering hypersonic capabilities to the warfighter at speed," said Leidos Defense President Cindy Gruensfelder. "Our team is committed to supporting the Army and Navy in producing this critical operational capability."

The combined contract is intended to transition the programs into a production-ready phase to support the Department of War's initiatives. Leidos has been the prime contractor on the TPS program since 2021 and CHGB program since 2019.

This contract aligns with Leidos' NorthStar 2030 strategy, emphasizing commitment to innovation and technological leadership in defense and national security. By focusing on advanced hypersonic and precision strike technologies, Leidos is not only working to meet current defense needs but also positioning the company for future military capabilities, a key pillar of its long-term corporate vision.

SRF-JRMC Continues to Deliver Warships to Fleet On Time

From U.S. Naval Ship Repair Facility Japan RMC, May 13, 2026

YOKOSUKA, Japan – U.S. Naval Ship Repair Facility and Japan Regional Maintenance Center (SRF-JRMC) completed a key maintenance period for the Arleigh Burke-class guided-missile destroyer USS Ralph Johnson (DDG 114), returning the ship to the fleet on time April 6.

The successful Chief of Naval Operations (CNO) maintenance availability reinforces SRF-JRMC's critical role in generating combat-ready ships to support U.S. 7th Fleet operations.

This year, SRF-JRMC has delivered all seven of its completed ships to the fleet on time or ahead of schedule. From January through April, SRF-JRMC returned two mine countermeasures

ships, three destroyers, and an amphibious transport dock to the U.S. 7th Fleet.

The timely and successful work by the U.S. Navy’s primary ship repair team in Japan underscores its commitment to ensuring U.S. 7th Fleet remains a lethal, mission-ready force in the Indo-Pacific.

Diligently preserving, maintaining, and employing combat ready ships in the Indo-Pacific is a core focus of U.S. Pacific Fleet, reflecting teamwork among Sailors and civilian maintenance personnel. The CNO availabilities brought together the ship’s crew, SRF-JRMC’s Japanese master labor contractors, local Japanese contractors and U.S.-based companies.

“Our success this year is a testament to the dedication and professionalism of the ships’ crews, the ship superintendents and their teams, and the entire SRF-JRMC organization,” said Capt. Wendel Penetrante, SRF-JRMC commanding officer. “Managing availabilities, with the recent increase in operational tempo, demonstrates their exceptional capability. We continue to meet the spirit of the command’s motto, ‘Nan Demo Dekimasu!’”, which means ‘we can do anything!’ in Japanese.”

The U.S. Navy maximizes its ability to maintain a reliable presence in the region by conducting complex repairs at forward locations. This demonstrates a long-term commitment to a free and open Indo-Pacific.

For over 75 years, SRF-JRMC has been the linchpin of U.S. naval operations in the Indo-Pacific region by providing intermediate and depot-level repair for the ships of U.S. 7th Fleet.

Navy Advances Acquisition Reform Strategy: Appoints Three New Portfolio Acquisition Executives

From the Department of the Navy Office of Information, May 11, 2026

WASHINGTON – The Department of the Navy today announced the

establishment of three additional Portfolio Acquisition Executive (PAE) organizations: PAE Aviation, PAE Mission Systems and PAE Munitions. With these directives, the Navy continues foundational acquisition reforms focused on accelerating delivery of capability to the fleet.

“The needs of the warfighter demand that our acquisition system move faster in order to outpace the threat,” said Jason Potter, Performing the Duties of Assistant Secretary of the Navy for Research, Development and Acquisition (ASN RDA). “The establishment of these PAEs today will accelerate acquisition efforts in three key portfolios.”

The Department of the Navy has designated three senior acquisition leaders as the interim PAEs:

- PAE Aviation: Vice Adm. John Dougherty
- PAE Mission Systems: Mr. Jim Day
- PAE Munitions: Mr. Paul Mann

“We are empowering these officials to move out and deliver for the fleet,” Potter said. “With these authorities, we are removing barriers that slowed down capability delivery. We are also doing away with fragmented accountability. Each PAE is accountable for mission outcomes across their entire portfolio.”

The PAE represents a significant evolution of the previous Program Executive Officer (PEO) construct, with PAEs possessing broader scope and authority. PAEs are responsible for an entire portfolio of like programs and will have direct authority not only for program offices, but also over associated technical, contracting and sustainment functions. Approximately 70 percent of these functions and

associated personnel will move from systems commands (SYSCOMs) into the PAEs.

“This is not just a name change, but a critical step toward streamlining and simplifying the Navy’s acquisition process,” said Adm. Jim Kilby, Vice Chief of Naval Operations. “The three new PAEs are designed to align authority and accountability, reduce process overhead, equip program managers to execute more effectively, and deliver operational capability to the Navy and Marine Corps with speed and scale.”

“We are fully committed to getting Marines what they need with the speed and flexibility demanded by the modern security environment,” said Gen. Bradford J. Gering, the Assistant Commandant of the Marine Corps. “We have empowered our PAEs with broad authorities and cradle-to-grave oversight of portfolios. This combination will eliminate obstacles and accelerate the delivery of capabilities to our Marines at the speed of relevance.”

The establishment of PAE Aviation, PAE Mission Systems and PAE Munitions brings the total of Department of the Navy PAEs to nine, joining PAEs for Robotic and Autonomous Systems, Maritime, Industrial Operations, Marine Corps, Strategic Systems Programs, and Undersea.

Flight III Destroyer Ted Stevens (DDG 128) Sails Away

from HII’s Ingalls Shipbuilding

From HII

PASCAGOULA, Miss., May 08, 2026 (GLOBE NEWSWIRE) — The Flight III *Arleigh Burke*-class guided missile destroyer *Ted Stevens* (DDG 128) departed HII’s (NYSE: HII) Ingalls Shipbuilding division today enroute to its homeport in Norfolk, Virginia ahead of its future commissioning in Whittier, Alaska.

“The sail-away of *Ted Stevens* reflects the strong momentum of our Flight III destroyer deliveries and the team’s work to deliver the most capable and combat ready ships to the fleet,” said Chris Brown, Ingalls Shipbuilding DDG 51 program manager. “Seeing DDG 128 depart Ingalls is a proud moment for us all, and we are honored to support the Navy with a ship that will

strengthen U.S. maritime security for decades to come.”

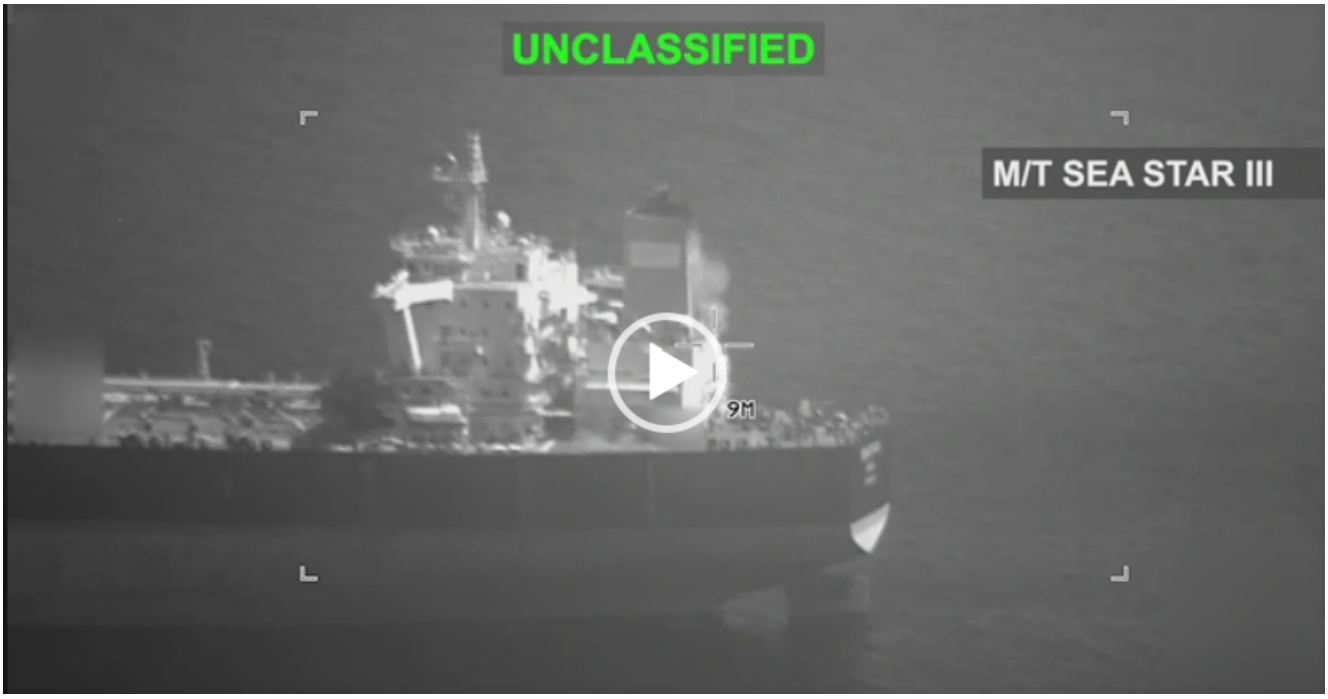
DDG 128 is the second Flight III *Arleigh Burke*-class destroyer built and delivered by Ingalls. The ship represents the next generation of surface combatants, featuring the Flight III AN/SPY-6(V)1 radar system and the Aegis Baseline 10 combat system designed to counter evolving threats well into the 21st century.

Ingalls Shipbuilding currently has five additional Flight III destroyers under construction, with seven more in early pre-planning and material procurement phases. To increase throughput and meet growing demand from the Navy, Ingalls is executing a distributed shipbuilding initiative, partnering with shipyards and fabricators beyond the company’s traditional labor market to improve schedule performance across all programs.

In 2026, HII plans to outsource more than 2.5 million hours of shipbuilding work, while expanding its structural assembly network of assembly partner companies, enabling more work to be completed outside the shipyard before final assembly.

To date, Ingalls has delivered 36 *Arleigh Burke*-class destroyers, including the first Flight III, USS *Jack H. Lucas* (DDG 125), and *Ted Stevens* (DDG 128). Flight III destroyers currently under construction include *Jeremiah Denton* (DDG 129), *George M. Neal* (DDG 131), *Sam Nunn* (DDG 133), *Thad Cochran* (DDG 135), and *John F. Lehman* (DDG 137). Ships in pre-planning include *Telesforo Trinidad* (DDG 139), *Ernest E. Evans* (DDG 141), *Charles French* (DDG 142), *Richard J. Danzig* (DDG 143), *Intrepid* (DDG 145), *Robert Kerrey* (DDG 146), and *Ray Mabus* (DDG 147).

U.S. Disables 2 More Vessels Violating Blockade in Gulf of Oman



From U.S. Central Command, May 8, 2026

TAMPA, Fla. – U.S. forces disabled M/T Sea Star III and M/T Sevda, May 8, prior to both vessels entering an Iranian port on the Gulf of Oman in violation of the ongoing U.S. blockade.

U.S. Central Command (CENTCOM) enforced blockade measures against two Iranian-flagged unladen oil tankers attempting to pull into an Iranian port on the Gulf of Oman. A U.S. Navy F/A-18 Super Hornet from USS George H.W. Bush (CVN 77) disabled both tankers after firing precision munitions into their smokestacks, preventing the non-compliant ships from entering Iran.

U.S. forces also disabled Iranian-flagged M/T Hasna, May 6, as it attempted to sail to an Iranian port in the Gulf of Oman. An F/A-18 Super Hornet from USS Abraham Lincoln (CVN 72)

disabled the unladen oil tanker’s rudder by firing several rounds from a 20mm cannon gun.

All three vessels are no longer transiting to Iran.

“U.S. forces in the Middle East remain committed to full enforcement of the blockade of vessels entering or leaving Iran,” said Adm. Brad Cooper, CENTCOM commander. “Our highly trained men and women in uniform are doing incredible work.”

Multiple commercial vessels have been disabled and more than 50 have been redirected by CENTCOM forces to ensure compliance.

USS Daniel Inouye Returns to Fleet Early After Successful Maintenance

The Arleigh Burke-class guided-missile destroyer USS Daniel Inouye (DDG 118) returns to Pearl Harbor on April 23, 2026. Hawaii Regional Maintenance Center completed a complex maintenance period of the Inouye eight days ahead of schedule, providing a significant boost to fleet readiness. PHNSY & IMF's mission is to keep the Navy's fleet "Fit to Fight" by repairing, maintaining, and modernizing the Navy's fast-attack submarines and surface ships. Strategically located in the heart of the Pacific, it is the most comprehensive fleet repair and maintenance facility between the U.S. West Coast and the Far East. (U.S. Navy photo by Mike Wilson)
From Michael Wilson, Hawaii Regional Maintenance Center, May 8, 2026

Arleigh Burke-class guided-missile destroyer USS Daniel Inouye (DDG 118) rejoined the Pacific Fleet in April after completing a complex maintenance period eight days ahead of schedule.

The Arleigh Burke-class guided-missile destroyer USS Daniel Inouye (DDG 118) returns to Pearl Harbor on April 23, 2026. Hawaii Regional Maintenance Center completed a complex maintenance period of the Inouye eight days ahead of schedule,

providing a significant boost to fleet readiness. PHNSY & IMF's mission is to keep the Navy's fleet "Fit to Fight" by repairing, maintaining, and modernizing the Navy's fast-attack submarines and surface ships. Strategically located in the heart of the Pacific, it is the most comprehensive fleet repair and maintenance facility between the U.S. West Coast and the Far East. (U.S. Navy photo by Mike Wilson)

Leaders from the U.S. Pacific Fleet and Hawaii Regional Maintenance Center (HRMC) recognized the joint government-industry team for the achievement in a ceremony at Joint Base Pearl Harbor-Hickam, March 19, 2026. The project's success was hailed as an example of exceptional teamwork and professionalism.

"This maintenance period for USS Daniel Inouye set the highest standards across the Pearl Harbor waterfront," said Capt. Brian Ryglowski, HRMC deputy commander.

He praised the ship's crew for their "culture, mindset, and positive attitude," which allowed them to seamlessly integrate with nearly 20 different maintenance activities.

"The ship definitely went 'for broke'," Ryglowski added, referencing the ship's motto. "This was an unprecedented performance that gave back significant operational time."

Effective and efficient maintenance keeps the U.S. Navy lethal and ready to defend the nation and maximizes the lifespan of its vessels. Navy regional maintenance centers conduct repairs and alterations that cannot be done by the ship's crew.

Daniel Inouye's Commanding Officer. U.S. Navy Cmdr. Ryan Kelly, attributed the success to his team's culture.

"Our Project Team culture was founded on three main principles: team cohesion, a solution-driven mindset and deliberate communication," Kelly said. "No matter the barrier or challenge we faced, there was a level of commitment to each

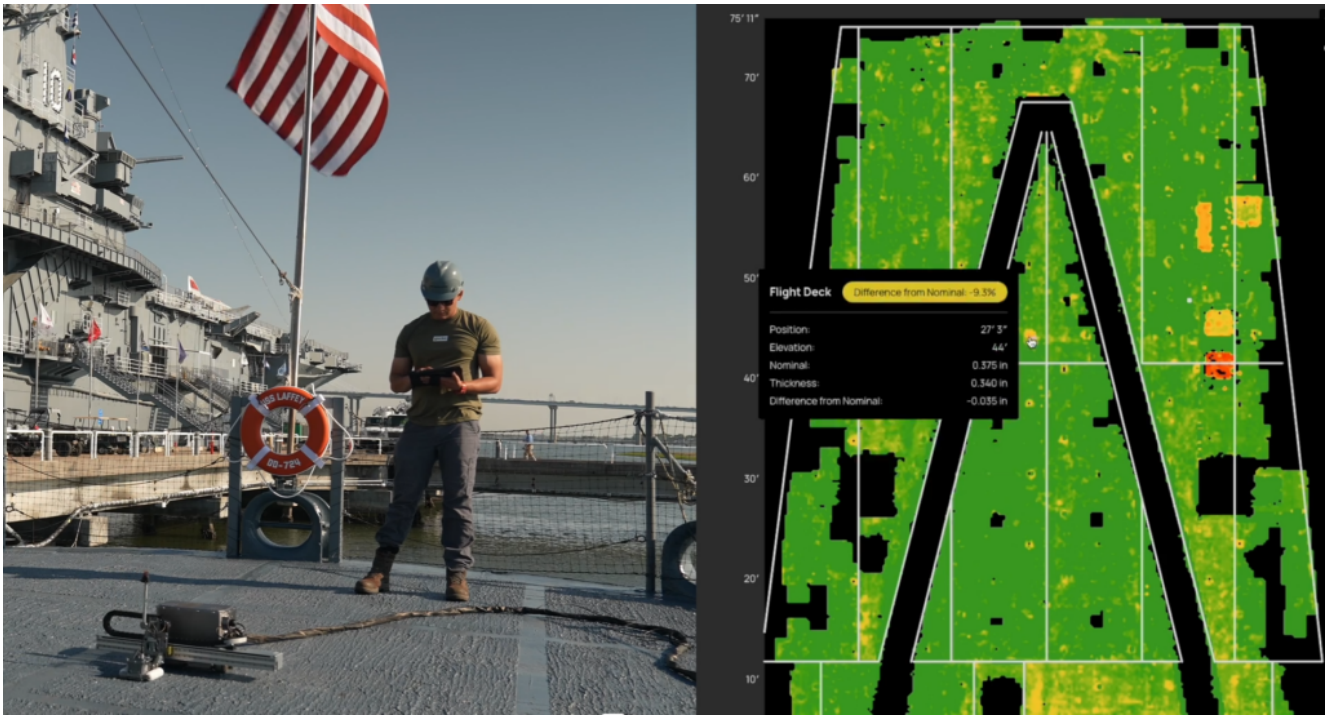
other that ensured our success. I am convinced that our people made the difference.”

Daniel Inouye is named for the late U.S. Senator from Hawaii, a Medal of Honor recipient who served in the 442nd Regimental Combat Team in Europe during World War II. The ship honors this legacy by adopting the unit’s historic motto, “Go for Broke.”

This maintenance was managed by HRMC and executed by the lead maintenance contractor, Pacific Shipyards International.

HRMC, in conjunction with Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, keeps the Navy’s fleet “Fit to Fight” by repairing, maintaining, and modernizing surface ships and fast-attack submarines. Strategically located in the heart of the Pacific, it is the most comprehensive fleet repair and maintenance facility between the U.S. West Coast and the Far East.

Gecko Robotics’ Komodo Robot Aids Ship Flight Deck Maintenance



By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — Robots and other unmanned systems are advocated to relieve humans for the "dull, dirty, and dangerous" jobs and missions the Navy is called upon to complete. One example is the increasing use of robotics for assessment and maintenance of ship surfaces such as the flight decks, weather decks, and well desks as applicable of amphibious warfare ships and guided-missile destroyers. Artificial intelligence is being added to speed up the processes.

Flight decks are coated with non-skid, a rough coating that reduces the slickness of the decks, enhancing the safety of operations sea for personnel, aircraft, and ground support equipment. The coating needs to be replaced periodically as it is worn down by operations. Assessing that need is being accomplished by Gecko's Komodo robots.

The U.S. Navy and the General Services Administration have awarded Gecko Robotics of Pittsburgh, Pennsylvania, a contract with a ceiling of $71 million "to deploy artificial intelligence and robotics to assess and maintain the health of military assets," the company said in a release. "Gecko will

start work with 18 ships [per year] in the U.S. Pacific Fleet with the initial award worth up to $54million over a five-year period.

“The Chief of Naval Operations has set a target of 80% fleet readiness, which Gecko will have a crucial role in helping to meet,” Gecko said. “Gecko’s advanced AI and robotic technology identify repairs up to 50 times faster and more accurately than manual methods, reducing maintenance delays and boosting battle readiness. This work will be carried out across destroyers, amphibious warships, and littoral combat ships.”

Gecko’s Komodo robot is designed to assess the extent of corrosion of non-skid, said Troy Demmer, co-founder and president of Gecko, in an interview with Seapower. The crawling robot uses “electromagnetic acoustic conduction to create an ultrasonic waveform that can penetrate that non-skid down to the base metal and be able to assess any sort of corrosion.”

The Komodo is able to operate during different sea states on the ship’s flight deck, enabling an assessment of the deck at sea six to 12 months before the ship enters a maintenance availability, reducing the time spent on the task of refurbishing the deck. The robot rolls along like a paint roller, its sensor scanning the deck in its passes, taking measurements, and recording those data points on a map display of a laptop computer. The measurements allow the Navy to determine the areas of the deck that need attention for non-skid maintenance.

Gecko also uses its Toka wall-climbing robots to scaling U.S. Navy ship hulls in order to assess corrosion.

Demmer expects the U.S. Naval Surface Force Atlantic to request Gecko’s services in the future in a separate contract.

“Where value hasn’t improved, that’s where opportunity lives. Cracking the cost equation is just as important as cracking the physics equation,” said Justin Fanelli, Chief Technology Officer for the Department of the Navy, quoted by Geck in its release. ”We’re now seeing solutions that make innovation adoption easier and in doing so save time, money and risk. When these American companies, pure play defense and dual use companies like Gecko Robotics, choose to do hard things and move the needle on our outcome metrics, not by percentage points but by orders of magnitude, it results in faster, better portfolio management.”

Gecko employs about 275 personnel, half of them based in Pittsburgh.

NPS Online Student Advances Fleet Analysis of Autonomous Systems

From Mass Communication Specialist 2nd Class Andrew Langholf, May 6, 2026

MONTEREY, Calif. – Advanced analyses completed by a Naval Postgraduate School (NPS) distance learning student is helping inform the U.S. Navy's future employment of autonomous systems, demonstrating how NPS Online students, and the school's unique certificate programs, offer the same impact on fleet needs as their counterparts on campus in Monterey.

U.S. Navy Lt. Marissa Amodeo, assigned to the Office of the Chief of Naval Operations Assessment Division, OPNAV N81, completed the systems analysis certificate program this past March. Through the coursework required for one of her classes in the program, titled Combat Systems Simulation, Amodeo developed a model and supporting analysis to inform autonomous systems concepts of operations, or CONOPS.

The work was well received by senior leadership, including OPNAV N81 director U.S. Navy Rear Adm. Douglas Sasse, with the

potential to help inform future Navy acquisitions of unmanned systems. More specifically, Amodeo's work focused on how the Navy can move from buying new technology, to fielding that technology as an advanced warfighting capability as effectively and efficiently as possible.

"My project tackled a key operational issue – making sure Navy investments in emerging technology, like small, unmanned surface vehicles, translate into usable warfighting capability," Amodeo said. "We are fielding robotic technologies quickly, but we still do not fully understand the deployment of bottlenecks. Identifying and quantifying those constraints is essential to mission success."

As an analyst, Amodeo's job is to support the OPNAV N81 mission to provide detailed, evidence-based analyses that inform decisions on resources, acquisitions, and readiness.

"At OPNAV N81, our mission is timely, data-driven analysis that informs resource decisions," she said. "My goal was to provide an analytical foundation that helps shape planning for these platforms and supports their integration into the fleet."

Stew Sharp, a senior member of the OPNAV N81 campaign analysis team, said Amodeo's work demonstrates how technical education strengthens U.S. Navy warfighting.

"Lt. Amodeo's work is a powerful testament to how technical education can be a direct force multiplier for our mission," Sharp said. "By applying advanced systems analysis, she transformed a complex operational challenge into a clear, data-driven model, revealing the critical bottlenecks we must address to successfully integrate unmanned systems."

"Her initiative provides the analytical foundation to guide future investment, ensuring our advanced technology delivers a decisive edge in real-world naval operations," Sharp continued.

NPS distance learning programs give military professionals access to advanced graduate education in the NPS Department of Operations Research that they can apply directly to operational challenges at their commands. In the systems analysis certificate program, students develop analytical skills that support complex operational questions, including force design, decision support, and emerging warfighting concepts.

“The NPS program gave me the toolkit to do this,” Amodeo said. “The combat systems and simulation course helped me build a discrete event queuing model, and the broader curriculum strengthened my systems thinking so I could turn a complex process into actionable insight.”

As the Department of the Navy works to understand how autonomous systems can be integrated into future operations, the connection between education and application becomes increasingly important. For officers serving in operational and assessment roles, graduate-level analysis helps commands evaluate concepts earlier, make more informed decisions faster, and directly align emerging capabilities with fleet needs.

“The biggest takeaway is that deploying autonomous systems at scale is a systems problem, not a linear one,” Amodeo said. “Processes that work for one or two units can break at scale when bottlenecks appear.”

“My analysis showed that when demand hits many assets at once, small constraints can delay deployment, even under optimistic assumptions,” she added. “Logistics and maintenance capacity can determine readiness, so the Navy has to invest in the process, not just the platform.”

Dr. Dashi Singham, research associate professor in NPS’ Department of Operations Research, taught the course leading to Amodeo’s analysis. She said distance learning students are

uniquely positioned to bring current operational problems into the classroom and use simulation tools to understand and inform decisions before they are made.

“Many distance learning students work in operational environments where real systems can be modeled using discrete event simulation,” Singham said. “That allows them to test potential policy changes in a simulated environment and provide immediate, data-driven recommendations across a variety of fleet settings.”

Amodeo said her full-time job as an OPNAV N81 analyst is a heavy lift, but the addition of an NPS class to her already busy schedule is anything but a distraction. In fact, the skills learned through the four-course certificate sequence immediately strengthened the work she was doing, Amodeo says, and ultimately advanced to the quality of the analyses she delivered to the fleet.

“These programs are not a distraction from the job. They are a force multiplier,” Amodeo said. “They help you ask better questions, challenge assumptions with data, and deliver more impactful results for the fleet and warfighter.”

NPS, located in Monterey, California, provides warfighting-focused graduate education, including classified studies and interdisciplinary research, to advance the operational effectiveness, technological leadership, and warfighting advantage of the naval service. Established in 1909, NPS offers master’s, doctoral, and distance learning certificate programs to Department of War military and civilian students, along with international partners, to develop warfighters and leaders who can think critically, solve complex operational problems, and deliver mission-ready solutions through advanced education and research.