

# Maxim Watermakers Completes Testing of First U.S. Navy Closed Loop Cooling System



From Fairbanks Morse Defense, Jan. 28, 2025

Maxim Watermakers, a business unit of Fairbanks Morse Defense, has successfully completed qualification testing for a first-of-its-kind submarine maintenance Closed Loop Cooling System (CLCS) for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNS and IMF). This qualification is the first CLCS implementation for the U.S. Navy and Maxim's initial application of this groundbreaking technology at naval facilities.

The testing, funded by the Maritime Sustainment Technology and Innovation Consortium (MSTIC), highlights Maxim's engineering expertise and commitment to advancing U.S. Navy operations.

The innovative CLCS is designed to support submarines during dry dock maintenance by enhancing operational efficiency,

reducing corrosion, optimizing maintenance schedules, and ensuring long-term system reliability. These advantages are particularly critical for naval vessels operating in environmentally sensitive regions or areas with stringent water resource management regulations.

The system features a ship service skid to circulate cooling water through the submarine and a chilled water skid to circulate water through high-capacity air-cooled chillers.

Maxim's full-scale testing flawlessly executed 14 separate evaluations, proving the system meets U.S. Navy requirements. The rigorous, four-day testing process verified normal operations, emergency responses, test modes, and essential filling and draining functionalities.

"This milestone reflects the engineering excellence of Maxim Watermakers and Fairbanks Morse Defense's dedication to innovation in naval systems," said Monica Rogers of Maxim Watermakers. "By leveraging MSTIC's support alongside our technical capabilities, we deliver state-of-the-art solutions that address evolving client needs and enhance critical naval operations worldwide."

Fairbanks Morse Defense and Maxim Watermakers continue to lead the development of advanced water treatment technologies. Through ongoing innovation, the companies aim to deliver reliable, high-performance water systems that address critical challenges and support their customers' operational needs.

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## **Lockheed Martin Offers Mk70**

# Launcher to Increase Lethality of LCS



An SM-6 missile is launched from a containerized launcher on board USS Savannah (LCS 28) on Oct. 24, 2023. (U.S. Navy photo)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. – Lockheed Martin has adapted its Mk41 vertical missile launcher into a scalable containerized system than can be deployed on U.S. Navy ships, including the littoral combat ships (LCS) and non-traditional platforms of opportunity to increase their lethality with mid-range precision strike and air defense capabilities. company officials said.

The system, called the Mk70 Payload Delivery System, is a 40-foot-long ISO container in which four VLS cells can be fitted. The Mk70 system, designed for and deployed with the U.S. Army in a land-based configuration, can launch any type of missile certified for the Mk41, including the Tomahawk cruise missile, the various Standard surface-to-air missiles, the antisubmarine rocket, and the Evolved SeaSparrow missile. The

Mk70 container is transportable on a C-17 cargo aircraft.

Ed Dobeck, director for launching systems at Lockheed Martin, told Seapower that the Mk70 was developed two years ago in concert with the Defense Department's Strategic Capabilities Office to provide the Army with the ability to deploy and fire the Raytheon-built SM-6 Standard missile.

The same container can be secured on the flight deck or helicopter landing pad of a Navy ship using helicopter tie-down chains, occupying 400 square feet of a flight deck. Power from the ship's electrical system can supply 400 volts to the Mk70. No modifications are required to the ship itself. The container can be installed within hours with a pier-side crane. A command shelter with virtual Aegis and Tomahawk control systems controls the launch of the missiles.

The flight deck of the Freedom-class LCS can accommodate three Mk70 containers, while the Independence-class LCS can accommodate four containers, Dobeck said. With one or more containers installed, the ships are unable to launch or land helicopters. The missile tubes can be reloaded horizontally, an advantage over the ship-installed Mk41's need for vertical re-load by cranes.

Lockheed Martin has demonstrated containerized launch of SM-6 missiles from two Navy ships. An SM-6 missile was fired from the USS Savannah (LCS 28) in October 2023 and before that another was fired from the Overlord medium unmanned surface vessel Ranger during an exercise.

Dobeck said that the Navy has shown great interest in the Mk70 system, which already has been delivered to the Army. Two full batteries – totaling eight missile cells – have been delivered to the Army and two have been delivered to other customers. The Army has deployed the Mk70 to the Philippines

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# Operation Southern Spear: Latest Development in Operationalizing Robotic and Autonomous Systems



Operation Southern Spear will deploy unmanned air and surface

vessels to help determine combinations of unmanned vehicles and manned forces to provide coordinated maritime domain awareness and conduct counternarcotics operations.

From U.S. 4th Fleet, Jan. 28, 2025

MAYPORT, Fla. – U.S. Naval Forces Southern Command/U.S. 4th Fleet is advancing the Navy's Hybrid Fleet Campaign through Operation Southern Spear, which will start later this month in U.S. Southern Command Area of Responsibility (USSOUTHCOM AOR) and at U.S. 4th Fleet Headquarters at Naval Station Mayport.

“Southern Spear will operationalize a heterogeneous mix of Robotic and Autonomous Systems (RAS) to support the detection and monitoring of illicit trafficking while learning lessons for other theaters,” said Cmdr. Foster Edwards, 4th Fleet's Hybrid Fleet Director. “Southern Spear will continue our (4th Fleet's) move away from short-duration experimentation into long-duration operations that will help develop critical techniques and procedures in integrating RAS into the maritime environment.”

Specifically, Operation Southern Spear will deploy long-dwell robotic surface vessels, small robotic interceptor boats, and vertical take-off and landing robotic air vessels to the USSOUTHCOM AOR. 4th Fleet will operationalize these unmanned systems through integration with U.S. Coast Guard cutters at sea and operations centers at 4th Fleet and Joint Interagency Task Force South. Southern Spear's results will help determine combinations of unmanned vehicles and manned forces needed to provide coordinated maritime domain awareness and conduct counternarcotics operations.

U.S. 4th Fleet is conducting Operation Southern Spear in support of our Navy's Project 33 targets to operationalize RAS. Using RAS to increase presence in, and awareness of, strategically and economically important maritime regions will

help decision-making, strengthen sovereignty, and facilitate regional cooperation.

“Operation Southern Spear is the next step in our Hybrid Fleet Campaign,” said Rear Adm. Carlos Sardiello, Commander, U.S. Naval Forces Southern Command/U.S. Fourth Fleet. “We look forward to the results of Southern Spear. Hybrid Fleet operations increase our collaboration with partners in the region while furthering the Navy’s tactics, techniques, procedures, and processes.”

U.S. Naval Forces Southern Command/U.S. 4th Fleet is the trusted maritime partner for Caribbean, Central and South America maritime forces leading to improved unity, security and stability.

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## **Secretary Hegseth’s Message to the Force**



From U.S. Department of Defense Public Affairs, Jan. 25, 2025

ARLINGTON, Va. – The following message to the U.S. armed forces was released by the new Defense Secretary, Pete Hegseth:

“It is the privilege of a lifetime to lead the warriors of the Department of Defense, under the leadership of our Commander in Chief Donald J. Trump. We will put America First, and we will never back down.

The President gave us a clear mission: achieve Peace through Strength. We will do this in three ways – by restoring the warrior ethos, rebuilding our military, and reestablishing deterrence.

o We will revive the warrior ethos and restore trust in our military. We are American warriors. We will defend our country. Our standards will be high, uncompromising, and clear. The strength of our military is our unity and our shared purpose.

o We will rebuild our military by matching threats to capabilities. This means reviving our defense industrial base, reforming our acquisition process, passing a financial audit, and rapidly fielding emerging technologies. We will remain the strongest and most lethal force in the world.

o We will reestablish deterrence by defending our homeland – on the ground and in the sky. We will work with allies and partners to deter aggression in the Indo-Pacific by Communist China, as well as supporting the President’s priority to end wars responsibly and reorient to key threats. We will stand by our allies – and our enemies are on notice.

All of this will be done with a focus on lethality, meritocracy, accountability, standards, and readiness.

I have committed my life to warfighters and their families. Just as my fellow soldiers had my back on the battlefield, know that I will always have your back. We serve together at a dangerous time. Our enemies will neither rest nor relent. And neither will we. We will stand shoulder to shoulder to meet the urgency of this moment.

Like each of you, I love my country and swore an oath to defend the Constitution. We will do that each and every day, as one team. Together we will accomplish the President’s mission to deter war, and if necessary, defeat and destroy our enemies. Godspeed!”

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# HII Closes on Asset Acquisition to Expand Shipbuilding Capacity



Operations Are Underway at Newport News Shipbuilding Charleston Operations

From HII

GOOSE CREEK, S.C., Jan. 27, 2025 (GLOBE NEWSWIRE) – HII (NYSE: HII) announced today it has closed on its acquisition of an advanced manufacturing facility and assets and begun work at its Newport News Shipbuilding (NNS) – Charleston Operations site in South Carolina.

“HII is committed to going where the labor is to increase shipbuilding capacity and increase throughput for our national security customers,” HII President and CEO Chris Kastner said. “This lets us efficiently add trained talent and state-of-the-art manufacturing capabilities to the urgent job of building ships, making it a unique opportunity to immediately

accelerate throughput at Newport News Shipbuilding in support of the Navy and AUKUS.”

HII announced last month its intent to acquire the facility and associated assets. Since then, more than 99% of the legacy workforce have accepted offers to continue to work on site, supporting the construction of nuclear-powered submarine modules and aircraft carrier units for U.S. Navy programs. Working closely with the South Carolina state and regional leadership, HII plans to create hundreds of additional jobs to support the increased demand and growth at the Charleston facility.

Photos accompanying this release are available at: <https://hii.com/news/hii-closes-on-asset-acquisition-to-expand-shipbuilding-capacity/>.

In addition to existing trained talent, HII’s acquisition also provides:

Advanced production facilities with state-of-the-art manufacturing equipment, tooling and infrastructure used to fabricate complex metal modules and structures.

Facility location on 45-acres with more than 480,000 square feet of manufacturing space.

Access to barge and rail transportation.

Access in nearby Charleston and surrounding region to rapidly growing shipbuilding ecosystem and capacity to expand a highly skilled maritime trades workforce.

“This is great news for the South Carolina economy. This investment will allow us to expand our manufacturing footprint more aggressively in the shipbuilding industry,” U.S. Sen. Lindsey Graham, R-S.C., said. “If you can drive it, fly it, shoot it or float it, South Carolina makes it.”

“The expansion of our nation’s largest military shipbuilder in



immediate benefits this year and the next one for its member companies, the association's survey said.

In its annual survey of 219 member companies, the Amphibious Warfare Industrial Base Coalition (AWIBC) said that a majority of its member companies affirmed that the Navy's announcement last year of a multi-ship buy will benefit their companies.

The survey focused on the August 2024 announcement by then-Secretary of the Navy Carlos Del Toro that the Navy would procure four amphibious warfare ships – one America-class amphibious assault ship (LHA) and three Flight II San Antonio-class amphibious transport dock ships (LPDs) in a bundle procurement according to the below schedule:

- LPD 33 in FY25
  
- LPD 34 in FY27
  
- LHA 10 in FY27
  
- LPD 35 in FY29

The four ships in the procurement would be built at the HII Ingalls Shipbuilding shipyard in Pascagoula, Mississippi.

“Our survey asked specifically about the impacts this bundle will have on the supplier base,” said Jack Feenick, a spokesman for the AWIBC. “We also included questions about the overall health of the industrial base, touching on key areas like workforce, training, inflation, and supply chain disruptions. Below are some of the key findings from our survey and attached is an infographic that provides some more insight on the data.”

## **Amphibious Warship Industrial Base Coalition (AWIBC) Survey**

*(Conducted survey from October – November 2024 from a sample of 219 total suppliers.)*

- 65% of amphibious warship suppliers say that the bundle buy will lead to immediate benefits starting in 2025 or 2026.
- 82% of suppliers that support both amphibious ships and submarines agree that bundle buys benefit their capability to deliver on orders as well as their overall capacity.
- 52% say the bundle purchase will strengthen the shipbuilding industrial base to meet the demand of today and tomorrow
- 46% say the bundle purchase enables the hiring, retention, and training of a workforce
- 42% say the bundle purchase helps invest in equipment to ensure quality and on-time delivery
- Consistent with findings from our survey last year, the top three challenges facing suppliers are:
  - Inflation
  - Workforce training and retention

- Supply chain disruptions
  - Currently, only 10% of amphibious warship suppliers are operating at full capacity.
  - 74% of suppliers who say they are sole-source/single-source supplier to the Navy are amphib suppliers.
  - Suppliers say that multi-ship procurements and earlier AP [advance procurement] funding are most likely factors to drive down material costs, help meet delivery schedules and improve their workforce and facilities.
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## **Forging the Future: Training Center Opens to Train Next Generation of Defense Manufacturers**



Jim Hook, an Accelerated Training for Defense Manufacturing (ATDM) instructor, teaches a student how to use a Haas CNC machine at the newly opened National Training Center in Danville, Virginia. This state-of-the-art facility, which opened on January 13, 2025, expands the program's capacity to train skilled workers for submarine and surface ship manufacturing. (Courtesy photo from ATDM)

From The Maritime Industrial Base Program, Jan. 24, 2025

DANVILLE, Va. – The U.S. Navy strengthened its efforts to revitalize the nation's shipbuilding capability with the opening of a new training center in Danville, Virginia.

The Accelerated Training in Defense Manufacturing (ATDM) program, launched in 2021, has graduated more than 777 students from 45 states, Guam, Puerto Rico, and Australia. About 25% of participants are veterans, and the program boasts a 90% job placement rate within the defense industrial base. New cohorts begin every eight weeks, offering a fast track to meaningful careers across five trades.

The new National Training Center, a state-of-the-art, 100,000-square-foot facility on the Institute for Advanced Learning

and Research (IALR) campus, opened its doors on January 13. On that day, the center welcomed its first cohort of students, marking the beginning of an expanded operation that will train 1,000 students annually, creating a pipeline of skilled workers critical for building and maintaining the nation's submarines and warships.

"This facility helps address our immediate workforce needs," said Frederick "Jay" Stefany, the Direct Reporting Program Manager for the Maritime Industrial Base (MIB) Program. "It advances our efforts to restore our industrial base and ensure our industry partners have the skilled workforce they need to build and maintain the Navy's fleet."

ATDM's graduates are essential in addressing the maritime industry's expanding workforce needs. The Navy's shipbuilding plans include the construction of Columbia-class and Virginia-class submarines, along with more than 10 different classes of surface ships, including aircraft carriers, destroyers, frigates, amphibious warships, and support vessels. This unprecedented scale of shipbuilding requires a comprehensive strategy to rebuild America's manufacturing capabilities. The establishment of the National Training Center marks a significant milestone in this endeavor.

## **A National Imperative**

The MIB Program leads the Navy's workforce development initiatives while advancing shipbuilding and repair capabilities through industrial base development, supply chain resilience, and advanced manufacturing technologies. With the U.S. manufacturing base having shrunk to a third of its size from 30 years ago, the program must overcome major challenges. One of these pressing challenges involves recruiting and training 140,000 new workers over the next decade for submarine production and sustainment, with an additional 110,000 workers needed for surface vessel construction and maintenance.

“The decline in American manufacturing has created a critical skills gap,” said Erica Logan, Workforce Director for the MIB Program. “But we’re not just filling jobs—we’re rebuilding America’s maritime manufacturing capability and offering meaningful careers for the next generation of workers. Every graduate represents another step toward restoring our nation’s industrial strength.”

This workforce development initiative is vital for both new construction and fleet maintenance, underscoring the strategic importance of programs like ATDM in maintaining America’s naval readiness. This national revitalization effort takes shape through individual success stories and community partnerships.

The IALR campus, which hosts the National Training Center, also houses another key MIB Program initiative: the Navy’s Additive Manufacturing Center of Excellence. This co-location creates a hub for maritime manufacturing innovation.

### **Transforming Lives, Strengthening Communities**

Natasha Barnes, part of the inaugural class that began training January 13 in the new facility, represents a growing wave of skilled workers entering the defense manufacturing workforce.

“ATDM has done an excellent job adapting during the transition into the new facility,” said Barnes, a CNC student. “It’s been an uplifting experience to learn in such a clean and well-maintained environment. I am very excited to see what the future holds for the program.”

For Telly Tucker, president of the Institute for Advanced Learning and Research (IALR), the program’s impact goes beyond the classroom.

“This facility is about more than training—it’s about revitalizing southern Virginia,” Tucker said. “It’s creating

jobs, fostering economic growth, and building a pipeline of skilled workers who will strengthen our nation's security."

To deliver on this promise of regional revitalization and support to national security, the National Training Center provides intensive, hands-on preparation.

### **Hands-On Training for Real-World Impact**

ATDM's intensive, 16-week accelerated training program provides students with 600 hours of hands-on experience in one of five trades critical to maritime manufacturing: welding, CNC machining, additive manufacturing, quality assurance, and non-destructive testing. Training runs on three shifts, mirroring the 24/7 operations of the defense industry.

"This program isn't theoretical—it's practical," said Christa Reed, ATDM's Interim Vice-President. "When our students graduate, they're not just trained—they're ready to hit the ground running."

The curriculum, developed in collaboration with industry leaders, ensures students are equipped with the skills and certifications needed to meet the Navy's rigorous standards. By

simulating real-world manufacturing environments, the program prepares graduates to succeed in high-demand roles. This focused training approach directly enhances America's maritime security.

### **A Shared Mission**

The opening of the National Training Center represents a milestone in the Navy's efforts to address workforce challenges and bolster the maritime industrial base. For Stefany, it's a reminder of how these efforts impact national security.

"Every ship we build, every submarine we launch, is a promise

to the American people,” Stefany said. “That promise begins here, with the people we train.”

As the Navy ramps up its fleet expansion, programs like ATDM and the new National Training Center are creating a ripple effect—transforming communities, empowering individuals, and ensuring America’s maritime superiority. The center highlights innovation, collaboration, and resilience, its impact extending beyond Danville to strengthen America’s maritime future.

For more information about ATDM and its programs, visit [www.atdm.org](http://www.atdm.org).

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**General Dynamics Mission  
Systems To Provide Advanced  
Electronics In MK 54  
Torpedoes For The U.S. Navy**



Sailors aboard the Arleigh Burke-class guided-missile destroyer USS Winston S. Churchill (DDG 81) maneuver a Mark-54 torpedo to the flight deck. Photo Credit: U.S. Navy  
From General Dynamics Mission Systems, Jan. 21, 2025

FAIRFAX, Va. – General Dynamics Mission Systems announced today that it was [awarded](#) a fixed-price-incentive, firm-fixed-price, cost-plus-fixed-fee, and cost-only contract from the U.S. Navy in December for up to \$808.6 million to produce MK 54 MOD 1 Lightweight Torpedo Kits and related test equipment, spares, provisioned item orders, engineering support and hardware support for the MK 54 Lightweight Torpedo Program. Work will be performed in Canonsburg, Pennsylvania, and is expected to be completed by December 2032.

“Our Progeny Systems employees have been providing advanced torpedo electronics to the U.S. and allied Navies for 18 years. This contract ensures that our surface ships and aircraft will have the most modern and capable torpedoes in the world for many years to come,” said Laura Hooks, vice president and general manager of Maritime and Strategic Systems at General Dynamics Mission Systems.

Progeny Systems was acquired by General Dynamics Mission

Systems in 2022. Headquartered in Manassas, Virginia, Progeny Systems provides a wide spectrum of capabilities and lifecycle support services for U.S. submarines and surface ships.

General Dynamics Mission Systems provides mission-critical solutions for defense, intelligence and cybersecurity customers across all domains. Headquartered in Fairfax, General Dynamics Mission Systems employs approximately 12,000 people worldwide. More information about General Dynamics Mission Systems is available at [gdmissionsystems.com](http://gdmissionsystems.com).

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## **NAWCAD Lakehurst Hosts Groundbreaking Ceremony For New Test Site Capability**



Naval Air Warfare Center Aircraft Division Lakehurst held a groundbreaking ceremony on Jan. 14 for an upgrade of the

Runway Arrested Landing Site testing facility. The update will house a Joint Precision Approach and Landing System (JPALS) and an Unmanned Carrier Aviation Mission Control System for the MQ-25 and other aircraft programs. (U.S. Navy Photo)

From Naval Air Systems Command, Jan. 22, 2025

JOINT BASE MCGUIRE-DIX-LAKEHURST, N.J. – On a day when the ground at Naval Air Warfare Center Aircraft Division Lakehurst was so cold it made digging into the dirt a challenge, a groundbreaking ceremony for an upgrade of the Runway Arrested Landing Site testing facility welcomed the start of a new chapter in the installation's testing capabilities.

The Jan. 14 event was attended by representatives of the Unmanned Carrier Aviation (PMA-268), Aircraft Launch and Recovery Equipment (ALRE) (PMA-251) program offices, and NAWCAD Lakehurst leadership, including Capts. Daniel Fucito and Mike Kline, as well as other stakeholders of the project.

When completed, the update will house a Joint Precision Approach and Landing System (JPALS) and an Unmanned Carrier Aviation Mission Control System for the MQ-25 and other aircraft programs.

"This groundbreaking represents a significant step forward in Lakehurst's ability to complete the initial carrier suitability testing for one of the Navy's major North Star programs in the MQ-25," said CDR. Adam Pawlak, NAWCAD Lakehurst Officer-in-Charge.

The JPALS update will allow compatibility testing for the MQ-25 on ALRE systems, starting with the TC-13 steam catapult and MK-7 arresting gear currently used on legacy aircraft carriers. Future testing will also be conducted using the Electromagnetic Aircraft Launch System and Advanced Arresting Gear found on the newer Ford-class carriers.

The update will also include a Mobile Integrated Telemetry

System, which can be used to set up temporary aircraft data management telemetry systems during testing.

Pawlak added the groundbreaking ceremony lays the foundation for Lakehurst's ability to test critical unmanned platforms of the future.

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## **U.S. Seventh Fleet Opens New Navigation, Seamanship and Shiphandling Trainer (NSST) Facility**



Vice Adm. Fred Kacher, center, commander of U.S. 7th Fleet, opens the new Navigation, Seamanship, and Shiphandling Trainer (NSST) facility during a ribbon-cutting ceremony at Commander, Fleet Activities Yokosuka (CFAY), Jan. 16, 2025. With Kacher are Rear Adm. Greg Newkirk, left, commander of Task Force 70, Capt. Dave Huljack, deputy commodore of Destroyer Squadron (DESRON) 15, Capt. Shockey Snyder, back, commander of Naval Surface Group Western Pacific, and NSST team members. (U.S. Navy photo by MC1 Caroline H. Lui)

From Destroyer Squadron 15, Jan. 21, 2025

YOKOSUKA, Japan – Adm. Fred Kacher, commander, U.S. Seventh Fleet, opened the new Navigation, Seamanship, and Shiphandling Trainer (NSST) facility at a ribbon-cutting ceremony in Yokosuka, Japan, Jan. 16, 2024.

“I’ve seen how history and time bend to the winner who works hard and plans—this is what simulation allows us to do,” said Kacher. “It’s great to see the power of these trainers, and we’re thrilled to bring this capability to the fleet.”

During the ceremony, Kacher received a tour of the new facility and observed Sailors and junior officers from the waterfront simulating harbor movements. Capt. Dave Huljack, deputy commodore of Commander, Destroyer Squadron (DESRON) 15, also attended the ribbon cutting ceremony.

“Our teams are busy, and we’re getting after it. We don’t only use these facilities for certification, we practice close-quarters shiphandling, tactical maneuvering, and just getting better,” said Huljack. “Building more trainers surges the volume of qualified and capable mariners that we’re able to bring to the fight.”

Members from the NSST staff Jesse Summerlin, Brad Stallings, and Bill Ault explained the capabilities of the new facility and spoke on the importance of the NSSTs as a whole.

“We’re already booked at 95% capacity for the remainder of the calendar year,” said Summerlin, an LB&B Associates NSST Instructor. “The demand from the ships has been overwhelming and our team stands ready to accept the challenge and continue to provide the best possible product to our customers on the Yokosuka waterfront.”

DESRON 15 is the Navy’s largest destroyer squadron and the U.S. 7th Fleet’s principal surface force. It is forward deployed to the U.S. 7th Fleet area of operations in support of security and stability in the Indo-Pacific.

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