

# Raytheon Begins Low-Rate Initial Production of Block 2 Evolved SeaSparrow Missile



Fire Controlman 2nd Class Daniel Boice uses a guided-missile loader to upload an Evolved SeaSparrow Missile into the forward launcher aboard the amphibious assault ship USS Iwo Jima. U.S. Navy/Mass Communication Specialist 3rd Class Joe J. Cardona Gonzalez

TUCSON,

Ariz. – The U.S. Navy awarded Raytheon Co. a \$190 million low-rate initial

production contract for Block 2 versions of the Evolved SeaSparrow Missile, the

company said in a release. ESSM Block 2 missiles feature a new guidance system

with a dual mode active and semi-active radar.

This award

follows the Navy's decision to shift from development to production on the

enhanced intermediate-range, surface-to-air missile, placing the Block 2

variant on track for initial operating capability next year.

[https://www.youtube.com/watch?v=Mw5f0\\_SQeuc](https://www.youtube.com/watch?v=Mw5f0_SQeuc)

The ESSM

missile is the primary ship self-defense missile aboard Navy aircraft carriers

and large-deck amphibious assault ships. It is an integral component of the

Navy's layered area and ship self-defense capability for cruisers and

destroyers.

“ESSM

plays a critical role in protecting navy sailors worldwide and our

international partners share our commitment to evolve this missile,” said Mitch

Stevenson, Raytheon Strategic and Naval Systems’ vice president.

ESSM is

the foundation of several allied navies’ anti-ship missile defense efforts and

is operational on almost 200 naval platforms worldwide.

The ESSM program is a

cooperative effort managed by a NATO-led consortium made up of 12 nations:

Australia, Belgium, Canada, Denmark, Germany, Greece, The Netherlands, Norway,

Portugal, Spain, Turkey and the United States.

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## **USNS Puerto Rico Successfully Completes Integrated Sea Trials**



USNS Puerto Rico successfully completed the first integrated sea trials for an expeditionary fast transport ship on Aug. 22. U.S. Navy via Austal USA

MOBILE,

Ala. – USNS Puerto Rico successfully completed the first integrated sea trials

for an expeditionary fast transport ship on Aug. 22, the

## Program Executive

Office Ships said in a release. The ship returned to the Austal USA shipyard following two days underway in the Gulf of Mexico.

Integrated trials combine builder's and acceptance trials, allowing for the shipyard to demonstrate to the Navy's Board of Inspection and Survey the operational capability and mission readiness of all the ship's systems during a single underway period. During trials, the shipbuilder conducted comprehensive tests to demonstrate the performance of the ship's major systems.

"The

EPF program continues to be an example of stable and successful serial ship production," said Capt. Scot Searles, Strategic and Theater Sealift program manager, Program Executive Office Ships. "I look forward to seeing EPF 11 deliver in the fall and expand the operational flexibility available to our combatant commanders."

## Expeditionary

fast transport ships are noncombatant vessels designed to operate in shallow-draft ports and waterways, increasing operational flexibility for a wide range of activities such as maneuver and sustainment, relief operations in small or damaged ports, flexible logistics support or as the key enabler for rapid transport. The ships are capable of interfacing with roll-on/roll-off discharge facilities as well as on/off-loading vehicles such as a fully combat-loaded Abrams main battle tank.

EPFs

support a variety of missions including the overseas contingency operations, conducting humanitarian assistance and disaster relief, supporting special operations forces, and supporting emerging joint sea-basing concepts.

In addition to Puerto Rico,

Austal USA is also currently in production on the future USNS Newport (EPF 12)

and is under contract to build the future USNS Apalachicola (EPF 13) and EPF

14.

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## **Teledyne Awarded \$22 Million Navy Contract for Autonomous Underwater Vehicles**

THOUSAND

OAKS, Calif. – Teledyne Technologies Inc.'s subsidiary, Teledyne Instruments

Inc., has been awarded an indefinite delivery/indefinite quantity contract by

the U.S. Naval Undersea Warfare Center to supply autonomous underwater vehicles

(AUVs) and related monitoring and communications acoustic systems, the company

said in a Aug. 19 release.

The initial

2019 value of the contract is about \$5.4 million. The award has a maximum value

of \$22.2 million through December 2024, if all contract options are exercised.

Autonomous underwater vehicles can carrying out complex survey missions for commercial, scientific and defense applications. Teledyne AUVs' modular architecture enables sensors to be easily integrated and battery packs to be exchanged in the field. In addition to powered, self-propelled AUVs, Teledyne provides a wide range of autonomous profiling floats, variable-buoyancy autonomous gliding vehicles, unmanned surface vehicles and inspection-class remotely operating vehicles.

“For more than a decade, Teledyne has been the leading provider of autonomous underwater gliding vehicles to the U.S. government,” said Al Pichelli, president and CEO. “We are exceptionally pleased now to have received our first significant order from the U.S. Navy for Teledyne’s self-propelled autonomous underwater vehicles.”

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## **CPI Aero Subsidiary Receives New Orders for Navy E-2D Inflight Refueling Probe Assemblies**

EDGEWOOD, N.Y. – CPI Aerostructures Inc.’s Welding Metallurgy Inc. subsidiary (WMI) has been awarded \$1.23 million in new requirements for aerial refueling probe assemblies from Northrop Grumman for new E-2D Advanced Hawkeye aircraft, CPI said in an Aug. 26 release.

The probe assembly is a long, welded tube assembly that enables a Navy or U.S. Air Force tanker to provide fuel to the E-2D while in flight. WMI manufactured several probe assemblies during the system test phase, and the refuellable version of the E-2D flew for the first time in December 2016 with a probe assembly manufactured by WMI.

“The E-2D’s refueling capability is transformational, allowing the aircraft to effectively double the time it can stay in the air conducting surveillance and performing its battle management command and control mission,” said Douglas McCrosson, president and CEO of CPI Aero.

“We are pleased to have the opportunity to continue manufacturing this critical component of the E-2D inflight refueling system and bringing WMI’s superior technical and unique production capabilities to bear in support of Northrop Grumman’s commitment to providing the E-2D with increased operational capability.”

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## **General Dynamics Awarded \$1.6 Billion Contract to Build Additional ESBs**



An MV-22B Osprey lands aboard the expeditionary sea base USS Lewis B. Puller. General Dynamics NASSCO has won a contract to build the sixth and seventh ESBs with an option to construct an eighth. U.S. Marine Corps/Sgt. Desiree King  
SAN DIEGO –

General Dynamics NASSCO, a subsidiary of General Dynamics, was awarded a contract by the U.S. Navy worth up to \$1.6 billion for the construction of the sixth and seventh ships of the Expeditionary Sea Base (ESB) program as well as an option for ESB 8, the company said in a release.

“We are pleased to be building ESB 6 and 7 for our Navy,” said Kevin Graney, president of General Dynamics NASSCO. “ESBs have proven to be affordable and flexible, and as the fleet has gained experience with the platform, we have worked with the Navy and Marines to develop even more capabilities and mission sets.”

The contract, announced by the Defense Department on Aug. 23, provides \$1.08 billion as a fixed-price-incentive modification to a previous contract for the design and construction of the two ships, with an option for the third that, if exercised, would bring the total cumulative value to \$1.63 billion.

Named after famous names or places of historical significance to U.S. Marines, ESBs serve as a flexible platform and a key element in the Navy’s airborne mine countermeasures mission, with accommodations for up to 250 personnel and a large helicopter flight deck. The ship’s configuration supports special warfare and Marine Corps task-organized units.

Work on the two new ships of the ESB program is scheduled to begin in the first quarter of 2020 and will continue to the second quarter of 2023, providing the opportunity to sustain and grow the workforce along San Diego's working waterfront. NASSCO's location along the historic San Diego Bay provides shipbuilders and skilled tradespeople with access to the nation's leading maritime support businesses, and highly trained employees allow NASSCO to build and repair ships in the most efficient manner possible.

In 2011, the Navy awarded NASSCO with a contract to design and build the first two ships in the newly created MLP program, the USNS Montford Point and USNS John Glenn. The program expanded with three more vessels, the USS Lewis B. Puller, USNS Hershel "Woody" Williams and the Miguel Keith, configured as ESBs. Following the delivery of the first four ships to the U.S. Navy, the fifth ship, the Miguel Keith, is scheduled for delivery in the fourth quarter of 2019.

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## **Coast Guard Commissions Two Newest National Security Cutters in Honolulu**



The crew of the Coast Guard Cutter Kimball brings the ship to life during a commissioning ceremony at Base Honolulu on Aug. 24. The dual ceremony was for the Kimball and Cutter Midgett. U.S. Coast Guard/Petty Officer 3rd Class Matthew West

HONOLULU –

The U.S Coast Guard's two newest national security cutters were commissioned

Aug. 24 during a ceremony presided over by Commandant Adm.

Karl Schultz, the  
Coast Guard Pacific area said in a release.

The Coast  
Guard Cutter Kimball (WMSL 756) and the Coast Guard Cutter  
Midgett (WMSL 757)  
were “brought to life” at the rare dual-commissioning ceremony  
in Honolulu,  
where the two cutters homeport. Three fast-response cutters  
also homeport  
there. Kimball and Midgett are the seventh and eighth Legend-  
class national  
security cutters in the fleet.

“These  
national security cutters will continue our 150 years of  
partnership and  
commitment to the Pacific region – since September 1849, when  
Revenue Cutter  
Lawrence sailed into Honolulu Harbor escorted by Native  
Hawaiians in outrigger  
canoes,” Schultz said. “In today’s complex geostrategic  
environment with rising  
great power competition, the importance and demand for a  
strong Coast Guard  
presence in the Pacific has never been greater.”

Advanced  
command-and-control capabilities and a combination of range,  
speed and ability  
to operate in extreme weather enable these ships to confront  
national security  
threats, strengthen maritime governance, support economic  
prosperity and  
promote individual sovereignty.

From the Bering Sea and the Arctic to patrolling known drug trafficking zones off Central and South America to working to strengthen the capabilities of our partners across the Indo-Pacific, national security cutters deploy globally to conduct essential Coast Guard missions.

Known as the Legend-class, national security cutters can execute the most challenging national security missions, including support to U.S. combatant commanders.

They are 418 feet in length, 54 feet in beam and 4,600 long tons in displacement. They have a top speed of more than 28 knots, a range of 12,000 nautical miles, an endurance of up to 90 days and can hold a crew of up to 150.

These new cutters are replacing the high-endurance Hamilton-class cutters (378 feet) that have been in service since the 1960s.



Commandant Adm. Karl Schultz shakes hands with Capt. Alan McCabe, commanding officer of the Coast Guard Cutter Midgett, during a commissioning ceremony at Base Honolulu on Aug. 24. U.S. Coast Guard/Petty Officer 3rd Class Matthew West

The Midgett's transit to Hawaii was punctuated by two interdictions of suspected low-profile go-fast vessels in the eastern Pacific Ocean, the first July 25 and a second July 31. The boardings resulted in a combined seizure of more than 6,700 pounds of cocaine, estimated to be worth over \$89 million.

National

security cutters are responsible for 40% of the 460,000 pounds of cocaine

interdicted by the Coast Guard in the fiscal year 2018. NSC crews have

interdicted more than 92,000 pounds of cocaine to date in the fiscal year 2019.

Midgett is

named to honor all members of the Midgett family who served in the Coast Guard

and its predecessor services. At least 10 members of the family earned high

honors for their heroic lifesaving efforts. Among them, the Coast Guard awarded

various family members seven gold lifesaving medals, the service's highest

award for saving a life, and three silver lifesaving medals.



The crew of the Midgett stand along the rails during a commissioning ceremony Aug. 24. U.S. Coast Guard/Petty Officer 3rd Class Matthew West

The Kimball is the third ship to bear that name, in honor of Sumner Kimball, who served as superintendent of the Revenue Marine and as general superintendent of the Life-Saving Service from 1878 until the two organizations merged in 1915 to become the modern-day U.S. Coast Guard.

“As you take to the seas, you will write the next chapters of the Kimball and Midgett legacies,” Schultz said, addressing the commands and crews of the two cutters on Aug. 24. “I charge you with carrying out the operations of these ships in such a manner as to be worthy of the traditions of self-sacrifice, inspirational leadership and unwavering dedication to duty – traits exemplified by these cutters’ distinguished and storied namesakes.”

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# BAE to Enhance F-35's Electronic Warfare Capabilities



An F-35C Lightning II launches off the flight deck of the aircraft carrier USS Nimitz. U.S. Navy/Mass Communication Specialist 3rd Class Christopher R. Jahnke

NASHUA, New Hampshire – BAE Systems has received a Block 4 modernization

contract award from Lockheed Martin to enhance the offensive and defensive

electronic warfare capabilities of the F-35 Lightning II fighter, BAE said in a release.

Under the contract, BAE Systems will modernize its AN/ASQ-239 Electronic Warfare/Countermeasures (EW/CM) system to address emerging threats.

“The F-35 will be in service for decades, and we’re committed to providing our pilots with an AN/ASQ-239 capability that affords a decisive and sustained EW operational advantage,” said Deborah Norton, vice president of F-35 Solutions at BAE Systems. “Our robust, modular

architecture enables us to efficiently insert new capabilities, supporting the next wave of technical innovation while proactively addressing total product lifecycle sustainability.”

BAE Systems has been the EW supplier for the F-35 program for

the past 14 years, designing and developing the Block 1, Block 2 and Block 3 configurations, and delivering production units for each of the Low-Rate Initial Production (LRIP) Lots 1-11. The Block 4 program is a multiyear, multicontract design and development effort that will add 11 new capabilities to the EW system.

BAE Systems has delivered more than 500 F-35 AN/ASQ-239 EW/CM shipsets to date and is matching aircraft production with continual on-time delivery as the program ramps to full-rate production.

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## **Air Surveillance Radar Successfully Tracks First Targets at Wallops Island**



SPY-6(V)2, Enterprise Air Surveillance Radar (EASR), recently completed its first system-level tests. The Raytheon Co.

WALLOPS

ISLAND TEST FACILITY, Va. – Raytheon Co. and the U.S. Navy completed the first system-level tests of SPY-6(V)2, the Enterprise Air Surveillance Radar (EASR), at the Surface Combat System Center at Wallops Island, Virginia, Raytheon said in a statement.

In the first test the radar searched for, detected, identified and tracked numerous targets – including commercial aircraft. In a second exercise,

the maturity of EASR integration enabled the radar to track multiple targets continuously for several hours during a test involving another system.

EASR, the newest sensor in the Navy's SPY-6 family of radars, provides simultaneous anti-air and anti-surface warfare, electronic protection and air traffic control for aircraft carriers and amphibious warfare ships.

"Moving quickly from radar installation at Wallops Island to 'tracks on glass' in less than three months is a major accomplishment," said Navy Capt. Jason Hall, program manager for above water sensors, Program Executive Office Integrated Warfare Systems. "The EASR program is progressing extremely well. We are now one step closer to production and delivering the radar's unmatched capability to the surface fleet."

Two variants of EASR are being built: a single-face rotating array designated AN/SPY-6(V)2 for amphibious assault ships and Nimitz-class carriers and a three fixed-face array designated AN/SPY-6(V)3 for Gerald R. Ford-class aircraft carriers and the future FFG(X) guided missile frigates.

Both versions of EASR are built on scalable Radar Modular Assembly, or RMA, technology as well as a software baseline that has been matured through development and test successes of AN/SPY-6(V)1, the Navy's program of record for the DDG 51

Flight III destroyers. These individual radars can integrate to form arrays of various sizes to address any mission on any ship. EASR also adds air traffic control and weather capabilities to the mature SPY-6 software baseline.

Upon completion of system-level testing in the fourth quarter of 2019, EASR will shift from the engineering and manufacturing development phase to the production phase. The first delivery of AN/SPY-6(V)2 will be to LHA 8, the third America-class amphibious assault ship.

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## **Coast Guard Patrols North Pacific in Support of International Fisheries**



A boarding team aboard an over-the-horizon cutter boat from U.S. Coast Guard Cutter Mellon (WHEC-717) navigates toward a fishing vessel to conduct an at-sea boarding in the North Pacific Ocean on Aug. 13. U.S. Coast Guard JUNEAU, Alaska – The crew of Coast Guard Cutter Mellon (WHEC-717) continues their North Pacific patrol in support of Operation North Pacific Guard (NPG) 2019, protecting living marine resources, enforcing international fisheries agreements and conducting global security missions, the Coast Guard 17th District said in a statement.

Since June, Mellon's crew has conducted 40 boardings and issued 61 violations. A total of 25 were serious violations because of their

potential to severely impact fisheries and/or blatant disregard for conservation and management measures. Their most frequent violations were improper vessel marking (9), illegal shark finning (4) and intentional tampering with the vessel monitoring system (2).

“These fisheries patrols are vital to demonstrating the U.S. commitment to our regional partnerships while strengthening regional maritime governance and promoting sustainability of living marine resources,” said Capt. Jonathan Musman, commanding officer of Mellon.

“I’m extremely proud of the work we’ve done this patrol, and it’s a direct result of the hard work of this crew as well as the continued support of our international partners. Together, we’ve put in a lot of hours and a lot of work, and we’ve seen impressive results because of it.”

*“These fisheries patrols are vital to demonstrating the U.S. commitment to our regional partnerships while strengthening regional maritime governance and promoting sustainability of living marine resources.”*

*Capt. Jonathan Musman, commanding officer of Mellon*

Mellon’s deployment is in support of U.S. goals for the conservation and management of high seas fisheries resources to eliminate illegal, unreported and unregulated (IUU) fishing activity from the North Pacific.

NPG 2019 showcases a multimission effort between the

Coast Guard, NOAA, Alaska Department of Fish and Game, five Pacific Rim countries and three regional fisheries management organizations. Unlike previous years' operations, Mellon has conducted high-seas boardings and inspections on the North Pacific Fisheries Commission fishing vessels, while continuing to conduct Western and Central Pacific Fisheries Commission boardings.

"We've seen a 344% increase in boardings and 867% increase in violations compared to last year's operation," said Lt. Cdr. Kristen Caldwell, living marine resource program manager for the Pacific Area. "This increase highlights the significance of employing differing authorities, all aimed at mitigation of IUU fishing, capitalizing on a highly capable resource to maximize time on scene and the targeting of IUU vessels."

NPG 2019 was designed to conduct law-enforcement operations in support of RFMO in the North Pacific Ocean. Through the North Pacific Coast Guard Forum and North Pacific Anadromous Fish Commission's enforcement coordination process, each partner nation contributes to this at-sea enforcement effort by providing surface patrols and/or air surveillance.

This operation is in direct support of the National Security Strategy as it aligns with the tenant of "achieving better outcomes in multilateral forums" as well as by addressing the risks to sovereignty of

developing nations by China identified in the Indo-Pacific Region. The 2018 National Defense Strategy (NDS) also has identified China as a “strategic competitor using predatory economics to intimidate its neighbors while militarizing features in the South China Sea.” A goal of the NDS is to “support U.S. interagency approaches and work by, with, and through our allies and partners to secure U.S. interests and counteract this coercion.”

Due to the increasing threat, complexity and diversity of tactics in IUU fishing, it is critical to ensure oversight and enforcement in regions in which the United States has jurisdiction and authority to mitigate the rapidly developing influence of specified fleets known to engage in IUU fishing. Efforts to increase the ability of the United States to check the threat of IUU fishing in the Pacific Ocean have been continuous, with the recent success of the adoption of high-seas boarding inspections (HSBI) for the Northern Pacific Fisheries Commission and continued efforts in the Western and Central Pacific Fisheries Commission and North Pacific Anadromous Fish Commission’s Convention Areas.

During NPG 2019, Mellon embarked two Canadian shipriders from the Canadian Department of Fisheries and Oceans as well as two aircrews from Coast Guard Air Station North Bend.

Mellon, a 378-foot high-endurance

cutter with a crew of 150, is homeported in Seattle and routinely deploys in support of counter-drug and alien migrant interdiction, living marine resources and search-and-rescue missions.

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## **VT Group Awarded Navy Afloat Global C4ISR Installations Contract**

CHANTILLY, Va. – VT Group, a middle-market technology integrator and C4ISR solutions provider, has been named by Naval Information Warfare Systems Command (NAVWAR) as one of six award winners for an indefinite delivery, indefinite quantity contract.

VT Group will compete for work in the areas of afloat installation and integrated command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) systems aboard the U.S. Navy's growing fleet of surface ships and submarines. The contract vehicle has a ceiling value of \$2.45 billion over a five-year base period and one five-year option period.

VT Group has a 50-year history providing the Navy with C4ISR solutions and full lifecycle engineering services – in the air, ashore and at sea. Its maritime solutions business has integrated C4ISR technologies aboard

every existing class of warship and submarine, building differentiated expertise in undersea warfare platforms and systems.

“VT Group is proud of its longstanding partnership with the U.S. Navy,” said John Hassoun, VT Group president and CEO.

“This award showcases our growing portfolio of fleet modernization capabilities and highlights the exceptional performance of our shipboard leaders and technicians. We look forward to continuing to provide NAVWAR with the deck-plate innovations and engineering expertise they have come to expect from our team.”