General Atomics SeaGuardian UAS Supporting RIMPAC 2022

An MQ-9B SeaGuardian UAS is supporting RIMPAC 2022 under a contract with the U.S. Navy. *GENERAL ATOMICS AERONAUTICAL SYSTEMS*

SAN DIEGO – An MQ-9B SeaGuardian unmanned aircraft system from General Atomics Aeronautical Systems Inc. is under contract with the U.S. Navy to support the Rim of the Pacific (RIMPAC) 2022 exercise, the company said July 27.

RIMPAC, the world's largest international maritime exercise, started in late June and continues until early August in Hawaii and Southern California operations areas.

GA-ASI's SeaGuardian is a maritime derivative of the MQ-9B SkyGuardian and remains the first UAS that offers multi-domain intelligence, surveillance, reconnaissance and targeting as an internal payload that can search the ocean surface and the depths in support of Fleet operations. The UAS is also providing real-time ISR data feeds to the U.S. Pacific Fleet Command Center using signals intelligence parametrics and full-motion video to the watch floor and intelligence centers for real-time, dynamic tasking.

As of July 25, 11 flights totaling over 80 hours have been flown by SeaGuardian showcasing all operational payloads, which includes electronic intelligence, communication intelligence, Automatic Identification System, antisubmarine warfare monitor and control of sonobuoys, GA-ASI developed Lynx Multi-mode Maritime Radar, high-definition electro-optical/infra-red imaging system and Link 16.

SeaGuardian's multi-domain capabilities allows it to flex from mission to mission and pass real-time sensor data directly to the Fleet through Link 16 and satellite feeds to the shore-based command and intelligence centers, the company said.

During RIMPAC, the MQ-9B has effectively passed ISR&T information to various surface and air units, such as the aircraft carrier USS Abraham Lincoln, guided-missile destroyers, littoral combat ships, frigates, patrol boats, P-8 and P-3 maritime patrol aircraft and a litany of other U.S. and foreign units taking part in the exercise.

Raytheon to Upgrade Australian Border Surveillance Aircraft with Advanced Radar

ADELAIDE, Australia – Raytheon Intelligence & Space will equip Australian border surveillance aircraft with its latest SeaVue Multi-Role radar under a contract with Cobham Special Mission, the company announced July 27.

Under the contract, RI&S will upgrade Cobham's fleet of Dash 8

fixed-wing aircraft to the most advanced version of its SeaVue multi-domain surveillance radar in support of Australian border protection operations.

SeaVue MR will bring long-range, high-altitude surveillance capabilities to the special mission fixed-wing aircraft used to patrol the oceans surrounding Australia's shores as part of the world's largest outsourced civil maritime surveillance operation.

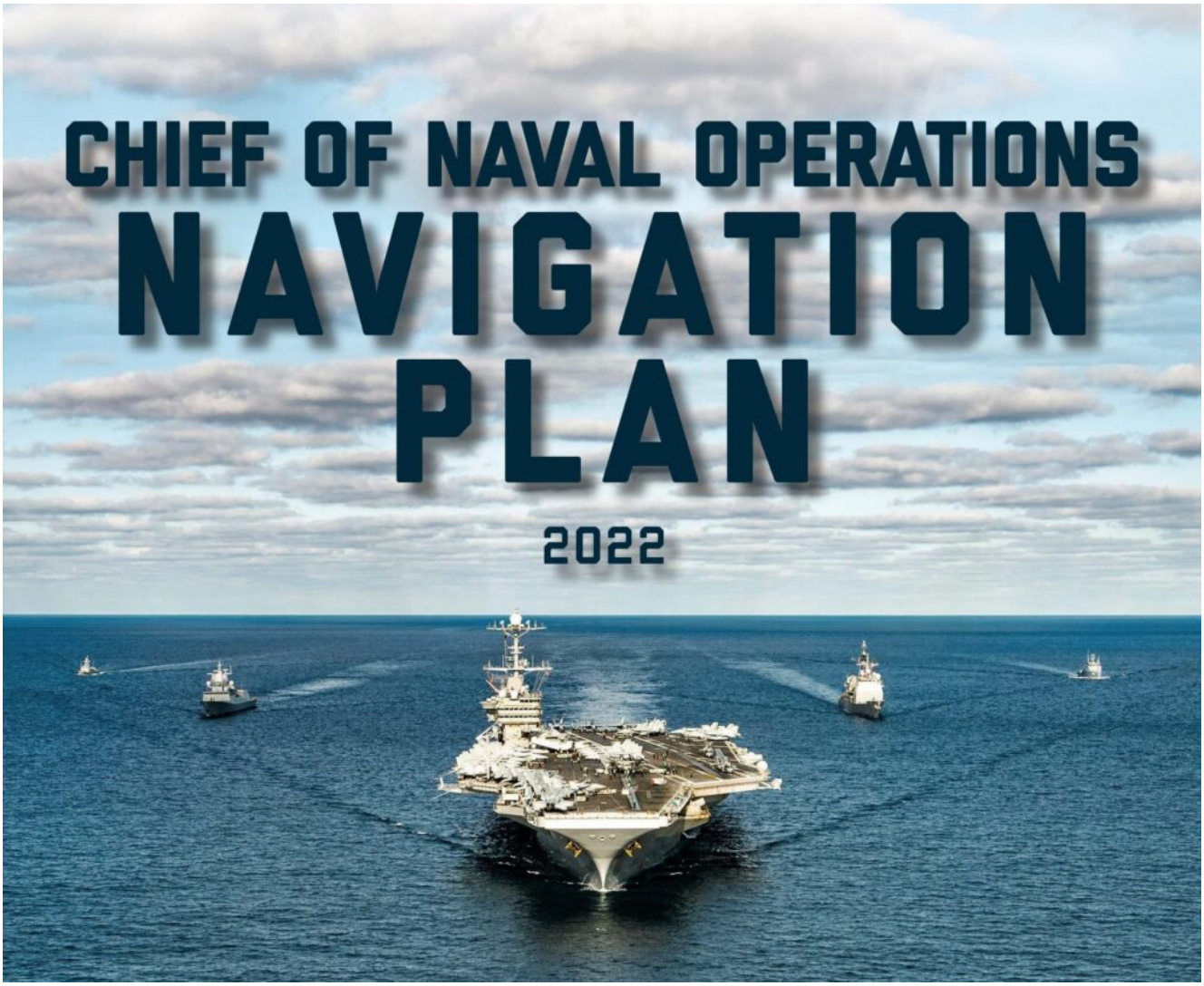
"Long-range detection of small targets from higher altitudes increases surveillance coverage and improves Australia's capability to detect and counter Civil Maritime Security threats," said Denis Donohue, president of Surveillance and Networks Systems for RI&S.

Cobham Special Mission Managing Director James Woodhams said, "Having new-generation technology on our Dash-8 fleet ensures these platforms remain relevant and fit for purpose to conduct border surveillance missions in the national interest."

RI&S has supported Cobham's mission of patrolling the country's vast 8.2-million-square-kilometer exclusive economic zone – which includes oil and gas fields, shipping lanes, and fisheries – with previous versions of the SeaVue radar since 1995. SeaVue maritime surveillance radars currently fly on manned and unmanned aircraft in nine countries around the world.

CNO's NAVPLAN Addresses

Hybrid Fleet Force Structure Goals for 2045



ARLINGTON, Va. – The update to the chief of naval operation's Navigation Plan incorporates the Navy's Force Design 2045 ship and aircraft force level goals for 2045, a hybrid fleet in which manned ships will remain dominant but supplemented by significant numbers of unmanned systems.

The NAVPLAN, released July 26, has been informed by recent fleet exercises, including IMX-22 held by Task Force 59 earlier this year and the Rim of the Pacific exercises, CNO Adm. Michael Gilday, now in his third year in office, said during a July 26 roundtable with reporters.

The plan complies with the National Defense Strategy and the CNO's priorities on Sailors, readiness, capability and capacity.

"The Navy must be capable of controlling the seas to deter aggression against our allies and partners, and project power ashore as an integral part of the Joint Force," the CNO says in the NAVPLAN. "The Navy will incorporate our force design imperatives – distance, deception, defense, distribution, delivery, and decision advantage – to effectively integrate with the joint force, deliver effects across all domains and defeat adversary forces in conflict.

"To accomplish this, the Navy must become a hybrid fleet. Manned, multi-mission platforms will remain at the core of our future fleet but augmented with new platforms and new capabilities. We will add to our current fleet a host of manned, unmanned and optionally manned platforms operating under, on, and above the seas. This future fleet will deliver an assured strategic deterrent; greater numbers of undersea capabilities; a mix of large and small modern surface combatants; and a resilient logistics enterprise that can sustain our distributed naval force."

Gilday said the future fleet would require a 3% to 5% annual increase in the Navy's budget, noting that the shipbuilding request of $27 billion is the highest ever but also affirming that a long time will be required to build up the size of the fleet to meet the goals in 2045.

"I think it's going to take a couple of decades to yield that hybrid fleet that we think that we ultimately need in order to fight the way we think we want to fight in a distributed manner, leveraging networking like JADC2 and the effort that we have ongoing with Overmatch," Gilday said. "All that is going to take time. I'm being realistic. We don't have the capacity in the industrial base to pump out that number of ships in a short period of time."

Force Design 2045 envisions a hybrid fleet of “more than 350 manned ships, 150 large, unmanned surface and subsurface platforms, and approximately 3,000 aircraft,” the plan says, noting the numbers will be refined as the security environment changes.

The capacity goals of Force Design 2045 include:

- 12 Columbia-class nuclear-powered ballistic-missile submarines
- 12 nuclear-powered aircraft carriers
- 66 nuclear-powered fast-attack and large-payload submarines, continuing with the Virginia class and developing the SSN(X)
- 96 large surface combatants, including the Flight III Arleigh Burke-class DDG and the DDG(X)
- 56 small surface combatants, including the Constellation-class FFG
- 31 large amphibious warships
- 18 light amphibious warships
- Approximately 150 unmanned surface and subsurface vessels
- 82 combat logistic and auxiliary ships
- Increased expeditionary logistics capacity
- Approximately 1,300 carrier-based fifth-generation strike fighters and Next-Generation Air Dominance Family of Systems
- Approximately 900 maritime patrol, reconnaissance, anti-submarine and anti-surface fixed-wing and rotary-wing aircraft, augmented by unmanned aircraft
- Approximately 750 intra-theater lift, training, and research and development aircraft.

“We will augment the force with an evolving complement of thousands of small, rapidly adaptable, and attritable unmanned platforms,” the NAVPLAN says. “These enablers will increase our sensing resilience, persistence, and coverage, provide cross-domain kinetic and non-kinetic effects, and enhance the

survivability and sustainability of the future fleet. We will build future platforms with modernization in mind – hardware upgradeable and software updateable at the speed of innovation. We must build adequate space, weight, and power into our large long-life capital investments to support evolving sensors and weapons systems."

The NAVPLAN is available here.

USS Whidbey Island Decommissioned after Nearly 38 Years of Service

A landing craft air cushion from Assault Craft Unit 2, currently embarked aboard the amphibious assault ship USS Bataan (LHD 5), passes the Spanish landing platform dock Castilla (L-52), during a bilateral Spanish Amphibious Landing

Exercise, June 21. *U.S. NAVY / Petty Officer 1st Class Rachael L. Leslie*

NORFOLK – Whidbey Island-class dock landing ship namesake, USS Whidbey Island (LSD 41) held a decommissioning ceremony at Joint Expeditionary Base Little Creek-Fort Story, Virginia, on July 22 before its inactivation next month, the Navy said in July 25 release.

The ship's decommissioning ceremony was held on the quay wall, alongside the moored USS Whidbey Island. The ceremony was attended by nine of her previous commanding officers and over 50 plankowners. "The last crew of Whidbey Island performed with great dignity and resiliency," said Cmdr. Matt Phillips, the ship's final commanding officer. "It's been a privilege and an honor to lead this crew in executing her final mission."

Whidbey Island was commissioned Feb. 9, 1985, at Lockheed Shipyard in Seattle. The first ship in a class designed specifically to interface with the landing craft, air cushion, assisted in the operational and developmental testing of the amphibious assault craft from July to September 1985 and again in May and July 1986.

Whidbey Island was the first amphibious ship from the East Coast to deploy to the European Theater with LCACs. In September and October 1989, it participated in Hurricane Hugo disaster relief operations in the Caribbean Sea.

In August 1994, Whidbey Island rescued and transported over 8,100 Cuban migrants from the Straits of Florida during Operation Able Vigil and participated in the restoration of the legitimate government to Haiti during Operation Uphold Democracy.

In June 2006, Whidbey Island deployed in support of Operation Enduring Freedom. While in-port Aqaba, Jordan in July of 2006, the ship was recalled through the Suez Canal to support

contingency operations due to the crisis in Lebanon. Whidbey Island subsequently participated in the largest non-combatant evacuation conducted by the U.S. Navy since Vietnam. During July and August, the ship evacuated 817 American citizens via LCAC with personnel transport module.

On Feb. 16, 2007, Whidbey Island was awarded the 2006 Battle "E" award.

On June 24, 2016, USS Whidbey Island deployed from Joint Expeditionary Base Little Creek-Fort Story, for what would be its final deployment. It conducted eight Theater Security Port Visits, country visits vital to reassuring host nations of the commitment of the United States to their partnership. On July 21, 2016, USS Whidbey Island transited the Bosphorus Strait during a time of tension following the failed 2016 Turkish coup d'état attempt.

Rear Adm. Tom Williams, commander, Expeditionary Strike Group (ESG) 2 presided over the ceremony, which included the remaining ship's crew, several of its previous commanding officers, including the ship's first commanding officer, Captain Pat Muldoon and many other special guests in attendance.

"I am humbled to be with you on this bittersweet day as we gather here at Joint Expeditionary Base Little Creek – Fort Story to commemorate this ship's near 38 years of commissioned service," said Williams.

HII's Ingalls Shipbuilding

Awarded DDG(X) Design Engineering Contract

An aerial image of HII's Ingalls Shipbuilding. Ingalls was awarded a design engineering contract from the Navy for the Next-Generation Guided-Missile Destroyer program. *HII*

PASCAGOULA, Miss. – HII's Ingalls Shipbuilding division has been awarded a cost-plus-incentive-fee contract for engineering and design from the U.S. Navy for the next-generation guided-missile destroyer (DDG(X)) program, the company said July 22.

"We are excited to continue on this path with our Navy and industry partners," Ingalls Shipbuilding President Kari Wilkinson said. "It provides us a tremendous opportunity to bring best practices and innovation from our experienced engineering team to the design of this important future surface combatant."

Ingalls Shipbuilding is a major contractor and shipbuilding partner in the Arleigh Burke-class (DDG 51) program that has been in production for three decades. Arleigh Burke-class destroyers are multi-mission ships that can provide offensive and defensive capabilities, and can conduct a variety of operations, from peacetime presence and crisis management to sea control and power projection, all in support of the United States military strategy.

DDG(X) will be the next generation large surface combatant for the U.S. Navy, and is being designed by a Navy-industry collaborative team consisting of the Navy and both large surface combatant shipbuilders.

CNO Travels to RIMPAC, Meets with Exercise Participants

Chief of Naval Operations Adm. Mike Gilday meets with Sailors aboard the Wasp-class amphibious assault ship USS Essex (LHD 2) during Rim of the Pacific 2022, July 21. *U.S. NAVY / Chief Mass Communication Specialist Amanda R. Gray*

HONOLULU – Chief of Naval Operations Adm. Mike Gilday traveled to Hawaii June 20-23 to visit participants of the Rim of the Pacific Exercise, the CNO's public affairs office said July 23.

Gilday visited several U.S. and partner nation ships, where he spoke with Sailors and observed the ongoing exercise.

"RIMPAC is the premier international maritime exercise and the largest multinational exercise," Gilday said. "The complex warfighting exercise in this unique training environment across all combat domains strengthens our ability to work together, hone our skills and foster trust among nations."

"Building interchangeability among like-minded allies and partners demonstrates our solidarity, RIMPAC truly demonstrates the value of maritime partnership," he said.

While on Oahu, Gilday met with U.S. Indo-Pacific Commander Adm. John Aquilino and U.S. 3rd Fleet and RIMPAC 2022 Commander Vice Adm. Michael Boyle.

Gilday also spent multiple days underway aboard ships participating in the exercise. He visited USS Essex (LHD 2), USS Abraham Lincoln (CVN 72), Japan Maritime Self-Defense Force helicopter destroyer JS Izumo (DDH-183) and the Republic of Korea navy amphibious assault ship ROKS Marado (LPH 6112), to thank Sailors, meet with leadership and observe the exercise first-hand.

Gilday met with Commander of Combined Task Force (CTF) 176, Republic of Korea Rear Adm. Sangmin An, when he was aboard Essex. Additionally, he met with vice commander of Combined Task Force for RIMPAC, Japan Maritime Self-Defense Force Rear Adm. Toshiyuki Hirata, while aboard the Izumo.

“Complex combined operations drive readiness, build confidence, and enhance interoperability among a diverse and highly capable international team,” Gilday said. “We are joined in our commitment to maintaining a free and open Indo-Pacific.”

Unmanned systems are being used in different ways from humanitarian assistance to high-end warfighting. This year, more than 30 experiments were planned using multiple unmanned platforms from U.S. and partner nations.

“We need to continue to put ourselves in a position where we can scale and really make unmanned assets on, below and above the sea an important part of the fleet,” said Gilday. “Unmanned systems provide Sailors with cutting edge capability now and into the future. It’s no longer a luxury. It’s a necessity if we want to operate in a distributed manner.”

In its 28th iteration, the biennial event is the world’s largest international maritime exercise, providing a unique

training opportunity to foster and sustain cooperative relationships critical to ensuring security on the world's oceans. Capabilities exercised during RIMPAC range from disaster relief and maritime security operations to sea control and complex warfighting.

This was Gilday's first time attending RIMPAC as CNO.

Four Unmanned Surface Vessels Being Demonstrated in RIMPAC

The large unmanned surface vessel Ranger transits the Pacific Ocean to participate in Exercise Rim of the Pacific (RIMPAC) 2022. *U.S. NAVY / Mass Communication Specialist 1st Class Tyler R. Fraser*

WASHINGTON, D.C. – Four prototype unmanned surface vessels are participating in the Rim of the Pacific 2022 exercise, known as RIMPAC, delivering warfighting capabilities and extending the reach of the manned U.S. fleet with fewer risks to the warfighter, Program Executive Office Unmanned and Small Combatants Public Affairs said July 22.

Though unmanned systems have participated in exercises before, the involvement of four different vehicles, operating both autonomously and by manned teams, is a major milestone.

The vessels – Seahawk, Sea Hunter, Nomad and Ranger – will execute a range of missions. The prototypes will work side-by-side with exercise participants, carrying payloads, providing intelligence, and most significantly, gathering data in a real-world environment to determine how they will function in the larger fleet.

The significance of the occasion is not lost on Navy Capt. Scot Searles, program manager of the Unmanned Maritime Systems (PMS 406) program office.

“The integration of autonomous USVs with manned combatants will give fleet commanders much-needed enhancements to maritime domain awareness, thereby increasing decision speed and lethality in surface warfare.” Searles said.

PMS 406, the office responsible for the participating RIMPAC prototypes, is a program office within the Program Executive Office, Unmanned and Small Combatants.

“While our prototyping efforts have grown and matured significantly in the last four years, their performance in the RIMPAC exercise marks another significant milestone in manned-unmanned teams.” Searles said.

The manned-unmanned team, in the case of RIMPAC, will include service members and civilians supporting the mission from various organizations all over the country.

The PMS 406 assets participating in RIMPAC are the Overlord unmanned surface vehicles, Nomad and Ranger, and the medium unmanned surface vehicles, Sea Hunter and Seahawk. Though primarily operated and maintained under the control of PMS 406, personnel from Unmanned Surface Vessel Division One within Surface Development Squadron One control much of the practical execution.

RIMPAC is the largest joint maritime exercise in the world. Lasting over five weeks and spanning massive areas in the Pacific Ocean, the exercise will include hundreds of ships, submarines and aircraft, along with over 25,000 personnel.

Brian Fitzpatrick, PMS 406 principal assistant program manager for unmanned surface vessels, said, “RIMPAC is an incredible opportunity to not only show that we can develop these vessels, but we’re also showing the Navy’s commitment to unmanned and manned teams.”

Austal USA Delivers the Future USS Santa Barbara to the U.S. Navy

Austal USA delivered the future USS Santa Barbara (LCS 32) to the U.S. Navy on July 21. *AUSTAL USA*

MOBILE, Ala. – Austal USA delivered the future USS Santa Barbara (LCS 32) to the U.S. Navy on July 21, the company said July 22. LCS 32 is the 16th Independence–variant littoral combat ship delivered by the company.

Delivery documents were signed on board the ship and followed the successful completion of acceptance trials during which the ship's major systems and equipment were tested to demonstrate mission readiness. The ship's pre-commissioning unit will now prepare the ship for fleet introduction.

"Delivering the future USS Santa Barbara is a proud moment for Austal USA shipbuilders who worked extensively with Navy teammates and suppliers from across the nation to produce a capability that will serve our country for years to come," said Rusty Murdaugh, president of Austal USA. "The fact that we're delivering that capability on time and on schedule demonstrates our commitment to the warfighter and our nation's defense."

LCS are built to operate in near-shore environments and support forward presence, maritime security, sea control and deterrence missions. Several Austal USA built Independence-variant LCS have deployed to the western Pacific within the

last year including USS Jackson (LCS 6), USS Tulsa (LCS 16) and USS Charleston (LCS 18).

Austal USA is currently constructing three LCS including the recently launched future USS Augusta (LCS 34). Final assembly is underway on the future USS Kingsville (LCS 36) and modules are under construction for the future USS Pierre (LCS 38).

Navy F/A-18 Launches AARGM-ER for Third Live-Fire Test

Northrop Grumman's Advanced Anti-Radiation Guided Missile Extended Range (AARGM-ER) is launched from a U.S. Navy F/A-18 Super Hornet. *U.S. NAVY*

LOS ANGELES – Northrop Grumman Corp. successfully completed the third live fire test of its AGM-88G Advanced Anti-

Radiation Guided Missile Extended Range (AARGM-ER), the company said July 21.

The U.S. Navy launched the missile from an F/A-18 Super Hornet aircraft recently at the Point Mugu Sea Range off the coast of California. Utilizing its advanced emitter acquisition system, the missile detected a land-based threat and engaged the threat system.

“The Navy requirement for AARGM-ER is now,” said Captain A.C. Dutko, Navy program manager for Direct and Time Sensitive Strike (PMA-242). “AARGM-ER performed as expected and detected, identified, located and engaged a land-based air defense radar system. The continued success of our developmental testing moves the program closer to fielding and providing the aircrews with the protection they need to remain ahead of adversary threats.”

Since achieving a Milestone C Decision in September 2021, AARGM-ER prime contractor Northrop Grumman has continued to lead its industry team in timely development of critically needed warfighting capability. LRIP Lot 1 AARGM-ER missiles are currently in-production to support initial operational capability fielding. LRIP Lot 2 missiles, under contract, will further augment the inventory in the fleet.

AARGM-ER is being integrated on the Navy F/A-18E/F Super Hornet and EA-18G Growler aircraft as well as the F-35 aircraft.

State Dept. Approves Possible

Sale of JASSM-ER Missiles to Australia

Maj. Jacob Rohrbach, a pilot assigned to the 40th Flight Test Squadron at Eglin Air Force Base, Florida, releases the first Joint Air-to-Surface Standoff Missile – Extended Range from an F-16 over the Gulf of Mexico on Sept. 19, 2018. *U.S. AIR FORCE / Master Sgt. Michael Jackson*

WASHINGTON – The State Department has approved a possible Foreign Military Sale to the government of Australia of Joint Air-to-Surface Standoff Missiles – Extended Range (JASSM ER) and related equipment for an estimated cost of $235 million, the Defense Security Cooperation Agency said July 21.

Australia has requested 80 JASSM ERs (AGM-158B with telemetry kits and/or AGM-158B-2 configurations).

"Also included are missile containers and support equipment; JASSM training missiles; weapon system support; spare parts, consumables, accessories, and repair/return support; integration and test support and equipment; personnel training; software delivery and support; classified and

unclassified publications and technical documentation; transportation; U.S. government and contractor engineering, technical and logistics support services, studies and surveys; and other related elements of logistical and program support," the release said.

"The proposed sale will improve Australia's capability to meet current and future threats by providing advanced, long-range strike systems for employment from Royal Australian Air Force air platforms including, but not limited to, the F/A-18F Super Hornet and F-35A Lightning II," the announcement said.

The principal contractor will be Lockheed Martin, Orlando, Florida.