

RTX's Raytheon Completes First Flight Test for New AMRAAM-ER Variant



Successful test showcases increased capabilities of upgraded AMRAAM-ER

ANDØYA, Norway (Feb. 27, 2024) – Raytheon, an RTX (NYSE: RTX) business, and Kongsberg Defence & Aerospace, with support from the Norwegian Ministry of Defense (MoD) and Armed Forces, successfully completed a flight test of an updated AMRAAM®-Extended Range missile variant from a National Advanced Surface-to-Air Missile System (NASAMS). The successful flight test showcases the increased capabilities of the upgraded AMRAAM-ER.

This latest AMRAAM-ER variant is a first-of-its-kind configuration incorporating the guidance section of the AIM-120 C-8. It also incorporates a more robust 10-inch rocket motor from Nammo and a 10-inch Control Actuator System, from Kongsberg Defence & Aerospace, branded the Norwegian

Propulsion Stack, for which the Norwegian MoD has been a collaborative partner.

“Integrating this new technology into the AMRAAM-ER ensures the advanced capabilities of the surface-launched munition for many years to come,” said Paul Ferraro, president of Air & Space Defense Systems at Raytheon. “Agile software upgrades will continue to advance AMRAAM to stay ahead of evolving threats.”

The testing included a test firing, during which the missile flew a preprogramed flight path to verify safe egress from the NASAMS launcher and missile performance.

The AMRAAM-ER is designed to be integrated with the NASAMS launcher for increased air defense protection, intercepting targets with increased range and altitude of a non-extended range AMRAAM.

NASAMS, a highly adaptable medium-range air defense solution, is jointly developed and produced by Raytheon and Kongsberg Defence & Aerospace. Drawing on decades of experience, industrial cooperation, and significant investment made by all three parties, this new cooperative arrangement will grow the capabilities of NASAMS to ensure it keeps pace with ever-evolving complex threats.

R2S Breaks Ground on Iron Dome Manufacturing Facility

in Arkansas



Left to right: Clint O’Neal, executive director of the Arkansas Economic Development Commission; Kevin Perry is president and Chief Executive Officer of R2S Pini Yungman, Executive Vice President and General Manager of the Air & Missile Defense Division, Rafael; Annabel Flores, deputy president of Land & Air Defense Systems at Raytheon; Senator John Boozman, R-Arkansas; Arkansas Governor Sarah Huckabee Sanders; Rep. Bruce Westerman, R-Arkansas; Marine Brigadier General Stephen Lightfoot; James Lee Silliman, executive director of the Ouachita Partnership for Economic Development; and Calhoun County Judge Floyd Nutt

East Camden, Ark. (Feb. 21, 2024) – R2S has broken ground on its new manufacturing facility in East Camden, Arkansas. The facility will produce the Tamir missile for the Iron Dome Weapon System and its variant, the SkyHunter missile to be used by U.S. Marine Corps and U.S. allies.

R2S is a joint venture between Raytheon and Rafael Advanced Defense System. Raytheon is an RTX (NYSE: RTX) business.

This facility represents an investment of \$63 million for R2S and will create up to 60 new jobs in the region. The R2S facility will build on RTX's existing production capacity at the Highland Industrial Park.

Company representatives joined Governor Sarah Huckabee Sanders and state officials to announce the project in October 2023.

"It's an honor to join R2S for today's groundbreaking, just as it was an honor to announce this project in October and meet with company representatives last summer at the Paris Air Show," said Governor Sarah Huckabee Sanders. "This investment will be a boon for the local economy: \$63 million and 60 new jobs. More than that, our world is a whole lot less secure than it used to be, and this facility makes our country safer. Thank you to all who made this announcement possible, and thank you to the team in Camden for helping our state stand out."

"Today, we mark a significant milestone in the Iron Dome program – one of the most important and advanced air defense systems in the world. The establishment of the new facility is the result of strong cooperation between Rafael and Raytheon, who joined forces about 18 years ago," said Pini Yungman, Executive Vice President and General Manager of the Air & Missile Defense Division, Rafael. "We have built and maintained fruitful collaboration based on the shared vision of both companies, committed to the highest level of technological innovation. The United States is a true partner; and local production, which we have aspired to for many years, will strengthen the partnership while safeguarding the interests of all sides. I am confident that we are ready for further cooperation in the future aimed at ensuring the security of the citizens of Israel and America."

"R2S is pleased to announce today that it's almost doubling the capital investment for the project here in Camden, Arkansas from \$33 million to \$63 million, and it may create up

to 60 new jobs. This increase represents the commitment by both partners to support this critical project for the USMC and to our allies around the world that depend on a reliable air defense system,” said Annabel Flores, deputy president of Land & Air Defense Systems, Raytheon.

SCHIEBEL WINS CAMCOPTER S-300 CONTRACT FOR SOUTH KOREAN NAVY



Vienna, 20 February 2024 – Schiebel, together with Korean based defence solutions companies Hanwha Systems and UI

Helicopter, has been awarded a contract by the Defence Acquisition Programme Administration (DAPA) for the development and delivery of the Vertical Take-off and Landing (VTOL) CAMCOPTER S-300 Unmanned Air System (UAS), to be operated by the South Korean MOD.

The contract was signed with Hanwha Systems for the supply of the S-300 for Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) missions for the South Korean Navy and Marine Corps.

The South Korean Navy has been a Schiebel customer for over 10 years, regularly carrying out maritime ISR operations with its CAMCOPTER S-100 UAS fleet. The changing geo-political situation and North Korean threat call for an expansion of their UAS fleet, adding larger and heavier UAS with greater capability.

“We are extremely excited that the South Korean Navy and Marine Corps is building on its extensive experience and success with the S-100 by awarding Hanwha the contract for Schiebel’s new long-endurance, heavy-lift-capable UAS. The S-300 marks a major milestone in the company’s history,” said Hans Georg Schiebel, Chairman of the Schiebel Group.

The STANAG-compliant and fully certifiable S-300 has an endurance of up to 24 hours and operates at an altitude of up to 21,000 feet, offering a persistent loiter capability for ISTAR operations. The heavy-lift UAS carries payloads of up to 250 kg, making it an ideal cargo delivery solution over long distances in complex and high altitude terrain. The versatility and flexibility of the S-300 also allows for the release of payloads such as dropping multiple sonar-buoys for Anti-Submarine Warfare (ASW) operations.

To ensure maximum mission versatility and cost effectiveness, the heavy-lift-capable S-300 can be controlled by the same proven Ground Control Station used by the CAMCOPTER S-100.

Schiebel's 'system of systems' approach ensures the interoperability of its unmanned fleet for many years to come building on its experience derived from over 20 years of building a robust and proven VTOL core system.

Schiebel recently announced the expansion of its Abu Dhabi facility extensively increasing its global footprint for the CAMCOPTER S-300. However, the new platform's open architecture will also ensure it will be able to meet countries' sovereignty and offset requirements.

RTX's Pratt & Whitney business completes key design review on Next-Generation Adaptive Propulsion offering



[Release from RTX](#)

Milestone moves program closer to detailed design review

EAST HARTFORD, Conn., (Feb. 12, 2024) – Pratt & Whitney, an RTX business, has completed a critical assessment of its Next-Generation Adaptive Propulsion (NGAP) offering with the U.S. Air Force, moving the program closer to completing its detailed design review. The team is now working towards ground testing of its NGAP prototype, referred to as XA103, which is expected to occur in the late 2020s.

“We are embracing digital transformation with NGAP and changing the customer experience through the entire development process in order to rapidly and efficiently deliver these advanced adaptive engines,” said Jill Albertelli, president of Pratt & Whitney’s Military Engines business. “This technology is critical to maintaining air superiority, which is why Pratt & Whitney has made significant investments in research and development and advanced manufacturing. Continued government funding for sixth-generation propulsion development must remain a high priority to support critical platform milestones and warfighter readiness.”

The engine will enhance performance that is key to enabling future air dominance capabilities, which are needed to ensure the U.S. Air Force achieves air superiority and deters pacing challenges.

NGAP technologies will provide advanced survivability, fuel efficiency, and robust power and thermal management. These are necessary to enable the required range, weapon and sensor capability, and persistence future air dominance platforms will require to meet evolving operational needs.

Insitu Announces Successful Shryke Demonstration with Integrator Uncrewed Aircraft System



Release from Insitu

BINGEN, Wash., Dec. 12, 2023 – Insitu, A Boeing Company, announced today the [first successful drop](#) of inert GPS-guided Shryke munitions from the Integrator Uncrewed Aircraft System (UAS) in collaboration with Corvid and L3Harris Technologies.

Shryke, developed by Corvid Technologies with L3Harris, is known for its multi-mission precision strike and versatility

and is another option in a long line of highly sought-after strike capabilities that Insitu is offering to its customers.

“We were able to demonstrate a low signature munition with a safe separation sensor, fuze, and warhead on Integrator,” said Kyle Bowen, Corvid Technologies Director of Business Development. “Integrator delivered the munitions within 1-2 meters of the target in each test flight. We couldn’t have asked for a more successful demonstration,” Bowen said.

Integrator, a NATO Class 1 Small UAS (DoD Group 3 UAS) offers endurance of more than 24 hours and carries up to 40lb of payload capacity. Payload integrations are accommodated in the center CG bay, two wing trays, and two wing-mounted hardpoints. Integrator’s multi-payload capacity provides our customers the ability to carry multiple munitions and/or transition between kinetic and non-kinetic objectives as the mission requires.

“The two rounds of munitions were seamlessly fitted into Integrator’s CG payload bay and several mission sorties were executed demonstrating advanced navigation, targeting, and payload delivery systems,” said Justin Pearce, Insitu Vice President of Programs, Engineering & Flight. “Pairing kinetics with Insitu’s proven endurance and range gives our customers flexibility in how they address a dynamic battlefield.”

The Integrator was equipped with a MIL-STD-1316 Electronic Safe and Arm Device (ESAD) from L3Harris to provide safety-critical energetic systems initiation-on-command and to safely support the post-flight recovery of munitions still installed.

“The ESAD was designed for applications that require a reliable arming and firing sequence with precise timing events, as well as vital personnel safety precautions,” said Steve Stasiak, General Manager, L3Harris Technologies. “We were able to validate this capability on Integrator and are

very pleased with the way the ESAD configurations performed during the flight test.”

Insitu continues to work with customers and industry partners in testing and integrating additional munition payloads.

With three decades of experience, more than 3,500 uncrewed aircraft manufactured to date, and more than 1.4 million operational flight hours, Insitu continues to deliver the most advanced capabilities available to our global customer base in more than 35 countries. Visit [Insitu.com](https://www.insitu.com) to learn more about the most capable, reliable, and combat-proven small tactical UAS on the market.

SAFE Boats and Vita Power Enter into an MOU to Build Zero-Emission Patrol Boat Options



[Release from SAFE Boats](#)

Bremerton, Wash. – SAFE Boats International (SBI) is collaborating with Vita Power to bring electrification to the patrol boat market. The first objective of this partnership was to develop a 100% electric patrol boat that is a first-class solution and is both reliable and practical. Together, they have adapted one of SAFE Boats' most proven hull designs – the 23' Center Console – to be propelled by Vita Power's V300 electric motor and battery package. Dubbed the "223e", this concept provides a zero-emission solution for operators who are working long hours at lower speeds.

Performance calculations with the 300HP electric motor predicts the 223e will maintain an operational battery life of 10 hours at 5 knots, one hour at cruise speed, and capable of a 34 knot sprint speed. Utilizing the Aqua superPower charger – from Vita's sister company – the boat can recharge in one hour or less. Compared to an outboard-powered engine, the 223e is expected to save thousands in annual fuel and maintenance

costs.

The 223e offers the work boat and patrol boat market a zero-emission option when long, high-speed runs are not required. SAFE Boats CEO, Richard Schwarz, remarks: "the SAFE/Vita collaboration is to develop electric boats that can be used for specific applications such as lake patrols and for harbormasters who are spending most of their time at low speeds in sensitive environments. As state regulations clamp down on emissions requirements, boat and engine manufactures are being pushed to develop innovative solutions to maintain compliance." Schwarz adds that "this SBI/Vita solution suits those ever-tightening requirements."

Vita Power is at the forefront of marine electric propulsion. Clive Johnson, CEO of Vita, states that "the 223e is the perfect size boat to offer first responders with the range and performance Vita has to offer in a durable workboat." Johnson adds, "The Vita propulsion system is designed to offer a complete electrification solution for a broad range of marine applications from commercial vessels to superyacht tenders, and we are excited to be working with SAFE Boats to bring our technology to first responders and harbormasters here in the US. With local and state government bodies offering increasing support for businesses wanting to decarbonize their operations, the US and organizations like SAFE Boats are paving the way to a clean marine future."

Future USS Thad Cochran Marks Start of Fabrication



Release from Naval Sea Systems Command

Nov. 15, 2023

PASCAGOULA, Miss. – The Navy and HII’s Ingalls Shipbuilding division marked the start of fabrication for the future USS Thad Cochran (DDG 135) with a ceremony at HII’s shipyard, Nov. 13.

The ship is named for the late Thad Cochran, a United States senator who represented Mississippi from 1978 to 2018 and served as chairman of the United States Senate Appropriations Committee.

DDG 135 will be a Flight III guided missile destroyer centered on the AN/SPY-6(V)1 Air and Missile Defense Radar and will provide greatly enhanced warfighting capability to the fleet. The Flight III baseline begins with DDGs 125-126 and continues with DDG 128 and follow-on ships.

“The future USS Thad Cochran’s start of fabrication is the first major milestone in the construction of the ship. Flight

III guided missile destroyers will deliver unparalleled warfighting capabilities to the Fleet, bringing nearly 10,000 tons of American maritime strength across the world's oceans and seas," said Capt. Seth Miller, DDG 51 program manager, Program Executive Office Ships.

Ingalls Shipbuilding division is also in production on future destroyers Ted Stevens (DDG 128), Jeremiah Denton (DDG 129), George M. Neal (DDG 131), and Sam Nunn (DDG 133).

As one of the Defense Department's largest acquisition organizations, PEO Ships is responsible for executing the development and procurement of all destroyers, amphibious ships, special mission and support ships, boats and craft.

AEROVIRONMENT'S JUMP 20 Medium UAS Demonstrates Maritime Autonomous Takeoff and Landing at Vessel Speeds Over 20 Knots



[Release from AeroVironment Inc.](#)

ARLINGTON, Va., November 07, 2023 - AeroVironment Inc. today announced the company's [JUMP 20](#) VTOL Medium UAS exceeded expectations during the recent U.S. Naval Forces Southern Command/4th Fleet Hybrid Fleet Campaign Event (HFCE) that demonstrated human-machine teaming in the maritime domain. The JUMP 20 provided ship-based intelligence, surveillance, reconnaissance, and targeting (ISR-T) support to USFOURTHFLT and USSOUTHCOM during the week-long, at-sea exercise onboard USNS Burlington. The JUMP 20 has previously flown over 130,000 land-based hours in support of U.S. Special Operations Command combat deployments, and the expansion of JUMP 20 operations into the shipboard environment allows AeroVironment to provide these services globally.

During HFCE, JUMP 20 showcased its ability to launch and recover at vessel speeds over 20 knots, with fully autonomous flight from takeoff to landing. The JUMP 20 requires neither launch or recovery equipment, nor personnel on the flight deck during launch and recovery, maximizing operational safety and flexibility for users. JUMP 20's vertical takeoff and landing (VTOL) capability, and class-leading endurance and payload capacity expand the operational capabilities of U.S. and allies to compete and win in the era of great power

competition. The JUMP 20 demonstrated how uncrewed systems will support distributed operations across multiple domains, supporting national security objectives and our warfighters.

“The shipboard flight environment is dynamic and challenging. JUMP 20 is a proven combat-effective platform, and the system’s performance during HFCE illustrates the value to maritime operations. JUMP 20’s ability to launch and land at speed, and without personnel intervention, enhances the ship’s operational effectiveness and enables operators to focus on important mission tasking,” said Shane Hastings, AeroVironment’s vice president and product line general manager for Medium UAS. “As we continue to demonstrate and prove the effectiveness of the JUMP 20 platform, we look forward to getting this capability in the hands of our sailors, Marines, and allies operating in the maritime environment.” AeroVironment JUMP 20 is deployed to U.S. and allied militaries around the world, and it can be provided on a contractor-owned / contractor-operated (COCO) basis to maximize operational flexibility.

HII’s Newport News Shipbuilding Opens Additional Site in Norfolk



[Release from HII](#)

NORFOLK, Va., Nov. 08, 2023 (GLOBE NEWSWIRE) – HII (NYSE: HII) announced today that its Newport News Shipbuilding division has begun production at an additional campus in Norfolk to support the shipyard’s continued progress toward more effective and efficient shipbuilding.

The Newport News Shipbuilding Norfolk Campus is located on land leased from Fairlead in the Lambert’s Point area, at a development known as Fairwinds Landing. NNS shipbuilders have worked at the site for several months constructing steel panels that will eventually make up units of *Gerald R. Ford*-class aircraft carrier *Enterprise* (CVN 80).

“This is a prime example of how we’re innovating, thinking differently and improving efficiency when it comes to building the aircraft carriers our nation needs,” explained Les Smith, NNS vice president for *Enterprise* (CVN 80), *Doris Miller* (CVN 81) and future aircraft carrier programs. “Coupling our energized workforce with this additional capacity is already yielding positive results and we expect to see great synergy

as a result of this intentional investment.”

In addition to *Enterprise* (CVN 80) panel production work, the site is freeing up critical storage space at the main shipyard in Newport News to support other programs, including nuclear-powered submarine production. The campus in Norfolk also allows for future growth opportunities.

Photos accompanying this release are available at: <https://hii.com/news/hii-newport-news-shipbuilding-opens-additional-site-norfolk-2023>.

HII investment, coupled with Navy funding, is helping to make the new campus possible. NNS leadership and shipbuilders joined with city of Norfolk leaders, Navy officials and Fairlead leadership to mark the opening Monday.

Rear Adm. Casey Moton, program executive officer for aircraft carriers, said the Norfolk campus is a prime example of what can be accomplished when the Navy-industry team comes together to drive new shipbuilding efficiencies into programs and to invest in the future of the industrial base and the workers and communities that support them.

“I think the fact that we’re able to both expand capacity but at the same time make it easier for employees that work in this area with shorter commutes, good parking, is not only good for them, but hopefully it’ll attract more people to the shipbuilding business,” Moton said.

Moton also talked about delivering much-needed capability against a backdrop of current world events. “The importance of our aircraft carriers and what you all do here, and our Navy’s ability to project power from five acres of sovereign U.S. territory, anywhere in the world has never been more clear,” Moton said.

Norfolk Mayor Kenny Alexander spoke on the importance of collaboration, “As an essential corporate citizen in our

region, HII and its remarkable shipbuilders serve as a vital force in protecting our national security and shaping the future of defense,” Alexander said. “We thank HII for choosing to invest in Norfolk and reaffirming our commitment to workforce development by bringing dozens of highly-sought after jobs to our city.”

NNS is the nation’s sole designer, builder and refueler of nuclear-powered aircraft carriers and one of just two shipyards capable of building nuclear-powered submarines for the Navy. Three *Gerald R. Ford*-class aircraft carriers are currently under construction: *John F. Kennedy* (CVN 79), *Enterprise* (CVN 80) and *Doris Miller* (CVN 81).

Tri-lateral alliance set to address critical AUKUS workforce and skilling opportunities

Release from HII

SYDNEY, Australia, Nov. 06, 2023 (GLOBE NEWSWIRE) – Defense companies HII (NYSE: HII) and Babcock Australasia (Babcock) have joined forces with the University of Adelaide, Curtin University, and the University of NSW to form the AUKUS Workforce Alliance (AWA) – a dedicated partnership committed to preparing a skilled workforce in support of all steps of Australia’s optimal pathway to sovereign nuclear-powered

submarines under AUKUS Pillar 1.

The AWA will work together in a tri-lateral alliance, combining proven and trusted knowledge, skills and unrivalled experience from across Australia, the United Kingdom and United States.

The AWA seeks to address the current and future workforce needs that are required to accelerate sovereign capability, capacity and resilience for Australia's defense sector.

Working together, the AWA will educate the thousands of qualified Australian engineering, maritime and nuclear trade and professional workers required to support the nation's nuclear-powered submarine enterprise from infrastructure, sustainment, supply chain through to disposal.

The AUKUS Workforce Alliance will:

Establish a proactive, innovative and internationally recognised platform for skill enhancement and leadership to support development of a sovereign, nuclear-powered submarine workforce in Australia.

Lead the development and execution of critical upskilling programs, focusing on harnessing the full potential of Australia's industrial base.

Foster cutting-edge research and practical experience for the future workforce.

Quotes attributable to:

HII President Nuclear and Environment Services Group Michael Lempke

"HII is proud to work with Australia's education institutions and to bring more than 60 years of nuclear shipbuilding expertise to the training of a workforce capable of supporting, and ultimately executing, nuclear shipbuilding.

The AWA is an investment in the security, and economic and technological progress of Australia. This comprehensive and rigorous training approach is also a commitment to the safety and protection of people and the environment and fostering public trust.”

**Babcock Australasia Managing Director AUKUS and International
Sir Nick Hine KCB**

“Babcock is proud to be partnering with HII and some of Australia’s top universities in a true, tri-lateral alliance to form the AUKUS Workforce Alliance.

Collectively, we will equip the workforce with the knowledge and the skills required to deliver the most complex and largest defence agenda in Australia’s history.

Given our extensive global experience in sustainment, nuclear safety and stewardship, Babcock stands ready to assist Australia in delivering this very significant opportunity, including growing the required workforce to support the delivery of the nation’s first nuclear-powered submarines.”

**University of Adelaide Vice-Chancellor and President,
Professor Peter Høj AC**

“The University of Adelaide is pleased to be joining the AUKUS Workforce Alliance (AWA). This alliance will strengthen and broaden the university’s partnering with industry in developing the workforce for the nation’s naval shipbuilding enterprise.

The University of Adelaide has an outstanding global reputation for teaching and research as well as a strong track record of working closely with industry, government and our global partners.

This partnership marks another step in the journey towards Australia realising the goals of the AUKUS partnership.”

Curtin University Vice-Chancellor, Professor Harlene Hayne

“Curtin is proud to be a foundation partner with global defence industry leaders HII and Babcock, and the University of NSW and University of Adelaide, in developing a highly skilled workforce to support the nuclear-powered submarine program in Australia and Western Australia.

Drawing on our significant expertise in building strong, sustainable communities of practice and in resilience and defence capabilities, Curtin will generate WA’s talent pipelines in collaboration with our key strategic partners within state and federal governments, industry, and the broader education sector, noting initial workforce deployment will be centred around WA.”

University of NSW Professor Attila Brungs, Vice-Chancellor and President of UNSW

“UNSW is pleased to be contributing our unique expertise and capabilities to the ground-breaking AUKUS Workforce Alliance. We look forward to supporting the Australian Submarine Agency’s “whole of nation” skilling objectives through collaboration with our partner universities in Adelaide and Perth, as well as with two global defence industry primes, in Babcock and HII, boasting a deep shared submarine capability sustainment heritage.

Our postgraduate and short courses across many faculties are geared to skill-building in advanced capabilities. Coupled with UNSW’s nation-leading faculty of engineering, the only nuclear engineering program in Australia with cutting-edge work on nuclear safety, UNSW is already pivoting towards generating the workforce needed across the entire nuclear ecosystem, from social licence to manufacturing facilities to regulatory authorities.”