Marine Corps Presidential Helicopter Testbed Retired

Glenn Perryman, deputy program executive officer for Air Anti-Submarine Warfare, Assault, and Special Mission Programs, stands in front of Sikorsky NVH-3A Sea King BuNo 150614, which his father flew as commanding officer of Marine Helicopter Squadron (HMX) 1. The helicopter subsequently served Air Test and Evaluation Squadron (HX) 21 as a testbed for 32 years before making its last flight in October 2020. NAVAIR

PATUXENT RIVER, Md. – After a 32-year career supporting the development of new technologies for the fleet, a historic Sikorsky NVH-3A Sea King helicopter assigned to Air Test and Evaluation Squadron (HX) 21 at Naval Air Station Patuxent River has flown its last mission – and a program executive with a special tie to the aircraft is hoping it will soon find

a new permanent home where its story can be shared, the Naval Air Warfare Center Aircraft Division said in a Jan. 6 release.

The dark-green Sea King, known universally as “614” – in reference to its military serial number, 150614 – rolled off the Sikorsky Aircraft assembly line in 1962 as a Sikorsky HSS-2 (later redesignated SH-3A). A decade later, the aircraft was assigned to Marine Helicopter Squadron (HMX) 1, where it was redesignated VH-3A and served for four years as a presidential helicopter for Presidents Richard Nixon and Gerald Ford. After a brief stint with Helicopter Combat Support Squadron (HC) 6, the Marine Corps transferred 614 to the Military Aircraft Storage and Disposition Center at Davis-Monthan Air Force Base in Arizona. There it rested for seven years, after accumulating a mere 4,500 hours of flight time.

Then, in 1984, the aircraft was pulled out of storage and underwent depot maintenance, and in 1988 arrived at the then-Naval Air Test Center (NATC) at NAS Patuxent River. Given the one-of-a-kind designation NVH-3A, 614 spent the next 25 years as a testbed for innovations in sensors, avionics, radios, computer hardware and software, composite rotor blades, and more. It even hosted the Navy’s first successful demonstration of satellite Wi-Fi in a rotary wing aircraft.

After 614 was stripped to its metal bones in 2013 for a cockpit modernization project that was canceled before the aircraft could be refitted, HX-21’s Presidential Helicopter Maintenance Team and flight test team undertook an unprecedented effort to return the aircraft to service as a VH-3D testbed. They installed a new power plant, drivetrain, rotors, and landing gear, as well as new electrical, avionics and fuel systems, and machined more than 200 custom parts. On April 4, 2017, the fully rebuilt aircraft took to the air once again.

For three more years, 614 flew in support of a wide range of

innovative test programs at NAS Patuxent River, including secure wide-band line-of-sight communications technologies, night vision equipment for the executive transport mission, high-speed rotor and engine shaft track and balance functions, and test flight exercises with U.S. Naval Test Pilot School students. But on Oct. 22, 2020, 614 made its final flight and the aircraft now rests inside one of HX-21's hangars, awaiting the next chapter in its storied life.

While 614 is well-loved by the men and women of HX-21, the aircraft has a uniquely special meaning to Glenn Perryman, deputy program executive officer for Air Anti-Submarine Warfare, Assault, and Special Mission Programs (PEO(A)). From 1971 to 1974, Perryman's father, Col. James Perryman Jr., served as commanding officer of HMX-1, and flew 614. In fact, Col. Perryman flew President Nixon twice on 614.

The elder Perryman served two combat tours in Vietnam before joining HMX-1 – and 614 was the first VH-3A he flew at his new squadron. ("How cool is that?" the younger Perryman remarked.) By the time he completed his squadron commander tour, Col. Perryman had made 48 flights in 614 totaling just over 66 hours' flying time. Col. Perryman passed away on New Year's Eve 2013, at the age of 80 – the same year that the younger Perryman joined PEO(A) as its deputy program executive officer.

Bringing his family history full circle, Perryman had an opportunity to fly in 614 in January 2018, not long after the newly refurbished aircraft had been returned to service with HX-21. Vice Adm. Dean Peters, commander of Naval Air Systems Command, was also on board for that flight, Perryman recalls.

"It was phenomenal," Perryman said. "To have the opportunity to fly in the same helicopter that my father flew almost 50 years ago, to sit in the same cockpit where he sat, is something that I'll never forget, quite frankly. Not everyone gets that kind of opportunity."

Perryman said his father's time at HMX-1 was the source of many childhood memories for him. "The squadron dominated our lives, as you can imagine," he said. "Wherever the president went, my dad would have to go. My brother and I thought it was the neatest thing in the world that our dad flew the president."

It was this combination of the aircraft's unique history and his personal connection to it that spurred Perryman to action when he heard HX-21 planned to retire the aircraft. "It's a piece of history," he said. "It has served unique missions in its lifetime – presidential helicopter, developmental test aircraft for many new technologies. Not every aircraft has this kind of history attached to it."

Perryman believes 614 hasn't used up all of its nine lives yet.

"It's in superb mechanical condition right now, and if it can be preserved in some way, it will last even longer," Perryman said. "I'm doing everything I can to facilitate that. I would be happy to donate my father's log books to go along with the aircraft. I have some Nixon memorabilia, too. Wherever it ends up, I hope that it will be preserved."

"I cannot think of a more symbolic representation of what we do at the Presidential Helicopters Program than aircraft 614," stated Col. Eric Ropella, program manager of the Presidential Helicopters Program (PMA-274). "This aircraft gives a full, rich history as both a no-fail mission aircraft that flew Presidents Nixon and Ford, and as a test bed for delivering the newest capabilities to the presidential fleet. It seems only fitting that we try and find a place of honor for 614 and its 32 years of service here in front of the Presidential Helicopters Support Facility as a static memorial and display."

Navy Contracts SAFE Boats for Work on Mk VI Patrol Boats for Ukraine

A Mark VI patrol boat participates in the bilateral Mine Countermeasures Exercise 2020 (MCMEX 20) with the mine countermeasures ship USS Gladiator (MCM 11) in the Arabian Gulf, March 28. U.S. Army / Pfc. Christopher Cameron

ARLINGTON, Va. — The U.S. Navy has awarded a contract to a Bremerton, Washington-based boat builder to begin work on Mark VI patrol boats for Ukraine.

The Naval Sea Systems on Dec. 31 awarded SAFE Boats International LLC a "$19,969,119 not-to-exceed, firm-fixed-price, un-definitized contract action for long-lead-time material and associated pre-production and planning support

for two Mk VI patrol boats to be delivered to the government of Ukraine," the Defense Department said in a Jan. 5 contract announcement. The funding is allocated under the Fiscal 2020 Title 10 Ukraine Security Assistance Initiative.

The U.S. State Department approved the possible foreign military sale of up to 16 Mk VI patrol boats and related equipment to Ukraine for an estimated cost of $600 million, the Defense Security Cooperation Agency said in a June 17 release.

The patrol boats will be operated by the Ukrainian navy to defend territorial waters and other maritime interests. They each will be armed with two MSI Seahawk A2 gun systems and two Mk44 cannons and equipped with electro-optical/infrared sensors and loud-speaker systems.

The sale will "improve Ukraine's capability to meet current and future threats by providing a modern, fast, short-range vessel," the DSCA said.

Mk VI patrol boats are used by the Navy Expeditionary Combat Command for escort of high-value ships, coastal patrol, and other maritime security missions.

Work on the contract is expected to be completed by December 2022.

Strategic Command Admiral Praises Navy's Choice of

C-130J for TACAMO Mission

A Lockheed EC-130Q Hercules, which previously handled the Navy's TACAMO work. The Navy has now decided to acquire the C-130J-30 Super Hercules as its platform for communicating with deployed ballistic-missile submarines. Wikipedia / Alain Rioux

ARLINGTON, Va. – The admiral in charge of the nation's strategic nuclear deterrent forces has praised the Navy's decision to acquire the C-130J-30 Super Hercules aircraft as a platform for communicating with its deployed ballistic-missile submarine force. Four decades ago, the Navy was using earlier C-130 versions – built by Lockheed – for the same mission.

"The Navy is fully capable of supporting my mission requirements to ensure survivable communications to the ballistic-missile submarines and I think they're making a great decision to go to the C-130," said Adm. Charles Richard, commander, U.S. Strategic Command, speaking in a Jan. 5 webinar to the Defense Writers Group, in response to a

reporter’s question.

The communications role is called TACAMO by the Navy – a term meaning “Take Charge and Move Out” – has been performed for three decades by the service’s Boeing E-6 Mercury aircraft, a variant of the Boeing 707 airliner. After the Cold War, the Airborne National Command Post role previously performed by Air Force EC-135 “Looking Glass” aircraft was incorporated into the E-6 with the installation of the Airborne Launch Control System (ALCS), combining the TACAMO and ALCS in one platform.

The Navy has performed the TACMO mission since 1963, beginning with four C-130G (later EC-130G) Hercules aircraft, later augmented by eight newer EC-130Q Hercules. The E-6 replaced the EC-130s, giving the two TACAMO squadrons, VQ-3 and VQ-4, a faster, quieter, more comfortable platform for the long missions.

The TACAMO aircraft are equipped with a long trailing wire antenna used to relay very-low-frequency radio messages to submerged ballistic-missile submarines. The airframes go through considerable stress as they maintain high angle of bank for long periods to maintain tight orbits to wind the trailing-wire antenna into a vertical position, needed for the radio waves to penetrate the water most effectively.

The Request for Information issued on Dec. 18 by the Naval Air Systems Command’s TACAMO Program Office (PMA-271) announced that the Navy “intends to negotiate and award sole-source contracts to Lockheed Martin Corporation, Marietta, [Georgia], for the efforts associated with the procurement of up to three C-130J-30 “Stretch” green airframes in [fiscal 2022/2023] for testing and analysis.

The C-130J is the current, much more modern version of the C-130 and is flown by the Air Force, Marine Corps and Coast Guard, as well as many foreign air forces. The C-130J-30 is

similar but has a 15-foot-longer fuselage. The rugged C-130J is able to operate from many more airfields than the current E-6B Mercury.

“Lockheed Martin Corporation is the sole designer, developer, and manufacturer of the C-130J-30 and is the only source capable of producing the C-130J and derivative aircraft and providing support equipment, logistics support, defensive systems services, and engineering services,” the Navy’s announcement said. “The Analysis of Alternatives results indicated that the four-engine, militarized C-130J-30 is optimally configured aircraft for performing the TACAMO mission. The characteristics of this airframe also maximize the operational deployability of the assets to austere environments. The C-130 is currently extensively fielded within the Department of Defense, and deployed at various bases that create operation, training and logistics support synergies for TACAMO execution. Lockheed Martin already has an established domestic production line that has the ability to produce test units for PMA271 that will enable acceleration of the risk reduction and subsequent engineering and manufacturing development test program.”

Teledyne Technologies to Acquire FLIR Systems

FLIR Systems' SeaFLIR 380 HD, which provides long range, shipboard multispectral surveillance. FLIR Systems

THOUSAND OAKS, Calif. and ARLINGTON, Va. – Teledyne Technologies Inc. and FLIR Systems announced Jan. 4 they have entered into a definitive agreement under which Teledyne will acquire FLIR in a cash and stock transaction valued at approximately $8 billion.

Under the terms of the agreement, FLIR stockholders will receive $28 per share in cash and 0.0718 shares of Teledyne common stock for each FLIR share, which implies a total purchase price of $56 per FLIR share based on Teledyne's five-day volume weighted average price as of Dec. 31, 2020. The transaction reflects a 40% premium for FLIR stockholders based

on FLIR’s 30-day volume weighted average price as of Dec. 31.

As part of the transaction, Teledyne has arranged a $4.5 billion, 364-day credit commitment to fund the transaction and refinance certain existing debt. Teledyne expects to fund the transaction with permanent financing prior to closing. Net leverage at closing is expected to be approximately 4x adjusted pro forma EBITDA with leverage declining to less than 3x by the end of 2022.

Teledyne expects the acquisition to be immediately accretive to earnings, excluding transaction costs and intangible asset amortization, and accretive to GAAP earnings in the first full calendar year following the acquisition.

“At the core of both our companies is proprietary sensor technologies. Our business models are also similar: we each provide sensors, cameras and sensor systems to our customers. However, our technologies and products are uniquely complementary with minimal overlap, having imaging sensors based on different semiconductor technologies for different wavelengths,” said Robert Mehrabian, executive chairman of Teledyne. “For two decades, Teledyne has demonstrated its ability to compound earnings and cash flow consistently and predictably. Together with FLIR and an optimized capital structure, I am confident we shall continue delivering superior returns to our stockholders.”

“FLIR’s commitment to innovation spanning multiple sensing technologies has allowed our company to grow into the multi-billion-dollar company it is today,” said Earl Lewis, chairman of FLIR. “With our new partner’s platform of complementary technologies, we will be able to continue this trajectory, providing our employees, customers and stockholders even more exciting momentum for growth. Our board fully supports this transaction, which delivers immediate value and the opportunity to participate in the upside potential of the combined company.”

Jim Cannon, president and CEO of FLIR, said, “We could not be more excited to join forces with Teledyne through this value-creating transaction. Together, we will offer a uniquely complementary end-to-end portfolio of sensory technologies for all key domains and applications across a well-balanced, global customer base. We are pleased to be partnering with an organization that shares our focus on continuous innovation and operational excellence, and we look forward to working closely with the Teledyne team as we bring our two companies together to capitalize on the important opportunities ahead.”

U.K. Carrier Strike Group Achieves Initial Operational Capability

A Marine with Marine Fighter Attack Squadron (VMFA) 211 launches an F-35B Lightning II Joint Strike Fighter from the deck aboard Her Majesty's Ship (HMS) Queen Elizabeth at sea on 10 October, 2020. U.S. Marine Corps / 1st Lt. Zachary Bodner

LONDON — The United Kingdom Royal Navy's Carrier Strike Group (CSG) has reached Initial Operating Capability (IOC), meaning all elements of the group from fighter jets to radar systems to anti-ship weapons have been successfully brought together and operated, the U.K Ministry of Defence said in a Jan. 4 release.

Both the air and naval elements of the CSG have now met this milestone, which includes qualified pilots and ground crews being held at short notice for carrier-based operations and trained to handle weapons and maintain the equipment.

Another marker of success at this stage includes the ability to deploy Anti-Submarine Warfare capabilities such as frigates and destroyers, as well as both fixed and rotary wing aircraft including Merlin helicopters to operate alongside the carrier.

“This is a hugely significant milestone for HMS Queen Elizabeth, the Royal Navy and the whole country,” said Defence Minister Jeremy Quin. “This achievement is a testament to the determination of our service personnel and industry workforce who have delivered this first-rate military capability, a capability held by only a handful of nations. I wish the entire Carrier Strike Group well ahead of their first operational deployment this year.”

Following the success of the NATO Joint Warrior Exercises last autumn, the Carrier Strike Group capability has reached the key IOC milestone for the program on schedule.

The multinational deployment in 2020 focused on incorporating all elements of the CSG with 13 of the United Kingdom’s allies including Belgium, Canada, Denmark, France, Germany, Latvia, the Netherlands, Norway, Spain, Turkey, Japan, United Arab Emirates and the United States. Exercise Joint Warrior saw the largest number of aircraft on a British Royal Navy carrier since 1983, as well as the most F-35B jets at sea across the globe. In addition to U.K. F-35Bs, the Queen Elizabeth has operated with U.S. Marine Corps F-35Bs assigned to Marine Fighter Attack Squadron 211.

Full operating capability for the CSG is expected by December 2023.

BAE Systems Tapped to Demonstrate P-8

Countermeasure System for U.S. Navy

An artist’s rendering of a BAE Systems ALE-55 Fiber-optic towed decoy deployed on an F/A-18 Super Hornet strike fighter. BAE Systems

ARLINGTON, Va. – BAE Systems will be demonstrating for the U.S. Navy this spring a podded radio frequency countermeasures (RFCM) self-protection system on the service’s P-8A Poseidon maritime patrol reconnaissance aircraft, the company said.

BAE Systems has received a $4 million contract from the Navy to conduct a quick-turnaround demonstration of a new RFCM system for the P-8A, the company said in a Jan. 5 release.

The RFCM is designed to jam or decoy missiles guided by RF energy, including radar-guided surface-to-air missiles and some air-to-air missiles. A maritime patrol reconnaissance aircraft is more likely to face these threats while operating against a near-peer competitor than in the more benign environment of the past three decades.

“The P-8 is now considered a high-value asset with these emerging threats from hostile countries,” said Donald Davidson, director of the Advanced Compact Electronic Warfare Solutions product line at BAE Systems, in a Jan. 5 interview with *Seapower*. “The Navy was interested in an ability to rapidly prototype and demonstrate an RF counter-measures system for the platform.”

Davidson said the Navy desired a system housed in a pod similar in its outer mold lines to a Harpoon missile that could be mounted on the aircraft’s existing wing stations.

The lightweight, high-power RFCM system pod will include some components that have been proven in the ALQ-214 electronic countermeasures system installed on the F/A-18E/F Super Hornet strike fighter, including a high-powered electronics frequency converter, a launch controller, and expendable ALE-55 fiber-optic towed decoys. The RFCM pod for the P-8A will include a component called the MDX, a small form factor jammer which is about half the size of a loaf of bread and integrated with the decoy, Davidson said.

The RFCM system will be demonstrated in the spring of 2021, Davidson said, “and if the demonstration proved effective, then [the Navy] would look to move to a more formal EMD [Engineering and Manufacturing Development]/production program to get it fielded as soon as possible.”

He said that a successful demonstration would “lead to opportunities for additional funding” as the Navy develops its program budget in the 2022-2023 time frame.

“The ability to meet this unprecedented response time underscores our agility, focus on meeting customer needs, and our ultimate goal of protecting our warfighters,” Davidson said in the BAE release. “A process that used to take 18 to 24 months has been scaled to five or six months, which is remarkable, as is deploying this new self-protection

capability.

BAE Systems said the “rapid response is the result of collaboration among small focus teams who developed an innovative approach to the design and fabrication of the system’s mechanical parts. As a result, BAE Systems will design, build, integrate, and ship the RFCM system in approximately five months, followed by two months of flight testing on the P-8A Poseidon platform.”

Work on the RFCM contract will be performed at the company’s state-of-the-art facility in Nashua, New Hampshire, the release said.

Australia Set to Acquire Two More P-8A Aircraft to Boost Maritime Patrol Capability

A P-8A aircraft 759 arrives at its parking spot in this 2019

photo. The Royal Australian Air Force will acquire two more P-8A Poseidons, bringing it total fleet size to 14. U.S. Navy / Lt. Cmdr. Alan Johnson

CANBERRA, Australia—The Royal Australian Air Force's maritime patrol capability will be boosted with Australia set to acquire two more P-8A Poseidon surveillance and response aircraft, bringing the total fleet size to 14, the Australian Department of Defence said in a Jan. 4 release.

The government has also approved sustainment funding for the current approved fleet of three MQ-4C Triton aircraft.

Sen. Linda Reynolds, the Australian defense minister, said the announcement is part of the Morrison government's unprecedented $270 billion investment in defense capability over the next decade.

"Together, the Poseidon and the Triton will provide Australia with one of the most advanced maritime patrol and response capabilities in the world," Reynolds said. "The Poseidon is a proven capability that will conduct tasks including anti-submarine warfare, maritime and overland intelligence, surveillance and reconnaissance, and support to search and rescue missions. These additional aircraft will enhance Air Force's flexibility to support multiple operations and will play an important role in ensuring Australia's maritime region is secure for generations to come.

"The Morrison government's continued investment in the Poseidon program is also creating more Australian jobs and opportunities for Australian small businesses, she said. "Several Australian companies are already completing work for Boeing Defence Australia, and industry investment including facilities works is over $1 billion."

The additional Poseidon aircraft are to be purchased through Australia's existing cooperative program with the U.S. Navy. Reynolds said the program allows Australia to share in the benefits of their technical expertise and divide project

costs.

“Defence is committed to this cooperative approach; together we are striving to develop this military technology to the highest standards,” Reynolds said.

The Poseidon is a highly versatile, long endurance platform capable of a range of mission types including maritime intelligence surveillance and reconnaissance and striking targets above and below the ocean’s surface.

The planned integration of the Long Range Anti-Ship Missile (LRASM) into RAAF capability will also allow it to strike adversary surface vessels at significantly increased ranges.

HII Expands Unmanned Capabilities by Acquiring Autonomy Business from Spatial Integrated Systems

An illustration of Spatial Integrated Systems’ capabilities in

unmanned systems. SIS' unmanned systems solutions, including multi-vehicle collaborative autonomy, sensor fusion and perception, have been fielded for more than 6,000 hours on 23 vessel types. Huntington Ingalls Industries

NEWPORT NEWS, Va. – Huntington Ingalls Industries (HII) has acquired the autonomy business of Spatial Integrated Systems Inc. (SIS), HII said in a Jan. 4 release. The acquisition further expands HII's unmanned systems capabilities with this highly skilled team and proven unmanned surface vessel (USV) solutions.

"We are excited to welcome the SIS autonomy business employees to the HII family," said Andy Green, HII executive vice president and president of Technical Solutions. "2020 was a significant year for HII in the unmanned systems industry, and this acquisition is the perfect complement to our existing portfolio and strategic partnerships."

"I am pleased that HII will carry on SIS's vision to deliver advanced autonomy to our armed forces in support of our national interest," said Dr. Ali Farsaie, CEO and founder of SIS.

SIS's unmanned systems solutions – including multi-vehicle collaborative autonomy, sensor fusion and perception – have been fielded for more than 6,000 hours on 23 vessel types. They have supported multiple development projects and demonstrations advancing autonomy in unmanned systems in the maritime, ground and air domains.

"SIS is a leader in autonomous technology, and this acquisition adds significant breadth to our unmanned systems solutions," said Duane Fotheringham, president of Technical Solutions' Unmanned Systems business group. "This technology and the talented team provide unmatched capabilities in multi-domain collaborative autonomy and perception, allowing HII to uniquely address our customers' needs."

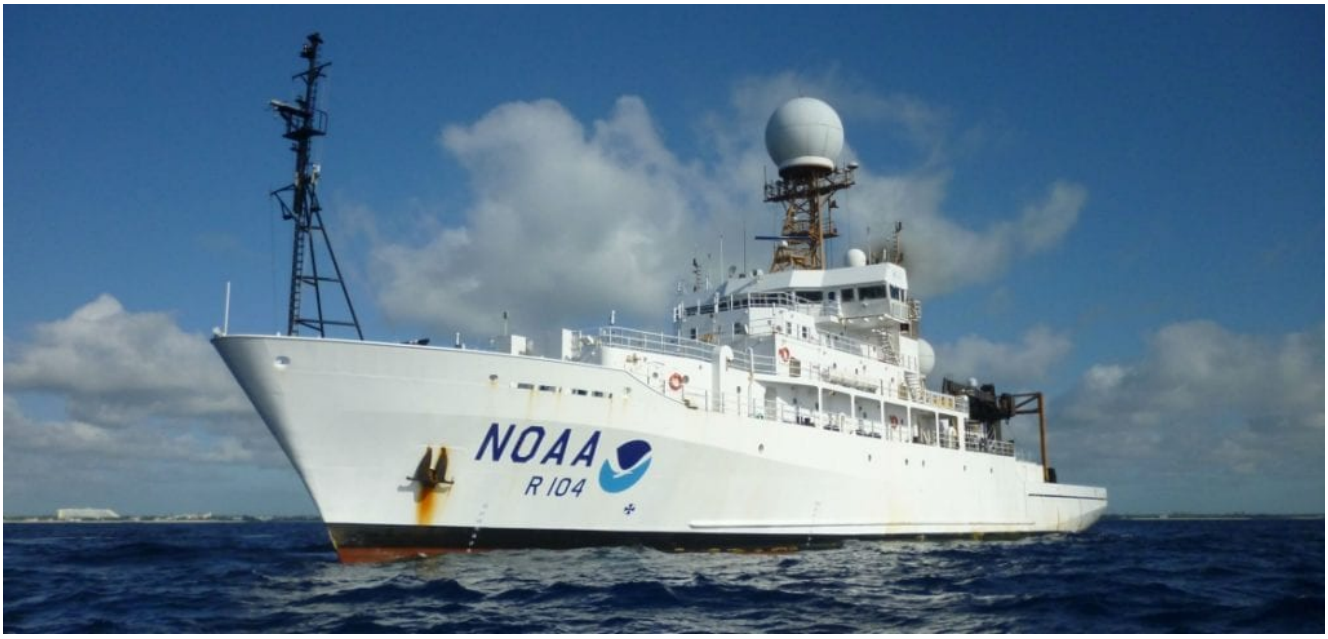
SIS's solutions are actively in use throughout the Department

of Defense, coordinating and controlling multiple collaborative unmanned vehicles in the execution of mission applications including intelligence, surveillance, and reconnaissance, harbor patrol, high-value unit escort missions, payload delivery, mine clearance, and transporting supplies. SIS's intelligent, goal-oriented USV solutions follow Unmanned Maritime Autonomy Architecture standards and integrate proven obstacle avoidance and International Regulations for Preventing Collisions at Sea-compliant behaviors.

The acquisition of SIS's autonomy business follows other recent unmanned systems activity by HII, including the acquisition of Hydroid, a strategic alliance with Kongsberg Maritime, an equity investment in Sea Machines, and the groundbreaking on a new HII Unmanned Systems Center of Excellence in Hampton, Virginia.

The transaction closed on Dec. 31, 2020, and approximately 50 employees from SIS, primarily located in Virginia Beach, Virginia, have joined HII Technical Solutions' Unmanned Systems business group. Sam Lewis, president and chief operating officer of SIS, will lead the company's USV efforts, reporting to Fotheringham. The cost of the transaction is not being disclosed.

Navy Awards Contract to Thoma-Sea Marine to Build 2 NOAA Ships



An existing NOAA research ship, the Ronald. H. Brown. NOAA / Wes Struble

WASHINGTON – The National Oceanic and Atmospheric Administration's (NOAA's) effort to recapitalize its aging fleet of research ships took a major step forward today with the U.S. Navy's award of a $178.1 million contract to Thoma-Sea Marine Constructors LLC, Houma, Louisiana, for the detailed design and construction of two new oceanographic ships for the agency, NOAA said in a Dec. 31 release.

NOAA is acquiring the vessels through an agreement with the Naval Sea Systems Command, a leader in building, providing and procuring large research ships for the nation's research fleet.

"We can all be proud that these two new NOAA ships will be built in the United States by highly skilled workers, and to the highest standards," said U.S. Secretary of Commerce Wilbur Ross. "The nation will benefit greatly from the information these state-of-the-art vessels will collect for decades to come."

The first ship, to be named Oceanographer, will be homeported in Honolulu. The second ship, to be named Discoverer, will be assigned a homeport at a future date. Both vessels will continue the legacies of their namesakes.

The first Oceanographer served in the NOAA fleet from 1966 to 1996 and her sister ship, Discoverer, served from 1967 to 1996.

The new ships will support a wide variety of missions, ranging from general oceanographic research and exploration to marine life, climate and ocean ecosystem studies. These missions include shallow coastal, continental shelf, and worldwide ocean survey and data collection.

Designed as single-hull ships, Oceanographer and Discoverer will be built to commercial standards. They will incorporate the latest technologies, including high-efficiency, environmentally friendly EPA Tier IV diesel engines, emissions controls for stack gases, new information technology tools for monitoring shipboard systems, and underwater scientific research and survey equipment.

“These state-of-the-art ships will play a vital role in collecting high-quality data and leading scientific discoveries,” said Neil Jacobs, Ph.D., acting NOAA administrator. “The science missions aboard these vessels promise to push the boundaries of what is known about our still largely undiscovered ocean.”

The ships will be equipped to launch work boats, perform maintenance on buoys and moorings, deploy scientific instruments to collect weather and water column data, and conduct seafloor mapping surveys. Each vessel will operate with a crew of 20 and will accommodate up to 28 scientists.

“This contract award represents a major step forward in the process to recapitalize NOAA’s ship fleet,” said NOAA Rear Adm. Michael J. Silah, director of the NOAA Commissioned Officer Corps and NOAA Office of Marine and Aviation Operations (OMAO). “We thank the Navy, our valued partner, for its assistance with this acquisition.”

The NOAA ship fleet is operated, managed and maintained by

OMAO, which is composed of civilians and officers with the NOAA Commissioned Officer Corps, one of the nation's eight uniformed services.

Navy Orders Logistics Support & Engineering for BQM-177A Targets

A BQM-177A subsonic aerial target. Kratos Defense & Security

SAN DIEGO – Kratos Defense & Security Solutions Inc. will receive an additional $3.6 million from the U.S. Naval Air Systems Command for the next option of its Contractor Logistics Support (CLS) and Engineering Services contract supporting BQM-177A subsonic aerial target system (SSAT) operations, the company said in a Dec. 28 release.

"Now that we're beyond the full-rate production acquisition

milestone, we've entered the operations and sustainment phase of the SSAT lifecycle," said Steve Fendley, president of Kratos Unmanned Systems Division. "CLS and engineering services are vital to ensuring the continuing adaptation, operations, and maintenance of this agile, realistic, and highly configurable aerial target system designed specifically for the Navy's challenging threat representation missions. Kratos is proud to be providing this support today and for the future as the number of missions and operational sites increase."

The work under this contract will be incrementally funded and conducted primarily in Kratos facilities in both Sacramento and Point Mugu, California. When fully funded, the total contract value after exercise of this option is $7.4 million.