

United States' Lone Heavy Icebreaker Begins Antarctic Deployment

HONOLULU – The Coast Guard Cutter Polar Star arrived Dec. 4 in Pearl Harbor to make final preparations before sailing to Antarctica in support of Operation Deep Freeze 2019, the Coast Guard Pacific Area said in a release.

The 42-year-old Coast Guard cutter is the United States' only operational heavy icebreaker. The crew is scheduled to make their sixth deployment in as many years to directly support the resupply of McMurdo Station – the United States' main logistics hub on Antarctica.

Polar Star recently completed a six-month drydock period where outdated equipment was upgraded or replaced. The 399-foot icebreaker is the only ship in the United States' fleet capable of clearing a path through the Antarctic ice to escort resupply ships to McMurdo Station. The resupply ships deliver cargo and fuel to sustain year-round operations on the remote continent.

Operation Deep Freeze is a joint military service mission in support of the National Science Foundation – the lead agency for the United States Antarctic Program. Since 1955, U.S. Pacific Command has assisted in providing air and maritime support throughout the Antarctic continent. This year marks the 63rd iteration of the annual operation.

The Coast Guard has been the sole provider of the nation's polar icebreaking capability since 1965, and is seeking to increase its icebreaking fleet with six new Polar Security Cutters to ensure continued national presence and access to the Polar Regions.

While in Pearl Harbor, the Polar Star will complete a variety of maintenance and repairs and to take on provisions in preparation for the month-long transit to Antarctica.

USS Thomas Hudner Brought to Life in Boston

BOSTON – The Navy commissioned its newest surface combatant, USS Thomas Hudner (DDG 116), during a Dec. 1 ceremony, the commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs said in a release.

USS Thomas Hudner, commanded by Cmdr. Nathan Scherry, is the 66th Arleigh Burke-class destroyer, and the 36th DDG 51-class destroyer built by General Dynamics Bath Iron Works (BIW). It is the first warship named for naval aviator and Medal of Honor recipient Capt. Thomas J. Hudner, Jr.

Hudner, a native of Fall River, Massachusetts, received the Medal of Honor for his heroic actions during the Battle of the Chosin Reservoir in 1950. Hudner crash-landed his plane in a selfless effort to save the life of his wingman and friend, Ensign Jesse Brown, the Navy's first African American aircraft carrier qualified naval aviator.

Among the distinguished guests and speakers at the commissioning, Thomas Hudner III, son of Capt. Hudner, gave a speech about his father's life and legacy.

"While many would say that my father's actions were an extraordinary act, my father never thought of himself or that action as extraordinary," said Hudner. "To the contrary, when he was asked through the years why he did what he did, he

responded simply that it was the right thing to do and if he hadn't acted, someone else would have. Throughout military history there have been countless acts of unselfish heroism, in fact the history of the United States has been built upon these acts many of which went unseen and without recognition. However, it was Capt. Hudner's unselfish act in the service of his country, the United States Navy, and his friend and squadron mate that lives in the spirit of this ship."

Massachusetts Gov. Charlie Baker delivered the principal address at the ceremony, which was attended by Chairman of the Joint Chiefs of Staff Gen. Joseph Dunford, Secretary of the Navy Richard V. Spencer, Mayor of Boston Martin Walsh, Vice Chief of Naval Operations Adm. William Moran, U.S. Rep. Stephen Lynch, D-Mass., and others.

"Simply put, life was never about Tom Hudner," said Baker. "He was the consummate team player. The only way a person would know anything about what took place on that mountain top during the Korean War would have been to hear from someone else or to have read about it because he never talked about that day. It is my fervent hope that this ship is imbued with the humility, selflessness, patriotism, the commitment to one another, the kindness and decency that transcends our differences that made Tom so special."

The ship's sponsors, Georgea Hudner, wife of Capt. Hudner, and Barbara Miller, former co-chair of the Flag Officer Spouse Training, gave the traditional order to "Man this ship and bring her to life," signaling the Sailors to embark and officially begin service as a U.S. Navy ship.

For the ship's crew, the day was the culmination of a few years of work to get USS Thomas Hudner prepared for commissioning. The day was a special opportunity to bring the ship to life in Boston, where the legacies of great ships and great people are kept and revered.

Next, the ship will make its way to homeport in Mayport, Florida.

Navy Accepts Final Component for LCS Anti-Submarine Warfare Mission Package

FORT PIERCE, Fla. – The Navy took delivery of the final component of the littoral combat ship (LCS) Anti-Submarine Warfare (ASW) Mission Package Nov. 30, following the successful completion of a rigorous acceptance test regime at the Harbor Branch Oceanographic Institute, Program Executive Office, Unmanned and Small Combatants (PEO USC), Public Affairs said in a Dec. 4 release.

The Raytheon-developed Dual-mode Array Transmitter (DART) Mission System and ASW Mission Package will significantly increase ASW capabilities within the U.S. Navy, bringing the ability to maneuver active and passive sonars above and below the thermocline layer.

“The DART Mission System is an essential component of the LCS ASW Package, and when coupled with the SQQ-89 acoustic processing, the Multi-Function Towed Array and MH-60R helicopter, makes up an ASW MP that will provide revolutionary capabilities to the fleet,” said Capt. Ted Zobel, LCS Mission Module program manager.

Sailors attached to USS Fort Worth (LCS 3) Gold Crew, Detachments 1 and 2, have played an integral role in testing and evaluating the DART Mission System. The Sailors participated not only in early testing of the system, but also

provided feedback to the manufacturer on the operation and usability of the system.

“LCS Sailors have participated in major testing and evaluation events throughout the development of the DART system,” said Senior Chief Sonar Technician (SW) Joseph Hart. “Raytheon’s willingness to accept Sailor input as far as what the final production unit should look like and how it should operate has been exceptional, and has allowed the fleet testing team to ensure the DART system and the full extent of its capabilities will be effectively employed by future LCS crews.

“Tactically, this should be a game changer for the Surface Navy,” said Hart, who is with LCS ASW Detachment 2.

The preproduction test article (PPTA) remained on schedule and met all contractual milestones since the award was made in March 2017.

Following the acceptance of the DART PPTA, the Navy plans to embark the system on a craft of opportunity and proceed to the Atlantic Undersea Test and Evaluation Center for an in-water demonstration of the of the LCS ASW Mission Package’s Escort Mission Module prior to formal developmental testing on USS Fort Worth.

The LCS ASW Mission Package ensures the U.S. Navy will remain dominant in ASW and outpace submarine advances of international competitors.

Navy Must Be ‘Agile’ but

'Sustainable' in the Arctic

WASHINGTON – Sustainability is the key issue for U.S. naval operations in the Arctic, a Navy official said.

“The Navy has to be agile [in its Arctic operations],” Jeffrey Barker, a deputy branch head for Policy and Posture in the Office of the Chief of Naval Operations, said Dec. 4 at a forum, The Arctic and National Security, sponsored by the Woodrow Wilson Center, a Washington think tank. “But we’re not going to do anything unless it is sustainable.

“I see this as a balance of space, time, and force,” Barker said.

Barker said the Navy would respond to any combatant commander requirements to operate more often in the Arctic. He stressed that the Navy would work closely with the Coast Guard, Air Force and international partners to accomplish assigned missions in the region.

“We can’t do it all our ourselves,” he said.

Barker cited a recent Government Accountability Office report that said that, in his words, “what we are doing aligns with the National Security Strategy. We think we are positioned very, very well.”

Although the recent focus on increasing Arctic operations has been brought about by the changes in the ice coverage of the Arctic Ocean, the Navy has long been a regular operator in the region.

“Most of the missions we do [in the Arctic] we can accomplish with submarines,” he said. “The submarines are up there to deny bastions to the Russians.

Canada Retires Sea King After More than 50 Years of Service

VICTORIA, British Columbia – The Canadian Armed Forces marked a major military milestone in the retiring of the CH-124 Sea King maritime helicopter, which has served for more than 50 years.

The Sea King will officially retire from service by Dec. 31 as the Royal Canadian Air Force (RCAF) completes its transition to the new CH-148 Cyclone maritime helicopter. But the Canadian Armed Forces paid tribute to the aircraft in a parade held Dec. 1 in Victoria.

Although the Sea King operates from ships, and was originally procured in 1963 to conduct anti-submarine warfare at sea, the aircraft were operated by the RCAF, and was that services longest-serving aircraft. The aircraft were assigned to the 12 Wing and based at Shearwater, Nova Scotia, and Patricia Bay, British Columbia.

The helicopter was capable of day and night operations, and had folding rotor blades so they could fit into the hangars aboard surface combatants. It had an amphibious hull and could land on water.

Canada's CH-124 Sea King fleet has flown in excess of 550,000 hours, and served in NATO and other international maritime operations conducting international peacekeeping, surveillance and counter-piracy as well as anti-submarine warfare. They have deployed all over the world, including the Persian Gulf, Somalia, Yugoslavia, East Timor and Haiti.

Many of the domestic maritime duties in the U.S. that would be

conducted by the U.S. Coast Guard, such search and rescue, disaster relief, counter-narcotic operations, and pollution and fisheries patrols, are missions performed in Canada by the Navy and Air Force. And many of those response and enforcement missions were performed by the Sea King. Most recently, a CH-124 Sea King participated in the RCAF's support to firefighting operations in British Columbia.

"The Royal Canadian Navy has been well served by the Sea King – our longest-range weapon and sensor – for decades. It was an honor to fly with the crew of Black Horse, the helicopter deployed with HMCS St. John's, during the Sea King's last operational deployment supporting NATO assurance measures this summer," said Vice Adm. M. F. Ron Lloyd, commander of the Royal Canadian Navy. "Canada's Navy and the Royal Canadian Air Force continue to forge ahead with an exciting new chapter, marked by the first operational deployment of Avalanche, the Cyclone helicopter currently deployed on NATO operations with HMCS Ville de Quebec."

According to RCAF Commander Lt. Gen. Al Meinzinger, the retirement of the CH-124 Sea King is truly historic for the RCAF.

"No other fleet has served as long as the Sea King, and its 55 years of service are a monument not only to its durability and capability, but to the men and women who operated, maintained and otherwise supported this incredible helicopter," he said.

Rite-Solutions Selected in

\$561 Million Navy UUV Contract

MIDDLETOWN, R.I. – Rite-Solutions recently was selected as one of 23 companies that will participate in a five-year, \$561.2 million contract to help the U.S. Navy develop future generations of its Unmanned Undersea Vehicle (UUV) Family of Systems (FoS), the company announced in a Dec. 3 release.

The contract, announced by the Naval Undersea Warfare Center (NUWC) in Newport, Rhode Island, will develop core technologies in 12 functional areas such as payloads, propulsion, power storage and conversion, vehicle control, and command and control.

“We will focus on three areas: software, architecture, and command and control functionality,” said Mike Coffey, executive vice president and general manager at Rite-Solutions. “Our strength is integrating disparate systems into a single, cohesive system of systems.”

Consistent with government contracts, NUWC will release task-order requests for proposal that participating companies will bid on. But unlike contracts that source a finished product (such as a UUV) from a single company, NUWC will receive components from multiple companies.

“This contract is a little unique,” said Coffey. “NUWC is taking a best-of-breed approach to acquiring technologies that will enable them to develop, build and support UUV systems. They will integrate the different technologies in the prototype phases of UUV FoS development, which will establish the baselines for future production.”

Often a subcontractor to large system developers, Rite-Solutions is now a prime contractor alongside them.

“We are pleased to be included on this contract, with some of the biggest and most reputable companies in the aerospace and defense industry,” Coffey said.

Overall, the contract has options that could bring the total amount to \$794.5 million.

Central Gulf Lines Moves Two Armored Brigades Across the Pacific

MOBILE, Ala. – Central Gulf Lines Inc. (CGL), a subsidiary of SEACOR Holdings Inc., announced in a Dec. 3 release that the M/V Green Cove recently completed a round-trip voyage to Busan, South Korea, under a time charter to the U.S. Navy’s Military Sealift Command. CGL supported the movement of military equipment for U.S. Army brigades.

Green Cove transported well in excess of 20,000 metric tons of military cargo, including more than 150 M1 Abrams tanks and nearly 300 Bradley Fighting Vehicles, utilizing the vessel’s full lift capacity. The high-profile loading and discharge operations were attended by senior Army leadership.

CGL President and U.S. Navy veteran Henry Nuzum praised the tight coordination between CGL and the military.

“We appreciate the hard work of the 833rd Transportation Battalion in Seattle, the 837th Transportation Battalion in Busan and the 834th Transportation Battalion in Oakland, loading and discharging the cargo. CGL delivered the equipment safely and ahead of schedule,” Nuzum said. “In 1950, CGL

completed its first military contract, moving equipment for Military Sealift Command to Korea. After nearly seven decades of moving equipment for the U.S. armed forces, it is gratifying to deliver a fresh brigade to the site of our inaugural military move and bring another one home.”

Austal Delivers First Guardian-Class Patrol Boat

HENDERSON, Western Australia— Austal delivered the first Guardian-class patrol boat (GCPB) to the Australian Department of Defence Nov. 30 and then, in a handover ceremony, presented the vessel to the Papua New Guinea (PNG) government, the company said in a release. Ted Diro is the first of 21 GCPBs to be gifted to 12 Pacific Island nations and Timor-Leste under the Commonwealths Pacific Maritime Security Program.

“Austal are proud to deliver this program for the Commonwealth of Australia,” the company said. “The Guardian class has brought together the industry-leading skills of over 200 Austal employees and estimated to have employed an additional 200 people indirectly through the design, construction and sustainment process.

The Guardian class is the latest evolution of Austal’s proven patrol boat platform that was first introduced some 20 years ago, commencing with the Bay-class patrol boat developed for the Australian Customs Service. Since 1998, Austal has delivered 32 patrol boats to the Commonwealth – representing Australia’s entire border patrol capability. Austal has delivered or has orders for a total of 97 patrol boats for Australia and around the world.

“Over the past six weeks, we have had the Ted Diro crew from the PNG Navy at Austal training on how to use and maintain the new vessels,” said David Singleton, Austal CEO. “Their positive feedback on the greater capability, amenity and operability of the Guardian class has been fantastic. We look forward to show casing the new vessels to the other Pacific Island nations over the life of the vessel program through to 2023.

“The program is now in a full rate of production, with the second vessel, which is destined for Tuvalu, successfully launched on Monday with an additional three vessels in various stages of construction. Austal are already looking at export opportunities for the GCPB.”

The Pacific patrol boat contract was awarded to Austal in May 2016 with a contract option in April 2018. The program supports more than 200 direct jobs at Austal and more than a further 200 indirect jobs through the Australian industry involved in the program. Austal has around 1,000 employees in Australia directly contributing to delivering a strong domestic and export shipbuilding industry.

BAE Systems Wins Navy Contract for C5ISR Systems Integration, Sustainment Work

MCLEAN, Va. – BAE Systems has earned positions on two single-award indefinite delivery/indefinite quantity (IDIQ) contracts that support the rapid integration and sustainment of command, control, communications, computers, combat systems, intelligence, surveillance, and reconnaissance (C5ISR) systems

for the Naval Air Warfare Center Aircraft Division (NAWCAD), the company said in a Dec. 3 release. The two awards have a total potential value of more than \$150 million.

The first award, LCS CONUS, is a five-year contract to provide life-cycle sustainment across military- and commercial-based communications platforms within the United States and abroad. These systems are used by Navy, Special Operations Forces, Homeland Security, and other Department of Defense and non-defense agencies. The IDIQ contract has a maximum ceiling value of \$83 million.

“Our engineers specialize in providing custom, tailor-made C5ISR solutions to help close communications capability gaps for the U.S. military,” said Mark Keeler, vice president and general manager of BAE Systems’ Integrated Defense Solutions business. “BAE Systems takes pride in keeping the lines of communication open for those on the front lines of national security.”

The company also secured a position on a five-year IDIQ to provide rapid integration and production services for C5ISR systems on board small and large militarized vehicles and air platforms. Most of the work will take place within NAWCAD’s Special Communications Mission Solutions Division’s production facility at St. Inigoes, Maryland, known as the Special Communications Rapid Integration Facility.

The remaining work will take place in Jacksonville, Florida, providing direct support to the local Fleet Readiness Center. BAE Systems taskings will include supporting mobile, fixed-base stations, various fixed and rotary wing air platforms, and large command centers deployed around the world. The IDIQ contract has a maximum ceiling estimated at \$68 million.

Coast Guard, DHS S&T Ventures into Space with Polar Scout Launch

WASHINGTON – The Coast Guard Research, Development, Test, and Evaluation (RDT&E) Program, in partnership with the Department of Homeland Security (DHS) Science and Technology Directorate (S&T), launched two CubeSats from Vandenberg Air Force Base, California, Dec. 3, the Coast Guard said in a release.

The launch is part of the Polar Scout project to evaluate the effectiveness of space-based sensors in support of Arctic search and rescue missions. Knowledge gained from this demonstration will be used to inform satellite technology recommendations for many potential applications within the Coast Guard and across DHS.

Jim Knight, the Coast Guard deputy assistant commandant for acquisition, said in ceremonies leading up to the launch, “The Polar Scout project presents an opportunity to evaluate the most efficient way to ensure that the United States can project surface presence in the Arctic when and where it is needed while filling an immediate Search and Rescue capability gap in these remote areas.”

The CubeSats, dubbed Yukon and Kodiak, were launched into a low-earth polar orbit on a rideshare with other spacecraft from 17 different countries. This economical alternative to a costly single-mission launch ensured dozens of spacecrafts from various organizations reached orbit. Success of the mission was due to public and private sector collaboration throughout the process, from developing the CubeSats to propelling them into space.

“In order to demonstrate, test and evaluate the viability and utility of CubeSats for Coast Guard missions, the Coast Guard

RDT&E Program has partnered with DHS S&T to conduct on-orbit testing of CubeSats using the Mobile CubeSat Command and Control (MC3) ground network,” said Holly Wendelin, command, control, communications, computers, intelligence, surveillance and reconnaissance domain lead.

Developed as a potential capability bridge between the current 20-year-old international search-and-rescue architecture and its future successor, “CubeSats serve as a much smaller, more cost-efficient solution that can be easily implemented over a short period of time. Each are only about the size of a shoebox,” said John McEntee, director of Border Immigration and Maritime at S&T.

In the 18 months leading up to the launch, DHS S&T handled the fabrication of Yukon and Kodiak, which are tailored specifically to detect 406 MHz emergency distress beacons. At the same time, the Coast Guard Research and Development Center deployed two ground stations – one at the Coast Guard Academy in New London, Connecticut, and one at University of Alaska Fairbanks – using the MC3 architecture and network. The ground stations will receive all of the signals from the CubeSats during the demonstration.

DHS will begin testing and demonstrations using emergency distress beacons in the Arctic beginning early next year and continuing through the summer.

“The demonstrations will include downlinking 406 MHz emergency distress beacon data from the CubeSats using the deployed MC3 ground stations,” Wendelin said. “We will set the beacons off, the satellite should detect it and send signals back to the ground station.” The testing period is expected to provide critical knowledge on how CubeSat technology can be used to enhance Coast Guard and DHS mission performance.

The Polar Scout project is providing valuable insight on the process, cost and feasibility of acquiring and using organic

satellites. The Coast Guard and DHS will use the knowledge gained from Polar Scout and the MC3 installs, market research and space mission design and assessments to develop satellite technology recommendations.

As Coast Guard missions become more challenging and complex, the use of small and inexpensive satellites has the potential for great impact. Potential uses for satellites include improving communication in the arctic environment, monitoring large areas for illegal activity and helping to locate persons lost at sea. Additionally, the use of satellites has the potential to reduce the time and resources spent on intensive aircraft searches as well as the risks associated with placing personnel in hazardous situations that only need sensors and communications on scene.

“Undoubtedly, the results and knowledge gained by the Polar Scout Satellite Project will lead to force-multiplying solutions for the Department, which is a big priority in this age of complex threat cycles,” said Bill Bryan, senior official performing the duties of undersecretary for the Science and Technology Directorate.

Through Polar Scout’s robust search-and-rescue satellite solution, the Coast Guard may be empowered to respond to maritime disasters with unprecedented speed, preserving lives and even cargo, along trade routes in the Arctic Circle.