

Mitcham Delivers micro-MA-X System for Navy's Next-Gen Small UUV Evaluation

THE WOODLANDS, Texas – Mitcham Industries' Klein Marine Systems unit recently delivered the first micro-MA-X (μ MA-X System) in support of the U.S. Navy's next-generation small-class unmanned undersea vehicle (UUV) evaluation sponsored by the Defense Innovation Unit (DIU), the company said in a release.

DIU is a defense organization focused exclusively on fielding and scaling commercial technology across the U.S. military to help solve critical problems.

The μ MA-X system is the first in a series of new imaging products based on Klein's previously announced MA-X technology and designed for both commercial and military unmanned vehicle markets.

The reduced size and power requirements of the μ MA-X system make it an ideal payload for the rapidly growing UUV market. MA-X technology represents a high-quality, cost-effective nadir imaging solution that has long been sought by the industry. Traditional side scan sonar imaging creates a nadir gap directly under the path of the vehicle. The μ MA-X system fills that gap, when paired with conventional side scan, eliminating the need for additional time for overlapping survey lines to achieve 100% coverage. For UUVs, this translates into extended mission duration, or shorter time to cover the same area.

One of the key discriminators of the μ MA-X, particularly for the defense sector, is the ability to produce high-quality imagery of the nadir area that is comparable to the traditional side scan images. This allows for the data

acquired by the system to be fed directly into existing automatic target recognition software allowing for automated detection and recognition of targets of interest.

“The μ MA-X system is the result of a fast-tracked, internally-funded development, and we are very excited to have the U.S. Navy evaluate its effectiveness for the Maritime Expeditionary Mine Countermeasures Unmanned Undersea Vehicle program,” said Guy Malden, co-CEO of Mitcham.

Medical Center Seeks Marine Corps Command's Help to Manufacture Ventilator Splitter



U.S. Navy Petty Officer 1st Class Ricler Magsayo calibrates a ventilator at Camp Kinser in Okinawa, Japan, on March 23. The University of California San Diego Medical Center has asked for Marine Corps Systems Command's help in making a ventilator splitter part via 3-D printing. U.S. Marine Corps/Lance Cpl. Terry Wong

MARINE CORPS BASE QUANTICO, Va. – The University of California San Diego Medical Center has requested Marine Corps Systems Command's (MCSC) assistance to help medical professionals as they deal with the evolving crisis of COVID-19, the command said in a release.

On March 16, Dr. Sidney Merritt, an anesthesiologist at UCSD Medical Center, contacted MCSC's Advanced Manufacturing Operations Cell and requested help in coordinating 3-D printer

assets to design parts to enable the simultaneous ventilation of multiple patients.

AMOC sought collaboration with the Naval Information Warfare Center Pacific Reverse Engineering, Science and Technology for Obsolescence, Restoration and Evaluation Lab to rapidly design, print, test and evaluate prototype ventilator splitters using various materials.

The AMOC team also worked with the Navy's Bureau of Medicine and Surgery for support in evaluating, certifying and approving the parts prior to delivery to the medical center.

On March 18, Merritt provided design files for the ventilator splitter based on a successful test print conducted by the UCSD engineering team. UCSD requested assistance in printing ventilator splitters in higher resolution and with diverse materials that could meet specific design requirements.

After receiving the design files, AMOC and the NIWC Pacific RESTORE lab printed several prototypes using different materials. In less than a day, AMOC used its industrial printer in Quantico, Virginia, and the RESTORE Lab employed its organic printers to produce initial prototypes.

The 3-D-printed ventilator splitters were scanned to ensure accuracy with the design files and then brought to UCSD Medical Center for fit testing and further design analysis.

AMOC's reputation in advanced manufacturing has grown since its establishment in 2019. The cell has demonstrated the ability to produce 3-D-printed parts and provide other sustainment and manufacturing solutions. When called upon, the AMOC can produce parts in a fraction of the time it takes traditional manufacturers.

"AMOC's response to this situation demonstrates how additive manufacturing can respond quickly to supply chain disruptions and rapidly prototype, evaluate and test new solutions to meet

emerging urgent requirements,” said Scott Adams, AMOC lead at Marine Corps Systems Command.

The rapid response by AMOC and the NIWC Pacific RESTORE lab to UCSD Medical Center’s request for support indicates how the Department of the Navy is prepared to respond to the medical community during the COVID-19 crisis.

“I couldn’t be prouder of the Marine Corps and NIWC Pacific team,” said Carly Jackson, the chief technology officer at Naval Information Warfare Systems Command. “We are demonstrating the power, agility and speed of response that our Naval research and development centers bring to bear in times of national need.”

Coast Guard Awards Eight Contracts for Industry OPC Studies

WASHINGTON – The U.S. Coast Guard has awarded eight offshore patrol cutter (OPC) industry studies contracts, the service announced in a release. These awards support the Coast Guard’s strategy to mitigate OPC program risk and establish a new, fair and open competitive environment to complete the OPC program of record.

Industry studies contracts were awarded to:

- Austal USA of Mobile, Alabama: \$2 million base award (\$3 million total potential value)
- Bath Iron Works of Bath, Maine: \$2 million base award (\$3 million total potential value)

- Bollinger Shipyards Lockport of Lockport, Louisiana: \$2 million base award (\$3 million potential value)
- Eastern Shipbuilding Group of Panama City, Florida: \$1.1 million base award (\$1.2 million potential value)
- Fincantieri Marinette Marine of Marinette, Wisconsin: \$2 million base award (\$3 million total potential value)
- Huntington Ingalls, Inc. of Pascagoula, Mississippi: \$2 million base award (\$3 million total potential value)
- Philly Shipyard of Philadelphia: \$2 million base award (\$3 million total potential value)
- VT Halter Marine of Pascagoula, Mississippi: \$2 million base award (\$2.9 million total potential value)

Under their respective contracts, the awardees will assess OPC design and technical data, provided by the Coast Guard, and the program's construction approach. Based on their analyses, the awardees will recommend to the Coast Guard potential strategies and approaches for the follow-on detail design and construction (DD&C). The awardees will also discuss how they would prepare the OPC functional design for production. The awardees may also identify possible design or systems revisions that would be advantageous to the program if implemented, with strategies to ensure those revisions are properly managed.

The Coast Guard will use the industry studies results to further inform its follow-on acquisition strategy and promote a competitive environment for the DD&C award. Participation in industry studies is not a pre-requisite for submitting a DD&C proposal.

The OPCs will replace the service's aging medium-endurance cutters, which are becoming increasingly expensive to maintain and operate. The OPCs will bridge the capabilities of the national security cutters, which patrol the open ocean, and the fast response cutters, which serve closer to shore.

The current OPC DD&C contract is for up to four hulls. The

contract was adjusted as part of a request made by the incumbent, Eastern Shipbuilding Group, for extraordinary relief. The request was a result of devastation caused when Hurricane Michael made landfall in Panama City, Florida, on Oct. 10, 2018. Hurricane Michael caused extensive damage to the ESG's shipyard and the Panama City region.

Hospital Ship Comfort Arrives in New York City



The USNS Comfort leaves Naval Station Norfolk on March 28. U.S. Navy/Mass Communication Specialist 2nd Class Jonathan Clay

NORFOLK, Va. – The Military Sealift Command hospital ship USNS Comfort arrived in New York City on March 30 in support of the nation's COVID-19 response efforts, the U.S. 2nd Fleet announced.

While in New York, the ship will serve as a hospital for non-COVID-19 patients admitted to shore-based hospitals and will provide medical care to include general surgeries, critical care and ward care for adults, allowing local health professionals to focus on treating COVID-19 patients and for hospitals there to use their intensive care units and ventilators for those patients.

Comfort is a seagoing medical treatment facility that has more than 1,200 personnel embarked for the New York mission, including U.S. Navy medical and support staff assembled from 22 commands as well as over 70 civil mariners.

“The USNS Comfort arrives in New York City this morning with

more than 1,100 medical personnel who are ready to provide safe, high-quality health care to non-COVID patients,” said Capt. Patrick Amersbach, commanding officer of the USNS Comfort Military Treatment Facility (MTF). “We are ready and grateful to serve the needs of our nation.”

Comfort’s primary mission is to provide an afloat, mobile, acute surgical medical facility to the U.S. military that is flexible, capable and uniquely adaptable to support expeditionary warfare. Comfort’s secondary mission is to provide hospital services to support U.S. disaster relief and humanitarian operations worldwide.

“Like her sister ship, USNS Mercy, which recently moored in Los Angeles, this great ship will support civil authorities by increasing medical capacity and collaboration for medical assistance,” said Rear Adm. John Mustin, vice commander of U.S. Fleet Forces Command. “Not treating COVID-19 patients ... but by acting as a relief valve for other urgent needs, freeing New York’s hospitals and medical professionals to focus on the pandemic.”

“This USNS Comfort team of Sailors, Marines and civilian mariners came together during the transit to New York City and our medical professionals are ready to begin receiving patients from local hospitals tomorrow,” said Capt. Joseph O’Brien, mission commander of Task Force New York City. “Our personnel are our strength – the men and women of our military services accomplish incredible things every day, and I am confident in their abilities as we start the next phase of this mission.”

The ship expects to begin receiving patients 24 hours after arriving in New York. All patient transfers will be coordinated with local hospitals, thus ensuring a consistent handoff of care between medical providers. Patients will not be accepted on a walk-on basis and should not come to the pier expecting to receive care.

“The last time that this great hospital ship was here was in the wake of 9/11, where she served as respite and comfort for our first responders working around the clock,” Mustin said. “Our message to New Yorkers – now your Navy has returned, and we are with you, committed in this fight.”

USS Fort Lauderdale Amphibious Transport Dock Ship Launched



Shipbuilders lift into place the aft end of the deckhouse of the USS Fort Lauderdale last May. Huntington Ingalls Industries

PASCAGOULA, Miss. – The USS Fort Lauderdale (LPD 28) was successfully launched at the Huntington Ingalls Industries Ingalls Division shipyard in Pascagoula, Mississippi, on March 28. Fort Lauderdale is the Navy’s 12th San Antonio-class amphibious transport dock ship.

On March 7, 2020, the ship was transferred from the land-level facility to the dry dock in preparation for floating off. During the launch, the dry dock was slowly flooded until the ship floated off the blocks.

“I am thrilled to get Fort Lauderdale in the water, so we can begin final outfitting and eventually take the ship out to sea for trials,” said Capt. Scot Searles, LPD 17-class program manager for PEO-Ships. “The San Antonio class has proven essential to expeditionary warfighters, and we are eager to deliver another ship to the fleet.”

San Antonio-class ships support embarking, transporting and landing elements of 650 Marines by landing craft or air cushion vehicles. The ships' capabilities are further enhanced by their flight decks and hangars, which can operate V-22 Osprey tilt-rotor aircraft. Because of the ships' inherent capabilities, they can support a variety of amphibious assault, special operations and expeditionary warfare missions, operating independently or as part of Amphibious Readiness Groups, Expeditionary Strike Groups or Joint Task Forces.

Ingalls Shipbuilding also is in production on the USS Richard M. McCool (LPD 29) and Harrisburg (LPD 30). LPD 28 and 29 will serve as transition ships to LPD 30, the first LPD 17 Flight II ship.

Marines Grapple with Maintaining Readiness Amid COVID-19 Restrictions



Marine provost marshals take precautions against COVID-19 at Marine Corps Air Ground Center in Twentynine Palms, California. U.S. Marine Corps

ARLINGTON, Va. – Restrictions imposed by the battle against the coronavirus are presenting the U.S. Marine Corps with an array of new challenges – from maintaining grooming standards to how, when and where America's force in readiness can train safely in a pandemic.

In a joint Pentagon press briefing on March 26 with Marine Commandant

Gen. David Berger, acting Navy Secretary Thomas Modly said the Marines have scaled back training at Marine Corps Air Ground Combat Center, Twentynine Palms and the Mountain Warfare Training Center, both in California. They also have canceled training with foreign partners and much of the Headquarters Marine Corps staff have been ordered to work from home.

[See: More Cases on Roosevelt as COVID-19 Spreads Across Navy, Marine Corps](#)

Promotion boards can spread out over several rooms and shooters can spread out on the firing line of a pistol range, but “in a live-fire exercise you can only do so much to moderate social distancing,” Berger said.

“The Marine Corps is unique,” the commandant explained. “We are mandated by law to be the nation’s most ready force.” He has given local commanders leeway to operate as they see best depending on the local situation rather than issuing a blanket, Corps-wide list of restrictions. When it comes to training, Berger said, “commanders are taking measures that make sense but also making sure their units are trained and ready to go.”

“This is a unique time. We’re trying to find unique answers. It’s not going to be the same as sitting in the bleachers at graduation. There’s no way to replicate that.”

Sgt. Major of the Marine Corps Troy Black

Basic training graduations have been closed to all outsiders, including family, to prevent spreading disease.

“It’s driving us to be pretty creative,” Berger said. The ceremonies are now televised and digitally recorded for each new Marine.

“This is a unique time. We’re trying to find unique answers,” said Sgt. Major of the Marine Corps Troy Black, but he conceded “it’s not going to be the same as sitting in the bleachers at graduation. There’s no way to replicate that.”

Although leaders have halted face-to-face meetings between recruiters and enlistment prospects, the Marines have not stopped training or bringing new recruits to boot camps in California and South Carolina. Both facilities have begun screening incoming recruits before they depart from processing stations and when they arrive at the recruit depot. Any showing symptoms are isolated. At least two have tested positive for the virus, but no drill instructors have, Modly said.

“Everybody’s still getting their head shaved as long as the barbers come to work,” Berger said, “but there will come that time when it gets worse and worse and worse, where barbers won’t come to work. In that case we’ll have to make a decision: ‘Do Marines cut Marines’ hair?’ Commanders at both of our recruit depots have thought their way through it.”

Berger noted headquarters hasn’t said grooming standards are relaxed for a given period. “What we have said is commanders have the latitude to make adjustments based on what’s available at your

location.”

Navy Orders Two More Navajo-Class Towing, Salvage, Rescue Ships



Gulf Island Shipyard held a keel laying ceremony on Oct. 30, 2019 for the future USNS Navajo (T-ATS 6), the lead ship of the Navy’s new class of towing, salvage and rescue vessels. U.S. NAVY

ARLINGTON, Virginia – The Navy has ordered two more Navajo-class T-ATS towing, salvage and rescue ships, the Defense Department said in a March 25 contract notice.

The Naval Sea Systems Command has awarded Gulf Island Shipyards LLC in Houma, Louisiana, a \$129.9 million firm-fixed-price contract modification “to exercise options for the construction of two additional towing, salvage and rescue ships (T-ATS) and for the performance of unique item identification on the T-ATS 6-class program.

“The contract also includes options for associated support efforts related to the ship design and construction for special studies, engineering and industrial services, provisioned items orders, unique item identification and data rights license,” the notice said. “Work is expected to be complete by October 2022.”

The Navajo-class T-ATS is designed to combine and replace the current capabilities of the three Powhatan (T-ATF 166) class of fleet ocean tugs and two Safeguard (T-ARS 50) class rescue

and salvage ships, which will reach the end of their expected service lives starting in 2020.

The Navajo-class is designed with 6,000 square feet of deck space for embarked salvage and rescue systems. The ship will have an overall length of 263 feet and a beam of 59 feet. It will be able to carry a 1,796-ton load.

Gulf Island Shipyard is currently building the first three T-ATSs: the future USNS Navajo (T-ATS6), USNS Cherokee Nation (T-ATS 7) and USNS Saginaw Ojibwe Anishinabek (T-ATS 8). These three ships are scheduled for delivery in 2021.

More Cases on Roosevelt as COVID-19 Spreads Across Navy, Marine Corps



Sailors prepare surgical equipment to be sterilized aboard the hospital ship USNS Mercy. U.S. Navy/Mass Communication Specialist Seaman Luke Cunningham

ARLINGTON, Va. – COVID-19 cases are on the rise among U.S.

Navy personnel, including five more Sailors diagnosed with the novel

coronavirus aboard the deployed aircraft carrier USS Theodore Roosevelt,

according to acting Navy Secretary Thomas Modly.

The news brings the number of Roosevelt crew members testing positive for COVID-19 to eight and raises the total number of infected active-duty

uniformed Navy personnel to 104, Modly told a Pentagon press

briefing March 26,
adding that 23 Navy civilian employees, 16 family members and
19 civilian
contractors also have the virus.

He acknowledged that those totals indicate the Navy has the
highest number – about one third – of all coronavirus cases in
the military. By
contrast, the Marine Corps, which keeps a separate tally, has
reported 31 cases
of COVID-19 among active-duty personnel, including the first
service member
working in the Pentagon to test positive. Also, five civilian
Marine Corps
employees, five dependents and three contractors also have
tested positive.



A sign put up to limit the spread of COVID-19 is displayed in
the Marine Corps Exchange at Marine Corps Base Camp Lejeune,
North Carolina on March 23. U.S. Marine Corps/Lance Cpl.
Taylor Smith

“I think we are trending higher. Some data that I saw this
morning showed that we are probably a third of all the active-
duty people that
have tested positive,” said Modly, adding “I don’t have a
reason for that.”

While the Navy is deployed around the world and has large
concentrations of
people in places like San Diego and Norfolk, Virginia, Modly
said any estimated
explanations were just speculation. “We have not done the
forensics yet on
where these individual Sailors contracted the disease and,
until we know that,
it would be irresponsible for me to say why we think this is
happening,” he
said.

All eight infected Sailors evacuated from the Roosevelt to Guam had mild symptoms and were not hospitalized but they are quarantined, Modly said. In a change from earlier plans, he said 100% of the nearly 5,000 crew members on board the carrier would be tested for the coronavirus "to ensure we are able to contain whatever spread might have occurred on the ship." He stressed the ship is operationally capable and "can do its mission if required to do so."

The Roosevelt is making a previously-scheduled port visit to Guam, where testing the whole crew will be completed. All crew will be confined to the ship or the pier area while in port. In the meantime, the ship has 800 testing kits, with more on the way by air, and some limited ability to process the samples. Sailors who test positive will be transported to the U.S. Naval Hospital Guam for further evaluation and treatment as necessary.

The infected Marine stationed at the Pentagon was last in the building on March 13 and tested positive on March 24 and is in isolation at home. His workplace has been cleaned by response crews. Both Marine Corps recruit depots have begun screening incoming recruits and at least two have tested positive for the virus, but no drill instructors have. Two other Marines stationed at Parris Island have tested positive, but they were already in quarantine when their tests came back, Modly said.

The Navy has accelerated preparations for the hospital ship USNS Comfort to sail to New York City to help relieve local hospitals' non-COVID-19 workload. Originally planned to depart from Norfolk, Virginia, on April 3, "in all likelihood she's getting underway this weekend," Modly said. "Hopefully she'll be in New York by the early part of next week," he added. The Navy's other hospital ship, USNS Mercy, has been deployed to perform similar duties treating non-coronavirus cases in Los Angeles.

Marine Force Design 2030: Reduce Tube Artillery, Increase Rockets, Missiles



Marines in an M1A1 Abrams main battle tank conduct a patrol during a predeployment training exercise at Marine Corps Air Ground Combat Center Twentynine Palms, California. Force Design 2030 dictates that the Corps reduce its investment in heavily armored ground combat systems. U.S. Marine Corps/Lance Cpl. Dalton S. Swanbeck

ARLINGTON, Virginia – The Marine Corps commandant has issued his plans for a major redesign of the Marine Corps' force structure by 2030, with substantial reductions in some venerable weapon systems and increases in new systems.

For example, traditional tube artillery is under the gun, as are tanks, but rocket artillery and precision missiles are boosted in the plan.

Force Design 2030, signed out this month by Commandant Gen. David H. Berger, is aimed at more closely aligning the capabilities of the Corps with the National Defense Strategy, from a priority of confronting violent extremism to "great power/peer-level competition," with emphasis on the Indo-Pacific.

"Such a profound shift in missions, from inland to littoral, and from nonstate actor to peer competitor, necessarily requires substantial adjustments in how we organize, train and equip our Corps," Berger said in the document.

"A return to our historic role in the maritime littoral will

also demand greater integration with the Navy and a reaffirmation of that strategic partnership. As a consequence, we must transform our traditional models for organizing, training and equipping the force to meet new desired ends, and do so in full partnership with the Navy.”

Berger, foreseeing flat future defense budgets, said he is “operating under the assumption that we will not receive additional resources, we must divest certain existing capabilities to free resources for essential new capabilities. ... With the shift in our primary focus to Great Power Competition and a renewed focus on the Indo-Pacific region, the current force has shortfalls in capabilities needed to support emerging joint, naval and Marine Corps operating concepts.”

He said the Corps is over-invested in heavily armored ground combat systems (tanks), towed cannon artillery and short-range, low endurance unmanned aerial systems (UAS) incapable of employing lethal effects.

Accordingly, Berger plans to, among other initiatives, to reduce the number of tube artillery batteries from 16 to five. These units are armed with the M777 towed cannon built by BAE Systems.

In contrast, the Corps plans to increase its rocket artillery batteries from 7 to 21. These batteries are equipped with the Lockheed Martin-built M142 HIMARS (High-Mobility Artillery Rocket System). The Corps intends to create batteries of anti-ship missiles such as the Raytheon’s Tomahawk Maritime Strike Missile and the Kongsberg/Raytheon Naval Strike Missile. These missiles will enable Marine expeditionary forces to operate in contested littoral environments.

“This investment provides the basis, over time, for generating one of the fundamental requirements for deterrence, and ultimately successful naval campaigns – long-range, precision

expeditionary anti-ship missile fires,” Berger said. “This requirement is based on one of the more well-supported conclusions from wargaming analysis conducted to date.”

The Corps also plans to eliminate its fleet of M1A1 main battle tanks, divesting its “entire capacity of seven companies and prepositioned capacity,” he said.

“We have sufficient evidence to conclude that this capability, despite its long and honorable history in the wars of the past, is operationally unsuitable for our highest-priority challenges in the future,” Berger said. “Heavy ground armor capability will continue to be provided by the U.S. Army.”

Because the Corps plans to reduce its active-component infantry battalions from 24 to 21, its amphibious assault requirements will be lessened. Accordingly, two of the six amphibious assault companies are slated for the cut. The units operate the AAV7 assault amphibious vehicle and the new Amphibious Combat Vehicle, both built by BAE.

The Corps is looking at increasing force structure of light armored reconnaissance companies from nine to 12.

“While I have repeatedly stated that all-domain reconnaissance and counter-reconnaissance will be a critical element of any future contingency, I remain unconvinced that additional wheeled, manned armored ground reconnaissance units are the best and only answer – especially in the Indo-Pacific region,” Berger said.

“We need to see more evidence during Phase III [of the study] to support this conclusion before engaging in an expansion of our existing capacity, or committing billions of dollars in procurement funds towards the acquisition of an Advanced Reconnaissance Vehicle (ARV).”

Polar Star Completes 123-Day Antarctic Treaty Inspection, Resupply Mission



Rear Adm. Jack Vogt, commander of the 13th Coast Guard District, welcomes the crew of Polar Star to Seattle on March 25. U.S. Coast Guard/Public Affairs Specialist 3rd Class Michael Clark

SEATTLE – The 150-member crew of the U.S. Coast Guard Cutter Polar Star returned March 25 to their homeport of Seattle following a 123-day deployment to Antarctica in support of Operation Deep Freeze, the Coast Guard Pacific Area said.

This mission marks the Polar Star's 23rd journey to Antarctica in support of Operation Deep Freeze, an annual joint military service mission to resupply U.S. Antarctic stations, in support of the National Science Foundation, the lead agency for the Antarctic program. This year also marks the 63rd iteration of the operation.

The Polar Star crew departed Seattle on Nov. 27 for their sixth deployment in as many years and traveled more than 26,350 miles through the North Pacific, South Pacific, Indian and Southern Oceans.

"I am very proud of the tenacity of this Polar Star crew."

Capt. Greg Stanclik, commanding officer of the Polar Star

In the Southern Ocean, the crew travelled through nearly 500 miles of pack ice and broke through 23 miles of fast ice in order to create a nearly 18-square-mile navigable channel to

McMurdo Station, Antarctica. Because of the efforts of the Polar Star crew, two resupply vessels and one tanker travelled to McMurdo Station unescorted in order to refuel and resupply U.S. Antarctic stations.

This year's operation required the construction of a temporary, modular mobile causeway to replace an ice pier, which disintegrated during Operation Deep Freeze 2018-2019. The modular pier required a three-day construction period prior to the offload of supplies, followed by a three-day deconstruction period at the conclusion of the mission.

Three resupply ships required 23 days to offload 19.6 million pounds of cargo and 7.6 million gallons of fuel during this year's operation, more than doubling the operation duration and capacity as previous years. Together, the three ships delivered enough fuel and critical supplies to sustain NSF operations throughout the year until Polar Star returns in 2021.

Among the cargo offloaded were construction materials for a five-year, \$460 million Antarctica Infrastructure Modernization for Science (AIMS) project to recapitalize McMurdo Station, South Pole Station and other American outposts on the continent.

Additionally, the Polar Star crew also supported a team of U.S. government officials from the State Department, National Science Foundation, National Oceanic and Atmospheric Administration and U.S. Coast Guard who conducted a five-day inspection of foreign research stations, installations and equipment in Antarctica.

The team inspected three stations: Mario Zucchelli (Italy), Jang Bogo (South Korea) and Inexpressible Island (China). This was the 15th inspection of foreign research stations by the United States in Antarctica and the first since 2012.

Inspections emphasize all of Antarctica is accessible to

interested countries despite territorial claims and reinforce the importance of compliance with the Antarctic Treaty's arms control provisions. The U.S. will present its report on the inspection at the next Antarctic Treaty Consultative Meeting in Helsinki, Finland, in May 2020.

"I am very proud of the tenacity of this Polar Star crew," said Coast Guard Capt. Greg Stanclik, commanding officer of the Polar Star. "158 crew members earned the Antarctic Service Medal during Operation Deep Freeze 2020."