Communications, Information Sharing Seen as Critical for Middle East Shipping Security

Collaboration between merchant shipping and military forces is seen as critical to securing trade flows across the Middle East. NCAGS

Collaboration between the merchant shipping community and coalition military forces is critical in securing maritime trade flows across the Middle East region, with communications and information sharing central to such collaboration, a U.S. Navy officer told a recent regional shipping stakeholder conference.

“Events have made it clear that no one entity alone can provide assurance to merchant shipping in this region,” Capt. Todd Hiller, commanding officer of Bahrain-based Naval Forces Central Command’s (NAVCENT’s) Naval Cooperation And Guidance

for Shipping (NCAGS) organization, told the annual International Maritime Security Construct (IMSC) conference last month. “Never before has it been more important to collaborate with our coalition partners and stakeholders to protect freedom of navigation in this critical part of the world.”

Established in 2019 following attacks on commercial ships in port and at sea, IMSC is a multinational maritime coalition designed to deter “gray zone” threats to commercial shipping operating between the Southern Red Sea and the Northern Gulf. The 2021 conference, titled Security through Partnership, was IMSC’s second annual event, held virtually due to the Covid-19 pandemic.

While IMSC-led naval presence has done much to deter attacks, risk persists. “From unmanned vessel-borne improvised explosive device attacks, to limpet mines attached to the hulls of tankers, to the recent seizure of the Motor Tanker Hankuk Chemi … these threats continue to attempt to destabilize commercial shipping,” Hiller said.

“Given the high risk of navigating, and security interests in the Middle East, there has been a steady uptick in stakeholder involvement in information sharing,” he said. “More times to not, stakeholders and coalition partners have shared specific knowledge and expertise that is paramount in staying ahead of the [risk].”

NCAGS acts as a key node in such information sharing, Hiller said. “NCAGS is an organization that bridges the gap between sustainment of forward-deployed military forces and merchant shipping, by providing a framework for communicating directions, advisories, concerns, and information. The mission is to assist the [U.S. 5th] Fleet commander in managing risk by providing maritime domain awareness (MDA), real-time clarity of the merchant shipping picture, and ensuring safe passage of merchant shipping in crisis or contingency.”

Staffed by U.S. Navy reservists, many of whom are merchant mariners or strategic sealift officers, NCAGS can scale up from providing single personnel as merchant marine advisors or liaison officers ashore or at sea, to a large theater contingent providing a shipping coordination center with teams assigned ashore or at sea.

Effective communications and information sharing is two way, Hiller said. For NCAGS, its outputs include creating incident reports, conducting ship visits, recommending transit routes, providing subject matter expertise, sharing best practice (currently based around the stakeholder-produced Best Management Practice document, or BMP 5), supporting NAVCENT forces and building and sharing an overall MDA and "pattern of life" picture. NCAGS is a touchpoint for shipping, for example for vessels transiting high-risk regions like the Southern Red Sea or the Straits of Hormuz. In return, the shipping community shares ship, cargo, and voyage information with NCAGS and encourages vessel masters to follow BMP5 guidance and report incidents to help build MDA.

"[Sharing] the most current information and accurate assessment of the merchant shipping picture is critical to the establishment of the 'pattern of life' and the achievement of MDA," Hiller said.

From NCAGS' perspective, effective communications and information sharing are enabled by its monitoring, tracking, and wider information technologies.

"Staying ahead with the latest information technology will keep NCAGS ahead of adversaries and reduce risk as it relates to operations, monitoring and surveillance, piracy, war, or other risks that could potentially impact MDA and patterns of life within the region," Hiller said.

Hiller told *Seapower* that NCAGS information technologies include AIS Live and the SeaVision web-based maritime

situational awareness tool, and that it is procuring the Maritime Intelligence Risk Suite tool that combines shipping database, real-time ship tracking, and risk event information.

U.S. Coast Guard Cutter Stone Completes Operation Southern Cross

U.S. Coast Guard Lt. Cmdr. Jason McCarthey, operations officer of the USCGC Stone (WMSL 758), bumps elbows, as a COVID mitigation, with a member of the Guyana coast guard off the coast of Guyana on Jan. 9, 2021, to celebrate the joint exercise. The U.S. Coast Guard and Guyana coast guard completed their first cooperative exercise in training to combat illicit marine traffic since the enactment of a

bilateral agreement between the two on Sep. 18, 2020. U.S. Coast Guard / Petty Officer 3rd Class John Hightower
PORTSMOUTH, Va. – The USCGC Stone (WMSL 758) crew arrived in their homeport of North Charleston, S.C., March 1, following the conclusion of the Operation Southern Cross, a patrol to the South Atlantic in support of counter illegal, unreported, and unregulated fishing (IUUF), the Coast Guard Atlantic Area said in a March 4 release.

Taking the newly accepted cutter on its shakedown cruise, Stone's crew covered over 21,000 miles (18,250 nautical miles) over 68 days. A mutual interest in combating IUUF activities offered an opportunity to collaborate for Stone's crew. They interacted with partners in Guyana, Brazil, Uruguay, and Portugal, strengthening relationships and laying the foundation for increased partnerships to counter illicit maritime activity.

"I could not be more proud of this crew," said Capt. Adam Morrison, the Stone's commanding officer. "It was no easy feat to assemble a crew and ready a cutter for sea, but to do so in a COVID-19 environment followed by a two-month patrol is truly quite amazing. While at sea, we completed all patrol objectives and strategic engagements with like-minded partners. Our crew training was balanced with shining a big spotlight on illegal fishing practices in the South Atlantic. We arrived at our homeport on Monday after nearly five months away from families and will now receive some well-deserved rest."

Even before leaving the pier, the Stone set milestones. They are the first U.S. Coast Guard cutter with a Portuguese navy member to serve aboard. Lt. Miguel Dias Pinheiro, a Portuguese navy helicopter pilot, joined the Stone's crew for the entirety of their first patrol.

Pinheiro served as both an observer and a linguist for daily

operations. Further, he lent shipboard aviation experience. On this patrol, Stone certified their flight deck for aviation operations and embarked an aviation detachment from Air Station Houston. His participation in the patrol has already led to reciprocal activity with Portugal.

“Working with our partner nations has not only strengthened our working relationships but has allowed the crew of the Stone to conduct training evolutions that we don’t often get to do,” said Lt. Cmdr. Jason McCarthey, the Stone’s operations officer.

While in transit to conduct joint operations off Guyana’s coast, Stone encountered and interdicted a suspected narcotic trafficking vessel south of the Dominican Republic. Having stopped the illicit activity, Stone handed off the case to the USCGC Raymond Evans (WPC 1110), a fast response cutter from Key West, Florida, and continued its patrol south.

Stone’s team practiced communications with the Guyana Defense Force during a fast-paced interdiction scenario. This evolution required focus and attention on both sides of the radio.

In Brazil, the crew practiced communications and steaming in close formation, an essential skill for joint and combined operations. Stone’s team also gave presentations to the Brazil navy members on maritime law enforcement practices and tactics.

“Having the opportunity to work together and exchange ideas helps us all become more proficient in achieving our shared goals,” said McCarthey.

Stone was the first U.S. Coast Guard cutter to call in Uruguay in more than a decade. Stone’s crew familiarized their hosts on the Coast Guard’s full range of mission and operations,

answering technical questions and sharing best practices. Uruguay expressed further interest in additional professional exchange opportunities and joint operations in the future.

The Stone crew were given a unique opportunity to forge new bonds and strengthen the foundations of previous alliances in the face of a global crisis and did so through in-person and virtual engagement, conscious of the risks involved.

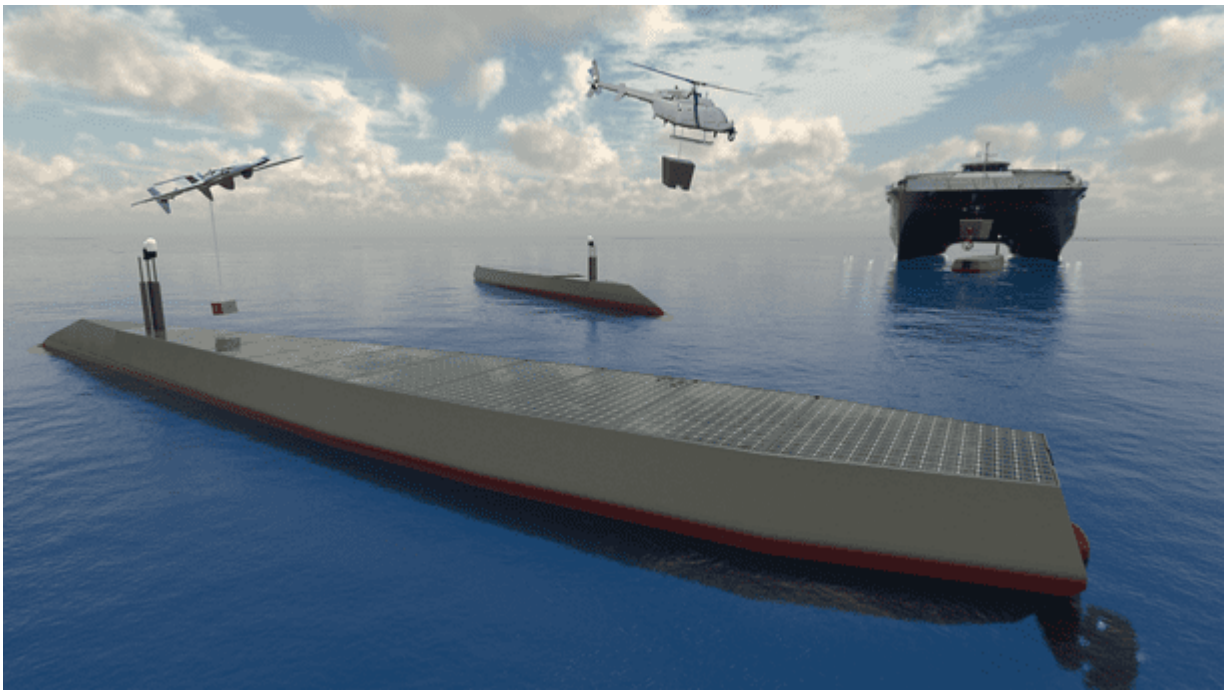
“We are very keen to not only negotiate international agreements to address IUU fishing, as we did with the Port State Measures Agreement. We’re also very supportive of the work the Coast Guard is doing to build relationships and strengthen the operational effectiveness of all of the coastal states to combat IUU fishing,” said David Hogan, acting director of The Office of Marine Conservation, Bureau of Oceans and International Environmental and Scientific Affairs, U.S. Department of State.

Operation Southern Cross promises to expand U.S. relationships with these partner governments. Beyond Operation Southern Cross’s immediacy, the U.S. government intends these collaborations to promote long-term regional stability, security, and economic prosperity.

Stone’s crew now prepares for the cutter’s commissioning on March 19.

The cutter’s namesake is the late Cmdr. Elmer “Archie” Fowler Stone, who in 1917 became the Coast Guard’s first aviator and, two years later, was one of two pilots to successfully make a transatlantic flight in a Navy seaplane, landing in Portugal.

L3Harris to Design Long-Endurance Autonomous Surface Ship Concept for DARPA



L3Harris was chosen for phase one of the two-phase No Manning Required Ship (NOMARS) program. The L3Harris design concept will streamline NOMARS' construction, logistics, operations and maintenance life-cycle. L3Harris

MELBOURNE, Fla. – L3Harris Technologies has been selected to design an autonomous surface ship concept for the U.S. Defense Advanced Research Projects Agency (DARPA) to demonstrate the reliability and feasibility of an unmanned ship performing lengthy missions, the company said in a March 2 release.

L3Harris was chosen for phase one of the two-phase No Manning Required Ship (NOMARS) program. The L3Harris design concept will streamline NOMARS' construction, logistics, operations and maintenance life cycle. The company teamed with VARD Marine to validate the concept and design of the architecture

and hull, mechanical and electrical systems.

The L3Harris design features an advanced operating system that can make decisions and determine actions on its own, without direct human interaction. This concept optimizes autonomous surface ship operations to support the U.S. Navy's future missions.

"L3Harris continues to pioneer innovative autonomous solutions that offer fully automated and integrated ship control and preventative maintenance systems to the U.S. Navy and its allies," said Sean Stackley, president, Integrated Mission Systems, L3Harris. "The NOMARS program selection reinforces our commitment to deliver highly reliable and affordable autonomous solutions that transform the way the U.S. Navy conducts its future missions."

L3Harris is a world leader in unmanned surface vehicle (USV) systems, with over 125 USVs and optionally manned vehicles delivered. The company's USVs are actively serving U.S and international navies, universities, research institutions and commercial businesses.

Navy Orders 20,000 SSQ-125 Sonobuoys

Aircrew Survival Equipmentman 3rd Class Alyssa Kozak, left, Hospital Corpsman 2nd Class Austin Phillips, center, and Aviation Ordnanceman Airman Siane Nash load sonobuoys onto a P-8A Poseidon anti-submarine warfare patrol aircraft, Dec. 14, 2020. U.S. Navy/ Mass Communication Specialist 2nd Class Austin Ingram

ARLINTON, Va. – The U.S. Navy has ordered 20,000 SSQ-125 sonobuoys for anti-submarine warfare (ASW) training and operations.

The Navy has in recent years placed renewed emphasis in ASW and has increased its capabilities and capacity in view of the increased Russian and Chinese submarine activity and capabilities.

The Naval Air Systems Command awarded ERAPSCO – a joint venture of Sparton Corp. and Ultra Electronics – a $71.3 million firm-fixed-price contract modification for a maximum quantity of 20,000 SSQ-125s, according to a March 3 Defense

Department contract announcement.

The sonobuoys will be used “in support of annual training, peacetime operations and testing expenditures and maintaining sufficient inventory to support the execution of major combat operations determined by the Naval Munitions Requirements Process for the Navy and Foreign Military Sales customers,” the announcement said.

The SSQ-125 is used by U.S. Navy P-8A and P-3C aircraft and produces electronic (coherent) pulses of various types and lengths that enable Doppler processing to distinguish moving targets (such as submarines) from stationary features of the environment (such as shipwrecks).

The work on the order is expected to be completed in March 2023.

Huntington Ingalls Industries Launches Virginia-Class Submarine Montana

Newport News Shipbuilding division recently reached a significant construction milestone by successfully launching the Virginia-class submarine Montana (SSN 794). The ship was christened on Sept. 12, 2020, and is scheduled to be delivered to the U.S. Navy in late 2021. HII / Matt Hildreth

NEWPORT NEWS, Va. – Huntington Ingalls Industries launched the Virginia-class submarine Montana (SSN 794) into the James River at the company's Newport News Shipbuilding division on March 3, the company announced in a release.

The 7,800-ton submarine, which had been in a floating dry dock since being transferred from a construction facility in October, was submerged and moved by tugboats to the shipyard's submarine pier, for final outfitting, testing and crew certification.

"For our shipbuilders, launching Montana signifies five years of hard work, commitment and dedicated service," said Jason Ward, Newport News' vice president of Virginia-class submarine construction. "We look forward to executing our waterborne test program and working toward sea trials and delivering the

submarine to the Navy later this year.”

Through the teaming agreement with General Dynamics Electric Boat, approximately 10,000 shipbuilders, as well as suppliers from all 50 states, have participated in Montana’s construction since the work began in 2015. Montana is approximately 92% complete and scheduled to be delivered to the U.S. Navy in late 2021.

Virginia-class submarines, a class of nuclear-powered fast attack submarines, are built for a broad spectrum of open ocean and littoral missions to replace the Navy’s Los Angeles-class submarines as they are retired. Virginia-class submarines incorporate dozens of new technologies and innovations that increase firepower, maneuverability and stealth and significantly enhance their warfighting capabilities. These submarines are capable of supporting multiple mission areas and can operate at submerged speeds of more than 25 knots for months at a time.

U.S., Canadian Coast Guards, RCAF Rescue 31 Fishermen from Sinking Vessel

An MH-60 Jayhawk helicopter, shown here in a 2008 photo. A similar helicopter aided in the rescue of a disabled Canadian fishing vessel on March 2. Coast Guard / Petty Officer Richard Brahm

BOSTON – The U.S. and Canadian Coast Guards and Royal Canadian Air Force rescued 31 fishermen from a disabled, Canadian fishing vessel over 130 miles south of Halifax, Nova Scotia, during the night of March 2.

At 7:05 p.m., March 2, the Rescue Coordination Center in Halifax notified watchstanders at the Coast Guard First District Command Center that the 143-foot vessel, Atlantic Destiny, was disabled with a fire on board, and was taking on water.

A U.S. Coast Guard Air Station Cape Cod HC-144 Ocean Sentry fixed-wing crew, and two MH-60 Jayhawk helicopter crews launched and arrived on scene.

A Royal Canadian Air Force CH-149 helicopter crew from 14 Wing Greenwood, in Nova Scotia, Canada, hoisted six crewmembers

from the vessel, and dropped off two search and rescue technicians to assist in dewatering the vessel.

The U.S. Coast Guard Jayhawk crews hoisted another 21 fishermen between the two helicopters. All hoisted crewmembers were taken to Yarmouth, Nova Scotia, where they were transferred for any medical treatment.

The remaining four crewmembers and two SAR technicians ceased dewatering efforts and were transferred to the Canadian Coast Guard Ship Cape Roger.

The vessel owner is coordinating any salvage efforts.

The weather on scene was 35 mph winds and 15-foot seas.

Coast Guard Transfers 3 Smugglers, Over $5.6M in Seized Cocaine to Federal Agents

Coast Guard Cutter Heriberto Hernandez crew members offload over 200 kilograms of cocaine, valued at over $5.6 million, and transfer three suspected smugglers, one Venezuelan and two Dominicans to federal agents from the Caribbean Corridor Strike Force March 2, 2021 at Coast Guard Base San Juan. U.S. Coast Guard

SAN JUAN, Puerto Rico – The Coast Guard Cutter Heriberto Hernandez transferred custody of three suspected smugglers and $5.6 million in seized cocaine to federal agents at Coast Guard Base on San Juan March 2, following the interdiction of a drug smuggling vessel in the Caribbean Sea off St. Croix, U.S. Virgin Islands, the Coast Guard 7th District said in a March 3 release.

The suspected smugglers are three males, one Venezuelan and two Dominican Republic nationals, who now face criminal charges by Department of Justice prosecution partners in the

U.S. Attorney’s Office for the District of Puerto Rico.

The interdiction resulted from multi-agency efforts in support of U.S. Southern Command’s enhanced counter-narcotics operations in the Western Hemisphere, the Organized Crime Drug Enforcement Task Force (OCDETF) and High Intensity Drug Trafficking Area (HIDTA) programs, and the Caribbean Corridor Strike Force (CCSF).

“This interdiction was the result of great teamwork from beginning to end with our interagency partners.” said Lt. Peter Kelly, Coast Guard Cutter Richard Dixon commanding officer. “I am extremely proud of the execution of the Richard Dixon crew in what was not an easy mission, and we are pleased to have kept such a large amount of cocaine from reaching U.S. streets.”

The bust occurred during the afternoon of Feb. 23, 2021, after the aircrew of a Customs and Border Protection Caribbean Air and Marine Branch maritime patrol aircraft detected a suspicious go-fast vessel in international waters southeast of St. Croix, U.S. Virgin Islands.

The Coast Guard Cutter Richard Dixon diverted to interdict the go-fast vessel with the assistance of the cutter’s small boat. Following the interdiction, the Cutter Richard Dixon’s boarding team located and seized over 200 kilograms of cocaine.

The crew of the cutter Richard Dixon embarked the three men and seized contraband from the go-fast vessel, and later transferred them aboard the Coast Guard Cutter Heriberto Hernandez for transport and offload in San Juan, Puerto Rico, where CCSF federal agents received custody. Cutters Richard Dixon and Heriberto Hernandez are 154-foot fast response cutters homeported in San Juan, Puerto Rico.

Naval Academy Increasingly Affected by Rising Tides, Superintendent Says

The U.S. Navy Flight Demonstration Squadron, the Blue Angels, fly over the U.S. Naval Academy commissioning ceremony May 20, 2020. The academy's waterfront is being affected by rising sea levels. Video still by U.S. Navy / Petty Officer 1st Class Jess Gray.

WASHINGTON – The waterfront of the U.S. Naval Academy is more frequently being affected by rising sea levels, the academy's superintendent said.

Vice Adm. Sean Buck, testifying March 2 before the House Appropriations Committee's Defense subcommittee, said that rising sea level is causing more high-tide flooding of the academy's campus.

The Naval Academy, in Annapolis, Maryland, is located at the

estuary of the Severn River at the Chesapeake Bay.

“We’re built on a lot of reclaimed land, Buck said. “We’re at the confluence of one of Maryland’s major rivers and the Chesapeake Bay, and we’re also affected throughout the entire day, 365 days of the year, by the prevailing winds that have existed for centuries, easterly and southeasterly winds which, when you combine that weather with sea-level rise, with subsidence, which is pretty significant in the Chesapeake Bay area … we are continuously experiencing negative effects of high tide almost on a regular basis.”

Buck said in the entire decade of the 1990s the academy experienced 41 events of high-tide flooding.

“Now, we’re experiencing 41 instances of high-tide flooding per year,” he said. “As we look at all of the projections from all of the science, and those who are looking at this, especially on the East Coast looking at it for naval infrastructure, it is projected by 2050 that we will see this high-tide flooding negative effect every single day of the year.”

Buck said some of the effects of the flooding are flooded-out roads – including commuting routes – parking lots, and entrances and exits to some of the campus buildings.

Buck said his predecessor formed the U.S. Naval Academy Sea-Level Rise Advisory Council in 2015, comprised of Naval Academy scientists and engineers and stakeholders in the Naval academy team, the city of Annapolis, and the state of Maryland. He said the council is informed by the Army Corps of Engineers and other experts who are working on a study expected to be completed by the end of 2021 “to help us create a military installation resiliency plan.

“They are going to present to us different courses of action – engineering solutions – that we can take around the yard,” he said, noting the solutions might include building up sea

walls, creating earthen berms, raising the level of roads and upgrading storm water drainage.

MARMC, Blue Water, USS Gerald R. Ford Partner for UAS Exercise

A logistics Unmanned Air System (UAS) prototype, called Blue Water UAS, approaches to deliver cargo on USS Gerald R. Ford's (CVN 78) flight deck during supply demonstration Feb. 21, 2021. The test was successfully conducted by transporting light-weight logistical equipment from one part of Naval Station Norfolk aboard Ford while the aircraft carrier was in port. U.S. Navy / Chief Mass Communication Specialist RJ Stratchko

NORFOLK, Va. – Mid-Atlantic Regional Maintenance Center (MARMC) hosted the Blue Water Unmanned Aerial System (UAS) Skyways team for an exercise that could impact the way the Navy handles transporting parts for repairs needed aboard forward deployed ships, Chris Wyatt, MARMC public affairs specialist, said in a March 2 release.

MARMC, in collaboration with the USS Gerald R. Ford (CVN 78) Beach Detachment and the Blue Water team, tested the abilities of a Maritime Logistics UAS to deliver a part to the ship from MARMC Headquarters.

"The UAS departed the MARMC parking lot with a simulated package pickup and took the part needed for repair over to the Ford," said MARMC Logistics Department Head, Cmdr. Kevin Borkert. "For this evolution MARMC handed the part to the UAS crew and they placed it in the cargo bay along the underside of the UAS."

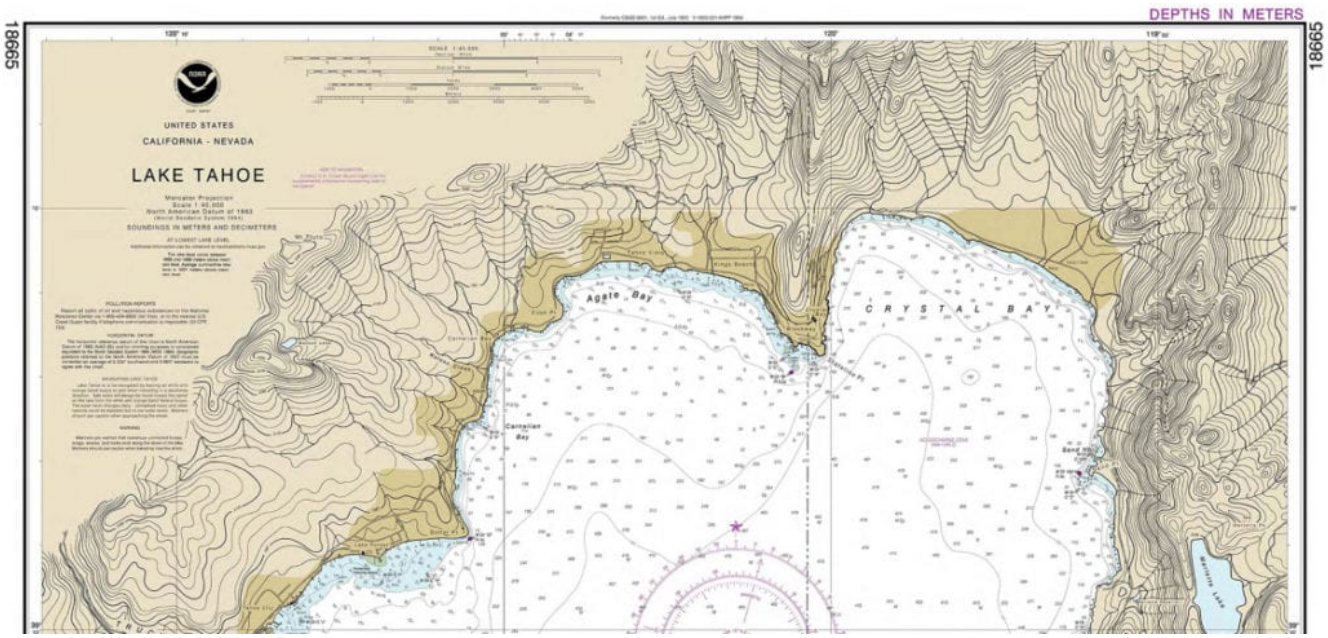
In October 2020, the US Navy acquired a commercial unmanned vehicle developed by Skyways of Austin, Texas, to further develop and demonstrate long-range naval ship-to-ship and ship-to-shore cargo transport. Navy engineers and test pilots continue to organically enhance the system with developments like folding wings for better handling and ship storage and consider alternative air vehicle designs with advanced propulsion systems to provide greater range and payload performance, optical and infrared collision avoidance and landing systems, and navigation systems not only dependent on GPS.

"Our motto is 'We Fix Ships' and we feel like they chose the right place to show this innovation in action," said MARMC Commanding Officer Capt. Tim Barney. "I want MARMC to be a part of any program that uses advancements in technology, which could potentially save time, money and reduce the Navy's carbon footprint, while helping to keep the fleet mission ready."

Moving forward, if MARMC is chosen as a pivot point in the procurement process for parts needed for repairs, it could potentially have a large and lasting impact on how business is done.

MARMC provides surface ship maintenance, management and oversight of private sector maintenance and fleet technical assistance to ships in the Mid-Atlantic region of the United States and provides support to the fifth and sixth Fleet Area of Responsibilities. They are also responsible for the floating dry-dock Dynamic (AFDL-6).

NOAA Begins Transition Exclusively to Electronic Navigation Charts



A paper chart of Lake Tahoe, the first paper chart to be entirely replaced with electronic navigational charts. NOAA

WASHINGTON – NOAA will begin to implement its sunset plan for

paper nautical charts this month, starting with the current paper chart 18665 of Lake Tahoe, the agency announced in a Feb. 26 release. After August, NOAA's electronic navigational chart will be the only NOAA nautical chart of the area.

This is the first traditional paper chart to be fully supplanted by an electronic chart as part of NOAA's Office of Coast Survey Raster Sunset Plan, which includes a new process to notify mariners of the transition of individual paper charts to electronic charts. These charts are easier to update and maintain, keeping mariners safer with up-to-date information on marine hazards.

As part of the sunset plan, released in 2019, mariners will be officially notified of this chart's cancellation in the U.S. Coast Guard Local Notice to Mariners. A note in the lower left corner of the chart will state that it is the last paper edition and it will be canceled six months later on August 26.

NOAA will continue to announce the cancellation of additional paper charts as the sunset plan progresses, initially based on volume of sales or downloads, and in regions with improved NOAA electronic navigational chart coverage. Cancellation of all traditional paper and associated raster chart products will be completed by January 2025.

NOAA announced the start of a five-year process to end traditional paper nautical chart production in late 2019 via a Federal Register Notice. While NOAA is sunsetting its traditional nautical chart products, it is undertaking a major effort to improve the data consistency and provide larger scale coverage within its electronic navigational chart product suite.

Over the next four years, NOAA will work to ease the transition to electronic products by providing access to paper chart products based on electronic data. The online NOAA

Custom Chart tool enables users to create their own paper and PDF charts from the latest NOAA ENC data.