

# With Order, Trump Eases Path for Transition to Merchant Marine



ARLINGTON, Va. – President Trump has issued an executive order easing the path for active-duty military personnel and veterans who want to transition to service as merchant mariners, a move designed to open jobs to veterans while strengthening national security.

The executive order, issued March 4, stated its purpose as promoting “employment opportunities for United States military veterans while growing the cadre of trained ... mariners available to meet ... requirements for national and economic security.”

Many current and former sailors and Coast Guardsmen have extensive experience in ship-handling, navigation and engineering applicable to service in the merchant marine, but in the past, they have faced bureaucratic obstacles and expenses in the thousands of dollars to make the transition.

“It is the policy of the United States to support practices and programs that ensure that members of the United States armed forces receive appropriate credit for their military training and experience, upon request, toward credentialing requirements as a merchant mariner,” the order stated. “It is further the policy of the United States to establish and maintain an effective merchant marine program by providing sufficient support and resources to active-duty and separating service members who pursue or possess merchant mariner credentials.”

The order continued: “A robust merchant marine is vital to the national and economic security of the United States.

Credentialed United States merchant mariners support domestic and international trade, are critical for strategic defensive and offensive military sealift operations and bring added expertise to federal vessel operations. Unfortunately, the United States faces a shortage of qualified merchant mariners. As our strategic competitors expand their global footprint, the United States must retain its ability to project and sustain forces globally. This capability requires a sufficient corps of credentialed merchant mariners available to crew the necessary sealift fleet. Attracting additional trained and credentialed mariners, particularly from active-duty service members and military veterans, will support ... national security requirements and provide meaningful, well-paying jobs to ... veterans.”

Trump ordered the secretaries of defense and homeland security to, within a year, identify all military training and experience within the applicable service that may qualify for merchant mariner credentialing and submit a list of military training and experience to the Coast Guard National Maritime Center to determine whether such training and experience counts for credentialing purposes.

The secretaries also are to provide for waiver of licensing fees for active-duty personnel and pay for Transportation Worker Identification Credential (TWIC) cards.

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**Coast Guard Cutter Robert  
Ward Commissioned in San**

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SAN FRANCISCO – The Coast Guard commissioned a new, California-based 154-foot fast response cutter (FRC), named the Robert Ward, in San Francisco on March 2.

The Robert Ward is the second of four Sentinel-Class FRCs to be homeported at Coast Guard Base Los Angeles-Long Beach. While the FRCs will be based in Southern California, they will operate throughout the 11th Coast Guard District, which includes all of California and international waters off Mexico and Central America.

“This cutter is specifically designed to face today’s threats in the maritime domain,” said Rear Adm. Peter Gautier, commander of the 11th Coast Guard District. “This cutter is faster, goes further and can do more than any other Coast Guard patrol boat.”

FRCs are 154-foot multimission ships designed to conduct drug and migrant interdictions, ports, waterways and coastal security operations, fisheries and environmental protection patrols, national defense missions and search and rescue.

“The crew and I are truly honored to serve aboard such a capable platform, and we look forward to continuing the Coast Guard’s vital missions throughout California and the Pacific,” said Lt. Benjamin Davne, Robert Ward’s commanding officer.

To date, the Coast Guard has accepted delivery of 31 FRCs. Each ship is designed for a crew of 24, has a range of 2,500 miles and is equipped for patrols up to five days. The FRCs are part of the Coast Guard’s overall fleet modernization initiative.

FRCs feature advanced command, control, communications, computers, intelligence, surveillance and reconnaissance

equipment as well as over-the-horizon response boat deployment capability and improved habitability for the crew.

The ships can reach speeds of 28 knots and are equipped to coordinate operations with partner agencies and long-range Coast Guard assets such as the Coast Guard's national security cutters.

FRCs are named in honor of Coast Guard enlisted leaders, trailblazers and heroes. Robert Ward operated beach-landing boats during the Allied invasion of Normandy during World War II. He landed his craft on the Cotentin Peninsula and rescued two stranded boat crews in the face of a heavily fortified enemy assault.

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## **Special Missions Training Center graduates first class from new N.C. location**



CAMP LEJEUNE, N.C. – The Coast Guard celebrated the graduation of the first pre-deployment training class at Special Missions Training Center here on March 1.

Class 19-01's 104 students mark the first group to graduate from the Camp Lejeune location since the course was relocated from Portsmouth, Va., last May.

The SMTC crew made preparations for the inaugural Camp Lejeune-based course, which convened Sept 10, to be the first to graduate from the new location. But Hurricane Florence forced the staff and 90 students to evacuate to Charlotte.

The SMTC staff utilized makeshift classrooms at a hotel for classroom training and capitalized on relationships with Naval Operations Support Center, also in Charlotte, for medical screening and initial weapons classroom training. The students received weapons qualifications, water survival training master and responder qualifications, tactical combat casualty care instructor training, maritime tactical-egress and firearms instructor school qualifications.



After moving several times, the hurricane passed, but no one could return home or to SMTC due to the devastation at the Marine Corps base.

“SMTC trains over 300 members deploying to Patrol Forces Southwest Asia each year,” said Capt. Adrian West, commander of the Special Missions Training Center. “Our highly trained and competent instructor staff does a great job each course preparing our Coast Guard men and women for deployment to the U.S. Central Command area.”

Vice Adm. Scott A. Buschman, Coast Guard Atlantic Area commander, was the keynote speaker at the March 1 graduation while Capt. J. Paul Gregg, PATFORSWA commodore, watched as his first class of students graduated.

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## **Marine Warfighting Lab Develops Roadmap on Robotic Experiments**



Recognizing the impact that the rapidly expanding capabilities

of robotic systems will have in all the warfighting domains, the Marine Corps Warfighting Laboratory (MCWL) has developed a draft roadmap to prioritize its experimentation on the most immediate threats in a resource-constrained environment.

“We prioritize based on the perceived threat. ... And the biggest threat right now is to the infantry squad,” said Jeff Tomczac, the deputy director of the science and technology division at MCWL.

The roadmap emphasizes interoperability, modularity and providing “enhancements” to the squads, because “we don’t want to go after something that will be a liability. You want a battle buddy and you want something that is as good or better than what you have,” Tomczac said in a conference call with two reporters.

In the quest for interoperability, MCWL has created the Tactical Robotic Controller, “the universal controller for all the unmanned, robotic, or autonomous systems that we experiment with,” for air, ground, water surface and subsurface systems, he said.

To illustrate the scope of that controller, Tomczac said, “we have an effort down in Norfolk with our connectors. It’s an LCM-8, a Mike boat, that is now fully autonomous.” They are working with the landing craft because “we see an important role for autonomy,” with surface connectors, Tomczac said.

The Marine Corps is working with the U.S. Army on the controller “to create a set of standards that industry is going to have to adhere to for different robotic systems,” he said.

Tomczac said MCWL is working closely with the Army on other programs, which is important because the Army can buy systems in larger numbers, which increases the support for programs and reduces the cost for the Marines.

The need for a common controller has been recognized for years, he said, "otherwise your squad leader can have 10 different controllers in his pocket for each different type of system out there."

The infantry squads already are operating a small quadcopter unmanned aerial system.

Part of the focus on interoperability is to ensure the various robotic systems can communicate with each other, know where the others are and "can work sometimes in tandem."

The MCWL strategy also emphasizes "working on systems that are modular, so you can put systems on, take them off, depending on the mission, depending on what you want to do," he said.

An example of that is a current program called the Expeditionary Modular Autonomous Vehicle (EMAV), which is a tracked, flattop vehicle, that can carry up to 7,000 pounds of supplies or infantry gear, Tomczac said. It also "allows us to put on different types of sensors, communications equipment, different kinds of weapons."

It also can carry casualties from the battle line to a safe area or aid station, with only one Marine ensuring the wounded are "taken care of and protected," rather than the two or more Marines needed to manually transport a casualty, he said. The unwounded Marine then "can return with supplies, ammunition and gear."

MCWL has two EMAVs, will get two more shortly and has asked for another 10, which "will go out to an operational unit to conduct an extended user evaluation," to help refine the requirements to move the prototypes into a program of record for acquisition, he explained.

MCWL already has deployed the vehicle multiple times with operational units for limited evaluations, mounting sensors and even weapons on it, he said.

The EMAV can be controlled by an operator or programmed to make runs between supply spots and infantry Marines forward. But the emphasis is on using artificial intelligence and machine learning to develop greater autonomy, Tomczac said.

However, when the robotic system is armed, “the goal is always a man in the loop. A man will make the decision whether an engagement occurs,” he said.

While MCWL works toward new robotic systems, Marine explosive ordnance disposal specialists and engineers already are using five unmanned ground systems, which range from a 600-pound ordnance neutralizer down to the Ultra-Light Robot, a seven-pound remote sensor that can be thrown into a room or sent into a tunnel to look for enemy soldiers or improvised explosive devices.

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## **Navy Orders Materials for 16 P-8A Maritime Patrol Aircraft**



PHILIPPINE SEA (Feb. 4, 2019) A P-8A Poseidon assigned to the Golden Swordsmen of Patrol Squadron (VP) 47 performs a fly-by next to the Arleigh Burke-class guided-missile destroyer USS Preble (DDG 88).

ARLINGTON, Va. – The Navy has awarded a \$429 million contract modification to Boeing for long-lead material and activities for 16 P-8A Poseidon maritime patrol aircraft.

The contract modification, awarded by Naval Air Systems Command, will support the procurement of Lot 11 aircraft for six P-8As for the U.S. Navy, four for the Royal New Zealand Air Force and six for the Republic of Korea Navy.

New Zealand and South Korea are the latest nations to order the P-8A. Earlier international customers include Australia, the United Kingdom and Norway. India has acquired the P-8I version.

Last month, the Navy awarded Boeing a \$2.4 billion production contract for 19 P-8As, including 10 aircraft for the U.S. Navy fleet, all five ordered by Norway and the final four of nine P-8As for the United Kingdom, which will receive its first P-8A this year. Norway will receive its first aircraft in 2021.

All of the customers except the United Kingdom and India are replacing P-3 Orion maritime patrol aircraft with the P-8.

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## **F-35C Lightning II Fighter Achieves Initial Operational Capability**



SAN DIEGO – The F-35C Lightning II, the aircraft carrier variant of the Joint Strike Fighter, has met all requirements and has achieved Initial Operational Capability (IOC), the commander of Naval Air Forces and the deputy commandant of the Marine Corps for aviation announced Feb. 28 in a joint statement.

The announcement comes shortly after the Navy's first F-35C squadron, Strike Fighter Squadron (VFA) 147, completed aircraft carrier qualifications aboard USS Carl Vinson (CVN 70) and received safe-for-flight operations certification.

To declare IOC, the first operational squadron must be properly manned, trained and equipped to conduct assigned missions in support of fleet operations. This includes having 10 Block 3F, F-35C aircraft, requisite spare parts, support equipment, tools, technical publications, training programs and a functional Autonomic Logistic Information System (ALIS).

Additionally, the ship that supports the first squadron must possess the proper infrastructure, qualifications and certifications. Lastly, the Joint Program Office, industry, and Naval Aviation must demonstrate that all procedures, processes and policies are in place to sustain operations.

“The F-35C is ready for operations, ready for combat and ready to win,” Commander Naval Air Forces Vice Adm. DeWolfe Miller said. “We are adding an incredible weapon system into the arsenal of our carrier strike groups that significantly enhances the capability of the joint force.”

Naval Air Station Lemoore is the home-base for the Navy’s JSF wing, Navy F-35C fleet squadrons and the Fleet Replacement Squadron (FRS), VFA-125, that trains Navy and Marine Corps carrier-based JSF pilots.

To accommodate the F-35C program at NAS Lemoore, several facilities were built or remodeled to facilitate F-35C maintenance and training requirements, including a pilot fit facility, a centralized engine repair facility, a pilot training center and a newly remodeled hangar. Future projects are planned as additional Navy squadrons transition into the F-35C. The Marine Corps plans to transition four F-35C squadrons that will be assigned to carrier air wings for deployments.

“We’re very proud of what our sailors have accomplished in the Joint Strike Fighter community,” said Capt. Max McCoy, commodore of the Navy’s JSF Wing. “Their commitment to mission delivered fifth-generation capability to the carrier air wing,

making us more combat effective than ever before. We will continue to learn and improve ways to maintain and sustain F-35C as we prepare for first deployment.”

Meanwhile, Rear Adm. Dale Horan, director of the Navy’s F-35C Fleet Integration Office, said, “The F-35C will revolutionize capability and operating concepts of aircraft carrier-based naval aviation using advanced technologies to find, fix and assess threats and, if necessary, track, target and engage them in all contested environments.”

The F-35C’s stealth technology, state-of-the-art avionics, advanced sensors, weapons capacity and range provides unprecedented air superiority, interdiction, suppression of enemy air defenses and close-air support as well as advanced command and control functions through fused sensors, according to the joint Feb. 28 statement.

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## **Advanced 3-D Printing Allows Marines Quick Material Production in the Field**



QUANTICO, Va. – From a small plastic clip that keeps a snowshoe fastened to a multi-ton concrete replacement bridge and a wide range of items in between, Marines are using advanced manufacturing, commonly called 3-D printing, to produce in the field or in garrison rather than waiting days or weeks for the normal supply system to respond.

“We’re going hot and heavy” into advanced manufacturing, using materials from plastic to aluminum and other metals and even

concrete, Capt. Matthew Friedell, the team leader on advanced manufacturing in the Rapid Sustainment Office at Marine Corps Systems Command said Feb. 7.

Systems Command has sent more than 100 3-D printers to Marine units, mostly small, desktop size instruments, but also a number of mid-size devices in 20-foot shipping containers and three huge machines at the Marine supply depots, Friedell told reporters in a telephone conference call from Marine Corps Base Quantico, Va. Some of the printers, called tactical fabricating kits, are in the hands of infantry units, he said.

They also send training teams to help the field units learn how to use their new equipment and provide a support service that can develop the data required to produce the needed item and email it to the requesting unit, Friedell said.

Other crucial services the SysCom office provides are conducting tests of the material needed for the item to determine if it can be safely printed by the field unit, and studies of the original commercial source of the item to protect the company's intellectual property rights, he said.

Industry has been very cooperative, but their data rights need to be protected, he said.

But most of the time, the request is for five to 10 small parts, for which there is no real profit interest for the producer. And

often the needed item is no longer being produced due to the age of the equipment being repaired.

Items produced by Marines using 3-D printers cited by Friedell and other Marine officials include the snowshoe clip, a plastic buckle on a backpack, a compressor blade for an M-1 tank and a heavy concrete footbridge built by a Marine engineer unit in a test.

The long-term thrust for 3-D printing, Marine officials have said, is to greatly improve the ability of small combat units, well separated from senior commands and supply sources under the distributed forces concept, to sustain themselves by producing critically need parts.

Flexibility is another key contribution of the printers, Friedell said, noting that the prototype machine that produced the concrete bridge could also produce a security barrier or a shelter.

Electrical power is a crucial consideration, Friedell said, because the larger printers require huge amounts of power. Current tactical generators are able to provide the needed power and the services are developing hybrid power sources that combine high-efficiency generators with powerful batteries that can reduce the fuel demands of running the generators.

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## **Analyst: Navy Needs to Re-**

# Configure Carrier Air Wings for Future Fight



WASHINGTON – The Navy needs to change the structure of its future

carrier air wings (CVWs) in the future to meet future threats, particularly in high-end combat against potential adversaries such as

China and Russia, a team of defense analysts said in a published report.

“If the U.S. Navy is going to continue to invest in aircraft carriers, it need to re-consider how it’s going to configure its [carrier] air wings,” said Bryan Clark, a senior fellow at the Center for Strategic and Budgetary Assessments, a Washington think tank, speaking Feb. 7 at the center about the new report, *Regaining the High Ground at Sea: Transforming the U.S. Navy’s Carrier Air Wing for Great Power Competition*.

The Navy’s current CVW “is not designed for the way we’re going to operate in the future,” Clark said. “I would even go further to say, unless the Navy is going to re-configure its air wings, it should reconsider its continued investment in aircraft carriers.”

Clark briefed the audience on worst-case scenario where an adversary such as China could launch a salvo of 600 1,000-pound-class weapons at a carrier strike group and recommended the type of defenses, including a CVW, that would be needed for a carrier to operate in the ocean in a high-end fight.

The report said that today’s CVWs “lack the reach to operate

at sufficient ranges from operational areas; the stealth to fight in contested environments; and the specialized capabilities in IRS&T [infrared search and track], EMW [electromagnetic warfare], and ASW [anti-submarine warfare] needed to defeat adversary platforms and systems.”

Clark sees the need for a CVW to move toward including more unmanned aircraft. He recommended development of three new aircraft types: an unmanned air combat vehicle (UCAV); an unmanned refueling aircraft, initially the MQ-25; and FA-XX, a new fighter with a longer strike range.

The report’s recommendations for re-configuring the carrier air wing by 2040 include:

- \* Sustaining planned procurement of the F/A-18E/F strike fighter through fiscal 2023.
- \* Sustaining procurement of the F-35C strike fighter through the first half of its planned production, ending in fiscal 2024.
- \* Develop an FA-XX fighter, a derivative of an existing fighter, by 2024.
- \* Develop a low-observable UCAV attack aircraft for production by 2025.
- \* Continue development of the MQ-25 aerial refueling UAV and increase overall number of tanker aircraft to 12 per air wing. Also, develop the UCAV as a tanker for the mid-to-late 2030s.
- \* Retire the EA-18G electronic attack aircraft as they reach the end of their service lives during the 2030s and replace them with UCAVs equipped with the Next-Generation Jammer and also with expendable UAVs and missiles.

\* Field a rotary wing MALE [medium-altitude, long-endurance] UAV  
(in concert with the Marine Corps) to augment the carrier-based helicopter squadrons and assume some of the ASW missions.

Clark's team for the report included Adam Lemon, Peter Haynes, Kyle Libby and Gillian Evans.

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## **Coast Guard Offloads 34,780 Pounds of Cocaine in Port Everglades**



MIAMI – The crew of the Coast Guard Cutter Forward (WMEC-911) offloaded approximately 34,780 pounds of cocaine Feb. 5 in Port Everglades worth an estimated \$466 million wholesale seized in international waters in the Eastern Pacific Ocean, the Coast Guard 7th District said in a release of the same date.

The drugs were interdicted off the coasts of Mexico, Central, and South America and represent 21 separate suspected drug smuggling vessel interdictions by the U.S. Coast Guard.

The cutter Forward was responsible for eight cases seizing an estimated 14,207 pounds of cocaine. The Coast Guard Cutter Hamilton (WMSL-753) was responsible for five cases, seizing an estimated 9,460 pounds of cocaine. The Coast Guard Cutter Campbell (WMEC-909) was responsible for four cases, seizing an estimated 6,153 pounds of cocaine. The Coast Guard Cutter Alert (WMEC-630) was responsible for two cases, seizing an

estimated 5,736 pounds of cocaine. The Coast Guard Cutter Venturous (WMEC-625) was responsible for one case, seizing an estimated 1,565 pounds of cocaine. The Coast Guard Cutter Confidence (WMEC-619) was responsible for one case seizing an estimated 553 pounds of cocaine.

“The interdiction and disruption of more than 17 tons of cocaine is a result of the collaboration and coordination of multiple Coast Guard and interagency assets to address the complex maritime challenge of transnational criminal organizations,” said Cmdr. Michael Sharp, commanding officer of the cutter Forward. “I am extremely proud of all the women and men that contributed to the mission success, it is a direct reflection of how the U.S. Coast Guard delivers mission excellence anytime, anywhere.”

Numerous U.S. agencies from the Departments of Defense, Justice and Homeland Security are involved in the effort to combat transnational organized crime. The Coast Guard, Navy, Customs and Border Protection, FBI, Drug Enforcement Administration, and Immigration and Customs Enforcement along with allied and international partner agencies play a role in counter-drug operations. The fight against transnational organized crime networks in the Eastern Pacific requires unity of effort in all phases from detection, monitoring and interdictions, to prosecutions by U.S. Attorneys in Florida, California, New York, the Gulf Coast, Puerto Rico and elsewhere.

The Coast Guard increased U.S. and allied presence in the Eastern Pacific Ocean and Caribbean Basin, which are known drug transit zones off of Central and South America, as part of its Western Hemisphere Strategy. During at-sea interdictions in international waters, a suspect vessel is initially located and tracked by allied, military or law enforcement personnel. The interdictions, including the actual boarding, are led and conducted by U.S. Coast Guardsmen. The law enforcement phase of counter-smuggling operations in the

Eastern Pacific are conducted under the authority of the Coast Guard 11th District headquartered in Alameda, California.

The cutter Forward is a 270-foot medium-endurance cutter homeported in Portsmouth, Virginia. The cutter Hamilton is a 418-foot national security cutter homeported in Charleston, South Carolina. The cutter Campbell is a 270-foot medium endurance cutter homeported in Portsmouth, New Hampshire. The cutter Alert is a 210-foot medium-endurance cutter homeported in Astoria, Oregon. The cutter Venturous is a 210-foot medium-endurance cutter homeported in St. Petersburg, Florida. The cutter Confidence is a 210-foot medium-endurance cutter homeported in Port Canaveral, Florida.

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## **Army Corps Awards Contract to Widen, Deepen Corpus Christi Ship Channel**



CORPUS CHRISTI, Texas – The U.S. Army Corps of Engineers has been awarded a contract to deepen the Port of Corpus Christi ship channel.

Great Lakes Dredge & Dock Co. received a \$93 million construction contract on Jan. 4, to deepen and widen the Corpus Christi Ship Channel from the Gulf of Mexico to Harbor Island, as part of the first phase of the port's \$326 million Channel Improvement Project (CIP).

Corpus Christi is the largest crude oil port in the United States and handles both imports and exports. The port exports about 100 million tons annually.

Charles W. Zahn, chairman for the Port of Corpus Christi Commission said the deeper channel “will allow larger vessels access to much needed export facilities, safely and responsibly.”

The dredging will deepen the entire ship channel to 54 feet from 45 feet and widen it to 520 feet from 400. The full project, which will be completed in phases and take about five years, will permit two-way supertanker traffic, including very large crude carriers (VLCCs), which can carry up to 2 million barrels of crude oil. Great Lakes will start this first phase later this year, which will take about a year to complete.

“We commend the Army Corps of Engineers for progressing the highly anticipated Corpus Christi Ship Channel Improvement Project, and the selection of Great Lakes Dredge & Dock to perform on this first contract is an extraordinary step forward in positioning the United States as the largest exporter of energy in the world,” said Sean Strawbridge, CEO for the Port of Corpus Christi.

The CIP will result in the first shore-based VLCC terminal in the U.S. The only other terminal is located offshore.

Based in Oak Grove, Illinois, Great lakes is America’s largest dredging contractor, although much of its work is international.

“We are confident that this will drive the much-anticipated future investment and development in the port,” said Lasse Petterson, CEO of Great Lakes. “It all starts with dredging.”