U.S. Navy Asserts Freedom to Navigate in International Waters

The Arleigh Burke-class guided-missile destroyer USS John Finn (DDG 113) transits the Taiwan Strait March 10, 2021. John Finn, part of the Theodore Roosevelt Carrier Strike Group, is on a scheduled deployment to the U.S. 7th Fleet area of operations. *U.S. Navy / Mass Communication Specialist 3rd Class Jason Waite*

The U.S. Navy continues to assert its right to operate freely in international waters with yet another Taiwan Strait transit, following several recent freedom of navigation operations (FONOPS) in the South China Sea, particularly in the vicinity of the Spratly and Paracel Islands.

The Arleigh Burke-class guided missile destroyer USS John Finn

(DDG 113) conducted a routine Taiwan Strait transit March 10 (local time) in accordance with international law.

According to a statement from the U.S. 7th Fleet, the ship's transit through the Taiwan Strait "demonstrates the U.S. commitment to a free and open Indo-Pacific. The United States military will continue to fly, sail, and operate anywhere international law allows."

China's People's Liberation Army officials said the USS John Finn transit was a provocation intended to undermine regional and cross-strait stability.

The John Finn transit isn't the only one in recent weeks. The Arleigh Burke-class guided missile destroyer USS Curtis Wilbur (DDG 54) conducted a routine Taiwan Strait transit Feb. 24 in accordance with international law. On Feb. 17, USS Russell (DDG 59) "asserted navigational rights and freedoms in the Spratly Islands, consistent with international law." And on Feb. 5, USS *John S. McCain* (DDG 56) asserted navigational rights and freedoms in the vicinity of the Paracel Islands, consistent with international law.

Each of these transits occurred in areas where nations have disputed claims regarding sovereignty.

"A Taiwan Strait transit is not a freedom of navigation operation. Freedom of navigation operations challenge excessive maritime claims, while Taiwan Strait transits simply exercise the rights of all ships to pass through an international waterway, said Lt. Mark Langford, deputy public affairs officer for the U.S. 7th Fleet.

According to statements from the 7th Fleet, the FONOP "upheld the rights, freedoms and lawful uses of the sea recognized in international law by challenging the unlawful restrictions on innocent passage imposed by China, Taiwan, and Vietnam and also by challenging China's excessive straight baseline claims enclosing the Paracel Islands."

The statement said China, Vietnam, Taiwan, Malaysia, Brunei and the Philippines each claim sovereignty over some or all of the Spratly Islands. China, Vietnam, and Taiwan require either permission or advance notification before a foreign military vessel engages in “innocent passage” through the territorial sea.

The 7th Fleet statement says, “Under international law as reflected in the Law of the Sea Convention, the ships of all states – including their warships – enjoy the right of innocent passage through the territorial sea. The unilateral imposition of any authorization or advance-notification requirement for innocent passage is not permitted by international law. By engaging in innocent passage without giving prior notification to or asking permission from any of the claimants, the United States challenged these unlawful restrictions imposed by China, Taiwan, and Vietnam. The United States demonstrated that innocent passage may not be subject to such restrictions.”

The 7th Fleet statement said U.S. forces have operated in the South China Sea on a daily basis, and have done so for more than a century. “They routinely operate in close coordination with like-minded allies and partners who share our commitment to uphold a free and open international order that promotes security and prosperity. All of our operations are designed to be conducted professionally and in accordance with international law and demonstrate that the United States will fly, sail, and operate wherever international law allows – regardless of the location of excessive maritime claims and regardless of current events.”

The Department of Defense’s annual Freedom of Navigation Fiscal Year 2020 Report to Congress, released March 10, said during the period from Oct. 1, 2019, through Sept. 30, 2020, U.S. forces operationally challenged 28 different excessive maritime claims made by 19 different claimants throughout the world.

Naval Academy Makes More Room for Keeping Midshipmen Safe

Midshipman 3rd Class Angelina Chan receives the COVID-19 vaccine, which is currently voluntary for active duty members, including midshipmen, while it is in an Emergency Use Authorization status. Vaccinating the midshipmen now will allow them to participate in summer training programs to meet Navy requirements. *U.S. Navy/ MC2 Nathan Burke*

Due to what Naval Academy officials are calling an "an uptick in positive cases within the Brigade of Midshipmen," increased COVID-19 mitigation measures have been implemented, to include a full restriction of movement.

Ninety-eight midshipmen are now being housed in the Hilton Garden Inn, and an additional 98 midshipmen have been moved to the Graduate Hotel, both located on West Street in downtown Annapolis, to provide more quarantine and isolation space in

Bancroft Hall, the Naval Academy's dormitory.

The midshipmen in the hotels will attend classes virtually and be required to stay in their rooms except when "escorted outdoors at set times for wellness purposes."

Meals are being served as "grab and go" via King Hall, as they have been since the midshipmen returned over the summer. Because food deliveries from off base are restricted, the Naval Academy Business Services Division is providing some complimentary menu items directly to the midshipmen currently in isolation.

"This is a dynamic situation and decisions are made on a daily basis in a way that prioritizes the healthcare needs of the midshipmen and well-being of our entire Naval Academy community," said Superintendent Vice Adm. Sean Buck. "I am thankful for the flexibility and adaptability of the Brigade and our entire team here on the Yard and in the local community as we navigate this challenging period, especially the hotels for their responsiveness and hospitality."

During a virtual address on Feb. 28., Buck said, "The health and safety of our entire Naval Academy family is, and will remain, my highest priority while we continue to execute our mission of developing our future naval leaders.

"We need this to be an all-hands effort from our faculty, staff, coaches … this is not just a midshipman effort," Buck said. "Additionally, those who may have approved credentials to access the Yard, such as sponsors, parents, active/reserve/retired military, shall refrain from visiting the Naval Academy, even to drop off deliveries, at this time in order to minimize the spread of this virus."

A shot in the arm

While the academy had already been inoculating staff and faculty, the midshipmen began receiving the vaccination on

March 11.

“The Navy has prioritized vaccinating the operational forces first, and they’re developing very safe and healthy bubbles. For midshipmen to participate in summer training programs to meet Navy requirements, we need to begin vaccinating them now,” Buck said.

According to USNA Public Affairs Officer Cmdr. Alana Gara, “A total of 1,800 vaccines were administered to midshipmen, faculty, and staff last week, and will continue to vaccine this week based on the number of vaccines received.”

Summer STEM Camp

USNA officials decided to host its 2021 Summer Seminar and Summer STEM Camp virtually. According to a statement from the academy, the decision was made “to protect the health and welfare of our summer program attendees, as well as our midshipmen, faculty and staff for each program. It is also necessary to move these programs to a virtual format for 2021 in order to enable the Naval Academy to safely prepare for the induction of the incoming Class of 2025.”

Due to the pandemic, last year’s Summer Seminar and STEM Camp were forced to be virtual events. Based on that experience, the 2021 event will “offer enhanced programming. “This year, STEM Camp participants will receive USNA STEM kits to support engagement during the academic modules. Additionally, participants for both programs will receive USNA apparel and promotional items specific to their program.”

The Summer Seminar is open to rising 12th graders. The STEM Camp is for rising 9th graders. Applications for both programs remain open until March 31, 2021, at https://www.usna.edu/Admissions/Programs/index.php.

Coast Guard Commissions 42nd Sentinel-Class Cutter

Vice Adm. Scott Buschman, the deputy commandant for operations, addresses the USCGC Robert Goldman (WPC 1142) crew on March 12, 2021, in Key West, Florida. The Robert Goldman was officially commissioned into service and will now transit to Bahrain for service as part of Patrol Forces Southwest Asia. *U.S. Coast Guard / Senior Chief Petty Officer Sara Muir*

KEY WEST, Fla. — The USCGC Robert Goldman (WPC 1142), Patrol Forces Southwest Asia's (PATFORSWA's) second Sentinel-class cutter, was commissioned into service at Coast Guard Sector Key West, March 12, the Coast Guard Atlantic Area said in March 12 release.

Vice Adm. Scott Buschman, the deputy commandant for operations, presided over the 42nd Sentinel-class cutter ceremony.

The Robert Goldman is the second of six FRCs to be homeported in Manama, Bahrain, which will replace the aging 110-foot Island Class Patrol Boats built 30 years ago. Stationing FRCs in Bahrain supports PATFORSWA, the Coast Guard's largest unit outside of the U.S., and its mission to train, organize, equip, support and deploy combat-ready Coast Guard forces in support of Central Command and national security objectives.

PATFORSWA works with Naval Forces Central Command to conduct maritime operations forwarding U.S. interests. These efforts are to deter and counter disruptive countries, defeat violent extremism, and strengthen partner nations' maritime capabilities to secure the maritime environment in the Central Command area of responsibility.

Each FRC bears the name of an enlisted Coast Guard hero who distinguished himself or herself in the line of duty. Robert Goldman enlisted in the Coast Guard in October 1942 as a pharmacist's mate. In 1944 he reported for duty aboard the Coast Guard-manned, 328-foot Landing Ship, Tank-66, taking part in a campaign to retake the Philippines from the Japanese.

On Nov. 12, 1944, a Japanese plane flew straight for the men gathered on the starboard side of the LST's stern. Goldman witnessed the enemy fighter crash into the deck and exploded. Goldman's back was on fire from the aviation fuel, his right leg received shrapnel from the crashing fighter, and he suffered severe shock from the sudden crash and the resulting carnage. Disregarding his injuries, Goldman courageously treated the wounded and dying. For his heroic deeds, Goldman received the Purple Heart and Bronze Star medals.

Several Goldman family members were in attendance, including

his three sons and his daughter-in-law, Elly Goldman, the ship's sponsor, and daughter-in-law, Ms. Gail Fresia. Fresia, in nautical tradition, presented the long glass to the crew to set the first official watch aboard the ship.

The Coast Guard took delivery of Robert Goldman on Dec. 21, 2020, in Key West. They will transit to Bahrain later this year with their sister ship, the Charles Moulthrope (WPC 1141), delivered on Oct. 22, 2020, and commissioned on Jan. 21, in Portsmouth, Virginia.

The Coast Guard has ordered 64 FRCs to date. Over 40 are now in service: Charles Moulthrope and Robert Goldman, 12 in Florida, seven in Puerto Rico, four in California, three each in Hawaii, Texas, and New Jersey, and two each in Alaska, Mississippi, and North Carolina. Two FRCs arrived in their homeport of Apra Harbor, Guam, in 2020, with one more to come.

The fast response cutters are designed to patrol coastal regions and are operating in an increasingly expeditionary manner. They feature advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance equipment and launch and recover standardized small boats from the stern.

Cutter Bertholf Returns to Alameda following Three-Month Patrol

A boarding team member from the U.S. Coast Guard Cutter Bertholf stands on top of a semi-submersible boat Feb. 1, 2021, in the Eastern Pacific Ocean. The Bertholf crew completed a 3-month, 15,000 mile, multi-mission patrol. *U.S. Coast Guard*

ALAMEDA, Calif. – The crew of the Coast Guard Cutter Bertholf (WMSL 750) returned home to Alameda March 15 following a three-month, 15,000-mile, multi-mission patrol, the Coast Guard Pacific Area said in a release.

In January, the Bertholf's crew boarded three vessels in the Eastern Pacific Ocean.

"Early in the patrol, we interdicted three go-fast vessels over a span of six hours," said Capt. Brian Anderson, Bertholf commanding officer. "We used every available resource including all three pursuit boats, our helicopter and Scan Eagle drone to successfully stop them in their tracks, resulting in the apprehension of four suspected drug smugglers and seizure of over 1,700 pounds of cocaine. It was quite an exciting evening and demonstrated our full capabilities and our commitment to keeping America safe and secure."

The Bertholf mobilized its advanced capabilities that included a small unmanned aircraft system, an attached Helicopter Interdiction Tactical Squadron MH-65 helicopter and aircrew, and an embarked Law Enforcement Detachment from the Pacific Tactical Law Enforcement Team. The crew spent more than 50 days patrolling the Eastern Pacific Ocean on a counter-narcotics mission that resulted in the apprehension of approximately 6,200 pounds of cocaine with an estimated value of more than $107 million.

“This is my last deployment aboard the Bertholf,” Anderson said. “It’s been a privilege to serve, especially with this crew, who have gone above and beyond in every respect to accomplishing the mission safely and effectively amidst a pandemic. I couldn’t be more proud of them.”

The Bertholf is a 418-foot national security cutter, commissioned in 2008 and homeported in Alameda.

Royal Malaysian Navy Stands Up Unmanned Aircraft Squadron

A ScanEagle UAS being displayed on its pneumatic launcher at the inauguration ceremony of Malaysia's 601 Squadron on 4 March 2021. *Royal Malaysian Navy*

The Royal Malaysian Navy (RMN) established the 601st Unmanned Aerial System Squadron on March 4, 2021, operating the Boeing Insitu ScanEagle UAS from its base at Kota Kinabalu in Sabah. It is the RMN's first unit dedicated to unmanned aerial systems.

According to First Admiral Ahmad Shafirudin, commander of the Naval Air of the RMN, the squadron will acquire capability and knowledge for UAS operations and support for the RMN and Malaysia's joint forces.

The RMN has already received six aircraft from Insitu Boeing as part of an order for a total of 12 systems, announced by the U.S. Department of Defense on May 31, 2019 under of the Foreign Military Sales program, and part of the U.S. government's Maritime Security Initiative. The remaining six ScanEagles are to be delivered by 2022. The value of the contract is $19.3 million. The Naval Air Systems Command,

Patuxent River, Maryland, is the contracting activity. That contract also announced systems for Indonesia, Philippines and Vietnam.

At that time, the U.S. Embassy in Kuala Lumpur issued a statement saying, “These UAVs will enhance the Royal Malaysian Navy’s ability to defend the country’s territorial integrity.”

The contract also included two pneumatic launchers, two SkyHook UAS retrieval systems, two ground control units, as well as spare payloads, spare and repair parts, support equipment, tools, training and maintenance technical services, and field service representatives.

ScanEagle is a small, long-endurance, low-altitude system that can carry electro-optical imagers, long-wave infrared sensors and X-band radar payloads. The RMN intends to initially operate the systems from land with a mobile detachment concept, but eventually they could be hosted aboard ships.

The 601 squadron will be located at RMN Naval Base at Kota Kinabalu in Sabah on the northern part of the island of Borneo, in East Malaysia. There are several reasons the squadron will be located in East Malaysia. Unmanned air operations in Western Malaysia are complicated by the more complex and crowded airspace. More importantly, RMN officials acknowledge a more pressing need for maritime ISR across Malaysia’s eastern maritime border, where there is a current threat of non-state-sponsored militant activities.

Malaysia’s chief of navy, Adm. Tan Sri Mohd Reza bin Mohd Sany, participated in the event. U.S. Defense Attaché Capt. Muzzafar Khan, who attended the official handover ceremony, said, “For over 60 years the U.S. and Malaysia have shared a productive and mutually beneficial security cooperation partnership, and I am glad to see that continuing today.”

Coast Guard Reducing Some Marine Protector Patrol Boats for Budget Reasons, Commandant Says

U.S. Coast Guard Cutter Ibis (WPB 87338), anchored in the Anacostia River in Washington, D.C. in May, 2003. Ibis is an 87-foot Coastal Patrol Boat and part of the Coast Guard's Marine Protector Class of vessels. *U.S. Coast Guard / Joseph P. Cirone*

ARLINGTON, Va. – Budget constraints are the main reason the Coast Guard is decommissioning a few 87-foot Marine Protector-class patrol boats, the Coast Guard commandant said, but the capabilities of other boats will compensate for the change.

"We are taking some 87-footers out of service," said Coast Guard Commandant Adm. Karl Schultz, responding to a question from *Seapower* during a March 11 in a teleconference with reporters following his State-of-the-Coast Guard address in

San Diego. “That’s a budget reality.”

Schultz explained that, during the 1980s, 49 Island-class 110-foot patrol boats were built, but with six deployed to the Persian Gulf with Patrol Force Southwest Asia and six retired after a failed hull-length extension, the fleet in domestic waters was down to 34 and has been reduced since to less than 20. However, the 64 larger Sentinel-class 154-foot responses cutters (FRCs) being built – of which 58 will be stationed in the United States and its territories – have been replacing the Inland-class boats.

“So, there is a lot more new ship capacity,” Schultz said. “When you look at an FRC versus an Island-class patrol boat – significantly more linear feet across the waterline, significantly more tonnage, about 28 to 30-knot speed, eight more crew members, an over-the-horizon boat capability, just a lot more C5 [command, control, communications, computers, combat systems, intelligence capability]. So, there’s a lot more capability and capacity on the waterfront with the swap out.”

Schultz said the Congress funded more 87-foot patrol boats than the program of record’s requirement when the Marine Protector program started.

The commandant said some of the Marine Protectors may be declared excess defense articles and offered to foreign navies and coast guards, just as some Island -class patrol boats have been.

“We may hold some to bring back into service,” he said.

It is absolutely budgetarily influenced and informed within the topline, he said. “I’m the last guy as a cutterman who wants to remove a cutter from service, but I think we’ll have plenty of capacity. That fast response cutter – its seakeeping, its legs – is considerably more [capable] than the patrol boats it’s replacing.”

Referring to the March 10 decommissioning of the Marine Protector-class USCGC Dorado at Crescent City, California, Schultz pointed out that with the mission demands and capabilities in that area resident in the Coast Guard's heavy-weather-capable 45-foot response boats and the nearby aviation capability, 'taking out some of those 87's was a relatively rational, hard choice we had to make."

Coast Guard Commandant Outlines Future of Service in San Diego

Adm. Karl Schultz, the commandant of the Coast Guard, speaks during the 2021 State of the Coast Guard Address in San Diego March 11, 2021. During the annual address, Schultz reflected

on the organization’s successes over the past year and outlined the shared vision for the future of the Coast Guard. *U.S. Coast Guard / Petty Officer 2nd Class Travis Magee*

SAN DIEGO — The Commandant of the United States Coast Guard delivered his third state of the Coast Guard address March 11 at Coast Guard Sector San Diego, Coast Guard Headquarters said in a release.

Adm. Karl Schultz outlined his vision for the service to protect the homeland, enhance economic prosperity, and advance America’s national security interests. Schultz accentuated the dedication and sacrifice of Coast Guard members stationed across the country and deployed during this past year of unprecedented challenges.

“Across the Service, I see individual Coast Guard members contributing to their communities, and standing the watch to secure the Homeland, enhance our economic prosperity, and advance our national interests across the globe,” Schultz said.

During the annual address, Schultz reflected on the organization’s success over the past year and featured members of the Coast Guard who excelled in crisis, rescued mariners in distress, interdicted illicit narcotics, and responded to a record-setting Atlantic basin hurricane season, all complicated by the challenges presented by the COVID-19 global pandemic.

“Coast Guard members stood the watch amidst adversity, showcasing what makes our Service special — our people,” Schultz told the mostly virtual attendees this year due to COVID-19 restrictions.

He also underscored new Coast Guard capabilities in Southern California. “In April, we will break ground on our first new aviation unit in more than two decades — located right here in Southern California. Air Station Ventura County will significantly enhance our aviation multi-mission capability in

the region," Schultz said.

The service chief discussed a variety of ongoing and emerging fleet recapitalization programs, providing updates on the Polar Security and Offshore Patrol Cutter acquisitions; efforts to replace the aging fleet of inland buoy and construction tenders with Waterways Commerce Cutters; and initial steps to transition to an all MH-60 Jayhawk helicopter fleet.

Schultz further highlighted the Coast Guard's operations in the nation's system of ports and waterways, better known as the Marine Transportation System (MTS). The MTS is a key economic engine for the nation, fueling 26% of America's gross domestic product (GDP) which equates to $5.4 trillion of annual economic activity and 31 million jobs.

"Our seaports are the gateways for 90% of international trade, and the Coast Guard helps to oversee this vital economic engine that ensures energy products and other goods arrive at businesses and storefronts in every corner of our country," Schultz highlighted.

Download his full remarks at www.uscg.mil/AlwaysReady.

Navy Aims to Fast-Track Artificial Intelligence, Machine Learning to Maintain

Dominance

This unmanned surface vessel, part of the Strategic Capabilities Office's Ghost Fleet Overlord program, recently made a trip from the Gulf Coast to the coast of California, almost entirely by traveling autonomously. In December, it participated in exercise Dawn Blitz, where it also demonstrated its autonomous capabilities. *Defense Department Strategic Capabilities Office*

Like a bolt from the blue, the Navy has a new modernization priority – Project Overmatch, a campaign to accelerate delivery of artificial intelligence, machine learning and tools needed to allow the fleet to disperse forces, mass fires, integrate unmanned ships and, in the view of service leaders, maintain maritime dominance in the future.

The project aims to begin delivering the Naval Operational Architecture (NOA), a lackluster name for a breathtaking effort whose results will determine nothing less than the service's future ability to establish and sustain sea control

by integrating network infrastructure, data and analytic tools to provide decision-advantage in a fight.

“Beyond recapitalizing our undersea nuclear deterrent, there is no higher developmental priority in the U.S. Navy,” Chief of Naval Operations Adm. Mike Gilday wrote in Oct. 1, 2020, memo to Rear Adm. Douglas Small establishing Project Overmatch. “Your goal is to enable a Navy that swarms the sea, delivering synchronized lethal and nonlethal effects from near and far, every axis and every domain.”

Small, who in addition to heading Project Overmatch is head of Naval Information Warfare Systems Command, was further tasked by the CNO “to develop the networks, infrastructure, data architecture, tools, and analytics that support the operational and developmental environment that will enable our sustained maritime dominance.”

The two-star admiral says he has committed the memo to memory and, for good measure, carries a copy at all times. Why? Gilday likens Project Overmatch to some of the most important Navy engineering and development challenges ever, including adopting nuclear power, developing the Polaris Missile and creating the Aegis Combat System.

Project Overmatch is not only about technical linkages and new software tools, according to a service official, it aims to speed development of concepts of operations for test, evaluation and capability exploitation of long-range fires, helping pave the way for new fleets of large and medium unmanned ships.

Vice Adm. James Kilby, deputy chief of naval operations for warfighting requirements and capabilities, told an online audience in January that Project Over- match plans to deliver a “minimally viable capability” – including new artificial intelligence and machine learning combat tools – to the Theodore Roosevelt aircraft carrier strike group in 2023.

Rear Adm. Douglas Small, Commander, Naval Information Warfare Systems Command (NAVWAR), discusses NAVWAR's role in Project Overmatch to a virtual audience at the 2021 Surface Navy Association symposium from the systems command's Old Town San Diego complex. *U.S. Navy photo by Rick Naystatt*

Small, speaking at a separate online conference at the end of January, described the effort in broad strokes.

"When you have a project the size of Project Overmatch – connecting everything and bringing [artificial intelligence] and [machine learning] to every- thing – you have to go at it in an agile manner," Small said. "Step one for us was: Let's break this thing down into agile chunks and take a look at what are the things that we're working on currently now that we could take advantage of and grow from there.

"It consists of things like networks that are brought in as part of Overmatch," Small said. "Certain configurations of networking gear like CANES [Consolidated Afloat Networks and Enterprise Services], certain sets of management aids and planners and things like that. And then defining data structures right for that first increment of capability. So that's, that's the concept behind a minimum viable product … so we'll take some time to develop that and then get it out as

it’s ready.”

Once delivered to the carrier strike group, Project Overmatch aims to accelerate user feedback to developers to refine fielding of new capabilities and ensure functionality as new tools are integrated into the NOA. The effort also includes using live virtual events and training to execute and practice fleet-centered design.

JADC2

Project Overmatch is effectively the naval component of the Defense Department-wide effort to establish a Joint All-Domain Command and Control capability, which aims to network the entire U.S. weapons inventory in a manner similar to the way commercial handheld devices are linked, with each able to access an information cloud.

The U.S. military wants combat capabilities akin to Uber, Amazon and Facebook in their ability to scale and serve unique needs of different military users.

JADC2 was spearheaded by the Air Force in 2019; in 2020 the Army announced a similar campaign called Project Convergence. Last fall, the two services signed a joint memorandum of agreement to explore close integration.

While the Navy has not inked any formal agreements with the Army and Air Force, service leaders stress they are collaborating. The Navy, for instance, participated in Air Force-sponsored JADC2 events – contributing a DDG-51 Arleigh Burke-class destroyer and an aircraft carrier capable F-35C Joint Strike Fighter to a January 2020 all-service experiment that focused on defending the United States against a cruise missile attack. Navy leaders were present during the Army’s initial Project Convergence event last fall. And now projects Overmatch and Convergence are eyeing a collaborative event this summer.

Meantime, the Joint Staff is working to establish a frame- work to coordinate efforts of the three military departments. Gen. John Hyten, the No. 2 military officer and chairman of the Joint Requirements Oversight Council, estimates that by late spring the Pentagon will issue a new Joint Warfighting Concept to provide an overarching blueprint for JADC2 as well as three other key areas: joint glob- al fires, contested logistics and information advantage.

Members of the 6th Special Operations Squadron use a tablet to upload coordinates during an exercise showcasing the capabilities of the Advanced Battle Management System at Duke Field, Florida, Dec. 17, 2019. During the first demonstration of the ABMS, operators across the Air Force, Army, Navy and industry tested multiple real-time data sharing tools and technology in a homeland defense-based scenario enacted by U.S. Northern Command and enabled by Air Force senior leaders. *U.S. Air Force / Tech. Sgt. Joshua J. Garcia*

Building on Experience

“We’re not starting this journey from a cold start,” Kilby said of the complex effort to create new technical linkages

across platforms. “We’ve been working toward it for some time.”

For instance, the Navy has developed Naval Integrated Fire Control-Counter Air, an “any sensor, any shooter” capability that extends the air and missile defense battlespace to the maximum kinematic range of weapons for air, surface and strike warfare missions. NIFC-CA allows aircraft and surface ships to pass data that enable shooters to attack targets beyond their organic detection range.

Similarly, the Cooperative Engagement Capability – through connecting sensors and communications tools – makes possible the ability for multiple surface ships and aircrafts to form an air defense network for the pur- pose of sharing radar target measurements in real-time.

The adoption of commercial-off-the-shelf hardware into the Aegis Combat System and the introduction of a common source library now allows the Navy to scale the power of the air and missile defense system across ship classes and land- based systems.

Project Overmatch seeks to replicate these sorts of integrations, but on a much larger scale.

“Our end state: We have to pass the best sensing to the best kinetic or non-kinetic platforms to create the tactical battle network, where the whole system fights as one regardless of how many units are in,” said Kilby. “Great power competition demands that we deliver distributed, networked and lethal naval force. Time is of the essence.”

On Dec. 15, Small hosted a classified conference on the West Coast for defense contractors to explain Project Overmatch. Interest was high: Representatives from 150 companies attended.

“I laid out basically everything that we’re doing, the why of

everything that we're doing, and made specific asks for help," Small said in January. "One of the specific things that I asked for is imagination.

"We think we understand where we're headed in terms of the future and the things that you can unleash from a connected Navy," Small said, but noted that sometimes a new technology's utility – he mentioned the introduction of the iPad – is not always obvious.

"There's no user when presented with an iPad back in the day that would have said, 'Oh my gosh, yes I need this large cell phone that's between my laptop and my cell phone.' It would have never hit the market," Small said. "But the fact is by watching people and understanding the state of technology and what could be needed, the iPad is now this ubiquitous device."

Small said he is hoping for industry's help identifying potential in new technologies – waveforms, machine learning algorithms and such – for Project Overmatch.

"This is not something the Navy is at a standstill on," said Small. "We've done some incredible things tying various networks and sensors together. So, we're taking that to the next level and beyond."

China Adopts 'Assertive Posture' With Eye on Taiwan, Admiral Says

The Tien Kung area defense system, developed indigenously by the National Chun-Sheng Institute of Science and Technology (NCSIST), is designed to intercept tactical ballistic missiles. *NCSIST*

Admiral Philip Davidson, commander of the U.S. Indo-Pacific Command, speaking at the American Enterprise Institute on March 4 and in testimony to Congress on March 9, said the People's Republic of China (PRC) is stepping up its pressure on Taiwan and called for the island nation to increase it defensive capabilities.

In his testimony on Capitol Hill, Davidson said, "The PRC has adopted an increasingly assertive military posture to exert pressure and expand its influence across the region. This is particularly stark concerning Taiwan. Over the past year, Beijing has pursued a coordinated campaign of diplomatic, informational, economic, and – increasingly – military tools to isolate Taipei from the international community and if necessary, compel unification with the PRC."

"I worry that they're [China] accelerating their ambitions to

supplant the United States and our leadership role in the rules-based international order… by 2050," he said. "Taiwan is clearly one of their ambitions before that. And I think the threat is manifest during this decade, in fact, in the next six years."

At the American Enterprise Institute, Davidson said it is vital the U.S. continue arms sales to Taiwan and encouraged their continued investments in national defense. Taiwan receives military assistance from the United States, but being diplomatically and commercially isolated, Taiwan has had to develop much of its defense capabilities on its own.

"Helping to encourage Taiwan on its investments, a mix of capabilities that include capabilities that helps Taiwan deter, as well as provides some decent [other] capabilities that helps Taiwan defend, I think is a very important approach that the [Defense] Department needs to take," Davidson. "And I would say, you know, for the greater U.S. government – consistent arms sales to Taiwan to help in this deterrence strategy is critically important. And again, that takes a balance to capabilities to go to them."

The Taiwan News reported on Feb. 17 that Taiwan's National Chung-Shan Institute of Science and Technology (NCSIST) has been directed to ramp up production of Taiwan-made weapons systems, including anti-aircraft and anti-ship missiles. NCSIST is responsible for the development, manufacture and sale of Taiwan's indigenous defense technology and weaponry.

According to the news report, the list includes the Sky Bow III (Tien Kung III) surface-to-air, anti-ballistic missile and the Hsiung Feng III supersonic missile capable of destroying both land-based and naval targets. Development of the Sky Sword II (Tien Chien II) radar-guided air-to-air missile, as well as some classified missile systems, will be stepped up.

The PRC is a nation of 1.4 billion, with the largest navy in

the world. One hundred miles away is Taiwan, a country of 22 million people. Militarily, it almost seems to be an untenable position.

“Taiwan is the most dangerous Sino-American flashpoint, because regaining de facto sovereignty over Taiwan has long been a Chinese core interest, and the potential for the use of force to accomplish reunification is always on the table,” said Ret. Rear Adm. Michael McDevitt, author of the recently published “China as a Twenty-First-Century Naval Power: Theory, Practice, and Implications” from Naval Institute Press.

Should China and Taiwan begin hostilities, the People’s Liberation Army (PLA) has a decided home-field advantage. “In the face of almost two decades of Chinese military modernization, Taiwan’s forces – as well as the U.S. forward deployed forces – are vastly outgunned on a day-to-day basis, as they operate literally in China’s front yard, because they face the totality of China’s armed forces,” McDevitt said.

‘“[PRC President and Communist Party Secretary] Xi Jinping has suggested that an indefinite perpetuation of the current status quo, with Taiwan existing as a de facto independent country, cannot go on forever. Xi gives the impression he is impatient because he fears perpetuation of the status quo will eventually lead to ‘peaceful separation,'” he said.

McDevitt said there are those that think Xi Jinping wants to be remembered as the party secretary that finally resolves the Taiwan question. “Taiwan is always going to be just a hundred miles of the coast of China, it will never be towed out to the mid-Pacific,” he said.

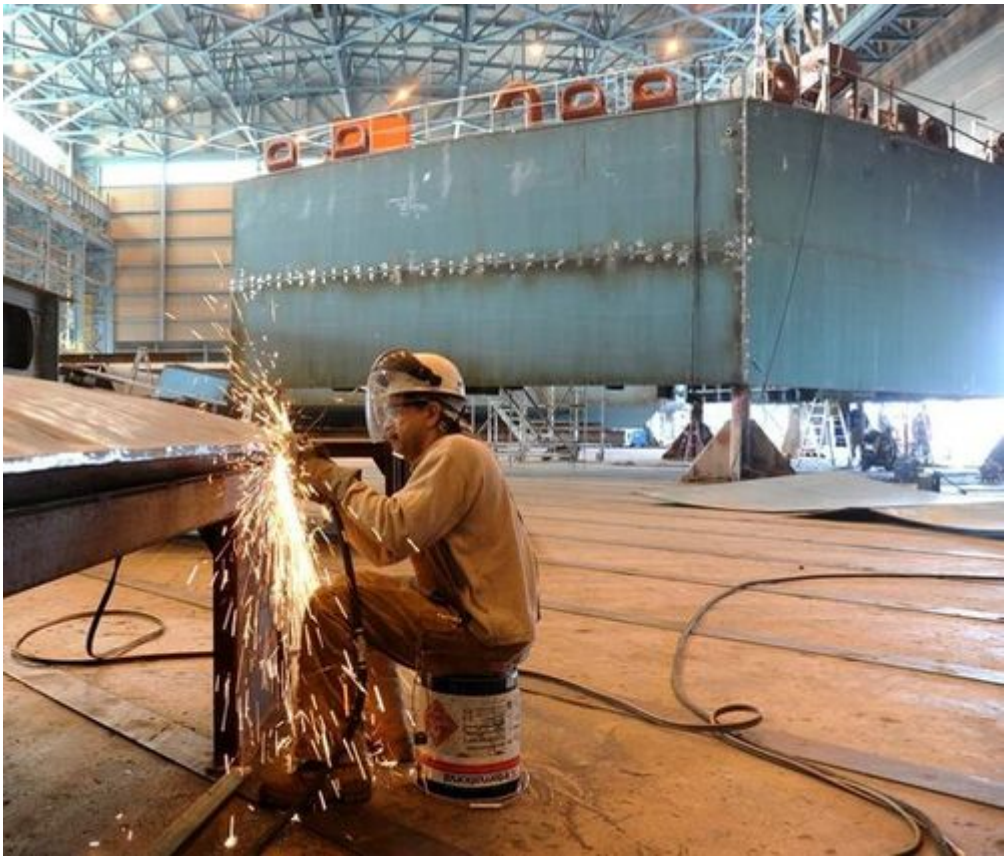
“The basic U.S. policy on reunification is straightforward,” he said. If the people of Taiwan decide in favor of it, “that is fine, but in the meanwhile, any attempts by the mainland to unify through coercion or outright aggression might result in

U.S. military intervention," said McDevitt. "Given the economic clout and military capability of the mainland, it is hard to imagine that reunification of some sort, a commonwealth for example, will not eventually take place, unless of course, Beijing agrees to let Taiwan declare independence, which in my mind would be the sensible thing for Beijing to do. Taiwan is not going anywhere."

The Biden administration has signaled its support for Taiwan. State Department Spokesman Ned Price said on Jan. 21, "The United States notes with concern the pattern of ongoing PRC attempts to intimidate its neighbors, including Taiwan. We urge Beijing to cease its military, diplomatic, and economic pressure against Taiwan and instead engage in meaningful dialogue with Taiwan's democratically elected representatives. We will stand with friends and allies to advance our shared prosperity, security, and values in the Indo-Pacific region — and that includes deepening our ties with democratic Taiwan.

"The United States will continue to support a peaceful resolution of cross-strait issues, consistent with the wishes and best interests of the people on Taiwan," Price said. "The United States maintains its longstanding commitments as outlined in the Three Communiqués, the Taiwan Relations Act, and the Six Assurances. We will continue to assist Taiwan in maintaining a sufficient self-defense capability. Our commitment to Taiwan is rock-solid and contributes to the maintenance of peace and stability across the Taiwan Strait and within the region."

Senators, Congressmen Reintroduce the Energizing American Shipbuilding Act



Members of the U.S. Senate and House have reintroduced the Energizing American Shipbuilding Act, intended to boost ship construction. *USDOT*

WASHINGTON – U.S. Sen. Roger Wicker, R-Mississippi, a senior member of the Senate Armed Services Committee, joined Sen. Bob Casey, D-Pennsylvania, in reintroducing the Energizing American Shipbuilding Act, Wicker's office said in a March 11 release.

Reps. John Garamendi, D-California, who serves on the House Armed Services Committee, and Rob Wittman, R-Virginia, ranking member of the Seapower and Projection Forces Subcommittee, introduced the companion bill in the House of Representatives.

The legislation would support American shipbuilding by requiring a portion of liquefied natural gas (LNG) and crude oil exports to be transported on U.S.-built, U.S.-crewed vessels.

“Strengthening our domestic maritime industry is essential to our national defense,” Wicker said. “Ensuring the U.S. can move our growing energy exports on American-flagged, American-crewed vessels protects the critical role these vessels play in our national defense and bolsters hundreds of thousands of American shipbuilding and maritime jobs. As foreign nations continue to invest heavily in their own shipbuilding capacity, the United States cannot allow our own capabilities to dwindle.”

“America’s merchant fleet has dwindled 60 percent since 1991. Requiring LNG and oil to be exported on U.S.-built and crewed vessels will help strengthen our nation’s shipyards and maritime industry and keep America competitive in international markets,” Casey said. “The bipartisan Energizing American Shipbuilding Act would also create good-paying jobs for our ports in Pennsylvania, and throughout the country, while increasing ship manufacturing to ensure that we can provide sealift capacity for our military.”

“U.S. exports of America’s LNG and crude oil resources present a unique opportunity to create new middle-class jobs by strengthening our nation’s crucial domestic shipbuilding, advanced manufacturing, and maritime industries – which are key to national security and our ability to project American military power abroad,” Garamendi said. “American shipyards and mariners are ready for the job, and our bill ensures American workers are no longer expected to compete against heavily subsidized foreign shipyards in Korea, China, and elsewhere. Our domestic maritime industry is critically important to the U.S. economy and national security, and I will work tirelessly until this bill becomes law.”

“The Energizing American Shipbuilding Act is a major step in the right direction for the American shipbuilding industry, the men and women of America’s shipyards, and our national security,” Wittman said. “The EAS creates new, good-paying jobs for working-class Americans in every state while enhancing our national security by transporting more American-produced energy on American crewed, built, and flagged ships. Furthermore, The EAS Act ensures the United States has the industrial shipbuilding capacity necessary for our national defense by building new LNG carriers rivaling those of China and Russia and ensuring the continued prosperity of our shipbuilding industry.”

The bill would require that vessels built in the U.S. transport 15 percent of total seaborne LNG exports by 2043 and 10 percent of total seaborne crude oil exports by 2035. If enacted, the bill is expected to spur the construction of dozens of ships, supporting thousands of good-paying jobs in American shipyards, while also boosting domestic vessel component manufacturing and maritime industries.