

# Missile Exercise Sends Frigate to the Bottom



Rim of the Pacific 2022 military forces from Australia, Canada, Malaysia and the United States fired upon and sunk the decommissioned ex-USS Rodney M. Davis (FFG 60), July 12, during a sinking exercise to gain proficiency in tactics, targeting and live firing against a surface target at sea. *U.S. NAVY*

HAWAII – Units from Australia, Canada, Malaysia and the United States took part in a live-fire missile exercise that resulted in the sinking of a former U.S. Navy guided missile frigate at sea on July 12.

The ships and aircraft, which were participating in the Rim of the Pacific 2022 (RIMPAC) exercise, sank the decommissioned ex-USS Rodney M. Davis (FFG 60) July 12, in waters 15,000 feet deep, 50 nautical miles north of Kauai.

According to a statement from the RIMPAC Combined Information Bureau, “Live-fire events provide realistic training that refine partner nations’ abilities to plan, communicate and

conduct complex maritime operations such as precision and long-range strike capabilities.”

The objective of the sinking exercise, or SINKEK, is to “gain proficiency in tactics, targeting and live firing against a surface target at sea,” the statement said.

“This exercise provided a great opportunity for the extremely talented Sailors, soldiers and aviators who comprise the RIMPAC 2022 team to hone their skills in a live-fire setting,” said Royal Canadian Navy Rear Adm. Christopher Robinson, deputy commander of the RIMPAC Combined Task Force. “There is nothing that really replaces the training value of opportunities such as this, which enable us to test our weapons and their associated combat systems with as much realism as possible. These live-fire exercises are vital for maintaining our proficiencies, building our interoperability, and increasing our readiness for future operations.”

Royal Canadian Navy frigate HMCS Winnipeg (FFH 338) fired two Harpoon missiles as part of the SINKEK. A U.S. Navy P-8A Poseidon maritime patrol aircraft deployed an AGM-84D Harpoon missile, and an F/A-18F Super Hornet from Nimitz-class aircraft carrier USS Abraham Lincoln (CVN 72) launched an GBU-16 laser guided bomb for the event.

The 1,850-ton, 321-foot Royal Malaysian Navy corvette KD Lekir fired an Exocet MM40 missile during the SINKEK. Lekir is the first Royal Malaysian Navy ship to launch a missile and hit a target outside of Malaysian waters. The ship had also recently fired an Exocet during the Taming Sari exercise north of the Strait of Malacca in May.

“The SINKEK was a professionally enriching experience for the crew of KD Lekir,” said Adm. Mohd Reza Mohd Sany, chief of the Royal Malaysian Navy. “These events provide an excellent platform toward enhancing interoperability amongst the participating navies. The involvement is an experience that

will elevate the professionalism of the KD Lekir crew,” said Mohd Reza. “The biggest international maritime exercise is an opportunity for a joint exercise involving various countries while strengthening cooperation among the participants,”

“The coordinated firing of anti-ship munitions is a complex activity. This SINKEX demonstrates the interchangeability of the capable and adaptive RIMPAC partners,” said Royal Australian Navy Commodore Paul O’Grady, commander of the RIMPAC maritime forces component. “In doing so, significant measures were taken to protect the maritime training environment.”

The ex-Rodney M. Davis was a 4,100-ton, 453-foot Oliver Hazard Perry-class guided missile frigate that served in the U.S. Navy from 1987 to 2015. Preparing decommissioned ships for sinking follows a rigorous process to ensure there are no hazardous materials, fuels or lubricants still onboard. The target ships must be sunk in water at least 6,000 feet deep and at least 50 nautical miles from land.

## **RIMPAC Fire**

At least one mishap was reported during RIMPAC. A Peruvian navy corvette, BAP Guise (CC 28), suffered a fire outbreak July 18. A statement from the Peruvian navy said the fire was “mitigated and controlled by the crew with support of foreign units.”

The ship was not identified in the initial statements from the RIMPAC Command Information Bureau, but the Guise was identified in subsequent statement from the Peruvian navy.

According to a statement from the CIB, the RIMPAC watch floor received the report of a fire and potential injuries aboard a Combined Task Force ship around 8:00 a.m., Sunday morning Hawaii time. “Two critically stable patients were evacuated from the ship by a helicopter from French Navy frigate FS Prairial (F731) to USCGC Midgett (WMSL 757), and have since

been transferred ashore by U.S. Navy helicopter from USS Abraham Lincoln (CVN 72)," the statement said.

"Two crew members suffered burns as a result of it and were evacuated by helicopter for their respective care at a specialized hospital in Honolulu, the details having been communicated to their relatives," the Peruvian Navy statement said. "It should be noted that the rest of the naval personnel are unharmed."

RIMPAC is the world's largest international maritime exercise, with 26 nations, 38 ships, four submarines, more than 170 aircraft, more than 30 unmanned systems and 25,000 personnel participating this year in and around the Hawaiian Islands and Southern California. The biennial exercise will conclude Aug. 4. RIMPAC 2022 is the 28th exercise in the series that began in 1971.

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## **US Marine Corps Successfully Tests Iron Dome-Based Air Defense Prototype**



The U.S. Marine Corps has tested Rafael's Iron Dome ground launcher and Tamir interceptor with its Medium-Range Interceptor Capability prototype, G/ATOR radar and Common Aviation Command & Control System. *RAFAEL*

HAIFA, Israel – The U.S. Marine Corps conducted a successful live-fire test of Israel-based Rafael's Iron Dome ground launcher and Tamir interceptor missile integrated with the USMC Medium-Range Intercept Capability prototype, Rafael said July 18.

The test included the Marine Corps' Ground/Air Task Oriented Radar and Common Aviation Command & Control System.

"This demonstration proves that we do now have a relevant capability," said Don Kelley, program manager for ground based air defense at PEO Land Systems, immediately following the successful test.

"Once again, Rafael's systems have proven that they are capable of seamless, optimized integration with other defense systems," said Brig. Gen. (Res.) Pinhas Yungman, executive

vice president and head of Rafael's Air Defense Systems Directorate.

"This test has proven the Iron Dome Tamir Interceptor and associated ground components can be integrated quickly and efficiently in any relevant defense architecture and intercept various aerial threats successfully in complex and advanced scenarios," said Moshe Patel, head of the Israel Missile Defense Organization within Israel's Ministry of Defense. "We look forward to further partnerships with the U.S. Armed Forces on air and missile defense."

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## **Xerox Elem Additive and U.S Navy Deploy First Metal 3D Printer at Sea**



The amphibious assault ship USS Essex (LHD 2), shown here in 2018, now has an ElemX liquid metal printer onboard. *U.S. MARINE CORPS / Cpl. A. J. Van Fredenberg*

NORWALK, Conn. – Xerox Elem Additive Solutions announced July 18 that an ElemX liquid metal printer was recently installed onboard USS Essex (LHD 2), making it the first metal additive manufacturing machine deployed on a U.S. naval vessel.

The ElemX was placed on the ship earlier this month in Pearl Harbor, with at-sea trials beginning immediately. The installation is the latest step in the U.S. Navy's strategy of using additive manufacturing to increase operational readiness for the fleet. It also builds on the relationship between the U.S. Navy and Xerox Elem Additive that began with the Naval Postgraduate School in Monterey, California, receiving the first installation of the ElemX in 2020.

"The military supply chain is among the most complex in the world, and putting the ElemX on USS Essex means Sailors can now bypass that complexity and print parts when and where they need them," said Tali Rosman, GM of Elem Additive. "We are

proud to continue our partnership with the Navy to help them advance their additive manufacturing capabilities and execute their long-term vision.”

The ElemX leverages Xerox’s liquid metal additive manufacturing technology that uses standard aluminum wire. Unlike other metal 3D printing technologies, there are no hazardous metal powders with ElemX and no need for special facility modifications or personal protective equipment to operate the machine. The printer also requires minimal post-processing and therefore provides a faster time-to-part. This ability to produce reliable replacement parts on-demand reduces the dependency on complex global supply chains for deployed forces.

To withstand various sea states and environmental challenges that U.S. naval warships encounter, the ElemX was installed in an industrial shipping container to ruggedize it. Trials have already begun to establish operational guidelines and technical feasibility studies to determine applications and use cases. A team on USS Essex will design and print shipboard items and provide feedback to NPS and Commander, Naval Surface Force Pacific.

The ElemX 3D printer was commercially introduced in February 2021, and since then Elem Additive Solutions has expanded operations, including opening an Additive Manufacturing Center of Excellence in Cary, North Carolina. The ElemX is a safer and simpler metal 3D printer, addressing supply chain resiliency for transportation, aerospace, defense and industrial manufacturing.

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# U.S. Affirms Support for Philippines Over Disputed Islands



Philippine Navy frigate BRP Antonio Luna (FF 151) arrives at Joint Base Pearl Harbor-Hickam to participate in the Rim of the Pacific 2022. *U.S. NAVY / Mass Communication Specialist 3rd Class Demetrius J. Williams*

MANILA, Philippines – Demonstrators gathered outside the Chinese embassy in Manila on July 12 to mark the sixth anniversary of 2016 international court arbitration ruling that invalidated Beijing's vast territorial claims in the South China Sea. The Philippines say China continues to harass its vessels and personnel near the disputed islands and in the country's exclusive economic zone.

In a statement issued by the U.S. Embassy in Manila on July 12, U.S. Secretary of State Antony Blinken called on the

Peoples Republic of China to comply with the decision by an arbitration tribunal after the Philippine government complained in 2013 about China's increasingly assertive claims and aggressive actions around its islands in the South China Sea.

China has unilaterally claimed that virtually all islands in the South China Sea belongs to it.

Blinken said the Arbitral Tribunal, which was constituted at The Hague under the 1982 Law of the Sea Convention, delivered a unanimous decision, which is final and binding on the Philippines and the PRC. "In its ruling, the Tribunal firmly rejected the PRC's expansive South China Sea maritime claims as having no basis in international law. The Tribunal also stated that the PRC has no lawful claim to the areas determined by the Arbitral Tribunal to be part of the Philippines' exclusive economic zone and continental shelf. We also reaffirm that an armed attack on Philippine armed forces, public vessels, or aircraft in the South China Sea would invoke U.S. mutual defense commitments under Article IV of the 1951 U.S.-Philippines Mutual Defense Treaty."

In a May address at George Washington University, Blinken said China is advancing unlawful maritime claims in the South China Sea and undermining peace and security, freedom of navigation, and commerce.

Philippine Foreign Secretary Enrique Manalo said Tuesday called the 2016 arbitration ruling an "indisputable" decision.

"These findings are no longer within the reach of denial and rebuttal and are conclusive as they are indisputable," said Manalo. "The award is final."

Despite rhetoric by the previous president of the Philippines, Rodrigo Duterte, where he said the Philippines would move away from U.S. influence and establish closer ties with China, he later had a change of heart when his

overtures failed to deliver results.

The new Philippine President Ferdinand Marcos Jr., who assumed office on June 30, and his government are expected to seek closer ties with the U.S. And today, the U.S.-Philippines partnership remains strong.

In August of last year, Adm. John C. Aquilino, commander of U.S. Indo-Pacific Command, traveled to the Philippines to mark the 70<sup>th</sup> anniversary of the U.S.-Philippine Mutual Defense Treaty and reaffirm the U.S. commitment to the alliance with the Philippines.

“Both of our nations have made it clear that we are committed to the alliance, and that we remain prepared to fight alongside and defend each other using all of our capabilities to preserve peace and stability in the region – just as we have before,” Aquilino said.

On May 23 of this year, Aquilino and the chief of staff of the armed forces of the Philippines, Gen. Andres Centino, signed the Maritime Security (Bantay Dagat) Framework at USINDOPACOM headquarters on Camp Smith, Hawaii. According to a statement from INDOPACOM, “Bantay Dagat” is a Tagalog term that means “Guardian of the Sea,” illustrating U.S. and Philippine resolve to improve regional maritime domain awareness and confront maritime challenges together. The framework is designed to enable a holistic, intergovernmental approach to maritime security through the interoperability of U.S. and Philippine maritime forces and option to include interagency organizations, and is a testament to the strength of the U.S.-Philippines alliance.”

The Philippine navy’s 2,600-ton, 351-foot guided-missile frigate BRP Antonio Luna (FF-151) is currently participating in the 2022 Rim of the Pacific exercises off Hawaii.

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# Boeing, U.S. Navy Demonstrate Manned-Unmanned Teaming with Super Hornet



A Block III F/A-18 Super Hornet takes off from Lambert International Airport in St. Louis. As the most advanced Super Hornet ever built, the Block III is equipped to run the app-based solutions of the future. *BOEING*

ST. LOUIS – Boeing and the U.S. Navy have completed a series of manned-unmanned teaming (MUM-T) flight tests in which a Block III F/A-18 Super Hornet successfully demonstrated command and control of three unmanned aerial vehicles, the company said July 15.

Boeing system engineers connected Block III's adjunct processor, known as the Distributed Targeting Processor –

Networked (DTP-N), with a third-party tablet to team with the UAVs. Boeing developed new software loads for the DTP-N specific to running the third-party tablet and transmitting commands. The software development, tablet connection to the fighter and all flight tests were completed in less than six months.

“Block III Super Hornet is executing on its guarantee of hardware – installed today – that is ready to receive the software of the future,” said Ben LeGrand, Boeing director of Mission Systems. “Block III Super Hornet will integrate third-party systems and software with minimal modifications.”

Boeing partnered with the F/A-18 & EA-18G Program Office (PMA-265), Air Test and Evaluation Squadrons 23 and 31, Naval Air Warfare Center-Weapons Division at China Lake, California, and a third-party vendor on the demonstration. During the test flights, F/A-18 pilots entered commands into the tablet, which were processed and transmitted through Block III’s hardware. The UAVs executed all commands given by F/A-18 pilots during tests over a two-week period.

“This successful MUM-T demonstration represents a significant step toward the Navy’s vision for distributed maritime operations. It highlights the potential of unmanned concepts to expand and extend the Navy’s reach,” said Scott Dickson, Boeing’s director for Multi-Domain Integration. “As part of a Joint All-Domain Command and Control network, teams of UAV conducting ISR missions led by the latest Super Hornets equipped with network-enabled data fusion and advanced capabilities would provide warfighters across the Joint Force with significant information advantage.”

“Future fighter pilots will be the quarterback of the skies, orchestrating commands and controlling UAVs from the integrated Block III touch-screen cockpit,” said Mark Sears, Boeing vice president and program manager of F/A-18, EA-18G programs. “Block III Super Hornet is the bridge to the future



and is a risk reducer for the Navy that is delivering on teaming, networking and interoperability now.”

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# Sikorsky Delivers Third Production CH-53K To U.S. Marine Corps



Sikorsky delivered a seventh CH-53K Helicopter to the U.S. Marine Corps. The heavy lift helicopter will be based at Marine Corps Air Station New River in Jacksonville, North Carolina. *SIKORSKY*

STRATFORD, Conn. – Sikorsky, a Lockheed Martin company, delivered the third low-rate initial production CH-53K King Stallion helicopter ahead of contract schedule to the U.S. Marine Corps, the company said July 14.

This aircraft, built in Sikorsky's digital factory, is the

first CH-53K from the Lot 2 LRIP contract awarded by the U.S. Navy in 2019, and the seventh overall delivered to the fleet. The CH-53K's heavy-lift capabilities exceed all other U.S. Department of Defense rotary wing platforms and is the only heavy-lift helicopter that will remain in production through 2032 and beyond.

This CH-53K heavy lift helicopter joins the six in operation at Marine Corps Air Station New River in Jacksonville, North Carolina. The CH-53K is the only sea-based, long range, heavy lift helicopter in production and will immediately provide three times the lift capability of its predecessor.

"This Connecticut-built CH-53K aircraft is a credit to our employees and their skills embracing digital tools and other advanced technologies to continue the Sikorsky legacy of building modern, safe, reliable rotorcraft. Our nationwide supply chain supports the active production line as we prepare to deliver two more CH-53K helicopters later this year," said Bill Falk, director, Sikorsky CH-53K program. "We look forward to continuing our progress toward next year's full rate production decision."

The CH-53K helicopter was born in a digital environment, and now its digital thread connects design, manufacturing, training, and sustainment teams. This network, that includes everything from work instructions to maintenance manuals, is based on the helicopter's single, continuous data thread that stays consistent from initial design all the way through sustainment. Today, all of Sikorsky's aircraft programs are born in a digital environment. The power of this digital thread drives affordability, producibility and reliability across the aircraft lifecycle.

Earlier this year Sikorsky secured a contract to build 12 CH-53K heavy lift helicopters for Israel under a U.S. Navy Foreign Military Sales agreement.

The signed letter of offer and acceptance between the U.S. government and Israel states first deliveries of the baseline aircraft are planned for 2025.

The CH-53K helicopters will replace the Israeli Air Force fleet of modified CH-53D Yasur helicopters, which have been in Israel's inventory for over 50 years.

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## Marine I-CsUAS Works to Defend Against Drones



Program Executive Officer Land Systems recently started fielding the Installation-Counter small Unmanned Aircraft Systems, depicted in this simulated graphic, to select Marine Corps installations. *U.S. MARINE CORPS / Andrew Reynolds*  
MARINE CORPS BASE QUANTICO, Va. – The battle to keep Marines



and their critical assets safe is constantly evolving. As technology advances, so does the need to field more cutting-edge equipment to counter threats, such as those posed by small unmanned aerial systems.

With these challenges in mind, Program Executive Officer Land Systems is fielding the Installation-Counter small Unmanned Aircraft Systems, the Marine Corps Systems Command Office of Public Affairs and Communication said July 14.

Known as I-CsUAS, the system is designed to protect Marine Corps installations by detecting, identifying, tracking and defeating small UAS.

“The Marine Corps, and DoD in general, required the capability to defend against SUAS years ago,” said Don Kelley, program manager for Ground-Based Air Defense at PEO Land Systems. “The threat of SUAS is only proliferating every day. The bottom line is, we need to provide this capability to our Marines as rapidly as possible.”

I-CsUAS features an integrated system equipped to carry out all phases necessary to counter small unmanned aerial systems such as commercially available drones, said Kelley. The system will primarily provide a service to ensure Marines or security forces have the capability to defend installations against SUAS at all times.

Maj. Kyle Yakopovich, fixed site project officer for Program Manager Ground Based Air Defense at PEO Land Systems, said I-CsUAS is intended to defeat commercial off the-shelf Group 1 and Group 2 UAS. I-CsUAS also provides detection, tracking and identification capabilities.

“What makes this system interesting is it fuses multiple modalities together into a single system,” Yakopovich said. “This allows us to more accurately detect, track and identify [small unmanned aircraft systems].”

Yakopovich said the program's system is equipped with a few different components for better detection and ultimately, defense. The Long-Range Sentry Tower is comprised of a radar system and an optical sensor, and works in conjunction with a passive radio frequency detection capability to present the operator with a visual depiction of the threat's flight path. While each of the towers' sensor components are already widely in use, Yakopovich said I-CsUAS is special because it uses machine learning and artificial intelligence to constantly and autonomously analyze the sensor data faster and more accurately than a human operator. The system enhances the capability to detect, track, and identify the threat while reducing the amount of manpower previously required to perform these actions.

Yakopovich also said the I-CsUAS also has a separate non-kinetic defeat capability that has proven itself capable in other programs within PM GBAD. Using this capability, a Marine who has detected an intruding sUAS is able to disrupt the sUAS communication link. This enables Marines operating the LRST-42 or LSTR-82 tower will be able to determine the drone's point of origin.

PM GBAD's Fixed Site Product Manager Jessica McCauley said the Marine Corps plans to use this technology to defend critical assets, following the requirement set forth in Title 10 of the U.S. Code, which outlines the role and responsibilities of our nation's armed forces.

"The I-CsUAS protects the facility by detecting, tracking identifying the drone and empowering law enforcement to defeat it," McCauley said. "We are delivering a system to select installations, providing them the ability to conduct that kill chain in order to protect critical assets against small UAS threats."

"These small commercial off-the-shelf drones – they're everywhere," Yakopovich said. "You can't walk into a park

without seeing them, and our enemies know how to use them. If you follow the news you can read articles about these drones being used as weapons of war in places like Ukraine, and those drones are capable of doing similar damage here at home. We're delivering these systems to CONUS locations and defending certain assets aboard those installations that have been deemed critical to national security.

"Use your imagination of how much damage and chaos could be done by these small commercial off-the-shelf drones by attacking or otherwise harassing domestic Marine Corps installations. That's why we're doing this – to protect those assets and to enable the warfighter to do what the warfighter should be doing, which is keeping his focus oriented toward the enemy."

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## **Navy Rethinking 'Full-Mission Capability' Definition with F-35s in Distributed Ops, Whitesell Says**



An F-35C Lightning II, assigned to the “Argonauts” of Strike Fighter Squadron 147 prepares to land on the flight deck of Nimitz-class aircraft carrier USS Carl Vinson (CVN 70) on June 17, 2021. *U.S. NAVY / Mass Communication Specialist Seaman Caden Richmond*

ARLINGTON Va. – The Navy’s “Air Boss” said fifth-generation strike fighters are redefining the concept of full mission capability and changing the way a four-plane division operates in distributed maritime operations.

Vice Adm. Kenneth Whitesell, commander, Naval Air Forces and commander, Naval Air Force, U.S. Pacific Fleet (the Air Boss), addressed the concept while speaking July 13 at a naval aviation seminar hosted by the Center for Strategic and International Studies and the U.S. Naval Institute and sponsored by HII.

Responding to a question from moderator Ward Carroll about the full-mission-capable rates of Navy F-35Cs during the 2021 deployment on board USS Carl Vinson, Whitesell said taking a “30,000-foot view of the way the [carrier] air wing is going to be employed is going to be completely different.”

“The air wing’s not going to be employed the same way [as

before],” Whitesell said. “The F-35 is the perfect exemplar of that. The way we employ that platform. ... There is no defensive and offensive combat spread [where] you break out into some of the traditional missions that we would have done five or 10 years ago. Employing the Joint Strike Fighter as they employed it as a [four-plane] division [was] definitely more spread out. The way information is shared amongst the platforms makes up for any deficits that an individual aircraft may have.

“The way we think of mission capability and full mission capability – we have to think about it in a distributed and in this case in a full division or greater employment mode through Distributed Maritime Ops,” the admiral said. “Fitting into the bigger vision of Distributed Maritime Ops, a single platform can have degradations, but because of the information sharing between the platforms, we have to think about how we’re going to define full mission capability, not platform-specific, but truly mission specific. It’s a different way of looking at things.”

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## **Sev1Tech Proposes Solutions for Moving Navy Shipyards into the Digital Age**





USS Pasadena (SSN 752) arriving at Norfolk Naval Shipyard in 2020 for a Drydocking Selected Restricted Availability.  
*NORFOLK NAVAL SHIPYARD / Daniel DeAngelis*

ARLINGTON, Va. – As the U.S. Navy makes a huge investment in upgrading and modernizing its four public shipyards, one company is proposing ideas to move shipyard processes from the Industrial Age to the Digital Age using digital information technology.

The Navy is investing more than \$20 billion over 20 years to modernize its shipyards under the Shipyard Infrastructure Optimization Plan, or SIOP. Much of the effort involves modernizing century-old dry docks and other heavy infrastructure.

Patrick Fitzgerald, senior vice president for Navy Missions of Sev1Tech, is a former Naval Information Warfare Center Atlantic Enterprise Systems Department Head and a manager with a long background in information technology. He told *Seapower* his company is well positioned to contribute to the SIOP the digital transformation of the Industrial-Age processes of Navy

shipyards and to “generate a really significant return on investment” and enable the shipyards to “get the ships out to the fleet when needed and fully ready to perform their mission.”

Fitzgerald said the SIOP is a “once-in-a-century thing that our country needs to safeguard itself. “Unfortunately, a lot of the federal government has not moved to the information age; it’s still very Industrial Age processing.”

Among the ideas SevlTech is floating is the use of augmented reality or virtual reality in training the shipyard workers. Fitzgerald said that technology makes for “much more effective training programs that improve knowledge retention.”

The workers “make fewer errors when they actually perform the maintenance. They can verify that a part is being installed in the correct space, [which] will help eliminate re-work for a variety of tasks.”

He also said applying data analytics would result in better parts-demand forecasting and help minimize issues with the global supply chain. Data analytics also would improve auditability, lower the warehousing complexity and costs and reduce or eliminate the time a ship waits for a part to arrive.

Digital twin modeling of the actual layout of the shipyard facilities as they evolve over time can improve shipyard processes.

“Once we get that initial model set, you can start doing simulations on that for the evolving needs and the evolving capabilities,” Fitzgerald said. “It really optimized the layout for the workflow.”

Use of drones is one way to save time and improve productivity, he said.

"The walking that the folks at the four public shipyards do every day is absolutely insane," Fitzgerald said. "At the end of the day you have to leave the security to get a part and then come back. That's a lot of lost labor time not directly serving the mission and helping us get that ship out on time. Having the networks in place where a person working on a ship realizes they needed a part that they didn't expect they needed – if it's a lightweight part – a drone could potentially fly out a five-pound package to the edge of the ship so they don't have to walk all the way across the base to get it from a warehouse."

Fitzgerald pointed out that the Navy owns the airspace over its shipyards and therefore could set the policy of drone operations within the yard.

"We could save hours of an employee's time every day walking back and forth to get parts or checklists," he said. "That's massive for what it could mean to getting a ship out of the shipyard on time and back to the fleet where it needs to be."

He also advocates leveraging 5G and other wireless communications and use of tablets and other support devices.

With a tablet that can go classified when [a worker goes] into a classified space – and given access to the data and drawings they need dynamically, and as soon as they walk out of that space, no longer have access to that information. That would reduce the complexity of managing them, reduce the risk of that information getting compromised, and give them what they need at the right time when they need it," he said.

"The investment in IT relative to the investment in the capital infrastructure is pretty small to get a really big yield," Fitzgerald said.



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# Reservist's Innovative Idea is a Winner in Navy Waypoints Contest



Lt. Cdr. Jonathan Calhoun (center) holds the i3 Waypoints trophy after Vice Adm. John Mustin (back row, middle) announced Calhoun's "Leveraging Mobile Technology to Streamline Mobilization" as the winning entry of the inaugural i3 Waypoints. Calhoun is surrounded by the other final presenters (front row), the finalist panel and production staff (back row). *U.S. NAVY / Chief Mass Communication Specialist Elisandro T. Diaz*

FORT MEADE, Md. – A Navy Reservist's innovative concept for adapting a mobile application to better enable mobilization is a winning idea.

Lt. Cdr. Jonathan Calhoun, a Selected Reserve member attached to U.S. Fleet Forces Command Maritime Operations Center (N3 FCC) in Norfolk, Virginia, submitted his entry, "Leveraging Mobile Technology to Streamline Mobilization," as part of the "i3 Waypoints" effort to find new or better ways for the Navy Reserve to operate.

Vice Adm. John B. Mustin, chief of Navy Reserve and commander, Navy Reserve Force, announced the winning entry of the inaugural i3 Waypoints in a streaming broadcast on July 14.

Calhoun's entry was one of 107 received and evaluated by a panel of judges.

Calhoun initially thought of his idea during a mobilization exercise where he realized shifting many of the mobilization requirements to a secure mobile platform would make the process faster and more efficient for both Sailors and Navy Reserve Center staff.

"Empowering Sailors to use their mobile device to complete a significant portion of pre-mobilization requirements will improve the overall experience for the modern-day Sailor and save critical time during mass mobilizations to get warfighting-ready Sailors on station faster," said Calhoun.

Calhoun's entry envisions a mobile application to reduce duplicative administrative requirements for both members and mobilization staff, save critical time by auto-populating data fields across multiple documents, provide real-time transparency and progress status for members and leadership throughout the process, and enable clear and customizable views and reports.

Additionally, the app could remove the difficulties some Reserve members have accessing Common Access Card-enabled sites outside an Navy/Marine Corps Internet environment and would "ensure our ability to mass mobilize, predictably, at scale, and with seamless administration activation workflows"

as outlined in the Navy Reserve Fighting Instructions 2022.

“We are already moving out on the design for Lt. Cdr. Calhoun’s mobile application,” said Mustin. “His idea to add mobile technology to our distributed activation process helps us achieve our goal of mobilizing the entire Selected Reserve force of 50,000 in 30 days, if required.”

Mustin conceived of the i3 Waypoints program as an approach to “innovate something entirely new; improve on something already established; or integrate several ideas, products or processes rendering the former completely obsolete.”

The annual competition is designed to fast-track transformative ideas from across the Navy directly to the highest levels of the Navy Reserve, without filters or bureaucratic barriers.

The competition is open to anyone in the U.S. Navy—Selected Reserve, Training and Administration of the Reserve, Individual Ready Reserve, Active Duty and civilians, in all ranks, rates and grades.

Of the 107 entries received, five entries were subsequently chosen and presented to a panel hosted by Mustin, retired Vice Adm. Andrew “Woody” Lewis, Bruce E. Mosler, chairman, global brokerage of Cushman & Wakefield Inc., Navy Reserve Force Master Chief Tracy L. Hunt and 2021 Reserve Sailor of the Year Chief Yeoman (Select) Jasmyn Phinizy.

“The large number of creative, thoughtful strategic ideas submitted in a relatively short timeframe far exceeded our original expectations,” said Mustin. “It demonstrates our Reserve Force’s commitment to innovate, improve efficiencies, and reduce administrative burdens, allowing us to focus on warfighting readiness – our one and only priority. With such an enthusiastic response from the force, and so many great ideas to modernize the way we do business, we saw enough in this inaugural event to commit to making i3 Waypoints an

annual program. Very little is more important to us than keeping the direct pipeline open for creative ideas to flow to top leadership without filter or disruption.”

The other i3 Waypoints finalists, and their winning ideas, are:

- Lt. Brian Adornato, Naval Sea Systems Command, Surge Maintenance Sacramento: “Create a New Category of Personnel: Civilian Technicians”
- Cdr. Bobby Hsu, Director of Navy Staff, Office of the Chief of Naval Operations: “Official Navy Reserve YouTube Channel”
- Cdr. Sarah McGann, Navy Personnel Command (PERS-9), and Lt. Josh Didawick, Office of the Chief of Naval Operations for Manpower, Personnel, Training and Education: “New Policy for Reserve Retirement Education Across the Career Continuum”
- Cdr. Scott Mericle, Navy Reserve Operations, Plans and Policy (N5), Commander, Second Fleet: “Improve Active to Reserve Transition.”

The streamlined broadcast can be viewed here:

<https://www.navyreserve.navy.mil/Resources/I3-Waypoints/>

<https://www.dvidshub.net/video/850290/i3-waypoint-challenge>

<https://www.youtube.com/c/usnavyreserve>