

Weekly Media Report - August 10-16, 2021

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SECNAV:

Carlos Del Toro Sworn in as 78th Secretary of Navy

(Mirage 11 Aug 21)

The Honorable Carlos Del Toro swore into the Department of the Navy as the 78th Secretary of the Navy during a private ceremony at the Marine Corps Memorial Aug 9... Born in Havana, Cuba, Del Toro immigrated to the United States in 1962. He graduated from the U.S. Naval Academy in 1983 as a Surface Warfare Officer and later attended **Naval Postgraduate School**, Naval War College, and George Washington University.

NPS Space Systems Grad Carlos Del Toro sworn in as 78th Secretary of the Navy

(NPS.edu 13 Aug 21) ... Matthew Schehl

Naval Postgraduate School (NPS) Space Systems Engineering alumnus Carlos Del Toro was sworn in as the nation's 78th Secretary of the Navy, August 9. Del Toro, who is also a graduate of the Naval Academy and Naval War College, served 26 years in uniform followed by 17 years as CEO and President of a private sector firm.

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NPS Aviation Community Graduates Set to Take Command

(NPS.edu 13 Aug 21) ... Mass Communication Specialist 2nd Class Lenny Weston

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Electrodynamic tethers speed up satellite reentry timelines

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FACULTY:

Tanker War 2.0: Iranian Strategy in the Gulf (Audio Interview)

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The Iranian government is accused of using a loitering munition to strike the tanker Mercer Street, killing two crew members. The attack is the latest incident at sea involving the Iranians and international shipping. To discuss Iranian strategy in the Persian Gulf, Aaron speaks with **Afshon Ostovar**, an **Associate Professor of National Security Affairs at the Naval Postgraduate School**, about escalation dynamics and Iranian strategy.

<u>Professor Brenda Shaffer Specializes in international energy</u>, <u>Azerbaijan</u>, and the <u>Middle East (Video Interview)</u>

Brenda Shaffer talks to #THECAPITOL on drone attacks caused by Iran, Iran regime assassinations, reviving the nuclear deal and the #UAE Azerbaijan relationship.

ALUMNI:

McAdams appointed director of Talbot Emergency Services

(The Star 11 Aug 21)

Talbot County Council has appointed Michael "Mike" McAdams director of Talbot Emergency Services... McAdams has a Bachelor of Science in Emergency Health Services from the University of Maryland Baltimore County, and a Master of Arts in Defense and Security Studies from the **Naval Postgraduate School**, Monterey, California. McAdams completed the George Washington University Institute of Regional Excellence program. He is a certified public manager.

WIDOW: Nellis AFB Airmen use tailor-made software for ABMS

(AF,mil 11 Aug 21)... Airforce 1st Lt. Nicolle E. Mathison

Nellis Air Force Base Airmen are utilizing the modern software application WIDOW, or Web-based Information Dominant Warfare, to digitize the tactical-level mission planning process..."WIDOW improved the access, accuracy and timeliness of information required for the U-2 (<u>Dragon Lady</u>) pilot to effectively synchronize capabilities with the composite force," said Maj. John Mattson, former U-2 Weapons Instructor Course instructor and current **Naval Postgraduate School** student.

Knox Co. Health Department resumes COVID data update

(WVLT 13 Aug 21)... Paige Hill

The Knox County Health Department epidemiology team will resume updating COVID-19 case count data on Tuesdays and Thursdays on their website... Strum served at the health department for 13 years, most recently the county's lead Emergency Preparedness Epidemiologist. She has a bachelor's degree in Public Health from the University of Tennessee, a master's degree from East Tennessee State University and is currently pursuing a Master of Science Degree in Homeland Security Studies from the **Naval Postgraduate School**.

Health Department to Resume Twice-Weekly Data Update

(The Knoxville Focus 14 Aug 21)

The Knox County Health Department epidemiology team will begin updating COVID-19 case count data on their website on Tuesdays and Thursdays... Additionally, Roberta Strum has been promoted to Director of Communicable and Environmental Disease and Emergency Preparedness, filling the position vacated by Charity Menefee in July; she has served the health department for 13 years, most recently as the county's lead Emergency Preparedness Epidemiologist. Sturm has a bachelor's degree in Public Health from the University of Tennessee, a master's degree from East Tennessee State University, and is currently pursuing a Master of Science Degree in Homeland Security Studies from the **Naval Postgraduate School**. Sturm has also taught epidemiology and biostatistics at King University and serves as an instructor at the University of Tennessee.

Dowd Assumes Command at Southeast Regional Maintenance Center

(DVIDS 13 Aug 21)... Scott Curtis

Capt. Justin Dowd relieved Capt. John Lobuono as Commanding Officer of Southeast Regional Maintenance Center (SERMC) August 13, 2021 in a ceremony on Naval Station Mayport... Dowd is a native of Anaconda, Mont.













and graduated the U.S. Merchant Marine Academy in Kings Point, New York where he received dual Bachelors of Science degrees in Nautical Science and Marine Engineering. He also holds Masters of Science Degrees from the **Naval Postgraduate School** in Systems Engineering & Analysis and Mechanical Engineering.

UPCOMING NEWS & EVENTS:

August 17-20: Center for Executive Education SC Workshop

August 23-28: Joint Interagency Field Experimentation (JIFX) 21-4

August 24-26: High Energy Laser Technical Area Working Group Meeting

August 26: SGL with Adm. Craig S. Faller, Commander, U.S. Southern Command: Charting

Our Course in the Era of Strategic Competition

September 20: WIC Workshop 2021: Hybrid Force 2045 (Registration Open)

SECNAV:

Carlos Del Toro Sworn in as 78th Secretary of Navy













(Mirage 11 Aug 21)

The Honorable Carlos Del Toro swore into the Department of the Navy as the 78th Secretary of the Navy during a private ceremony at the Marine Corps Memorial Aug 9.

"I am extremely proud but humbled to return to the Department of the Navy," Del Toro said. "I come back as someone who loves the Navy – who spent twenty-six years in uniform and another seventeen striving to make sure you had the capabilities you needed to fulfill your mission effectively and safely. Serving you as your 78th Secretary of the Navy is a high honor that carries grave responsibilities to which I will dedicate all my skill and devotion."

Born in Havana, Cuba, Del Toro immigrated to the United States in 1962. He graduated from the U.S. Naval Academy in 1983 as a Surface Warfare Officer and later attended **Naval Postgraduate School**, Naval War College, and George Washington University.

Over the course of a 22-year career as a naval officer, Secretary Del Toro held a series of critical appointments and served numerous tours of duty at sea – including Senior Executive Assistant to the Director for Program Analysis and Evaluation in the Office of the Secretary of Defense; First Commanding Officer of the Arleigh Burke-class guided missile destroyer USS Bulkeley (DDG 84); and Special Assistant to the Director and Deputy Director of the Office of Management and Budget in the Executive Office of the President.

"Carlos Del Toro's lifelong pursuits and deep experience advancing America's national security make him well-prepared to serve as the 78th Secretary of the Navy," Secretary of Defense, Lloyd J. Austin III said in an earlier statement. "A student of the U.S. Naval Academy and Naval War College, Carlos rose through the ranks during the Cold War and Operation Desert Shield and Storm to serve as the first commanding officer of the destroyer USS Bulkeley (DDG 84), and then later as a trusted aide to Pentagon leadership. He understands firsthand the most pressing challenges and opportunities facing our Navy, from addressing the pacing challenge of China and modernizing our capabilities, to investing in our most valuable asset – our people. As an immigrant who has dedicated his life to public service, Carlos exemplifies the core values of honor, courage, and commitment in defense of our country."

"We remain the preeminent force in the world because of leaders like Carlos, and I have no doubt our Navy and our nation will be well served. I congratulate him on his confirmation, look forward to working with him and take pleasure in welcoming him back aboard."

Carlos Del Toro Sworn in as 78th Secretary of Navy | Mirage News

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NPS Space Systems Grad Carlos Del Toro sworn in as 78th Secretary of the Navy (NPS.edu 13 Aug 21) ... Matthew Schehl

Naval Postgraduate School (NPS) Space Systems Engineering alumnus Carlos Del Toro was sworn in as the nation's 78th Secretary of the Navy, August 9. Del Toro, who is also a graduate of the Naval Academy and Naval War College, served 26 years in uniform followed by 17 years as CEO and President of a private sector firm.

Naval Postgraduate School (NPS) alumnus Carlos Del Toro was sworn in as the nation's 78th Secretary of the Navy, August 9. Del Toro served 26 years in uniform followed by 17 years as CEO and President of a private sector firm.

A 1989 graduate of NPS' Space Systems Engineering master's degree program, Del Toro brings a keen understanding of the value of advanced education, applied research, and technological leadership as the United States and the world grapple with the challenges presented by peer adversaries. In addition to his graduate degree from NPS, Del Toro also holds master's degrees in national security and strategic studies from the Naval War College and legislative affairs from George Washington University.

"As a graduate of the United States Naval Academy, the Naval Postgraduate School, and the Naval War College, I understand the importance of, and I have benefited from, professional military education," he told the Senate Armed Forces Committee during his confirmation hearing, July 13. "PME is a













necessary investment by the Department of the Navy to improve readiness across the force. PME reforms should concentrate on creating a relevant and challenging learning environment for officers and enlisted Sailors and Marines that is responsive to emerging threats.

"PME is a necessary investment by the Department of the Navy that improves readiness across the force by developing critical and creative thinkers," Del Toro said recently. "Any PME reforms should concentrate on fostering a realistic and challenging learning environment, operating within a continuum through the progression of ranks for both officers and enlisted Sailors and Marines, ultimately preparing them for emerging threats."

NPS President retired Vice Adm. Ann E. Rondeau offered congratulations to Del Toro on behalf of the NPS community, adding that she is eager to show Del Toro how far NPS has come since his time here as a student and the exciting future ahead as the institution sets out on a transformation vector to maximize its impact for and in support of the Naval services.

"To prevail in Great Power Competition, we must adapt and lead at the pace of technology to accelerate our advantage at sea. NPS is positioned to do that for the Fleet and Force, and transformation will further enable us to help our Navy and Marine Corps," she said.

"Secretary Del Toro fully understands this challenge through his brilliant entrepreneurial leadership success as well as through his distinguished career in the Navy, including his studies at NPS. In fact, when Secretary Del Toro received accolades for his warfighter relevant research when he studied electrical and computer engineering, his intellectual leadership was evident and cutting-edge. His ideas were so far ahead at the time that his research thesis remains in the restricted collection of the NPS library," she continued. "What was clear to NPS faculty was then-Lt. Del Toro's energy toward addressing important and relevant problems and developing solutions. He exemplifies the decisive advantage that warfighters bring to application of knowledge."

Del Toro's NPS thesis explored the utilization of bubble memory to capture satellite telemetry data, with NPS Distinguished Professor Dr. Rudy Panholzer, former Chair of Space Systems Academic Group, serving as his thesis advisor. Del Toro's diligent and focused academic work made an impression on his professor, who stayed in touch with him years after graduation.

"I was not surprised to see [Del Toro] achieve success in his career, whether it was on active duty, in private industry, and now in senior civilian leadership at the Pentagon," said Panholzer. "I recall him being remarkably diligent, motivated and inquisitive. He was a true self-starter who was always upbeat and positive."

Del Toro's active duty career as a Surface Warfare Officer in the Navy spanned 22 years, including command of an Aegis destroyer, the USS Bulkeley (DDG-84), from her christening through the first deployment. Del Toro launched and became president and chief executive officer of SBG Technology Solutions. This IT company supports Navy shipbuilding, artificial intelligence, cybersecurity, acquisition programs, space systems and training.

Del Toro now brings his education and wealth of experience to his new role as Secretary of the Navy at a time marked by heightened tensions with China and fiscal constraints. During his confirmation hearings, he articulated his vision, vowing to be "exclusively" focused on China while meeting the 355-ship goal set by Congress and investing in emerging technology.

"As our nation shifts from a land-based strategy over the past 20 years fighting the wars in the Middle East to a more dominant maritime strategy in the Pacific, particularly in our efforts to deter China, I do believe that our Navy and Marine Corps team will need additional resources to be able to fully field the combat effectiveness we will need as a nation," he said.

"China continues to develop sophisticated military capabilities to include surface, air, and undersea platforms while demonstrating aggressive behavior that flouts the rules-based order, threatening regional stability and security," Del Toro added. "I believe that it's imperative to make the right investments and modernization. We can't continue fighting the wars of yesterday; we have to work toward fighting the new wars of tomorrow."

NPS Space Systems Grad Carlos Del Toro sworn in as 78th Secretary of the Navy - Naval Postgraduate School













EDUCATION:

NPS Aviation Community Graduates Set to Take Command

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Three Naval Aviators completing their graduate degrees at the Naval Postgraduate School (NPS) – Lt. Cmdrs. Michael "Jeeves" Hooten, Philip "Lurch" Pretzinger and Austin "Truffles" Ordway – are slated for future command and to become Executive Officers (XO) of Naval Aviation Squadrons after their respective NPS graduations.

A trio of Naval Aviators attending Naval Postgraduate School (NPS) may be starting a trend — heading to command a squadron upon their graduation. All aviation community students attending NPS come to campus to research key operational problems, and to find innovative solutions to those problems, all while earning a master's degree in the process. However, not all of them will put their new education and skills to use at the command level right away.

U.S. Navy Lt. Cmdrs. Michael "Jeeves" Hooten, Philip "Lurch" Pretzinger and Austin "Truffles" Ordway will be doing just that as they are set to become Executive Officers (XO) of Naval Aviation Squadrons after their respective graduations.

While the NPS campus in Monterey, Calif. has a long history with Naval aviation, where it graduated 5,000 aviation cadets during World War II, these days the Navy sends some of its aviators to Monterey not for flight training, but to become innovative thought leaders, critical thinkers and decision-makers ready to lead in Great Power Competition and in an ever-increasing cognitive age.

In developing these leaders, NPS immerses these officers into the school's cutting-edge curricula to conduct applied research that addresses specific warfighting needs. For Hooten, Pretzinger and Ordway, each one is studying a specific operational need and taking away a transformational experience furthering their readiness to lead in an operational command.

According to U.S. Navy Capt. Edward "Tick" McCabe, NPS' Air Warfare Chair, Naval Aviation is looking for key abilities in prospective squadron commanders.

"Leaders are expected to bring to the table the ability to think critically and solve problems, and in some cases, technological challenges ... and organizational change challenges," said McCabe. "At NPS, our graduates leave here with the technical and intellectual edge that will help their commands to deter and prevail in the all-domain battlespace. For these three officers, who were fortunate enough to refine those skills at NPS, they are not just prepared to succeed, but to excel."

Like most NPS students, they were able to focus their problem-solving research on operational challenges they were familiar with from their time in the Fleet. With the help of NPS' expert faculty, there is potential for their findings to benefit the fleet, and in some cases, their solutions to see fleet-wide adoption.

For instance, Hooten's research focused on comparing operational costs to combat readiness requirements for F-18 Super Hornet Squadrons through an operational cycle. By comparing operational costs or what a squadron is supposed to produce, he found there is a significant difference in the outcome.

"My research looked at fiscal constraints and how it affects combat readiness," said Hooten. "I was able to identify certain types of Super Hornet squadrons who may not have been getting a commensurate return on investment in terms money spent on combat readiness. I also looked at finding economical options for the Strike Fighter community to achieve their combat readiness requirements, identifying options where funds may be available to redistribute to other requirements within the Naval Aviation Enterprise.

Hooten noted, "My research is designed to get people talking. If the Navy were to choose to follow what my thesis recommends, it would be a monumental shift in naval aviation."













Reflecting on his combined operational and NPS experiences, Hooten believes he has a new perspective and many objective tools he hopes to take to his future unit and command.

"In some of the most demanding situations, I found myself readily able to reflect on my past experiences and apply many of the concepts and frameworks we are taught here [at NPS]," said Hooten. "Particularly, our studies on leading for organizational effectiveness, strategic leadership, ethical leadership, and consensus-building, helped to better equip me to objectively evaluate past operational experiences, both successes and failures, and I am now able to more effectively apply the lessons learned from them."

While Hooten studied fighter jets, Pretzinger, a helicopter pilot, started his research with a question about helicopters that had puzzled him his whole career. In exploring the development of carrier aviation, he will be writing his thesis on, "Why are helicopters secondary to jets in the Navy's TacAir community?"

"My whole career, I've tried to figure out why we're kind of in a secondary role and there's never been a good explanation," said Pretzinger. "I'm kind of using this opportunity to look at it academically. Which I then will learn something academically to take back to the Fleet and try to apply these things as an XO to help the aviation community."

"NPS drives critical thinking," Pretzinger continued. "It's searching for and trying to understand other perspectives, including our military branches, the DoD, our allies, our partners, our adversaries. With that broader perspective, it'll help me as I go to squadron command and maybe further."

As for Ordway, he is still in the early stages of his NPS curriculum but has high hopes of integrating his financial management classes into a thesis project helping the Chief of Naval Air Training on a new aviation training program.

"The significance of coming [to NPS] is the focus on the leadership, higher-level thinking and the strategic thinking classes that we take, which are significant for later on in the career," added Ordway. "In addition, being here teaches you how you can teach other people in the future."

As pilots progress through their career on the path to serving as squadron commanders, getting out of the cockpit for higher education is imperative to develop their ability to identify, explore and solve complex warfighting challenges. As McCabe noted, this education from NPS will serve as a building block for their upcoming command tours.

"The reasons are simple, but extremely significant for Naval Aviation," said McCabe. "Education is important for our future, but the rigorous and extremely competitive requirements for command limit those educational opportunities. Officers who have already established their potential for command and have clearly demonstrated sustained superior performance are therefore able to take advantage of this opportunity."

"There is only one window available for an aviator to come to NPS and still make command," continued McCabe. "This window is immediately after a successful department head tour. Officers who are NPS graduates are highly educated, capable officers who are now starting to be in high demand."

Every student at NPS produces a thesis or capstone project, and that process enables students to find solutions. As graduates returning to the fleet, however, they are now equipped to be critical thinkers and solution leaders.

"Ideally, the skills they gained at NPS will enhance their already strong resumes and help facilitate a successful command tour," said NPS' National Security Affairs Program Officer U.S. Navy Cmdr. Paul Rasmussen. "A successful command tour will lead to increased responsibility and likely promotion to Captain for the three officers where they will lead large organizations at not only the operational but strategic level. At these levels of command, above-average levels of critical thinking and decision making are vital as we execute current strategy."

As Hooten notes, while he is ready to influence the next generation, he hopes more officers like him will gain from the operational and educational path he has traveled.

"It's really exciting to have that opportunity to shape and mold the next generation of aviators coming in," said Hooten. "I hope that by having more and more graduates from NPS selected for command, for it sends a signal to the rest of aviation and the rest of the Navy. We should be sending our top performers













and our top critical thinkers from the aviation community to NPS because they can take those critical thinking skills and all the tools and the perspectives that NPS offers back to the Fleet."

Both Pretinger and Ordway are looking forward to leading in their next assignments.

"I am very excited to get back to the Fleet, focus on getting flying again, and supporting our missions," said Pretzinger. "It'll be nice to get out with junior sailors, junior officers and get everybody working towards the same goal."

"It's just exciting to know that if you take the job seriously and do it well, you can have a lasting positive impact on all the people that walk through that door," said Ordway. "Having that influence as a commanding officer to make people excited about a career in the Navy is truly a gift."

Hooten is slated to serve as the executive officer (XO) of the "Redhawks" of Training Squadron (VT) 21 in Kingsville, Texas. In San Diego, Pretzinger will be the XO of the "Blackjacks" of Helicopter Sea Combat Squadron (HSC) 21, and after his graduation in June 2022, Ordway will serve as the XO of the "Eagles" of Training Squadron (VT) 7 in Meridian, Miss.

"Our future continues to be in good hands with these officers," said McCabe. "NPS has further prepared them to do exactly as the Air Boss directs. Fly, Fight, Lead and Win."

NPS Aviation Community Graduates Set to Take Command - Naval Postgraduate School

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RESEARCH:

Hybrid Air Vehicles Ltd Announces HAV and Naval Postgraduate School sign CRADA (Benzinga 10 Aug 21)

Hybrid Air Vehicles (HAV) and the U.S. Navy's Naval Postgraduate School (NPS) announce a collaboration to evaluate hybrid airship technologies in military applications.

BEDFORD, UK / ACCESSWIRE / August 10, 2021 / HAV and NPS have recently signed a Cooperative Research and Development Agreement (CRADA) to explore the impact that hybrid aircraft technologies may have on mobility resilience and flexibility in support of the US Navy and Marine Corps expeditionary warfighting capability.

Highly efficient and with a combination of payload capacity and endurance that is unmatched by other types of aircraft, Hybrid Air Vehicles leaders believe their Airlander family of aircraft have unique characteristics that are well suited to the applications this three-year CRADA seeks to explore. The aircraft's ability to take off and land from virtually any flat surface, even if unprepared, can facilitate operations from remote and austere locations.

NPS students and staff will engage fleet units across the Navy and Marine Corps to develop scenarios based on real-world exercises and deployments. Developing multiple scenarios will allow the team to consider multiple geographies as well as both logistics and mobility applications. These scenarios will then be modelled, and performance evaluated against jointly developed criteria. NPS and HAV will also generate a joint plan for field experimentation and demonstration of capability.

A unique aspect of this CRADA is the inherently inter-disciplinary nature of the technology exploration. Multiple interest groups across NPS will be able to collaborate with HAV on a variety of subjects within hybrid airship technology, from electric engines to material resilience. Additionally, NPS and HAV intend to utilize the emerging field of digital twin technology to explore how requirements development of large-scale transportation platforms can be made more efficient.

'We are excited to start our work with the NPS team to evaluate Airlander in USMC-led scenarios,' comments Nick Allman, HAV's Chief Operating Officer. 'Our previous experience during NATO Trial UNIFIED VISION confirmed that Airlander 10 can be a transformative surveillance asset. This CRADA is an excellent opportunity to validate Airlander's viability in a much wider range of defence applications including mobility and logistics.'













'The CRADA mechanism allows NPS to work in-depth with companies on specific emerging technologies,' said NPS Dean of Research Dr. Jeff Paduan. 'This is more important than ever because, today, industry is the prime source of innovation and capabilities. NPS, with our experienced officer students and our dedicated faculty, is an ideal partner to identify and expand upon the defense applications of these new technologies.'

This work will leverage HAV's knowledge of Airlander and NPS' extensive experience in military equipment requirements, force package deployment and redeployment, and Expeditionary Advanced Basing Operations (EABO). The CRADA brings together the experience and tools to model complex, long-duration scenarios to demonstrate platform viability.

Hybrid Air Vehicles Ltd Announces HAV and Naval Postgraduate School sign CRADA | Benzinga

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Electrodynamic tethers speed up satellite reentry timelines

(Space News 12 Aug 21) ... Debra Werner

Tethers Unlimited's Terminator Tape lowered a cubesat into Earth's atmosphere in eight months, while a nearly identical satellite without a 70-meter conductive tail is expected to remain in orbit for more than a decade.

A paper presented at the virtual Small Satellite Conference described three Terminator Tape deployments and offered convincing evidence that the technology can dramatically speed up satellite reentry, said Rob Hoyt, Tethers Unlimited founder and president.

Hoyt's hope is that people will employ tethers to help clean up the low Earth orbit (LEO) environment.

"With the population of satellites in LEO growing rapidly and projected to grow even more rapidly over the next decade, removing spent satellites as soon as possible will provide significant reductions in risks for debris-generating collisions," Hoyt told SpaceNews.

The Tethers Unlimited presentation covered the deployment of Terminator Tapes on three satellites: Alchemy, the **Naval Postgraduate School's** NPSat-1 and Prox-1, a satellite built by the Georgia Institute of Technology with funding from the U.S. Air Force Research Laboratory.

Alchemy and its twin satellite Augury were launched in November 2020 as part of the Dragracer mission, a campaign by Millennium Space Systems, TriSept Corp., Tethers Unlimited and Rocket Lab to measure the impact of an electrodynamic tether.

After Alchemy and Augury were launched on a Rocket Lab Electron and deployed in a 500-kilometer orbit, Alchemy activated its Terminator Tape. Eight months later, on July 19, 2021, Alchemy reentered Earth's atmosphere. Augury is expected to follow sometime between 2032 and 2037.

With data from the three missions, Tethers Unlimited is refining its predictions of satellite deorbit rates.

Prox-1 and NPSat-1, launched in June 2019, remain in orbit. Prox-1 released its Terminator Tape 90 days after its mission began. NPSat-1 deployed its Terminator Tape after 18 months.

Both missions moved to lower altitudes soon after their tethers were deployed. While they remain in orbit, the deorbit speeds for Prox-1 and NPSat-1 will increase with heightened solar activity over the next few year, said Harrison Stankey, Tethers Unlimited mechanical engineer, said Aug. 10 at the Small Satellite Conference.

Solar conditions have an important impact on Terminator Tapes, which rely on passive interactions with the neutral particles in the upper atmosphere and the ionospheric plasma to generate drag, Hoyt said.

"Decay rates for all spacecraft are more than an order of magnitude higher after deployment of the Terminator Tape," Stankey said. "Terminator Tape has shown its effectiveness as a deorbit device."

Electrodynamic tethers speed up satellite reentry timelines - SpaceNews

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FACULTY:

Tanker War 2.0: Iranian Strategy in the Gulf (Audio Interview)

(FPRI.org 10 Aug 21) ... Aaron Stein

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Tanker War 2.0: Iranian Strategy in the Gulf - Foreign Policy Research Institute (fpri.org)

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Professor Brenda Shaffer Specializes in international energy , Azerbaijan, and the Middle East (Video Interview)

Brenda Shaffer talks to #THECAPITOL on drone attacks caused by Iran, Iran regime assassinations, reviving the nuclear deal and the #UAE Azerbaijan relationship.

Maria Maaloof on Twitter: "Professor Brenda Shaffer Specialises in international energy, Azerbaijan, and the Middle East @ProfBShaffer talks to #THECAPITOL on drone attacks caused by Iran, Iran regime assassinations, reviving the nuclear deal and the #UAE Azerbaijan relationship https://t.co/61SZn11mm3 https://t.co/xOZ6TbiY7g" / Twitter

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ALUMNI:

McAdams appointed director of Talbot Emergency Services

(The Star 11 Aug 21)

Talbot County Council has appointed Michael "Mike" McAdams director of Talbot Emergency Services.

"Mike has years of experience in the areas of firefighting and emergency medical services, which will be a real asset to his position as director of Talbot County Emergency Services. He is an innovator in the field, having developed training for both fire and police personnel, as well as has worked in the area of special operations. I have known him both personally and professionally for many years and he will continue to raise the bar for these services in the county," said Clay Stamp, county manager.

McAdams has worked for the National Fire Operations Reporting System, where he dealt with national fire standards and best practices. He served 30 years with the Montgomery County Fire and Rescue Service, retiring as assistant fire chief of special operations. Most recently, he was project manager of the planning and organization section of the Maryland-National Capitol Region Emergency Response System.

"We are thrilled that Talbot County could get such a seasoned professional to lead our Department of Emergency Services. Talbot County is fortunate to have created a strong Emergency Services department with extremely dedicated personnel. Mike will be an asset to us as we continue to provide exceptional emergency services to our citizens," said Talbot County Council President Chuck Callahan.

McAdams has a Bachelor of Science in Emergency Health Services from the University of Maryland Baltimore County, and a Master of Arts in Defense and Security Studies from the **Naval Postgraduate**













School, Monterey, California. McAdams completed the George Washington University Institute of Regional Excellence program. He is a certified public manager.

"I look forward to giving back to a community like Talbot County and sharing my professional experience as this rural emergency services system continues to grow. I have always liked the Eastern Shore and its beauty, having vacationed here for a while," McAdams said.

McAdams is married and has four children.

McAdams appointed director of Talbot Emergency Services | Local | stardem.com

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WIDOW: Nellis AFB Airmen use tailor-made software for ABMS

(AF.mil 11 Aug 21)... Airforce 1st Lt. Nicolle E. Mathison

Nellis Air Force Base Airmen are utilizing the modern software application WIDOW, or Web-based Information Dominant Warfare, to digitize the tactical-level mission planning process.

The 100% government-owned code that is designated as the official United States Air Force Mission Planning Cell Tool enables real-time and distributed contribution, coordination and visualization of planning details so Airmen, Guardians and joint partners can focus on tactics and lethality.

Mission commanders, mission planning cell chiefs and their teams need only an internet connection and a browser to use WIDOW, which offers increased speed, organization and accuracy of planning tasks.

Applications like WIDOW will be able to live on the Advanced Battle Management System's secure military digital network environment and disseminate data to the edge, other applications and mission partners with speed and agility in an effort to achieve the Joint All-Domain Command and Control vision.

"What WIDOW provides the warfighter right now, is the ability to do collaborative, all-domain, tactical-level mission planning in a secure and cloud-hosted environment," said Maj. William Short, U.S. Air Force Fellow and Blue Horizons, Center for Strategy and Technology chief of staff at Air War College, Maxwell AFB, Alabama.

WIDOW uses Department of Defense Platform One's continuous Authority to Operate, or c-ATO, on Non-secure Internet Protocol Router (unclassified), Secret Internet Protocol Router (secret) and Joint Worldwide Intelligence Communication System (top secret) networks.

"Think of Platform One as a road that all DoD-approved applications or vehicles can operate on. This road has built-in rules and security measures, i.e. red/green lights, etc. The security measures enable DoD users with a Common Access Card to access the applications they need to execute their mission, at their respective security levels," Short said.

"WIDOW is only successful because of the zero barrier to entry for using it and the fact that you don't have to install it directly on a computer, like you do with so many legacy software applications," Short said. "WIDOW fills a gap that has never been filled by the mission-planning enterprise. It enables users to complete the mission-planning process defined in 3-3.IPE (Integrated Planning and Employment) in a distributed and collaborative way, where everybody who is a part of that mission can access mission data easily."

Warfighters use 3-3.IPE, which is a manual that outlines Air Force tactics, techniques and procedures for mission planning and employment. The manual details what data needs to be collected and what products should be generated with that data for each mission.

"What planners have historically had to do is take several individual pieces of mission data and manually input them into spreadsheets and other disconnected mission products as designated by 3-3.IPE and then save them on a shared drive or email them for dissemination to mission participants. If there is a missing or incorrect piece of information, then the process of saving, sharing and emailing happens again. This process is long, arduous and leaves a lot of room for error," Short said.

Platform One allows all tactical-level planners and their teams to login to WIDOW at the same time and simultaneously update the mission data set and products in real-time.











Additionally, Platform One automates the updates, security and access to WIDOW via the commercial software best practice known as DevSecOps. The process enables applications like WIDOW to receive direct-user feedback and implement that feedback more quickly, because tactical-level planners have direct access to the application's engineers.

This allows the engineers to truly understand the challenges and needs of the end user and then implement software updates as fast as possible.

"With DevSecOps, we can fix bugs and push new features on a timeline that most in the DoD have never seen before," Short said.

"Utilizing a common dataset, WIDOW also automatically produces common products necessary to fly and execute the missions during training exercises like Red Flag and Weapons School Integration. Some examples are coordination cards, tanker plans, mission timelines, asset flows, etc. that enable all mission participants to stay on the same page with what's going on in the mission-planning cycle, without needing to email each individual with updates," Short added.

"WIDOW improved the access, accuracy and timeliness of information required for the U-2 (Dragon Lady) pilot to effectively synchronize capabilities with the composite force," said Maj. John Mattson, former U-2 Weapons Instructor Course instructor and current **Naval Postgraduate School** student.

"While the U-2 easily deconflicts vertically by flying several miles above all of the other air domain players, the objective of WSINT is not to deconflict capabilities, but to integrate capabilities to achieve the desired effect. WIDOW has improved the U-2 pilot's access to mission-planning information and their ability to input timely refinements of mission planning-information in a manner that just wasn't practical with paper coordination cards for a geographically or temporally-dispersed pilot in a space suit. That's why the 19 WPS U-2 WIC cadre were early adopters and are continued users of WIDOW," Mattson added.

The next step for WIDOW is to build the digital bridge between the tactical and operational levels by connecting it to Kessel Run's family of applications that support the operational planning cycles in air operation centers.

This will enable operational and tactical planners to share data back and forth automatically and significantly reduce the need for shared drives, email and SharePoint to disseminate critical planning data.

"Kessel Run has created multiple modern software applications that live on the cloud, that digitize and replace manual processes for operational-level planning. WIDOW has done that for tactical-level planning, but these capabilities are not yet connected," Short said.

WIDOW is the result of Air Force leadership and mission-partner support of Airmen innovation. WIDOW is an example of how warfighters can directly accelerate change by identifying a need, building a vision, creating a prototype and developing it into an operational capability.

WIDOW: Nellis AFB Airmen use tailor-made software for ABMS > U.S. Air Force > Article Display

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Knox Co. Health Department resumes COVID data update

(WVLT 13 Aug 21)... Paige Hill

The Knox County Health Department epidemiology team will resume updating COVID-19 case count data on Tuesdays and Thursdays on their website.

"By increasing the frequency of our data updates, we can provide a clearer picture of the local situation," said Senior Director and Public Health Officer Dr. Martha Buchanan.

Officials stated even though Knox County is experiencing a rise in COVID-19 cases, 47 percent of the county's population is fully vaccinated and 52 percent have received at least one shot. The percentages are higher than the state average and ahead of 87 other Tennessee counties.

"I encourage Knox Countians to speak to their physician about the vaccine," said Mayor Jacobs. "Please stay home if you are sick, practice good hygiene, and follow health care guidance when













appropriate. I also encourage everyone to respect the choices our fellow citizens make. This is a great community, but we can't stay that way if we continue to aggressively tear one another down."

Roberta Strum has, additionally, been promoted to Director of Environmental Disease and Emergency Preparedness.

Strum served at the health department for 13 years, most recently the county's lead Emergency Preparedness Epidemiologist. She has a bachelor's degree in Public Health from the University of Tennessee, a master's degree from East Tennessee State University and is currently pursuing a Master of Science Degree in Homeland Security Studies from the **Naval Postgraduate School**.

Sturm, who serves as an instructor at the University of Tennessee, has also taught epidemiology and biostatistics at King University.

"Roberta has been an invaluable asset in the fight against COVID-19 in Knox County and was recently recognized as one of the County's Employees of the Month," said Know County Mayor Glenn Jacobs. "She has always been gracious in sharing information, always explains things in layman's terms, and is well-qualified to take on this new role."

Knox Co. Health Department resumes COVID data update (wvlt.tv)

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Health Department to Resume Twice-Weekly Data Update

(The Knoxville Focus 14 Aug 21)

The Knox County Health Department epidemiology team will begin updating COVID-19 case count data on their website on Tuesdays and Thursdays.

"By increasing the frequency of our data updates, we can provide a clearer picture of the local situation," said Senior Director and Public Health Officer Dr. Martha Buchanan.

At this point, the health department doesn't feel it's necessary to hold weekly briefings or restart the Joint Information Center. Rather, the mayor's Office and KCHD will work together to address all media inquiries. They ask that questions be sent

to Mike.Donila@knoxcounty.org, Abbey.Harris@knoxcounty.org,

and Kelsey.Wilson@knoxcounty.org and copied to communications@knoxcounty.org, which is a general mailbox.

Additionally, Roberta Strum has been promoted to Director of Communicable and Environmental Disease and Emergency Preparedness, filling the position vacated by Charity Menefee in July; she has served the health department for 13 years, most recently as the county's lead Emergency Preparedness Epidemiologist. Sturm has a bachelor's degree in Public Health from the University of Tennessee, a master's degree from East Tennessee State University, and is currently pursuing a Master of Science Degree in Homeland Security Studies from the **Naval Postgraduate School**. Sturm has also taught epidemiology and biostatistics at King University and serves as an instructor at the University of Tennessee.

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Health Department to Resume Twice-Weekly Data Update - The Knoxville Focus (knoxfocus.com)











Dowd Assumes Command at Southeast Regional Maintenance Center

(DVIDS 13 Aug 21)... Scott Curtis

Capt. Justin Dowd relieved Capt. John Lobuono as Commanding Officer of Southeast Regional Maintenance Center (SERMC) August 13, 2021 in a ceremony on Naval Station Mayport. Dowd is the seventh Commanding Officer at SERMC and reports from his previous assignment serving concurrently as U.S. Fleet Forces Command Surface Maintenance Branch Head, and Naval Surface Force, Atlantic Engineering and Maintenance Assistant Chief of Staff.

Dowd is a native of Anaconda, Mont. and graduated the U.S. Merchant Marine Academy in Kings Point, New York where he received dual Bachelors of Science degrees in Nautical Science and Marine Engineering. He also holds Masters of Science Degrees from the **Naval Postgraduate School** in Systems Engineering & Analysis and Mechanical Engineering.

His prior sea assignments include tours aboard USS Rainier (AOE 7) as Communications/ADP Officer where he earned his surface warfare officer qualification. Dowd also served as the Main Propulsion Assistant onboard USS Philippine Sea (CG 58). His ashore tours include Naval Postgraduate School and Naval Warfare Development Command. He executed a lateral transfer to the Engineering Duty Officer (EDO) community in 2007.

Dowd's EDO tours include Norfolk Ship Support Activity where he completed his EDO Qualification as Assistant Project Manager on USS San Antonio (LPD 17). He previously served at SERMC as Waterfront Operations Officer.

Prior to the change of command, Mr. Michael Haycock, Executive Director for Surface Ship Maintenance & Modernization and Deputy Commander, Navy Regional Maintenance Center presented Lobuono with a Legion of Merit medal for his accomplishments since assuming command of SERMC in June 2018 and his retirement from the Navy after 30 years of service.

"Capt. Lobuono and the Southeast Regional Maintenance Center team have made outstanding performance in ship repair, maintenance and modernization their top priority and their commitment is exemplified by the back to back Regional Maintenance Center Excellence Awards they received," said Mihael Haycock, Deputy Commander, Navy Regional Maintenance Center and Executive Director,

Surface Ship Maintenance and Modernization. "Maintaining readiness is not easy, but by working collaboratively, being innovative and most importantly, delivering on-time, high-quality work, Capt. Lobuono and the team always show us their commitment to excellence and I know this high standard will continue under the leadership of Capt. Dowd."

Throughout Lobuono's tour as commanding officer, SERMC supported operations and exercises conducted by ships homeported in Mayport, various visiting ships in the 4th Fleet, and augmented Forward Deployed Regional Maintenance Center in 5th Fleet to ensure the Navy's warships were maintained to the highest level of readiness. Those efforts culminated with SERMC being awarded 2020 CNO Safety Shore Award and the 2019 and 2020 Commander, Navy Regional Maintenance Center Excellence Award – recognizing SERMC as the premier Regional Maintenance Center (RMC) throughout the NAVSEA Enterprise.

Lobuono led the command through a successful 2019 NAVSEA Inspector General Inspection where SERMC was the first RMC ever to be found compliant in all areas. In addition, the command earned their fifth consecutive Retention Excellence Award and supported the first Freedom-class Littoral Combat Ship deployment to 4th Fleet.

Knox Co. Health Department resumes COVID data update (wvlt.tv)

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