

Weekly Media Report – Apr 6 - 21, 2023

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(Aero Space Testing) ... Ben Sampson

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(GovTech 19 Apr 23)

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According to Christopher Twomey, a U.S. Naval Postgraduate School security scholar in California, the assessment shows crucial improvements in Chinese capabilities.

Lessons of the Energy Crisis

(Algemeiner 9 Apr 23) ... Clifford D. May

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<u>Proceedings Podcast EP. 333: Sea Power and the Operational Level of War [Audio Interview]</u>

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Retired Navy Capt. Jeff Kline, **Naval Postgraduate School** Professor of Practice talks with host Bill Hamblet about his contribution to the American Sea Power Project.

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(Forbes 18 Apr 23) ... Paul Iddon

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Champion for Student Success, Interdisciplinary Research Earns NPS Hamming Award

(Navy.mil 21 Apr 23) ... Javier Chagoya

Naval Postgraduate School (NPS) Assistant Professor Douglas Van Bossuyt, Department of Systems Engineering, is the 2023 recipient of the Richard W. Hamming Faculty Award for Interdisciplinary Achievement.

ALUMNI:

Jennifer Clift '00, a Top Official of Dahlgren Technology, to Give UMW Commencement Speech

(Bolly Inside 6 Apr 23) ... Delia Reynolds

Her achievements and leadership in the field serve as a testament to the quality of education and opportunities provided by the University... Clift earned a bachelor's degree in business administration from Mary Washington and was recently inducted into UMW's College of Business Hall of Fame. She holds master's degrees in national security and strategic studies, with a concentration in insurgency and terrorism, from the United States Naval War College and in engineering systems from the **Naval Postgraduate School**. Currently, she is pursuing a doctorate in engineering at The George Washington University. Clift also holds a certificate in systems engineering and a diploma in joint professional military education. She is a member of the Acquisition Professional Community and a recipient of the Meritorious Civilian Service Award.

DoD Announces a New DIU Director

(Sat News 6 Apr 23)

Doug Beck, Vice President at Apple and a Navy Reserve Captain, has been named as the new director of the Defense Innovation Unit (DIU) as of May 1, 2023...Doug previously served as a nonpartisan appointed member of the Secretary of State's Foreign Affairs Policy Board, an Executive Advisor to three Chiefs of Naval Operations and to Special Operations Community leadership, and an adjunct lecturer on strategy and innovation for Flag and General Officers at the **Naval Postgraduate School**. For more than 15 years, he has served as a formal and informal advisor to senior uniformed and civilian leadership across the Department. He also serves as a part of Secretary of Commerce Raimondo's mentorship program for Commerce leaders. Doug has also served for eight years as a member of the Board of Directors of the Center for a New American Security and of the Advisory Board for Yale's Jackson School of Global Affairs.

Victor J. Glover Will Make History as the First Black Astronaut to go to the Moon

(Insider 10 Apr 23) ... Brianna Holt

This week, NASA announced the crew for its 2024 lunar voyage...A Pomona, California, native, Glover earned a Bachelor of Science degree in general engineering from California Polytechnic State University in 1999. As a part of the U.S. Air Force Test Pilot School program, he obtained a Master of Science degree in flight test engineering from the Air University at Edwards Air Force Base in 2007. Two years later, he earned a Master of Science degree in systems engineering from the **Naval Postgraduate School**. By 2010, he received a Master of Military Operational Art and Science from the Air University in Montgomery, Alabama.



<u>AFIT Administrator Named Dean of the College of Engineering and Computer Science at</u> Wright State

(Xenia Gazette 19 Apr 23) ... Scott Halasz

Darryl K. Ahner, Ph.D., dean for research at the Air Force Institute of Technology at Wright-Patterson Air Force Base, has been appointed dean of the Wright State University College of Engineering and Computer Science, effective July 3.

UPCOMING NEWS & EVENTS:

Apr 24: <u>SGL GEN Paul Nakasone: Director, National Security Agency and Commander, U.S.</u> <u>Cyber Command</u> May 1 - 5: <u>JIFX 23-3</u>

May 10 -11: NPS 20th Annual Acquisition Research Symposium



RESEARCH:

US Navy to Assess Use of Airlander Airship for Logistics

(Aero Space Testing) ... Ben Sampson

The US Navy is working with UK-based Hybrid Air Vehicles to assess the potential use of the Airlander airship as a logistics platform.

A research program is being funded by the US Department Of Defense's Operational Energy Office to simulate and analyze the use of an Airlander hybrid airship in the US Indo-Pacific Command (INDOPACOM).

The move represents a return to the US military for the Airlander, which started life in 2007 as an aerial platform for battlefield observation for the US Air Force, before the program was scrapped in 2014. Hybrid Air Vehicles bought the prototype and has continued to develop and test the concept for commercial applications since 2016.

The Airlander 10 will carry up to 100 passengers, have a range of 4,600 miles (7,400km), a top speed of around 85mph (km/h), and will be able to stay airborne for up to five days. HAV plans to begin regional passenger-carrying services with the airship in 2026.

The company has also recently set out plans to develop the Airlander 50, a larger version for freight applications which will enter service by 2030.

Marine Corps Captains Ben Cohen, the lead for the US Navy research program said, "As a logistics officer, the challenges with contested logistics are at the forefront of my mind.

"After attending a highly productive working group with the INDOPACOM Logistics, Plans, and Exercises Division in November of 2022, we designed this research effort to be able to respond to many of the challenges identified by the cross-functional team.

"When we reach the second phase, we will be ready to support modeling, simulation, and analysis of the hybrid aircraft in use cases that are defined by any combatant commander, but with a particular eye to contested logistics challenges in INDOPACOM."

Ben Cohen and Marine Corps Captain John Schmaltz became interested in the defense applications of hybrid aircraft like Airlander while students at the **Naval Postgraduate School** (NPS) and were introduced to HAV through the NPS alumni network.

Their thesis which assesses commercially developed, large-capacity transportation platforms, has been instrumental in the current work with HAV.

This latest project leverages commercial innovation to adopt and adapt commercial sustainable aviation technology, change operational concepts, and address logistical capability gaps.

The lack of existing infrastructure within INDOPACOM limits current asset flexibility for inter/intratheater lift, where access to deep water ports and airfields to accommodate appropriate aircraft is limited.

With no need for ports or runways, Airlander aircraft can land on any reasonably flat surface, providing much-needed mobility resilience and flexibility in support of distributed maritime operations and expeditionary warfighting.

Tom Grundy, CEO of Hybrid Air Vehicles said, "Our Airlander hybrid aircraft represents a gamechanging technology for ultra-low-emissions flight, that can also revolutionize the capabilities of the Department of Defense.

"Through our collaboration with Capt. Ben Cohen and through the R&D work with the **Naval Postgraduate School**, we are demonstrating how private investment and commercial innovation can be adapted to enhance logistics, intelligence, surveillance, and reconnaissance operations, and communications in the Pacific.

"The Zero Carbon Logistics Support Via Hybrid Aircraft project has the potential to transform the way the U.S. Navy and Marine Corps conduct operations in contested and distributed environments, providing them with an unparalleled advantage in the region."

The latest project builds on an existing three-year Cooperative R&D Agreement (CRADA) that has been running since August 2021 between HAV and NPS. As part of the CRADA Cohen and Schmaltz



have been exploring the potential of civilian hybrid aircraft technologies and evaluating how to adapt Airlander for US Marine Corps-led scenarios in logistics and mobility applications.

Cohen and Schmaltz's research emphasized the importance of digital technology, particularly digital twins, and expanded the opportunities for DOD applications of hybrid aircraft technology.

NPS' Modeling Virtual Environments and Simulation (MOVES) Institute analyzed the Airlander 10's potential for surface surveillance missions in the Arctic Ocean resulting in the development of a virtual reality view of defense-unique missions using hybrid aircraft.

The MOVES Institute is continuing this research, using the Airlander 10 concept for EABO and Littoral Operations in a Contested Environment (LOCE) modeling, which is crucial for ideating new concepts and examining how new technologies integrate with existing infrastructure. The MOVES Institute is planning to model other environments for HAV to showcase hybrid aircraft capabilities in both the civilian and defense sectors.

US Navy to assess use of Airlander airship for logistics | Aerospace Testing International

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Naval Oceanography Presents at DEPS Conference 2023

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Naval Oceanography Officers attending the **Naval Postgraduate School** presented their thesis and participated in the Directed Energy Professional Society (DEPS) 2023 conference in San Antonio, Texas, April 3-6.

The 2023 Annual DE S&T Symposium focused on sub-systems and component research as well as development aspects of DE in a mixed-access environment. There were symposium sessions at the Open/Public Release and CUI/Limited Distribution levels so that all attendees could participate.

LCDR Melissa JonMoore and LCDR Kelsey Rowe, both Meteorology and Oceanography Officers (METOC), attended the conference in the past week and presented their thesis work to a wide range of audiences. Also presented at the conference were Mr. Ryan Yamaguchi, an NPS faculty affiliate researcher, and Ph.D. candidate.

"My thesis work analyzed measurements taken from the Coastal Land Air-Sea Interaction (CLASI) 2021 field study to assess the coastal variability of optical turbulence," said LCDR JonMoore, **NPS** Student and METOC Officer. "The impact of atmospheric scintillation on optical beams, including High Energy Laser Weapon Systems (HELWS), is related to turbulence perturbations in the index of refraction known as optical turbulence."

DEPS intends to be the premier professional organization for the advocation and exchange of information between academia, industry, service laboratories, and warfighters while continuing to develop and support the next generation of scientists and engineers in Directed Energy.

JonMoore continued "I presented these results during the conference to highlight the strong vertical and temporal variation of optical turbulence within the lowest 12 m of the atmospheric boundary layer where most forecast models do not have sufficient resolution to accurately represent the small-scale turbulent structures."

"As part of the Fog and Turbulence Interactions in the Marine Atmosphere (FATIMA) project sponsored by ONR, my research aims to improve the fundamental understanding of the marine-fog life cycle, focusing on understanding and quantifying the relationship between fog microphysics and their impact on optical propagation," said LCDR Rowe, **NPS** Student, and METOC Officer. "Characterizing and forecasting fog is not only vital for operational safety but of increasing importance due to the impact on optical attenuation in applications such as free-space optical communication, use of Electro-optical and Infrared (EO/IR) sensors, and high-energy laser weapon systems."

DEPS serves the DE Community through the volunteer efforts of its nearly 1,000 members. They represent a wide cross-section of the DE community.



JonMoore closed her comments about her work and the conference with, "Directed Energy offers a wide range of applications in the battlespace, from improved targeting to optical dazzling, and ultimately, hard kill via High Energy Lasers. A better understanding of how lasers interact with our atmosphere improves our targeting algorithms, offering the warfighter a higher probability of kill per shot and therefore helping to keep our sailors safe from rapidly evolving threats."

All presenters worked on their thesis/dissertation under the guidance of Professor Qing Wang in the Meteorology Department of NPS.

Her group is actively involved in highly Navy-relevant research subjects such as the impact of the atmosphere on electromagnetic (EM) and electro-optical (EO) wave propagation in addition to the basic understanding of the marine atmospheric boundary layers sponsored by the Office of Naval Research (ONR) and Joint Directed Energy Transition Office (DE-JTO). Her work is of significant interest to the DE community.

Rowe finished her comments by saying, "Increased understanding of coastal fog will enhance our ability to exploit the battlespace and increase lethality in an otherwise mission-limiting environment. Attending the Annual Directed Energy Science and Technology Symposium was an invaluable opportunity to engage with professionals from a comprehensive range of specialties from atmospheric propagation to machine learning and laser beam control. DE is a high-impact field, and I look forward to leveraging the knowledge and connections I gained from this experience to enhance the operational employment of these systems in the Fleet."

All the presented thesis research work was well-received by the audiences.

The Directed Energy Professional Society (DEPS) is a professional organization for the advocation and exchange of information between academia, industry, services laboratories, and warfighters to develop next-generation scientists and engineers in Directed Energy (DE) and aid in the research, development, and operational transition of DE technologies. DEPS holds Science and Technology symposiums yearly. This year's symposium was in San Antonio, Texas from 3-6 April 2023.

The **Naval Postgraduate School** provides defense-focused graduate education, including classified studies and interdisciplinary research, to advance the operational effectiveness, technological leadership, and warfighting advantage of the naval service.

Naval Oceanography has approximately 2,500 globally distributed military and civilian personnel, who collect, process, and exploit environmental information to assist Fleet and Joint Commanders in all warfare areas to guarantee the U.S. Navy's freedom of action in the physical battlespace from the depths of the ocean to the stars.

Naval Oceanography Presents at DEPS Conference 2023 > United States Navy > News Stories Naval Oceanography Presents at DEPS Conference 2023 - EIN Presswire (einnews.com)

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Macomb County Police Bolster Mental Health Response

(GovTech 19 Apr 23)

It is estimated at least 20% of police calls for service involve a mental health or substance use crisis, and for many departments, that demand is growing according to the American Psychological Association.

Veteran law enforcement administrators in Macomb County have noticed their officers are responding to a steadily increasing amount of calls involving someone struggling with mental illness.

Last month in Warren, a suicidal man who suffered from depression and had recently lost his job and his wife, barricaded himself in a residence on Joanne Avenue and fired more than 10 rounds during negotiations with police. The incident ended peacefully with the man coming out of the house and officers working with the family to get him to a mental health facility.

In Eastpointe last year, a young man experiencing a mental crisis walked into a city council meeting, approached one of the council members seated at the table and indicated he needed the police. Public Safety Director George Rouhib, who was in attendance, told him he could help and gently guided him



into the atrium. Rouhib was able to get in contact with family members and get the young man back to the mental health facility that he had apparently exited.

It is estimated at least 20% of police calls for service in the United States involve a mental health or substance use crisis, and for many departments, that demand is growing, according to a report by the American Psychological Association (APA).

"The amount of calls involving mental illness have been increasing for a long time, and then we saw a massive increase when the COVID pandemic hit," said Sterling Heights Police Chief Dale Dwojakowski. "Everyone was shut down and locked down and isolated and people who were already kind of struggling were really in trouble and the safety nets became overwhelmed."

Dwojakowski says more than 30% of the calls his department responds to involve someone experiencing mental health issues.

In a nationwide survey of more than 2,400 senior law enforcement officials conducted by Michael C. Biasotti, formerly of the New York State Association of Chiefs of Police, and the **Naval Postgraduate School**, about 84% said mental health-related calls have increased during their careers. Sixty-three percent of these law enforcement officials said the amount of time they spend on these calls has also increased.

The rising numbers, coupled with widespread concerns about police brutality, have prompted more police departments to partner with mental health professionals in order to provide officers in the field with training that enables them to diffuse these situations.

The goal of the training is to provide a compassionate and effective crisis response to an emergency situation that is the least intrusive in a person's life, while providing individuals with mental disorders or addictions access to medical or mental health treatment needed.

"Calls involving mentally ill people have been on the rise for 20 years ever since a lot of funding for mental health care was cut," said Warren Police Commissioner William Dwyer. "The Warren Police Department is interacting with people with mental illness several times a day.

"Many times the interactions take place without force or incident but unfortunately, sometimes they escalate into dangerous situations."

So far this year, Warren police have responded to 430 calls involving someone dealing with mental illness.

The increase in mental health calls has prompted local police departments to implement specific measures to effectively deal with the needs of their communities.

In Eastpointe, Rouhib created a crisis intervention team last year with six officers specially trained to deal with people experiencing a mental crisis.

"The critical response team is trained in talking to people, building trust and getting them the help they need," said Rouhib. "If we have reason to believe someone is dealing with mental illness, one of the CIT officers will be there to calm them down and get them into an ambulance."

Eastpointe's four police chaplains and a fire chaplain are also trained in crisis response. Last year, Eastpointe responded to 27,725 calls and Rouhib estimates about 25% of them involved the CIT.

"When you're dealing with someone in a mental crisis, you have to know what kind of body language, facial expressions and voice tone to use to diffuse the situation," said Rouhib. "The CIT is trained in talking to people, building trust and getting them the help they need.

"We can't just go in there like storm troopers; we have to be equipped to deal with people using compassion and empathy."

In November 2021, Sterling Heights hired a community social worker. She has been so effective and helped with so many cases involving residents struggling with mental illness that Dwojakowski requested a second one be added in the 2024 fiscal year budget.

In the 17 months social worker Amy Compton, LLMSW has been in her position, she has dealt with 274 cases involving mentally ill residents who initially came into contact with the police. She has managed 24 hoarding cases; 25 cases of domestic violence; 10 cases of substance abuse; several people experiencing delusions or psychotic breaks; as well as other types of cases.

Compton is a city social worker assigned to the police department because it deals with the most cases requiring a social worker.



"At the time we hired here there were only a few municipalities in the state that had a social worker; it was a very, very new concept," said Dwojakowski. "The rise in mental health calls were off the charts and we needed someone to follow up with family and make sure the person was getting help."

Sterling Heights Mayor Michael Taylor said he hopes his city can be a leader in helping other cities use innovative ways to address the mental health crisis. He believes having a social worker and putting programs in place like Hope Not Handcuffs and COMEBACK for people dealing with drug addiction provides better service to residents than simply arresting people in crisis.

"A lot of things that manifest as crime, the underlying problem is a mental health disorder," said Taylor. "If people can be treated rather than being thrown in jail it is a huge benefit to the community and now, we have the resources to deal with the underlying condition.

"Amy Compton has handled something like 300 cases and she is having a direct impact on our residents."

Sterling Heights and Warren police officers will also be ramping up training that helps them effectively deal with people in mental crisis. Mental health training is currently mandatory in both departments, but Dwojakowski and Dwyer say they plan to increase training opportunities. Dwyer said the training helps his officers learn to recognize someone who is in mental crisis as well as how to deescalate potentially volatile situations,

"Our police are armed with a set of tools to get bad guys, but not to deal with someone with mental illness so the next 12 months we are having an uptick in training," said Dwojakowski. "There are not enough resources for people struggling with mental illness so the residents call 911 because they know we show up 24/7."

While most people think of the barricaded gunman scenario when considering police calls involving mental illness, cases where people are delusional or hallucinating are more common and can be very difficult to handle.

"The barricaded gunman is easy because if someone is a danger to themselves, we use kid gloves and we get them to the hospital," said Dwojakowski. "The tough cases are when they are delusional and saying weird things to their neighbors or hoarding; who fixes that problem?"

Dwyer believes strongly more funding needs to go toward giving people access to mental health care including opening more facilities where people can get treatment. Many times, he said, people can't find a place to get treatment even if they have the money to pay for it.

"I hope the legislature would look at more funding for mental health because I think that should be a big priority," said Dwyer. "Fifty percent of barricaded gunman or mass shooting incidents are related to mental health.

"There is absolutely no easy solution for mental illness; it has to be multifaceted as far as how you deal with it."

Macomb County Police Bolster Mental Health Response (govtech.com)

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FACULTY:

China Is Building New Subs And Missiles To Reach U.S.: Infographics

(Tipp Insights 6 Apr 23)

According to Pentagon reports, China operates "near-continuous" submarine patrols in the South China Sea. Type-094 Jin-class boats will be replaced by advanced Type-096s, equipped with new, longer-range Julang-3 ballistic missiles that can hit the continental U.S. from Chinese home waters.

According to Christopher Twomey, a U.S. Naval Postgraduate School security scholar in California, the assessment shows crucial improvements in Chinese capabilities.



"We're going to want to have our SSNs [nuclear-powered attack submarines] trying to tail them... so the extra demands on our assets are clear," said Twomey. "But the point here is that the information -- the near continuous patrols -- has changed so rapidly that we don't know what else has changed."

The Chinese subs are now deploying a third-generation missile, the Julang-3 (JL-3), General Anthony Cotton, the U.S. Strategic Command commander, told a March congressional hearing.

With an estimated range of more than 10,000 kilometers (6,214 miles) and carrying multiple warheads, the JL-3 allows China to reach the continental United States from Chinese coastal waters for the first time, the Pentagon reports.

And within a few years, these missiles will be carried by stealthier Type-096s boats, warns Timothy Wright at London's International Institute for Strategic Studies.

"That will be of concern to the United States because it will stretch U.S. defenses, hold more targets at risk, and they will need addressing with additional conventional and nuclear capabilities," Wright said. China Is Building New Subs And Missiles To Reach U.S.: Infographics (tippinsights.com)

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Lessons of the Energy Crisis

(Algemeiner 9 Apr 23) ... Clifford D. May

Energy policy is national security policy. So when political leaders get energy policy wrong, they get national security policy wrong.

An obvious example: Germany for years eagerly increased its dependence on Russian oil and gas. German diplomats thought they were implementing a clever strategy: "We're making Putin dependent on our money!" Then, just over a year ago, Russian tanks rolled into Ukraine. Russian hydrocarbons stopped flowing to Europe.

But it's not imperialism alone that's to blame for what Brenda Shaffer calls the world's "worst energy crisis since World War II."

A research faculty member at the US **Naval Postgraduate School** and a senior adviser for energy at the Foundation for Defense of Democracies, she delivered a lecture on this topic last month at the Center for Global Security Research at Lawrence Livermore National Laboratory.

Lucy, Maia, and Rina Dee -- a mother and her two daughters, from the yishuv of Efrat -- were murdered...

In addition to relying on Russia for a strategic resource, she explained, German energy policy for almost a decade has aggressively promoted solar and wind power while dis-investing from hydrocarbons. This has led to "the collapse of many energy-intensive industries in Europe."

President Biden has adopted similar policies. His Inflation Reduction Act has had no impact on inflation. Instead, it provides enormous subsidies for "renewables."

The cost to taxpayers, according to a Goldman Sachs estimate, will be a stunning \$1.2 trillion over 10 years—funds that will not, obviously, be available for strengthening national security at a time of intensifying threats and challenges.

Biden's energy policy disregards a basic fact: For industrialized economies to function when the sun isn't shining and the wind isn't blowing, there must be what Shaffer terms a "baseload or a stable source of energy." Currently, only hydrocarbons or nuclear power can provide that.

She notes that natural gas, "the cleanest of the fossil fuels with very little air pollution impact," is also a significant input in fertilizers. Restricting the production of natural gas has raised the price of food. That's good for no one and especially painful for the poor.

Most Western leaders seem oblivious, nodding along as UN Secretary-General Antonio Guterres insists that a "climate time-bomb is ticking."

That was his response to the most recent report from the Intergovernmental Panel on Climate Change (IPCC) which acknowledged: "Very high emission scenarios have become less likely but cannot be ruled out."



Climate scientist Roger Pielke, Jr. noted that the same could be said of an extraterrestrial invasion. Should implementing policies to cope with Martians now be the West's highest priority?

Thanks to Guterres and other alarmists, 60 percent of people living in wealthy countries think climate change "is likely to bring an end to humanity," as Bjorn Lomborg, president of the Copenhagen Consensus Center, recently wrote. "This is not only untrue," he added, "it is also harmful because it makes people embrace bad policies."

Lomborg has estimated that if every nation "fulfills every promise" made in the Paris Climate Agreement of 2015, the reduction in temperature rise will be 0.17 degrees Celsius. That would make no difference whatsoever.

He adds: "To fulfill the promises made in the Paris climate accords, the United Nations says, annual reduction by 2030 would have to be eleven times what we managed to achieve when the world ground to a halt during the Covid lockdowns. That is hardly realistic."

Meanwhile, Germany and other European nations have been buying and burning more coal—the most polluting hydrocarbon—to make up for the oil and gas they no longer receive from Russia.

China is building about one dirty coal-fired plant every week—more than the rest of the world combined. Pollution and CO2 emissions from those plants will vastly exceed any emissions reductions Americans and Europeans can possibly achieve.

China already accounts for more than a quarter of all global CO2 emissions. True, Beijing is also increasingly utilizing solar and wind power. But that's to augment hydrocarbons rather than replace them—a sensible policy.

China's rulers also know they will hugely benefit if a global energy system led by the United States the world's largest producer of hydrocarbons—transitions to one led by China—the dominant player in renewable technologies, rare earths minerals and components used in the electric vehicles that the Biden administration is spending taxpayer dollars to bribe the auto industry to sell and consumers to purchase.

Those vehicles will require vast amounts of electricity that can't be generated by renewables alone or distributed adequately by an aging and unreliable grid. Currently, only 3 out of 100 cars in California are EVs. Yet the state recently asked owners for "voluntary electricity conservation" because demand for electricity was exceeding supply. Want to bet that electricity conservation won't be voluntary a few years from now?

This column began by pointing out that energy policy is national security policy. But, as Shaffer noted in her lecture, for many European and American leaders, energy policy has become instead "a subset of climate policy."

The purpose is to virtue signal. That's why you'll see them boast that their policies "address" climate change. Anyone paying attention knows these policies won't stop or even slow climate change.

The world has warmed by 1.1 Celsius over the last 150 years. Adapting to another degree or two of warming is doable at a reasonable cost. If we want to reduce pollution and carbon dioxide emissions there's a simple way: utilize more natural gas and nuclear power. Why do most climate activists reject both energy sources?

Current American and European policy—attempting to eliminate hydrocarbons and force a transition to renewables—is weakening national security, causing serious economic dislocations, and making people poorer.

That's the most important lesson of the energy crisis. European and American leaders are refusing to learn it.

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Proceedings Podcast EP. 333: Sea Power and the Operational Level of War [Audio Interview]

(USNI 17 Apr 23)

Retired Navy Capt. Jeff Kline, **Naval Postgraduate School** Professor of Practice talks with host Bill Hamblet about his contribution to the American Sea Power Project.

Proceedings Podcast EP. 333: Sea Power and the Operational Level of War (usni.org)

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Does Turkey Have A Problem With The U.S. Navy?

(Forbes 18 Apr 23) ... Paul Iddon

Two separate incidents this year involving a U.S. submarine and aircraft carrier suggest that Turkey is wary of the U.S. Navy's presence near its shores in the Eastern Mediterranean. Popular conspiracies on Turkish social media about the nefarious purpose of the U.S. naval presence near Turkey's waters also suggest that at least a segment of the Turkish public feels hostile about it. But is that truly the case?

In early April, the USS San Juan (SSN-751), a Los Angeles-class submarine, docked at Limassol in the Republic of Cyprus. The Turkish Republic of Northern Cyprus (TRNC), a separatist political entity only Turkey recognizes, predictably condemned the move. The Turkish Foreign Ministry promptly issued a statement expressing "strong support" for the TRNC's condemnation.

That wasn't the only incident regarding the anchoring of a U.S. Navy vessel that Ankara opposed in recent months. Following the tragic earthquake that devastated Turkey in February, the U.S. offered humanitarian assistance, dispatching the aircraft carrier George H.W. Bush. Turkish nationalists, including some journalists, took to social media, expressing strong opposition and promoting conspiracy theories about the carrier's presence.

Turkish Foreign Minister Mevlut Cavusoglu issued a statement dismissing the prospect of the U.S. carrier docking in Turkey. "We decide who will come or not to Turkey's territorial waters," he said, according to Turkish media. "There was no such request from America. Even if such a request came, there is no need for it. We will not allow it."

Ryan Gingeras, an expert on Turkey and a professor in the Department of National Security Affairs at the **Naval Postgraduate School**, does not believe such incidents reflect general Turkish antagonism toward the U.S. Navy in the region.

"There is no evidence that suggests that there is a generally negative perception [in Turkey] of the U.S. Navy in the Eastern Mediterranean," he told me.

"Ankara very specifically, however, does not wish any foreign power to establish stronger military ties with the Republic of Cyprus (or the Southern Cypriot Greek Administration as Turkey refers to it)," he said. "Otherwise, the U.S. Navy does regularly cooperate and interact with the Turkish Armed Forces."

Even though the U.S. and Turkey may have policy disagreements, Gingeras reiterated that this doesn't mean Turkey is "generally hostile" to the American naval presence in the Eastern Mediterranean.

Conspiracy theories regarding the U.S. military's intent in the region and toward Turkey are nothing new. Widespread opposition to the Iraq War fueled anti-American sentiment and conspiracy theories in Turkey. When Tomahawk cruise missiles launched by the U.S. Navy missed their targets in Iraq and crashed in southeastern Turkey during the 2003 invasion, locals believed it was an intentional action aimed at punishing Turkey for not supporting the Iraq War.

On July 4, 2003, U.S. soldiers in Iraqi Kurdistan captured Turkish military personnel who allegedly planned to assassinate a local governor to destabilize the region as a pretext for a Turkish military intervention. Photographs of those Turkish troops with hoods over their heads sparked outrage in Turkey. The following year, a Turkish novel depicting a war between Turkey and the United States became an instant bestseller, mainly due to anger in Turkey over the Iraq War and "the Hood event."



In 2021, Turkish youth in Istanbul assaulted a U.S. Navy civilian employee and placed a hood over his head in clear revenge for that incident and subsequent American support for Syrian Kurdish fighters Turkey considers terrorists.

There was also a much earlier incident involving Turkey and the U.S. Navy that's mostly forgotten in the United States.

On Oct. 1, 1992, two U.S. Sea Sparrow missiles fired by the U.S. aircraft carrier Saratoga during an exercise in the Aegean Sea struck the TCG Muavenet, a Turkish destroyer. The missiles killed seven Turkish naval personnel, including the ship's captain, and injured 22 others. Turks did not believe the American explanation that the incident was merely an accident.

Suleyman Ozeren, a professorial lecturer at the American University and senior fellow at the Orion Policy Institute, noted that the Muavenet incident and the Hood event were "deeply felt by the Turkish people and left deep scars."

However, he argued that these historical incidents alone do not explain the present anti-American sentiment in Turkey.

"The ruling AKP (Justice and Development Party) has had a dual approach to the United States for years," Ozeren told me. "While the AKP officials and (Turkish President Recep Tayyip) Erdogan have been pushing for anti-Americanism sentiment in Turkey, they were threading a fine line not to try the United States' patience too far. The years-long strategy has gotten worse in recent years."

As part of that strategy, Erdogan and the AKP have attempted to deflect blame for crises or scandals by attacking the U.S. or stirring up anti-Americanism to divert public attention and anger.

"So, the disinformation about the presence of the USS George H.W. Bush carrier group and connecting it to the devastating earthquake was an easy take-on for the AKP to divert the public outcry from AKP's emergency management disaster," Ozeren said.

He also pointed to the "deep distrust" that has emerged between the United States and Turkey under Erdogan. This distrust has partly been due to "Ankara's aggressive military activism" that has isolated the country further.

"In response to Ankara's actions, the U.S. has shifted and repositioned its long-standing regional policies, including toward Cyprus and Greece," Ozeren said.

"It is the elections season in Turkey, and facing economic, social, and political crises, it wouldn't be a surprise to see Erdogan using conspiracies and attacking the U.S. in the coming days."

Does Turkey Have A Problem With The U.S. Navy? (forbes.com)

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Champion for Student Success, Interdisciplinary Research Earns NPS Hamming Award

(Navy.mil 21 Apr 23) ... Javier Chagoya

Naval Postgraduate School (NPS) Assistant Professor Douglas Van Bossuyt, Department of Systems Engineering, is the 2023 recipient of the Richard W. Hamming Faculty Award for Interdisciplinary Achievement.

"NPS is a special place for cross-cutting research on real Navy, DOD needs," said Van Bossuyt. "Our research impacts many aspects of the naval enterprise and DOD, including installation and operational microgrid resilience; additive manufacturing for the surface fleet and expeditionary forces; assault amphibious vehicle failures; UAS and other UxS systems and C-UAS systems; a Zero-Trust philosophy for systems engineering and operations; and sustainment and maintenance model verification and validation, among others."

Van Bossuyt, who arrived at NPS in 2018, says providing the highest instruction to his students is a passion, and one of his three pillars of scholarship – teaching, research and service. And it shows, as he consistently receives high marks in student surveys for his teaching and mentorship – which in fact led to his receipt of the Hamming Teaching Award in 2022.



Recognized for his interdisciplinary work with this latest accolade, his research and scholarship is not solely within his own discipline, Systems Engineering, but cross-pollinates with other departments on campus, including Computer Science, Electrical and Computer Engineering, Operations Research, Defense Analysis (DA), Information Systems, and the Modeling, Virtual Environments and Simulation (MOVES) program. And Van Bossuyt has embraced hybrid and distance learning modalities, seamlessly working in both environments.

In the execution of this research, Van Bossuyt ensures his students are in position to publish their work, bringing a recognition to their efforts that extends well beyond the NPS campus.

"My students have been lead authors on 13 of the 20 peer-reviewed journal articles that I have published in the last two years, disseminating research beyond NPS' library to the right people in the Pentagon. I also have advised or co-authored with 144 students," he said.

Van Bossuyt has also implemented a "manuscript option" through the students' thesis preparation. "This means student thesis documents are primarily comprised of a journal manuscript prepared for submission," said Van Bossuyt. "This puts students in the lead on publishing their research.

"I am now implementing appropriate renditions of the 'manuscript option' with my capstone and Ph.D. students and several of my SE colleagues have followed suit," he added. "Additionally, the Computer Science department is also trialing the concept. This has led to many wonderful opportunities to collaborate, share resources, and compare notes with my colleagues to maximize student success."

Van Bossuyt says this interdisciplinary research at NPS is an indicator of just how strong the school recognizes and invests in cross-pollination of its faculty and programs. This has also provided him with an opportunity to support a very large number of students in varying capacities.

"Since 2018, I have advised 19 Systems Engineering master's students, co-advised 11 master's students, and been a second reader for six master's students. I have also advised, co-advised, or been the second reader for 17 capstone teams totaling 94 students, and have supervised three project teams for the Engineering Systems master's program with eight students total," Van Bossuyt explains.

"I am supervising two Systems Engineering doctoral students and am/have been on four doctoral committees. This interdisciplinary research cannot be achieved without students and faculty from many disciplines across campus," he added.

All totaled, Van Bossuyt's impressive impact on NPS and its students over the past few years is worth recognition, but he is quick to point to the NPS community, and its unique mission and students, that are the catalysts for his success.

"The whole is greater than the sum of its parts, and that's the synergistic value of the NPS team," he said. "It's rare and special for an assistant professor to conduct the kinds of research we're engaged with at NPS ... There are many other faculty who could have been selected for this award, as we are all striving to collaborate along different disciplines. We couldn't do this kind of research without collaboration."

The Richard W. Hamming Faculty Award for Interdisciplinary Achievement, named after NPS professor emeritus Dr. Richard W. Hamming, annually highlights one faculty member who demonstrates a commitment to interdisciplinary scholarship and exceptional teaching skills. Hamming's dedication to teaching and research are well known, specifically in the mathematics, computer science and telecommunications fields of study. Hamming taught at NPS as an adjunct professor from 1976 to 1997.

<u>Champion for Student Success, Interdisciplinary Research Earns NPS Hamming Award > United</u> States Navy > News Stories

Champion for Student Success, Interdisciplinary Research Earns NPS Hamming Award - Naval Postgraduate School

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ALUMNI:

Jennifer Clift '00, a Top Official of Dahlgren Technology, to Give UMW Commencement Speech

(Bolly Inside 6 Apr 23) ... Delia Reynolds

(UMW 6 Apr 23) ... Lisa Chinn Marvashti

Her achievements and leadership in the field serve as a testament to the quality of education and opportunities provided by the University

Jennifer Clift, a University of Mary Washington alumna and senior scientific technical manager and chief technology officer for the Naval Surface Warfare Center Dahlgren Division (NSWCDD), will deliver the university's 112th Commencement speech on May 6, 2023

Clift oversees the Center's innovation laboratory, science & technology portfolio, academic partnering, and technology transfer efforts

She has served in various technical and organizational leadership roles throughout her 25-year career with NSWCDD, including deputy head of the Electromagnetic and Sensor Systems Department and director of the former Irregular Warfare Office

Jennifer Clift, a University of Mary Washington alumna and senior scientific technical manager and chief technology officer for the Naval Surface Warfare Center Dahlgren Division (NSWCDD), will deliver the university's 112th Commencement speech on May 6, 2023. Clift oversees the Center's innovation laboratory, science & technology portfolio, academic partnering, and technology transfer efforts. She has served in various technical and organizational leadership roles throughout her 25-year career with NSWCDD, including deputy head of the Electromagnetic and Sensor Systems Department and director of the former Irregular Warfare Office. Clift earned a bachelor's degree from Mary Washington and holds master's degrees in national security and strategic studies and engineering systems.

Following UMW News, Jennifer E. Clift, a University of Mary Washington alumna and senior scientific technical manager and chief technology officer for the Naval Surface Warfare Center Dahlgren Division (NSWCDD), will deliver the 112th Commencement speech on Saturday, May 6, 2023.

Clift has been with NSWCDD for 25 years and has held various technical and organizational leadership roles throughout her career. As deputy head of the Electromagnetic and Sensor Systems Department, she led a 600-person organization that supported research and development in electronic warfare, spectrum operations, and advanced sensors. She has also served as head of NSWCDD's Electromagnetic Effects and Electronic Warfare and Sensor Systems divisions and as director of the former Irregular Warfare Office, completing assignments at the U.S. Special Operations Command and the U.S. Central Command.

In her current role, Clift drives the vision and heads the efforts for advancing the Center's technical capabilities through investments, partnerships, and education. She oversees the Center's innovation laboratory, science and technology portfolio, academic partnering, and technology transfer efforts.

Clift earned a bachelor's degree in business administration from Mary Washington and was recently inducted into UMW's College of Business Hall of Fame. She holds master's degrees in national security and strategic studies, with a concentration in insurgency and terrorism, from the United States Naval War College and in engineering systems from the **Naval Postgraduate School**. Currently, she is pursuing a doctorate in engineering at The George Washington University. Clift also holds a certificate in systems engineering and a diploma in joint professional military education. She is a member of the Acquisition Professional Community and a recipient of the Meritorious Civilian Service Award.

As a distinguished alumna and leader in the technology industry, Clift is an inspiring choice to deliver the Commencement speech at Mary Washington. Her achievements and leadership in the field serve as a testament to the quality of education and opportunities provided by the University. The graduating class will undoubtedly benefit from her insights and advice as they embark on their own professional journeys.

The 112th Commencement will be held on Saturday, May 6, at 9 a.m. on Mary Washington's Ball Circle. The event will mark the culmination of the graduates' hard work and dedication, and the



beginning of their next chapter in life. With Jennifer Clift as the Commencement speaker, it promises to be a memorable and inspiring event.

Jennifer Clift '00, a Top Official of Dahlgren Technology, to Give UMW Commencement Speech -Bollyinside

<u>Top Dahlgren Technology Official Jennifer Clift '00 to Deliver UMW Commencement Address -</u> <u>News</u>

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DoD Announces a New DIU Director

(Sat News 6 Apr 23)

Doug Beck, Vice President at Apple and a Navy Reserve Captain, has been named as the new director of the Defense Innovation Unit (DIU) as of May 1, 2023.

As DIU Director, Doug will oversee efforts to accelerate the Department's adoption of commercial technology throughout the military and also serve as a senior advisor to the Secretary and Deputy Secretary of Defense on technology innovation, competition, and strategic impact.

As a VP at Apple, Doug reported directly to CEO Tim Cook since joining the company in 2009. During that time, he co-led Apple's global business development and sales functions and led the company's business across Northeast Asia and the Americas, and most recently, several of the company's purpose-driven businesses worldwide, including in health, education, and other institutions of public impact. He has more than 15 years of experience living and working across Asia, including in Japan, China, Hong Kong, Korea, Singapore, and Indonesia.

Doug is a Captain in the U.S. Navy Reserve and served from 2006 through 2007 in Iraq and Afghanistan with a joint special operations task force. He has also served extensively throughout the Asia Pacific region during his nearly 26 years of service, including command of a large joint reserve unit supporting U.S. Indo-Pacific Command in Pearl Harbor, Hawaii. Doug has previous experience working with DIU, as he founded and led its Joint Reserve Directorate (JRD) and was the first JRD Commander from 2015 to 2019. His personal and unit awards include the Defense Superior Service Medal (two awards), the Bronze Star Medal, the Combat Action Ribbon, and the Presidential Unit Citation.

Doug previously served as a nonpartisan appointed member of the Secretary of State's Foreign Affairs Policy Board, an Executive Advisor to three Chiefs of Naval Operations and to Special Operations Community leadership, and an adjunct lecturer on strategy and innovation for Flag and General Officers at the **Naval Postgraduate School**. For more than 15 years, he has served as a formal and informal advisor to senior uniformed and civilian leadership across the Department. He also serves as a part of Secretary of Commerce Raimondo's mentorship program for Commerce leaders. Doug has also served for eight years as a member of the Board of Directors of the Center for a New American Security and of the Advisory Board for Yale's Jackson School of Global Affairs.

He holds a bachelor's degree summa cum laude from Yale and an M.Phil in International Relations from Oxford, where he was a Rhodes Scholar.

DoD announces a new DIU Director - SatNews

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Victor J. Glover Will Make History as the First Black Astronaut to go to the Moon

(Insider 10 Apr 23) ... Brianna Holt

(IUSA Herald 18 Apr 23) ... Jackie Allen

This week, NASA announced the crew for its 2024 lunar voyage.

The Artemis II expedition marks the first manned moon mission in over five decades, since the Apollo missions.



Among the crew, Victor J. Glover will become the first Black astronaut to visit the moon.

Last week, NASA announced a crew for its next lunar expedition. Set to take off in 2024, the Artemis II mission will be the first manned moon mission in more than five decades since the Apollo missions.

The crew has made NASA history, with the first woman, Christina Hammock Koch, and first Black astronaut, Victor J. Glover, assigned to lunar orbit. Glover has been appointed the pilot of the mission.

While they won't land on the moon, NASA has announced the following mission, Artemis III, will have two astronauts walk on the lunar surface for the first time since 1972.

A Pomona, California, native, Glover earned a Bachelor of Science degree in general engineering from California Polytechnic State University in 1999. As a part of the U.S. Air Force Test Pilot School program, he obtained a Master of Science degree in flight test engineering from the Air University at Edwards Air Force Base in 2007. Two years later, he earned a Master of Science degree in systems engineering from the **Naval Postgraduate School**. By 2010, he received a Master of Military Operational Art and Science from the Air University in Montgomery, Alabama.

Victor J. Glover to Become NASA's First Black Astronaut to Go to the Moon (insider.com) Victor J Glover is set to be the first Black astronaut on Artemis II to visit the moon – USA Herald

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AFIT Administrator Named Dean of the College of Engineering and Computer Science at Wright State

(Xenia Gazette 19 Apr 23) ... Scott Halasz

(For Reports 19 Apr 23) ... Becca Roberts

Darryl K. Ahner, Ph.D., dean for research at the Air Force Institute of Technology at Wright-Patterson Air Force Base, has been appointed dean of the Wright State University College of Engineering and Computer Science, effective July 3.

Michael L. Raymer, Ph.D., professor and chair of the Department of Computer Science and Engineering, is serving as the college's interim dean during the 2022–2023 academic year.

"Dr. Ahner's combination of leadership, scholarship and service experiences makes him uniquely qualified to lead the College of Engineering and Computer Science," said Wright State Provost Amy Thompson. "He aims to create an environment where faculty, students and staff can thrive. As dean, he will foster a community that values inclusiveness, integrity, ingenuity, accountability, competence and honesty."

Ahner said he is excited about the opportunity to work with students, faculty and staff and local community members to advance the College of Engineering and Computer Science (CECS).

"There is a strong demand for engineers and computer scientists across the region and nationally," Ahner said "I look forward to leading the College of Engineering and Computer Science in providing transformative opportunities for our students, both in and out of the classroom, as they develop into competent, confident problem-solvers to meet this need. President Susan Edwards and Provost Amy Thompson have built a strong foundation of recruitment, retention and relationships toward ensuring student success, and I plan to continue this work with the staff and faculty of CECS in enabling our students to excel in their lives and chosen careers."

As dean for research at the Air Force Institute of Technology (AFIT) Graduate School of Engineering and Management, Ahner leads the Office of Research and Sponsored Programs and manages a \$36 million research program. He provides advice and assistance to the chancellor, administrators and faculty on research, technology transfer, strategic communications, outreach and partnership activities.

In addition to serving as dean, Ahner is a professor of stochastic operations research.

Since he joined AFIT in 2010, he has also served as the director of the Office of the Secretary of Defense Scientific Test and Analysis Techniques in the Test and Evaluation Center of Excellence, director of the Center for Operational Analysis and professor in the Department of Operational Sciences.



In 2021, he received the Medal for Exceptional Civilian Service — the Secretary of Defense's highest civilian award — for workforce development and consulting activities.

Before joining AFIT, Ahner served on the faculty and as director of the Army Research Laboratory Mathematical Center of Excellence at the U.S. Military Academy at West Point and as director of research of the U.S. Army Research Center at the **Naval Postgraduate School**.

Ahner's research emphasizes the optimization of test and evaluation, autonomous systems, big data analytics, reliability, stochastic models, simulation and military operations research applications. He has written 35 peer-reviewed articles, 28 proceedings and several book chapters.

A first-generation college student, Ahner graduated from the U.S. Military Academy at West Point with a bachelor's degree in mechanical engineering (aerospace). He then served 22 years in the U.S. Army in leadership and technically demanding positions, retiring from the Army in 2012.

Ahner earned a Ph.D. in systems engineering from Boston University, a master's degree in operations research and statistics and a master's degree in applied mathematics from the Rensselaer Polytechnic Institute, and a graduate certificate in computer engineering from the Air Force Institute of Technology.

AFIT administrator named dean of the College of Engineering and Computer Science at Wright State - The Xenia Gazette

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