

**DECEMBER 2022** 

SECNAV Carlos Del Toro Announces Support of Naval Innovation Center at NPS alongside Rep. Jimmy Panetta at the Reagan National Defense Forum



In early 2020, the leadership of the Naval Postgraduate School recognized that the organization and the Department of the Navy at large must modernize and transform to adapt to an increasingly complex and uncertain future. The NPS Foundation engaged Applied Minds, Inc. to support the creation of a forward-leaning vision for the school supported by an innovative facility to turn that vision into reality.

The Secretary of the Navy, Mr. Carlos Del Toro, sees the immense value in investing in professional military education, defense-focused research, and the young leaders who are the future of our Department of Defense and our Nation. NPS is at the nexus of academia, industry and the Department of Defense, making NPS the ideal organization to develop, foster and lead a culture of innovation within the Department of Defense. We are proud to have Mr. Del Toro's support of a Naval Innovation Center at NPS.

As a jointly resourced initiative, the Naval Innovation Center will require funding from government entities as well as private donations and corporate partners to outfit and sustain the facility with state-of-the-art technology. The Naval Postgraduate School Foundation is invested in the planning and development of the Naval Innovation Center vision and has committed to working alongside NPS in the advocacy, development and funding of a Naval Innovation Center at NPS through its completion. Read more.

### **Watch the Announcement**

Naval Postgraduate School and Naval Postgraduate School Foundation enable STEM education through outreach activities across the Central California Coast



Opportunities like NPS' Discovery Day, Design Challenges and internships inspire learning and foster creativity in the Central California community from an early age, cultivating a culture of innovation and ensuring our Nation remains the global leader in science and technology discovery and competitiveness. These students are the future leaders who will drive transformation and innovation in these fields, not just for the military, but across a number of industries.

In the 2022 fiscal year alone, the NPS Foundation invested over \$100,000 in STEAM and community outreach activities to expand opportunities for the NPS community and K-12 students across the Central California Coast. With your help with are confident that we can raise \$50,000 to expand and enhance STEAM education opportunities.

We urge you to <u>support the Naval Postgraduate School Foundation's end of year giving campaign to</u> <u>expand and enhance Science, Technology, Engineering, Arts and Mathematics (STEAM) education</u>

<u>opportunities</u> in the Central California Coast inspiring and emboldening the next generation of scientists, engineers, astronauts, military leaders and more. **Read more.** 



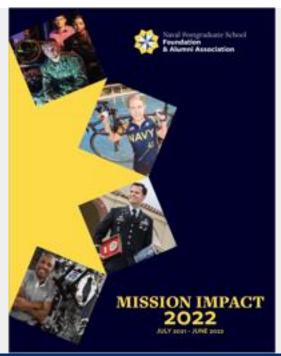
#### 2023 Design Challenge: Local Challenges, Global Solutions - Seeking NPS Student Mentors

Schools and students are invited to envision, develop, and design innovative solutions to local climate challenges. Through engagement with design challenges presented with scaffolded lessons that support student learning and engagement, students will be asked to consider how science, technology, engineering, arts, and mathematics (STEAM) can be used to create meaningful solutions with global impact. **More information.** 

#### NPS Foundation Making an Immediate and Lasting Impact on National Security

Through applied research and education designed to understand and solve the toughest challenges facing our Department of Defense, the Naval Postgraduate School delivers ethical and technical leaders equipped to operate in the face of rapid global change. The Naval Postgraduate School Foundation is the nexus between the DOD, industry, academia and our community in support of national security and an innovation ecosystem that will create enduring advantages. Our partnership with the Naval Postgraduate School is as strong as ever, as we work together on the transformation of the school to better serve the DOD with national security research and solutions and to better serve our military students and their families.

Because of the generous support of donors, corporate partners, and our NPS community the Naval Postgraduate School Foundation was able to provide **\$5 million** in support of the Naval Postgraduate School and U.S. service members, veterans and their families during the 2022 fiscal year. To show where your donations are making an immediate and lasting impact, we are proud to share our **2022 Impact Report.** 



## View Online



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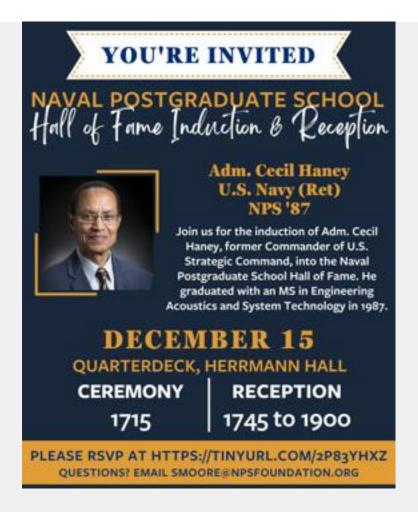
Announcing the 2022 Mauz-Warner Distinguished Leadership Award Recipient: Rick Hargrove



**Rick Hargrove**, a retired software engineer and development manager, is the lead architect of <u>Athena, a collaborative research tool for the Naval Postgraduate School</u> funded by the NPS Foundation. Hargrove and a team of developers volunteered thousands of hours and worked tirelessly for over a year to build a scalable and secure platform that will empower the national security innovation ecosystem and enable professionals across the United States Department of Defense to discover, connect, collaborate and deliver solutions for the Fleet & Force.

Hargrove was introduced to computing during his Naval service, which impacted his career direction when he left the US Navy. He spent the early part of his career working on low-level operating system, kernel and driver development at NCR, ATL and then Microsoft, including leading on the first graphical Windows OS from Microsoft. Hargrove became the Group Program Manager in the Enterprise Tools Group at Microsoft, where he led a system to help corporate developers build advanced client-server database applications. Hargrove also served as a Principal Systems Consultant at Microsoft Consulting Services Group, where he created and defined the practice and worked with top Fortune 100 corporations to migrate legacy mainframe and mini-computer systems to Windows client-server architecture. He has a BS in Computer Science from The University of Kansas.

The Mauz and Warner Distinguished Leadership Award, established in 2019, recognizes individuals and organizations that have provided significant leadership in support of the mission of the Naval Postgraduate School Foundation & Alumni Association. The award is named in honor of former NPS Foundation Board Chairs Adm. Henry H. Mauz, USN (Ret) and Bill S. Warner.



Join the Secretary of the Navy, NPS, and the NPS Foundation for the induction of retired Adm.

Cecil Haney into the Naval Postgraduate School Hall of Fame. Haney, MS in Engineering

Acoustics and System Technology '87, is the former Commander of U.S. Strategic Command and is a member of the NPS Foundation Advisory Council.

December 15
5 - 7 p.m.
Quarterdeck of Herrmann Hall

#### **RSVP**

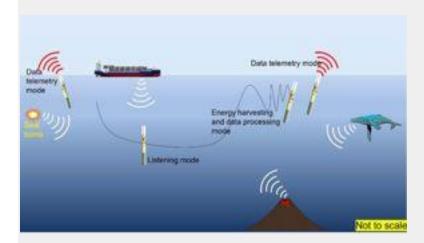
## Navy prof created 'self-sealing' fuel lines, no drips after .50 cal shot

Prof. **Raymond Gamache** found he could manufacture a flexible fuel line that "snaps back" from a .50 caliber bullet entry & exit penetration using a "heterogeneous elastomer system."

A self-sealant hose incorporating the heterogeneous elastomer system "with a working fluid (water) pressurized to 276 kPa, was successful in enabling a complete self-seal from an incident 0.50 caliber ogive ball round incident at 488 m/s," <u>Gamache reported</u>.

The technology has obvious uses for sea and ground combat vehicles, but the research has also attracted interest from aerospace manufacturers because the materials are compatible with new fuels.

The Naval Postgraduate School has filed for a 20-year utility patent, which was made public a week ago at the U.S. Patent and Trademark Office under the name "Self-Sealing Hose." The patent claims allow for commercial uses and are not tied to a particular fuel, engine, or vehicle. Private companies are invited to evaluate and acquire rights to the patent-pending research via a license agreement with the NPS Technology Transfer Program.



## Seatrec and Naval Postgraduate School Launch a New Project to Study Ocean Soundscape and Chart Impact of Noise Pollution on Ocean Environment

Seatrec and the Naval Postgraduate School recently launched a new project to study the impact of human-made noise on the ocean soundscape and marine life. An Ocean Sonics hydrophone installed on a Seatrec autonomous sustainably powered float system is the first of its kind and enables acoustic data to be collected anywhere in the world's oceans nearly indefinitely.

"When it comes to understanding the ocean, sound is everything, but persistent listening is extremely difficult and expensive," explains Yi Chao, Ph.D., Seatrec's CEO and Founder. "The Naval Postgraduate School is a great partner, and we are excited to help them research acoustic impacts more effectively and affordably. Providing the necessary scientific instruments that are powered by the ocean's own temperature differences opens the door to persistent monitoring of our oceans in an economical manner." Read more.



### Fellowship Connects NPS Information Warfare Students to NIWC Pacific Needs

Naval Information Warfare Center Pacific selected five U.S Navy and Marine Corps students from the Naval Postgraduate School for the prestigious NIWC-PAC Fellowship. These warrior-scholars are directly connecting their education, ideas and research to fleet information warfare force design objectives in support of the capabilities necessary to counter adversary forces, improve command and control across the fleet, and to persistently cover the maritime battlespace for decision advantage.

The partnership between the two organizations provides a direct connection between the alignment select NPS research efforts with NIWC-PAC focus areas, advancing the impact of NPS education and research programs in IW for the U.S. Navy and DOD. In addition, the partnership lays the groundwork for future technical and project management assignments for NPS graduates at NIWC-PAC.

"The NIWC-PAC Fellowship at NPS supports our warrior scholars in their thesis research," said Dr. Kevin Smith, NPS Vice Provost for Research. "This support helps provide awareness of some NPS research activities to NIWC-PAC, and serves to promote collaboration between our organizations. It also provides an opportunity for NPS warrior scholars to engage with one of the Navy's premier Naval Research and Development Establishment (NR&DE) warfare centers, highlighting the value of warfare center activity in support of the fleet, and the Fleet Marine Force." Read more.

# **Alumni Updates**

**Brian E. Souhan,** MS in Electrical Engineering '05, joined the Institute for Defense Analyses as a research staff member in the Operational Evaluation Division of IDA's Systems and Analyses Center.

Souhan earned his master's degree in electrical engineering from the Naval Postgraduate School in 2005. He earned his bachelor's degree in electrical engineering from the University of Cincinnati in 1997. Souhan earned his doctoral degree in electrical engineering from Columbia in 2014.

IDA is a nonprofit corporation that operates three federally funded research and development centers in the public interest. IDA answers the most challenging U.S. security and science policy questions with objective analysis leveraging extraordinary scientific, technical and analytic expertise.





The National Museum of the Surface Navy (NMSN) recently presented its 2022 "Freedom of the Seas" awards at a gala aboard the historic battleship USS Iowa at San Pedro, Calif. The 2022 VADM Samuel L. Gravely, Jr. Award was presented to retired Rear Adm. **Sinclair Harris**, MS in Operations Analysis '89, Vice President, Client Relations for LMI. The award, which was named in honor of the first African American in the U.S. Navy to command a Navy ship, command a fleet and become a flag officer, recognizes leaders who exemplify the trailblazing, courageous service of the late U.S. Surface Navy vice admiral.

"During Rear Adm. Harris' distinguished 34-year Navy career, which culminated as vice director for operations to the chairman of the Joint Chiefs of Staff, he led joint, combined, multinational, and interagency organizations across all aspects of defense, commanded the U.S. Fourth Fleet, and led U.S. naval forces assigned to the U.S. Southern Command," Shatynski said.

Lt. Cmdr. **Chad Henderson**, MBA '21, received the Naval Air Station Patuxent River 2022 Admiral Merlin O'Neill Officer of the Year award during a ceremony Nov. 10. The Military Officers Association of America presented the award to Henderson who was recognized as a junior officer that has demonstrated superior performance and leadership, with an emphasis on volunteer activities and involvement in the community. Henderson is a graduate of the U.S. Naval Academy and earned his wings in 2012. He attended the Empire Test Pilots' School in 2017.

"Chad is an exemplary naval officer and leader in both our office and the community," said Capt. Alex Dutko, the Direct and Time Strike Weapons (PMA-242) program manager who oversees Henderson. "This award reflects his sustained superior performance and clearly reflects those values that Admiral O'Neill espoused throughout his career."





Governor Brad Little announced the appointment of Kirk Wille, MS in Management '94, as Gem County Commissioner.

Wille, of Sweet-Montour, is an attorney at High Rock Law, PLLC, where he has practiced in several areas of law since 2017. He is the owner and founder of Cowboys Chophouse, Inc., a steakhouse in Emmett, and the former owner of Gem County Motorsports, LLC. He is a decorated Commissioned Officer of the U.S. Marine Corps, where he served for two decades. Wille sits on the board of directors for the Gem County Chamber of Commerce, Gem County Economic Development Foundation and is a trustee to Valor Health. He formerly served on the Gem County Senior/Community Center and is a Staff Judge Advocate for the Veterans of Foreign Wars Post 4900. After attending the Marine Corps University in Quantico, Va., Wille received his Bachelor's from North Carolina State University in Raleigh, his Master's from the Naval Postgraduate School, and his Juris Doctorate from the University of San Diego School of Law.

Gene Moran, MS in Financial Management '88, Founder and President of Capitol Integration, is the foremost expert on federal defense and security lobbying. He guides and advises defense companies of all sizes to dramatically improve federal sales through funding and policy change in Washington, D.C. He is the co-author of "Million Dollar Influence" with Alan Weiss. Moran's groundbreaking academic research earned him a doctorate in Public Policy and Administration from Walden University. His dissertation explored the impact of congressional lobbying on contracting and the performance of democracy. He holds a Master's in Financial Management from the Naval Postgraduate School and a Bachelor's degree from Florida State University.



Malachite Innovations, Inc. welcomed retired Major General James A. Hoyer and Gary G. White as its initial Strategic Advisors who will provide strategic advice and counsel to Malachite's senior leadership team to help accelerate the profitable growth of its operating businesses and facilitate new connections for future impact investing opportunities.

Hoyer is a decorated military veteran with decades of public service who currently serves as Vice President of Economic Innovation for West Virginia University, Senior Mentor for Civil-Military Innovation Institute and a member of the Board of Advisors for Fidelis New Energy LLC, a leading developer, investor and operator of climate impact infrastructure. Hoyer began his military career in the West Virginia National Guard as a Cavalry Officer and attended the Special Forces Officer Qualification course and spent over 14 years with the 2<sup>nd</sup> Battalion, 19<sup>th</sup> Special Forces Group. Hoyer received his undergraduate degree from the University of Charleston, a master's degree in Management and Public Administration from the West Virginia Graduate College, a master's degree in Strategic Studies from the U.S. Army War College and a certificate in Identity Management from the Naval Postgraduate School.

### Submit an Alumni Update Meet more Students & Alumni: Faces of NPS

# **Upcoming Virtual Event**

#### America In Transition: How Homeland Security Is Changing and What Leaders Need To Know in 2023

The NPS Center for Homeland Defense and Security is hosting a five-part interactive webinar series. National experts will discuss the evolving homeland security and emergency management landscapes at a time of transition and increasing concern domestically and globally. Each webinar will tackle an important topic for the Nation and underscore what homeland security leaders and newly elected and appointed officials need to know heading into 2023.

#### Wednesday, December 7, 2pm ET

The Global Picture: What Do Foreign Threats Mean For Us Here At Home?

#### Wednesday, December 14, 2pm ET

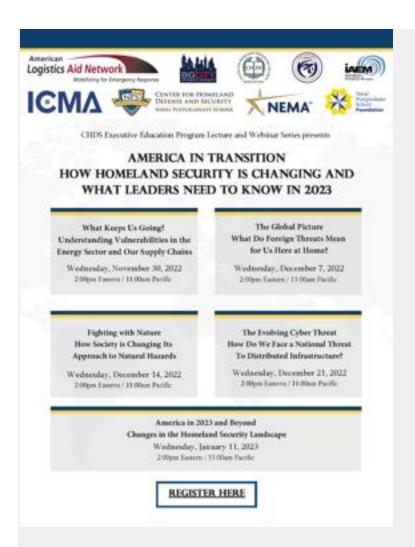
The Evolving Cyber Threat: How Do We Face a National Threat to Distributed Infrastructure?

#### Wednesday, December 21, 2pm ET

Fighting with Nature: How Society is Changing Its Approach to Natural Hazards

#### Wednesday, January 11, 2pm ET

America in 2023 and Beyond: Changes in the Homeland Security Landscape



Coming up on Dec 7, 2022: Part two will look at how the global threat landscape is evolving as we transition into 2023, including the evolution of domestic terrorism, the use of "gray zone" tactics to target the homeland, and more. This conversation will explore what local and state leaders should know about how the global picture impacts the security landscape for communities in the U.S.

#### Featured Guests:

**John Cohen** Former Acting Under Secretary of Intelligence and Counter-Terrorism Coordinator, U.S. Department of Homeland Security

Laurie Doran Director, New Jersey Office of Homeland Security and Preparedness (NJOHSP)

**Dr. Seth Jones** Senior Vice President and Director, Center for Strategic and International Studies and Instructor, Center for Homeland Defense and Security

Moderator:

Russ Porter Senior Executive, Office of the Director of National Intelligence

#### In Case You Missed It:

## Rep. Panetta Introduces Legislations to Strengthen Educational Opportunities of Enlisted Service Members at NPS

U.S. Representatives Jimmy Panetta (D-CA), Don Bacon (R-NE), Rick Larsen (D-WA), Mike Waltz (R-FL), and Pat Fallon (R-TX) of the House Armed Services Committee (HASC) introduced the Strengthening the Force and Fleet through Enlisted Education Act, or Smart Act. This bipartisan bill would expand advanced degree opportunities for enlisted servicemembers at the Naval Postgraduate School (NPS). Currently, enlisted servicemembers have limited opportunities to pursue higher education, and in some cases the proportion of officers with a master's degree or higher is more than six times the proportion of enlisted servicemembers with a bachelor's degree.

"Our enlisted men and women are the backbone of our military and make up about 80 percent of our Armed Forces. That's why we should invest in our enlisted servicemembers by providing them with more opportunities for higher education degrees," said Rep. Jimmy Panetta. "The Smart Act would make that investment by affording enlisted members with the chance to obtain advanced degrees and allow our Armed Forces the chance to retain and attract the best talent. This bill would not only strengthen our military and national security, it also would provide our enlisted men and women with the opportunity to further secure their careers." Read more.

## **How China Spies**

<u>In this article</u>, Anthony W. Holmes reviews Nicholas Eftimiades' pioneering and alarming monograph "Chinese Espionage Operations and Tactics." Holmes describes how Eftimiades does yeoman's work and offers the free world an essential service by painstakingly combing through public information on how the PRC operates its vast foreign intelligence apparatus. His revelations are alarming.

There is no area of modern economic and military life that PRC intelligence is not trying to infiltrate and exploit. Anyone involved in modern business, the foreign and national security policy enterprise, free trade, and a rules-based international order should see what they are up against. This is why we support the national security research and education at the Naval Postgraduate School. We must invest in professional military education and innovative offensive technologies to compete with the PRC's increasingly bold tactics of attacking and stealing U.S. information. Read more.

#### **How China Got Our Kids Hooked on Digital Fentanyl**

Ever since TikTok began expanding into the United States, more than four years ago, we've known that it was a disaster waiting to happen. What's shocking is that it's taken this long to get serious political attention.

Now, there are calls to shut it down. FBI Director Christopher Wray said the bureau has "national-security concerns" about TikTok. The top Republican on the Federal Communications Commission, Brendan Carr, called TikTok "China's digital fentanyl." Senator Marco Rubio and Rep. Mike Gallagher, both Republicans, introduced legislation banning the social-media platform, noting that the data of millions of Americans is

"effectively controlled" by the Chinese Communist Party. Earlier in the month, Carr also said the U.S. government should ban TikTok.

Every day, every hour, every waking minute, TikTok is hoovering up seemingly infinite bits of information about its users—their tastes, hobbies, political views, sexual preferences, their facial structure, the sound of their voice. Ostensibly, all this is meant to provide a better product. It should also be noted that this information can be used for spying, influencing millions of users—even waging war. Every time we swipe for the next video, every time we post videos of our own, we are helping the world's most sophisticated police state learn more about us. Read more.

Faces of NPS: Gaming, Experimentation, Modeling & Simulation Impact

Navy professor finishes strong in 'Jeopardy!' tournament

Inaugural Stanford Oceans Conference reimagines approach to ocean exploration

Microsoft, Defense Firms Partnering on Modeling and Simulation Capabilities

Why the war on fossil fuels is causing chaos

How gamifying cyber training can improve your defences

Orbital hopping maneuvers with two Astrobee free-flyers: Ground and flight experiments

Pentagon chief: US faces pivotal years in countering China

U.S. Needs to Push Allies to Prepare for a Potential Conflict with China, Panel Says

Pentagon: Chinese Navy to Expand to 400 Ships by 2025, Growth Focused on Surface Combatants

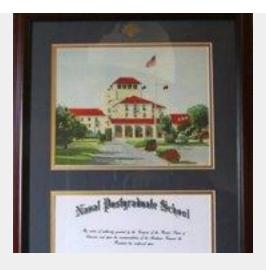
**2022 Pentagon Report on Chinese Military Development** 

MI5 spy chief says Russia, China, Iran top threat list to UK

Panel of three-star generals to lead military training modernization

This week in Congress: Final NDAA compromise expected to be unveiled

SHOP NPS GEAR ONLINE



In-store pick-up available for local orders. The shop is now open Monday through Friday from 10 a.m. to 4 p.m. Questions about the shop or the merchandise available? Contact the Peacock Shop Manager.

## **Shop NPS Gear**

## **SHOP WITH AMAZONSMILE**



When you order through AmazonSmile, Amazon donates 0.5 percent of your purchase price to the NPS Foundation, equipping our nation's premier defense education and research institution!

## **Shop AmazonSmile**

"PATHWAY TO THE FUTURE"



Make your mark on the NPS campus with a custom brick on our "Pathway to the Future," a unique, lasting way to remember and mark your connection to NPS.

# **Design Your Brick**

## **Connect with us!**



Your gift helps produce the Leaders, Technologies, and Ideas our Nation needs to keep our service members safe abroad and us all safe at home.

Thank you for your generosity!

# **Make a Donation**

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