



# NAVAL POSTGRADUATE SCHOO

# Navy "SWO Boss" Honors Accomplishments of NPS Summer Graduates

By MC2 James Norket

For just the second time in 2021, the Naval Postgraduate School (NPS) celebrated a graduating class in person during a hybrid ceremony for its Summer Quarter graduates, Sept. 24 in King Auditorium, honoring and recognizing the remarkable achievements and resiliency of the class. While these students completed the same rigorous programs and research requirements as other graduates, they did this by adapting and overcoming the adversity brought on by the COVID environment.

Commencement speaker and NPS alumnus, Commander, Naval Surface Forces/Commander, Naval Surface Force, U.S. Pacific Fleet Vice Adm. Roy Kitchener, known around the Navy as the Surface Warfare Officer Boss, or "SWO Boss," congratulated the 294 graduates, including 23 international students from five countries, conveying how the nation's warfighting ability is directly correlated to their NPS education.

"This institution and our military's technological advancement are completely linked," said Kitchener. "For more than a century, the Naval Postgraduate School provided students with top-of-the-line, defense-focused education, and this year marks 70 years of providing that service from Monterey."

"The Naval Postgraduate School has long recognized the connection between technology and warfighters – people drive technology, and then technology improves our human ability, and neither can accomplish the mission purely on its own," he continued. "In today's rapidly evolving battlespace, it is crucial that as leaders, you grasp and fervently apply the full potential of our systems – and you learn that here at NPS."

First, be bold. Let your questioning spirit stoke the flames of rapid change. And be convicted in bringing the right ideas to fruition. Second, have a can-do attitude, tempered by your understanding of risk. Approach innovation with realism and tangible outcomes — address faults head on and continue to find long-lasting solutions for them. And finally, be demanding of leadership and stay focused on winning — that is our imperative."

-Commander, Naval Surface Force, U.S. Pacific Fleet, Vice Adm. Roy Kitchener

U.S. Navy Surface Warfare Officer Lt. Jonathan Shepherd is the embodiment of Kitchener's remarks about warfighters driving technology. Shepherd came to NPS with operational experience in mine countermeasures and the AEGIS weapons system. He conducted his thesis research at the classified level pioneering the latest technology used by the fleet to protect ships from incoming missiles. For his work, Shepherd is the recipient of both the Military Operations Research Society (MORS) Tisdale Award and the Surface Navy Association Award for Excellence.

To read the full story, please visit our website.

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National Hispanic Heritage Month

October 2021

# NPS Honors Victims, First Responders, Service Members at 9/11 Remembrance Ceremony

By MC2 Tom Tonthat

Students, faculty and staff at the Naval Postgraduate School (NPS) honored the nearly 3,000 lives lost on Sept. 11, 2001, and the continued commitment of first responders and service members in the 20 years that have followed, during a reverent and uplifting ceremony, Sept. 10, in front of the university's Herrmann Hall.

"Today, I welcome all of you because you are the faces of our nation," said NPS President retired Vice Adm. Ann Rondeau as she addressed attendees from all the military branches as well as civilian faculty and staff. "On behalf of those who serve with great gratitude, we thank each other for this moment of standing here together and saying to America, 'We are a great place. We are a great country."

While there are moments in the past 20 years that have cast a shadow of trauma, including recent events in Afghanistan, Rondeau added, "The honor of service, the honor of country, the honor of standing up for each other and for what we stand for as a nation that has done more good in mankind's history than ever before, is what America is and today we stand strong."

New York Police Department (NYPD) Capt. Brian Nyhus, an alumnus of NPS' Center for Homeland Defense and Security, served as the keynote speaker for the remembrance ceremony. He described the aftermath of the attacks, and his experience as a rookie police officer helping with the recovery efforts.

"While it was a bright, sunny day in New York City, lower Manhattan was dark and everything was covered in concrete dust," said Nyhus. "I saw the duty and bravery out there from a very close point of view. Rescue crews responded to Ground Zero and started doing the work. Iron and construction workers helped clear the remains of the buildings so people could do their work and help search for survivors.

"I also witnessed great acts of compassion from the public," continued Nyhus. "Clergy and business owners turned out to provide whatever comfort they could to victims like hot meals and clothing to those who were driven from their apartments and therapy to those who were trying to help deal with what they had witnessed."

Twenty years later, Nyhus reflected on the country's recovery from the attacks that include the rebuilding of One World Trade Center, repairs of the Pentagon, and multiple memorials including a 9/11 museum erected over the footprints of the original towers in honor of all the people who passed. He also talked about the lingering effects of the attacks that still remain to this day.

"While the physical damage of those attacks has been repaired, the acts of those terrorists 20 years ago are still taking people's lives," said Nyhus. "First responders and residents of lower Manhattan have died from cancer due to exposure to toxic materials due to those recovery efforts. Over 15,000 have developed serious illnesses due to those recovery efforts. To be truthful to the phrase 'Never forget,' Congress passed the James Zadroga Act to provide medical care and compensation to the victims and families for years to come."

Nyhus then acknowledged the sacrifices of the military who took the fight to the terrorists after 9/11.



NYPD Capt. Brian Nyhus places a wreath at the 9/11 Memorial near the Naval Postgraduate School's Centennial Park during a remembrance ceremony, Sept. 10, to honor lives lost during the terrorist attacks on Sept. 11, 2001. The 9/11 Memorial is built from a piece of steel rubble recovered from the World Trade Center. (U.S. Navy photo by MC2 Tom Tonthat)

"After 9/11, the United States military deployed overseas to two war zones in Iraq and Afghanistan," he said. "Hundreds of thousands of service members endured long, dangerous deployments and hostile lands, fighting terrorists to ensure the safety of our country. As you know, some of these men and women did not come home making the ultimate sacrifice for the safety of their country."

No matter how many years have passed since 9/11, Nyhus called on everyone to continue remembering those who were lost that day.

"Today and on the 20th anniversary of the attacks, I ask you to not only remember those who died on that day, but to those who have fallen since then," said Nyhus. "I ask you to seek out those who are still being affected by the attacks and help them. Please, never forget all of the victims of 9/11."

The generations of Sailors who attended the ceremony took heed of Nyhus' speech.

"I'm very proud to be a part of this ceremony, which remembers those who perished that day and in the years that followed," said NPS Dean of Students U.S. Navy Capt. Brandon Bryan. "I was a fairly young lieutenant on Sept. 11. At the time, I didn't fully understand what it meant to serve in the military with the emphasis on the word 'serve.' Since that day, and all the things that our country has been through and how we as a country responded to those attacks, I truly understand what it means to serve this country and I'm very proud to be able to do that."

"I feel honored to be a part of the ceremony and being able to have a role where I am honoring those who have lost their lives in an incident that shook America," said Yeoman 2nd Class Keyston Braxton, one of the honor guard members who folded and presented the American flag during the remembrance ceremony.

"As someone who was too young to remember the actual event, I still have an empathetic heart for all of the victims and service members who lost their lives. The folding and presenting of the American Flag honors the dead, and I am grateful that I was able to do that today."

# Acoustics Experimentation Helps NPS Researchers Better Understand Sensor Capabilities, Monterey Bay Soundscape

By Rebecca Hoag

It was a surprisingly sunny day when the small group of researchers equipped the R/V Fulmar for their first of five days data collection trip off the coast of Santa Cruz in the Monterey Bay. Their goal was to use vector sensors, passive acoustic technology that detects particle motion and pressure changes, to collect data for several projects. The trip was run by Dr. Kevin Smith, a Professor of Physics at the Naval Postgraduate School (NPS) and the Chair of the NPS Undersea Warfare Academic Group, and Dr. Paul Leary, a Research Assistant Professor of Physics at NPS. Together they run the NPS Undersea Sensing Systems Lab.

Understanding marine acoustics is important for both national defense and environmental purposes. Vector sensors can help detect acoustic signals, and provide estimates of direction to adversarial marine vessels, merchant ships, or marine mammals. Researchers can use the data collected to learn more about sound characteristics in different parts of the ocean, and make determinations about the local underwater propagation environment. This understanding can help unmanned underwater vehicles (UUVs) better navigate and communicate with each other, provides data to improve predictions of operational performance, and aids in marine mammal studies by keeping track of different individual animals via their sounds. Better understanding these big picture items is the focus of Smith's efforts.

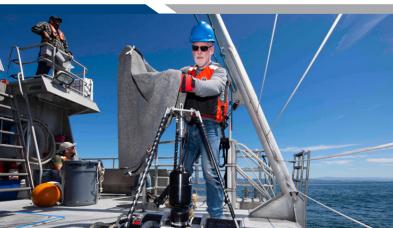
"The technologies, the sensors we use, and the processes we employ for tracking marine mammals or merchant vessels is the same kind of processing we use to track other targets of interest to the Navy," Smith says. "So we are building up our skills to see how far we can track something, how accurate we can track something, how quietly a target can be that we can still track."

In other words: "Anything you can use to track a submarine, you can use to track a whale," says Anu Kumar, director of the Office of Naval Research (ONR)'s Living Marine Resources (LMR) program. ONR is one of the sponsors of this research, along with the NPS Naval Research Program (NRP), and the Los Alamos National Laboratory.

Kumar joined the team on their first day out to observe and assist the researchers in deploying vector sensors and retrieving them for data collection. The team included an NPS summer intern, Navy MIDN 1/C Anne (Bonnie) Tom from the U.S. Naval Academy, PhD student Nick Durofchalk from Georgia Tech, and international PhD student and Brazilian officer Alexandre Guarino from NPS.

Guarino is studying Engineering Acoustics at NPS. His thesis relies on this field research as it looks to determine acoustic properties of the sea floor using various signals collected throughout the test. This process is known as geoacoustic inversion.

"I feel very happy working with these very advanced systems," Guarino says. This will be his second <u>research project</u> focusing on marine acoustics, but it is his first time working with vector sensors, where previously he worked with pressure sensors. This means he has more data to work with, and new features in the acoustic field to explore. The trip involved deploying two vector sensor systems at multiple locations along the Santa Cruz shelf to collect data for his work, one of



Dr. Kevin Smith, Professor of Physics and Chair of the NPS Undersea Warfare Academic Group, prepares an acoustic sensor for deployment off the Santa Cruz coast in Monterey Bay. (U.S. Navy photo by Javier Chagoya)

which was provided by the Naval Undersea Warfare Center (NUWC) in Newport, R.I. The team also collected data from a drifting buoy equipped with vector sensors supplied by and with help from an engineer at the NUWC in Keyport, Wash.

"When we do tests like these we are often trying to collaborate with and help out as many people as we possibly can," Leary says. "We like to construct experiments that touch on several concepts that have important questions around them as far as we can manage with the timeframe we have on the boat."

The team conducted experiments to try to answer questions from Smith, Leary, Guarino, Durofchalk, and several other researchers in and out of NPS. These questions range from purely theoretical to mechanical.

For example, Smith and Leary wanted to see what the data can tell them about the sensors' abilities. Part of the trip involved deploying two sensors 10 km apart along the Santa Cruz shelf to see if the sensors could localize signals of interest, such as ships and whales, by both picking up the same signal at once. The team generated signals made by imploding lightbulbs in a device designed by Leary, who's the primary engineer of the team, to test how well the sensors could localize the same sound. This signal is also being used to understand the environment between the source and sensor.

Leary's job was to make sure the data collected was as clear and useful as possible. He works to make the data processing part more efficient by creating pipelines to feed the data into, which reflect data processing as performed on autonomous systems. For example, he would like to get a computer to recognize certain sounds as ships or whales, or make it possible for a researcher to efficiently request processed data products for a period of time from a common database.

Now that it's the end of the two weeks of data collection, the team is ready to sink their teeth into the data, hoping to advance the Navy's utilization of vector sensors as a means to better understand the environment submarines operate in, and to protect the fleet from possible adversarial underwater advances.

# Interagency "TEAMS" Effort to Tackle Federal Talent Management Challenges

By Rebecca Hoag

The federal government has a problem. More than half of its defense acquisition employees are currently within 10 years of retirement age, according to a 2019 Navy report ... This means there needs to be a massive knowledge shift to the rest of the workforce fast.

Responding to this need, the Naval Postgraduate School's (NPS) Associate Dean of Research for Technology Development Chris Manuel is collaborating with Veterans Affairs (VA) through Tony Boese, NAII Interagency Programs Manager, and Harvard University's Adam Wood to create and integrate a system of systems called the Talent Education and Assessment Management System (TEAMS), an effort of the National Artificial Intelligence Institute's Workforce Knowledge Certification program.

TEAMS will assess the current knowledge level of the workforce and provide meaningful feedback to leadership about the cabailities and gaps within their ranks. Pairing a Learning and Development System (LDS) will provide access to timely and efficient knowledge acquisition.

A key component of TEAMS is an adaptive assessment that determines what the user already knows and finds where their gaps in knowledge are and how large they are. This will help to determine if it is beneficial for an employee to fill in the knowledge gaps, or if the gaps are too large and someone new should be hired for the job. This can be particularly useful if an agency is determining whether to invest in higher security clearances for employess to fill in a gap or not.

If upskilling is preferred, the assessment will inform the placement of a learner on a personalized learning pathway. Additionally, to ensure timely and efficient knowledge acquisition, the personalized educational platform breaks down academic topics to the granular level. The TEAMS LDS is based on a personalized and adaptive learning platform, CHUNK Learning, which at NPS has been developed under the leadership of professor of Applied Mathematics, Dr. Ralucca Gera, retired U.S. Army Lt. Col. Michelle Isenhour, and faculty associate D'Marie Bartolf.

"We were seeking an environment that is respectful for every learner's time, that is personalized and individualized and supportive of every

The stars may be aligning for an ambitious effort in workforce management called the Talent Education and Assessment Management System, or TEAMS. Developed in part by NPS experts in collaboration with the Central Coast NavalX Tech Bridge, TEAMS is designed to assess the current talent available in a workforce, identify gaps, and develop a pathway of learning to fill them. (Courtesy graphic)

learner's individuality," Gera says.

<u>CHUNK</u> Learning is a prototype used to improve the individual education experience at NPS. It has been used in several classes with successful results. Expanding this technique to a broader naval purpose, TEAMS will use artificial intelligence (AI) as the first knowledge domain tested because it is an emerging and in-demand industry.

"The TEAMS pilot will provide the opportunity to build out an architecture for a learning platform that addresses the Navy's desire for relevant learning," Bartolf explains.

NPS provides an ideal backdrop to create this assessment and academic platform because there are so many subject matter experts on a university campus.

While the creation of this learning platform is in Gera and Bartolf's area of expertise, legal and acquisition blocks slowed down initial collaboration efforts. This is where Chris Manuel and the NavalX Central Coast (C2) Tech Bridge have been pivotal to the project. In fact, Gera said she was ready to turn her focus strictly to teaching until the Tech Bridge got involved.

"There's so much capability that doesn't get out of these gates around campus," Manuel says. "We're trying to identify those and create a path for developing the technology to where it actually gets out, so people can see the great work that goes on [here]."

Manuel advertised their project to the NavalX Tech Bridge Director Whitney Tallarico, who immediately saw its potential to help with training throughout Naval institutions.

"I see it as a sustainment factor for a lot of the learning we're trying to build into talent acquisition," Tallarico says. "If we do TEAMS right, it'll remove the reliance on people to be the connectors, which is very exciting."

The project became a NavalX strategic project, allowing the project to grow and the team to utilize other technologies and resources within

the NavalX network. For example, the Central Florida Tech Bridge is helping with the systems approach for the network because they hold a focus on large virtual education systems.

TEAMS has gained a lot of support throughout the DOD with the help of Tallarico and Harvard University collaborator, Wood, who advertised the project to government stakeholders from Veteran Affairs (VA), Office of the Director of National Intelligence (ODNI) and the General Services Administration (GSA), among others.

"We're the best way to get thousands of eyes on something to test the user interface," says Tony Boese, NAII Interagency Programs Manager.

For more information, or to get involved with NavalX, visit their website.

### NPS Hosts High-Energy Laser Working Group to Address DOD Domain Needs

By MC1 Nathan K. Serpico

The Naval Postgraduate School (NPS) hosted the latest annual Laser Lethality Technical Area Working Group (TAWG) sponsored by the Joint Directed Energy Transition Office (DE-JTO), Aug. 24-26. The event brings together the joint services to collaborate and present sponsor-funded research results, as well as for laser lethality subject matter experts to review DOD laser lethality programs and technical efforts and results.

The lethality community also provides technical review of service products that address current and future directed energy lethality gaps.

"Laser weapon systems (LWS) provide a complementary, layered defense option to existing weapon systems and offer great potential to fill warfighter gaps from the air, land and sea," said Dr. Chris Lloyd, Distinguished Scientist for Navy Laser Weapon Systems Lethality at Naval Surface Warfare Center Dahlgren. "Novel technologies such as directed energy will allow the U.S. to increase overall defensive and offensive capabilities, thus enhancing weapon lethality and effectiveness."

According to NPS Physics Dept. Research Associate Professor Dr. Joe Blau, NPS' Directed Energy Group has been conducting research in this field for more than 30 years.

"We have ongoing collaboration with the Meteorology and Systems Engineering departments, as well as working with the MOVES Institute to develop simulations of the use of LWS in battlefield scenarios," noted Blau.

"LWS offer the warfighter scalable effects options that can address a variety of missions," continued Lloyd. "LWS will offer a deep 'electrical' magazine and reduce logistic resupply burdens, increasing weapon system engagement options and efficiency."

NPS is uniquely positioned to host these kinds of events, fostering the advancement of directed energy technologies in an environment that is unilaterally focused on advancing capabilities that directly affect the warfighter.

"Given the variety and depth of the presentations and corresponding discussions, this meeting allowed the DOD laser lethality community to stay abreast of related activities and strengthen coordination amongst Service laser lethality teams," stated Lloyd, who added that the meeting was a definite success.



The Naval Postgraduate School (NPS) hosted the latest annual Laser Lethality Technical Area Working Group (TAWG) sponsored by the Joint Directed Energy Transition Office (DE JTO), Aug. 24-26, which brings together the joint services to collaborate and present sponsor-funded results, as well as for laser lethality subject matter experts to review DoD laser lethality programs and technical efforts and results. (Courtesy photo)

CAMPUS news & notes

This will be a transition quarter at NPS where we bring as many students back to campus as possible while still accommodating those with individual circumstances that prevent that from occurring. After this transition quarter, our goal is to return to fully in-person instruction in the winter quarter. To that end, my expectation for fall quarter is that, in accordance with the specific mitigations below, every NPS student will return to in-person classes unless they have a personal or family challenge that precludes that. The default in the winter quarter will be in-person classes, with exceptions made on a case-by-case basis via a process that will be published by the Dean of Students.

Several new COVID mitigations will be in place beginning in the fall quarter to allow safe in-person learning. Most importantly, only vaccinated individuals will be allowed in the classroom. Those persons who are not vaccinated will be required to participate in classes via DL. Additionally, all students will be required to wear masks (instructors will be exempt to allow clear communication), and only classrooms that have sufficient ventilation for the intended class size will be used. A risk assessment conducted by the NPS Occupational Safety, Health and Environmental Department determined that the implementation of these mitigation measures will result in a low risk of COVID transmission.

Ann E. Rondeau, Ed.D. Vice Admiral, U.S. Navy (Ret.) President, Naval Postgraduate School

To read the full memo, click here.

Send your campus news and notes to update@nps.edu.

### **NPS Collaboration Keeps NATO Up To Speed in Cyber Security**

By MC2 Lenny Weston

The Naval Postgraduate School (NPS) and the North Atlantic Treaty Organization (NATO) initiated a relationship in 2004, with NPS serving as a United States' Partnership for Peace Training and Education Center. Since then, the university has developed a strong connection with the NATO School Oberammergau (NSO), launching the NPS-NSO Cyber Security Program, and later the Cyber Security Professional Program, to address the rising need for cyber awareness within NATO members and partners.

The NPS-NSO partnership goes beyond the Cyber Security Program, and when the partnership initially started it offered different courses in the fields of maritime security, energy security and cybersecurity. The cybersecurity program has been the most sought-after of the courses provided due to its rising need. To date, the program has successfully graduated over 1,200 students who together strengthen the organization.

Deciding who can instruct, as well as deliver, these courses is determined during an annual conference through NATO to identify its members and partners' educational

needs and priorities. With NPS being a leader in cyber security and having programs already in place, the choice was obvious for NATO on who will teach these highly-valuable courses.

The NPS-NSO relationship began with a conversation between Alan Howard, who now serves as NPS Energy Academic Group (EAG) Associate Chair, and, at the time, NSO's Commandant U.S. Army Col. Mark Baines, who were determining how to align education and training throughout NATO.

"I said, how about we offer some of our education from NPS to the alliance at the NATO school?" Howard said. "I saw an opportunity for the NATO school to be, in a way, like the Naval Postgraduate School's European campus. Why not have a campus in Germany where people could go and take our classes, experience the kind of capabilities that NPS has and can offer, and ideally some percentage of those numbers that attend our courses at the NATO the school, would later become full-time resident students at NPS."

"The collaboration between NPS and the NSO allows the U.S. and, by extension, NATO to build internal and partner capacity in cyber expertise and capability," said NSO Dean of Academics and Senior National Representative for Student Affairs U.S. Air Force Col. Ryan B. Craycraft. "Having this capability throughout NATO and among NATO's partners adds a buffer of security that enhances the security of the alliance."

The Cyber Security Program officially started in 2010 with one course, and has since developed into what it is today, with seven different courses; Network Security, Network Vulnerability Assessment & Risk Mitigation, Cyber Incident Handling & Disaster Response, Network Traffic Analysis, Principles of Software Reverse Engineering, Mobile Applications, and Big Data Analytics.

"The first four courses are part of the Cyber Security Professional Program started in 2012 and the students spend more than 400 hours



The Naval Postgraduate School (NPS) and the NATO School Oberammergau (NSO) continue their collaboration in educating NATO members in cyber security. The NPS-NSO partnership offers classes led by NPS faculty at the NATO school and in select countries, strengthening the cyber posture of several NATO partners through advanced education. (U.S. Navy graphic by MC2 Lenny Weston)

with lectures, labs, self-paced readings, quizzes, distance learning problem challenges, final exams and final projects," noted Howard

The program has had increasing popularity in recent years and has seen a tremendous increase in attendance within NATO. This rise has caused rapid expansion, offering classes more frequently and in some cases doubling the classroom size from 30 to 60 students.

"For anyone who has been even casually skimming the headlines for the past decade, the reason for this growth is rather obvious," said NPS Senior Lecturer and Cyber Security Professional Program developer Dr. J.D. Fulp. He attributes the increase in class size to three primary causes.

"First is the increase in the number and type of devices that rely on the proper and secure functioning of an operating system, application, or network service," Fulp explained. "Second is the increase in the degree of interconnectivity of these devices, something that will increase further as 5G technology brings higher bandwidths, think 10Gbps or more, to a greater number and variety of devices and people. And, the third is the increased exploitative sophistication of certain nation states investing heavily to enhance their offensive cyber capabilities."

Each course in the certificate program runs for 10 weeks, with two of those weeks taught in-residence with an NPS instructor, and the remaining 8 conducted virtually. After completing the Cyber Security Professional Program, students will understand operations, use, investigation and troubleshooting of cyber systems. The students also receive Certification as a Cyber Security Professional that is recognized within NATO and is a mandatory requirement by many of its members and partners.

"I would not have it any other way," said German Air Force Maj. Tim Schleimer. "I have only experienced NPS while on these courses but have never been disappointed. From the material presented to the instructors delivering it, it has all been great from my point of view."

# NPS Hosts JIFX 21-4 at Camp Roberts and SLAMR in Monterey

By MC2 Lenny Weston

The Naval Postgraduate School (NPS) held the latest iteration of its Joint Interagency Field Experimentation (JIFX) 21-4 event, August 23-27, with experimentation taking place at the NPS Field Lab at Camp Roberts and the recently added Sea Land Air Military Research Initiative (SLAMR) Laboratory across the street from the NPS campus. The quarterly event focuses on collaboration between military, commercial industry, and academia to experiment with and evaluate emerging technologies for defense-related applications.

During the week-long event, a total of 247 registered participants, including 84 experimenters representing 19 unique organizations, 40 DOD stakeholders, and 51 NPS students representing multiple service branches along with international students from Brazil, Greece, Indonesia and Sweden, took part in observing and evaluating the technologies.

"The program brings together a really diverse group of people to conduct research," said JIFX Director Michael Richardson, a retired Army Special Forces officer. "We can support field experimentation across the physical, electromagnetic, and cyber domains, but at this point in time, the JIFX team has expertise in enabling experimentation on autonomous systems and communications networking between those systems."

Whether a JIFX veteran or a first-time attendee, JIFX strives to create connections that foster the collaborative spirit amongst those with a curious mind and provide an opportunity to gain first-hand knowledge of

what various entities can offer to create effective solutions.

For someone like first-time JIFX participant Chief Executive Officer of Craitor Eric Shnell, JIFX offers a unique opportunity to test his 3D printing capability in a rugged environment. Already in collaboration with the U.S. Marine Corps, Craitor is trying to revolutionize the DoD supply chain by making a truly expeditionary high-temperature 3D printer that can manufacture high-grade parts anywhere.

"JIFX provides a community of very likeminded, technology-driven experimenters," said Shnell. "We all understand what we're working towards to be able to build the solution. Not only do we understand more from stakeholders as we talk to the government side, but also the industry side and being able to develop even more solutions out of just a few days, once a quarter."

JIFX also provides NPS students and faculty a distinct opportunity to see relevant research and technology that directly relates to their work at the university in a field environment while giving them a chance to integrate field-experimentation into their own research efforts.

"What JIFX gives me is the ability to see the experiments in action and the new technology being produced for the DOD," said NPS student U.S. Navy Lt. Mario Medina. "It directly aligns with my thesis work, which is maritime, to bring awareness of dark target threats off the California coastline. This gives me a better idea of the technology that could be used in my thesis program and toward my overall degree program, which in return will benefit the Navy, Coast Guard and Marine Corps to better understand maritime domain awareness."

"What we're trying to do is offer this uniquely militarily relevant educational experience that connects the next generation, emerging technology to the officers that will be using those in support of military missions in the future," added SLAMR Director Dr. Raymond Buettner.



Jorge Jimenez of SpyDar Sensors Inc. describes how his prototype Vertical Take-Off and Landing drone works as an effective platform for small, light payloads. (U.S. Navy photo by Javier Chagoya)

**COVID** updates

Digital COVID Vaccine Record Info

In the State of California, there is a Digital COVID-19 Vaccine Record (DCVR) Portal that allows you to download your vaccination record to a personal electronic device and receive a QR code for digital proof.

For those that received the vaccine out in town, your CDC Vaccine Card should have been uploaded automatically to the DCVR portal.

However, for those that received the vaccine at POM through CALMED (or other sites that did not automatically upload), you will need to upload your Vaccine Card to the DCVR portal. Below are the directions for those who wish to do so.

More information can be found here.

- Go to: <a href="https://myvaccinerecord.cdph.ca.gov/">https://myvaccinerecord.cdph.ca.gov/</a> and enter relevant information.
- 2. You will receive an email and/or text (depending on what you enter) saying your record was not found. The email and/or text will contain a URL to submit the vaccination information including photos of the front/back side of the vaccine card, the physical address of where you got the vaccine, and personal details.
- 3. Processing and notification takes 1 month.
- Receive a text and/or email to go back to <a href="https://myvaccinerecord.cdph.ca.gov/">https://myvaccinerecord.cdph.ca.gov/</a> and re-enter info to download digital vaccine record.
- Download the digital vaccine card to personal digital device.

v/r, CAPT Philip E. Old Chief of Staff, Naval Postgraduate School

Send your campus news and notes to update@nps.edu.

### A Message From the Provost...

Team NPS, welcome back to campus!

The President, DOS and I appreciate the extra effort made by all as we work to transition to in-person classes this quarter. While there were certainly a few speed bumps today, the overwhelming feedback and sentiment walking around campus is that students, faculty and staff are glad to be back amongst friends and colleagues, which is an important part of our culture and the NPS learning experience.

Bottom line: Our expectation is that instruction will be in person for residential courses and that everyone in the classroom is vaccinated. The current level of COVID-19 community transmission in the local area requires everyone to be masked indoors at NPS including faculty and students in classrooms.

NPS is an institution of higher learning and a learning organization. The transition this quarter will not happen overnight and will include hybrid classes for some. To any of you who continue to experience issues, please keep the feedback coming so we can do something about it. To be clear, our collective focus and NPS's center of gravity is – our students.

As we work through the implementation of mandatory COVID vaccinations for military and civilians alike, the validation of vaccination records is tedious. However, this process is enabling our return to full campus operations, and the effort by DOS and program officers to reconcile student records is progressing rapidly (another 100+ over the weekend). DOS will continue sending out a list daily of those approved for virtual instruction (please note some are on the list due to issues concerning childcare, health, etc. and regardless of exceptions, everyone is on Team NPS). Please be patient as this team works through this ongoing process, and I expect 85-90% of NPS students will be receiving in-person instruction by the end of the week.

A handful of faculty have requested waivers. In the rare situation where this occurs, students will be notified to still report to class to receive instruction virtually from the instructor. Those students are being asked to attend class in person partially because that is now NPS's default means of instruction, and primarily because the social interaction and peer-learning this engenders is still beneficial.

NPS will continue to provide resources to assist in this transition. For students, in addition to the DOS office, the Registrar's office is open 1000-1400 Monday – Thursday. For faculty, GEAC has provided workshops (that are also recorded) and other resources – contact APGE Lester for more information. If you are not sure who to reach out to for assistance, please feel free to contact myself. Additionally, the IT Help Desk x1046 is the go-to place for audiovisual/IT issues during a class and tac@nps.edu for submitting Help Desk ticket outside class time.

### Services:

NSAM has opened the Del Monte Gate from 0700-1000 M-F to ease morning traffic. Note the parking lot west side of Herrmann Hall will undergo refurbishment and paving from 27 September – 19 October 2021 (23 calendar days).

Breakfast is now open in the El Prado room in Herrmann Hall, 7 days a week from 0630-0930. Expanding service will be evaluate as demand for lunch service is determined. In the meantime Starbucks and Del Monte Café remain open for breakfast and lunch.

Again, thank you for your hard work, patience and assistance making this important transition possible.

V/R, Dr. Scott S. Gartner Provost and Academic Dean Naval Postgraduate School



### **Any Day at NPS**



Naval Postgraduate School (NPS) students and faculty participate in the Hybrid Warfare Innovation Continuum (WIC) Workshop "Hybrid Force 2045," Sept. 22. Students led by facilitators work together to develop concepts for future warfighters. (U.S. Navy photo by MC2 Lenny Weston)



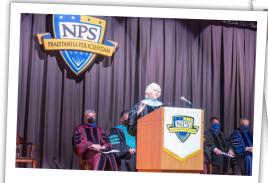
NPS Students stand during the playing of the National Anthem during the Summer Quarter Graduation ceremony in King Hall, Sep. 24. (U.S. Navy photo by Javier Chagoya)



Lt. Cmdr. Michael Larson, left, receives a Navy and Marine Corps Commendation Medal from NPS Chief of Staff Capt. Philip Old during an awards at quarters ceremony, Sep. 23. (U.S. Navy photo by MC2 James Norket)



Students pose for a selfie with their friends and family while waiting to enter King Hall for the Summer Quarter Graduation ceremony, Sep 24. (U.S. Navy



NPS President retired Vice Adm. Ann E. Rondeau gives opening remarks during the Summer Quarter Graduation ceremony in King Hall, Sep. 24. (U.S. Navy photo by MCI Nathan K. Serpico)



Chief Yeoman Brandy Golphin, left, receives a Meritorius Service Medal from NPS Chief of Staff Capt. Philip Old during an awards at quarters ceremony, Sep, 23. (U.S. Navy photo by MC2 James

STUDENT voice

Maj. Domoniqué Hittner, U.S. Army

Hello new and current students,

Welcome back to campus, Peacocks! Thank you to our students and family members who attended our End of Summer BBQ. It was wonderful to see everyone. The President's Board for Student Affairs (PBSA) is your communication bridge between the staff and students at the Naval Postgraduate School. As the Fall quarter begins, we will continue our efforts to provide helpful and tangible tips to ease the transition to full inperson learning. We welcome your feedback, recommendations, concerns, or improvement suggestions that you would like brought up to the Staff. Please email me directly at domonique. hittner@nps.edu or use our Student Recommendations Link.

We will post other upcoming events, support resources, and more volunteer opportunities to our website, the muster page, and the library. Join us in getting involved on campus to help break up the time between studying. It is a great way to connect with other students and learn more about our local community.

We hold a general student body meeting on the second Thursday of every month from 1200-1240 on campus outside of the Dudley Library/Starbucks and on MS Teams. This month's meeting is on Thursday, 14 October 2021 from 1200-1240. Please join us, or if you are unable to attend, please email for a recap of this meeting.

The PBSA is here to support you every step of the way at NPS and beyond. Contact us at <a href="mailto:pbsa@nps.edu">pbsa@nps.edu</a>. We look forward to hearing from you soon and cannot wait to see you on campus!

Here to serve,

Domoniqué Hittner, Chair, PBSA <a href="https://nps.edu/group/pbsa">https://nps.edu/group/pbsa</a>

# On campus this month

# October 11 Columbus Day



## **October 12**

V-SGL with Vice Chair, Global Affairs and Managing Director of The Carlyle Group, Adm. James G. Stavridis, USN, Ret. 3:00 p.m. Online

# October 25-29

**Center for Executive Education NSL Seminar** *Online* 



# EFFECTIVE IMMEDIATELY

AS OF 30 SEP 2021, LEAVE IN EXCESS OF 60 DAYS (UP TO 120 DAYS) IS PROTECTED UNDER SPECIAL LEAVE ACCRUAL. SEE NAVADMIN 159/21 FOR MORE DETAILS.

-YOUR SLA LEAVE BALANCE MAY BE RETAINED UNTIL 30 SEP 2024.

-SAILORS ARE RESPONSIBLE FOR TRACKING AND MANAGING THEIR OWN LEAVE, WHICH CAN BE FOUND ON THEIR LEAVE AND EARNINGS STATEMENT (LES).

-PLEASE CHECK THE DFAS WEBSITE FOR MORE INFORMATION ON SLA.



# Missing the camaraderie and conversation of the Trident Room?

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