USSOCOM Deputy Commander presides over summer quarter graduation

By MC2 Patrick Dionne

U.S. Navy Vice Admiral Tim Szymanski, Deputy Commander, U.S. Special Operations Command (USSOCOM), presided over the Naval Postgraduate School (NPS) 2019 Summer Quarter Graduation ceremony as the school bid farewell to 280 graduates, including 18 international students, in King Auditorium, Sept. 27.

University president retired Vice Adm. Ann Rondeau bestowed the 290 advanced degrees upon the graduates, and provided insights on how important the graduates are to the nation’s future.

“This event is a celebration of individual commitment, perseverance, and accomplishment,” said Rondeau. “We have immersed you in an extremely competitive academic environment that has enabled you to focus on the challenges that affect your service, our defense capabilities and our national security.”

Following her remarks, Rondeau turned the podium over to Szymanski.

“As you walk across the podium and receive your diploma, realize that this incredible institution, demanding curriculum and fantastic faculty have further revealed what you have always had—critical thinking. You are thought leaders and your organizations will rely on that leadership. Unleash your superpowers. Make a difference in your organization, in your team and in your relationships. And more importantly, inspire others to make a difference.”

—Vice Admiral Tim Szymanski, Deputy Commander, USSOCOM

“The Naval Postgraduate School is where the DOD has invested in its competitive advantage, it has invested in you,” Szymanski said. “You are thought leaders, and your organizations will directly and indirectly lean on you for that leadership.”

Szymanski then went on to highlight the importance of accelerated learning of 21st century skill sets, including space, cyber information, influence decision science, data analytics, algorithmic warfare, noting the Navy’s approach of velocity learning and ready relevant learning.

“One of the elements of critical thinking is thinking differently, and challenging your assumptions and theses, you may not immediately realize your new superpowers, or realize that they are essential when you return to duty, but know that they are,” he continued. “To me, it is about two things. First, it’s about making a difference in the relationship between leaders and followers, not necessarily a result, or an outcome, but just a positive difference. And second, it’s about inspiring others to make a difference. This incredible faculty helped you develop the most important skill that will serve you best as you return to your services and parent organizations, and that is not what to think, but how to think.”
NPS sleep research takes on amphibious operations

By Matthew Schehl

The Naval Postgraduate School (NPS) recently led a research mission across the Pacific Ocean which may vastly improve the Navy’s understanding of how sleep can boost crew performance during arduous amphibious operations.

Dr. Nita Shattuck, Crew Endurance Lead with NPS’ Human Systems Integration (HSI) program, headed up a team of Navy psychologists from across the Fleet in August for a three-week embed aboard the amphibious dock landing ship USS Ashland (LSD 48) as it sailed from Australia to Japan. Distributing 500 wristwatches Shattuck described as “Fitbits on steroids,” the team recorded critical biometrical data as the crew went about its business underway ... regular duties, standing watch, training, and even eating, recreation and sleeping.

“These watches collect activity. They’re basically accelerometers which pick up every slightest movement, including sleep,” Shattuck explained. “Every crew works hard, but until we measure this, we have no idea how hard.”

“This gives us the opportunity to know what is really happening with the crew,” she continued. “Are they getting sleep? How much, and what’s the quality of that sleep?”

The data they collected will further advance the pioneering work Shattuck and her NPS team have already accomplished in how the Navy fights the dangers of sleep deprivation.

For two decades, Shattuck has investigated how circadian rhythms – the body’s natural 24-hour sleep-wake cycles – impact the continuous operational demands on Navy crews underway. Aligning watchbills and environmental conditions with optimized sleep schedules can go a long way in mitigating fatigue and reducing mishaps, with the goal of greatly improving crew endurance and performance.

NPS’ work in this domain has been featured in a wide array of national media outlets, including National Public Radio, National Geographic and Navy Times, and in 2017 led to a comprehensive policy change in the Navy when Vice Adm. Thomas Rowden, then Commander, Naval Surface Forces, announced the service would implement the HSI lab’s optimized watchbill program throughout the surface fleet.

Since 2004, the NPS crew continuously worked to collect data at sea, embedding on destroyers, cruisers, aircraft carriers, frigates and littoral combat ships ... countless hours gathering and analyzing data.

Never have they done so with amphibious assault ships - until now.

“People have told me that’s never going to happen on amphibs. They’re a different kind of animal, you can’t get there, and so on,” Shattuck said. “That’s because amphibs are especially challenging. Not only do they have sailing their ship and other typical stuff going on, but they also have to launch and recover aircraft and send off Marines.

“So, it’s not just one mission,” she continued. “It can be all these missions simultaneously, so the workload on the crew can just be wicked hard.”

To undertake this kind of study, the HSI lab called in the heavy artillery. NPS put out the word to the naval research community in early summer for additional Navy psychologists to support the upcoming field collection, and the response was not disappointing. Within short order, Shattuck assembled a crack team with representatives from the Naval Research Lab (NRL), the Naval Medical Research Unit - Dayton (NAMRU-D) and the Naval Aerospace Medical Institute (NAMI).

The research team then spent the next three weeks with the ARG Wasp as it transited from Townsville, Australia to Sasebo, Japan, conducting operations along the way.

In addition to the wristbands, the group also collected all sorts of environmental data, including the kind of light crews were exposed to, the hours of daylight, how much light they got and when. This information was also supplemented with journals the team handed out to participants to fill in during transit.

“The idea is to have both the objective data that says, ‘This is what we think you are doing,’ and then match that with self-reported data [from participants] that says what they were doing over each day,” Shattuck explained.

It will take some time for Shattuck and her HSI team to analyze the data collected and fold it into their ongoing research, but at the end of the day the ball will be advanced.

“Navy-wide, our entire goal is to increase the performance, readiness, lethality and day-to-day experiences of those frontline individuals out in the fleet,” noted Lt. Heidi Keiser, an experimental psychologist with NAMI. “That’s what we’re all here to do. Whether we’re in different job titles or different locations, we use our research skills to make the Navy better and make lives better for those individuals who are out doing the work every day.”
NPS ITACS recognized with Navy Agility and Accountability Impact Award

By MC2 Taylor Vencill

The Naval Postgraduate School’s (NPS) Information Technology and Communications Services (ITACS) department has been recognized for innovative support to the university with its receipt of the Navy Agility and Accountability Impact Award, presented Sept. 18.

ITACS was recognized in the Agile Technology category, which highlights achievements in the development, adoption and/or delivery of new or improved hardware, software or tool(s) that improved the effectiveness or overall mission readiness of the organization. As leaders across the services are touting the value of rapid acquisition processes to respond to emerging requirements, NPS ITACS is making it happen for faculty and students across the university campus.

“The EDU network affords NPS the ability to make changes quickly to respond to emerging faculty, staff and student requirements,” said Chris Gaucher, NPS’ Deputy Chief Information Officer (CIO), on hand to accept the award on behalf of CIO Joe LoPiccolo and the entire ITACS team. “Timeliness is absolutely critical in an academic environment.”

“This is a great opportunity for the institution,” added university president, retired Vice Adm. Ann Rondeau. “With NavalX here talking about how to bridge and integrate efforts across various entities to create the kind of ecosystem of innovation is really great. I want to thank NavalX for its efforts and being here today.”

Gaucher stressed that the EDU network employed by the university is a critical enabler to the mission, much like every member of the larger ITACS community on campus.

ITACS serves as the central information technology (IT) organization for NPS and provides technology and communications support for its core mission of teaching and research. This challenging academic environment requires that faculty and researchers constantly explore new boundaries of the unknown, and that leads to failures, often.

Academic IT services must be agile, resilient and secure, Gaucher stressed. Static IT services with limited capacity and long procurement lead times cannot keep up with the demands of NPS faculty.

The ITACS department “meets this challenge every day,” Gaucher said, in three major areas that led to its selection for the award.

First, a 100-gigabit-per-second Software Defined Network-capable EDU network using a hybrid Infrastructure-as-a-Service model leveraging elastic cloud services with on-premise hardware. Second, a High-Performance Computing suite of systems that supports education and research at NPS, and actually helps recruit top faculty. And third, a determined focus on security with its Cybersecurity Operations Center that monitors and defends the Navy’s EDU networks 24 hours a day, seven days a week while offering unique experience tours to students and cyber research opportunities to faculty.

Yost began teaching in the NSA department in July 1979. He has taught nearly 2,000 graduate students and advised over 170 thesis students, making lasting contributions to their intellectual development.

“I feel most grateful and privileged to have taught at NPS. For many reasons, I admire my students and colleagues,” said Yost.

Yost’s prolific scholarship includes authoring 12 books and 120 articles, book chapters and conference proceedings. He is recognized on the international stage as a leading expert in security studies and French foreign and defense policy.

“Prof. Yost is a legend among former students, many of whom recollect decades later about his great care and helpful suggestions on their theses,” said Moltz.

Yost’s work has garnered accolades and support from NATO’s Defense College, Le Centre des Hautes Etudes de l’Armement, Ecole Militaire, Council on Foreign Relations, the Woodrow Wilson International Center for Scholars and the U.S. Institute of Peace.

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NPS, Air Force Research Lab use JIFX to improve situational awareness tool

By MC2 Nathan K Serpico

The Naval Postgraduate School’s quarterly Joint Interagency Field Experimentation (JIFX) event has once again provided an opportunity for partnerships to improve tech to the warfighter. This time, the NPS Field Laboratory in Camp Roberts, Calif., enabled collaboration between U.S. military research enterprises – NPS and the U.S. Air Force Research Lab (AFRL) – which partnered on the development and testing of a new common operational picture (COP) system called COPERS, or Common Operating Picture for Event Response and Situational Awareness.

A COP is a single identical display of relevant information shared by more than one command that facilitates collaborative planning and combined execution, and assists all echelons to achieve situational awareness.

According to Dr. Ray Buettner, JIFX director and associate professor in the NPS Department of Information Sciences, there can be reluctance in having a military system accept information feeds from external or commercial systems, therefore, a military common operating picture typically only fuses military information coming off military systems.

However, according to Raymund Garcia, COPERS program manager, the COPERS system is built to easily ingest both government and commercial data in the same COP to give the warfighter the most efficient and effective operational information of the battlespace.

“The biggest differential [between COPERS and other COPS] is the capability of its interoperability,” Garcia explained. “[JIFX] is one of those few places that we can do on-the-flight integration and see the possibilities of ‘what if,’ and we find tremendous value in that.”

At JIFX, the COPERS system acted as the mortar during an integrated event connecting different experimentation groups together, allowing each unit to access and feed data into the centralized system creating situational awareness of the environment.

With the call for more integration and collaboration with industry from senior leaders like Secretary of the Navy Richard V. Spencer, having a system that can easily incorporate data from more commercialized systems can expedite service members getting pertinent information.

“We built the system to rapidly integrate, so when we come into a place like [JIFX], where there are other technologies, and they all want to be up on COPERS, it’s good practice for us,” said AFRL contractor Preston Hoeve. “They want to be in the common operating picture for the command to see. It allows us to see if we’ve built a system that’s flexible enough and able to rapidly expand fast enough to bring data in there.”

Allowing Garcia and Hoeve to see how COPERS performed during JIFX helped provide insight on how to further modify the system to maximize the Air Force’s investment and reach a broader customer base.

COPERS would be especially useful in humanitarian assistance and disaster relief operations, Buettner says. In these environments, where pushing information out to allies or non-governmental organizations who are providing assistance is paramount, a system like COPERS would allow for that flexibility with a reasonable commercial standard of security in place.

Hispanic Heritage Month proclamation launches month-long recognition

By Javier Chagoya

University president retired Vice Adm. Ann Rondeau signed a special proclamation officially announcing the beginning of Hispanic Heritage Month, Sept. 16, with NPS Command Heritage Committee representative Intelligence Specialist 2nd Class Brandon Lee serving as witness. National Hispanic Heritage Month begins mid-September each year, followed by a month-long tribute to the generations of Hispanic Americans that have positively impacted the nation.

“I believe it’s important that we take time out to observe and welcome the melting pot of diversity we have in our Navy community and our nation as we recognize the contributions Hispanics have made to the country,” said Lee.

The Proclamation recognizes the diversity of the American people, where Hispanics represent a wide range of nationalities and backgrounds who have had to overcome great obstacles to persevere and flourish in every sector of society.

“With enduring values of faith and family, hard work and sacrifice, Hispanics have helped to preserve the rich heritage of generations past while contributing mightily to the promise of our nation for their children and grandchildren,” the proclamation reads.

NPS President retired Vice Adm. Ann Rondeau signs a proclamation signaling the start of Hispanic Heritage Month, Sept. 16, with NPS Command Heritage Committee representative Intelligence Specialist 2nd Class Brandon Lee serving as witness.

National Hispanic Heritage Month begins each year on September 15, followed by a month-long tribute to the generations of Hispanic Americans that have positively impacted the nation. (U.S. Navy photo by Javier Chagoya)
First responders recall their 9/11 experiences during remembrance ceremony

By MC2 Tom Tonthat

Two 9/11 first responders shared their experiences during the World Trade Center attack in New York City with students, faculty and staff at the Naval Postgraduate School and Naval Support Activity Monterey during a 9/11 Remembrance Ceremony honoring the nearly 3,000 lives lost, Sept. 11, in front of Herrmann Hall.

New York Fire Department (FDNY) Battalion Chief Timothy Rice and U.S. Secret Service Senior Special Agent Laura Hughes both spoke of the chaos and heroism they witnessed as they and their colleagues, and civilians, helped to rescue victims with no regard for their own lives.

“We’re gathered here this morning to remember the victims of the attacks and those responders who made the supreme sacrifice on that fateful day,” said Rice. “All the employees and civilians who went to work or boarded planes, never to return.

“All those at the Pentagon and on United Flight 93, the 37 Port Authority officers, the 23 NYPD officers and 343 members of the FDNY... It is important to remember that on this day we honor and support the families of all those lost and who continue to suffer today,” he continued.

Rice brought attention to several firefighters who gave their lives that day as he provided his personal experience with each one.

“I had the honor of working and knowing some of the most exceptional people, and the bravest firefighters who are no longer with us,” said Rice. “As we honor them on this day of remembrance, we renew our vows to never forget. For those of us here today in the Center for Homeland Defense and Security, for those who remain in the fight and respond to the call, let us all vow to do everything we can to ensure, never again.”

Hughes, who was less than a year out of the Secret Service Training Academy that fateful day, recalled how beautiful the morning was as she headed to her assigned post at the Secret Service Field Office at the World Trade Center.

“As I headed into work on the morning of September 11, 2001, I actually remember thinking what a beautiful day it was,” said Hughes. “Little did I know that in less than an hour, it would be the most memorable day of my life.”

From the streets of the World Trade Center site, Hughes recalled the chaos around her and the unified effort of first responders and citizens to assist the victims.

“All I remember seeing was a burst of orange out of the corner of my eye,” said Hughes. “After rallying at a relocation site, agents and officers from our office assisted in many ways that day. Some ran into the towers to help with the evacuation. Others assisted firefighters and police on the ground. The remaining evacuated schools in the area and assisted with triage of the injured. I was amazed at the heroic efforts of our first responders and the citizens who raced into the building to try and save as many people as they could with no consideration for their own lives.”

Both keynote speakers of the 9/11 Remembrance ceremony echoed the importance of remembering.

“I am afraid as time marches on, we and future generations will have forgotten the horrific events that unfolded on September 11, 2001,” said Hughes. “I know the family members, the first responders, our military and thehardworking homeland security employees have not forgotten. It is my hope that we as a country never forget what happened that fateful day. That we continue to be vigilant in our fight against terrorism and always remember the precious lives that were lost.”

Send your campus news and notes to update@nps.edu.
Senior service leaders updated on Marine Corps Ph.D. program

By MC2 Patrick Dionne

When senior service leaders launched the Marine Corps Doctor of Philosophy Programs (PHDP) in mid-2017, the services wanted to take advantage of talented officers amongst the ranks, developing “a cohort of strategic thinkers and technical leaders capable of applying substantive knowledge, directing original research, and leveraging relationships with industry and elements of national security combined with their operational MAGTF experiences to achieve the innovative thinking desired by the Marine Corps,” as stated in MARADMINs 423/17, announcing the program.

The Naval Postgraduate School stepped forward to support the PHDP’s technical track, with programs in operations research, computer science, modeling, virtual environments and simulation (MOVES), and information sciences.

Just a few months into his duties as Commanding General of the Marine Corps Combat Development Command (MCCDC), and Deputy Commandant for Combat Development and Integration, Lt. Gen. Eric Smith visited NPS in late August to check in with all of the Marines studying at the university. But he expressed a keen interest in exploring the small cohort of PhD students currently working through their respective programs via the PHDP.

“This is the first trip I have taken as the deputy commandant because we have 268 students here who are getting master’s or doctoral degrees, and not for their own benefit, but for the Corp’s benefit,” said Smith. “This particular education is the high end of our warfighting expertise, so coming here to meet with the students and Admiral Rondeau helps to find out how to best utilize the work these students are doing.”

The number of students enrolled in the Ph.D. program pales in comparison to the Marines on campus for master’s degrees. But the roles these doctoral candidates will play in the Marine Corps is massive, according to Smith.

“These Ph.D. students are a significant part of the future of the Marine Corps because of the intractable problems we are facing,” said Smith. “This is a huge part of the commandant’s planning guidance, and allows us to take problems and turn them over to these Ph.D. students, who have not only the intellectual capacity, but the networks necessary to find and bring additional resources into these problem sets and solve them.”

From the students’ perspectives, the opportunity to engage with senior leaders on how best to capitalize on the investment in them was welcomed, and invaluable.

“This was a great opportunity for a lot of us because we were able to discuss what we can do to best leverage the research we are doing for NPS to solve Marine Corps problems,” said Maj. Robert Schotter, a Ph.D. candidate in the Department of Information Sciences. “We talked about utilization concepts of how we can be used after graduation. And anytime you have a respected senior leader in the Marine Corps that gives his vision for the future, that is very helpful to us.”

Focus On... PII Team

Deputy Chief Information Officer for Operations Chris Gaucher serves as NPS’ Privacy Act Coordinator, ensuring the management of personally-identifiable information (PII) remains in compliance in all facets in the Information Technology and Communications Services department (ITACS).

Personally-identifiable information (PII) is any data that could potentially identify a specific individual. Any information that can be used to distinguish one person from another and can be used to compromise the anonymity of anonymous data can also be considered PII.

Gaucher recently gathered a team of PII representatives from around campus and NSA Monterey for an annual meeting to share lessons learned from this past year. He also passed along new Navy and DOD privacy requirements, and gave the team of PII reps the opportunity to ask questions. It was also a chance for the team to learn from one another, and to build a local network of trusted partners who work with privacy information every day.

“NPS’ broad and diverse communications, including high performance and high bandwidth networking services is important,” said Gaucher, referencing the critical role these technologies play in empowering our student, faculty research. And this annual meeting of representatives is just one of the many ways he keeps NPS network users apprised of current privacy act practices, he added.

In the very near future, Gaucher said he will convene a tabletop exercise on managing responses to a large-scale privacy incident, with several participants across campus.
Tech. Sgt. Gerald McLaughlin, USAF

NPS Colleagues,

Congrats to our graduates for this quarter! I hope that each of you was able to fully enjoy your time here with the NPS community. We also had approximately 130 new students join us this month, so if you see some new faces around, be sure to say hello! If you’re one of the new students, welcome!

The President’s Board for Student Affairs now has a virtual bookstore. Previously, this was an NPS-run affair, but due to reduced funding, it was discontinued a few years ago. We believed we could build something to easily allow students to create peer-to-peer transfers of used books on campus. Those with unused books can pass them along and those needing books can elect to receive them faster and, more importantly, cheaper. Head over to our website (https://my.nps.edu/group/pbsa) to see what books are currently listed. Currently, it’s a very basic concept; but, we hope to move further into automation once LifeRay gets updated in November.

In the next couple of weeks, the NPS Student Survey will be going live. We’d love to hear your feedback on the academic and quality of life aspects of being a student here at NPS. We are in the process of testing the survey for compatibility with all the usual mobile devices (iOS and Android), so hopefully you can take a few minutes to plug in your responses and help us provide direct feedback to the NPS command staff.

We hope everyone enjoys the fall season on the Monterey Peninsula.

The President’s Board for Student Affairs will continue striving for excellence, and our hope is to always leave things better than the way we found them. Best of luck to all in the current quarter!

With Warm Regards,

Gerald P. McLaughlin

Don’t hesitate to contact us at PBSA@nps.edu

Chair: Tech. Sgt. Gerald McLaughlin, USAF
Vice-Chair: Lt. Christina Gatti, USN
GSBPP Lead: Maj. Kevin Landreth, USAF
GSEAS Lead: Lt Adam Waymouth, USN
GSOIS Lead: Master Sgt. Joe Scobey, USAF
SIGS Lead: Capt. Jessica Sunkamanaveonge, USAF

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On campus this month

October 11
The History of Probability Theory
11:00 a.m., Spanagel 117

October 14
Columbus Day
Federal Holiday

October 19
Navy Ball
6:00 p.m., McNitt Ballroom

October 22
SGL with Mr. Robert D. Cabana
3:00 p.m.-4:30 p.m., King Auditorium

October 25
Hypervelocity Gun Weapon System Workshop
Naval Postgraduate School

Breaking News Happens
Stay Connected. Stay Informed.

Historical Highlights

All things must change. Nowhere is it easier to see natural changes than at the site of a lake on its way to becoming a marsh, a meadow, a forestland.

Del Monte Lake is undergoing a period of “shoreline maintenance,” in essence to keep the lake...a lake. This month’s Historical Highlight honors the processes of nature that continue to resist our best efforts to halt the power of nature to change.

Landscape designer Rudolph Ulrich envisioned a reflecting mirror before the grand Hotel Del Monte—and a solution to a water shortage. In 1880, he dredged a thriving marshland to make it happen.

Over time, Nature reclaimed the landscape, as it inevitably will: the trees grew in, and today the once-artificial lake is habitat to an astonishing variety of animal, insect, and bird life. But, the processes of change continue, quietly, as the lake silts in. “Shoreline maintenance” will halt the progress toward marshland for now. But all things must change.

Photography by Susan Hawthorne

Historical Highlights are provided by the Dudley Knox Library.