SECRETARY OF THE NAVY Richard V. Spencer presided over the Naval Postgraduate School’s (NPS) 2019 Winter Quarter Graduation ceremony as the school bid farewell to 212 graduates, including 11 international students, in King Auditorium, March 29.

University president retired Vice Adm. Ann Rondeau conferred the advanced degrees upon the graduates, and then reminded the new NPS alumni of the higher calling ahead.

“This event is a celebration of individual commitment, perseverance, and accomplishment,” said Rondeau. “You should all be very proud of what you have accomplished here and we look forward to seeing great things of you in the future. Today we celebrate you, but tomorrow our investment in you is what matters.”

She then turned the podium over to Spencer, who began his speech with a special recognition of the university, and the graduates’ accomplishments.

“To the graduating winter class of 2019, a hearty congratulations,” exclaimed Spencer. “One of the things that I truly love about NPS, that I have been excited to see continue, is that it is about ready, relevant research. You come in from the fleet, you do your studies, but most importantly, you are now acolytes that go back to the fleet to impart your knowledge of how to do our jobs better.”

Spencer, who himself served as a Marine Corps aviator from 1976-1981, imparted the wisdom behind maintaining relationships with friends, colleagues and mentors.

“From this day forward, you will share a bond of achievement with your classmates,” stated Spencer. “Hold these relationships dear, because if a 65-year-old person standing on a stage can impart one thing on you, it is that a rolodex of friendships will enrich your life.”

Concluding his speech, Spencer left the class with a promise he made to the late Sen. John McCain.

“I will break glass, I will not break laws,” Spencer recalled of his testimony to McCain and the Senate Armed Forces Committee. “I will come before you with skinned knees, and if I do not, that means I am not pedaling the bike fast enough. ... That is the kind of organization we must be working in. I look forward to seeing the impressions you make on your services.”

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You are now acolytes that go back to the fleet to impart your knowledge of how to do our jobs better.”

—The Honorable Richard V. Spencer, Secretary of the Navy
NPS Relaunches Partnership with Middlebury Institute of International Studies

By MC2 Patrick Dionne

For the first time in eight years, Naval Postgraduate School (NPS) students have returned to the Middlebury Institute of International Studies (MIIS) campus in Monterey, Calif., as part of an exchange program supporting NPS’ ongoing effort to enhance partnerships with civilian institutions and academia to the benefit of its students.

According to National Security Affairs (NSA) Program Officer Cmdr. Paul Rasmussen, the exchange program was revitalized after the Secretary of the Navy Richard V. Spencer stressed the importance of expanding NPS’ partnerships with academia during a visit to NPS in 2018.

“With the positive trajectory that NPS has right now on partnering with other institutions, it was the right time to breathe some new life into this program,” said Rasmussen. “The biggest benefit is that it is going to open up future possibilities for partnership, collaboration and innovation between the faculty, staff and students of NPS and MIIS.”

MIIS and NPS share similarities within their curricula in that they teach contemporary international politics, history and strategic studies. However, the MIIS courses in which the NPS students are enrolled come with the twist of being taught completely in a foreign language.

NPS Associate Professor Erik Dahl believes the partnership with MIIS helps NPS maximize its capabilities and provide a better education to students.

“We want our students to not only leave Monterey with an NPS education, but with a broader education,” said Dahl. “Interacting with a diverse group of students and faculty at MIIS translates into our students becoming more effective, better educated officers.”

When the opportunity for the program was advertised to NPS’ NSA students, the advertisement included a variety of potential courses, from Nuclear proliferation to Russian cinema. For Air Force Maj. Caitlin Diffley and Marine Corps Capt. Jason Hotalen, both prospective Foreign Area Officers (FAO), this was a perfect fit for them to refine and diversify their expertise.

“My class focuses on the Russian language through culture, so it is all conversational and all in high-level Russian,” said Diffley, who had studied the Russian language for 47-weeks at the Defense Language Institute (DLI) at the Presidio of Monterey. “I am gaining access to a Russian cultural mentality that I would not have had otherwise.”

The program was equally fitting for Hotalen, who is fluent in French.

“I have always been interested in leveraging my very unique experiences to help the Marine Corps,” said Hotalen. “MIIS is going to make me a better communicator for sure. In today’s environment, the military is not operating in a vacuum and there is a real possibility of working with people like you meet at MIIS in the future.

“A knowledge of language and cultures opens up doors and unique opportunities,” he continued. “This also helps by presenting a new view of the world’s problems because, being a warfighter, my experience of the world and the violence in it is very different from the other students that you interact with there, and that helps expand your point of view.”

Given the valued experiences by this initial cohort of students participating in the exchange, Rasmussen says the collaboration is still only beginning to take shape.

“I think as we deepen this partnership, we can not only increase the number of students we send there, but they also can begin to send their students here, which will bring that fresh perspective to our own campus,” said Rasmussen.
NPS Participates in Salinas Airshow’s STEM Runway

By MC2 Tom Tonthat

Volunteers from the Naval Postgraduate School (NPS) hosted a trio of interactive booths to spark interest in science, technology, engineering and math (STEM) in attendees of the California International Airshow in Salinas, March 23-24, as part of an expanded addition to the popular event called the STEM Runway.

“The purpose of hosting STEM exhibits was to encourage STEM sciences to middle school youth in the Salinas Valley,” said NPS Air Warfare Chair Capt. Ed McCabe, who helped arrange NPS’ presence at the airshow. “Faculty and military staff from the campus manned these booths to show students some practical and fun demonstrations of science and technology.”

Hundreds of middle school students from throughout Monterey County navigated the STEM Runway, where NPS students, staff and faculty gave interactive demonstrations in the areas of undersea operations, space and augmented reality, and oceanography.

“We want NPS to be recognized as one of the major institutions in Monterey County for STEM, and showcase the research that we do,” said NPS Program Officer Cmdr. Paula Travis, who also helped coordinate the university’s participation, and operated the oceanography booth. “We are an engine that drives the adoption of new practices and technology.”

In addition to hands-on demonstrations at the NPS booths such as using a helmsman console simulator to dock a virtual ship into port, students had a chance to talk to Navy Sailors, including members of the U.S. Navy Blue Angels ground crew who visited the STEM Runway before their flight demonstration.

“It is important to encourage our youth to study,” said McCabe. Interest in science and technology now means more scientists and researchers in the future, solving our nation’s most “vexing challenges,” he said.

After experiencing a sample of what NPS is about, Travis reminded attendees that the whole university will be on display come October 25, for the annual Discover NPS Day.

“We’ve got a great staff at NPS, and we’ve got an important mission to help solve military and national security problems,” Travis said. “We’re executing it every day, and getting students involved with technology and science is essential to inspiring the next generation of problem solvers.”

Retired Naval Postgraduate School (NPS) Senior Lecturer George W. Lober has the honor of being the namesake for a new annual lecture series in the field of ethics. NPS’ Department of Defense Analysis (DA) debuted the George W. Lober Lecture Series, Mar. 7.

Lober retired in 2018 after 21 years serving as a senior lecturer, teaching technical writing and ethical decision-making. He won the annual Schieffelin Award in 2006, which recognizes the best in teaching at the university.

“Having this lecture series named for me is an extremely high honor,” said Lober. “These types of honors are career honors. But my personal honor is when I get an email from a student telling me that I’ve contributed something to their life.”

Dr. Bradley Strawser and DA department chair Dr. John Arquilla generated the vision for this lecture series and aim to make it a campus-wide event and a staple at NPS.

“He’s a master teacher,” said Strawser. “I’ve always looked up to him as a mentor, a friend and a model of what a good teacher should be. When he retired last year, we thought there was no better way to honor him than naming a lecture series after him, for he was the guy who brought ethics to our department.

“The plan is to offer this series every winter quarter,” continued Strawser. “In the spring, we plan to poll the DA students to see whose work in the ethics field is relevant to them and have that be our system of nominating who the lecturer will be for that year.”

Have a story to share? Public Affairs is constantly seeking interesting news and stories for Update NPS. Send your tips to pao@nps.edu.
NPS Director Who Overcame Obstacles Highlights Women’s History Celebration

By MC2 Patrick Dionne

Born to a teenage mother in a small Wisconsin town, Laurel Minik explained to a small Naval Postgraduate School audience that her future appeared to have very few options. She recalled as a teenager, however, telling her mother that she determined to go to college. Her determination succeeded, and through education she was able to rise through the ranks in marketing at the Coca-Cola Company, and eventually joining NPS.

The NPS Heritage Committee held a Woman’s History Month commemoration at the campus’ Mechanical Engineering Auditorium, March 27, hosting Minik, NPS Director of Institutional Advancement, as keynote speaker.

The event’s theme was “Visionary Women, Champions of Peace and Non-violence.” The brief presentations highlighted women’s personal and professional achievements across a range of vocations such as major milestones of women in sports, as well as the military career accomplishments of Capt. Rosemary Mariner and Fleet Master Chief April Beldo.

“These sorts of celebrations really help to educate people of what women are capable of, and that is what we need today,” said Minik. “It was really uplifting to reflect on the struggles that all these great women have faced and how they overcame them.”

Minik’s passion and long-term goals to break the cycle gave her momentum to face unexpected challenges. After graduating college, getting married, and joining Coca-Cola, she saw initial success in marketing. However, the gender barrier became present and she was relegated to support functions, even having to relinquish her office to a man.

In 24 months, Minik had two sons and completed her MBA, all while facing resistance in the workplace.

“Earning my MBA proved to be the best decision for my career. Soon after I was promoted to a regional marketing manager,” said Minik. “Despite the tremendous amount of stress I experienced, the obstacles were a gift, the gift of motivation to change the direction of my future with education.”

Also part of the commemoration was Yeoman 1st Class Alice Flowers, who helped organize the event as a member of the Heritage Committee. She drew inspiration from Minik’s story to keep focused on her own goals.

“This kind of event and listening to the stories of other people really helps inspire you to continue focusing on your goals,” said Flowers. “Our goal for the heritage committee is to help increase involvement and camaraderie at NPS. Even though we have come a long way, there are still unique challenges that women face and we aim to face those challenges moving forward.”

ECE Student Earns Wozencraft Award

By Javier Chagoya

Lt. Michelle Parmentar, an NPS electronic systems engineering student, was selected as the recipient of the John McReynolds Wozencraft Electrical and Computer Engineering (ECE) Academic Honor Award, presented March 19.

Parmentar’s thesis investigates the effects of spectrally opportunistic shaped communications waveforms impinging into the spectrum of a radar.

“To simulate the radar, we first use a Hamming-based spectral shape and a more realistic spectrum from a commercial navigation radar,” she explained. “Our results showed that, yes, you can spectrally shape a communications signal to fit on the side lobes of a commercial navigation radar and inject some into the mainlobe. We tested three different communications spectral shapes,” she added.

Lt. Michelle Parmentar proudly holds the Wozencraft Academic Honor Award, following her ceremony attended by NPS leadership, March 19. (U.S. Navy photo by Javier Chagoya)
Navy Officer Receives Winter Quarter’s MORS/Tisdale Award

By MC2 Michael Ehrlich

Three Winter quarter graduates from the Naval Postgraduate School (NPS) Department of Operations Research (OR) presented their theses to a panel of five judges, along with an audience of faculty and fellow students, during the Military Operations Research Society (MORS) Stephen A. Tisdale Graduate Research Award competition in Glasgow Hall, Feb. 28.

U.S. Navy Lt. Cmdr. Adam Hilliard and Lt. Carolyne Vu, and U.S. Marine Corps Capt. Ashley Brown each developed unique approaches to solving very different issues facing the U.S. military, and delivered detailed presentations on their research followed by thorough deliberations.

In the end, the panel of judges selected Hilliard to receive the winter quarter MORS/Tisdale award for his thesis, “A Drydock Loading Model for Surface Ship Maintenance,” in which he researched how to coordinate maintenance schedules and drydock availability to accommodate real-time demand changes with greater ease.

“Surface forces have a large number of availabilities with fewer number of dry dock resources,” said Hilliard. “My thesis developed an optimization model to help those forces with scheduling maintenance availabilities to available dry dock resources.”

U.S. Navy Capt. Brian Morgan, program officer for NPS’ OR curriculum, presided over the competition and described the caliber of theses that usually receive a nomination.

“Every quarter, the faculty nominates students to present their work, and to be recognized for the quality of their work,” said Morgan. “The significance of nominating these students is to recognize their outstanding work in operations research on particular topics that are of near-term value to the United States and its allies.”

For Vu and Brown, their research also presented the potential for immediate dividends to the nation.

Vu’s thesis, “Network Classification Under Incomplete Information,” studied the time between information gathering and reaction time.

“My thesis is examining a supervised learning method on how to classify a network before you have complete information,” said Vu. “I’m hoping that with my method of classification we can look at partial information of a network and start to develop a strategy to take action without delay.”


“My thesis is about humanitarian logistics delivery and using a routing model that is a simple heuristic solution that improves how we are able to deliver supplies, by reducing time, distance demands,” said Brown. “Having a quick and easy tool you can implement to route logistics can save time, money and most importantly lives.”

Retired U.S. Capt. Wayne Hughes, whose first MORS symposium was in 1979, served as a panelist and says the competition is meant to be inspirational.

“The theses are some of the best examples of the kinds of things that can be done by our students,” said Hughes. “These works are different, original, and in the best of worlds, they are immediately applicable to military operations.”

The Naval Postgraduate School (NPS) completed its latest curricula review for the National Security Affairs (NSA) department, adjusting course to meet new challenges of increasing Great Power Competition.

NSA leadership presented the review to Rear Adm. Will Pennington, director of the Office of the Chief of Naval Operations (OPNAV) N-51 Strategy and Policy Division, as well as representatives of the Defense Security Cooperation Agency (DSCA), through an in-depth, day-long tour of the department’s capabilities and priorities, March 5.

“As a result of the 2019 NSA curricula review with OPNAV and DSCA, the NSA department will be updating the Educational Skills Requirements (ESRs) across all nine of our programs to reflect changes in the strategic environment and recent strategy and policy documents,” noted Cmdr. Paul Rasmussen, NSA program officer.

The recent publication of several key reports has marked a sea change in strategic direction and policy across the armed services, reflecting complex and rapidly changing global conditions. Chief among these is the 2018 National Defense Strategy (NDS), which specifically observes the re-emergence of China and Russia as long-term strategic competitors requiring increased and sustained investment well into the future.

The changes in the 2019 NSA curricula review are geared to better prepare students to better navigate the complexities of a changing international security environment. Recent updates include a new foundational course required for all students, “Great Power Competition in the Modern World,” a new FAO security cooperation course entitled “Security Sector Assistance in an Era of Great Power Competition,” and an ongoing lecture series focused on new Global Challenges.

Send your campus news and notes to update@nps.edu.
Deputy USSTRATCOM Shares Latest in Strategic Deterrence

By Javier Chagoya

Vice Adm. David Kriete, Deputy Commander, United States Strategic Command (USSTRATCOM), addressed Naval Postgraduate School (NPS) students, faculty and staff about USSTRATCOM’s strategic deterrence mission, and their latest endeavors to advance that mission through education, during the latest Secretary of the Navy Guest Lecture (SGL).

Kriete has almost a decade of service at USSTRATCOM, and played an integral role in the two most recent Nuclear Posture Reviews, determining the role of nuclear weapons in U.S. policy and strategy.

“Strategic deterrence is the number one mission of USSTRATCOM, however, today’s security threats are multi-domain, multi-regional and multi-adversary,” said Kriete. “This is an extremely complex environment that militaries around the world have to navigate, and we have to partner with other nations and with other U.S. government departments if we are going to be successful.”

“The real value of the Naval Postgraduate School is that you’re developing ideas here that you will bring back to the fleet or community you work in,” continued Kriete. “One of the favorite parts of my job at USSTRATCOM is engaging with the young professionals who are going to lead our nuclear enterprise well into the future.”

Kriete expressed that the education of all military officers is a force multiplier for both USSTRATCOM and the joint force.

“One of our biggest success stories of late at USSTRATCOM is the establishment of what we call the Deterrence and Assurance Academic Alliance,” said Kriete. “The alliance today consists of over 40 prestigious universities and institutions, including NPS, that are all working together to advance deterrence far beyond the old Cold War narrative.”

“By promoting collaboration between both the academic and military communities, the alliance encourages the development of security professionals that can meet our future security needs for research, analytics, policy and decision-making,” continued Kriete. “We use all those things at USSTRATCOM every single day.”

At the conclusion of his SGL, Kriete made it clear when he addressed the entire campus that he loved the enthusiasm, passion and perspectives demonstrated by the university’s students, and expressed a level of envy that he had not had the opportunity to attend NPS as a student.

“You students are truly the envy of many,” said Kriete. “Not only do you get to study full time at one of the most prestigious institutions in the world, but most importantly you’re studying in first-class facilities alongside the best instructors and staff that exists anywhere in the country.”

Focus On... Hamming Interdisciplinary Award

Dr. Oleg Yakimenko, Professor in the NPS Department of Systems Engineering and founding director of the Aerodynamic Decelerator Systems Center and the Autonomous Systems Engineering and Integration Laboratory, has earned the 2019 Richard W. Hamming Faculty Award for Interdisciplinary Achievement.

“I am honored to have been selected for the Hamming Award and I owe a lot of that to the talented students that I have worked with at NPS,” said Yakimenko.

Systems Engineering professor Chair Ronald Giachetti echoes the Hamming Interdisciplinary Award selection committee’s high praise for Yakimenko’s rigorous teaching methods, and especially the concrete results his students have attained.

“Oleg and his students have been especially prolific in the development of unmanned systems,” said Giachetti. “We are fortunate to have him as a member of the Systems Engineering Department.”

Part of Yakimenko’s teaching method, which can be intimidating to students, is to challenge students to conduct hands-on testing of their theories.

“Students often say that I am establishing too high a standard, which are difficult to meet,” said Yakimenko. “As a reward though, student research often results in publication or a patent.”
First and foremost, congratulations to this quarter’s graduates. I’m astounded by the achievements of so many of the awardees. I had the privilege of working with so many of you in NSA and learning from your experience and academic insight. I even sited one of our graduates, Georgian civilian Mr. Dimitri Nadiradze, in my course critiques as a major contributor to course objectives. We wish you fair winds and blue skies.

The PSC is looking forward to a busy Spring! We’re rebranding as the President’s Board for Student Affairs, boosting communication channels—newsletter, central kiosk, library screens and more—hosting a few leadership and mentorship events, and continuing to advocate for students. Many students have come forward in the past several months with comments that range from SGI ideas to water fountains to curriculum. Please, keep them coming!! We continue to request more students to step forward to represent their programs to the Board, so we can ensure we’re representing the student experience as fully as possible. Finally, a few programs have recently gotten the green light including a partnership with the upcoming NPS Alumni Association to build student-alumni mentorship partnerships and an NPS Foundation International Club which will increase inclusion for our international students and build cohesion among U.S. and partner nation members.

Thank you for the hard work you are doing to build your academic and leadership acumen while at NPS. Consider joining our Board at the next Townhall meeting.

With Warm Regards,

Caitlin B. Diffley
April 6
Naval Submarine Birthday Ball
6:00 p.m.-11:00 p.m., Barbara McNitt Ballroom

April 9-11
Naval Research Working Group 19

April 17
CRUSER TechCon
9:00 a.m.-4:00 p.m.
ME Auditorium

April 19
Optimizing the U.S. Air Force
1:00 p.m.
Ingersoll Hall 122

April 26
Solar Thermal Technology
1:00 p.m.
Ingersoll Hall 122

April 27
International Day
12:00 p.m.-4:00 p.m.
Academic Quad

Historical Highlights

March 12, 1953: This large redwood tree standing on the site of one of the new Engineering School buildings of the Naval Postgraduate School will remain, even though a special opening for it must be built through a roof. Ens. Gerard Drake, assistant officer in charge of construction at the school, shows it to Lewis Hobart, architect of the original Hotel Del Monte, which now houses the school. (US Navy photo).

Monterey was concerned in 1953 about exactly what the new “owners” of the beautiful Hotel Del Monte site would do with it. There was talk about taking down the hotel buildings (in 1953 it was hardly “historical”), and many feared the garden spot would be scraped and paved into an easy-maintenance Navy-base flatland.

Today we know something of how that story turned out, but we can’t know if this one tree was spared. No building on campus now has an opening through its roof, but it is possible the tree remained safe in a nearby grove. 1956’s “Dedication of Buildings” ceremony program offers an aerial view of the newly-built Engineering School.

Historical Highlights are provided by the Dudley Knox Library.