Memorial Day Concert on the Lawn Returns to Hotel Del Monte

By Melinda Larson, NSA Monterey Public Affairs

Hundreds of concert-goers gathered for a Memorial Day show on the Hotel Del Monte grounds as Concerts on the Lawn returned to Naval Support Activity (NSA) Monterey, May 28.

The Monterey Peninsula Cypressaires, a barbershop chorus, started the show with a 30-minute performance. Following opening remarks at noon, the Monterey County Pops performed a variety of pop and patriotic music during its 90-minute show.

"We’re bringing back a part of our history with the return of the Monterey Pops’ Concert on the Lawn at the historic Hotel Del Monte,” said Capt. Rich Wiley, Commanding Officer, NSA Monterey.

The free community event was open to the public, giving some 1,300 visitors the opportunity to join the local Navy community in the Memorial Day tribute. As part of the event, guests were also able to participate in self-guided tours of the historic Hotel Del Monte and Arizona Garden, climb aboard a Monterey Fire Department fire truck, and play with exotic birds. From 1985 to 2012, Monterey County Pops presented free summer concerts at the Hotel Del Monte grounds.

“It’s part of our outreach to bring the community back onto the grounds of the historic Hotel Del Monte,” said Kyle Rhodus, NSA Monterey Quality of Life Director. “We are part of the community, and it’s important for the community to know we are part of it.”

Concerts on the Lawn began as a Naval Postgraduate School (NPS) tradition some 30 years ago when NPS professor Ron Weitzman founded the Monterey County Pops.

“After he founded Monterey County Pops, Professor Weitzman convinced NPS leadership to host the orchestra for concerts on the lawn in front of the Hotel Del Monte,” said Doug Lee, Vice President, Board of Trustees, Monterey County Pops.

The return of the Memorial Day concert isn’t the only opportunity for the public to learn more about the historical venue. For details on upcoming events for members of the Navy community and beyond, visit the NSA Monterey Morale, Welfare and Recreation website at http://monterey.navylivew.com/.
Marine Corps Students Share Their Big Ideas During BIX

By MC2 Patrick Dionne

Students, staff and faculty packed the Naval Postgraduate School’s (NPS) Glasgow Hall for the latest Big Ideas Exchange (BIX), May 22. A departure from the typical BIX format, the latest event served as a forum for NPS students, six Marine Corps officers, to share their thesis research in an effort to promote awareness, receive feedback, and offer their own solutions to the grand challenges facing American national security.

Senior Marine Corps Representative and Associate Dean of Research Col. Todd Lyons kicked off the exchange that would go on to see the six students give detailed, 10-15 minute presentations on their individual research topics.

“This format demonstrates not only what they have learned in their education here, but also the research they can deliver in terms of value back to the Marine Corps,” said Lyons. “The vast majority of the Marine Corps does not come to NPS, and they don’t know what our students can do ... This was a great way of showcasing that.”

“I learned so much from listening to other presenters,” Writt added. “Having the opportunity to hear other people’s perspectives really helped me look at a new angle.”

Following graduation, Writt will move on to the Joint Space Operations Center to act as a space operations planner which will give her the opportunity to explore her ideas and innovations that she learned at NPS in a joint environment.

“My presentation covered the Marine Corps rapidly integrating more free space optics, or what most people know as laser technology, into our tactical communications in order to better combat our adversaries’ threats in the electromagnetic domain,” said Felder, a student in the NPS Department of Computer Science. “These are far more resilient to jamming, are far less likely to be detected, and as our communications systems expand and our needs for big data expand, this will provide a far more efficient use of networks.

“By having events like this to share knowledge and proliferate some of these ideas, it creates an environment where we can more quickly adapt to the threats on the modern-day battlefield,” Felder continued.

On campus to witness the presentations firsthand was Maj. Gen. William Mullen, Commanding General of Marine Air Ground Task Force Training Command. Both senior officers were at NPS to take part in the International Mine Warfare Technology Symposium, and to tour various labs developing unmanned systems.

“Having senior leadership like Maj. Gen. Mullen and Maj. Gen. Coffman in attendance helps show the presenters that the Marine Corps really cares about what they are doing and that it is essential to what they do,” said Lyons. “Additionally, having them listen to the ideas and research our students have done allows them to take those ideas back and propagate them through their jobs, both in the Navy and in the Marine Corps.”

“Update NPS” is a monthly publication for students, faculty and staff of the Naval Postgraduate School produced by the Public Affairs Office. For additional copies, comments, or to suggest story ideas, contact the editorial staff at pao@nps.edu.
NPS Holds 13th International Mine Warfare Technology Symposium

By MC2 Michael Ehrlich

The Naval Postgraduate School (NPS), the Office of Naval Research (ONR), Navy’s Office of Expeditionary Warfare (N95), and the Consortium for Robotics and Unmanned Systems Education and Research (CRUSER) teamed up to co-sponsor the 13th International Mine Warfare Technology Symposium in Monterey, Calif., May 22-24.

The symposium brought together diverse subject matter experts with unique operational experiences, discussing current issues in the fleet in the field of mine warfare, while focusing on the impact of technology.

“Certainly, this warfighting domain affects a lot of people. There are a lot of stakeholders that are involved in working this problem, whether it’s industry, academia or our foreign partners. Bringing all of those together as a coalition to examine this area holistically is a challenge,” said NPS Chair of Mine Warfare, retired Rear Adm. Rick Williams, lead organizer of the conference.

“The pace of technology, and how quickly we take that technology and incorporate it into current systems delivered to our warfighters to stay ahead of the threat, is critical,” Williams continued. “I think that if you look at the pace and rate of change in technology, from artificial intelligence to data analytics, the potential in those fields as it relates to mine warfare at large has tremendous potential.”

The Navy’s Director of Expeditionary Warfare (N95), Marine Corps Maj. Gen. David W. Coffman, spoke on his expectations for the symposium.

“We’re getting a desired effect of bringing together expertise and interest in mine warfare to improve our capability in this subject area,” said Coffman. “We’re on the move, we are working on next generation expeditionary warfare.

“Join the revolution,” he added. “We have exciting things happening both in technology and in operational capability.”

NPS not only supports the symposium with speakers and subject matter experts, it also presents a great opportunity for students to hear directly from senior leaders on the key issues that are on their radar.

NPS alumnus Sean Kragelund, now a research associate in NPS’ MAE department, described his experience coming back from the symposium to his lab in Halligan Hall.

“It was great to hear the speakers at the symposium, in particular Maj. Gen. Coffman who spoke [directly] to the national defense strategy ... It’s great to get that perspective and begin to think about what changes might be on the horizon,” said Kragelund.

“You don’t really have separate manned or unmanned systems anymore ... You have manned teams working with unmanned teams,” he continued. “In our lab, we have Navy and Marine Corps students working directly with these systems. It is a learning process for us as well as for them, and they come away with great ideas that they can apply to their thesis research.”

Recently, NPS Professor Jan Breemer was recognized with the Navy Superior Civilian Service Award and Medal at a special luncheon in April for his 30 years of dedicated federal service. He retired from his position at the Naval War College in April.

Breemer taught national security decision making for 18 years as part of the NWC partnership with NPS. Prior to that he taught at the Naval Postgraduate School for 12 years in the National Security Affairs department.

“It is difficult to imagine a more rewarding job than the one I had with the Naval War College ... But when you suddenly realize that your students are closer in age to your grandsons than they are to you, time comes to make room for the next, “Post-Cold Warrior” generation,” said Breemer.

Breemer’s dry sense of humor and sometimes jolting views on questioning authority came across in the classroom. He always guided his students into healthy debate and to question all writings about outcomes of war and specific battles in reading assignments.

“Students are often taken aback when I start off a new quarter and inform them of my mantra for the course: Question Authority,” said Breemer. “They are more at ease when I explain I am not talking about their chain-of-command, but instead the next 10-weeks of give-and-take questioning and counter-questioning, not just with me, but most importantly, between and among themselves. This is the kind of Socratic dialogue which I believe should be at the heart of a graduate education.”

Have a story to share? Public Affairs is constantly seeking interesting news and stories for Update NPS. Send your tips to pao@nps.edu.
Members of the Monterey community were recently brought up to speed on cryptocurrency, which has rapidly emerged over the last few years as a global economic force to be reckoned with.

Naval Postgraduate School (NPS) information systems security manager Gerald Holland addressed the Rotary Club of Monterey at the nearby Hyatt Regency Hotel, May 10, enabling members to better understand the nuances of bitcoin and blockchain technology.

It’s a virtual, secure, anonymous and direct financial transaction conducted without any intermediaries, such as financial institutions or the federal government, and as such, has proven highly appealing to criminals and venture capitalists alike.

Bitcoin, Holland explained, is a “type of digital currency in which encryption is used to regulate generation of units, verify authenticity, and operate independently of a central bank.

“They’re selling cars with it, they’re raising money with it, they’re using it for crowd-sourcing, for starting businesses,” he added. “Not necessarily in America, but worldwide, it’s very widely used.”

Blockchain is the encrypted technology which acts as an immutable ledger to publicly record the history of transactions. Each ‘block’ contains both a header with transaction data and ‘proof of work’ for all previous blocks.

For each new block, “nothing’s going to happen until the whole community approves the blocks,” Holland said. “The ledger is a list; it’s a big database of all those ‘proof of works.’”

This communal aspect is both a blessing and a curse, and the reason bitcoin falls within the cybersecurity domain.

As with the Internet itself, information becomes publicly accessible to both friends, and those with malicious intentions alike.

Navy Reserve Chief Shares Corporate Knowledge, Best Practices

By Javier Chagoya

Vice Adm. Luke McCollum, Chief of Navy Reserve and Commander, Navy Reserve Force, spoke to participants of the NPS Center for Executive Education’s latest course on Leading Innovation.

As a civilian, McCollum served as an executive with one of the nation’s largest retail outfits. In addition to his leadership responsibilities with the reserve, he is also a member of one of the Navy’s most critical committees, the Navy Readiness Reform and Oversight Council, formed to ensure reforms and recommendations from the service’s comprehensive review of 2017 Surface force incidents were made and implemented.

“One of the definitions of leadership is to define reality, provide encouragement on the way, and say thank you in between. I’ve gotten to do that in both of my organizations,” said McCollum.

Dr. Neal Thornberry is faculty director for the Leading Innovation course ... He has tapped McCollum before as a guest lecturer because of his experience in the retail space.

“Vice Admiral McCollum talked about how his company provides a culture of innovation, which is best summed up by values of commitment to mission, leading with humility, celebrating people and their quick wins, and assuming a positive intent by allowing room for a dissenting view.

“He also talked about how they try to create an entrepreneurial mindset in all their company’s associates so that they try to think of themselves as owners of the company,” added Thornberry. “This provides an awareness that everything comes from their employees and customers.”
Former NPS Prof Returns to Lecture on Future of Undersea Communication

By MC2 Patrick Dionne

Dr. Joe Rice, a former research professor in the NPS Department of Physics, returned to campus to offer the latest Menneken Lecture, May 3. Rice was also honored with the NATO Science and Technology Organization Science Achievement Award.

Rice’s lecture to the assembled students and faculty focused on the latest developments in research he spent many years examining here on campus, the next generation of underwater communications.

“It is very challenging to do wireless communications, especially network communications, through the water, where radio waves don’t work. Instead, we have historically had to follow the lead of marine mammals and use acoustics,” explained Rice. “It wasn’t until 1995 that it was practical to do that using a battery-powered device, which shows how far we have come in the past 20 years in making it a practical technology.”

Rice’s lecture covered undersea communications and networks, and addressed the competing factors of through-water communications.

“If you want to have underwater awareness, you have to place sensors in that environment to detect a target, so having off board sensors and the ability to communicate with them is really a force multiplier for Navy operations,” Rice said.

“This is the future, because it is becoming more and more difficult to put our Sailors and our people in these environments where they are at great risk. Having the ability to do that with machines is a better and more cost-effective approach,” he continued.

While on campus offering the lecture, Rice was presented with the NATO Science and Technology Science Achievement Award, recognizing the value of his contributions to NATO in autonomous vehicle sensing, control, communications, navigation and decision making.

“It is very gratifying, almost as gratifying as seeing some of this technology being implemented in the fleet,” Rice said. “The work we did with NATO holds a special place in my memory memory because of all the great partnerships and international work.”

The Future of Undersea Communication

By MC2 Nathan Serpico

The Naval Postgraduate School (NPS) held its 15th annual Acquisition Research Symposium (ARS) at the nearby Embassy Suites hotel, May 9-10. The two-day symposium brought together leading defense acquisition experts from across the nation to exchange ideas, and to benefit from NPS student-led acquisition research.

NPS students from all services and allied nations, senior acquisition professionals, industry representatives, and researchers from universities across the country were all present to enrich the discussion.

“The acquisition research program has had, and continues to have, a significant positive impact on defense acquisition,” said William Lucyshyn, a research professor at the University of Maryland and one of the few individuals who has attended every NPS-hosted Acquisition Research Symposium to date. “This is continually affirmed by the growing participation, particularly by senior DOD acquisition leaders and program officials.

“Over the years, there have been many studies that have examined lessons learned, identified best practices, modeled process changes, and recommended changes,” he continued. “These may not all have been implemented, but they have certainly been considered and have influenced programmatic decisions. Moreover, the program exposes NPS students to many new and novel concepts, which will impact them for the remainder of their careers.”

Acquisition Professionals Return to Monterey for 15th Annual Symposium

By MC2 Nathan Serpico

The Naval Postgraduate School (NPS) held its 15th annual Acquisition Research Symposium (ARS) at the nearby Embassy Suites hotel, May 9-10. The two-day symposium brought together leading defense acquisition experts from across the nation to exchange ideas, and to benefit from NPS student-led acquisition research.

The decision was prompted by the retirement of previous associate provost Paula Jordanek, who ran the faculty management and administration functions for education from 2007 through early 2018.

“We should involve more faculty in aspects of academic governance,” Lerman said. “Doing so would give them a better sense of how NPS runs, and could provide us with a larger pool of faculty who have the experience to take on additional leadership positions in the future.”

The decision was prompted by the retirement of previous associate provost Paula Jordanek, who ran the faculty management and administration functions for education from 2007 through early 2018.

“Her decision to retire led me to a rethinking about how the various functions in my office might best be structured,” Lerman added. “Primary among these is the impending re-accreditation process in 2020, which opens the door for our new provosts to laser focus on those things in our own processes to align with the highest accreditation standards.”

With the selections announced in April, Dr. Michael Freeman will now serve as Associate Provost of Faculty Affairs, along with Dr. Raluca Gera serving as Associate Provost of Graduate Education.

What both Gera and Freeman bring to the table in their new roles, they say, is a fresh perspective straight from the trenches of teaching, where recent achievements include launching new academic certificate programs, working closely with fellow faculty and department chairs, service on the Faculty Council, and advocating for an adaptive teaching approach in the classroom.

Send your campus news and notes to update@nps.edu.
To step into the Dudley Knox Library (DKL) at the Naval Postgraduate School (NPS) today is to enter a busy, vibrant world. Throughout the library, students are diligently absorbed in their work; groups meet to hash out class projects; writing coaches guide students as they craft their theses; friends and faculty grab a cup of joe at Starbucks.

"When I first walked in for my interview, all I saw were books and journals crowding the entry, and not a whole lot of students," Uhlinger recollected. "Over the past 12 years, we've spent a lot of time peeling back the books and moving very aggressively into online resources and creating lots of study spaces for students.

"The way students work now is not just going into the library, reading a book, or putting your head down and working," Uhlinger said. "They work in teams, they problem-solve, they interact with a diverse group outside of their classrooms, and we've made a lot of spaces for them to do that."

Uhlinger is insistent that she accomplished none of this alone: the 'we' she refers to is her team of library staff, all working closely with faculty and students, combining their range of skills, experiences and a pervasive interest in advancing graduate education.

"There's not a lot of 'I' in her verbiage; it's really more 'we'," said Greta Marlatt, DKL outreach and academic support manager. "Her care for the staff, her willingness to let people try to reach beyond their comfort zone and her encouragement to do so … She always emphasized that we're team players and we need to get things done as a team, and I'll miss that."

It's a common theme amongst DKL staff. Since day one, Uhlinger set the standard for open communication, transparency and a strong corps d'esprit, driven by an underlying desire to serve the NPS community. One of her first actions upon assuming her new duties in 2006 was to ask the staff to set up new offices with their desks facing the door, recalled Sam Hornbeck, DKL resources assistant.

Student services such as the Graduate Writing Center and the Thesis Processing Office were administratively brought under the library, and DKL increasingly became a focal point of the NPS student experience.

"We’ve been pretty creative," she laughed. "It really gets people thinking differently. We’ve got pulleys; we’ve got Playdoh; sometimes you can mock up a really quick prototype of something that you’re thinking about, and that’s the point: you’ve got an environment to help them design on the fly and think creatively."

Uhlinger officially stepped down May 17, but her duties will be continued by associate university librarian Edward Corrado, who will serve as acting university librarian.

Focus On … Networking Knowledge
A Monthly Look at Names and Faces on Campus

Recently, Information Technology Specialist Petty Officer First Class Bradlee Young, center, led NPS students in the Modeling, Virtual Environments and Simulation (MOVES) curriculum through a networking lab.

The nine NPS students taking MV4503 Advanced Simulation Networking wanted hands-on experience with networking equipment before they graduate. Many of these students will go on to work in DOD Simulation Centers where networked simulations will be commonplace.

To meet the students’ needs, Young developed a comprehensive lab exposing students to router programming and network configuration. They were all grateful for his expert knowledge.

"I supervise all 11 ITACS Sailors, ensuring they meet all Navy-related requirements, provide them guidance and help to mitigate any obstacles that they might encounter," said Young.

"This includes coordinating and approving leave requests, writing evaluations, writing Junior Sailor of the Quarter and Sailor of the Quarter packages. I also ensure all training and physical requirements are being maintained, providing clarification of all Navy instructions and standards, and more importantly, maintaining morale.”
The President’s Student Council is here to serve you and to be your advocates as fellow students working with NPS and NSA Monterey leadership to make your time at NPS a great experience. We’d like to congratulate all the June graduates and award recipients on a job well done. We’d also like to thank Cmdr. Rasmussen for all of his hard work as the Deputy Dean of Students. NPS will also be welcoming a class of 500+ students during our Summer Quarter so be prepared for a significant increase in the population on campus.

As always feel free to contact the President’s Student Council for any concerns you may have or any suggestions that would be useful to NPS leadership. Thank you for your hard work and good luck with your studies! As always, feel free to reach out to PSC directly at PSC@nps.edu or contact your school representative.

Sincerely,
Lt. Tanya L. Herfi, USN

Chair: Lt. Tanya Herfi
Vice-Chair: Capt. Ben Collier
SIGS Lead: Capt. Alejandro Bihar
SIGS Rep: Lt j.g. Anton Balsirow, Capt. Matt Grill, Lt j.g. Tim Cole, Maj. Peter Cox, Capt. Dan Grant
GSOIS Lead: Master Sgt Alex Eudy
GSOIS Rep: Lt. Cmdr. Shivashankar
GSEAS Lead: Lt. Josh Malia
GSEAS Rep: Lt. Cmdr. Pete Harley, Lt j.g. Aaron Demers
GSBPP Lead: 1st Lt. Helene Caniac
GSBPP Rep: Capt. Tyler Flansburg

Have a story to share? Public Affairs is constantly seeking interesting news and stories for Update NPS. Send your tips to pao@nps.edu.
June 7
NWC Graduation Ceremony
3:00 p.m. - 4:00 p.m.
at the Barbara McNitt Ballroom

June 12
TLC Education Open Forum
10:00 am at ME Auditorium

June 25
Reporting Day

June 27
New Student Orientation
King Auditorium

June 15
Spring Quarter Graduation
10:00 a.m. to 12:00 p.m.
at King Auditorium

June 27
New Student Orientation
King Auditorium

Historical Highlights
Dr. Richard W. Hamming’s many awards, achievements and the sheer breadth of his innovations are legend, though few legends are so honorably well-documented. So it was with interest that a group of his colleagues and present-day NPS students, faculty and staff gathered last month to share in a tribute to him by Dr. Martin Mandelberg, founder of the Richard Hamming Legacy Project, a 1982 NPS graduate and Dr. Hamming’s only Ph.D advisee.

Mandelberg noted that while Richard Hamming’s influences are profound and ongoing, it was his passion for teaching that was his greatest gift to the next generation of scientists and recalled a true “mentor” with the ability to change lives as surely as he changed computer science. In closing, Dr. Mandelberg shared practical wisdom for NPS students today, and recalled Dr. Hamming’s advice to a young Ph.D: “To appreciate the rewards of technical breakthrough, and to recall that “if you don’t work on important problems, it’s not likely that you’ll do important work.”

Dr. Hamming carried out the important work of teacher and mentor at NPS from 1976 until 1998, and passed away 20 years ago this year.

Historical Highlights are provided by the Dudley Knox Library.