



U.S. Navy photo by MC3 Michael Ehrlich

NPS Honors Spring Quarter Graduates

by Kenneth A. Stewart

NPS honored some 313 graduates earning 318 advanced degrees during its Spring Quarter Graduation Ceremony at King Auditorium, June 20. The graduates included representatives from every branch of the U.S. military as well as Department of Defense civilians and students from 16 partnered and allied nations.

NPS President retired Vice Adm. Ronald A. Route congratulated the graduating class calling the ceremony “a celebration of individual commitment, perseverance and personal accomplishment.”

NPS Professor and Department of Defense Analysis Chair Dr. John Arquilla served as guest speaker for the ceremony. He spoke at length to the graduating class about the “big ideas” that come out of NPS and their ability to combat what he described as a “world war” against international terrorist and criminal networks.

“Most of us grew up in a cold war world characterized by an arms race to build new weapons. The world we are in today is characterized by a race to create networks.” - Dr. John Arquilla

“Something has gone awry in the world, a very hard won victory over Al Qaeda in Iraq now hangs by a thread ... the Taliban watches as the clock runs down in Afghanistan. The list goes on and on and extends to more than 30 armed conflicts around the world,” said Arquilla.

He described these conflicts in terms of a global struggle being fought against dark networks.

“Most of us grew up in a cold war world characterized by an arms race to build new weapons. The world we are in today is characterized by a race to create new networks.

“The education that you have received here has provided you with the tools you will need to face those networks,” Arquilla said. And despite the challenges that dark networks pose, he remains optimistic in part because of the work done by the students at the university.

“There is hope, despite all of this, even hope for peace one day,” Arquilla said. “Across campus, our students and faculty are proposing big, game-changing ideas.

“What kind of place is NPS?” asked Arquilla. “It’s a place where we redefine the possible ... Where top tier faculty come together deeply with security professionals from all over the world.”



NAVAL POSTGRADUATE SCHOOL

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Student Work Supports International Research Effort

By Kenneth A. Stewart

An eclectic group of NPS students has been working with Professor Alex Bordetsky on a series of initiatives tied to NPS led research into the use of mobile ad hoc networks.

While Bordetsky's work has garnered significant local and international attention, the work of the many students conducting thesis work under his tutelage also poses several significant benefits to the Navy and Department of Defense.

The students' work shares a tenuous common denominator, but their association with Bordetsky's research is indicative of the manner in which NPS research not only supports student educational

U.S. Marine Corps Capt. Robert Schulz, an MP by trade with a background in communications, is exploring the possibility of using remote biometric collection technology to capture fingerprints, iris scans and other important biometric data.

"Ideally, I would like to explore the feasibility of using UAVs and other devices that could potentially zoom in on a suspected terrorist and capture his biometrics," said Schulz.

As with Sinse's and Bordetsky's broader body of work, Shulz ultimately is hoping to not only collect data from a distance, but to share that data simultaneously with subject matter experts that can help teams to exploit the data on the move.



U.S. Marine Corps Capt. Robert Schulz, left, and U.S. Navy Lt. Adam Sinse, right, aboard the Polish Vessel Copernicus. Sinse and Schulz were part of a team of NPS student researchers that traveled with NPS Professor Alex Bordetsky to Gdansk, Poland to conduct an international Weapons of Mass Destruction Intelligence Surveillance and Reconnaissance (WMD ISR) experiment. (U.S. Navy photo by Kenneth A. Stewart)

efforts, but also supports larger initiatives that offer near immediate value to the Navy and its sister services throughout the DOD.

Lt. Adam Sinse is working with Bordetsky to adapt off-the-shelf technologies to ad hoc mobile networks in an effort to enhance Rapid Site Exploitation (RSE) efforts.

"What I would like to do is leverage existing technology to implement a secure and efficient way to transmit RSE data wirelessly from the boarding team all the way back to distributed analysts, wherever they may be, without having to rely upon larger vessel-based networks."

U.S. Army Special Forces Sgt. 1st Class Joshua Urban, who was recently recognized with outstanding thesis honors, is one of a handful of enlisted students attending NPS. He has been working with the Common Operational Research Environment Laboratory (CORE Lab) to create his Mercury Mobile Application, an Android based app designed to help Special Operations Forces (SOF) teams identify and report ideal landing zone and drop zone locations.

"I wrote the application on my own after taking some classes on Android software at NPS and a course online," said Urban. "I had the computer background, I just needed to update my knowledge to be able to use modern design tools."

Urban's research is aimed at sharing mission essential data in a streamlined format that is user friendly.

"It's about streamlining the process. When a SOF team deploys somewhere they have certain reporting requirements after they hit the ground, those

reports take up multiple pages.

"What I want is to have is a direct link that gives more than just a grid location, but rather offers information recorded on the spot and is able to be viewed by mission planners without their having to read through pages of reports to get what they need," Urban said.

For Bordetsky, student researchers are a valuable commodity.

"Student research creates a steady flow of research deliverables, which are helping us to tackle advanced, sensor-unmanned systems-decision maker networking problems," said Bordetsky.

NPS, NATO School Collaborate on Maritime Security Education

By Kenneth A. Stewart



Littoral Operations Center Director Kalev Sepp, 2nd from left, and NPS Homeland Security Coordinator Wendy Walsh, center left, are pictured with members of their NATO Maritime Security Course in Oberammergau, Germany. (Courtesy Photo)

NPS Littoral Operations Center (LOC) Director Kalev Sepp and Homeland Defense and Security Coordinator Wendy Walsh recently traveled to Germany to teach NPS' first ever NATO Maritime Security Course at the NATO School Oberammergau (NSO), March 31- June 2.

"The NATO School at Oberammergau provides connectivity to the armed forces of all the NATO members, and many partner nations as well, like Egypt, Ireland and Morocco," said Sepp. "Professionalism is their central theme, and Oberammergau itself is a splendid venue."

"It was amazing, it was wonderful to be in this class and to have such a variety of perspectives," added Walsh.

Energy Academic Group Deputy Director Alan Howard forged the NPS-NSO relationship that made the course possible.

"My role in the project was facilitation ... I developed a partnership with the NATO School Oberammergau where we began offering several NPS courses in a hybrid format, two weeks in residence [in Germany] and eight weeks of distance learning.

"The vision for the partnership program with NSO was to expand into what NATO calls 'emerging challenges,'" Howard said.

Another of Howard's primary goals was to expose foreign officers to educational op-

portunities at NPS and to generate increased interest in NPS in-residence programs amongst partnered and allied nations.

Walsh and NPS Faculty Associate Lyla Englehorn developed the course.

"The course has evolved over time, but the curriculum was initially developed with active practitioner and operator input.

"Maritime security involves a vast range of stakeholders with a vast range of perspectives, so we tried to incorporate those multiple perspectives from the start," said Englehorn.

The course drew upon operator perspectives in both individual and group work that culminated in a capstone project tailored to address the issues specific to the students' regions of interest.

"The various final project topics were fascinating, you could really see the import of the issues presented, especially when they were tied to issues in the students' home nations," said Walsh.

Walsh's point was illustrated by a tragic anecdote.

"We had a student from Georgia who is dealing with maritime security while areas within his nation are under Russian occupation," said Walsh.

FACULTY news & notes

A cohort of five students in the Graduate School of Engineering and Applied Science's Department of Applied Mathematics became the first to earn the institution's new academic certificate in Network Science, developed by Program Coordinator Associate Professor Raluca Gera.

The Certificate in Network Science provides an interdisciplinary education using mathematical methods for the analysis, understanding and exploitation of complex networks.

GSBPP Associate Professor of Economics David R. Henderson recently traveled to Oberlin College, where he debated health care policy with Ted Marmor, Professor Emeritus of Public Policy and Management and Professor Emeritus of Political Science at Yale University. He also spoke at the San Francisco Federal Reserve Bank's Annual Conference of 12th District Directors. Additionally, Henderson presented a paper titled, "Would Conscriptio Reduce Support for War?," co-authored with Operations Research Instructor, U.S. Marine Corps Maj. Chad W. Seagren, at the Annual Meetings of the Association for Private Enterprise Education in Las Vegas, Nevada.

NSA Monterey and senior NPS leaders welcomed the Governor's Military Council (GMC) to the installation for an afternoon of briefings and campus tours, June 16.

Chartered by California Governor Edmund G. Brown Jr., the council was established to assist state leadership in promoting California's defense installations.

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 students Lt. Cmdr. David Tully and Marine Corps Capt. Kristofer Skidmore on site at Naval Education and Training Center Zambales, Philippines. (U.S. Navy photo by MC2 Shawn Stewart)

Students Evaluate Innovative Tech in Support of HADR

By MC3 Michael Ehrlich

NPS students Lt. Cmdr. David Tully and Marine Corps Capt. Kristofer Skidmore traveled to Subic Bay, Philippines to evaluate a novel construction solution that may support future Humanitarian Aid and Disaster Relief (HADR) operations, June 23.

Both Tully and Skidmore are Graduate School of Business and Public Policy (GSBPP) students. Tully is earning his MBA with a concentration in Supply Chain Management and Skidmore is working on a Master's of Science in Management.

Tully and Skidmore were on site to evaluate a project dubbed "Cold-Formed Steel," a machine capable of forming pre-designed building frames from rolled steel. Their business case and cost benefit analysis of the project could have a clear, direct impact on future expeditionary and HADR missions.

"This is the culmination of my NPS studies, and it applies all the academic principles that I learned at NPS to a real-world scenario.

"We look to compare [Cold-Formed Steel] to wood frame and cement block construction and asked the question 'does this system provide added benefit to the Seabees?'" Skidmore said.

Skidmore believes that by traveling to the Philippines, he was able

to see firsthand how users interface with the system and its associated equipment.

Tully also found the assessment useful.

"Actually experiencing and evaluating the process in a real world environment was an extremely valuable part of my education at NPS," said Tully.

NPS Associate Professor Kenneth Doerr was Tully and Skidmore's advisor throughout the deployment.

"It's our duty to make sure that every one of our expenditures are made wisely and to maximize the value we can deliver from that commitment.

"I think the state-of-the-art tools our students are learning are precisely those needed to maximize the 'bang' we can deliver for the 'buck' that the people have given to us," Doerr continued.

"These types of business and cost estimate analyses are crucial for decision makers when deliberating over high-value programs," added Skidmore. "By spending a little money up front, we can save a lot."

NSA Monterey Welcomes New Chaplain

NSA Monterey offered a sad farewell to Command Chaplain Lt. Cmdr. William Riley during a brief award ceremony at NSA Monterey Headquarters, June 11.

But while Riley will be missed, NSA Monterey Commander Capt. Timothy Faller welcomed incoming Command Chaplain Lt. Cmdr. Robert Nelson to the organization.

"We are very fortunate to have a chaplain who has lived on the battlefield and in academia," said Faller. "He is a perfect fit to serve our NPS student body, many of whom like Nelson, are returning to academia after having served in Iraq and Afghanistan."

Nelson served in both the Army and the Marine Corps prior to attending seminary and joining the Navy's Chaplain Corps.

Notably, Nelson was awarded the Purple Heart for injuries sustained while serving in Iraq. He hopes to draw upon that experience, and others, while ministering to his fellow combat veterans and taking over Riley's comparative ethics course.

"I will teach ethics drawing upon the lessons I learned in Iraq," said Nelson who hopes to be able to apply his combat experience to the classroom and help his students to make the ethical distinction between what is legal and what is right.

Senior Military Advisor for Cyber Kicks Off Cyber Endeavour 2014

By MC2 Danica M. Sirmans

U.S. Army Maj. Gen. John Davis, Senior Military Advisor for Cyber to the Under Secretary of Defense (Policy) addressed NPS Cyber Endeavour 2014 (CE2014) participants in Glasgow Hall, June 24.

The Department of Defense Information Operations CE2014 event was conducted under the theme, "When the Lights Go Out."

The event provided senior DOD officials, partners and NPS researchers with an opportunity to explore our critical infrastructure's cyber resiliency.

Davis outlined what he referred to as the "three drives in cyber" during his keynote speech.

"Of the three drives in cyber perhaps the most controversial is creating a culture of clarity and transparency in regard to our cyber capabilities.

"Not to give away our abilities, because that would be against our best interest, but to

shine more light, accurately, on our capabilities to decrease greater uncertainty and to effectively use deterrence," said Davis.

Davis pointed to President Barack Obama's 2014 West Point graduation keynote address, which highlighted the need for transparency in regard to the DOD's mission in cyberspace to dispel public uncertainty.

During his address, Davis also stressed the importance of teamwork and partnership amongst the DOD, its interagency partners, international allies, and the public and private sectors.

"It's heard too often, but in the realm of cybersecurity, teamwork and partnership are far from cliché ideas, they're paramount and necessary," said Davis.

More than 260 invited subject-matter experts attended CE2014, its largest attendance since the event began in 2011.

NPS Welcomes New Students

By Javier Chagoya

NPS recently welcomed its latest group of graduate students to campus. Students attended orientation with NPS President retired Vice Adm. Ronald A. Route, participated in campus tours, and took their first steps on their academic journeys at NPS.

"I'm honored and excited about being here and ready to learn.

"The last time I was in college was at North Central, Illinois eight years ago," said U.S. Army Capt. Betsy Desitter.



Desitter is a Medical Service Officer coming off tours in Yongsan, South Korea and Iraq, and although she has been out of school for quite some time, she is excited to be back in an academic environment like NPS.

"As an administrator in the Medical Service Corps, I applied for NPS' NSA program and I am looking forward to working in the [Medical Corps'] Operations and Security section when I finish here," said Desitter.

Saudi Arabia National Guard Col. Abdullah Alanazi is also a new student in the NSA program.

This is Alanazi's first time in the U.S.

"I'm looking forward to the NSA program, ... I am very interested in learning more about international affairs," said Alanazi.

Desitter and Alanazi joined some 400 new students including: 120 Navy, 120 Marines, 65 Army, 20 Air Force, five Coast Guard and 71 international officers newly onboard.

CAMPUS news & notes

U.S. Army Pacific (USARPAC) representatives recognized an NPS capstone project produced by students from the WarGaming Applications class during a campus visit, May 28.

NPS student Maj. Cardy Moten led a student-team including Lt. Sylvester Campos and U.S. Army Maj. Adam Haupt, Jesse Nesbitt and Dave Risius, through the process of designing and facilitating a wargame that was provided to USARPAC G5 staff in support of contingency operations planning.

NPS students Lts. Nicholas Vilardi and Mathew Bird recently earned their State of California Professional Engineer (PE) licenses in Mechanical Engineering. PEs are distinguished from other engineering graduates because they are licensed to legally practice the profession of engineering and are allowed to approve engineering plans. Fewer than 20 percent of engineering undergraduates continue to become PEs.

Naval Reactors Professional Development Program graduates Lt. j.g. Steven Holdcroft and Lt. j.g. James Steele, were recently honored with their Mechanical Engineering master's degrees during a ceremony at the Washington Navy Yard. Students in the program earn a mechanical engineering master's degree from NPS in conjunction with the Bettis Engineering Reactor School (BERS). More than 150 students have graduated from the program in the last 15 years.

NPS VIDEO
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O'Neal Says Farewell, but the Band Plays On ...

By Javier Chagoya



NPS Research Associate retired Navy Capt. Carol O'Neal performs on the steps of Herrmann Hall during one of many Del Monte Brass performances. (U.S. Navy photo by Javier Chagoya)

Traditionally, retiring naval officers are awarded a Navy and Marine Corps Achievement Medal or Legion of Merit award. But, when retired Navy Capt. and NPS Research Associate Carol O'Neal retired as NPS Dean of Students, she insisted that her end of tour award be the Military Outstanding Volunteer Medal.

O'Neal has a passion for volunteerism and she is especially proud of her work with greyhound rescue, adoption organizations and her tireless work with the Del Monte Brass.

O'Neal returned to NPS in December 2008 as a research associate in the Operations Research (OR) department. Since her return, she has worn many hats at NPS and has been the driving force behind several successful programs in academia and the arts.

O'Neal was instrumental in co-establishing, amongst other things, the Consortium for Robotics Unmanned Systems Education and Research (CRUSER) and in directing the concept generation and innovation branch of the CRUSER enterprise.

O'Neal has continued to strive for excellence in her continuing work with the OR department and is an accomplished musician whose love of music has had an indelible impact on NPS.

With baton in hand, O'Neal has led both fledgling and seasoned musicians with the Del Monte Brass and has consistently applied her unique touch to whichever task she has set out to accomplish.

NPS Faculty Associate Lyla Englehorn recently shared an anecdote that exemplifies the "O'Neal approach" to problem solving.

"Carol had this fabulous arrangement of Battle Hymn of the Republic that she wanted the Del Monte Brass to play for the Memorial Day Concert on the Lawn in 2011.

"But O'Neal felt that for the band to reach its full potential with the piece, that it really needed a 'vocal instrument' - her solution? Start a choir!" Englehorn recalled.

NPS Research Assistant Kira Waxer has also worked closely with O'Neal.

"Carol is a ball of positive musical energy, she always greets the band at rehearsal with a happy attitude and the perfect blend of fun and seriousness to have a productive and meaningful rehearsal.

"She taught me to always have music in my heart," said Waxer.

It is not likely that O'Neal will slow down much after retirement - it's not in her nature, but wherever she goes, her commitment to NPS and to the Del Monte Brass will linger.

Focus On ... Daniel Magdaleno

A Monthly Look at Names and Faces on Campus

Daniel Magdaleno is a very busy man, but as a student, father and education technician, he somehow manages to get it all done.

Originally from Watsonville, Magdaleno is one of two NPS Education Technicians (EdTech) hard at work in the Admissions Office.

Magdaleno's duties include processing and evaluating potential student transcripts and applications. Before joining the NPS team, he worked as a forklift

driver in the San Francisco Bay area and served in the U.S. Marine Corps.

Magdaleno is proud of what he has achieved both professionally and academically.

He earned a Bachelor of Science in Business Administration from California State University at Monterey Bay. He attributes much of his success to three people.

"It was all possible thanks to

the support from Sue Dooley, my mentor, Jess Miller, my awesome coworker, and my beautiful wife," said Magdaleno.

"I enjoy working with such a great team, and have great support from both the Admissions and the Registrar's office," Magdaleno said.

That support will be crucial if Magdaleno is to achieve one of his more ambitious goals. Goals that despite their lofty titles, he insists are within his reach.



Daniel Magdaleno is pictured at his work space in the Admissions office.

"My goal is to become Director of Admissions, or the Registrar Director, here at NPS," Magdaleno said.

Ambitious or not, Magdaleno is the kind of guy that just may get it done.

Any Day at NPS ...



Members of NPS' Motivating Others Through Outreach (MOTO) program gather for a group photo with Central Coast High School (CCHS) students during the CCHS graduation ceremony at nearby California State University Monterey Bay, June 6. (U.S. Navy photo by MC2 Chablis J. Torrence)

Dora Martinez proudly wears her Navy Meritorious Civilian Service Medal at her retirement ceremony, June 11. Martinez's friends and family celebrated her 43 years of federal service at NPS. (U.S. Navy photo by Javier Chagoya)



NPS student Lt. Emily Merritt and Marines from the Defense Language Institute Foreign Language Center's Marine Detachment escort the ceremonial wreath which adorned the 72nd Battle of Midway Memorial Dinner at the Barbara McNitt Ballroom, June 7. (U.S. Navy photo by Javier Chagoya)

Electronics Technician 2nd Class Brandon Meyerdirk makes adjustments to the Mobile Phased Array Weather Radar Truck (MWR-05XP) at the Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS), June 6. The MWR-05XP is being prepped for use during upcoming experiments off the California coast. (U.S. Navy photo by MC2 Danica M. Sirmans)



NPS President retired Vice Adm. Ronald A. Route shakes hands with three-year-old Aaron Matthew Root, great-great-grandson of Professor Ralph Root, in the president's office, July 2. Aaron, along with his father, Christian Root and his wife Amy, came to visit the campus while vacationing in the area. (U.S. Navy photo by MC2 Chablis J. Torrence)

STUDENT voice

By U.S. Marine Corps
Capt. Gunnar Spafford,
President's Student Council

This is my final message as Chairman of the President's Student Council. I want to thank everyone on behalf of Lt. Adam Farber, Lt. Jason Grammar and myself for your support over the last four months. While we did not get everything that we set out to do accomplished, we did reopen many doors to ensure that the student body is heard.

With all the craziness of finals, enrichment week, and the 4th of July holiday, we decided to move elections to the beginning of the Summer Quarter in order to ensure maximum participation. You will soon be able to cast your ballots online. Once the election results are published, we will hand over our responsibilities to whichever of the very capable officers that you choose to elect.

Lt. Adam Farber is currently the Vice Chairman of the Student Council and is running for reelection. He has helped me over the last six months and has been a great representative for the student body. I know he will continue to push for more warrior days and reshaping the SOFs.

Lt. Gabriel Urquidez is a Medical Service Corps officer looking to address three issues, PHA functions on NPS campus, Pinnacle housing availability, and Child Development Center wait lists.

Finally, U.S. Marine Corps. Capt. Alex "Kronk" Beachy, is running after working with the council over the last two quarters. He would like to work on administrative efficiency.

Thank you and Semper Fi.

Have a story to share? Public Affairs is constantly seeking interesting news and stories for Update NPS. Send your tips to pao@nps.edu.

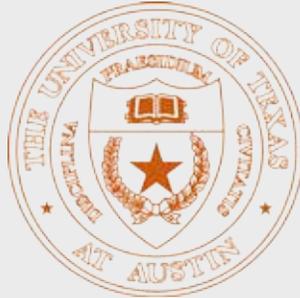
On Campus this Month

July 4
Independence Day



July 16
Naval War College Faculty Workshop
POC: Rose Drake, x 2118

July 11
Defense Energy Seminar
Guest Lecturer: Heath Naquin
University of Texas, Austin
POC: Dr. Daniel Nussbaum, x 2387



July 17
Special Guest Lecture
Dr. Peter Lavoy
Former Acting Assistant Secretary of Defense
for Asian and Pacific Security Affairs
POC: Judith Tulkoff, x 1812



July 15
Cybersecurity Awareness Training
Glasgow 102 Auditorium
3:00 p.m.

July 25

Movies on the Lawn
La Mesa Housing
9:00 p.m. or Sunset
POC: Cecilia Legario, x 7677



Annual Report 2013

Check it out online.
<http://www.nps.edu/AR2013>



Historical Highlights

Professor Claude Buss taught in the NPS National Security Affairs Department for more than 20 years, from 1976-1998. Buss began his diplomatic career in 1929 and he was executive assistant to the U.S. high commissioner in the Philippines when Japan invaded that Pacific Island nation. Captured and interned, Buss was repatriated in 1943. Philippine President Manuel Quezon lauded him as “a man with the vision and ideas of a real statesman” and one news agency called him “the greatest American of them all during those dark days in the Philippines.” Intern Julia Robinson has developed a new exhibit in the Dudley Knox Library showcasing records of Buss’ capture, internment and repatriation which are now part of the library’s Claude Buss Manuscript Collection. The collection was developed through the efforts of Naval War College Professor Mitch Brown, a former Buss student at NPS, and Jane Miller Chai, a former Buss student at Stanford University.



Historical Highlights are provided by the Dudley Knox Library.