



U.S. Navy photo by Javier Chagoya

NPS Supports SOUTHCOM CubeSat Program

By Kenneth A. Stewart

The U.S. Southern Command (Southcom) has embarked on an ambitious international CubeSat program, and turned to the Naval Postgraduate School for help. The NPS Distributed Information Systems and Experimentation (DISE) research group along with the university's Space Systems Academic Group (SSAG) teamed up to help the combatant command evaluate how low-cost space communications capabilities can support information sharing and tactical communication across the remote and densely-forested areas common to the Southcom area of operations.

A specially-modified CubeSat, dubbed the Space and Missile Defense Command Nano-Satellite-3 (SNAP-3), was launched from Vandenberg Air Force Base aboard an Atlas 5 rocket, and housed inside the NPS SSAG-developed CubeSat launcher, NPSCuL.

DISE Research Associate Brian Wood lead the NPS effort to assess the operational value of the technologies employed by the mini-satellite. "SNAP-3 is an attempt to fill a capabilities gap associated with the need for other than line-of-sight communications in Southcom's heavily-forested area of operations," said Wood. "NPS will be conducting an assessment of SNAP-3's ability to fill that gap."

"SNAP-3 is an attempt to fill a capabilities gap associated with the need for other than line-of-sight communications." – Research Associate Brian Wood

SNAP-3 seeks to overcome line-of-sight limitations by allowing Soldiers on the ground to ping CubeSats in low earth orbit which in turn relay messages to command and control nodes or to other service members.

SNAP-3 also utilizes Unattended Ground Sensor Exfiltration technology. Researchers hope to be able to use unattended ground sensors to gather intelligence, such as the presence of insurgent or criminal groups traveling along known smuggling routes, and then beam that data to orbiting SNAP-3 satellites. The satellites would then download the data to receivers without the need to place Soldiers in harm's way.

"Over the next 18 months, we will be traveling to Brazil and Peru, and possibly other interested nations, where we will set up a scenario that tests the ability of SNAP-3 to perform as designed," said Wood.

NPS space systems student, U.S. Marine Corps Capt. Clayton Jarolimek is working with Wood on the SNAP-3 assessment. "One of the things that drew me to this was my past experience on the ground without satellite communication in Helmand Province, Afghanistan," said Jarolimek. "If adopted, SNAP-3 has the potential to bring satellite communications down to squad size units on the ground."



NAVAL POSTGRADUATE SCHOOL

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BLACK HISTORY MONTH

FEBRUARY 2013

Students, Staff and Faculty Build Culture of Volunteerism Off Campus

By MC3 Shawn J. Stewart

Volunteerism is a cornerstone of the United States military — there are nearly 1.5 million individuals in the uniformed services, and all of them volunteered to be there. They are volunteers who decided to sacrifice their lives for the betterment of themselves and their country. For some, enlisting or commissioning was enough, while others are driven to extend further into the immediate communities around them.

At the Naval Postgraduate School, officer students, staff Sailors, and their colleagues from across the services and the classroom, place a priority on making a difference in the local region.



Naval Postgraduate School personnel, from left to right, IT1 Lance Bloodworth, Lt. Endia Mendez, and YN3 Breana Ruiz are just a few of the countless NPS students, staff and faculty that help build a culture of volunteerism outside campus through their tireless efforts in the local community.

“We volunteer in Monterey and its surrounding counties,” said Lt. Endia Mendez, Vice President of the Monterey Chapter of the National Naval Officers Association and a student in NPS’ Graduate School of Business and Public Policy. “One of our programs is entitled Breakfast for Your Brain, where we tutor local elementary, middle and high school students.”

Service members enjoy reaching out to the community because it gives them a chance to give back while helping to shape minds for the future.

“These sort of programs show that we care about our community,”

said Mendez. “We get to talk to the students about their career goals while helping them plan for college and all of their future endeavors.”

“It is our pleasure to volunteer in a variety of events around the Monterey Peninsula,” echoed Information Technician 1st Class Lance Bloodworth, Lead Petty Officer for NPS’ Information Technology and Communications Services group.

“We have served in a variety of ways, from coaching kids baseball and softball to relocating the Habitat for Humanity’s warehouse from a dangerous location in Fort Ord to a new location in Seaside. Without a doubt, volunteering has really been a highlight for us here at NPS.”

Sailors frequently serve the local community in a wide variety of events and programs. Food drives to feed the hungry, golf tournaments that raise money for local charities, and athletic events that build awareness are only the beginning. Some Sailors even take it a step further by manning vital positions at local support centers.

“I’ve been a volunteer at the MCRCC [Monterey County Rape Crisis Center] since November of 2012,” said Yeoman 3rd Class Breana Ruiz. “I man the phones at MCRCC every Tuesday from 1600 through 0600 the next day,” she said. “I volunteer because Monterey Bay is also my community and home.”

The culture of volunteerism at NPS will continue to flourish with programs like Breakfast for Your Brain, honor guard and various volunteer opportunities throughout the Monterey Bay area.

“Whether it is standing in the rain asking for donations or getting my hands dirty, I will do anything I can to help the this community,” said Bloodworth. “The Navy core values of Honor, Courage, and Commitment are not just something to follow in regards to being on duty; they are values that I align with everyday of my life,” he said.

At the heart of the volunteer efforts of those across the entire NPS community is a simple, straightforward idea – helping those in need.

“If I walked in the shoes of those who are less fortunate than me, I would want someone to help me if I desperately needed it,” said Bloodworth. “That is why I cannot sit idle knowing that there are less fortunate people out there that need our help.”

Systems Engineering Program Brings Product Development to Spotlight

By Kenneth A. Stewart

The Naval Postgraduate School's Joint Executive Systems Engineering Management — Product Development 21st Century (SEM-PD21) program is working to bring together senior engineering and technical professionals from across the Department of Defense (DOD) and private industry in order to revolutionize the military's acquisition process.

"By integrating engineering and management elements, our program strives to develop a new kind of leader with a holistic perspective and knowledge of systems engineering and its role in the total life-cycle acquisition system," said Dr. Walter E. Owen, NPS Department of Systems Engineering Associate Chair for Distributed Programs and Outreach.

SEM-PD21 is offered in collaboration with MIT's Educational Consortium for Leadership in Product Development in the 21st Century. It is a two-year, eight-quarter, part-time master's degree program delivered in an executive format.

According to Owen, the strength of the program lies in its unique ability to bring together defense industry contractors and senior systems engineering and acquisition professionals from within the DOD. This sort of collaboration was made possible due to a provision in the 2001 Defense Acquisition Bill.

"In early 2000, then Undersecretary of the Navy Jerry Hultin asked NPS' Systems Management Department to join the Education Consortium for Product Development of the 21st Century," said Owen. "Hultin's request was made in response to a trend toward privatizing acquisitions that had resulted in the migration of many activities once performed by Navy uniformed or civilian personnel to the private sector."

"It made sense for Navy personnel and defense industry civilians to participate shoulder to shoulder in graduate studies focusing on improving Navy research, development, and acquisition cost, schedule and performance," continued Owen.

Program organizers believe that the public/private nature of the program greatly enhances the educational experience of both sets of students. The course is offered in a distance-learning format, that combines web-conferencing and face-to-face instruction as well as class visits to key industries where students are able to network and form relationships.

"We have a two-week kick off in Monterey and do an industry trip each year where we try to expose students to best practices and technological advances in systems engineering and product development, in both commercial and defense industry sectors," said Owen.

The SEM-PD21 curriculum also aims to focus students on the skills and strategies required to affect change in their respective organizations. They also work to recognize barriers to success early in product or system development cycles when corrective actions are least costly.

"Students in our program are exposed to the latest state-of-the-art concepts, tools and best practices, both private and public, in systems engineering and management," said Owen. "They learn from experienced faculty, who have worked in the defense industry and have completed defense relevant research.



Naval Postgraduate School Department of Systems Engineering Graduate School of Engineering and Applied Sciences Senior Lecturer Gary O. Langford teaches a course via distance learning to students enrolled in the Joint Executive Systems Engineering Management — Product Development 21st Century masters degree program.

"They sit side-by-side with future military and industry decision makers in a non-threatening educational environment where they can study and analyze how to improve the way defense does business," continued Owen.

FACULTY news & notes

NPS alumnus and Oceanographer of the Navy, Rear Adm. Jonathan White recently authored an article on the critical role of information in worldwide U.S. Navy operations. White serves as Director, Maritime Domain Awareness.

NPS Professor James Clay Moltz spoke with the Sydney Morning Herald on the latest developments in Asia's race to space. Moltz, who wrote the book, "Asia's Space Race," discussed the competitive fear and secrecy that surrounds some Asian military space programs. He also commented on China's growing interest in space and its affect upon Chinese-U.S. relations.

NPS Department of Physics Assistant Professor Joseph P. Hooper was honored with the 2013 Menneken Faculty Award. He was recognized for his outstanding efforts and achievements in research that directly impacts Navy and Department of Defense technologies.

Operations Research Department Associate Professor Nita Shattuck was awarded the Surface Navy Association (SNA) Literary Award at the SNA Annual Symposium in Springfield, VA, Jan. 15. Shattuck was recognized alongside co-author, retired Navy Capt. John Cordle for their article, "A Sea Change in Standing Watch," which addresses the importance of sleep and it affects on operational readiness.

THIS MONTH ON

INSIDE NPS

- A look at disaster relief operations with Hastily Formed Networks Director Brian Steckler
- Highlights of Capt. Jose Gonzalez's work supporting Operation Damayan
- Overview of the Fleet Numerical Meteorology and Oceanography Center (FNMOC) and its collaboration with NPS' Meteorology Department featuring FNMOC Commander John Okon and NPS Professor Wendell A. Nuss.

"INSIDE NPS" AIRS WEEKLY ON THE PENTAGON CHANNEL



U.S. service members, Haitian citizens, and Chilean troops unload medical supplies in Haiti in 2010. (U.S. Air Force photo by 2nd Lt. Victoria Brayton/Released)

Business of Humanitarian Aid, Disaster Relief Takes Center Stage

By Kenneth A. Stewart

NPS Associate Professor Aruna Apte and Assistant Professor Keenan Yoho, with the university's Graduate School of Business and Public Policy, are guiding a series of important, student-led Humanitarian Aid and Disaster Relief (HADR) research efforts with the aim of improving processes and meeting the Navy's burgeoning HADR research requirements.

"I was looking for a service-oriented military topic when Hurricane Katrina hit in 2005," said Apte. "Like many academics, Katrina inspired me to look into HADR research topics." Apte, who is an operations management expert, approaches her analyses of HADR operations from an optimization point of view. And she quickly realized that NPS had an important contribution to make on what have become commonplace missions for commanding officers around the fleet.

Fellow logistics strategist Yoho developed a passion for improving HADR operations after being exposed to Apte's work, and watching the devastation caused by the Haiti earthquake. "Naval HADR operations have broad implications beyond war that demonstrate the generosity of the U.S," said Yoho. "When the earthquake in Haiti happened, I realized that I needed to bring HADR research into my classroom."

A business school may not seem like a natural fit in conducting HADR research, but Apte insists that GSBPP's acquisition, financial management and logistics orientated faculty and student body possess the ideal mix of academic and operational expertise necessary to tackle HADR challenges.

"We have the necessary faculty with the expertise to make it work," said Apte. "We look at processes and at weakness within those processes, that sort of education lends itself naturally to looking at HADR problems."

"A lot of our background in operations and logistics management deals with process management and we tend to think in terms of processes. We have to ask, when do these processes start, when do they end, what is the capacity, where are the bottlenecks, when do you have to hand off to another organization and how do you mitigate quality costs?" added Yoho.

And while the logistics and supply chains that support HADR operations are similar to those that are used to support both industry and other DOD operations, they do require considerable foresight and planning — luxuries that are rarely afforded to disaster relief professionals.

"HADR logistics necessitate a response supply chain, and these supply chains are very difficult to manage," explained Apte.

HADR research efforts at NPS are revealing. The mid- to senior-level military students that make up the majority of NPS' unique student body bring a degree of operational and real-world experience to the classroom that would be difficult to replicate in a civilian graduate institution and whose impact is readily apparent in GSBPP's HADR research initiatives.

DRMI Explores Strategic Human Capital Management

The Defense Resources Management Institute (DRMI) recently welcomed its latest cohort of Human Capital Resources Management (HCRM) students to NPS. The HCRM program offers relevant economic concepts and strategic planning resources emphasizing human resources integration and total force management.

"We learn from each other's experiences, knowledge and backgrounds," said Saudi Arabian National Guard Brig. Gen. Dr. Khalid AlShohaib. "It's a mix of knowledge that one could never get anywhere else."

"I hope our students take a step back from their day-to-day manpower and human resource problems and look at the overall process of managing people from a fresh and strategic perspective," said DRMI Assistant Professor Dr. Laura Armeiy.

The HCRM course is a two-week program of classroom lectures, small group discussions and real-world case studies intended to develop the decision-making skills necessary in today's challenging defense environment.

NPS Expands International Outreach

By Javier Chagoya

Comoros National Defense Officer Capt. Adaine Moudjib is part of a very small group of officers from his nation to study at NPS. Moudjib hails from the Union of the Comoros, an archipelago nation of volcanic islands located in the Mozambique Channel northwest of Madagascar.

“I was selected to come to NPS due to my educational background and language skills,” said Moudjib who speaks five languages — French, English, Arabic, Malagasy and Comorian, a Bantu language closely related to Swahili.

Moudjib is participating in the NPS Department of National Security Affairs new international defense planning certificate program.

“I hope my studies will bring more ideas to me and I’ll be able to contribute some solutions to problems in our small armed forces,” said Moudjib.

NPS has over 5,300 international graduates from 108 countries. Current international enrollment includes 247 students from 47 countries, with students enrolled in over 30 curricula across campus.

NPS Commemorates Dr. Martin Luther King Jr. During Annual Breakfast

By MC3 Danica M. Sirmans

Members of the Monterey Chapter of the National Naval Officers Association (NNOA) were recently joined by Seaside Mayor Ralph Rubio, Village Project Inc. Chair Ann Todd Jealous, and Naval Postgraduate School President retired Vice Adm. Ronald A. Route for the NNOA’s 28th Annual Dr. Martin Luther King, Jr. Commemorative Breakfast.

“We often hear of Dr. King in the context of the extraordinary, but I think it’s just as important to talk about the ordinary,” said

Jealous. “I share the imperfections of his humanness so that you will understand that perfection is not necessary in order to make great and positive change. We just have to care enough to not let our fears and our imperfections stop us.”

Jealous participated in the 1963 March on Washington for Jobs and Freedom where, as a 16-years-old, she heard King’s famous, “I Have a Dream,” speech.

NNOA advisor and NPS Graduate School of Business and Public Policy Associate Dean Cmdr. Simonia Blassingame offered closing remarks at the commemoration.

“I have marched and commemorated Dr. King’s birthday for as long as I can remember, but I have not quite heard the story put together in the way that Mrs. Jealous told it today,” said Blassingame. “You gave me so much to think about, and I enjoyed it tremendously.”

The Jealous family is active in a number of community organizations designed to empower people to improve their lives. Jealous’ husband, Fred Jealous, is founder of the Breakthrough Men’s Community, a men’s organization focused on self-improvement. Her son, Benjamin, recently completed a five-year term as President of the NAACP.



Village Project Inc. Chair Ann Todd Jealous speaking at NPS during the NNOA’s 28th Annual Dr. Martin Luther King, Jr. Commemorative Breakfast.

CAMPUS news & notes

Congratulations to Naval Postgraduate School’s Center for Homeland Defense and Security Executive Leaders Program alumnus William Evans, who was officially named Boston Police Commissioner, Jan. 9.

The Defense Resource Management Institute (DRMI) conducted its 11th Defense Institution Building workshop for the Kyrgyz Republic, Jan. 20–24. DRMI coordinated these efforts with the Office for Military Cooperation at the U.S. Embassy in Bishkek, regional and country desk officers at U.S. Central Command, and representatives of the Office of the Secretary of Defense. Organizers are hopeful that the workshop will help the Kyrgyz defense forces to better prepare and execute multi-year budgets.

A small, but proud group of 31 NPS distance-learning students from the GSBPP’s Advanced Acquisition Program (AAP) recently graduated at the U.S. Army TACOM Life Cycle Management Command. The AAP provides federal sponsors with an on-site source for Level III Program Management Certification Training. NPS is one of only two institutions that provides Defense Acquisition University equivalency in Program Management.

Former NPS student Lt. Darryl Diptee was a guest on FoxBusiness where he discussed his Emotional Vitality Assistant, a smartphone application that he is developing to combat PTSD and military suicide. Diptee’s application provides a resource for servicemembers fighting the effects of Chronic Emotional Apathy, a condition associated with prolonged exposure to an emotionally sterile environment and a possible contributor to military suicide.

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 Join Community Effort to Build Home for Wounded Warrior

By Kenneth A. Stewart

Students from the Naval Postgraduate School and nearby Defense Language Institute Foreign Language Center (DLIFLC) recently joined the regional community in welcoming Army Sgt. Brian Jergens and family to their new home during a ribbon-cutting ceremony in Hollister, Calif.

The home was donated by Homes for Troops, a national non-profit organization founded in 2004, and was built by members of the local community including a cadre of volunteers from both NPS and DLIFLC. Homes for Troops has built and donated 155 homes in the last 10 years to wounded service members.

While deployed to Afghanistan in 2011, Jergens was severely injured by a roadside bomb in Uruzgan Province. The improvised explosive device that ripped through his vehicle blew off both his legs below the knee, broke his neck, and injured his brain, hearing and internal organs.

Despite the trauma, or perhaps because of it, Jergens remembers nothing of the long road home that took him from field hospitals and medical centers in Afghanistan to Landstuhl, Germany and then to Brooke Army Medical Center in San Antonio, Texas. In fact, he does not remember Afghanistan at all.

"I don't remember what happened until I look down," quipped Jergens with his ever-present smile and infectiously positive attitude.

"Thank you for coming, we are so excited that all of you are here to share this day with us."



Army Sgt. Brian Jergens, center, cuts the ribbon on his new home during an emotional ceremony in Hollister, Calif., Dec. 12. Through the tireless efforts of hundreds of volunteers, including a large contingent of NPS Department of Defense Analysis students, national non-profit Homes for Our Troops provided Jergens and his wife Jennifer, left, with a new, free custom home.

Jergens and his wife are working hard to reclaim their lives and to raise their young family in Hollister, and the community has welcomed them with open arms. The ribbon-cutting ceremony was attended by the mayor, the chief of police, city council members, a local Boy Scout troop, and members of the Patriot Guard Riders.

"You are going to get the key to your home, and I am very excited for you. But I have a better key for you, the key to our city," said Hollister Mayor Ignacio Valazquez. "A lot of people have asked for this key, but it only belongs to heroes and that's what you are."

NPS defense analysis student, U.S. Air Force Maj. Jeff McMaster of Fort Worth, Texas, was one of many volunteers to work on the Jergens family home.

"I was both surprised and happy to see the number of volunteers, there was easily 200 people who showed up with smiles on their faces and ready to work. It was really something to see," said McMaster.

"It was a great chance to give back to someone who has sacrificed so much, someone who maintains a great attitude and who is such an inspiration despite the severity of his injuries. It was a privilege," McMaster added.

Focus On ... Exercises in Public Service

A Monthly Look at Names and Faces on Campus

NPS Energy Academic Group Deputy Director Alan Howard was recently appointed to the Osteopathic Medical Board of California, a state licensing body designed to protect consumers and promote professionalism in osteopathic medicine.

"I had wanted to serve the public and had been in discussions with [former] Gov. Schwarzenegger's administration in 2007 as to where my skills, education and interests could best be of service," How-

ard said. "It was then I was first appointed to this board and it's a great honor to have been recognized by Governor Brown as a valuable member of the board and allowed to continue in this role."

Howard's background in management and administration provides a unique perspective to the board's primary mission to protect consumers and promote professionalism in the field of osteopathic medicine. As a public member of the board, How-

ard says his contributions are focused more on public service and board operations.

"With my background and education, I tend to look at the business aspects of the board and provide more oversight there ... things like board finances, budget, processes, reporting, etc.," Howard noted. "Providing a safe, efficient, and compliant health care system with the highest professional standards for the people of California is our board's top priority."



NPS Energy Academic Group Deputy Director Alan Howard

Any Day at NPS ...



NPS Students head to class in the shade of the season's first cherry blossoms. Some of the trees represent remnants of the Hotel Del Monte's botanical garden and according to an undated, early 20th Century brochure titled, "Trees, Shrubs and Plants in the Gardens and Groves of Hotel Del Monte" are from the genus *prunus piasardii* or *prunus triloba*. (U.S. Navy photo by Javier Chagoya)

Monterey Police Department Assistant Police Chief Michael Aspland meets with senior Panamanian government officials at the Monterey Police Department, Jan 21. Aspland took part in a three-day Defense Resource Management Institute (DRMI) workshop that sought to identify Panama's long-term resource management education requirements and to develop an appropriate engagement plan to meet those requirements. (Courtesy photo by Charlie Orsburn)



Lt. Cmdr. Anthony Bumatay an NPS student and member of the university's Hastily Formed Networks (HFN) Research Group, details his team's experiences supporting relief efforts in the wake of Typhoon Haiyan during a campus brown bag lecture, Jan. 14. The HFN group deployed to the Philippines in support of Operation Damayan immediately following the devastating typhoon last November. (U.S. Navy photo by MC2 Shawn J. Stewart)

Lt. Stephen Emerson proudly displays his game-day screen saver, the shot features Emerson and his son Andrew showing their "12th-Man" pride prior to the Seattle Seahawks vs. New Orleans Saints National Football League Playoff game at Seattle's Century Link Field, Jan 19. Emerson won the Russell Wilson Fan Rescue Contest, which in conjunction with Alaskan Airlines, flies loyal fans living outside the Seattle area to home games. (U.S. Navy photo by MC2 Chablis J. Torrence)



Members of the NPS Information Technology Task Force meet in Herrmann Hall's Didactic Room, Jan. 9, to review the outcome of last year's cybersecurity inspection, a comprehensive evaluation of the physical network, administrative practices, user behaviors and network defenses aimed at protecting the health and safety of DOD computer networks. (U.S. Navy photo by MC2 Chablis J. Torrence)



STUDENT voice

By Lt. Brian Harrington
President's Student Council

The President's Student Council has had a busy start to 2014. We began with the return of the always popular Warrior Day on January 21. Elections were conducted January 27 and 28 and student body participation hit record highs for voter turnout. Over 600 students voiced their opinion, up from only 150 voters in the summer 2013 elections.

Captain Gunnar Spafford was elected to serve as Chairman, Lieutenant Adam Farber was elected to serve as Vice Chairman, and Lieutenant Jason Grammar will be the Recorder. The new administration comes from a range of curriculums and communities and looks forward to serving the student body.

Items on the PSC's radar include the February monthly meeting, an ongoing assessment of the Student Opinion Form and our continuing effort to have more campus-wide Warrior Days. We are also planning the Battle of Midway Dining Out for June 7.

Thank you to all students for voting in the election. Your participation is essential to the success of the President's Student Council. As always, the monthly meeting is open to everyone and the suggestion box is available for new ideas at <http://intranet.nps.edu/psc/index.html>

Very Respectfully,

Lt. Brian Harrington
Chairman, President's
Student Council

Lt. Brian Harrington is a Chairman of the President's Student Council. Visit the PSC on the intranet at <http://intranet/psc/index.html>.

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



February 7
Brown Bag Lunch and Roundtable on Counterinsurgency with Dr. Douglas Porch
POC Naval War College Monterey



February 19
General John F. Kelly, Commander, United States Southern Command
Secretary of the Navy Guest Lecture
POC Lt. Jon Volkle, (831) 656-2466



February 11-12
Adm. Mark Ferguson
Vice Chief of Naval Operations
Secretary of the Navy Guest Lecture
POC Lt. Jon Volkle, (831) 656-2466

February 26-28
Lt. Gen. William Phillips
Military Deputy/Director, Army Acquisition Corps
Address Acquisition Students

February 17
President's Day



February 21
Black History Month Celebration
POC MC3 Danika Sirmans
(831) 656-1070

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Historical Highlights

Secretary of the Navy Dan Kimball delivered the keynote address for NPS' official commissioning of the Monterey campus in February 1952.



Kimball noted, "Nothing is more important for the advancement of Naval science and the future greatness of the American Navy than to provide adequate opportunity for its officers to carry on their advanced study and individual research. This school provides this opportunity."

The world of electronic computers was in its infancy in 1952 and today's computational capability and interconnectivity make cyberwar the most important challenge for national security, said NPS alumnus and former Chairman of the Joint Chiefs of Staff, Admiral Michael Mullen, in his December commencement speech. He urged each member of the graduating class to take action. "No matter where you are, whether you are military or civilian, where is cyber in your world and how do we get this piece right?" he asked.

Historical Highlights are provided by the Dudley Knox Library.