



NAVAL POSTGRADUATE SCHOOL

UPDATE
NPS

HISPANIC HERITAGE
MONTH

September 2017



(U.S. Navy photo by MC2 Michael Ehrlich)

Former Defense Secretary Panetta Offers Latest NPS Guest Lecture

by MC2 Michael Ehrlich

The Honorable Leon Panetta, former Secretary of Defense, shared his seasoned perspective on the demands of leadership, and national security's greatest current challenges, during the latest Secretary of the Navy Guest Lecture (SGL) at NPS, Aug. 11.

A packed house of students, faculty and staff in King Auditorium got an inside perspective from Panetta's more than 50 years of public service, speaking openly about challenges, hope and assurance – stressing that those in attendance would become the leaders the United States must have to protect and preserve our national security.

“We are coming together at a critical time in the history of our country, facing global and domestic challenges,” said Panetta. “Our nation, as we are all aware, is confronting a series of complex and dangerous flashpoints in the world, I think perhaps more dangerous points since the end of World War II.”

Panetta charged the students with recognizing their personal responsibility, to become leaders that will be able to face those challenges at home and abroad, and he reminded them that their presence here, at the Navy's graduate university, serves that critical purpose.

“Originally chartered to focus on science and technology, NPS has evolved into an institution that provides and focuses on current and future readiness, on advances in technology, on educational and operational programs that directly support all facets of our national defense and homeland security,” Panetta said. “Most importantly, it helps make you better leaders, more effective critical thinkers, and in turn, you will become the kind of leaders I think we need in the 21st century.”

Panetta's career in service has come full circle. Elected to the House of Representatives in 1976 representing Monterey in what was then California's 16th District, Panetta has since served in several senior positions in the federal government, including Director of the Central Intelligence Agency, White House Chief of Staff, and of course, Secretary of Defense. Panetta returned to the area following his tenure as SECDEF, to become more involved in his Panetta Institute for Public Policy, founded in 1997 at California State University, Monterey Bay.

“At the Panetta Institute, we discuss how in a democracy we govern either by leadership or by crisis. If leadership is there and is willing to take the risk, then we can avoid or at least contain crisis. Make no mistake, as a leader you're going to have to take risks, in business or in the military,” he said.

p3 Marina's VA Clinic Officially Opens, Honors Former NPS Dean of Students

p4 NPS Cyber Graduate Detects Active Vulnerability

p6 CubeSat Communications Research Competes in NASA iTech

Defense Execs Share Industry's Perspective on Major Acquisition Programs

By MC2 Michael Ehrlich

NPS students showed up in force to get insight first-hand from some of the defense industry's most senior leaders during a panel discussion with university faculty, Aug. 16. The NPS Department of Systems Engineering hosted the discussion, with President and CEO of Huntington Ingalls Industries Mike Petters and President & CEO of BAE Systems, Inc. Jerry DeMuro, offering their unique perspectives on the history and future forecast of shipbuilding and acquisitions for the U.S. Navy.

Joining the two executives on the panel were NPS Director of Undersea Warfare retired Rear Adm. Jerry Ellis, and Associate Professor Rene Rendon of the Acquisition Management program in NPS' Graduate School of Business and Public Policy.

DeMuro began the discussion by emphasizing some of the unique aspects of the defense industry.

"Aerospace or defense in particular operate in a very unique environment," DeMuro said. "It is not truly a commercial market driven environment, and as you all know, all markets are unique in their own way."

DeMuro leads BAE Systems Inc., an international aerospace security company that provides a range of products and services for air, land and naval services. DeMuro discussed the government's decision to rely on the private sector for the development of complex systems that would require sustainment over several years, and the impact of decreasing federal budgets on these systems.

"If you look at 2010, we were spending a little less than five percent GDP, and that has implications on our industry. It's very cyclical," he noted. "This also drives behaviors in our business ... We have to be prepared for the up, and more importantly, for the survival of the down."

Petters opened his discussion by offering a framework for the students in attendance to consider while participating in the discussion.

"I would like to give you a lens to look through for our discussion today," he said. "The business we are in, the stakeholders we work

with, we're going to come to a complex problem and look at it through a lens of investment and return. How much do we invest in that problem, how do we create return?

"Return can mean a lot of things," he continued, referring to growth, long-term sustainability, higher margins and investment capabilities among others. The federal government, he says, looks at acquisition programs through budget and expense, "which is a very different lens," Petters continued.

Petters is CEO of Huntington Ingalls Industries, America's largest shipbuilding company. He offered an example through the Virginia Class submarine program, demonstrating how reviewing acquisition programs through an incomplete 'lens' can be an inaccurate measure of effectiveness.

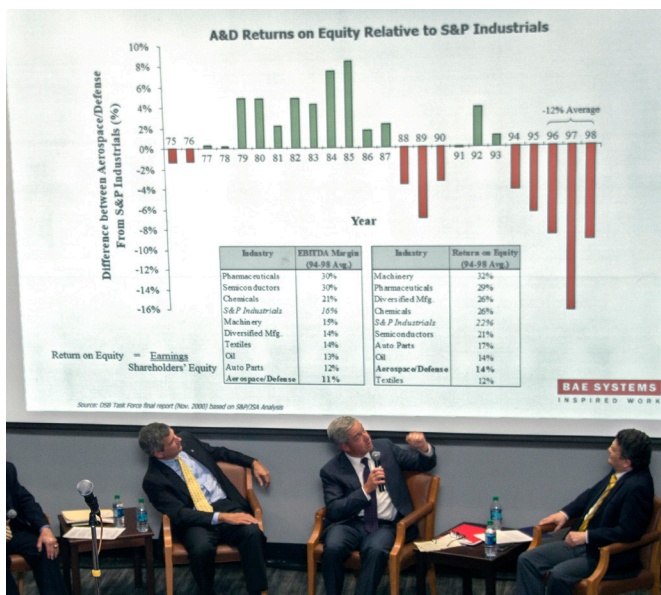
NPS' resident undersea warfare chair with 36 years of active duty, Ellis took the opportunity of the Virginia Class discussion to have a conversation on lessons learned, especially for the upcoming Columbia Class submarine program.

"The Virginia Class program is widely considered one of the most successful ship building programs ever. What key principles of this program could you apply to other

shipbuilding programs?" he asked, referring specifically to the Columbia Class. "There is no doubt that this program has to be successful for the survival and preservation of our great nation."

Petters noted several advantages through the Virginia Class that can be applied to other programs, from establishing business arrangements at the beginning to developing an acquisition 'rhythm.'

"There are so many things to have to go right for the first ship of a class to go well, and we can talk about that all afternoon," he stressed. "If you really want to drive success of the Columbia Class in production, make sure you fully invest in the engineering up front and don't delay it, don't slow it down, don't find your suppliers too late, don't start the process too late, because all of those things will have an adverse impact when you finally get to the point where you are appropriating money for ships."



NPS students pack the Ingersoll Hall Auditorium for a panel discussion with senior defense industry leaders and university faculty, offering unique insights on the history and future forecast of shipbuilding and acquisitions for the U.S. Navy, Aug. 16. (U.S. Navy photo by MC2 Michael Ehrlich)

"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

Marina's VA Clinic Officially Opens, Honors Former NPS Dean of Students

By MC1 Lewis Hunsaker

The Major General William H. Gourley VA-DOD Outpatient Clinic in Marina held its grand opening celebration, Aug. 3, with military officials, local leaders, and former congressman Sam Farr on hand to welcome the community to the state-of-the-art facility.

"This is a very significant day in the history of the Monterey Bay area," said Farr. "We are dedicating a clinic that, for the first time, was built from the bottom up, using veterans in the design of the building. All buildings have a history, and the history starts with the land under it. The history here is this area, first settled by the military."

When Ft. Ord closed in 1994, the 400-patient, full-service hospital also closed. This created a gap in medical care for service members stationed at Defense Language Institute Foreign Language Center (DLIFLC) and NPS and their families, as well the large populations of local retired veterans.

"This was when Bill Gourley stepped in and said that we have to solve this problem," said Farr. "What if we use the VA as the civilian entity, and the Army medical at DLI and bring them together. This is where the concept of building this joint clinic started."

Farr secured federal funding to build the clinic and led the collaboration between the VA, DOD and local governments to complete the outpatient facility.

Sadly, Gourley died in 2008 before ground was broken on the \$100-million clinic that bears his name. The three-story, 150,000 square-foot, facility is expected to serve more than 80,000 people when fully operational, with a staff of about 125 including primary care physicians, physician assistants, registered nurses, nurse assistants, specialists, administrative personnel, and volunteers.

"This center is going to be able to give a different kind of care to the patient. But it's also going to be training the medical community of the future of medical care," concluded Farr. Following the ribbon-cutting ceremony, those in attendance were able to take self-guided tours and interact with medical professionals ready to answer questions about the clinic.

In addition to the facility's honor of Gourley, the clinic also recognized NPS alumnus and former Dean of Students, Capt. Alan Poindexter, by naming one of its conference rooms in his honor. Poindexter earned a Master of Science in Aeronautical Engineering from NPS in 1995, and was the university's Dean of Students from 2010-2012. He was selected to serve in NASA's astronaut program in June 1998 and went on to fly two space shuttle missions logging 669 hours in space aboard the Atlantis (STS-122) and the Discovery (STS-131).



Former congressman Sam Farr cuts the ribbon officially opening the Major General William H. Gourley VA-DOD Outpatient Clinic in Marina, Aug. 3. The \$100 million, 150,000 square-foot facility is expected to serve more than 80,000 people when fully operational. (U.S. Navy photo by MC1 Lewis Hunsaker)

FACULTY news & notes

Former NPS Distinguished Professor of Physics Dr. Nancy Haegel presented the latest Defense Energy Seminar on "Terawatt-Scale Photovoltaics: Trajectories and Challenges" in the Mechanical Engineering Auditorium, July 28. After 14 years at NPS, Haegel joined the National Renewable Energy Lab in 2014 as the director of its Materials Science Center.

Haegel's discussion focused on the use of photovoltaics for energy generation around the world, and the need for significantly more in order to make a dent in global energy demand.

"We have about 300 gigawatts of photovoltaics installed around the world, and in order to have a significant fraction of the world's energy, we need to move that up another order of magnitude ... into the terawatt scale," Haegel explained.

To achieve the terawatt threshold of usage, Haegel recommended these key areas of development.

"The business and finance models have to develop because the sun is a different kind of source, no one owns it or controls it," said Haegel. "Only 20 percent of our energy consumption is electricity. To impact the system on a large scale, we need to start thinking about how to convert solar energy into other things." Haegel offered the transition of automobiles from fossil fuels to electrical power as an example.

"The DOD has an operational energy interest that is very specific, and very critical, and it can be informed from many sources. Hopefully this inspires ideas, which could very well lead to a student's thesis project," she continued, concluding her presentation with several examples of photovoltaic-related research topics ready for students to start on.

"Some of which already have DOD funding," she added. "And we would love to have NPS students at NREL if we can figure out the time and logistics."

NPS Cyber Graduate Detects Active Vulnerability

By MC2 Patrick Dionne

The mission of the NPS Department of Computer Science is to advance the combat effectiveness of the U.S. and allied armed forces through unique graduate education programs and associated research in areas such as cyber-physical systems security, network security, cyber systems and operations, and other related fields.

However, for September 2016 graduate Francisco Tacliad, classroom education quickly became a real-world scenario when he discovered an active vulnerability in the Allen Bradley MicroLogix 1100 Programmable Logic Controller (PLC) while performing research for this NPS thesis. PLCs are vital components for the operation of industrial control systems (ICS) that manage critical infrastructure services.

“It all started when I developed a fuzz testing tool to find vulnerabilities as part of my thesis. Basically, the tool sends inputs to the system under test while looking for undefined behavior or denial of service errors,” said Tacliad. “From there, we can determine whether that was caused by something the fuzzer had sent.”

Fuzzing is a penetration-testing technique used to discover coding errors and security loopholes in software. It involves feeding massive amounts of random data, called fuzz, to the test subject in an attempt to make it crash.

“The way fuzzers work is you just set it and let it run. So, I set it, and an hour or two later I noticed a red light on the MicroLogix 1100 that indicated a fault,” said Tacliad. “The device was unresponsive and the only way to get it to function again was a hard reboot. This

proved an incredible way to apply my thesis in a tangible matter, and to prove that this tool can find vulnerabilities.”

Titled “ENIP Fuzz: A Scapy-Based Ethernet/IP Fuzzer for Security Testing,” Tacliad’s thesis largely centered on building a tool that could find vulnerabilities in industrial network protocols used in control systems.

The vulnerability that Tacliad discovered was an improper input validation which sends commands to the controller. The vulnerability would have allowed an attacker to launch a denial-of-service attack by sending a maliciously-crafted packet to the PLC to cause it to stop responding to new requests.

“I feel fuzzing has got a lot more traction as far as a way to find vulnerabilities in devices,” said Tacliad. “With the increased use of the Internet as part of our daily life, this field is really growing and fast. The fuzzer that I made is a good proof of concept that people can take a specification of a protocol and analyze it in such a way that they will be able to find bugs and vulnerabilities in these types of devices.”



While completing research for his master’s degree thesis in computer science, NPS graduate Francisco Tacliad discovered an active vulnerability in a commonly-used programmable logic controller. Tacliad, who attended NPS through the National Science Foundation’s Scholarship for Service program, currently works for the Space and Naval Warfare Systems Command (SPAWAR) in San Diego. (U.S. Navy photo by Javier Chagoya)

Tacliad attended NPS as part of the Scholarship for Service (SFS) program which is sponsored by the National Science Foundation. NPS has been part of the program since 2001, with the intent of infusing new cybersecurity talent into the government. Students receive paid tuition and an annual stipend as well as an allowance for books and other related expenses in exchange for their obligation to work in the federal government for two years.

NPS Alumnus, Faculty Awarded Patent for Advancement in Time Synchronization Protocols

By Javier Chagoya

NPS graduate U.S. Marine Corps Maj. Sung Park, along with Department of Electrical and Computer Engineering Professors Murali Tummala and John McEachen, have been awarded a patent for their invention, “Method and Apparatus for Hybrid Time Synchronization Based on Broadcast Sequencing for Wireless Ad Hoc Networks.” Park, created a hybrid of two, time synchronization protocols resulting in significant improvements in network synchronization and the transmission of time-stamped messages.

“The patent is based on two prior types of protocols,” McEachen added. “Park created a hybrid method of drawing from the benefits

of both of those protocols to achieve an even better synchronization method. Park came up with those techniques, and figured out how to combine them. He then conducted simulations that demonstrated his algorithm would work in the field.

“Park’s unique method of the time-stamping approach is quite novel and creative,” McEachen continued. “There’s a lot of need when you have to orchestrate random and multiple nodes, such as agricultural monitoring devices that measure rainfall for a particular crop, or measure water depth, or coping with pests. These kinds of communications happen in a microsecond environment.”

DOD's New Chief Financial Officer Introduced to DRMI, Welcomes Latest SIDMC



By MC1 Lewis Hunsaker

budget – annual planning, and the Planning, Programming, Budgeting and Execution (PPBE) process, which is what the DOD uses to effectively allocate resources within the strategic guidelines and goals established by the Secretary of Defense, extending over multiple years.

“With annual planning, the core question you ask is where are we now and what should we do different next year. The advantage of this process is that it is much easier for decision making and is a faster process,” said Norquist.

The annual process works well in some areas with set functions but not so well in others, Norquist said. He used America’s initiative to put a man on the moon as an example, where planning cannot just be year to year. Rather, the concurrent development of several systems and technologies has to come together at the right time, and, “That’s where you have to plan,” he stressed.

“When you have a changing or dynamic mission, you tend to adopt the [PPBE] strategy,” Norquist continued. “But it is challenging. It takes longer, involves more people, and creates more effort to get approved.”

The Honorable David Norquist, Under Secretary of Defense (Comptroller) and Chief Financial Officer for the Department of Defense, welcomed attendees to the latest Senior International Defense Management Course (SIDMC) at NPS, Aug. 9.

Held through the university’s Defense Resources Management Institute (DRMI), SIDMC provides a diverse international collective of flag level participants with a unique program on strategic planning and the efficient allocation of resources. Norquist took advantage of his short time on the university’s campus to welcome attendees to the program, while also learning more about the unique capabilities within DRMI.

During his discussion with attendees, Norquist talked about two different ways of building a

NPS, CSUMB Interns Close-Out Summer With Research Symposium

By MC1 Lewis Hunsaker

NPS summer interns presented research projects during the Monterey Bay Summer Research Symposium at California State University, Monterey Bay (CSUMB), Aug. 11.

The symposium highlighted the STEM – or science, technology, engineering and mathematics – research of nearly 80 interns participating in summer programs at NPS, CSUMB and Hartnell College.

“Today we were able to highlight the summer work of these interns,” said NPS Dean of Research Jeff Paduan. “Some of them are interning at NPS, some at CSUMB, and some are overlapping and cross-pollinating. This joint event allows the interns to show off what they have done, while allowing us to see the results of their hard work.”

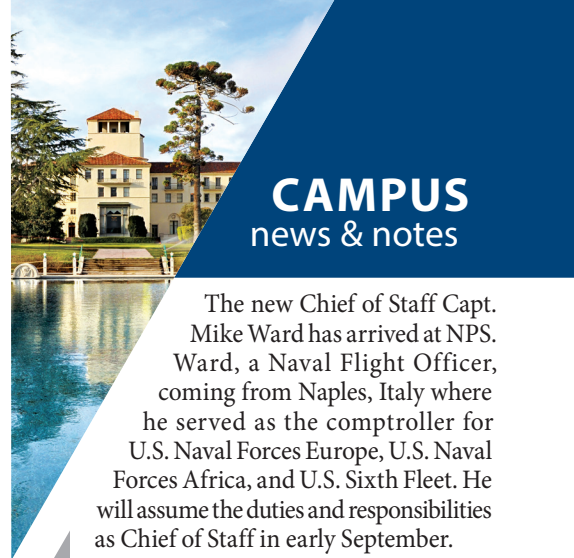
This year, a total of 80 interns from four different programs spent approximately 8-10 weeks on campus, working on the very same research endeavors the university’s faculty and students do.

“One of the most effective contributions that NPS can make to the STEM program is to open our labs to train and excite young potential scientists in the areas of STEM,” added Paduan.

NPS Provost and Academic Dean Dr. Steven R. Lerman participated in the annual symposium, offering interns his congratulations for their hard work over the summer.

“It’s amazing what can be accomplished over a relatively small period of time, in the right environment, and with the right mentors,” said Lerman.

“I believe that there are two, primary reasons for why we engage in STEM programs,” he continued. “The first is curiosity, which is core to what it means to be human. The second is to develop new technologies. Clean water, for example, saves an enormous number of lives, but you cannot have clean water without developing technology. The process of invention, exploration and creating new things, ultimately, is to better humankind.”



CAMPUS news & notes

The new Chief of Staff Capt. Mike Ward has arrived at NPS. Ward, a Naval Flight Officer, coming from Naples, Italy where he served as the comptroller for U.S. Naval Forces Europe, U.S. Naval Forces Africa, and U.S. Sixth Fleet. He will assume the duties and responsibilities as Chief of Staff in early September.

The recruitment of faculty and staff positions is ongoing. There are currently 131 recruitment actions in the pipeline with 73 AD and 58 GS. The Human Resources Office continues to work with regional servicing center, the schools, and directorates to fill these critical positions. Since the hiring freeze was lifted in May, NPS has filled 42 vacancies-9 internal promotions and 33 new hires. NPS is evaluating the FY18 budget to determine what can be supported going forward.

Capt. Jennifer K. Eaves, steps into the position of commanding officer of Fleet Numerical Meteorology and Oceanography Center (FNMOC), following the change of command ceremony at FNMOC’s Sparks Plaza, Aug. 17.

Eaves is a native of nearby Cupertino, Calif. She is a qualified Information Warfare Officer and formerly served as Director, Intelligence and Cryptology, U.S. Third Fleet. She becomes FNMOC’s second commanding officer from the Navy’s intelligence community.

“My appreciation of the power and the elegance and the warfighting contributions of the Navy meteorology and oceanography community began a number of years ago when I started some collaborative efforts with one of Fleet Numerical’s counterparts, NAVOCEANO [Naval Oceanographic Office] at Stennis, Mississippi, and that appreciation has only grown over the ensuing years,” said Eaves.

Eaves takes the helm from Capt. Russell Smith III, who has steered the weather forecasting facility since August 2015. Both Eaves and Smith have come to the job with long careers in naval intelligence, and represent a new era in information warfare.

CubeSat Communications Research Competes in NASA iTech

By MC2 Michael Ehrlich

Research into how small satellites, known as CubeSats, communicate with each other and the Earth performed by a team of researchers in NPS' Space Systems Academic Group (SSAG) was one of 10 innovations selected to participate in NASA iTech's Cycle Two competition at Langley Research Center. SSAG Research Associate and Ph.D. student Giovanni Minelli, along with Research Associate Professor Mark Karpenko, Professor Mike Ross and SSAG Chair Jim Newman, comprise a group of investigators looking to build autonomy into the communications of low-earth's ever increasing number of orbiting spacecraft.

The NASA iTech competition, hosted by the Office of the Chief Technologist at NASA, provides a forum for the broader research community to bring new, innovative ideas forward ... Ideas that not only advance varied elements of society and industry, but can also be leveraged to solve NASA's space technology challenges.

"For me, it is very gratifying to have worked on this topic for about five years and finally have some results that I can share with the greater community," Minelli continued. "I knew I chose a research topic that, at the end of the day, is valuable to our nation's space program. What was also encouraging was not just competing but hearing from these judges. We got a lot of feedback on how we can make our research better and even more relevant."

CubeSats are miniature satellites that have been growing in use over the last decade. NPS boasts a lengthy history of success with the small spacecraft, recognizing the value of the platform from an educational perspective early on.



NPS Space Systems Academic Group (SSAG) Research Associate and Ph.D. student Giovanni Minelli, above, along with Research Associate Professor Mark Karpenko, Professor Mike Ross and SSAG Chair Jim Newman, comprise a group of investigators looking to build autonomy into the communications of low-earth orbit's ever-increasing number of orbiting spacecraft. (U.S. Navy photo by MC2 Michael Ehrlich)

"NPS' role in small satellites serves two purposes. First and foremost is the educational piece, we want to be able to provide a hands-on education for our officers here in SSAG, specifically in building small satellites quickly, launching them and operating them," described Minelli. "That gives our students a chance to be a part of that life cycle, in the very short time period they are here, before they go back out to the military."

CubeSats popularity has grown significantly over

the past decade. Their low cost to build and deploy makes them particularly desirable, although their small stature creates problems and limitations to their capabilities compared to traditional satellites.

"The reason for their growth is because the price point makes them more attractive for certain missions, rather than spending a lot more money on a bigger satellite you might not need," said Minelli. "That also translates to the ground stations where you might not need to spend tens of millions of dollars on pristine ground stations. You might be able to spend tens of thousands of dollars and get away with maybe not as good of a capability, but good enough to still communicate effectively with your satellites."

Focus On ... Breakfast for Your Brain

A Monthly Look at Names and Faces on Campus

NPS Meteorology and Oceanography student Lt. Kellen Jones has taken over as lead for the university's popular, student-run Breakfast for Your Brain tutoring program, and is seeking student volunteers for tutoring sessions for local K-12 students every Saturday, starting Sept. 30.

"I felt that I could bring a STEM [science, technology, engineering and mathematics] focus to the program," said Jones. "Being in the applied sciences, with meteorology and oceanography, I deal

with real-world situations and I feel that the kids enjoy that."

The tutoring program, originally established by the Monterey chapter of the National Naval Officers Association, has had an ebb and flow of volunteers over its 20 years, and only about half of the students utilizing the program come from military or DOD dependents.

"We help them in various subjects in school, but also expose them to what we are doing here at NPS. From thesis projects to bringing

in professors to talk about some of the research that is happening right here, we show them different opportunities beyond school," said Jones.

Through feedback from parents, Jones says the program has traditionally experienced a lot of success, with many of the students seeing higher grades as a result of their own effort.

"I believe the reason for this success is getting the students motivated, getting them to like what they

are doing and seeing what they do can be fruitful," said Jones.

Interested students, faculty and staff should e-mail BreakfastForYourBrain@nps.edu.



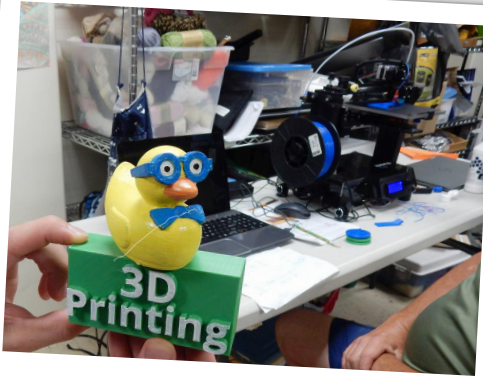
Any Day at NPS ...



Naval War College (NWC) Monterey students earning academic honors during the third quarter of Academic Year 2017 are pictured following a brief ceremony in their honor near the NWC Monterey Program offices outside Halligan Hall, Aug. 15. (U.S. Navy photo by MC1 Lewis Hunsaker)



Lt. Patrick Stewart, a student in NPS' mechanical engineering program, competes in Monterey's annual Scottish Games and Celtic Festival along with NPS national security affairs students Air Force Maj. Scott Gross and Tom Alford, and Naval Support Activity Police Officer Bryan Swanston. (U.S. Navy photo by MC2 Michael Ehrlich)



NPS student Lt. Todd Coursey had an idea, that desktop manufacturing devices like 3D printers and laser cutters could be utilized to assist transitioning veterans. The Veterans Administration (VA) selected Coursey's idea for presentation at the latest VA Innovation Demo Day, Aug. 8, where teams across the nation offered forward-leaning solutions to improve services for U.S. veterans. (Courtesy Photo)



Campus women display a sign in front of Herrmann Hall recognizing Women's Equality Day. On Aug. 26, 1920, the 19th Amendment was added to the U.S. Constitution, granting women the right to vote. In 1971, Congress designated this date as Women's Equality Day to honor women and their continuing efforts toward true equality. (U.S. Navy photo by Javier Chagoya)



Participants from the Defense Resources Management Institute (DRMI) course don protective eye wear to observe the astronomical show of the century in Spruance Plaza, Aug. 21. Unfortunately, a marine layer along with low clouds dashed any hopes of experiencing the partial solar eclipse around the Monterey Bay. (U.S. Navy photo by Javier Chagoya)



Naval Postgraduate School's Human Resources Center of Excellence (HRCOE) welcomed the latest cohort for its introductory human resources course, July 31. (U.S. Navy photo by MC2 Patrick Dionne)

STUDENT voice

Marine Corps Capt. Dan Salazar, Chairman of the President's Student Council

Fellow Students, as the quarter comes to end, the Student Council is busy collecting your feedback through the Student Experience Survey. As of this writing, more than 200 students have responded and there is still a week left for input.

After the survey closes, the PSC will spend the next several weeks reading over your input and presenting the results to university leadership as your advocates.

We will also provide an update to the student body via the muster page to keep you informed of our progress. For all who provided input, thank you for taking the time to make NPS a better experience for everyone.

The PSC is also welcoming new members. If you would like to know more about being part of this unique team, please email any current member, info below.

Also, all students are always welcome to our monthly meetings held the first Wednesday of each month at 1200 in the library, room Kn-263A.

The PSC is here to serve you and be your advocates. Thank you for your hard work and good luck with your studies.

Chair: Capt. Dan Salazar
Vice-Chair: Capt. Margarita Balish
SIGS Lead: Lt. Dan Justice
GSOIS Lead: Maj. Jake Jacobs
GSOIS Rep: Maj. Paul Webber
GSBPP Lead: Capt. Beau Pillot
GSEAS Lead: vacant

**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

HISPANIC HERITAGE MONTH (15 SEPT -15 OCT)

September 4

Labor Day



September 18-22

Thesis and Research Week



September 22

Summer Quarter Graduation Ceremony
10:00 a.m. in King Auditorium



September 5

Warrior Day



September 12

Summer Quarter Awards Ceremony
3:00 p.m. at Herrmann Hall,
Quarterdeck



September 25

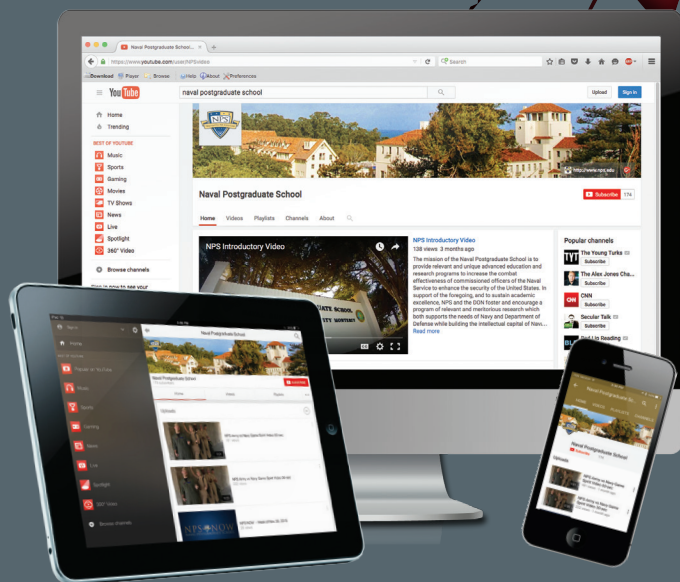
Fall Quarter
Instruction Begins



BREAKING NEWS HAPPENS

STAY CONNECTED. STAY INFORMED.

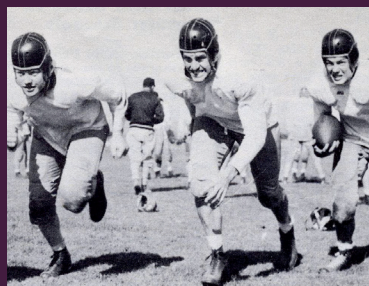
You Tube



JOIN OUR GROWING
YOUTUBE COMMUNITY
www.youtube.com/NPSvideo

Historical Highlights

According to Lt. Cmdr. Frank Wickhorst, Officer in Charge of the Naval Aviation Training Program, "Football gives the people the same thing that war does only without guns and bayonets, and we can't do without it. We of the Navy believe that competitive spirit is best attained through competition, and co-operative teamwork in sports adds materially to vital teamwork necessary in all phases of the war effort."



At Del Monte Pre-Flight School in Monterey, Calif., Lt. William F. Kern (former All-American tackle, Green Bay Packer, and coach at several universities) assembled a winning combination of young aviators who demonstrated successful teamwork.

Closing their 1943 season with a 47-8 victory over the University of California, Berkeley, the Navyators were ranked eighth best team in the nation, having won seven of eight starts (scoring 252 points compared to 65 for their opponents). Del Monte Pre-Flight School was decommissioned shortly thereafter in January 1944.

Historical Highlights are provided by the Dudley Knox Library.