

NPS Student Gives New Voice to Hope Services Janitor

By Javier Chagoya

"There is no one else I can think of who deserves this kind of communication device more than Juan," said U.S. Air Force Capt. Zachary Daniels during a presentation to Hope Services Janitor Juan Olguin at the RoboDojo Lab in Root Hall.

Olguin is part of the Hope Services team, and has been a fixture on the NPS campus since 1995 ... He currently works the Root Hall beat. After seeing Olguin frequently in one of the Root Hall labs, Daniels quickly realized Olguin had a lot he wanted to say, and thought there must be an intuitive, comfortable system he could use to more easily communicate with his friends and family. Daniels approached leadership at Hope Services and shared his ideas.

"I envisioned a harness and a tablet device that could translate text to a computer voice. I researched off-the-shelf products that only needed some minor customization and developed a wearable iPad that is loaded with a text to speech app called Predictable that was specifically designed for the special needs community," explained Daniels.

Sometimes it just takes a little extra push to put our innate humanity to work." -U.S. Air Force Capt. Zachary Daniels

Hope Services managers, seasoned veterans at communicating with Juan, pitched the idea to Olguin himself, and he loved it. Daniels then turned to the Internet, starting a GoFundMe campaign entitled "Help Juan Speak." He quickly raised the funds needed to pay for the intuitive device.

"I'm very thankful to Capt. Daniels for this great gift, I love it!" Olguin said with the help of a sign language interpreter. There will be a learning curve to get used to the new device, but if his optimism and appreciation are indicators, he'll be conversing in no time.

"Sometimes it just takes a little extra push to put our innate humanity to work," Daniel continued. "I like to take the approach that if something needs to be done, I might as well step up and do it rather than wait for the next person to take the initiative. All it takes is one person to make that initial step and then others will want to help out and push a project forward."

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VAVAL POSTGRADUATE SCHOO

Happy Labor Day!

September 2018

NPS, CSUMB Interns Share Research During Annual Showcase

By MC2 Nathan K. Serpico

Several summer interns from the Naval Postgraduate School's latest cohort presented their research projects during the Monterey Bay Summer Research Symposium at nearby California State University, Monterey Bay (CSUMB), Aug. 10. The symposium highlighted the STEM – or science, technology, engineering and mathematics – research of 65 interns participating in summer programs at NPS, CSUMB and Hartnell College.

"This is our fifth annual summer research symposium partnership between the Naval Postgraduate School, the Monterey Bay Regional Ocean Sciences Research Experiences for Undergraduates, and the Undergraduate Research Opportunities Center at CSUMB," said CSUMB Provost Dr. Bonnie Irwin. "Some may eventually join the military, while others will simply have learned something about science as it applies to defense-related problems. All of those things benefit NPS, and the nation as a whole, in the long run."

After all of the oral and video presentations were complete, students participated in a research poster showcase where they were able to share their work in more detail. Dr. Sophoria Westmoreland from the Office of Naval Research, a critical supporter of NPS' Summer STEM programs, took this opportunity to learn a bit more about the students' work.

"The number one reason these programs benefit NPS and the

NPS Provost Dr. Steven Lerman also attended the annual showcase, encouraging the audience of young scientists to hold on to the inquisitive spirit that brought them to the sciences.

"I would like to congratulate all of the students on the great work they did this summer and certainly urge them to continue their interest in the scientific or technological areas that most excite them," he said. "Pursue your passion around science and technology, and continue in that spirit of inquiry that characterized these internships this summer."

NPS summer intern Amanda Coleman presents her waveform research project poster during the Monterey Bay Summer Research Symposium at California State University, Monterey Bay (CSUMB), Aug. 10. The symposium highlighted the STEM research of 65 interns participating in summer programs at NPS, CSUMB and Hartnell College. (U.S. Navy photo by MC2 Nathan K. Serpico)

The internships are not just for the benefit of the students, Lerman added, with NPS reaping its own rewards from the research performed on the campus.

"NPS gets tremendous benefits from the students engaged with our faculty on these projects," Lerman said. "They become part of a working team, where some of their work will contribute to a larger body of research that we at NPS are involved in.

"In the long run, it engages students in scientific exploration and many of those students will go on to do great things," he continued. Internship Coordinator Alison Kerr, who strengthened partnerships with regional institutions and the Office of Naval Research.

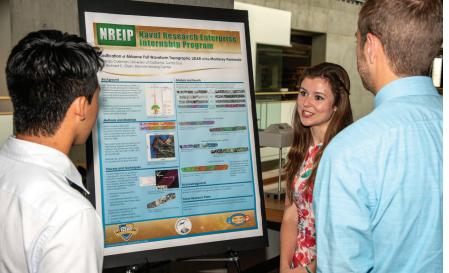
This year, interns from several different community colleges and universities spent approximately 8-10 weeks on campus, working on the very same research endeavors the university's faculty and students do.

"I have worked with over 600 high school, community college and university students and it's very exciting to see them not only during the summer at NPS, but I also keep in touch with them throughout the years," said Kerr. "It's amazing to see where their academics and career take them after these internships."

benefit NPS and the Department of Defense is in workforce development," said Westmoreland. "We want to make sure that our pipeline for future scientists and engineers is full ... and has the best and brightest students from across the country to come in and work for the Navy to help solve our naval research problems.

"If the Navy doesn't invest in its future then we won't have a future," she stressed.

NPS has maintained an internship program for many years, but significantly expanded it around 2013 through the efforts of STEM



Monterey Woman Uncovers Civil War Era Diary

By MC2 Patrick Dionne

It's January 1862, and a man named Josiah Parker Higgins from Boston works at his father's shoe store. Though he is only 20-years old, he is highly educated for the time. He regularly attends political events, abolitionist meetings and church sponsored gatherings.

A deeply religious man, Higgins yearned to leave Boston and serve God and Country. By February of the same year he had enlisted in the Union Navy as a Yeoman, and from then on, he would thoroughly document his experiences in a journal.

More than 100 years later, that journal was unearthed in the basement of Monterey resident Elaine Herrmann, who originally found the book in the 1980s in a house that previously belonged to an elderly friend of her mother.

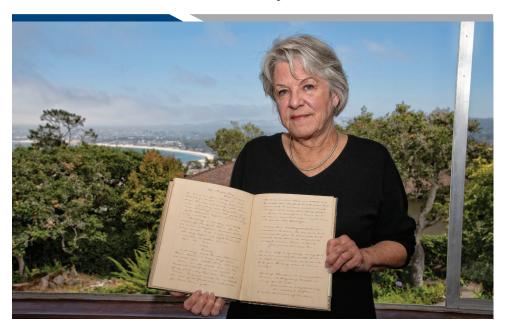
Herrmann kept the journal stored in her basement unaware of its significance until one day in the mid-1990s while flipping through its pages she discovered a familiar word ... "Farragut."

"I realized then and there that this was something of historical importance and I remembered from history classes that Adm. David Farragut was an important officer in the Civil War," Herrmann said. Over the course of the next five years, Herrmann painstakingly went through the diary transcribing it.

"I felt compelled to transcribe this young man's story because, as a mother, I felt a sense of duty to his family and even his long dead parents to have his story told," she continued. "If there is one thing I hope people take away from this is that you should always keep the things that your grandparents and elders give to you, because you can never know what you can discover."

The journal covers Higgins experiences as a Yeoman serving aboard the USS Kennebec, a Union gunboat in Farragut's West Gulf Blockading Squadron over a two-year period. During this time, he covers events including capturing Confederate ships and taking prisoners onboard, rumors of mutiny and his own near death experience when a chunk of ice destroyed his work desk.

Following her transcriptions, Herrmann used resources from the Naval Postgraduate School's Dudley Knox Library. Through this she was able to properly annotate the journal to include the names of ships, dates of events and background information on important battles.



Monterey resident Elaine Herrmann displays the journal of Union Navy Yeoman and Civil War Veteran Josiah Parker Higgins, Aug. 17. Herrmann discovered the book in a house that previously belonged to an elderly friend of her mother, and recognized the significance of the journal from several references to the famous Civil War hero Adm. David Farragut. (U.S. Navy photo by MC2 Patrick Dionne)

FACULTY news & notes

NPS Department of Systems Engineering Professor Clifford Whitcomb has been selected to serve as the new Editor-In-Chief (EIC) of "Systems Engineering" journal, a bimonthly publication recognized as a respected, forwardlooking archival resource for systems engineering and related fields.

"My experience in systems engineering at NPS has prepared me very well for my position as the EIC of 'Systems Engineering," said Whitcomb. "Much of the basis for accomplishing systems engineering development in the past 50 years has come from defense and defense-related industries. Defense systems acquisition, in particular, has provided a fundamental basis for understanding the fundamentals of systems engineering methods and applications."

I was able to begin my career at NPS by being a team member for the design, development and deployment of that systems engineering curriculum, and for the subsequent advancement of the development of systems engineering education and research for the Navy and DOD," said Whitcomb.

Whitcomb says he regularly encourages students to read "Systems Engineering" and similar journals that publish on SE-related topics. There are several papers authored by NPS SE faculty in the journal, and several NPS alumni have also been published in them. In the end, he says, professional journals like "Systems Engineering" can serve as important resources for our students as they begin developing their theses.

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

Cameroon's Top Navy Admiral Explores NPS

By MC2 Patrick Dionne

Rear Adm. Jean Mendoua, Chief of Staff of the Cameroon Navy, took an opportunity to learn more about NPS education and research programs during a visit to campus, Aug. 1-2.

Mendoua toured several research labs, and explored programs of potential interest to the security of his West African nation through briefings with the International Graduate Programs Office, the Defense

Resources Management Institute and the Center for Civil-Military Relations, among others.

"The purpose of this visit is to strengthen cooperation between the United States and Cameroon, and we are here because NPS is an outstanding institution for defense strategy that we hope to work closely with in the future," said Mendoua.

"Cameroon is facing a lot of threats, especially terrorism in the northern part of the country, and we hope to work closely with our allies to share our best ideas and collaborate, to take on terrorism in West Africa," he continued. "NPS is a great institution to help meet that goal and this visit has gone far beyond all of my expectations."



come and learn."

Rear Adm. Jean Mendoua, Chief of Staff of the Cameroon Navy, second from left, is pictured in front of his nation's flag in the International Flag Garden during a visit to NPS, Aug. 2. Mendoua was joined, from left to right, by Cmdr. Atonfack Guemo, Cmdr. Michele Lowe, Senior Defense Attache for the U.S. Embassy in Cameroon, Cameroon Army Lt. Col. Stans Victor Mouaha-Bell, and Director of International Graduate Programs Office Al Scott. (U.S. Navy photo by MC2 Patrick Dionne)

During the visit, the work Mouaha-Bell is currently doing towards his thesis became of particular interest. The thesis, which he is co-authoring with fellow Defense Analysis student U.S. Army Maj. Patrick Kerins, focuses on how the multi-national force of Nigeria, Chad, Niger, Cameroon and Benin have focused their efforts on the West African terrorist group Boko Haram.

Both students have prior experience with the terrorist organization, with Kerins previously serving in Niger for six months with Special Operations Command Africa, while Mouaha-Bell has taken part in counter-Boko Haram operations for seven years in Cameroon.

Among the official party was Cameroon Army Lt. Col. Stans Victor Mouaha-Bell, the sole student from the nation at the university currently studying in NPS' Department of Defense Analysis. Mouaha-Bell's unique insights into the challenges facing Cameroon, and the capabilities of NPS, led him to serve in a liaison-type role during the visit. "The first-hand experience that we both bring to the table helps us understand the terrain and the cultural dynamics of the region," said Kerins. "This allows us to further understand not only what actions their militaries have currently taken, but also sheds light on possible strategies they can implement."

"This was a great opportunity to demonstrate to my leadership what we

can learn from NPS and what we can bring back to our own military,"

said Mouaha-Bell. "The ultimate goal is to use NPS as an opportunity to bring that critical thinking mindset back to our military, and I am

confident that Rear Adm. Mendoua will be the best advocate to our Minister of Defense and our President to send our military here to

NSA Faculty Celebrate Scholarly Milestone With 100th Book

By MC2 Michael Ehrlich

Faculty in NPS' Department of National Security Affairs (NSA) celebrated a significant milestone in scholarly achievements this month with the publishing of their 100th book.

Dr. Robert E. Looney, NSA Distinguished Professor, has the honor of authoring the team's century mark title with his "Handbook of International Trade Agreements: Country, Regional and Global Approaches." NSA department chair Dr. Mohammed Hafez says he is quite proud of the department's efforts to maintaining the highest standards of academic scholarship.

"Our department is an interdisciplinary department that deals with politics, economics and history," said Hafez. "And part of what political scientists, historians and economists do is they publish. They have to publish for their own professional advancement, to establish their name in the field, and to inform students in the classroom with cutting-edge research.

"This is our form of continuing education and development," added Hafez. "We get a degree a few years, or decades, back, but what keeps us current is our ability to conduct deep and meaningful research projects with critical thinking skills and field work within the regions we have been studying."



Department chair Dr. Mohammed Hafez stands near a handful of the latest titles authored by his colleagues, celebrating the release of the current NSA faculty's 100th book. (U.S. Navy photo by MC2 Michael Ehrlich)

Students Discuss Academic Environment During TLC Open Forum

By MC2 Nathan K. Serpico

Naval Postgraduate School (NPS) students, faculty and staff gathered for a student-led forum to explore how teachers teach, and how students learn, July 31. The effort is part of a series of open campus discussions to engage the NPS community, helping to inform leaders as they plan on the establishment of the Teaching and Learning Commons, an effort identified in the university's new NPS strategic plan.

"The Teaching and Learning Commons puts together existing resources in order to make them more effective in supporting faculty and students in their endeavor of teaching and learning at NPS," said Dr. Ralucca Gera, Associate Provost of Graduate Education.

"We're pursuing certain avenues in revitalizing the way we teach, learn and even advise here at NPS," she added. "I wanted to hear from students on campus on how they best learn."

A student representative from each school, including doctoral and international students, presented to a group of peers and professors

about what they felt were the strengths and weaknesses in their field. Many of the presenters echoed similar themes of increased engagement in the classroom.

"My thought is that if the material isn't interesting to me, then I'm figuring it's probably not interesting to the students either, so I try to present the information in a way that I find compelling," said Cmdr. Kathleen Giles, a former PhD student who became a permanent military professor following graduation. "It's good to get input from both sides and for both sides to hear those inputs. There are some people that have been teaching for a long time, and it's possible that they need to brush up on their techniques."

The Teaching and Learning Commons is just one of multiple action areas identified in the university's 2018-2023 Strategic Plan, providing a road map for NPS to maximize the impact of its world-class education and research programs to the U.S. Navy, Marine Corps and their partners.

Local Scouts to Bring Historic Del Monte Trails Back to Life

By MC2 Patrick Dionne



Local scout Luke Rasmussen, right, shakes hands with Naval Support Activity Monterey (NSAM) Public Works Officer Lt. Cmdr. Timothy James following a coordination brief on Rasmussen's Eagle Scout Service Project, Aug. 3. Rasmussen and some of his fellow Carmel Valley Boy Scouts plan to revitalize the old bridal paths encircling the former Hotel Del Monte.

"One of the requirements of achieving the rank of Eagle Scout is to participate in a community service project and that is what we are trying to do here," said Rasmussen. "This is a really good opportunity for us to be able to give back to the community while meeting those requirements."

The project will primarily consist of removing unsightly vegetation, restoring the 19th century trails. And the project is also in alignment with NSAM's ongoing efforts to beautify the grounds while also honoring the history of the campus, Rasmussen says. The work is scheduled to kick off August 11, and is expected to take three days to complete.

"I have been a scout leader for three years now, and when [NSAM Commanding Officer] Capt. Rich Wiley asked us if we had any scouts looking to do community service I knew this would be a good fit," said National Security Affairs Program Officer Cmdr. Paul Rasmussen, Luke's father.

"This project will help meet NSAM's vision of rejuvenating the area's historical charm while providing the local Boy Scouts with a chance to interact with the military and learn what this base is all about."

CAMPUS news & notes

Joe LoPiccolo, Naval Postgraduate School (NPS) Chief Information Officer (CIO) and Director, Information Technology and Communications Services (ITACS), welcomed senior information technology leaders from regional DOD, academic and civilian organizations throughout the Monterey Peninsula to the NPS campus, Aug. 20, for the latest gathering of the Monterey Peninsula CIO Council.

"Today, we're talking about cloud operations and our acceleration into the cloud through our advanced contracts with partner vendors," said LoPiccolo. "We're also talking about our networking initiatives, and the icing on the cake, the new Cyber Security Operations Center (SOC)."

Led by ITACS' Director of Cyber Security Bob Goodwin, the SOC provides NPS with an advanced situational awareness, in real time, of the university's critical .EDU network.

Goodwin offered the consortium an overview of the center, and how it will expand the capabilities of NPS' IT team by being able to handle incidents in real time, rather than relying on firewalls and safety measures running in autopilot.

Now, Goodwin says, there will be specialists manning these systems around the clock, capable of taking immediate action on issues or potential failures.

"We discussed the development of the SOC and why we went to 24/7 manning ... We really had a major transformation of the space over the past few months," Goodwin noted.

"It's been a lot of work trying to get the space built," Goodwin added. "From paint to the new video system, furniture and cubicles ... it's all been one big dance."

Send your campus news and notes to update@nps.edu.

Exchange Students Leave Mark on Network Research Lab

By Javier Chagoya

After a year of research and discovery in the Naval Postgraduate School's (NPS) Center for Network Innovation and Experimentation (CENETIX), German and South Korean students on campus through the Engineer and Scientist Exchange Program (ESEP), Carsten Glose and Jung Hun Ryu, are ready to head home.

Civilians in their home nations, the two applied for the ESEP program through their respective educational programs at home, and then found matches here at NPS. Each competed with hundreds of other applicants for the exchange. Glose examined machine learning of semi-autonomous, intelligent mesh networks, while Ryu discovered ways to optimize power consumption techniques within mobile ad hoc network nodes.

"When I saw Carsten's resume, I knew his interests in network operations, among other topics, lined up with our own CENETIX lab work," said CENETIX director Dr. Alex Bordetsky. "I sent him a note about our research that deals with networking hyper-nodes. These hyper-nodes are autonomous and use artificial intelligence components to adapt,

work together and operate the network. That resonated with Carsten and I knew he was a great match for us.

"Bringing these two researchers to NPS was an art and science of finding common ground. And luckily, the broad footprint of CENETIX research into networks gave us the opportunity to benefit from their insights," Bordetsky stressed.

Founded in 2004, CENETIX serves as a research hub for exploring the frontiers of self-organizing tactical networking and collaboration. It provides students and faculty with opportunities for

CENETIX leadership say Glose and Ryu significantly advanced the lab's research into managing mesh networks, and in the modeling and simulation of ad hoc networks. Back home, Glose works for the Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support, the German equivalent of DOD's office of acquisition and procurement. Ryu is a communications engineer and senior researcher working for the Agency for Defense Development in South Korea.

"I have been a member of the Bundeswehr team for about



Carsten Glose of Germany, left, and Jung Hun Ryu of South Korea have just completed a year of extensive research in machine learning and ad hoc networking in NPS' Center for Network Innovation and Experimentation (CENETIX) through the Engineer and Scientist Exchange Program. (U.S. Navy photo by Javier Chagoya)

nine years," said Glose. "My background is in computer science, so I conduct IT-related acquisition research, working closely with contracting officers, ensuring technical specifications are met as I provide a thorough study and report to my superiors. There are also military officers within my group, who provide expertise for fielding equipment to soldiers.

interdisciplinary study within the space of agile adaptive wireless networks, social network dynamics, network-controlled unmanned vehicles, sensors and intelligent agents, and situational awareness platforms.

Focus On...Honoring Women's Equality

Several NPS faculty and staff rallied at the front steps of Herrmann Hall commemorating Women's Equality Day, Aug. 23.

Marilyn Owens, an NPS Administrative Support Assistant working in Academic Administration, organized the rally to show support for the struggles that women face to gain equality.

"Women's Equality Day means staying connected with the trailblazers who fought so hard for women's rights," said Owens. "It's important to keep our voices lifted for the next generation and let them know that we need to push those issues to get better.

"This photo rally was triple the size this year and we had the NPS President, Chief of Staff, and EEO Officer attend. I think their support is going to be important for us as we keep making positive statements and gestures to the community," she added.

In addition to organizing the group photo, Owens turned the

Registrar's Office service window into a makeshift memory lane highlighting milestones in women's history and equality.

"I spoke to people who didn't even know when Women's Equality Day was or had little education about it," said Owens. "Having that memory lane was a good way of providing information and perhaps motivate people to push more information out towards others and grow. If we stand together on important issues, we will succeed in overcoming a lot of obstacles."



The 19th Amendment, which granted women the right to vote, was added to the U.S. Constitution August 26, 1920. Congress designated that date as Women's Equality Day to honor women and their continuing efforts towards equality in 1971.

Any Day at NPS...



Naval War College (NWC) Monterey students earning academic honors during the second quarter of Academic Year 2018 were recognized during a brief ceremony in their honor near the NWC Program offices in Halligan Hall, July 31. (U.S. Navy photo by MC2 Patrick Dionne)



Director of NPS' Littoral Operations Center Dr. Wayne Porter, served as the keynote speaker at the California Sea Grant Aquaculture Conference at the Moss Landing Marine Lab, Aug. 10. (U.S. Navy photo Javier Chagoya)



Renowned businessman Ross Perot Jr. fields a student's question during the Naval Postgraduate School's latest Secretary of the Navy Guest Lecture, Aug. 15. The unique presentation marks the first lecture offered through the NPS Foundation's new speaker's initiative. (U.S. Navy photo by MC2 Patrick Dionne)



Bob Parsons, founder of the Internet domain registrar and Web hosting company GoDaddy, speaks to NPS Marine Corps students, Aug. 21. Parsons served as a rifleman in the Marine Corps during the Vietnam War, and sternly attributes much of his success to his military service. (U.S. Navy photo by MC2 Nathan K. Serpico)



NPS Associate Professor of Information Sciences Ray Buettner and his associates with the Consortium for Robotics and Unmanned Systems Education and Research (CRUSER), which he directs, envision a plan to refurbish the Navy Beach Lab, located across the street from NPS' Del Monte gate. Buettner envisions an overhaul of the facility that will make it a world class laboratory for Sea, Land and Air Military Robotics (SLAMR). (U.S. Navy photo Javier Chagoya)



Secretary to the Dean of the Graduate School of Business and Public Policy (GSBPP) Mary Lou Vossen receives a photo of Herrmann Hall, signed by her many friends and colleagues from around the NPS campus, from GSBPP Dean Dr. Bill Gates, Aug. 30. Vossen is retiring after more than 30 combined years of government service. (U.S. Navy Photo by MC2 Tom Tonthat)

STUDENT voice

Capt. I. Benjamin Collier, USAF Fellow Students,

I would like to personally thank you for your recent participation in our annual student survey. It means so much to the council and the NPS staff that students take time out of their schedule to provide feedback. I'd like to also convev that your comments translate to actionable items for the NPS leadership. Post-survey, your council will be hard at work to address your concerns and further improve campus services. If you have not had an opportunity to take the survey yet, I urge you to visit the muster page or review your inbox for the link. We want to hear what you have to say!

Please note that the President's Student Council is available and ready to assist all students. If you have any comments or concerns, we can be reached at PSC@nps.edu or via your school representative.

Good luck on your finals!

Sincerely, Capt. I. Benjamin Collier, USAF

Ideas? Concerns? Don't hesitate to contact us:

Chair:	Ca
Vice-Chair:	Capt
SIGS School Lead:	
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GSOIS School Lead:	
GSOIS Representative	: LC
GSEAS School Lead:	
GSEAS Representative	:
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GSBPP School Lead:	
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apt I. Benjamin Collier, USAF Angelica Silva-Garza, USAF LT Christina Gatti, USN LTJG Tim Cole, USN Maj Peter Cox, USA Maj Caitlin Diffley, USAF LT Tanya L. Herfi, USN MSGT Alex Eudy, USAF CDR Santhosh Shivashankar, USN LT Iosh Malia, USN LCDR Pete Harley, USN LTJG Aaron Demers, USN LT Adam Waymouth, USN 1st Lt Helene Caniac, USAF Capt Tyler Flansburg, USAF

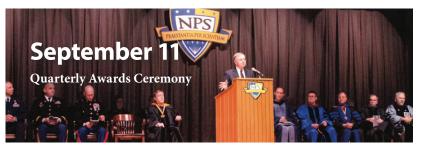
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On Campus this Month

September 3

Labor Day





September 20

Provost Open Office Hours 3:30 p.m. - 4:30 p.m. Herrmann Hall, Room M12

September 21

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





A REAL

Warfare Innovation Continuum Workshop 2018

September 17



Fall Quarter Instruction Begins

BREAKING NEWS You Tube HAPPENS

STAY CONNECTED. STAY INFORMED.



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Historical Highlights

1952 was a banner news year for NPS, and exotic-looking lab equipment provided many a "scientific" photo op for the newspapers. Here, Professor Fred L. Coonan, then-chairman of NPS' Department of Metallurgy, explains the "intricacies of a metalloscope" to students Lt. j.g. Thomas J. O'Connell and Lt. John J. Holden of the Mechanical Engineering School. This "delicate instrument," once used to provide microscopic representations of the structure of metals, now makes its home in the Dudley Knox Library's Special Collections & Archives, part of a collection of scientific instruments brought across the country from Annapolis to Monterey. A project is under way to research each piece for its history and significance to contemporary science research.

Historical Highlights are provided by the Dudley Knox Library.

