NPS Volunteers Recognize Veterans Across Monterey County

By Javier Chagoya

NPS student volunteers recognized Monterey County Veterans who set the standard in service before them at The Park Lane senior living facility, Nov. 9

Local Congressman and Navy Reserve veteran Jimmy Panetta joined leadership from the Visiting Nurses Association (VNA) and Hospice in formally recognizing 25 veterans in residence at the center... One of nine separate ceremonies attended by NPS student volunteers across the Monterey Peninsula and into the Salinas Valley.

“I believe that is what our community and country is about—ensuring that we continue to serve those who served us.”

—Congressman Jimmy Panetta

“I want to thank the Visiting Nurses Association and Hospice and these officers from the NPS for [participating] in this wonderful ceremony in which we recognize, honor and we appreciate those who served us,” said Panetta. “I believe that is what our community and country is about – ensuring that we continue to serve those who served us. That is why we’re here today, and that is why we are going to honor our Veterans on Sunday.

“It’s because we understand that in this democracy of we the people, it is left up to us to ensure the security and the safety of our great nation,” he continued. “But it’s also left up to a few men and women who are willing to sign up, to step up, and for some to give up, everything, in order to serve the great nation of this United States of America.”

For Ed Laughton, now 97, Veterans Day is another opportunity for him to share his treasured scrapbook filled with accounts from the war in the Pacific where he served as Second Mate aboard the munitions supply ship S.S. Hobbs Victory.

“I served from 1943 to 1945 on Hobbs Victory in the Pacific campaigns,” Laughton recalled. He recounted how, on April 6, 1945, kamikaze planes from Okinawa struck his ship, killing 13 seaman and wounding more. The ship was eventually lost along with another supply ship during the massive assault on Okinawa, he said.

Lt. Cmdr. David Couchman, who participated in the volunteer effort, said he met a 100-year-old Veteran who survived the Bataan Death March of 1942, and even talked with a retiree who developed technologies used in modern torpedoes.
New Programs Deliver Cohort of Navy Ensigns to Campus

By MC2 Patrick Dionne

The future of the Navy has arrived.

While there are typically a handful of Navy Ensigns assigned to the Naval Postgraduate School (NPS) through the Bowman Scholar program, this year their numbers are way up. In fact, a total of 40 Navy Ensigns are roaming the halls of NPS, wide-eyed and well on their way to earning graduate degrees early in their Navy careers.

Their paths to campus follow three distinct and unique opportunities, but all of the Ensigns are newly-commissioned officers attending NPS immediately after completing an undergraduate degree from either the United States Naval Academy in Annapolis, or through colleges around the country with supporting ROTC programs.

Included in the cohort, of course, are the recipients of the distinguished Bowman scholarship, which recognizes excellence in highly-competitive future Nuclear Officers from the Naval Academy. The Bowman scholarship is an ongoing program.

This year included the addition of the new Shoemaker scholarship, which seeks to replicate the success of the Bowman Scholarship in the Naval Aviation community. Additionally, several students were able to take advantage of gaps in the aviation training pipeline, and were offered a competitive opportunity to pursue graduate education while waiting to begin flight school.

“The biggest benefit to having these fresh ensigns here is that it allows them to start their career with a deeper academic background than an undergraduate,” said NPS Dean of Students U.S. Navy Capt. Markus Gudmundsson. “A graduate degree teaches you how to think critically. Whether or not the job you’re doing is a specific application of your graduate education, the ability to think, research, write and communicate is advantageous to both the junior officer and also the fleet.

“Additionally, this instills in these young junior officers the value of education while exposing them to NPS,” he continued. “The more junior officers that we have exposed to what we as a campus have to offer the more likely they will be throughout their career to recommend others to come here.”

Take Ens. Brianna Kaufman of the Mechanical Engineering and Undersea Warfare program, and Ens. Joshua Ten Eyck, from the Space Systems program, for example. The road to a graduate education at NPS began a year ago with a series of essays and research conducted in their senior year at the academy to qualify for the Bowman Scholar program. Each nominee for the program must conduct relevant, approved research that benefits the Navy reactor community.

“What made this program so appealing to me is I wanted to be a submariner but I was also really interested in pursuing my own goals in higher education,” said Kaufman. “This was the perfect match, it comes with its challenges because it is a pretty rigorous course of study but doing this before going to the Naval Nuclear Power School in Goose Creek, South Carolina, the school makes it worth it for me to be able to get a master’s degree early which frees up my time in the future.”

Named after the former director of the Naval Nuclear Propulsion Program, Adm. Frank L. Bowman, the scholarship offers an expedited one year graduate degree in their technical discipline.

“My stuff is all still fairly fresh in our heads,” said Ten Eyck. “Coming straight from the academy means we didn’t have to take any refresher courses and could jump right back into the fray which makes it a lot easier to accomplish so much in such little time.”

Though supporting fresh academic qualifications and insights, the new Ensigns do face the drawback of having no fleet experience. However, according to Ten Eyck, his classmates, which are mainly lieutenants and lieutenant commanders with years of fleet experience, “Have not only helped look at problems from the Navy perspective, but also been a huge help with things such as budgeting and day to day things you don’t necessarily learn in college.”

In addition to the Bowman scholarship, two new programs for newly-commissioned Navy Ensigns, the Shoemaker scholarship and a new opportunity for aviators, have made the current cohort of Ensigns on campus one of the largest ever.
Marine Cyber Chief Stresses the Role of Humans, Not Hardware, in the Fight

By MC2 Michael Ehrlich

Maj. Gen. Matthew Glavy, Commander, U.S. Marine Corps Forces Cyberspace Command, took the opportunity to candidly address Marines attending the Naval Postgraduate School (NPS) during a visit to the university campus, Nov. 8. Glavy discussed the importance of respecting and understanding the most important part of his mission...humans, not hardware.

“I wanted to share this presentation with all of you, it’s the same discussion that I would have with commanders to guide them in what is important for decision makers and why this domain is pertinent and relevant,” said Glavy.

Through his experiences in past leadership positions and from the role models who inspired him, Glavy stressed that it is the Marines around him, officers and enlisted, who are the most important resource, and should be nurtured to excel in defense and in maintaining military superiority abroad.

“During my time at the [Second Marine Aircraft Wing II Marine Expeditionary Force] I had no choice but to be enamored by hardware while I tried to manage 500 airplanes and 1,000 vehicles,” said Glavy. “But any success we have, whether it’s in artificial intelligence, quantum physics or even F-35s and B-22s, what is really going to make the difference is the people. I had to learn this the hard way.”

Glavy continued to describe several examples that cemented his premise, one of which being, retired U.S. Air Force Col. John Boyd, a military strategist who reaffirmed Glavy’s main response. “Col. John Boyd was quite a character... cantankerous, nonconformist, a real renegade,” said Glavy. “In the final version of the collection of his life’s work, titled A Discourse on Winning and Losing," he dissected every piece of military history possible and he came up with the conclusion that ‘people, ideas and things,’ in that order, are what matter most.”

Glavy went on to offer some of those dissected references of military history, including Germany’s resurgence between World War I, and the second World War.

“They were far behind the curve in amassing technological developments of tanks, planes and ships due to recovery from World War I and the treaties and restrictions imposed upon them,” Glavy said. “But, when it came time to progress their country’s agenda, Germany was able to excel very quickly.”

Another example Glavy referenced is that of the development of the F-16 fighter aircraft.

“Boyd was the father of the F-16, and he built it with two things in mind: the pilot and the mechanic,” Glavy said. “Today, it has been the most prolific aircraft ever produced, 4,500 F-16s have been built, and that’s because it can do what the pilot needs it to do, and the mechanic can keep it flying.”

The National Defense Industrial Association (NDIA) honored NPS Distinguished Professor Emeritus Robert E. Ball Nov. 8, at the Aircraft Survivability Symposium announcing it has renamed its award for expertise in the field to the Robert E. Ball Award for Combat Survivability.

The Aircraft Survivability Division of NDIA recognized Ball as the quintessential aircraft combat survivability expert, educator and mentor to generations of military and civilian aircrew, requirements officers, scientists, engineers, designers, testers, program managers as well as senior managers and leadership in DOD aviation.

Ball developed the first-of-its-kind Aircraft Combat Survivability Course (AE3251) at NPS, which he taught.

The inaugural Robert E. Ball Award was presented to Boeing Phantom Works Engineer Laura Trench, one of five awards presented at NDIA’s annual symposium during the luncheon and award ceremony.

“NDIA hopes the symposium fostered dialogue and networking opportunities among the event participants, so everyone from the senior-level government and industry representatives to the military and academia who attended can contribute to the main goal, to learn what is needed for the fight today and plan for the survivability challenges of tomorrow,” said Evamarie Socha, NDIA Director of Public Relations.

FACULTY news & notes

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 Launches the Inclusion and Diversity Council

By MC2 Nathan K. Serpico

NPS’ Inclusion and Diversity Council (IDC) held its first formal meeting, Nov. 8, officially launching the new group created in response to NPS’ recent Command Climate Surveys. The IDC’s charge will focus on monitoring general trends, providing recommendations for action, and serving as a communication link between NPS senior leadership, management and employees on matters relating to inclusion and diversity.

The first hurdle in getting the IDC up and running was the challenge of selecting its initial membership. Associate Provost for Faculty Affairs and Chair of the IDC Dr. Michael Freeman, NPS Chief of Staff Capt. Mike Ward, and Human Resources Director Ermelinda Rodriguez-Hefner were charged with making these challenging choices from a significant number of submitted nominations.

“We want to have council members that are in different positions around campus,” said Freeman. “We want to be able to broaden the range of ideas this council generates.”

Following a number of difficult choices, the trio selected the following members for the inaugural IDC: Sue Dooley, Director of Admissions; Blaire Harms, Faculty Associate; Dr. Christina Hart, Distance Learning Program; Jim Howard, Director of DEVOPS and Resource Management; Dr. Anthony Pollman, Assistant Professor, Department of Systems Engineering; and Dr. Preetha Thulasiraman, Associate Professor, Department of Electrical and Computer Engineering.

“I was pleasantly surprised to get selected because there are so many individuals who I believe would do a great job as part of the council,” said Hart, who manages DL programs for the Graduate School of Business and Public Policy. “I’m looking forward to sitting down with everyone and seeing the data available to us to help make any positive changes that we can.”

“I’m excited to be a part of this new group that has the potential to really help make NPS an even better institution,” echoed Pollman.

Council membership is comprised of seven members from both the faculty and staff to provide an array of experiences and perspectives. The Associate Provost for Faculty Affairs will serve as the lead with selected nominations for two faculty members, two faculty associates of any rank, and two staff of any rank, civilian or military. In addition, the office of counsel, equal employment opportunity office, command-managed equal opportunity office, and human resources office will each have a representative to serve as advisors to the IDC and attend council meetings.

“The IDC is not the same as the human resources department or equal employment opportunity office in the sense that we will not be handling particular cases or complaints,” said Freeman. “Rather, we will look at and study data for a few select issues and collaborate amongst the council to see if we can think of new and different strategies to address it and present these ideas to the leadership that ultimately has to make the decisions.”

As the IDC looks ahead to its next meeting, they plan on reviewing initial data, surveys and reports that the council members have access to as a starting point for identifying which inclusion and diversity issues and concerns are the most relevant and pressing to address.

NPS Honors 2018 Sailors of the Year

By MC2 Nathan K. Serpico

“The sense of pride is almost overwhelming,” said Electronics Technician 1st Class Jennifer Macaya. “The work is hard and can make you feel stretched a bit too thin sometimes, but people I work with have been so great that it’s easy to stay dedicated.”

“It was truly an honor to win Junior Sailor of the Year,” echoed Bollman. “I know it’s an individual award, but I really feel like it was a team effort with my shop and mentors setting me up for success. I encourage anyone hoping to earn this award to get involved in the command with collateral duties, as well as getting involved in the community through volunteer work.”

Bollman received a Navy and Marine Corps Achievement Medal with his selection, while Macaya will move forward in the Navy-wide SOY competition with the potential to be meritoriously advanced to Chief Petty Officer. The Sailor of the Year Program has recognized Sailors who represent the best of our Navy for almost 50 years. The program was established in 1972 by then Chief of Naval Operations Adm. Elmo Zumwalt and MCPON John Whittet to recognize Sailors who have demonstrated the highest standards of our Navy, and have proven themselves by their performance, knowledge, and leadership on the deck plates.

Electronics Technician 1st Class Jennifer Macaya, left, and Aviation Electronics Technician 2nd Class Alex Bollman have been named NPS’ 2018 Senior and Junior Sailors of the Year, respectively, during a ceremony outside of Herrmann Hall, Nov. 2. (U.S. Navy photo by MC2 Nathan K Serpico)
**NPS Hosts IT Senior Leadership from Navy Higher Education Institutions**

By MC2 Nathan K. Serpico

NPS welcomed information technology professionals from the United States Naval Academy (USNA) and Naval War College (NWC) for the latest gathering of the Navy Higher Education Information Technology Consortium (NHEITC), Oct. 24. The three peer institutions of the NHEITC have had a multi-year collaboration to enhance the consortium’s employment of information technology (IT) towards meeting the mission needs of the three institutions.

“This year we focused heavily on the new Cybersecurity Operations Center (CSOC),” said Joe LoPiccolo, NPS Chief Information Officer (CIO). “Although all three institutions have unique missions and provide their own cyber defenses, the CSOC has many new opportunities. Some have already been realized with advanced operational capabilities and by recent purchases to include all using the same Systems Information and Event Management (SIEM) tool. This will help correlate security events for quick defensive and preventive actions.”

“The opportunity for the three Navy Higher Education Schools to meet together as the NHEITC, away from the day to day operational distraction is invaluable,” said Joe Pangborn, NWC CIO. “This collaboration provides a forum for the development of solutions to ensure the mission success of each institution.”

“The NHEITC provides a valuable forum for consideration of Navy higher education information technology issues having unique business, technology, policy and process aspects,” echoed Herb Elkin, USNA Deputy CIO.

The NHEITC ensures that, from an IT perspective, these three schools are able to operate as efficiently as possible.

**Professor’s Patents Could Help Speed Diagnosis of Infectious Diseases**

By Matthew Schehl

NPS applied physics associate professor Emil Kartalov has recently been awarded three additional patents, discoveries which could significantly reduce the time and cost of the diagnosis of infectious diseases. (U.S. Navy photo by Javier Chagoya)

An NPS applied physics associate professor was recently awarded a series of patents which could dramatically reduce the cost and time of infectious disease diagnosis.

Dr. Emil Kartalov received three patents in September – bringing his total number of patents awarded to 21 – for work he did at the University of Southern California (USC) prior to coming to NPS. The research details a new way to more efficiently read DNA taken from blood samples to more rapidly detect pathogens. By measuring the brightness of light in a standard polymerase chain reaction (PCR) test, the method can provide exponentially-greater fidelity than currently available analysis.

“Because we have improved optical systems, it’s no longer just a ‘yes or no’ answer about the sample. You can actually start getting information about the amplitude of the light that you get out of [the PCR],” Kartalov explained. “This opens a new dimension in which you can extract more information based on the brightness of the light.”

He envisions a future where this technology allows for the use of small, hand-held machines to swiftly diagnose diseases such as the Ebola Virus.

Kartalov foresees a miniature, disposable PCR being developed which can be plugged into a phone.

**Send your campus news and notes to update@nps.edu.**
Defense Energy Seminar Examines Navy’s Future Use of Electrical Energy Tech

By MC2 Patrick Dionne

A group of energy officials from across the Navy teamed up to provide the NPS community with an overview of the Navy’s future electrical energy technology development during the latest Defense Energy Seminar, Nov. 2.

Retired Navy Capt. Lynn Petersen, program officer for the Office of Naval Research, Cmdr. John Stevens, Associate Chairman of U.S. Naval Academy’s Department of Electrical and Computer Engineering, and retired Cmdr. Stephen Markle, Director of the Electric Ships Office, joined forces to provide an update titled, “U.S. Navy Electrical Leap Forward ... A Vision for the Future of ONR Technology Development.”

The talk focused heavily on updating the power and energy requirements throughout the fleet to take better advantage of upcoming changes in technology, including energy weapons like lasers and stochastic electronic warfare systems, radiated energy systems such as the Air and Missile Defense Radar, and advances in kinetic energy weapons including electromagnetic railguns.

“We have determined that power is the foundation of the kill chain of the future, which means directed energy weapons and sensors are all dependent on power and energy,” said Markle. “So, we are here to talk about where the Navy is headed in 30 years.”

“Think of science fiction moves,” he continued. “There are people in this room that are working on technologies like rail guns ... We are bringing science fiction into reality today.”

“Our job at ONR is to give our warfighters an unfair technical advantage,” added Petersen. “If we give them an equal playing field with our adversaries, we as scientists and engineers have not done our jobs. We at ONR are here to try to address those gaps so we can mature the technology and hand it off to the next step.”

Part of that technology development includes the evolution of systems designed to handle the electrical requirements of these new systems require. The team discussed the Integrated Power and Energy System (IPES), for example, which is a medium-voltage, direct-current (MVDC) system that offers the potential to provide significant warfighting capability at an affordable cost.

Ultimately, the officials agreed, ensuring the officers and scientists at NPS are well versed in these technologies helps ensure their integration into the fleet in the not-so-distant future.

Focus On … Teaching & Learning Commons

Naval Postgraduate School (NPS) students, faculty and staff attended the latest Teaching and Learning Commons (TLC) Open Forum, Nov. 8, to learn how big data could potentially be used to shape educational programs.

Guest speakers Drs. Sae Schatz and Jennifer Vogel-Walcutt, both with the Advanced Distributed Learning Initiative, discussed their perspectives on the educational landscape required to capitalize on future distributed learning initiatives.

“The educational ecosystem is a theory that in the future, learning is going to be radically different,” said Schatz. “It will be technology enabled. It will be ubiquitous.”

The TLC is one of multiple action areas identified in the Naval Postgraduate School’s 2018-2023 Strategic Plan, providing a road map for NPS to maximize the impact of its world-class education and research programs to U.S. Navy and Marine Corps officers, and their U.S. and international partners.

“Hopefully, we can have these TLC forums driven more by students and faculty, and the types of information they want delivered to them,” said Dr. Ralucca Gera, Associate Provost of Graduate Education. “The TLC is here to streamline resources, information and access.”

The next Teaching and Learning Commons Open Forum will be held on Thursday, Dec. 6, and will look at collaborative ways to make online synchronous classes more effective and engaging.
Maj. Caitlyn Diffley, USAF

Colleagues,

Dig deep – we are almost there! Finals is a challenging time as many of us are treading water to finish up assignments and reading while also preparing for exams. Graduates have the added excitement and challenge of preparing for a PCS. On top of that, the holidays often bring a host of excitement and sometimes stress. I hope you are able to keep these various aspects of life in balance, to finish strong and enjoy some rest in the second half of the month.

I look forward to serving with Lt. Christina Gatti as the leaders of the President’s Student Council. A focus of the upcoming terms will be mentorship and networking at NPS. The PSC will be working to connect students with one another, building networks to last for our careers and beyond. Additionally, we want to build mentorship connections within the student body, alumni, and current senior leaders. NPS is a critical career building block and the PSC wants to ensure students do not feel these years are lost from a professional perspective.

Thank you for participating in the student survey. This is a major deliverable for the PSC and our voice to the school leadership. We’ve been briefing the results to leadership, including to President Route. You can expect a response from school leadership once they have had a chance to consider the results and design a way forward. Please continue to send forward concerns or ideas, until the next survey, the Suggestion Box on the Muster page or our monthly meetings are the best place to bring those forward.

Sincerely,
Maj. Caitlyn Diffley, USAF

Chair:
Vice-Chair:
SIGS School Lead:
SIGS Representative:
SIGS Representative:
GSOIS School Lead:
GSOIS Representative:
GSEAS School Lead:
GSEAS Representative:
GSEAS Representative:
GSEAS Representative:
GSBPP School Lead:
GSBPP Representative:

Any Day at NPS...

Naval War College (NWC) Monterey students earning academic honors during the 2018 Summer Quarter are pictured following a brief ceremony in their honor near the NWC Monterey program offices in Halligan Hall, October 30. (U.S. Navy photo by MC2 Michael Ehrlich)

The Human Resources Office hosted a federal health fair in the La Nova Room, Nov. 6. The health fair brought together representatives from the major health, vision and dental insurers that have contracted with the federal government to provide benefits to federal employees. (U.S. Navy photo by MC2 Michael Ehrlich)

NPS Distinguished Professor Emeritus Robert E. Ball announces the inaugural selection of the National Defense Industrial Association’s (NDIA) Young Professional Award for Combat Survivability during the NDIA Survivability Symposium, Nov. 8. (U.S. Navy photo by Javier Chagoya)

NPS National Reconnaissance Office Chair retired Navy Capt. Daniel Bursch, holds the Haley Space Flight Award Certificate and wears the Haley Medal recently presented to him by the American Institute of Aeronautics and Astronautics. (U.S. Navy photo by Javier Chagoya)

Intelligence Specialist 2nd Class Billy Rhoads repeats the oath of enlistment to Lt. Cmdr. Christian Simonsen during a reenlistment ceremony held at Herrmann Hall, Nov. 1. (U.S. Navy photo by MC2 Nathan R Servisco)

Marines from Naval Postgraduate School (NPS), the Defense Language Institute Foreign Language Center (DLIFLC) and Naval Support Activity Monterey (NSAM) joined by friends and family listen to the keynote speech from Commander, U.S. Marine Corps Forces Cyber Space Command Maj. General Matthew Glavy in NPS Barbara McNitt Ballroom, Nov. 9. (U.S. Navy Photo by MC2 Patrick Dionne)

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

December 7
Physics: Plasma Armature EM Launchers
Time: 11:00 a.m.
Location: SP-117

December 8
Army Navy Tailgate Party
Time: 11:30 a.m.
Location: Trident and El Prado Rooms

December 11-13
Strategic Communication Workshop
Location: Center for Executive Education

December 14
Fall Quarter Graduation Ceremony
Time: 10:00 a.m.
Location: King Auditorium

December 25
Christmas Day

December 26
Reporting Date
U.S. and International students are to report back on Wednesday, December 26, 2018.

Historical Highlights
Hotel Del Monte made a big splash in the early automotive world in 1903 when it installed an electric charging station for “automobilists.” The resort’s 1903 guest booklet prominently featured autos — even including photos of women as drivers. Editors of the San Francisco Chronicle, caught up in the buzz, published this poem in the newspaper’s December 13 edition:

Christmas at Del Monte

On the road to Monterey,
Where society golfers play,
And the autos roll like thunder
Over driveways round the bay.

On the road to Monterey
Santa Claus will pass that way,
But Del Monte throngs may wonder
If he goes there in a sleigh.

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YOUTUBE COMMUNITY
www.youtube.com/NPSvideo

Historical Highlights are provided by the Dudley Knox Library.