NPS Welcomes New University President

By MC2 Chablis Torrence

Retired Vice Adm. Ronald A. Route officially took the helm as NPS President during a brief ceremony in Herrmann Hall, Oct. 4. Route joins the university after a lengthy, decorated military career followed by several varied leadership positions within the private sector.

“I am honored by this opportunity and grateful for the trust being placed in me by both the Secretary of the Navy and the Chief of Naval Operations,” said Route.

The small, official ceremony was held in the president’s Herrmann Hall office, with a few members of the military staff waiting to bid Interim President Rear Adm. Jan E. Tighe farewell. “We have laughed, we have cried, we have sweated and we have rejoiced in the success of this institution and our students, faculty and staff,” said Tighe. “Successes in this fiscal environment are hard fought, but you have persevered, NPS is better for it and I am proud of you.”

“I am honored by this opportunity and grateful for the trust being placed in me by both the Secretary of the Navy and the Chief of Naval Operations.” – NPS President Retired Vice Adm. Ronald A. Route.

Secretary of the Navy Ray Mabus announced the new president after an arduous selection process designed to ensure the Navy’s premier educational institution remained at the forefront of relevant, defense-focused graduate education.

Route comes to NPS with more than 20 years of leadership experience at the senior executive and operational levels. His vast professional experience includes responsibilities in graduate education, program requirements, resource management, international affairs, research and development, and ethics.

A career Surface Warfare Officer, Route’s naval service includes assignments and deployments on cruisers, destroyers, frigates and aircraft carriers. His most recent command at sea was the USS George Washington (CVN 73) Carrier Strike Group of ten ships and embarked carrier air wing.

After more than 36 years of active duty service, Route retired from the Navy in 2008. He served for several years as a senior vice president at Burdeshaw Associates, Ltd., an executive-level consulting firm specializing in defense industry and government business. He also served as the President of the Surface Navy Association, and has been a member of the Council on Foreign Relations since 1998.
Antarctic Research Details Ice Melt Below Massive Glacier

By Kenneth A. Stewart

An international team of scientists and glaciologists are reaping the data-rich rewards of an exhaustive expedition to the Western Antarctic Ice Shelf’s (WAIS) Pine Island Glacier (PIG), where landmark measurements of ocean/ice interactions are beginning to clarify what experts have long called “the biggest source of uncertainty in global sea level projections.”

Naval Postgraduate School Department of Oceanography Research Professor Tim Stanton and University of Alaska Department of Physics Professor Martin Truffer led the team to the remote edge of the PIG’s massive shelf. And the results of their expedition are giving scientists a rare look beneath the ice at one of the most critical research sites on the planet — a site whose fate could affect the lives of millions.

The accelerated flow of glacial ice from Antarctica’s WAIS into the Amundsen Sea has been a concern of scientists since the late ’80s. As warm sea water flows along the ocean floor toward the grounding line, where the massive glacier and land meet, the resulting boundary layer current heads back out to sea along the underbelly of the glacier, carving a series of melt channels along the way.

In late 2012, after years of planning, missed opportunities, and uncooperative weather, the team was able to deploy one-of-a-kind sensors and profilers designed and built by Stanton through the 450-meter ice shelf. The resulting data sets are revealing, for the first time, exactly how much ice is melting beneath the massive glacier, one that is estimated to contribute an astounding seven percent to overall global sea level rise.

“There were basically three scientific activities performed at the PIG sites…Our instrumentation packages underneath the ice shelf, dual seismic and radar mapping by Penn State, and the British Antarctic Survey group’s radar survey,” said Stanton.

Together, these activities reveal a detailed picture of glacial ice melt beneath the shelf, stripping away the glacier’s bottom at a rate of approximately six centimeters per day, Stanton said.

NPS oceanography Assistant Research Professor William Shaw has been working on the NPS portion of the project since its inception, and has traveled to the remote site twice in the last two years.

“You are in an open area with nothing around for thousands of miles but ice…sleeping in small backpack size tents,” said Shaw. There were also years of setbacks prior to the successful deployment of the team’s equipment, which Truffer reluctantly describes as a “season of learning.”

But in December 2012, all the pieces fell into place. The team’s equipment reached McMurdo by vessel, and was then flown by a ski-equipped C-130 Hercules to a staging area, then transported via Twin Otter aircraft to the ice shelf — a trip of more than 1,100 miles. Once on the shelf, the equipment was packaged aboard snowmobiles and trekked to pre-selected drill sites.

Logistical headaches aside, Stanton and Truffer note that detailed data of the ocean/ice interactions beneath the Pine Island Glacier specifically have been on glaciologists’ wish lists for decades. Dr. Terry Hughes with the University of Maine underscored the importance of the Pine Island Glacier in 1982 when he referred to it as “the weak underbelly of the West Antarctic Ice Sheet.”

While previous research detailed the processes that were believed to be occurring beneath the PIG, Stanton and his team needed precise measurements. He selected what he believed would be three ideal sites to measure basal glacial melting, where boundary layer currents had carved channels beneath the ice shelf.

“The idea that we were able to drill through 500 meters of ice and then deploy our sensors through the hole that we had made was remarkable,” said Shaw. The sensors measured details such as salinity, ocean water turbulence and ice thickness data, which were transmitted back to NPS for analyses.

“We were essentially measuring the salt flux and the little turbulent eddies that occur within the current…We could integrate these findings over time, by adding up the salt flux and the basal retreat. Using these two methods allowed us to get at the melt rate,” said Stanton.

The measured glacial melt rate at the site, and through the channel on Pine Island, at approximately six centimeters per day, reveals a critical need to understand channelized melting underneath these massive glaciers, as they are major contributors to global sea-level rise now, and are expected to be so into the future.
NPS Establishes Portal for Combating Terrorism Information Exchange

By Amanda D. Stein

A team of faculty and researchers from the Naval Postgraduate School Department of Defense Analysis along with the MOVES (Modeling, Virtual Environments and Simulation) Institute has launched an on-line counter terrorism portal titled GlobalECCO or Global Education and Collaboration Community Online.

“This is the space the GlobalECCO portal fills, where as its mission statement clearly states, was created to "build and strengthen the Combating Terrorism Fellowship Program’s global alumni network of counterterrorism experts and practitioners through innovative and engaging technologies and techniques that both enable and encourage collaborative partnership among individuals, nations, organizations and cultures."

While most CTFP students take part in short certificate programs, a select few enroll in full graduate degree programs like those offered by the NPS Department of Defense Analysis, where they study alongside officers from around the world. And while CTFP’s programs are offered through a number of different institutions around the U.S., it was NPS’ participating faculty that realized the need for greater connections amongst the program’s alumni population.

"Many of the students, even here at NPS, don’t realize that they are sponsored by, and a part of, the larger CTFP effort," said Freeman. "What we are trying to do is build a community. And it’s not just a community of students here, but a larger community of CTFP alumni from several institutions that includes NPS."

Upon graduating or completing a program from any of the CTFP partner institutions around the world, students will be offered access to the GlobalECCO.org website, where they can stay connected with their peers and continue to draw upon the broad experiences of the counterterrorism community.

The GlobalECCO website offers multiple avenues for continuing engagement, collaboration and education. The journal, Combating Terrorism Exchange or CTX, helps CTFP alumni stay abreast of developments and ideas in their field of expertise.

"Terrorist ideologies change, but their tactics and strategies are, in fact, generally consistent over time. As wars between states have become and continue to be less common, our attention will increasingly shift to conflicts within states or between states and extremist organizations," said project lead Professor Michael Freeman.

These kinds of conflicts will likely lead to the expanded use of terrorism, making the mission of the CTFP that much more important as nations struggle with combating it in the future. It also, however, casts a bright light on the need to constantly share what has been learned already through the study of national responses to terrorism from states across the world.

"Britain, Egypt, India, Algeria, Pakistan, Israel, the Philippines, Colombia and many, many others have been fighting terrorism for decades and even centuries in some cases. What we are trying to do with CTFP and GlobalECCO is share the experiences and lessons that others have learned,” said Freeman. “We also hope to enable greater on-the-ground collaboration between countries fighting terrorism by building a community of CTFP alumni, many of whom have been and will be deployed to confront terrorist threats that are regional and sometimes global in nature.”

Retired Navy Capts. and Professors of Practice, Wayne P. Hughes and Jeffrey Kline were both honored with this year’s Hugh G. Nott Prize. Hughes and Kline were honored for papers published in the Review’s Summer and Autumn editions, respectively. Hughes’ paper, “Naval Operations: A Close Look at the Operational Level of War at Sea,” won first place, and Hughes’ and Kline’s co-authored, “Between Peace and the Air-Sea Battle: A War at Sea Strategy,” took second-place honors.

U.S. Army Col. Greg R. Wilson, Co-Director of the Common Operational Research Environment (CORE) Lab and Special Operations Forces Chair retired from active military service, Sept. 6. Both colleagues and family members applauded Wilson for his 28-year military career. Wilson is wrapping up his third stint at NPS as co-director of the defense analysis department’s CORE Lab with Dr. Sean Everton.

Operations Research Department Professor Ronald D. Fricker with the Graduate School of Business and Public Policy was named the Academic Year 2013 Richard W. Hamming Award winner. Fricker excelled in all three Hamming Award criteria: outstanding teaching, excellence in thesis supervision and strength of contribution to NPS beyond the classroom.

FACULTY

news & notes

Interview with NPS Professor of Practice, retired Navy Capt. Jeff Kline about NPS’ most recent Warfare Innovation Workshop.

Interview with CRUSER Director, Dr. Ray Buettner about Robo-Ethics.

Interview with FEMA’s Dessi Matel-Anderson about FEMA’s recent participation at JIFX and her work with FEMA Corps.

Interview with Center for Interdisciplinary Remotely Piloted Aircraft Studies’ Mr. Ray Jackson about NPS involvement in Black Dart Operations.

*INSIDE NPS* AIDS WEEKLY ON THE PENTAGON CHANNEL
The Naval Postgraduate School (NPS) honored 400 students earning 412 graduate degrees during the 2013 Summer Quarter Graduation Ceremony held in King Auditorium, Sept. 27.

Presiding over a graduation ceremony for the final time was NPS alumna and departing Interim President, Rear Adm. Jan E. Tighe, who after welcoming the graduates and their families acknowledged the work of faculty and staff in preparing the graduates.

"Before I introduce our guest speaker, there are a few groups of people I would like to recognize," said Tighe. "First and foremost, I would like to acknowledge our faculty and staff that made this graduation possible. Your passion and commitment to this institution and to our students is profound and very appreciated."

Tighe also thanked the assembled graduates’ families and friends for their support.

"You share in today's success by being a part of our students' lives, and supporting them to achieve their educational goals," she noted. "Your role is often overlooked or understated, but today would not be possible without your sacrifice, love and support."

Tighe also made a point to recognize the Navy families impacted by the tragic events at the Washington Navy Yard only days prior. The Summer class had its own direct connection to the tragic events, with Naval Sea Systems Command personnel graduating through one of the university’s distance learning programs participating in the graduation ceremony. "Our thoughts and prayers are with the Navy Yard families during these difficult times," she said.

Following Tighe's remarks, Vice Adm. Richard W. Hunt, Director, Navy Staff and an NPS telecommunications systems management alumnus, took the podium to address the graduating class, which coincidentally included his own son, Lt. Richard Hunt Jr.

"I would first like to acknowledge Rear Adm. Tighe for the terrific job that she has done as interim president over the last year," said Hunt.

He went on to offer his own praise to the university’s faculty and staff for a job well done throughout the transition that has taken place on campus over the last year.

"I'd also like to thank the support and professionalism of the entire NPS staff and faculty during this period," Hunt said. "You have insured that the Naval Postgraduate School has continued to excel as one of our nation's leading higher education institutions."

Twenty-two course participants from nine countries recently attended a Defense Resources Management Institute (DRMI) course on Budget Preparation, Execution and Accountability (BPEA). The two-week course provides principles and concepts for preparing and executing defense budgets.

"Within a general planning, programming, budgeting and execution system framework, [the BPEA] illustrates how planning and programming support national defense objectives and priorities … and how this kind of system allocates resources in the budget under changing circumstances," said DRMI Lecturer Mark Hladky.

Students work through several case studies designed to capture the process of translating top-level guidance and integrating it at lower organizational levels to create a defensible budget, implement funds control, and establish performance management and accountability in the resource allocation process.

Participating students traveled from Argentina, Colombia, Lebanon, Liberia, Malaysia, Norway, Pakistan, Saudi Arabia and the U.S., and are made up of seasoned financial management officials in their respective ministries of defense. Ten of the students are returning to NPS, after having attended DRMI courses in the past.
Energy Executive Education Helps Navy Leaders Implement Cultural Change

By Kenneth A. Stewart

A diverse mix of Navy officers, senior enlisted service members and DoD civilians recently converged upon NPS to take part in an intensive weekend executive education course that seeks to change the Navy’s culture of energy consumption. NPS’ Energy Academic Group (EAG) and Cebrowski Institute tailored the course to teach senior leaders to foster change in direct support of Secretary of the Navy Ray Mabus’ energy security goals and initiatives.

Mabus recognized long ago that energy was creating an operational vulnerability, and outlined several efficiency goals to reduce fleet-wide energy dependence. A key component of his effort was the implementation of sweeping cultural change throughout the services “where energy is a part of every consideration and decision.”

The primary goal of the Energy Executive Education forum, the second rendition of what officials hope is a continued periodic offering, was to demonstrate how leaders can begin to affect their chains of command in this critical capacity.

NPS Challenges Students to Consider the Ethics of Unmanned Systems

By Kenneth A. Stewart

NPS Department of Defense Analysis Assistant Professor Bradley J. Strawser moderated a debate between Visiting Associate Professor Heather M. Roff with the University of Denver and freelance journalist Joshua Foust.

The debaters sought to answer the question, “Does the future of unmanned and autonomous weapons pose greater potential ethical dangers or potential ethical rewards?” While the debaters were cordial and shared some common ground, they were passionate about their respective positions.

“Presence is what we are all about. When there was an earthquake in Haiti, a tsunami in Sendai or a fighter needed in Afghanistan, we were there,” said Mabus in a recorded message to the attendees.

“Being there requires the right people in the right place at the right time…” Without the energy to feed our platforms, we might not be there when it matters,” he continued. “We need forward thinkers during this transformation forward … We need your leadership and innovative thinking to meet this challenge.”

We are trying to expand the sphere of influence around energy,” said Dr. Neal Thornberry during one presentation. Thornberry is a member of NPS’ Center for Executive Education and an expert on driving innovation.

Expanding that sphere of influence means changing the way military and civilian leaders from within the Department of Defense think, exposing them to some of the nation’s best minds in the areas of conservation, alternative energy and efficiency engineering.

Foust argued in favor of the development of unmanned autonomous systems contending that, “machines are quick, better at processing large amounts of data instantly” and therefore superior in some aspects to actual service members.

“Humans are deeply flawed moral actors in war,” Foust said. “Machines respond to criteria and input, they lack emotional choices” and the presumed negative affects of those emotions.

Roff countered that it was the absence of the ability of unmanned autonomous systems to use human emotion that made unmanned system generally, and Lethal Autonomous Robots (LAR) specifically, a poor combat option.

“We are focusing on the vices, but we should be looking at the virtues. What about when a soldier shows empathy or mercy? Taking the emotion out of combat is not necessarily a good thing,” said Roff. “You can’t mimic human judgment.”

An emergency management professional from Washington state and a retired New York City police detective are the 2013-14 Center for Homeland Defense and Security Distinguished Alumni Fellows. Jody Woodcock, Deputy Director of Pierce County (Wash.) Emergency Management, and Edwin Welch, a retired New York City law enforcement officer, will spend a year in Washington, D.C., working at the Federal Emergency Management Agency (FEMA) National Preparedness Directorate. This year marks the seventh year of the CHDS Distinguished Fellows program. The fellowships enable participants to share their local government expertise while gaining insights into the inner-workings of the upper echelon of FEMA management.

The Naval Support Activity Monterey (NSAM) Fleet and Family Support Center is attempting to raise awareness for National Preparedness Month amongst the NPS, NSAM communities. The support center is stressing that emergencies can happen quickly and that families should prepare today for tomorrow. The center is here to help families to prepare for both manmade and natural disasters. For more information on preparing for disasters, visit the Ready Navy or Ready.gov websites.
NPS Class Inspires Officer to Combat Military Suicide With Smartphone App

By MC3 Shawn J. Stewart

The U.S. military suffered more casualties from suicide than from combat last year. A staggering 349 service members took their own lives in 2012 according to a Pentagon report on active-duty suicides. These numbers, when compared to the 229 troops killed in combat over the same period according to a Washington Post tally, compelled U.S. Navy Lt. Darryl Diptee to seek out the underlying causes of military suicides and ultimately, to develop a solution of his own to assist in combating the problem.

Diptee quickly found the answer in a straightforward therapeutic approach. And he quickly set out to provide a resource to help fight the effects of Chronic Emotional Atrophy (CEA) for deployed troops, creating the Emotional Vitality Assistant (EVA) model using a special application design process developed by Stanford University.

“EVA extends the physical mental health therapy space to the virtual space,” said Diptee. “It is a smartphone application that was designed to combat CEA by promoting continual personal expression in a private, confidential, virtual space with a counselor.”

“It is believed that if service members continually and honestly express their deepest emotions in a safe non-threatening arena with a counselor, that the symptoms that lead to suicidal thoughts will not occur,” he added.

Diptee’s EVA application is grounded in a concept of therapy known as Frontal Lobe Stimulation (FLS). “FLS strengthens emotional and mental health by helping a service member exercise emotional functioning of the [frontal lobe region of the] brain,” said Diptee. Exercising emotional function can be anything from writing or verbally expressing personal feelings, creating art or human bonding, he said.

“EVA will help fight the effects of CEA for deployed troops because it is socially acceptable, technically feasible and economically viable,” Diptee added.

Since its creation, Diptee’s application and the supporting research has garnered a lot of attention, giving him the ear of military leaders and the private sector.

“I was invited to present EVA at the Naval Development Warfare Command’s IdeaFest in Hampton Roads, Va.,” said Diptee. “EVA received many positive responses and showed potential for use with the Navy Expeditionary Combat Command’s Embedded Health Care Provider program.”

“The Navy Times requested an interview on my research and the EVA concept, focusing on innovation in the Navy and the people behind those innovations,” he said. “The EVA concept was recently shared with some flag staff, and it is currently under review.”

And it couldn’t be a better time for Diptee’s research. In light of the Navy’s recent Suicide Prevention Month, Secretary of Defense Chuck Hagel released a message to the forces emphasizing the Department of Defense’s ongoing support of research into the epidemic.

“I believe that my research can help arm our military with the knowledge and tools to keep themselves mentally healthy and emotionally stable,” said Diptee.

Focus On … Deputy Dean of Students

A Monthly Look at Names and Faces on Campus

Deputy Dean of Students, Lt. Cmdr. Alex Mabini has served NPS’ diverse student body for the last 8 months.

“Here at NPS I am responsible for maintaining good order and discipline amongst the student population,” said Mabini. “I am essentially the Dean of Student’s Executive Officer.”

Mabini downplays his position’s negatives aspects and tends to stress the positive — positives that he finds very fulfilling.

“My job is probably most closely associated with the negative aspect of student life, such as carrying out disciplinary measures,” said Mabini. “However, the best part of my job is helping officers to improve. I help them to prepare their packages for career boards, facilitate special requests in support of international adoptions and assist with permissive travel for difficult to obtain medical care.”

Mabini is an NPS graduate with a degree in Modeling Virtual Environments and Simulations (MOVES). He was able to utilize his MOVES degree while serving with the Fifth Fleet.

I take pride in every aspect of my job, said Mabini. “From the administrative aspects to the sharing of my operational experiences in the fleet.”

Mabini insists that his past operational experience with the Fifth Fleet and both his academic and operational work with virtual environment modeling through the Modeling Virtual Environments and Simulations (MOVES) program has added value to his leadership responsibilities here at NPS.
Any Day at NPS ...

NPS’ Center for Interdisciplinary Remotely Piloted Aircraft Studies (CIRPAS) Aircraft Commander Dennis Hamaker, looks over one of five newly acquired aircraft at the facility’s hangar in Marina, Calif. (U.S. Navy photo by Javier Chagoya)

The President’s Student Council has grown. Thanks to the interest and effort from a handful of students, new positions as coordinators for outreach, campus events, and the Secretary’s Guest Lecture series have been established. These additional participants help the student council to be more responsive to the student body’s interests. We are still in the process of establishing service and academic department representatives, so if you are interested in participating come to the next student council meeting.

One of the priorities for the student council is to renew the Secretary’s Guest Lecture series. Many students have voiced a desire to have a diverse range of intriguing and impactful speakers come to NPS at least quarterly. A fact that is not widely known, however, is that SGL nominations begin with you—the student. If you know a speaker that should present to the student body, and you are willing to serve as the speaker’s event liaison, submit your nomination using this form: http://intranet.nps.edu/SGL/index.html.

Finally, on Friday, December 6th, please join the student council along with the Monterey Bay Commandery of the Naval Order of the United States and the Armed Forces Communications and Electronics Association Monterey Bay Chapter as we remember the attack on Pearl Harbor. The Remembrance Dinner will be held at the Naval Postgraduate School with a reception at 1800 followed by dinner at 1900. Ticket sales are available through the MWR ITT office or online at www.nps.edu/pearlharbor.

Lt. j.g. Barry Scott is the Chairman of the President’s Student Council. Visit the PSC on the intranet at http://intranet.psc/index.html.
On Campus this Month

October 4
Monterey Bay Navy Ball, Barbara McNitt Ballroom
POC navyballchairperson@nps.edu

October 18
John Wason
House Armed Service Committee
POC Shelley Gallup, (831) 594-0609

October 14
Columbus Day

October 31
Halloween

November 4–8
Joint Interagency Field Experimentation
Register on NPS JIFX homepage

Historical Highlights

The Navy’s first command at Hotel Del Monte, the Del Monte Pre-Flight School, was established 70 years ago during WWII. The pre-flight school operated for only 11 months at Del Monte but its existence set the stage for an option to purchase the famous hotel and negotiations began in earnest during the war.

This photo captures three aviation cadets from the Del Monte Pre-Flight School’s 19th Battalion marching briskly down the front steps of the hotel, now known as Herrmann Hall. Shown (left to right) are Company Commander R.D. Murray, Battalion Commander I. J. Norris and Bravo Company Commander Frank Rohrback. Today, the Navy is engaged in a $6.4M building renovation project to repair the building’s exterior and recapture some of the Del Monte’s original architecture.

Historical Highlights are provided by the Dudley Knox Library.