



NAVAL POSTGRADUATE SCHOOL

# IN REVIEW

MAGAZINE

JULY 2009

## Centennial Year Kicks Off

University Begins 100-Year Anniversary Celebration in Grand Style

### Inside:

—◆◆◆—  
**Researchers Record  
Complete Tornado Lifecycle**

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**“Three Cups of Tea”  
to Greg Mortenson**

—◆◆◆—  
**Mercury 7 Astronaut,  
Alumnus Scott Carpenter**





**Daniel T. Oliver**  
Vice Adm., United States Navy (Ret.)  
President, Naval Postgraduate School

**“Distinguished faculty represent what is best about NPS – dedicated, world-class teachers producing relevant, high-level research while also nurturing a new generation of students and leaders to be creative, critical thinkers.”**

# PRESIDENT'S MESSAGE



Welcome to the new *In Review!* This publication has been in production each quarter since February 2007, sharing the story of the Naval Postgraduate School with alumni, Board of Advisors members, flag officers and many more. While there have been minor changes in appearance and format, this issue marks the first major revamping. We hope the new format and a broader distribution will make it easier for friends of NPS to learn more about the extraordinary achievements and events happening on campus.

Changes for *In Review* coincide with the beginning of our Centennial celebrations and this issue is dedicated to highlighting events that took place over the Memorial Day weekend. For those of you who were able to join us on campus, you're likely to recall many lab tours and open houses, the presentation on the history of information technology at NPS, a dedication of the remodeled Dudley Knox Library, and a gala dinner at which Marine Corps General Michael Hagee was our 10<sup>th</sup> inductee into the NPS Hall of Fame. In addition, a new display celebrating the 100-year history of NPS in 48 magnificent panels along the length of Root Hall opened to great reviews. And the traditional Concert on the Lawn welcomed the entire Monterey Peninsula community while two orchestras celebrated the service of our military men and women to their country.

The Centennial celebrations will continue throughout the coming year, and I am pleased to announce our next event. August 5-9 will be NPS Air and Space Week, dedicated to the accomplishments of our many alumni who have gone on to distinguished careers in aero- and astronautics. NPS proudly boasts of more alumni who have become astronauts than any other graduate institution in the world, 37 in total. Many of those alumni will be attending the events, which include a symposium, reception and a chance to breakfast with the astronauts. The week caps off with an NPS Appreciation Day at the California International Airshow in nearby Salinas where all military and NPS personnel will get free admission.

NPS is also celebrating accomplishments of our faculty with five members receiving the title of “Distinguished Professor” in honor of outstanding contributions they have made to the university and their academic disciplines. Not surprisingly, many of these faculty have also received recognition by their respective professional associations. Distinguished faculty represent what is best about NPS – dedicated, world-class teachers producing relevant, high-level research while also nurturing a new generation of students and leaders to be creative, critical thinkers. One of the Distinguished Professors, Nancy Haegel, is also this year's winner of the Schieffelin Award for Teaching Excellence. Please read more about the work of our newest Distinguished Professors in this issue.

And finally, NPS just received formal word that it has successfully completed the first step in its accreditation review process. The President of the Western Association of Schools and Colleges noted our “strong mix of programs, engaged faculty in leading-edge research and effective instruction.” He goes on to say, “The School provides significant service to the Navy, and other branches of the military and government, as well as the Monterey community.”

In this, our 100<sup>th</sup> year, we indeed have much to celebrate.

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## NAVAL POSTGRADUATE SCHOOL IN REVIEW MAGAZINE

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### ON THE COVER

*Since 1863, the Medal of Honor has been the nation’s highest military award. Six graduates of NPS have received this distinction, their citations encompass one of 48 Centennial Timeline panels stretching Root Hall’s 1/8 mile façade, forever memorializing the university’s first 100 years.*

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## Team Evaluates Breakthrough Recon System

The Navy has tapped NPS to be the Operational Test Agent (OTA) for a new “tunable” multi-mission, multi-sensor reconnaissance and surveillance system that could drastically cut costs while revolutionizing the way the military identifies and tracks targets on land and at sea.



A faculty-student team led by NPS Distributed Information Systems Experimentation Research Group director Professor Shelley Gallup and OTA program manager Research Associate Brian Wood developed and will coordinate portions of the capabilities demonstrations for the sensor

pod, titled the Joint Multi-Mission Electro-Optic System (JMMES).

“JMMES has the potential to be revolutionary for airborne surveillance and reconnaissance, which is absolutely critical to protect troops and allow commanders real-time information from the battlefield,” said Gallup, Principal Investigator for the JMMES OTA project. “It could be a game changer for high cost-savings,” he added.

Two NPS officer students are researching aspects of JMMES for their joint master’s thesis. Information Warfare Systems Engineering students Marine Corps Maj. Bronchae Brown and Lt. Brian Schulz will analyze how JMMES impacts the Intelligence, Surveillance and Reconnaissance (ISR) process and compare and contrast JMMES and traditional ISR systems methodologies.

“As an Information Warfare officer in an EP-3 squadron, I noticed increasing flight delays on ISR missions because we didn’t always have the right carry-on equipment installed,” Schulz noted. “A multi-mission sensor system like this would be a huge cost and time saver for our operations.”

## Symposium Explores Changes in Acquisition

NPS’ Acquisition Research Program hosted its 6th Annual Acquisition Research Symposium in May with this year’s theme, “Defense Acquisition in Transition,” addressing pending changes in the acquisition process brought forth by both the new presidential administration and the current economic environment.

“What makes this symposium unique is that there is no other forum where these senior acquisition people can get together and participate in a public discussion like this,” said retired Rear Adm. James Greene, the Acquisition Chair. “We provide the forum for them to not only talk about changes in acquisition, but other internal issues that directly affect the acquisition process.”

Greene also noted that this year, both the President of the United States and members of Congress have expressed high levels of interest for these issues. “Because the President is very focused on DoD’s acquisition processes, and with Congress picking up on this theme as well, the whole DoD ac-

quisition process is going to be in transition ... and people are really interested in getting things right as we move forward,” he said.

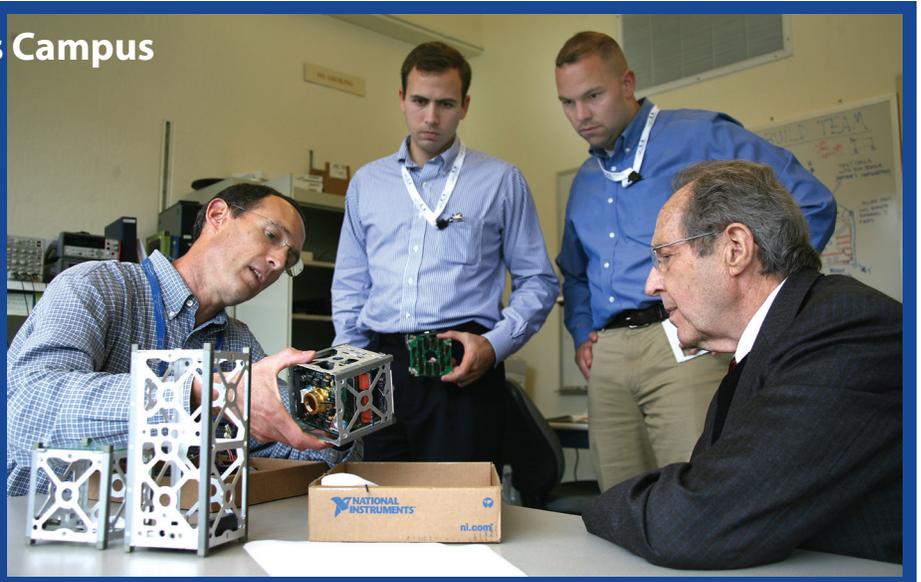
## IPSOC Course Required for Flag Consideration

NPS’ Information Professional Senior Officer Course (IPSOC) helps senior military leaders explore innovative tools and practices for managing the rapidly-changing challenges in information technology. In fact, IPSOC has become such a crucial part of the IP community’s development that all senior IP officers must complete the training in order to be considered for promotion to the admiral ranks.

The Information Professional (IP) community is a fairly new one, established in October 2001 after naval leaders felt it was important to create an officer community that could enhance the Navy’s war-fighting capabilities by evaluating and managing cutting-edge technologies, innovative ideas, and information and network systems. To support the educational and training needs of its newest community, the Navy

## Former SecDef Perry Visits Campus

*(From left) Former Astronaut Dr. James Newman, an NPS Space Systems professor, Navy Lt. Rod Jenkins and Marine Corps Capt. Matthew Schroer show Dr. William J. Perry, a senior fellow at the Hoover Institution and former Secretary of Defense, components of a mini-satellite launcher during a tour of the Space Systems Laboratory in May. Perry visited NPS for a day to learn about the school’s research efforts and spent time touring the campus, observing academic laboratories, and speaking with students and faculty. During his visit, Perry also delivered a special lecture on “Dealing with Nuclear Dangers” to NPS Foundation trustees, members and guests.*



established the Information Professional Center of Excellence at NPS, or IPCOE.

During the center's most recent course, a diverse group of 20 students spent two weeks immersed in topics such as higher-order thought, social networks, complex organizations and polarity management. The students also spent time touring well-known technology companies that demonstrate both traditional and flat hierarchies, and gained insight from Department of the Navy Chief Information Officer (CIO) Rob Carey, Department of Defense CIO Dave Wennergren, and other senior executives in the IP community.

"We could not have this course at another Navy installation," said recently retired Lt. Cmdr. Warren Yu, director of the IPCOE. "We have to be in NPS' academic and research environment because it provides us flexibility and access to invaluable resources."

For more information about IPSOC and IPCOE, visit [www.nps.edu/academics/centers/ipcoe](http://www.nps.edu/academics/centers/ipcoe).

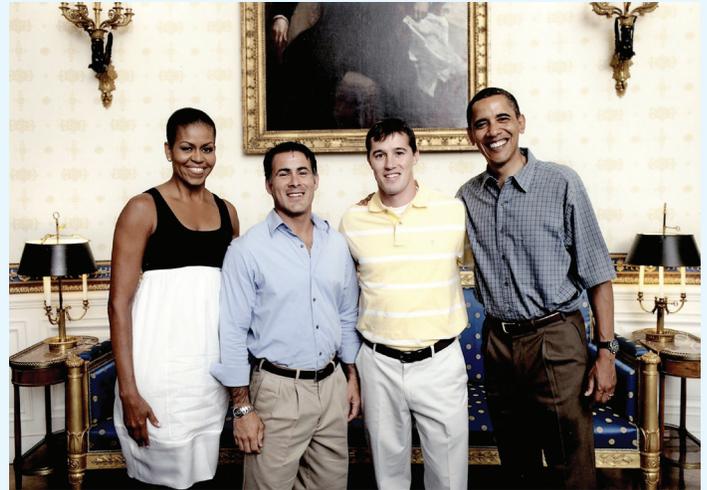
### NPS Students Host FAO Conference

Students from the Foreign Area Officer (FAO) Association of Monterey hosted their third annual FAO conference, "Today's FAO: Warrior, Scholar, Diplomat," on campus in late April.

Originally built as a research project to gain a better understanding of the multifaceted aspects of the FAO community, the conference featured a number of military and civilian experts. One of the conference's primary guest speakers, Dr. David Chu, President of The Institute for Defense Analyses and former Under Secretary of Defense for Personnel and Readiness, spoke to students about how the Department of De-

### Student Honored at July 4th White House Celebration

Lt. Trevor Ritland, a dual master's degree student in the Business Administration and Operations Analysis curricula, was one of 19 service members honored during the Independence Day celebration at the White House. Ritland, pictured second from right along with fellow Navy man Chief Jose Bryant, has already received three bronze stars for his tours in the Middle East.



"It was an incredible experience. It was my first time at the White House, so I was pretty excited to just be able to walk around and see everything," Ritland said, posing with President and First Lady Barack and Michelle Obama in the Oval Office. "My girlfriend and mom were able to come out and be on the guest list so it was very special to share the experience with them."

fense (DoD) transformed its view of the FAO program over the last decade, and what its goals are for the community.

Chu credited former Secretary of Defense Donald Rumsfeld – who said military establishments



were focused too heavily on "old Europe" and not on the future – for challenging DoD to rethink the kinds of language and cultural competencies it wanted from its officer corps.

With the military's increased emphasis on "soft power" and international partnerships, Chu said the Department soon recognized that language fluency and cultural expertise were essential military skills, and began viewing them as "personnel assets for the Department as a whole," rather than com-

ponents of the policy community.

As a result, the number of FAOs has increased by 50 percent in the last three years. And in the next five years, DoD expects 1,100 more FAOs to enter the community, which currently has 1,800 officers serving in the field.

### NPS Team Wins AIAA Rocket Competition

A team of students and faculty at NPS took top honors in the American Institute for Aeronautics and Astronautics Region VI Young Professionals Rocket Launch Competition. The goal of the competition is to design and build a one-stage rocket, then accurately predict its overall performance.

One of two NPS teams, Point Lobos Section Team Peacock, won the competition with the winning time-history profile. But all participants gained extensive experience designing, building and launching their own rockets, with the efforts supporting a number of student theses. The winning rocket will be

put on display in Watkins Hall on the NPS campus.

The NPS group is already planning to participate in next year's competition, switching to a two-stage rocket platform. Members of the winning Team Peacock are students Mike Juillet (Team Leader), Marine Maj. Nick Marciano, Air Force Capt. Melissa Corley, Orlando Diaz, Paul Oppenheimer, Weng Wai Leong (Singapore), Navy Lt. Mike Tozzi and Lt. Cmdr. Keith Falkencamp, and Mechanical and Astronautical Engineering Professor Oleg Yakimenko.



# FACULTY SHOWCASE



## Prestigious IA Dual Designation Achieved

The National Security Agency (NSA) and Department of Homeland Security have announced the designation of NPS as an Information Assurance (IA) Center for Academic Excellence-Research as well as re-designation as a National Center of Academic Excellence (CAE) in Information Assurance Education (CAEIAE) for the academic years 2009-2015. The CAE-Research designation recognizes academic institutions that actively integrate research activities into their curricula, achieving both designations is a

mark of true prestige in the IA community.

“NPS has been a National Center for Academic Excellence in Information Assurance Education since April 2000 – the same year as Stanford University, Carnegie-Mellon and the University of Illinois – as well as being twice re-designated, but this is the first time we’ve also been awarded the Research designation, which is a significant accomplishment,” said Computer Science Professor Cynthia Irvine, Principal Investigator for NPS’ Federal Cyber Service Scholarship for Service Program, also known as Cyber Corps.

“Becoming CAEIAE designated in 2000 really opened the door to our receiving National Science Foundation ‘Cyber Corps’ scholarship grants,” Irvine noted, “because to qualify, NSF says applying institutions have to be CAEIAE or equivalent. Since 2002, we’ve graduated 65 students through the program – which requires two years of government service for the two years of education – and currently have 13 more, three of whom graduated in June.

“NPS has a reputation for turning out really high-quality students with national security relevant information assurance expertise,”

Irvine added. “Prospective employers come to us, and every one of our ‘Cyber Corps’ graduates has gotten a great job, for example at NSA, CIA, FBI, SPAWAR and Sandia Labs. Now that we have the Research as well as the Education designation, we can expect the combination to be an even better door opener. NPS is now positioned to make even more significant contributions to improve the cyber security stance of the U.S., both in terms of the Departments of Defense and Homeland Security and our critical national infrastructures.”

## University Names Newest Distinguished Professors

Five professors at the Naval Postgraduate School have received the title of “Distinguished Professor” in honor of their significant contributions to the Navy, the university and their academic fields.

Dr. Dorothy Denning, Defense Analysis Department, Dr. Nancy Haegel, Physics Department, Dr. Robert Looney, National Security Affairs Department, Dr. Michael Morgan, Electrical and Computer Engineering Department, and Dr. Kevin Wood, Operations Research Department, were formally conferred their titles by NPS Provost Dr. Leonard Ferrari at the Spring Quarter Graduation Ceremony in June.

“The title of ‘Distinguished Professor’ is the highest academic honor the Naval Postgraduate School bestows upon its faculty, and I was very pleased to award some of our most accomplished professors their

new titles,” Ferrari said. “The significant contributions each of them has made to research are not only a reflection of their individual efforts, but of their departments and our institution as a whole.”

A computer scientist who specializes in cyberwarfare, cyberterrorism, and computer and network security, Denning has received some of the most prestigious awards in her field, including the ISSA Hall of Fame Award and Harold F. Tipton Award. She was also recognized as a Security Innovator by Time magazine in 2001.

Haegel, who also received this year’s Schieffelin Award for Teaching Excellence, has helped pioneer research in transport imaging in semiconductors. Her research group has also led the development of an “Identify Friend or Foe” patch, which aims to mitigate fratricide by identifying friendly forces during nighttime operations.

Looney, a researcher and author specializing in Middle East and international economics, has been teaching at NPS since 1979 and was once ranked 18th out of the world’s 250 most productive economists.

An NPS teacher for 30 years, Morgan was elected as a Fellow of the Institute of Electrical and Electronics Engineers, which is considered one of the highest levels of recognition in the electrical engineering field.

And Wood, teaching at NPS since 1982, has focused research efforts largely on interdiction, which includes ground-breaking research on mathematical theories that have contributed to the development of analysis tools for planning attacks on networks and defending against missile and submarine attacks.

“One of the biggest resources at NPS is the access to real-world problems that come directly from the students,” he explained. “Compared to a civilian university, where you really have to search to find interesting, real-world problems to work on, they just fall into our laps here. Teaching our students has been rewarding because of that fact ... but their outstanding motivation doesn’t hurt either.”



*(From left) Drs. Dorothy Denning, Kevin Wood, Robert Looney, Michael Morgan and Nancy Haegel show off their Distinguished Professor medallions upon being conferred by Provost Leonard Ferrari at the Spring Quarter Graduation Ceremony June 19.*

# FACULTY SHOWCASE



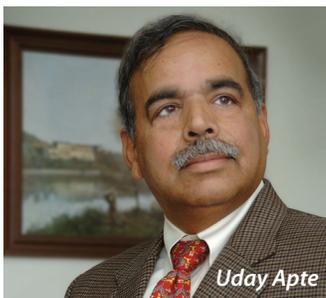
## Faculty Honors This Quarter

A number of NPS faculty have been honored with prestigious awards in their respective disciplines.

◆ Professor Emeritus **Jim Sanders** has been awarded the **2009 Rossing Prize in Acoustics Education** by the Acoustical Society of America (ASA). The Rossing Prize was established in 2003 by a grant from Thomas D. Rossing to recognize an individual who has made significant contributions toward furthering acoustics education through exemplary teaching, creation of educational materials, textbook writing and other activities.

◆ Professor **Kevin Smith** of the Physics Department has been selected as a **Fellow of the Acoustical Society of America**. “It is always a great honor to be recognized by your peers for the work you’ve done in your field,” Smith noted. “Part of that honor also belongs to my former students at the Naval Postgraduate School, their contributions have certainly added significantly to my own efforts.”

◆ At the Production and Operations Management Society (POMS) Annual Conference in May, Professor **Uday Apte** was the recipient of the **2009 POMS Distinguished Service Award**. This international society was established in 1989 to benefit the practice of production and operations management. Apte also serves as the Vice President-Colleges on the society’s 2009 Board of Directors.



Uday Apte

◆ The Military Operations Research Society (MORS) presented Professors **Moshe Kress** and **Johannes Moyset** with the **MORS Journal Award** at the society’s 77th symposium in June. The award was presented for their paper, “Aerial Search Optimization Model for UAVs in Special Operations.” The model prescribes optimal deployment locations for ground units and optimal time-phased search areas for the UAVs, and has been implemented successfully into four field experiments. According to Moyset, preliminary empirical evidence indicates that the model provides 50 percent increase in detection opportunities compared to a plan manually generated by experienced commanders.



Johannes Moyset



Moshe Kress

## Profs Advise Second Fleet Chief on Trident Warrior 09

Trident Warrior is the Navy’s expansive, cumulous effort to rapidly test and evaluate emerging technologies for fleet use and implementation. The program consists of more than 100 individual exercises, bringing together 5,700 participants across several nations – and faculty at NPS are playing an active role.



(From left) Commander, U.S. Second Fleet Vice Adm. Mel Williams Jr. and Dr. Tom Forbes, Trident Warrior 09 OLC2 lead are briefed by Capt. Carol O’Neal (Ret.) and Dr. Jerry Brown of the Operations Research department. U.S. Navy photo by MC3 Tyler J. Wilson.

In the Operational Level Command and Control (OLC2) Spiral Two experiments, Operations Research (OR) Distinguished Professor Gerald Brown briefed Vice Adm. Melvin G. Williams Jr., Commander, U.S. Second Fleet, on two NPS-developed optimization aids. During the brief, Williams stated, “Much of what we are testing here are concepts, but you NPS folks have delivered working prototypes we are actually using in this exercise.” His scheduled 10-minute visit turned into a 30-minute exchange with just the NPS planning cells.

OR’s Maritime Operational Planner research program developed the two prototype decision aids selected for analysis through student-driven research projects. One of the aids evaluated, the Combat Logistics Force Planner, was developed to examine exactly how the Combat Logistics Force, about 30 transport ships, can best be utilized for current naval operations.

The second aid, the Global Fleet Station Mission Planner, is an optimization model that aids in mission planning and scheduling operations in support of naval priorities in Maritime Security and Theater Security Cooperation. The model demonstrates that, through optimized mission planning, the Navy can significantly reduce operations time.

# University Researchers Record Complete Tornado Lifecycle

By MC2 Kellie Arakawa

The Naval Postgraduate School's Mobile Phased Array Weather Radar (MWR-05XP) recently completed a six-week deployment to the Great Plains in support of VORTEX2, the largest, most comprehensive tornado field experiment ever conducted.

Just like the countless other 'chasers' participating in the experiment, the MWR-05XP

would head out each day toward prime tornado areas identified by meteorologists, spending approximately 30-45 minutes capturing supercells. And one day their efforts paid off ... acquiring the entire life cycle of a tornado from formation through dissipation. In fact, the data set captured represents what could be the most scientifically detailed tornado ever recorded in history.

VORTEX2, sponsored by the National Science Foundation and the National Oceanic and Atmospheric Administration, brought together approximately 80 scientists from around the world and 35 support vehicles, all roaming the plains from Texas to North Dakota in an attempt to capture severe weather outbreaks. By studying supercells, which have about an eight percent chance of forming tornadoes, scientists hope to gain a better understanding of how and why tornadoes form, and to improve public warning times, which currently average at 13 minutes. The data collected here have a chance to greatly improve our understanding of this version of nature's fury – and was heralded by some well known, and experienced, tornado chasers.

"During that observation, Howie Bluestein, who is the Co-Principal Investigator from the University of Oklahoma and the individual on which the movie 'Twister' was based, was in the field with the radar and later said it was the best research radar system that he's used," said Bob Bluth, director of the Center for Interdisciplinary Remotely Piloted Aircraft Studies (CIRPAS).

Developed in partnership with ProSensing Inc., the MWR-05XP is an Army battlefield air defense radar modified to also measure weather structures, such as the supercells that potentially form tornadoes. The system was first acquired from the Army in the late 1990s by Bluth, who needed a mobile radar system to track unmanned aerial vehicles. In 2000, Bluth began working with Dr. Jeff Knorr, the Electrical and Computer Engineering Department Chairman; Paul Buczynski, the Radar Labs Director; and Dr. Ivan PopStefanija, Vice President of ProSensing, to transform the air defense surveillance system into a one-of-a-kind, self-contained mobile weather radar.

"What makes the system unique is its capability to scan the antenna beam electronically at a very high speed in elevation, without any physical movement, while mechanically scanning the antenna beam across a selected azimuth sector," said Knorr. "And all of this is controlled by a laptop in a self-contained environment."

*The NPS MWR-05XP Mobile Weather Radar team, from left, are CIRPAS Director Bob Bluth, Ivan PopStefanija of ProSensing, Inc., Professor Jeff Knorr, and Radar Lab Director Paul Buczynski.*



**“With this radar, you can see the thermodynamic processes of a storm that you wouldn’t see nearly as well in other systems. And by the time we’re done upgrading, this will be one of the most capable, mobile research radar systems in the world.”**

*Bob Bluth  
Director, Center for Interdisciplinary  
Remotely Piloted Aircraft Studies*



***The Naval Postgraduate School’s MWR-05XP mobile weather radar takes measurements of a complete tornado lifecycle in Goshen County, Wyo., June 5. The MWR-05XP, a modified X-Band tactical radar system, spent six weeks deployed to the Great Plains in support of VORTEX2, a national field experiment designed to study how and why tornadoes form. Photo courtesy of Paul Buczynski.***

“Similar radars can capture the volume of a tornado in about one to five minutes, but the MWR-05XP can do it in just seven seconds,” added PopStefanija. “Rapid scanning is the most important capability of this system. It gets volumes of images faster than anything else out there.”

After nine years of modifications and deployments, the MWR-05XP upgrades are nearing completion and will soon be receiving final sensor improvements. “With this radar, you can see the thermodynamic processes of a storm that you wouldn’t see nearly as well in other systems. And by the time we’re done upgrading, this will be one of the most capable,

mobile research radar systems in the world,” said Bluth.

In addition to weather experiments, the MWR-05XP has contributed to military research and completed field testing with the U.S. Army and Missile Defense Command. The experiment, conducted in March at the White Sands Missile Range in New Mexico, utilized the radar to capture the aftermath of a missile intercept. The data captured by the radar is currently being analyzed and will be used to study aspects of missile defense such as drift factors and cloud dispersions.

“This is one thing in particular NPS can do which is unique in the academic world,” Bluth

said. “There is no other organization that’s both a Department of Defense and a civilian university; since we are part of the military, we can acquire equipment like this radar, modify it and reapply it ... so we can really contribute in a meaningful way.”

Currently, the MWR-05XP is undergoing maintenance and is scheduled to capture storms in Colorado later this year. In November, the system will return to NPS to study winter storms along the Central Coast of California. It will then embark on another six-week deployment to the Great Plains for the second phase of VORTEX2 in 2010.

# NPS Raises “Three Cups of Tea” to Educator Extraordinaire Greg Mortenson

By Barbara Honegger

It was as if the entire Naval Postgraduate School sprang to its feet to give Greg Mortenson, author of the worldwide best-selling book “Three Cups of Tea,” a standing ovation at his Secretary of the Navy’s Guest Lecture, May 12 – a presentation which easily could have been titled “Build Them, and They Will Come.”

“They” are the thousands of Afghan and Pakistani children who have poured into the 84 schools that Mortenson and his Central Asia Institute have funded and built since 1993, when the people of the Pakistani village of Korphe nursed him back to health after getting lost climbing the world’s second-highest peak, K2. Ever since, Mortenson has been on a passionate and dangerous quest to fulfill the dreams of thousands of Muslim children eager to receive the bedrock of civilization – an education.

“In that impoverished village, a young girl came up to me and asked for what she wanted most in the world, ‘Can you help me build a school?’ I raised the funds and returned, and built her the school. And we’ve been building them ever since.

“My message is a message of hope, and the great difference that education – especially education for girls – can make in the world,” Mortenson said. “There’s an African proverb: ‘Educate a boy, and you educate an individual. Educate a girl, and you educate a community.’ If you educate girls to at least the fifth grade level, you reduce infant mortality, reduce population, and the quality of health and life itself is increased.

“In one village, it took us eight years to get the mullah to let the first girl go to school,” Mortenson recalled. “By 2007, 74 girls were in classes. Now there are 350. Of the 84 schools we’ve

helped build, only one has been attacked by the Taliban, because the whole community has been involved,” Mortenson noted.

“The lesson is to empower the community through education and put the elders back in the center of their communities,” he stressed. “Real progress and security comes from empowering local leaders to take control of their projects and give their people what they want and need. [Chairman of the Joint Chiefs of Staff] Admiral Mullen has got the message and is asking the local leaders to tell us, ‘What do you want and how can we help you get it?’

“Also – and very important – a son must get his mother’s permission to go to Jihad, and many educated women refuse to allow their sons to join the Taliban.”

The other saying Mortenson mentioned is the one upon which the book’s title is based. “‘Three Cups of Tea’ comes from the deep cultural tradition in that part of the Muslim world,” he said. “With the first cup of tea you share with the people of a village, you’re a stranger. After the second cup, you’re a guest. And after the third, you’re family.”

“The first time I read ‘Three Cups of Tea’ – for one of my classes here at NPS – I was amazed as well as inspired,” said Maj. Amy



**Mortenson, right, poses with Chairman of the Joint Chiefs of Staff Admiral Mike Mullen, an NPS Operations Research graduate. Mullen is one of many high-ranking, enthusiastic supporters of Mortenson’s in-country educational programs for Muslim girls and boys. Mortenson’s book, “Three Cups of Tea,” is now required reading for counterinsurgency training and Special Operations. Photo courtesy the Central Asia Institute.**

Bumgarner, who nominated Mortenson to be invited to give the lecture and was given the honor of introducing him. “This book should be required reading for everyone in the military,” she said, “because what he says is true. The real enemy is ignorance.”

Because of his dedication to building schools, especially for young girls, Mortenson has been kidnapped by the Taliban, for whom educating females is forbidden, and has had fatwas put out against his life. But through it all, he has persevered, and now even has some ex-Taliban teachers willing to risk their lives to promote education.

“In 2000, there were 800,000 children in school in Afghanistan, mostly boys,” the author noted. “Today, there are 10 million – 7-1/2 million boys and 2-1/2 million girls – the greatest increase in school enrollment in history. Afghan girls and boys desperately want an education, and many girls, their families and teachers risk their lives daily to get it. Since 2007, over 400 schools, most of them for girls,



*Above: During his visit to NPS, Mortenson shares his story first-hand and answers questions with several students in the National Security Affairs curriculum.*

*“Three Cups of Tea” author and international educator Greg Mortenson poses with students from the Sitara School, one of the over 80 schools his Central Asia Institute has helped finance and build throughout Pakistan and Afghanistan. Photo courtesy the Central Asia Institute.*

have been burned or bombed in Afghanistan and over 320 in Pakistan. But the girls return, sometimes walking over two hours to get to class.

“Teachers have been murdered, and acid thrown into girls’ faces, all for the ‘crime’ of wanting to be able to read and write and know about the world outside their village,” Mortenson said. “And why? Because their greatest fear is not the bullet, but the pen. They know that the Koran says ‘The ink of a scholar is holier than the blood of a martyr’ and encourages education – its very opening line says ‘Read!’ And there is nothing in the Koran that says girls can’t go to school. The pen truly is mightier than the sword.”

As Tom Brokaw, the only one of 400 celebri-

ties to respond to Mortenson’s first request for donations, has said, the success of his passionate quest to bring education to the wildest parts of Pakistan and Afghanistan “is proof that one ordinary person, with the right combination of character and determination, really can change the world.”

Since that first glimmer of support from Brokaw – whom the author quips now wishes he’d donated more than \$100 – Mortenson has been to Pakistan and Afghanistan over 30 times and has the ear of the nation’s top military leaders. “Admiral Mullen and General Petraeus have read the book, and it’s now mandatory reading for counterinsurgency training and Special Operations,” he noted.

Mortenson’s ‘Pennies for Peace’ program

encourages school children to raise funds to help eradicate global illiteracy. Last year it was in 279 schools, and has now reached over 4,000.

“When I served in Afghanistan in 2006, we adopted a school in a small village just outside of Baghram, where I was stationed,” Bumgarner recalled, “so I have some idea of what it must have taken to build 84 of these schools in remote areas. What “Three Cups of Tea” can do is give a better understanding of the Muslim people. They’re not different from us – not in any way that matters.”

For more information about the Central Asia Institute and Mortenson’s extensive work in rural Pakistan and Afghanistan, visit [www.ikat.org](http://www.ikat.org).

# Centennial Year Kicks

## University Begins 100-Year Anniversary Celebration in Grand

By Barbara Honegger

Photography by Javier Chagoya, MC2 Kellie Arakawa, MC3 John Fischer

**W**ith flying banners and ribbon cuttings, the Naval Postgraduate School exuberantly celebrated its Centennial Kick-Off and first-ever Alumni Reunion Weekend, May 22-25 on the Monterey campus.

Launching the four days of historic 100th-year anniversary celebrations was President Oliver's first-ever State of the University address, followed by Provost Leonard Ferrari's overview of the university's century of world-class, military-relevant research.

"Thank you for joining us on this special day as we celebrate the 100th year anniversary of the Naval Postgraduate School. This institution has a distinguished history of important contributions to our nation and the world," Oliver told the audience in King Hall. "We have adapted to change, we have been the drivers of change and we will continue in that tradition – adding new areas of innovation and discovery. As we honor NPS' past and celebrate its current accomplishments, we have before us a future that promises even more and greater contributions to our nation's security and the world's prosperity."

Following the presentations, visiting alumni and students, faculty and staff alike moved to the Ingersoll courtyard for the dedication of the new NPS Centennial Timeline – 48 large panels displayed along the entire length of the outside of Root Hall covering all aspects of NPS' history, from its founding at the U.S. Naval Academy at Annapolis in 1909 to the unveiling of the Timeline itself.

President Oliver, in dedicating the impressive display, noted the tremendous team effort involved. Individuals from across the campus, faculty and staff, suggested topics, contributed items or volunteered to edit material. The timeline is intended as a permanent display yet the unique design of the frames allow for possible updates to be done in the future. Oliver praised the leadership of Kari Miglaw, Director of Alumni Relations, in bringing this project to its successful completion.

"It was a privilege to work on this [Timeline] project with Erica Olsen, whose words brought a long and complex history into focus, and Matt Rose, whose inspired design brought the project to life," Miglaw said from the podium. "Together we feel honored to have worked on such a historic and significant enterprise highlighting NPS' amazing history."

Other highlights of the first Centennial Weekend day were the Alumni Open House at the newly renovated Dudley Knox Library, a ribbon cutting and historic retrospective celebrating over half a century of NPS computing by the NPS Information Technology and Communications Services (ITACS), a Battle of Midway lecture by the School of International Graduate Studies, guided tours and open houses of the university's schools and research institutes and the Center for Homeland Defense and Security, and a State of the NPS Foundation address by Foundation Executive Director retired Rear Adm. Merrill Ruck. The day was capped by an NPS exhibit and reception at the Monterey Maritime and History

--continued on page 14



*"To sum up the Centennial Celebration, it fulfilled all my expectations ... a unique opportunity to meet with good, old friends as well as behold the beautiful Monterey landscape. The Gala Reception became an atmosphere of cuisine, friendship and the feel young again. And the was very emotionally em*

*CDR Gustavo A. Weapo*



# Off!

## and Style

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storquiza, Chilean Navy (Ret.)  
ns Systems Engineering, 1975



Provost Dr. Leonard A. Ferrari welcomes the near record crowd at the school's annual Memorial Day Concert on the Lawn.



Left: Alumni, staff and students discover the remarkable 100-year history of NPS, memorialized in the Centennial Timeline, a 48-panel permanent display stretching the entire 1/8-mile length of Root Hall.

Below: Congressman Sam Farr, (D-17) and NPS President Daniel T. Oliver congratulate AT2 (AW) Joshua McDonald, who held his re-enlistment ceremony just prior to the university's Concert on the Lawn. McDonald is a technician in the NPS Telecommunications Office.



## Centennial Year Kicks Off!

Museum with a presentation by Knox Library Special Collections Manager John Sanders on "NPS' Hidden History."

Saturday kicked off with an alumni golf event and was capped by the 'jewel in the crown' of the four-day weekend, the festive Centennial Gala ball and dinner in the Barbara McNitt Ballroom in Herrmann Hall. President Oliver opened the Gala by inducting only the tenth member of the NPS Hall of Fame – former Marine Corps Commandant Gen. Michael Hagee (Electrical Engineering, 1969).

"General Hagee was and is a tireless advo-

cate for military higher education," Oliver told the guests at the sold-out black tie event. "As Maj. Gen. Mel Spiese, who is on our Board of Advisors, said so well, 'General Hagee is a model of advanced education in the armed forces and the value it brings to the service member and the service.'"

After enjoying a sumptuous dinner at elegant tables with peacock centerpieces, revelers danced away until almost midnight.

Sunday's events included the presentation of colors, Service of Remembrance in Christ the King Chapel and breakfast in Herrmann Hall,

and a talk on "NPS in Monterey" by Sanders at the Maritime Museum in Monterey.

On Monday, NPS flung open its gates to the entire community for a special Centennial rendition of its popular annual Memorial Day Concert on the Lawn. Master of Ceremonies NPS Director of Marketing and Community Relations Alan Richmond kicked off the outdoor festivities with the Monterey Bay Symphony on the theme "NPS: Honoring Heroes and Traditions."

"Thank you all for being part of the kick-off of our Centennial Year of the Naval Postgradu-

## Celebrating a Culture of Advanced Computing for Academia

The Naval Postgraduate School's Information Technology and Communication Services (ITACS) celebrated more than half a century of academic computing with historical presentations, an open house and ribbon cutting for its new information technology archives and photo gallery as part of Centennial Kick-Off weekend, May 22.

"Why has the Naval Postgraduate School been such a pioneer and leader in information technology?" President Daniel Oliver asked the audience in Ingersoll Hall auditorium during his welcoming remarks. "It's because IT is not just a support function here. It's a mission and a national security imperative to keep our computing systems on the cutting edge. Congratulations to [Vice President for Information Resources] Dr. [Christine] Cermak and all of your team. I'm so proud of all of you and your accomplishments on this wonderful occasion of NPS' Centennial."

"What an inspirational day this 100th anniversary celebration of the Naval Postgraduate School is," Cermak said in opening her talk reviewing the School's challenges and partnerships reflected in the newly unveiled NPS Centennial Timeline. "ITACS takes the technological challenges proposed, invented and developed by faculty and students and makes the technologies more reliable, more user-friendly, more secure, scalable to enterprise-wide use, more accessible, and adaptable to emerging conditions. ITACS partners with our faculty and students so we're not just reacting to change, but are part of the discovery process."

As part of the celebration, three industry leaders gave presentations along the theme "Technology as Mission Critical" – Casey Palowitch of SUN Microsystems, Cmdr. Don Mitchell (Ret.) of Schneider Electric, and Victor Jacobsen of Xerox Corporation. "History is the story of military victory through superior information, so information technology is a strategic priority in both war and peace," Palowitch said during his presentation.

Perhaps the highlight of the event was a retrospective on the evolution of NPS information technology by its founder and leader of over three decades, Professor Emeritus Douglas Williams.



*Two generations of NPS computing pioneers meet in the new High Performance Computing (HPC) Center. Professor Emeritus Doug Williams (left), NPS director for computing from 1961-1994, founded the W.R. Church Computer Center where he led the continual installation of the latest computing technology and software updates. His current peer, HPC Manager Jeff Haferman (right), takes Williams on a tour of the newly installed facility following the ITACS' ribbon cutting ceremony.*

"It's a wonderful experience to be back at NPS after 15 years," said Williams. "When I came here from the University of Edinburgh [Scotland] in 1953, all the students had slide rules and no one used [computing] machines. Soon, NPS was offering two of the first computer science programs in the world. In just two hours, we were able to teach them FORTRAN and, once they had access to the mainframe, were able to solve a whole quarter's problems in only three days. That got the faculty's attention."

"The need to integrate the computer into the educational system is paramount," Williams stressed. "Because of the importance of NPS to the future of the Navy, my goal throughout was to keep NPS at the forefront of academic computing and to make it freely available to all faculty and students in support of research and teaching."

ate School,” President Oliver told the crowd of thousands on a colorful sea of picnic blankets and beach chairs on the lawn in front of Herrmann Hall. “I am proud to be the president of this special institution at this very special moment in its history. Today we open our doors to our friends and neighbors, and invite you all to discover us.”

Congressional District 17 Representative Sam Farr read from John Steinbeck’s “East of

Eden” as the orchestra played a piece by the same name and guests perused information tables manned by local non-profit organizations. Children gleefully participated in a host of special kids’ events, the schools and research institutes held informative open houses, and Glasgow Hall and the Dudley Knox Library both held rededication ceremonies.

But it was Oliver’s words at the Gala that

perhaps serve as a fitting and all encompassing capstone to the historic weekend.

“These extraordinary celebrations marking the 100th anniversary of the Naval Postgraduate School signal the beginning of a year-long tribute to the legacy that has been created by this wonderful institution over a full century of its life. We honor NPS for the magnificent university it has become and the even greater university it will be 100 years from now.”

## General Michael Hagee Inducted into NPS Hall of Fame

Former Marine Corps Commandant Gen. Michael Hagee, a 1969 graduate of the Naval Postgraduate School in Electrical Engineering, was inducted into the NPS Hall of Fame at the Centennial Gala dinner ball, May 23.

NPS President Daniel Oliver kicked off the crown jewel of the four-day Centennial celebrations in the Barbara McNitt Ballroom by bestowing the award upon Hagee, only the tenth individual to be accorded the university’s highest honor.

“NPS has educated more than 60,000 alumni,” Oliver said in opening the induction ceremony. “They are leaders, they are Secretaries and chiefs of the military services, they are business and political leaders,

and they are all over the globe and beyond: our alumni have been Space Shuttle pilots and have walked on the moon. They invent new systems that change the face of warfare, and they create new policies and new technologies. In short, our alumni change the world. But of all those 60,000, only nine are in our Hall of Fame. And we are here tonight to make that ten.”

“General Hagee was and is a tireless advocate for military higher education,” Oliver told the guests at the elegant black tie event. “It’s something he respects and strongly believes in, has pursued in his own career, and has always encouraged in his subordinates.

“As Major General Mel Spiese, who is on our NPS Board of Advisors, said so well, ‘General Hagee is a model of advanced education in the armed forces and the value it brings to the service member and the service,’” Oliver stressed.

Hagee then took the microphone to thank Oliver and recall his time at NPS. “I remember walking to the Computer Science Department with my computer cards and a slide rule clipped to my belt,” he recalled.

“Today, technology and world events change so fast that we have to educate students for missions that don’t yet exist, to solve problems we don’t yet know, to respond to enemies that can adapt to our plans in seven to ten days. So innovation is more important than ever, and you can’t innovate without a good advanced educational foundation. And I cannot think of a better and more unique school for teaching innovative thinking than the Naval Postgraduate School. Nowhere is there a more dedicated faculty or such an unbelievably mature student body so totally dedicated to our national security.

“There is no higher honor than to become a member of the NPS Hall of Fame,” Hagee concluded. “I wish the Naval Postgraduate School a Happy 100th Birthday. Semper Paratus!”

As the Marine Corps’ 33rd Commandant, he pioneered the concept of seabasing, which vastly increased the responsiveness of Marines during military operations, and led the development of the strategic guidance document Marine Corps Strategy 21.

A plaque in Hagee’s honor has been added to the nine others that already adorn the Hall of Fame display in the elegant Herrmann Hall lobby.



*NPS President Daniel T. Oliver (right) congratulates former Marine Corps Commandant and 1969 NPS graduate General Michael Hagee on his selection as the university's 10th Hall of Fame member.*

# Mercury 7 Astronaut, Alumnus Scott Carpenter Shares Insights with Past, Future Space Travelers

By Barbara Honegger

Naval Postgraduate School alumnus retired Navy Cmdr. M. Scott Carpenter – the second American to orbit the Earth and the world’s first astronaut/aquonaut – celebrated the 47th anniversary of his Aurora 7 space flight and answered questions from aspiring students and fellow former astronauts now on the NPS faculty in a special telephone interview at the School, May 29.

Carpenter, now 83, is one of more than 30 astronaut graduates who have been invited to an Astronaut Symposium this August as part of the Naval Postgraduate School’s Centennial celebration. The NASA pioneer was one of the original “Mercury Seven” astronauts, the back-up pilot for John Glenn’s first U.S. manned orbital flight in 1962, and piloted his own Earth-circling spacecraft in May of that year.

Carpenter recalled NASA’s paradigm shift – when the space agency changed from training test pilots to do science experiments to training scientists to become astronauts – with President Daniel Oliver, former astronaut faculty members National Reconnaissance Office Chair Dan Bursch and Space Systems Prof. Jim Newman, Space Systems Academic Group Chairman Prof. Rudy Panholzer, and Space Systems students Air Force Capt. Christina Hicks and Lt. Matthew Crook.

“All of the early space program flights were experimental flight tests focused on learning about the spacecraft,” he said. “After our Mercury and the Gemini programs, NASA became more focused on the environment of outer space itself and the new science to be done rather than on the vehicles – on what was there versus what got us there. And the best way to get trained scientists in orbit was to take trained scientists and put them in orbit, versus taking trained test pilots and training them in science. That was a fun-

damental shift.”

Like the other “Mercury Seven,” Carpenter ran numerous scientific experiments on board a single-man space capsule as stepping stones to the later lunar missions. His Aurora 7 experiments included attempted observations of high-candle-power flares on earth and deploying a tethered balloon to measure drag resistance of the highly thinned atmosphere and identify the colors most visible in space.

Bursch and Newman, whose NASA missions were mainly on the Space Shuttle and International Space Station, pointed out other major differences between their experiences and Carpenter’s.

“You had to do everything yourself, in a single-seat spacecraft, versus our having a lot of people to do things for us, and we had the advantage of long flights, versus your having only three orbits,” Bursch said.

Newman noted that the first free-flying NPS satellite, designed and built by over 50 thesis students, called PANSAT, was released into orbit from the celebrated return flight into space of Senator John Glenn, for whose historic original earth-orbiting mission Carpenter had been the backup pilot.

Hicks, who graduates in September and is doing her master’s thesis on NPS’ modular mini-satellite CubeSat, asked Carpenter what advice he had for officer students like herself who want to become astronauts.

“The most important preparation is to stay in school as long as you can and work as hard as you can,” he said. “Follow your own mind and train yourself in the science that turns you on, as space flight serves all scientific disciplines. Design an instrument or experiment that takes advantage of the hard vacuum and zero gravity, name yourself as principal investigator and propose it to NASA – and you’re a ‘shoo-in,’” Carpenter quipped.

As for NASA’s current vision of establishing a lunar base as a platform for Mars missions, the pioneer astronaut said the jury’s out.

“We don’t yet know for sure that a lunar landing is a prerequisite to a successful Mars flight,” he said. “Maybe – but it may be more advantageous to go directly [from Earth] to Mars.”

In addition to the heights of space, which President Kennedy called “The Other Ocean,” Carpenter also explored the depths of the water planet we call home. On



*The original Mercury Seven astronauts were announced on April 9, 1959, only six months after the National Aeronautics and Space Administration was formally established. Front row, left to right, Walter M. Schirra, Jr., Donald K. Slayton, John H. Glenn, Jr. and NPS graduate M. Scott Carpenter; back row, Alan B. Shepard, Jr. Virgil I. ‘Gus’ Grissom and L. Gordon Cooper. Photo courtesy of NASA.*



**Astronaut M. Scott Carpenter, one of the original seven astronauts for Mercury Project, stands at the control center in 1959. Boosted by the Mercury-Atlas vehicle, shown inset, the MA-7 mission made the second manned orbital flight ever by the United States, and carried Astronaut Carpenter aboard the Aurora 7 spacecraft to orbit the Earth three times. Photos courtesy of NASA.**

leave from NASA, he spent a month living and working on the deep sea floor as an Aquanaut in the Navy's SEALAB II Program, Man-in-the-Sea Project in 1965, for which he received the Legion of Merit Award.

"SEALAB work was mule-hard – bitter cold and dark, long and arduous – not brief and glorious like space flight, and the divers put their lives on the line, just like astronauts," Carpenter recalled. "But it was an extremely rewarding experience and I was proud and happy to be part of that group because they were so unheralded. For me it represented a lost opportunity for a lunar flight and had ample rewards for what it replaced."

Upon returning to NASA, Carpenter served as Executive Assistant to the Director of the Manned Spaceflight Center and was a major participant in designing the Apollo Lunar Landing Module and training crews for underwater extravehicular activities.

Carpenter shared memories of his time at the Naval Postgraduate School, where he grad-

uated from the Naval General Line School in 1959. "Academia is a great place to be, which is what made my time at the Line School among the most pleasant memories I have of naval service and one that I will always treasure," he recalled. "It's wonderful that NPS has such a strong space program, for both engineers and operational students, and that the magic of

**"It's wonderful that NPS has such a strong space program, for both engineers and operational students, and that the magic of space flight has caught on here."**

*M. Scott Carpenter  
Mercury 7 Astronaut  
1959 NPS General Line School Graduate*

space flight has caught on here."

"It was inspiring and an honor to speak with someone who really paved the way for me to become an astronaut," Bursch said afterwards.

After retiring from a 25-year Navy career in 1969, Carpenter founded a venture capital firm specializing in programs that enhance the utilization of the oceans' resources and improve the health of the planet, working closely with world renowned oceanographer Jacques Cousteau. He continues to apply his extensive knowledge

of aerospace and ocean engineering as a consultant to industry and the private sector, and lectures worldwide on the history, future and importance of space and ocean technology for the advance of humanity.

The son of a research chemist from Boulder, Colo., Carpenter received a B.S. degree in Aeronautical Engineering from the University of Colorado in 1949 and has since been awarded seven honorary degrees.

He was designated a Naval Aviator in 1951 and served as a test pilot for every type of naval aircraft. In addition to graduating from the Naval General Line School in Monterey, he completed the Navy's Air Intelligence School and was assigned to the aircraft carrier USS Hornet, which later retrieved the Apollo 11 astronauts upon returning from the Moon.

Carpenter's memoirs, "For Spacious Skies," co-authored with his daughter Kristen Stover, was published in 2003. He and the other surviving "Mercury Seven" astronauts still get together through the Mercury 7 Foundation, which funds scholarships in space education.

# One of Our Own Rallies Spring Grads with the “Power of Education”

By Barbara Honegger

Institutions of higher learning usually have to reach beyond their walls for dignitaries to speak at graduation ceremonies. But in a rare moment for any university, the Naval Postgraduate School tapped a true in-house dignitary, Professor of Public Policy and former Dean of the Graduate School of Business and Public Policy Douglas Brook, to give the keynote address at spring commencement exercises, June 19.



Before the graduates crossed the stage, President Daniel Oliver proudly introduced Brook, who recently returned from a tour as a high-level presidential appointee at the Pentagon, as “one of our own.” The former Naval Supply officer, who is also Director of the NPS Center for Defense Management Research, served as Assistant Secretary of the Navy (Financial Management and Comptroller) and then Acting Under Secretary of Defense (Comptroller)/Chief Financial Officer in the final 13 months of the second Bush administration. From 1990 to 1992, Brook was Assistant Secretary of the Army (Financial Management) as well as Acting Director of the U.S. Office of Personnel Management in 1992.

“Doug Brook is a role model for us all,” Oliver said. “He has served his country as an accomplished career reserve military officer [30 years in the Naval Reserves, retiring at the rank of captain]; has been successful in the private sector [Vice President for Government Affairs with LTV Corporation]; is a distinguished educator and academic; and has served his country on a number of occasions in very high-level positions of responsibility at the request of somewhere between two and four presidents, depending on how you want to count them. We’re privileged to have him back with us now as a full-time member of our faculty.”

Upon taking the podium Brook returned the compliment, noting that “If

*NPS alumnus retired Navy Cmdr. David Place (M.A., National Security Affairs, 1982) left, now the School’s research associate in support of Third Fleet, stands proudly with his son, Lt. Cmdr. Scott Place, who received a master’s degree in Joint C4I at spring graduation ceremonies, June 19. The recent graduate is a third generation NPS alumnus, his grandfather, William Morris Place, is also an NPS grad (B.S., Aviation Ordnance Engineering, 1955).*

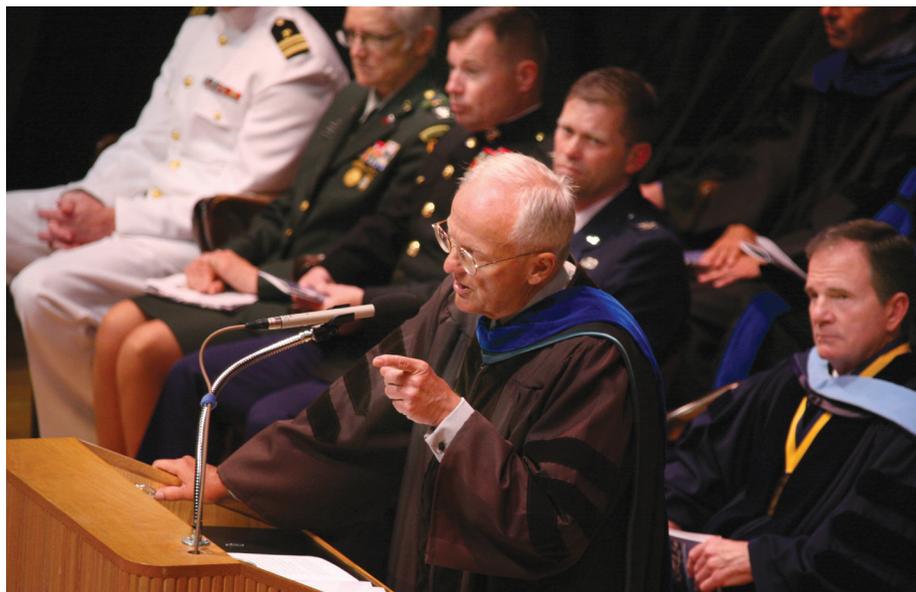
ever this institution had the right leader at the right time, it does now.”

Brook then rallied the 206 graduates with a heartfelt, experienced-based tribute to “the transformational power of education.”

“Education has the power to change people’s lives,” Brook stressed. “It certainly has changed my life more than once, and I hope it has had that power for you as well. As you complete your graduate work here at NPS, it is our hope and expectation that you are, and should be, changed in some way for the better – professionally, to become better equipped with new knowledge to take on additional responsibilities as you progress in your careers.

“As you do, the one thing that’s certain is that the future is changing and uncertain and that an educated military is essential to our future national security,” Brook said. “And because we’re in the midst of this transformation, we can’t see it all, or see it clearly. So what, then, is our – is your – responsibility? It is to create our own futures – to do nothing less than lead us into and through this time of historic change. And from my recent experience, I can tell you that our leaders are redefining the very meaning of the terms ‘national defense’ and ‘national security’ while exploring the limits of both power and the power of limits – asking not just what can we do, but what should we do?

“We now look to you, as our newest alumni, to perpetuate and enhance the reputation of the Naval Postgraduate School by your performance, your intellect and your service,” Brook continued. “You are now permanent members of a community that consists of astronauts, military leaders including the present Chair-



**Naval Postgraduate School Professor of Public Policy Douglas Brook, fresh off a Pentagon tour as Assistant Secretary of the Navy (Financial Management and Comptroller) and Acting Under Secretary of Defense (Comptroller)/Chief Financial Officer, delivers a stirring keynote address at spring graduation ceremonies in King Hall, June 19. Brook is also Director of the NPS Center for Defense Management Research.**

man of the Joint Chiefs of Staff, captains of industry, and even a king [King Abdullah of Jordan], all of whom credit their education at NPS and represent this institution in their accomplishments. It’s reasonable to think that there are such future senior leaders here in this auditorium today.”

A highlight of the commencement was the formal announcement of five new Distinguished Professors: Dorothy Denning of Defense Analysis, Nancy Haegel of Physics, Robert Looney of National Security Affairs, Michael Morgan of Electrical and Computer Engineering and Kevin Wood of Operations Research. Provost and Executive Vice President Leonard Ferrari presented the five with Distinguished Professor medallions and lauded their

research and teaching accomplishments (see story on page 6).

The graduates and their family members joined faculty and staff in the Barbara McNitt Ballroom for a festive reception following the ceremony, where President Oliver, Provost Ferrari and Marine Corps Maj. Eric Rose, recipient of the Monterey Council of the Navy League Award for Highest Academic Achievement, shared the honors of cutting the cake with the School’s ceremonial sword.

Two especially happy graduates were German Army Lt. Col. Marc Walther and Royal Australian Navy Lt. Cmdr. Lincoln Trainor, who both met the “love of their lives” while at NPS. Walther met his fiancé, Janet Else of Santa Cruz, now a wildlife (continued on next page)

## **Distinguished Prof, Marine Capt. Headline Spring Quarter Award Winners**

*By MC2 Kellie Arakawa*

Naval Postgraduate School (NPS) students, faculty and staff were recognized for their outstanding research and academic excellence at the Spring 2009 Awards Ceremony June 9.

Officiated by NPS Dean of Students Capt. Janice Wynn, the ceremony recognized 35 graduating students, nine faculty members and one military staff member.

Also, in a special presentation, four students from the NPS Marksmanship Team were honored for their team’s first-place performance at the Fleet Forces Command (West) Rifle and Pistol Matches. Along with

their coach, retired Navy Capt. Gordon Nakagawa, student members Navy Lt. Cmdr. Tariq Rashid, Marine Corps Capt. Daniel Hinkson, Navy Lt. Norman Overfield and Air Force Capt. Douglas Kisby were recognized for the team’s first-place pistol trophy, which they received during a joint-service competition at Camp Pendleton, Calif., in May.

For his outstanding academic accomplishments, Marine Corps Capt. Eric Rose received the Monterey Council Navy League Award for Highest Academic Achievement. The award is presented quarterly to a graduating Navy, Ma- (continued on next page)

biologist in Monterey, at a birthday party for another student, and Trainor recently married his beautiful new bride Dana, also of Monterey.

“The value of NPS is far more than a degree,” Trainor said. “It’s about forging long-term relationships and friendships. While here, I met a true lifetime friend in ‘Oz’ [Turkish Navy Lt. j.g. Omur Ozdemir], and was doubly blessed to find my life partner and now my beautiful wife.”

Trainor’s parents, “Bo” and Anne, came all the way from Melbourne to share their son’s day. “I’m a very proud father,” said the senior Trainor, himself a nine-year veteran of the Australian Royal Navy who served in Vietnam.

“NPS is a great learning experience of a very high-quality level,” said Walther, “where one of the most important things you get is insight

on other countries’ points of view. Being here has really extended my knowledge and widened my horizons.”

And a unique occurrence, a third generation NPS alumnus graduated this quarter – Lt. Cmdr. Scott Place earned a master’s degree in Joint C4I. His father, retired Navy Cmdr. David Place (M.A., National Security Affairs, 1982), now the School’s research associate in support of Third Fleet, and grandfather, William Morris Place (B.S., Aviation Ordnance Engineering, 1955), are also NPS alumni.

“It’s a great feeling knowing you’re the third generation that’s gone through this place, with all the family history here,” Scott said.

“It’s amazing to be back,” agreed his father. “This is the greatest thing ever.”

**“Education has the power to change people’s lives, it certainly has changed my life more than once, and I hope it has had that power for you as well. As you complete your graduate work here at NPS, it is our hope and expectation that you are, and should be, changed in some way for the better.”**

*Professor Douglas Brook  
Former Assistant Secretary of the Navy*

rine Corps, Coast Guard or National Oceanic and Atmospheric Administration (NOAA) student who has maintained an outstanding academic record, exhibited not only by academic achievement and thesis research, but motivation and community involvement.

Rose, a physics student, said he was humbled by the recognition and credited his academic success to his family’s support. Rose said his experience as an NPS student has been professionally rewarding and added, “It’s a lot of work, but at the end you can really look back on the two years here and know you did something that you can apply for the betterment of your service, Department of Defense and country.”

Following graduation, Rose will report to the U.S. Naval Academy to serve as an instructor in the Weapons and Systems Engineering Department.

Rose’s thesis advisor, Physics Prof. Nancy Haegel, was also recognized at the ceremony as the recipient of the Rear Adm. John Jay Schieffelin Award for Teaching Excellence. It is the most prestigious teaching award at NPS, and the recipient is determined by students and alumni who are polled annually by an award committee.

“The Schieffelin Award is a great honor here in part because it’s campus-wide, but also in large part because it comes initially from the students,” said Haegel, who has been teaching at NPS since 2003. “That makes it especially meaningful, and I’m very proud to be a part of that tradition.”

As an educator, Haegel said the drive, experience and maturity of the students at NPS is incredibly motivating. “When you look at what all of our students – both U.S. and international – are doing for our country and their countries, I do believe very strongly that we owe them the best education we can give them,” she explained. “So I do make every attempt to do that the best I can.”

In addition to receiving the Schieffelin Award, Haegel has been named a Distinguished

Professor for her scholarly accomplishments and outstanding contributions to the school. She and four other highly-accomplished NPS professors were formally recognized at the Spring 2009 Graduation Ceremony on June 19.

For the full list of awardees visit <http://www.nps.edu/About/News/Distinguished-Prof-Marine-Capt.-Headline-Spring-Quarter-Award-Winners.html>.



**Marine Corps Capt. Eric Rose and Physics Prof. Nancy Haegel pose for a photo outside King Hall following the Spring 2009 Quarterly Awards Ceremony June 9. Rose was awarded the Monterey Council Navy League Award for Highest Academic Achievement, and Haegel received the Rear Adm. John Jay Schieffelin Award for Excellence in Teaching.**

# Senate Confirms Professor Paul Stockton as Assistant Secretary of Defense

By Heather Isvoran

## Dr. Paul Noble Stockton, a professor and former Associate Provost at the Naval Postgraduate School (NPS), was confirmed on May 18 by the U.S. Senate as the Assistant Secretary of Defense for Homeland Defense and America's Security Affairs.

Stockton has achieved a long and distinguished career with NPS, which dates back to 1990. Prior to his appointment as Associate Provost, he was the founding Dean of the School of International Graduate Studies and was instrumental in developing two nationally recognized Centers – the Center for Civil-Military Relations (CCMR) and the Center for Homeland Defense and Security (CHDS). He is well known for his many contributions and leadership in helping to meet the educational needs of U.S. and allied officers and government officials. NPS President Daniel Oliver said, “Paul has been a big part of developing significant programs of national interest at NPS. The Department of Defense and the nation will undoubtedly benefit from his experience and leadership in this new role.”

Professor Stockton is widely known as a visionary who possesses an uncanny ability to anticipate the needs of government officials, creating relevant and innovative programs before requirements are fully articulated. In the mid-1990s, Dr. Stockton recognized the need to assist the democracies of Central Europe as they emerged from the shadow of Soviet control. Stockton created CCMR to help officers and government officials in these new

democracies understand basic elements of governance in a democracy, aspects of the policy-making process that are often taken for granted by Americans. CCMR has since expanded considerably, continuing to help transfer best practices in democratic reform, civil-military relations, counter-terrorism and stability and reconstruction operations to America's friends and allies around the world.

Stockton responded quickly to the tragedy of September 11, 2001 by advancing the notion that graduate level education could bridge the legal, bureaucratic and cultural divide that often separates local, state, tribal and federal officials. At the time, the U.S. Department of Homeland Security did not exist and little educational material was available on homeland security. He actively pursued a partnership between the U.S. Department of Justice (DOJ) and the Naval Postgraduate School.

Darrell Darnell, current Director for the Homeland Security and Emergency Management Agency for the District of Columbia was at DOJ at the time and remembers, “The challenge was that our idea was so unique [no other institution was focusing solely on homeland security education] that not many people thought it was worth doing and the emphasis at the time, coming on the heels of 9/11, was on equipping first responders and hardening potential targets. Not much thought was being given to the long-term strategic issues surrounding homeland security with respect to state and local officials that CHDS facilitates.”

When asked what made him agree to fund a program that had never been attempted, Andy Mitchell, former Director of DOJ's Office for Domestic Preparedness said, “Our hope was that the Center would create opportunities for higher education to homeland security decision-makers. We wanted an educational forum to discuss and debate strategic solutions for the new critical issues and threats facing our country.” He added that Stockton was the one who made it happen through his commitment

and ability to bring the necessary people to the project.

Jim Morhard, then Staff Director for the Commerce, Justice and State Appropriation Committees said, “At the time, there were so many unfunded requirements for training. The vision was to create a cadre of professionals who were educated with standards and capabilities that did not yet exist.” Stockton's relentless pursuit to achieve this goal was one of the main reasons officials committed resources to the idea.

By 2003, Stockton's initial vision took shape in the form of a nationally-recognized center devoted to developing new strategies and policies, bolstering domestic security with available



*Dr. Paul Stockton was confirmed by the Senate in mid-May to serve as the Assistant Secretary of Defense for Homeland Defense and America's Security Affairs. Stockton played an instrumental role in the creation of two nationally-recognized centers at the Naval Postgraduate School, the Center for Civil-Military Relations and the Center for Homeland Defense and Security.*

resources. Eventually, the Center for Homeland Defense and Security produced innovative graduate degree programs and executive seminars that blended material drawn from a variety of subjects and disciplines – intra-governmental relations, network vulnerability, intelligence, and law enforcement, counter-terrorism – into a coherent field of study.

Scores of mid-to senior-level officials representing law enforcement, fire service, emergency management, public health, military, federal government and others have enrolled in the CHDS program, producing cutting edge research as they undertake their graduate studies. The course content and research produced by the faculty and students at CHDS is made available to educational partners across the United States to enrich and support other efforts to meet the nation's needs for homeland security professionals.

Stockton's attention now must turn to serving his country at the Department of Defense.

And to those state, local and federal officials who know him, there seems a collective confidence he will bring his same tenacious visionary attitude to his new position.

"The military's role in U.S. domestic operations is to provide support to civilian entities under the direction and authority of competent (i.e., constitutionally and/or statutorily prescribed) civilian authorities. Paul understands the constitutional role of the military and therefore brings together civilian and military leaders at every opportunity to foster and encourage a closer, more sophisticated understanding of their respective roles, capabilities, limitations and responsibilities" says Tim Lowenberg, The

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Adjutant General, Washington Military Department and Homeland Security Advisor to Governor Chris Gregoire.

Prior to his confirmation, Dr. Stockton was also a senior research scholar at Stanford University's Center for International Security and Cooperation (CISAC).

## **Law enforcement leaders from the Northern District of California gather at the Naval Postgraduate School to attend the Local-State-Federal Senior Law Enforcement Executives Symposium**

Organized by NPS, the Center for Homeland Defense and Security (CHDS) and the U.S. Attorney's Office for the Northern District of California, the event enabled senior law enforcement personnel from various local and federal agencies to address mutual challenges and enhance interagency cooperation.

Panel discussions featured subject matter experts from a number of agencies, including the Federal Bureau of Investigation, the California Attorney General's Office, Northern

California police departments, the Drug Enforcement Administration, the United States Attorney's Office and Department of Homeland Security, who addressed local and national concerns surrounding guns and gangs, cyber and financial crimes, terrorism, human trafficking, and drugs and border security. Speakers and participants also discussed effective programs, tools and tactics to address these issues.

Rep. Sam Farr (D-Calif.) said uniting local, state and national law enforcement leaders to share knowledge and practices is essential to the safety of local communities and the

nation. "The first step in Homeland Security is hometown security, and I'm excited that CHDS is leading the way," he stated. "I look forward to continuing my work with CHDS to maintain its homeland security graduate program as the benchmark for schools worldwide."

When Paul Stockton established CHDS in 2002, these kinds of efforts were part of his vision, an educational forum that brings together various stakeholders to impact homeland security at the local and national levels.

CHDS provides a fully-accredited master's degree program in Homeland Security, as well as short-courses and seminars for senior and executive Homeland Security leaders. The center's mission is to "strengthen the national security of the United States by providing graduate-level educational programs and services that meet the immediate and long-term leadership needs of organizations responsible for Homeland Defense and Security.



# AIR & SPACE WEEK

AUGUST 4-9, 2009

The Naval Postgraduate School has proudly educated more Astronauts than any other graduate-level institution in the world, now standing at 37 in total, and we'll be honoring them all week as part of Air & Space Week 2009.



## Scheduled events include:

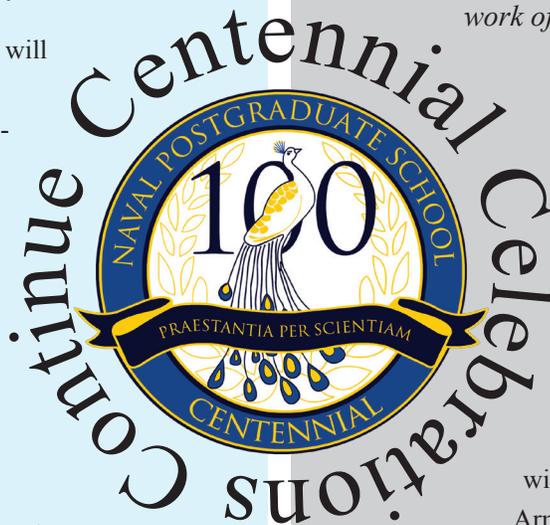
- “Wear Your Flight Suit to Work” Day
- Astronaut Symposium – Astronauts will offer interactive discussions on a variety of space topics, share experiences and space travels and more. This event is open to the entire NPS community.
- “Breakfast with the Astronauts: Reach for the Stars” – An all-ages event where astronauts will tell exciting tales of traveling in space, sign autographs and much more.
- NPS Day at the California International Airshow

For more information, contact Kari Miglaw, Director of Alumni Relations/Centennial Planning at (831) 656-2077 or [klmiglaw@nps.edu](mailto:klmiglaw@nps.edu).

## WASHINGTON, D.C. CENTENNIAL SHOWCASE

SEPTEMBER 9-10, 2009

As part of the fall Board of Advisors meeting, the Naval Postgraduate School will be showcasing the extraordinary work of students and faculty across campus at select events in our nation's Capitol.



On Wednesday, September 9, NPS will showcase several current research projects at the Office of Naval Research (ONR), presenting a unique opportunity for ONR leadership and staff to interact directly with NPS students and faculty.

On Thursday, September 10, Chief of Naval Operations Adm. Gary Roughead will host an NPS Centennial Reception at the Army Navy Country Club in Arlington, Va. In attendance will be senior leadership throughout the Pentagon, Intelligence, Homeland Security and the White House as well as several NPS students, faculty and administration.

For more information, contact Dr. Fran Horvath, Director of Institutional Planning and Communications at (831) 656-1068 or [rfhorvat@nps.edu](mailto:rfhorvat@nps.edu).





## Welcome to the Hall

Thousands of graduates have received an education from the Naval Postgraduate School, and countless more have impacted this university through momentous contributions too great to list. But of this extraordinary group of officers, officials and leaders, there are only nine that have been inducted into the NPS Hall of Fame. Now there are 10.

As part of the NPS Centennial Kick-Off and Reunion Weekend, General Michael W. Hagee, 33rd Commandant of the U.S. Marine Corps and a 1969 Electrical Engineering graduate, was inducted as the tenth member of this illustrious group of influential leaders.

As head of the Marine Corps, Hagee was a tireless supporter of education for the military service. Major General Melvin Spiese, Commanding General of the Marine Corps Training and Education Command, called Hagee “a model of advanced education in the armed forces, and the value it brings to the service member and the service.”

And at the Centennial Gala where he was honored, Hagee took the opportunity to reiterate his continuing support. “Today, technology and world events change so fast that we have to educate students for missions that don’t yet exist, to solve problems we don’t yet know, to respond to enemies that can adapt to our plans in seven to 10 days,” he noted during the event. “Innovation is more important than ever, and you can’t innovate without a good advanced educational foundation. And I cannot think of a better and more unique school for teaching innovative thinking than the Naval Postgraduate School ... There is no higher honor than to become a member of the NPS Hall of Fame.”

Semper Fi, General!