



# From The

# Bridge

A NEWSLETTER FROM THE UNITED STATES NAVAL ACADEMY FOUNDATION

2011 ISSUE 2

## Cyber Security at the Naval Academy

This academic year, for the first time, all plebes are taking an introductory cyber security course, the most visible early move of the Naval Academy's Center for Cyber Security Studies (CCSS), created on paper in December 2009.

"About three years ago we determined the Academy was not where we should be with respect to teaching future naval leaders fundamentals of cyber security, cyber awareness and cyber warfare," said Captain Robert Brennan '82, USN, director of the Mathematics and Science Division. "We realized that our best response was to establish a two-course sequence, a freshman-year

introductory course and then a junior-year more technically advanced course on cyber security. In addition, our vision was to create a center of excellence here at the Naval Academy that would ensure the Academy was serving the Navy's needs for cyber warfare."

New to the Academy is the first Center for Cyber Security Studies Director, Captain Steven Simon, who came on board this summer and is tasked with developing a strategic plan for the center and its coursework. Captain Simon, who has a doctorate in information systems and international business, is the former commander of the Naval Communications Material Security System at Andrews Air Force Base.

The second cyber security class will be taught beginning in the 2013-14 academic year. Later, a CCSS building may be erected between Rickover Hall and Nimitz Library.

Helping implement the introductory course is the Center's distinguished visiting professor David C. Gompert. Mr. Gompert, the former acting Director of National Intelligence, is "a superstar in the world of intelligence and cyber security," according to Captain Rusty Yeiser '74, USN (Ret.), director of development operations at the Naval Academy Foundation.

"One of the principal costs initially is for new faculty, because the

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## The Fifth Domain

An article in the 1 July 2010 issue of the *Economist* provides a unique description of cyberspace as, "the fifth domain of warfare, after land, sea, air and space." This description is appropriate as we witness the transformation of cyberspace from simply being the infrastructure used to support our forces in battle to becoming the actual battlefield itself. Being able to conduct operations in cyberspace—both offensive and defensive—is becoming increasingly important, and it's clear that we must equip our graduates with the tools and education to be effective combat leaders in this new warfare domain. The Naval Academy's Center for Cyber Security Studies (CCSS) will provide curricular and professional support across the Naval Academy, and advance the quality of education of Naval Academy graduates in all areas of cyber warfare.

The Naval Academy Foundation can support the Center for Cyber Security Studies by cultivating private and corporate gifts that fund, among other initiatives: computer forensic labs, wireless network security, hardware and software support, a guest speaker series, professional development for Academy cyber security faculty and midshipman internships at the National Security Agency and National Defense University.

The partnership between the Naval Academy and the Naval Academy Foundation has always been critically important to achieving a margin of excellence for our midshipmen. As we prepare our graduates to lead in the "fifth domain" of modern warfare, the Foundation will remain an important partner in achieving the highest quality education and leadership experience we can deliver. ■

Captain Pete Nardi '84, USN  
*Director of the U.S. Naval Academy  
Division of Engineering and Weapons*



Bret Hartman, chief technology officer of RSA, addressed the pressing need for threat awareness and capable cyber security measures at President's Circle Weekend (see coverage of the weekend on page 4). Photo courtesy of Barbara Hendricks



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## Project-Based Learning Satellite Honors and Teaches



Dr. Bradford W. Parkinson '57 meets with the Naval Academy team working on ParkinsonSAT, a midshipmen-built satellite named in his honor.

This spring, Dr. Bradford W. Parkinson '57 was honored with the 2011 U.S. Naval Academy Alumni Association Distinguished Graduate Award for a lifetime of service.

"I owe a great debt to many people, and certainly to be recognized in this way reflects their support," said Parkinson.

While in Annapolis for the Distinguished Graduate Award ceremony and events, he had the opportunity to meet with the Naval Academy team working on ParkinsonSAT, a midshipmen-built satellite named in his honor. In 2005, the Aerospace Corporation, a research and development center in support of national security, civil and commercial space programs, donated \$50,000 to the Naval Academy Foundation for the U.S. Naval Academy Small Satellite Program to recognize Dr. Parkinson. Parkinson served on the board

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### Editor's note

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## Cyber Security at the Naval Academy *continued from page 1*

highest priority initiative of the Center is the creation of the two courses that the entire Brigade of Midshipmen ultimately will be required to take," Yeiser said.

"Significant early support for the Center comes from lead gifts from SAIC and Commander David T. Leighton '46 that may be used by the Academic Dean wherever they are most needed to get this Center up and running."

*"...our vision was to create a center of excellence here at the Naval Academy that would ensure the Academy was serving the Navy's needs for cyber warfare."*

*—Captain Robert Brennan '82, USN*

"Private funding will be a key to the success of the Center, especially in the early stages of the Center's evolution," Yeiser said.

"The federal budget process is cumbersome, and it takes a while to get funding in place, even when the program is very important. Although there is wide consensus in the Department of

Defense and the Navy regarding the criticality of cyber security, it will still be several years before federal funding



Midshipmen participate in the 2011 Inter-Service Academy Cyber Defense Exercise. Sponsored and designed by the National Security Agency (NSA), the exercise involves teams from the U.S. Naval Academy, U.S. Military Academy, U.S. Air Force Academy, U.S. Coast Guard Academy, U.S. Merchant Marine Academy, Naval Postgraduate School and Air Force Institute of Technology. During the exercise, service academies compete to determine which team can most effectively defend their virtual computer network against a simulated malicious attack. Teams must choose how to utilize the resources at their disposal to best defend their virtual network and to keep certain critical services running, while the attackers (the NSA team that has designed the competition) attempt to infiltrate the virtual network and disrupt these services. The competition is designed to give students experience with designing and implementing computer security solutions with limited resources, as well as encourage some friendly competition among the services. Students learn how to work with a team to ensure that their plan will effectively protect their virtual network from attacks, and learn how to react when the defenses do not work as expected. Additionally, students gain experience using the tools that are used every day to defend Department of Defense networks against cyber attacks.

can be applied to this initiative. Private gifts, from individuals and from corporate and foundation sources, will be needed to fill this gap.”

For now, Brennan must make room for new CCSS staff and programs in older existing facilities. “We’re making this work with temporary fixes right now. I moved a few folks around and we converted a mail room into office space for four,” Brennan said.

“Naval Academy leadership has requested a new building to house the Center for Cyber Security Studies, but, optimistically, that’s somewhere

between five and 10 years in the future. That’s the vision. For now and the foreseeable future, we have to do the best we can with what we have,” he said.

“While a new building for the cyber center is uncertain at this point, it’s clearly what we’re pushing toward,” he said. “This is a fast train. In the academic world it would normally take several years to create a course and get all the academicians to say it meets all the needs. We pulled all this together in less than two years—highlighting its importance and it is something of which we’re very proud. ■

## Project-Based Learning

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of the Aerospace Corporation for several years and retired in 2006 as its chairman.

ParkinsonSAT was designed by midshipmen to relay data from environmental buoys back to the U.S. Naval Academy Global Ground Station Network.

“Our mission at the Naval Academy is to teach,” said Bob Bruninga, senior research engineer in the Aerospace Engineering Department. “And the best way that we can do that is to act as mentors to the students to keep them guided on the right path. The small satellite projects are quite dependent on mentors and engineers with good hands-on experience in satellite design.”

As an engineer, inventor and Air Force colonel, Dr. Parkinson is one of those mentors.

“I feel very fortunate that the foundation for my run through life was the Naval Academy,” said Parkinson. “It established a set of values, including integrity, duty and a willingness to be a team player.” ■

## The Legacy of *First Gift*

While the *Leaders to Serve the Nation* Campaign enjoyed broad support by alumni, parents, friends and organizations, donor participation among young alumni was less than seven percent (vs. a 23 percent participation rate for all alumni). With the help of midshipmen leadership, the U.S. Naval Academy Foundation embarked on an effort to afford members of each graduating class the opportunity to make their first charitable gifts to the Academy immediately following graduation.

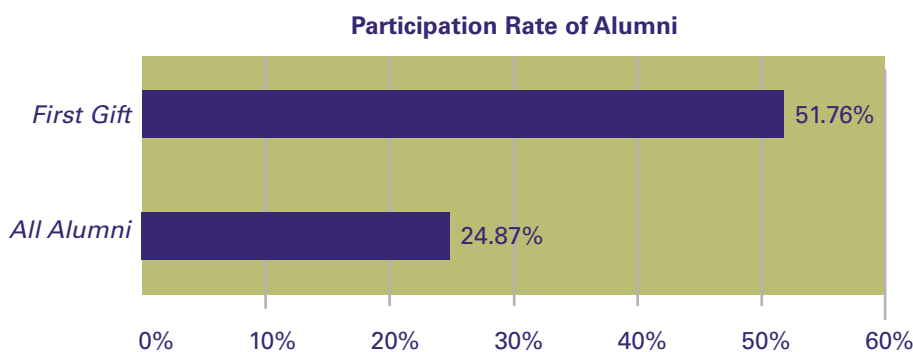
Known as *First Gift*, this program replicates a long standing initiative at West Point that encourages and

facilitates philanthropy via a monthly payroll allotment. The *First Gift* program is a completely class-led initiative and solicitations are made on a peer-to-peer basis. The Foundation facilitates the implementation, educates and assists the class leadership and coordinates the paperwork. The inaugural class, Class of 2008, saw great success with more than 63 percent participation. And each class since has well exceeded the overall average alumni participation. Thank you to our most junior classes for setting the standard for all classes who follow and giving your fellow alumni something to strive for! ■

*“I feel very fortunate that the foundation for my run through life was the Naval Academy.”*

*—Dr. Bradford W. Parkinson '57*

### Participation Rate of Alumni vs. *First Gift*





## President's Circle

### Young Philanthropist

First Lieutenant Kenneth Mateo '09, USMC, believes (and lives) the motto "From everyone to whom much is given, much is expected." At age 24, he is the youngest President's Circle donor, having made charitable contributions to the Academy every year since his graduation.

Lieutenant Mateo contributes through the *First Gift* program, which enables members of graduating classes to make their first charitable gifts to the Academy immediately following graduation. The program started with the Class of 2008, and it replicates a long-standing initiative at West Point that encourages giving through a monthly payroll allotment. Participating alumni designate a portion of their paycheck to be transferred to the Naval Academy Foundation each month for five years. The contribution can be any amount, and participants can end their allotment at any time.

"Through the *First Gift* program, we want to create a culture of philanthropy among the youngest alumni," said Steve Maconi, vice president for development at the Foundation. "The program plants the seed that will hopefully make them lifetime philanthropists."

The Class of 2009, of which Lieutenant Mateo is a member, has the highest giving rate of any class, with more than 70 percent participation. The inaugural class, Class of 2008, boasts a 63 percent participation rate, while the Class of 2010 has achieved a rate of 55 percent. "Ken is a three-year veteran of

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*"From everyone to whom much is given, much is expected."*

## President's Circle

### Red, White and True to USNA



*"Anchors Aweigh" reception during the 2011 President's Circle Weekend. Photo courtesy of Barbara Hendricks*

Every fall, President's Circle donors are recognized for their generous support of the Naval Academy and Brigade of Midshipmen at a special event. The weekend of 29 September through 1 October marked the 17th annual President's Circle Weekend, as 350 donors returned to Annapolis to network with one another; mingle with midshipmen, Academy and Foundation leaders; and, of course, watch Navy and Air Force battle it out on the football field.

The festivities began on Thursday with a luncheon for President's Circle parents of current and graduated midshipmen. Parents shared stories of their sons' and daughters' adventures in the Navy and Marine Corps, until keynote speaker Captain Peter A. Nardi '84, USN, director of the Academy's Division of Engineering and Weapons, took the stage. Captain Nardi presented remarks titled "Robots and Concrete Canoes." While he discussed the engineering curriculum in general, he emphasized the new Center for Cyber Security Studies, Project Based Learning and the Academy's STEM (Science,

Technology, Engineering and Math) programs for midshipmen as well as for middle and high school age children.

That evening, the "Anchors Aweigh" reception was held at the Loews Annapolis Hotel. The atrium was adorned with red, white and blue decorations, and as the guests enjoyed hors d'oeuvres, the "Anchormen," part of the Academy Glee Club, entertained from the hotel balcony with a variety of musical selections.

Alumni Hall was the site for most of Friday's activities. The day began with a continental breakfast and the Annual Meeting. After remarks from Alumni Association and Foundation President and CEO Byron Marchant '78, Naval Academy Superintendent Vice Admiral Mike Miller '74, USN, updated the audience with the "state of the Academy," including the important impact that private gifts have made throughout the curriculum. The morning session concluded with a panel discussion on athletic excellence. Current varsity athletes Midshipman Mary-Elyse Janowski '12 (swimming) and Midshipman Kathy Young '13 (lacrosse) discussed the challenges and

valuable lessons that teamwork, competition and time management have taught them. President's Circle donors were also able to hear Lieutenant John O'Hara '04, USN (lacrosse), Lieutenant Shaunnah Sopko '05, USN (crew) and Major Andy Thompson '96, USMC (football) describe how their experiences as student-athletes helped to prepare them for the leadership challenges they faced as junior officers. A further perspective was offered by Coach Mike Hughes (women's crew) and Coach John Morrison (women's swimming), who shared their observations of how midshipmen balance their academic and military commitments with the demands of varsity athletics.

Guests then joined a select group of midshipmen for lunch. "Previous President's Circle Weekend attendees said getting the chance to interact with midshipmen was one of the highlights of the weekend, so we wanted to make that happen again this year," said Julia Hutchison, associate director of President's Circle. H.B. Smith '83 from Charlotte, NC, agreed: "One of the neat things [about PC Weekend] is that you get to talk to the professors, officers and midshipmen at the Academy and find out what they are doing in the dynamic 21st century."

Following lunch, Bret Hartman, chief technology officer at RSA, gave a presentation on cyber security. Midshipmen in the Class of 2015 are taking the first-ever cyber security course at the Academy with emphasis on threat recognition, operating system basics, computer languages and other technical skills. This course has grown out of the newly established Center for Cyber Security Studies and will be followed by a required second class with greater emphasis on electrical engineering.

Understandably, Bret's presentation generated many questions on the part

of the audience regarding the nature of the threat, the nation's vulnerability and necessity for preparedness. Academic Dean Dr. Andrew Phillips described in detail the steps the Academy is taking to stand up the cyber program, including a robust lecture series and new lab configuration in addition to curriculum development.

After the formal dress parade, the day was highlighted by the Superintendent's Garden Party at Buchanan House. Admiral and Mrs. Miller welcomed guests throughout the evening of camaraderie and sea stories. The weekend's events concluded on a chilly Saturday with the much-anticipated Navy-Air Force football game. As the traditional tailgate party began to wind-down during the third quarter of the game, things were just starting to heat up on the football field. In the fourth quarter, the midshipmen overcame an 18-point deficit to tie the score with a touchdown and two-point conversion with just 19 seconds left in the game. However, after a touchdown to start overtime, Navy's extra point attempt was blocked, and Air Force responded with a touchdown and extra point enroute to a 35-34 victory.

Win or lose on the football field, attendees reminded each other of the true spirit of President's Circle Weekend: "The Naval Academy needs a continuing source of support for the margin of excellence," said Rear Admiral Jerry Smith '61, USN (Ret.). "We all know that the federal budget goes up and down, and we also know that giving [patterns] change... How do we help the Naval Academy maintain that margin of excellence? We should make a commitment to give every year, and if we can make that commitment at the President's Circle level, that's even better." ■

## President's Circle

*Continued from page 4*



the *First Gift* program and the President's Circle," said Maconi. "His is a remarkable show of philanthropy."

Lieutenant Mateo, who says attending the Academy was his "childhood dream," hails from the Boston area, one of four children in the Mateo family. His oldest brother Wesley graduated from Stanford University in 2008 and now lives and works in San Francisco. Younger brother Greg is a first class midshipman at the Academy, set to graduate in May. Greg has also started his commitment to the Naval Academy by joining the Alumni Association as a life member. Sister Meredith is a high school student near Charleston, SC. Parents Laura and Segundo are also President's Circle donors.

Based in Pensacola, FL, Lieutenant Mateo is enrolled in an advanced helicopter pilot training program. He took some time to reflect on his four years at the Academy and why it's important to give back to one's alma mater.

"It's my family's calling—and mine—to donate to programs that are worthwhile." To Lieutenant Mateo, one of those worthwhile programs is the drama club at the Academy, the Masqueraders. A history major, he was also an active member of the club while a student and allocates part of his monthly contribution to the club. "Of all the extracurricular programs that have a tough time at the Academy, drama club is one," he explained. "In the midst of all the engineering and science majors, it's hard to gain an appreciation of the arts." ■

## RMTS

# A Wise Investment— The Houser Family and the Naval Academy



Joanne and Vice Admiral Gerald E. Miller '42, USN (Ret.), with Vice Admiral William D. Houser '42, USN (Ret.), and Jan Houser at the Brigade Sports Complex.

Since entering the Naval Academy at age 16—the second youngest in his class—Admiral William D. Houser '42, USN (Ret.), made the Navy his life.

Named a U.S. Naval Academy Alumni Association Distinguished Graduate in 2003, Admiral Houser had a 35-year Navy career. A naval aviator, he is a veteran of World War II, the Korean War and Vietnam War. A former Deputy Chief of Naval Operations (Air Warfare), Admiral Houser is a staunch supporter of memorializing the Battle of Midway and preserving the Midway Islands.

Admiral Houser commanded fighter squadrons and the aircraft carrier *CONSTELLATION*. He earned a master's degree from George Washington University, and also studied at the U.S. Naval War College, the University of Maryland and Harvard University.

"He was the youngest flag officer in the Navy at the time he became an admiral, and retired as a vice admiral and head of Navy Air," said Jan Evans Houser. In addition, his three son-in-laws were all in the Navy, with one a Naval Academy graduate.

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## Class Giving

# Reunion Gift Funds Columbarium



*Naval Academy Columbarium*

Vice Admiral Frank Donovan '59, USN (Ret.), president of his class, recalls walking through the Naval Academy Columbarium when he was in town for his 50th class reunion. He saw the niche of Commander Francis Hall '44, USN (Ret.), the captain of the very first ship to which Donovan was assigned.

"He was my teacher," said Admiral Donovan. "I said a prayer for him and for my classmates who are [inurned] there. Our bond goes back so many years."

It is this strong bond to fellow midshipmen, past and present, that inspired the Class of 1959 to devote their 50th reunion class gift to the expansion of the Columbarium.

The Columbarium flanks the Naval Academy Cemetery and is the final resting place for hundreds of Naval Academy alumni, many of

whom gave their life in service to their country.

A. Morton Thomas and Associates, Inc., an engineering consulting firm, developed a design for a permanent reception area and for additional niches. The work has been divided into three phases. The first phase—funded by the Class of 1959—was a \$1.6 million Oratory. Construction began in March 2010 and was completed in April 2011.

The Oratory was constructed to replace the temporary tenting that had been used for inurnment ceremonies. The new structure provides a more private, sheltered location and will seat about 68 people, more than twice as many as in the past. Permanent benches have replaced the folding chairs. The number of inurnments each year has grown, from 25 during the first year to more than 120 in 2009.



As of summer 2010, more than half of the 2,448 white marble niches were occupied.

“Back in 2002, we sat down with the Naval Academy Foundation to find out how we could best use private funds for our 50th reunion class gift,” said Gerry Garbacz ’59, chair of the executive committee of the class. “This project had the greatest merit.” More than 400 members of the Class of 1959 have contributed to the project, Garbacz said. “Before the Oratory was put in place, the Columbarium was strictly utilitarian. Now it is an area that has dignity,” Garbacz added. As part of the fundraising effort, several donors have honored deceased classmates by having their memory perpetuated on plaques on the sides of the Oratory pews.

In the spring, members of the Class of 1959 gathered for a dedication ceremony for the Oratory. Garbacz served as Master of Ceremonies, and Donovan spoke as well. For Vice Admiral Donovan, the project is personal.

“Unlike many other colleges and universities, the size of the student

body at the Academy is very small,” said Donovan. “You couple that with the experiences you have there, starting with Plebe Summer, and you’ve developed a real bond with your classmates. And when we graduate, we often go into the same line of work. The limited space in the Cemetery and Columbarium has prevented some from ‘coming home.’” He hopes the project will give others the opportunity to be inurned there and, more symbolically, be another link in the chain that holds centuries of midshipmen together.

That chain is a powerful one, Donovan explained. As a midshipman, he would often admire the stained glass Porter Window in the Naval Academy Chapel. The Class of 1869 donated the Tiffany window as a memorial to Admiral David Dixon Porter, the sixth superintendent of the Naval Academy from 1865 to 1869. “That was 90 years before my class. In 2059, I hope some ‘youngsters’ will go see the Columbarium, see the names of some heroes, and get inspiration for their own class project.” ■

## RMTS

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Admiral Houser, now 89, wanted to support several charities, with the Naval Academy Foundation at the top of the list, as well as leave a legacy for his children and grandchildren.

He and Mrs. Houser accomplished both objectives with a Charitable Lead Trust. It reduces potential taxes on their estate by first donating a portion of the trust’s income to their favorite charities and then eventually transferring the remainder of the trust to their beneficiaries.

To date, the Houser Trust has funded athletics, midshipman wardroom improvements, the Science, Technology, Engineering and Math (STEM) conference and other worthwhile programs.

“We are always supportive of the Naval Academy and the work of the Naval Academy Foundation,” said Jan Houser. ■



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Photo by Alison Harbaugh, [frecklephotography.com](http://frecklephotography.com)

*Every gift counts, every donor matters.*