



From The Bridge

A NEWSLETTER FROM THE UNITED STATES NAVAL ACADEMY FOUNDATION

2010 ISSUE 1

Academic Excellence

By Andrew T. Philips, Ph.D., Academic Dean and Provost, U.S. Naval Academy

Naval Academy alumni know that the Academy strives for excellence in all areas. “Moral, mental and physical” doesn’t represent a choice; midshipmen don’t get to pick which of the three to pursue and excel in, they are expected to pursue and excel in all three. And the academic program is the centerpiece of the mental mission for the Academy. Naval Academy graduates, and probably everyone else familiar with us, know that the undergraduate engineering education provided in Annapolis is second to none. Perhaps not as well known is that the education provided in the liberal arts is also world class. Take a look at the achievements of our recent graduates—in just the last six years we’ve graduated nine Rhodes Scholars, 10 Marshall Scholars, four

Mitchell Scholars, five Gates–Cambridge Scholars, and 11 Truman Scholars. That record of success is hard to match anywhere, and many of the midshipmen selected for these prestigious awards chose majors in the liberal arts. The Naval Academy academic program represents a “best of breed” in both engineering and the liberal arts—and I expect it to remain so. To do that, we have developed some exciting plans for the near future.

During the next few years, you can expect to see new programs and novel approaches in both engineering and the liberal arts. In engineering, you’ll likely witness the emergence of cyber warfare and cyber security as new areas of focus on the Yard. In fact, just recently the Naval Academy finished in first place in the second annual Cyber Security

Challenge, a network attack competition hosted by the National Defense University. The Naval Academy team won the event by defeating 11 other teams, including teams from Army, DHS, NCIS, the Army Research Lab, the FAA, Northrop Grumman, among others.

Also in engineering you’ll witness the development of more project based learning (PBL) throughout the



Midshipmen use a decoder to check the function of AM radio transmitters during an electronic communications systems and digital communications class. Photo by Mass Communication Specialist 1st Class Chad Runge

Class Giving

Academic Lessons



Vice President Joe Biden with Midshipman Robby Battle '10, USN, at graduation. Photo by Barbara Hendricks

For Ensign Robby Battle '10, USN, the Naval Academy provided a balance of academics and athletics as well as leadership opportunities on the field and in Bancroft Hall to prepare him for his career as a surface warfare officer.

As an English major, he was named twice to the Commandant’s List. Prior to graduation and commissioning, then-Midshipman Battle reflected on a particular physics test. Unfortunately, he studied for the wrong test but ended up “just barely” passing.

“You never know what’s going to happen,” Battle said. “You’ve got to prepare yourself for every challenge. So, if you grit and stick your nose down, I think you can get through a lot.

That same lesson also applied to playing Navy lacrosse. In overtime, Battle won the face-off against Johns Hopkins that gave Navy possession and set up teammate Andy Warner for the winning goal. That victory ended Navy’s 36-game losing streak versus Hopkins!

As class president, he led the effort for the First Gift program—an entirely voluntary peer to peer solicitation. Following the success of the Classes of 2008 and 2009, the Class of 2010 has made noteworthy efforts in participation among the class.

Thanks to Robby for his leadership and for supporting—along with his classmates—the Naval Academy through the Foundation. ■



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President's Circle

Save the Date—2010 President's Circle Weekend

Every premier institution has those who step up to assume positions of leadership—those who inspire by example and form the foundation from which the larger community draws its strength. Among those leaders who help the Naval Academy flourish is a special group of men and women—the President's Circle.



Save the Date— 2010 President's Circle Weekend

*A weekend to recognize the generosity of
President's Circle donors
23–25 September 2010
Annapolis, Maryland*

Please contact Julia Hutchison at 410.295.4162 or julia.hutchison@usna.com for more information. ■

A few days before press time, the Navy Inspector General Report was released. Please visit www.usna.com for statements, frequently asked questions and the full report. Further, we will continue to communicate with you on this issue if additional information becomes available. We remain strongly committed to the value and importance of private donations that help achieve a margin of excellence at the Academy. Thank you for your interest in this matter and our Naval Academy.

Editor's note

From The Bridge is published periodically by the U.S. Naval Academy Foundation and Alumni Association. From the Bridge replaces three previous newsletters—the Navigator, President's Circle and Campaign newsletters. It offers a single, integrated newsletter for donors and friends.

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Academic Excellence

Project-Based Learning Adds to Midshipman Experience



Midshipmen in their concrete canoe for the Ocean Engineering course "Concrete Canoe Design and Fabrication."

“The nature of warfare has changed a lot over the last 10 to 20 years,” said Captain Pete Nardi '84, USN, director of the division of engineering and weapons at the Naval Academy. “When I entered the fleet in 1984, we were building ships and submarines to fight the blue water fight and gearing up for a possible large scale engagement with the Soviet Union.

“Now it's completely different—asymmetric,” he continued. “We really don't know exactly where the threat is coming from. It's everywhere and nowhere all at the same time, and a lot of the technologies our adversaries can use against us are commercial or available to anyone with access to the Internet.”

Preparing for today's warfare requires thinking differently, Nardi explained, which is why the Naval Academy has intensified and expanded its curriculum to include more hands-on, project-based learning. All midshipmen, regardless of major, will take part in project-based learning

experiences during their years at the Naval Academy. Some academic courses, such as Principles of Naval Weapons Systems, required of second class midshipmen, have associated hands-on projects. Engineering majors gain project-based experiences through their capstone projects, and many other midshipmen compete against students at other universities in project competitions such as the annual concrete canoe race and the inter-service academy Computer Defense Exercise (CDX).

“Project-based learning enhances the experience of the midshipmen and allows them to apply the theory and knowledge they learn in the classroom,” Nardi said.

Luckily, he added, today's students have an innate awareness of technology, which is very important in project-based learning. “They're very comfortable with information technology, and it's natural for them to think about how that technology will translate into doing their jobs in the fleet.”

Project-based learning experiences can range from high-tech cyber defense projects to building boats to launching rockets. Many projects are interdisciplinary in nature.

“We like to see the aerospace and systems and electrical engineers working together,” Nardi said. “In the real world, problems are solved by teams of engineers, scientists, financial specialists, sociologists and many others.”

One interdisciplinary engineering project involved connecting a camera to a “Roomba”—the automated vacuum cleaner—and then providing it with a wireless Internet connection. As the Roomba navigates a room, its camera takes photos of objects on the floor and sends those images to a laptop computer, which uses algorithms to compare the captured images to those stored in a Google database. “We actually had an outside Navy organization show interest in this project,” Nardi said.

Another project-based experience occurs each year when several midshipmen participate in the Society of Automotive Engineers Formula Car Competition. The students build a racecar based on requirements established each year. “It’s not all about speed,” said Nardi. “The competition is also designed to get students thinking about design, braking, handling, fuel efficiency and engine performance.”

In addition to helping midshipmen “think differently” and put theory into practice, project-based learning helps prepare midshipmen for the future.

“A lot of the practical application of building a car, for example, translates to the mechanical nature of the systems that drive our ships, airplanes or submarines,” explained Nardi. “These projects tie back to what the midshipmen have learned during their years at the Academy, but they also look forward to something graduates might be able to apply to their jobs in the fleet.”

Project-based learning has also become an effective recruiting tool, playing a role in the Naval Academy Summer Seminar program as well as STEM (Science, Technology, Engineering and Mathematics) weekends and camps. “These summer activities are all about hands-on learning. We say things like, ‘Let’s build a boat, let’s build a robot, or let’s do something with cryptography or with lights and lasers.’ The idea is to get kids excited early about science, technology and engineering.”

Perhaps most importantly, concluded Nardi, project-based learning gives midshipmen experiences to help them decide what they are really passionate about—“skills they can be excited to apply as officers in the Navy and Marine Corps.” ■

Academic Dean

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engineering and science programs. PBL is based on the idea that involving midshipmen in hands-on applications of the theory they are learning, and doing that from first exposure in a senior design project is the best way to keep a technical program of study both interesting and relevant. One expected outcome is that we should be able to recruit and retain greater numbers of students in technical majors because the academic work in engineering will be exciting right from the start.

In the liberal arts, you’ll likely witness continued growth in the number of participants in our study abroad programs, and you’ll hear about the expansion of our language, regional expertise and culture forums that bring dozens of guest speakers to the Yard each semester to speak about the many critical regions of the world. Such programs and events serve to enhance the global and cultural awareness of our midshipmen as they prepare themselves to operate overseas in the near future.

And coming this fall you’ll witness the creation of a new annual Science, Technology, Engineering and Mathematics (STEM) Conference designed on the basis of our well known and world class Naval Academy Foreign Affairs Conference (NAFAC). This new STEM Conference will bring undergraduate students from around the world to the Academy, along with national leaders in STEM fields, for several days of idea sharing, topical discussions, project demonstrations and keynote lectures. We’ll do both NAFAC and the STEM Conference each year because we expect to remain a world leader in undergraduate science and engineering and liberal arts education.

While these are only a few of the exciting new ideas we have planned for the future, we think the result will be an even stronger Naval Academy education, and of course a cadre of Navy and Marine Corps officers better prepared to lead in this fast changing world. ■



The midshipmen team and entry for the Society of Automotive Engineers annual student automotive design competition.

Robert Means Thompson Society

The Legacy of a Planned Gift...

Through the Robert Means Thompson Society, the Naval Academy Foundation recognizes alumni, family members and friends who have made a planned giving commitment. RMTS boasts nearly 500 members, and the following four stories illustrate the diversity in ways to give. Through each of these inspirational gifts, the donor has provided a lasting legacy for the Naval Academy and the Brigade of Midshipmen.

A Navy Family

Alice Nagle was part of a decorated Naval Academy family, including her grandfather, Rear Admiral Royal R. Ingersoll, USN (Ret.), class of 1868; her father, Admiral Royal E. Ingersoll '05, USN (Ret.), who served as Commander in Chief, U.S. Atlantic Fleet during World War II; and her brother Lieutenant Royal R. Ingersoll II '34, USN. Because Alice wanted to see her father and family honored in her lifetime, she made outright gifts to establish the Ingersoll Teaching Ethics Resource Room. Through charitable gift annuities and an irrevocable bequest in her will, she was able to permanently endow future costs to maintain the Ingersoll Room and provide a vital source of funds for Ethics Center initiatives. Alice died in January 2010 as a great friend of the Naval Academy and her father will be memorialized in perpetuity.

Defining Moments

Commander Lyle Cox '45, USN (Ret.), described graduating from the Naval Academy as one of his “defining events.” Because he deeply respected the leadership of the Naval Academy and thought his gifts would have the most impact if they could be used by the Superintendent to address areas of greatest need, he was committed to unrestricted giving. Lyle’s first planned gift was a charitable gift annuity that provided an immediate income tax deduction and a guaranteed fixed

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Robert Means Thompson Society

Annual Event Celebrates Legacy Giving



A Garden Party at Buchanan House caps off the annual RMTS event. Photo by Barbara Hendricks

This spring, the Naval Academy Foundation was delighted to host more than 50 members of the Robert Means Thompson Society (RMTS) at the annual event celebrating these special philanthropists and their commitment to the Naval Academy. Gathering at the Naval Academy Club in the Yard, RMTS members received greetings from Foundation President and CEO Byron Marchant '78, as well as a synopsis of current fundraising successes and future goals from Executive Vice President Dick Johnson.



Academic Dean Andrew T. Phillips, Ph.D.

Following these remarks, keynote speaker Academic Dean Dr. Andrew Phillips addressed the guests from the perspective of his first full year on the job. The Dean focused on the changes at the Academy that have significantly affected the curriculum, and discussed three major areas of change.

Language, regional expertise, and culture (LREC) is the Navy’s acronym for a Department of Defense-wide initiative whose implementation at the Academy will result in many more midshipmen being afforded the opportunity for significant experiences abroad. Ranging from full semesters spent studying at foreign military academies or overseas civilian universities, to month-long language immersion assignments during the summer, to faculty-led foreign culture trips during spring break or between semesters, these opportunities help the Academy make significant progress toward the goal of graduating junior officers who are more culturally aware than their predecessors.

Cyberwarfare, with the implications this new area of conflict holds for national security, is a second area of major change in the Academy curriculum. The recent creation of a Center for Cyber Security Studies is just the first step in creating a full range of opportunities for midshipmen to develop both awareness and expertise in this increasingly important warfare area, through both curricular and extra-curricular initiatives. In the context of the recent creation of the U.S. Cyber Command and the activation of the Navy's Tenth Fleet, these changes reflect the Academy's continuing efforts to produce graduates qualified to succeed, and lead, in the complex and continually evolving modern battlespace.

Finally, Dean Phillips addressed Project-based Learning (PBL). Simply put, PBL represents the Academy's recognition that today's midshipmen learn better by doing than by simply "reading about doing," and that experiential learning, especially in the engineering disciplines, is both very attractive to midshipmen and very effective. The Dean described the variety of projects that midshipmen have pursued, most notably as capstone engineering tasks during

their senior year. The Dean thus set the stage for the final presentation for the afternoon, briefings from first class midshipmen on the projects they were completing prior to graduation.

It's safe to say that, to a person, the audience was captivated by the midshipmen presentations! From seawall/breakwater designs that will be implemented at military marinas, to nano-technology demonstrations of microscopic robots, to an innovative method for detecting Improvised Explosive Devices (IEDs) that threaten our troops in Iraq and Afghanistan, the quality and intellectual depth of the student's projects was evident throughout.

Not lost on the audience was the fact that all three of these areas of change at the Naval Academy receive significant support from private gifts, and to a degree, the future success of these initiatives will depend on the generosity of our donors. As our RMTS guests thanked the Dean and the midshipmen for their presentations, they departed for the afternoon's formal parade with newfound confidence in the senior leadership of our Academy, the extraordinary capabilities resident in the midshipmen of today's Brigade, and the excellence that philanthropy enables at the Naval Academy. ■

Robert Means Thompson Society

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income for life. He then decided to create several testamentary unitrusts through his will. Lyle passed away in October 2009, and a charitable remainder unitrust will be established to provide income for his son and two grandchildren. After 20 years, the trust remainder will pass to the Naval Academy Foundation as an unrestricted gift. Lyle's meaningful gift supported both his family and education.

Philanthropic Professorship

Lieutenant Commander Ralph Odgers '47, USN (Ret.), and his wife Carol were early advocates of planned giving at the Naval Academy, establishing their trust in the early 1980s, years before RMTS was established. Through the Carol and Ralph E. Odgers Family Trust, funds were used to establish the Ralph E. Odgers '47 Distinguished Professorship in Science, Technology, Engineering and Mathematics (STEM). Ralph and his wife wanted to support a timeless aspect of the Academy and they have clearly done so by supporting academic excellence.

Athletic Excellence

Commander James. H. "Jim" Carrington '48, USN (Ret.), left a tremendous personal legacy as a star athlete. But, Jim, who died last year, has also left an enduring legacy in support of athletic excellence at the Academy. Jim was a six-time, three-sport All-American in football, swimming and lacrosse, earning 13 varsity letters at Fordham, Cornell and the Naval Academy. He was a recipient of the Naval Academy Athletic Association Sword for Athletic Excellence and was inducted into the Naval Academy's Athletic Hall of Fame. Jim's passion for Navy athletics inspired him to acquire two charitable life insurance programs in support of the Athletic & Scholarship Program, which encourages and supports athletic excellence at the Academy. Jim's legacy will surely endure! ■



Midshipmen Andy Lazzaro, Matt Davidson, Jenner Yuhas and Liz Leckie '10, USN, presented their team Capstone projects at the RMTS event.

Corporate and Foundation Relations

PSEG Becomes Corporate Sponsor for Minority Outreach



PSEG representatives present Naval Academy leadership with a contribution for Minority Outreach efforts in Newark, NJ. From L to R: Vaughn McKoy; USNA Foundation President and CEO Byron Marchant '78; USNA Superintendent Vice Admiral Jeffrey L. Fowler '78, USN; Bill Levis '78; Rick Thigpen; USNA Dean of Admissions Bruce Latta '78.

According to Rick Thigpen, vice president for state government affairs of Public Service Enterprise Group (PSEG) and chairman of the PSEG Foundation, there are a lot of talented minority students out there who don't know that the Naval Academy is an option for them. They are also unaware, Thigpen said, that the Navy would welcome them.

"That's why we have become the New Jersey corporate sponsor for the Naval Academy minority recruitment effort, which we are very proud of," Thigpen said.

PSEG is New Jersey's largest public utility and largest power generating company. Its partnership with the Naval Academy began in December 2009, sparked initially through a contact with Bill Levis '78, president and chief operating officer of PSEG Power.

"We are extremely committed to public service and workforce development, both for PSEG and for New Jersey," explained Thigpen. "Improving science, technology, engineering and math training has been a priority for our company for a long time.

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Corporate and Foundation Relations

Boeing and the Naval Academy: A Natural Fit

It started only a few years ago, when Admiral John Lockard, retired chief operating officer for Boeing Defense, Space & Security, was looking for a way to collaborate with the nation's service academies. It was only natural, given Lockard's naval service and Boeing's historic commitment to science, technology, engineering and mathematics (STEM) education, that Boeing would meet with the Naval Academy to explore the possibilities of a partnership.

"Boeing has had a robust university relations program for more than 20 years," said Matt Daniels, Boeing's regional manager for university relations. "We've partnered with many institutions of higher education, but our formal affiliation with the service academies is fairly new."

"We've supported individual efforts with the Naval Academy before, but until now our relationship was ad hoc," explained Walt Rice, Boeing's director of communications for Phantom Works and strategic growth. Phantom Works is the advanced research and development unit for the defense side of Boeing. "We wanted to take those smaller

projects and turn them into something valuable, not only for the Academy but also for Boeing."

During a meeting between leaders at the Naval Academy Foundation and Boeing, four areas of strategic collaboration were identified: ethics and leadership training, STEM education, minority outreach and project-based learning. Boeing committed \$275,000 to the Naval Academy, as well as to the Military and Air Force academies. In addition to financial support, however, Boeing's commitment manifested itself in human resources as well.

"Once the partnership with the Naval Academy began," said Daniels, "we were quick to find other ways to collaborate and to learn from each other." Daniels cited ethics and leadership benchmarking sessions, mutual participation in seminars and conferences, and visits and meetings with Academy faculty and midshipmen as examples.

The Boeing Company employs some 600 service academy graduates, many of whom are hired directly into leadership positions due to the quality of their education and training.



Naval Academy faculty and midshipmen met with Boeing's Dennis Muilenburg, president and CEO of Boeing Defense, Space and Security, during the kickoff meeting for the Cockpit of the Future competition. Photo by Boeing photographer Peter George



Midshipmen got the opportunity to investigate an aircraft mock-up during a tour of Boeing's F/A-18 Hornet production facilities in St. Louis, MO. Photo by Boeing photographer Peter George

Though a partnership with the Naval Academy may ultimately result in an infusion of leaders of their own workforce, Boeing has a broader objective.

"We want to play a role in developing strong ethical leaders for the future of our country. A number of them may choose to come to Boeing, and we will benefit from that," stated Rice. "Others may be our customers in the future. But because these leaders are well versed in multi-disciplinary engineering and have a great educational foundation to work from, our whole industry—our whole country—will benefit."

Luckily, Boeing leaders understand that the service academies must rely on corporate and private philanthropy in order to accomplish and supply many important initiatives and experiences. "It was clear to us as we developed our strategy that the initiatives the academies were trying to undertake—STEM camps, senior design projects, summer experiences—are not fully funded through tax dollars," said Daniels. "By adding our support, we are able to help move some of these programs forward and facilitate greater

success." A marked increase in the number of students who are able to attend Academy STEM camps, he added, is a direct result of Boeing's support.

"We knew the Academy needed more than the tax support they receive," added Rice. "What we didn't know was how to match our resources with mutual areas of interest. Because there's a great community among the three service academies, they all worked together to get us smart on how to go about this and to create partnerships that were equitable and efficient but also tailored toward the unique needs of each of the academies."

"As an employee of The Boeing Company, I see the impact of the work we are doing through our service academy partnerships," Daniels concluded. "The Boeing Company builds products and provides services to protect the people who protect our country's freedom. To see that tie and to have the opportunity to work with these men and women is an extreme honor. We view our relationship with the Naval Academy as a growing, enduring partnership that will continue for many, many years." ■

Corporate and Foundation Relations

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This is why the partnership with the Naval Academy is such a perfect fit. It's something that fits our personality, our business model and our state."

"Not all young people learn character, honor and commitment at home," Thigpen added. "The Naval Academy has that extra benefit of helping them become the kind of citizens we'd like to see them all be."

Through its Foundation, PSEG is committing significant financial resources as well as human resources to the Academy's minority recruitment effort. "Our foundation staff will be committing their time to getting the programs running. We're looking forward to working with members of Congress from the state of New Jersey so we can help them identify good candidates for the Academy. Because we are a nuclear operating company, we have perhaps more Naval Academy graduates working for us than other companies, so we're hoping to have our employees volunteer on some of their committees," Thigpen said.

"It's important for us to invest in making our state a better place," he added. "We love to have Academy graduates return to New Jersey after their time in the fleet, but we recognize it is also our role as a corporate citizen to help supply the nation with a well-trained workforce of people of character."

Thigpen said the PSEG-Academy partnership will touch many more young people than will actually end up at the Academy. "But if we can play a role in helping others recognize that careers in engineering or science or technology are out there for them—and make them recognize those fields can open doors for them, we will be doing something important for our community and our country." ■



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Photo by Barbara Hendricks

Every gift counts, every donor matters.