

Naval Academy pushing for more technical majors

By Jason Flanagan
Examiner Staff Writer

U.S. Naval Academy midshipman M.J. Wilder placed a circuit board attached to a lamp on a table in front of a curious crowd. He turned the lamp on, and nothing unusual happened.

But when Wilder turned the lamp off, the unlikely sounds of Marvin Gaye's "Let's Get it On" filled a meeting room filled with senators, representatives and high-ranking Navy officials.

"This machine is also good for pranks, as well as a type of alarm system," said Wilder, whose "Mood Machine" plays a recorded song when light sources are turned off.

Wilder's device, which was the end result of an electrical design project, is the kind of ingenuity and problem-solving the academy is hoping will attract more midshipmen toward technical majors and fulfill a Navy mandate for more tech-savvy graduates.

By the time the next incoming class graduates in 2013, at least 65 percent of the midshipmen must have majored in science, technology, engineering or math — commonly known as STEM.

But to shy midshipmen away from popular majors like history, English and politics and toward complex majors like chemical engineering and mechanical engineering, the academy changed its academic approach and created "project-based learning" that has midshipmen like Wilder using their hands and minds to physically solve problems.

"To account for attrition, we'll likely need 70 percent STEM ... and to do that we need to get them interested in these kinds of majors," said William Miller, the academy's academic dean and provost.

It's the academy's hope that introductory projects like Wilder's will lead to more sophisticated ones like first-class midshipman Kyle Checchi's research into the stress factors of *E. coli* to develop a polymer that can kill the bacteria.

"It's my hope that this polymer can be applied to surfaces where food is handled and reduce the chance of *E. coli* spreading," said Checchi, one of the academy's four Marshall scholarship winners heading to the United Kingdom next year for additional studying.

Miller said the academy was hoping to create new technical majors in computer engineering and industrial engineering.

But for this to happen, the academy needs more money and space.

The buildings used for engineering training are some of the oldest at the academy and are in need of renovation and expansion, Miller said.

"We have midshipmen building projects in the hallway," he said.

Money has been expected to come from Congress, but that was before bailouts and recessions became the dominant budget themes.

"We're in a very difficult funding environment, but it is one of our highest budget priorities," Miller said.

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U.S. DISTRICT COURT

Maryland suing Army over Fort Meade cleanup

By Jason Flanagan
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Maryland Attorney General Doug Gansler has filed a lawsuit against the U.S. Army for not complying with a federal order to clean up Fort Meade.

"There is an imminent and substantial danger of water contamination. ... The Army has agreed verbally to something they need to do and say they will do, but haven't done a thing to prove otherwise," said Gansler, who filed the suit in U.S. District Court in Baltimore on Tuesday.

The suit is demanding the Army give the U.S. Environmental Protection Agency control over the cleanup of Fort Meade, where buried chemicals and munitions have contaminated the water table.

The Army told *The Examiner* earlier this month that it would comply with the EPA's mandate after the U.S. Justice Department said the Army could no longer fight against the order.

The Army had protested the order due to possible high costs and delays.

Army officials said the military has spent \$83 million to clean 33 of 51 contaminated sites at the Anne Arundel County installation. The EPA has told *The Examiner* that the Army's effort was "not lacking."

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KRISTINE BULLS/EXAMINER FILE

Maryland Attorney General Doug Gansler has filed a lawsuit against the U.S. Army for not complying with a U.S. Environmental Protection Agency order to clean up Fort Meade.

Gansler and the Maryland Department of the Environment want concrete timetables for the cleanup. Fort Meade has been on the EPA's National Priorities List, or Superfund, since 1993.

"While we fully anticipate the Department of Defense will be in compliance in the near future, what we need is long-term legally binding commitment from the Army to clean up Fort Meade as soon as possible," MDE Secretary Shari Wilson said in a written statement.

The Army sent letters to Maryland officials notifying them of its intent to comply with the order, as well as a preliminary timeline on Dec. 19, said Tad Davis, deputy assistant secretary of the Army.

"I think we've made a good effort to work with the EPA ... and done our best job to address Maryland of our actions," Davis said Tuesday.

"It's disappointing to see them take this action."

Davis said \$24 million has been set aside to clean up the remaining sites.

Maryland can sue the Army under the Resource Conservation and Recovery Act, and filed a notice of intent to sue in August.

Gansler said the suit would be dropped if the Army officially signs onto the EPA order and sets up timetables for cleanup.

The most serious area of concern at the fort is a plume of contaminated underground water at the installation's southern boundary, where the Army once buried 250 drums containing hazardous liquids such as gasoline.

Already a mile long, the plume is spreading into the nearby Patuxent Wildlife Refuge, though it poses no immediate risk to humans, according to fort officials.

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PASSING ON TECHNOLOGY



ARIANNE TEEPLE/FOR THE EXAMINER

Officer Patrick Roche and Assistant Port Director for Trade Augustine Moore, both of U.S. Customs and Border Protection, hand a computer to Darryl Harris, 10, a fifth-grader at William Paca Elementary School in Baltimore. The agency donated 40 excess computer systems ranging from three to six years old to principal Stacey Place for her school.

THE 3-MINUTE INTERVIEW

Augustine Moore

Augustine Moore, assistant port director with U.S. Customs and Border Protection, helped donate 40 excess computers to Stacey Place, principal of William Paca Elementary School on North Lakewood Avenue in Baltimore, on Tuesday.

U.S. Customs and Border Protection is the unified border agency within the Department of Homeland Security that manages, controls and protects U.S. borders at and between official ports of entry. The school received hard drives, monitors and keyboards. The agency announced it would also donate additional excess computer systems to local Baltimore social organizations soon after the new year.

Why are you donating the computers?

We have an enormous responsibility to protect the American public and to do that we depend on computer systems for fast and accurate information. When better systems come out, we take advantage of it. The agency lets us donate the old computers to community organizations to help out the youth in the community.

How was the school selected?

We depend on our employees that reside in the community to advise us where the need is the most. The school we're donating to will benefit. And the fact that we're donating to an elementary school — it's truly a worthwhile endeavor. These computers will not go to waste and will help community youth and contribute to learning.

What kinds of capabilities do they have?

They're pretty current and will be effective in a grade-school environment in terms of speed and its capabilities. They're suitable for children of this age. They can handle programs and the Internet. Most children now work off the Internet, and they'll be able to do all their work.

What other donations does the agency make?

Here, our primary donations are computers. But we've also helped out in the past during [Hurricane] Katrina and other disaster events in terms of personnel and other things. — Josh Kowalkowski

SANTA CLAUS

Santa Claus will enjoy special express lanes tonight in the skies over the United States as he makes his Christmas Eve deliveries to children around the world. "We know Santa Claus must adhere to a really tight schedule to get to every house on his list," U.S. Transportation Secretary



Santa Claus

Mary Peters said when announcing the cleared airspace. "Allowing him to use military airspace will ensure that crowded skies won't mean empty stockings on Christmas morning." Santa's toy-filled sleigh has even been assigned a call sign for when it enters military airspace: North Pole One.