



Cyber Warrior

Rear Admiral Gretchen Specht Herbert '84 takes command of Navy Cyber Forces.

By Karen McCally '02 (PhD)

REAR ADMIRAL **GRETCHEN SPECHT HERBERT** '84 doesn't often get the chance to visit her hometown of Irondequoit, just north of Rochester, much less to stroll the River Campus, where, she says, 30 years ago her daily life as a student, athlete on the women's basketball and soccer teams, and NROTC scholar "really molded who I am."

But the newly installed commander of Navy Cyber Forces got that rare chance in July. During her day-long visit to the campus, she delivered a talk to high school students about her 25-year career in the Navy, which began with her NROTC scholarship at Rochester, and, along with President Joel Seligman, toured the University's newly installed electronic classroom—a room in Lattimore Hall outfitted with 12 computers with dual monitors that will help Naval ROTC students develop navigation skills in a full range of environmental conditions.

The sea can seem like a distant place, even to those who live near the coasts. But as Herbert told her audience of prospective students and parents, not only is almost three-quarters of the globe covered by water, but 80 percent of the world's population lives within 100 miles of the coast. About "90 percent of all international commerce, from your sneakers, to your TV sets, to your laptops, to your milk and butter, travels via the sea," she said. "And to make sure those sea lines of commerce are open, we're out there patrolling," she added, referring to the Navy's involvement in an international coalition to combat piracy off the coast of Somalia as a recent example.

There are other dimensions to the Navy's mission, of course, and in her talk and in a follow-up interview, she reflected on the implications of her new role, which she began in June, as commander of Navy Cyber Forces.

Herbert began her naval career, just following graduation, engaged in antisubmarine warfare, tracking Soviet submarines off the coast of Bermuda. That was in 1984, when, she says, "there were two great powers, you knew where your enemy was, you knew what your mission was."

But since then, developments in technology and geopolitics have made national se-

curity a much broader and more complex enterprise. For example, the Navy has traditionally had a command for the surface navy, a command for aviation, and a command for submarines. The establishment of a command for cyber forces, she says, is "a recognition by the Navy that cyber and cyberspace has risen to a level of increased importance and is actually very much like any other war fighting area." And as commander of Navy Cyber Forces, her job "is to ensure that the fleet has the tools and the

tive students and parents, "I can tell you I don't do anything with rocks." What college teaches, she said, is "the ability to look at things critically, and to make interpretations"—as well as "how to multitask and prioritize."

She's received schooling and on-the-job training from the Navy for each of the many positions she's held. As she's worked her way up the Navy hierarchy—her current rank, rear admiral, is the highest, permanent, peacetime rank in any of the armed




ATTENTION: Rochester area high school students and their parents (above) listen to Rear Admiral Gretchen Herbert '84 (opposite) in Hoyt Hall in July as part of Navy Week, an outreach program that showcases naval operations and opportunities.

training and the personnel to be able to operate in and through cyberspace."

To give a sense of the threats emerging in cyberspace, Herbert says that "across the Department of Defense networks, there are about 6 million probes a day." Probes, she clarifies, "are something very different from attacks. They're a 'testing of the waters' kind of thing. But some of those probes go farther and are actually aimed at particular information." That information might include intellectual property, plans for an operation, or information about "the capabilities and limitations of our armed forces."

Herbert studied geology at Rochester, and as she told the audience of prospec-

forces—she's embarked on a new job every two to three years. Often, she says, it's "something totally different" from her previous roles.

Her favorite mission? "My first C-duty job," she says, referring to a combat job that first opened to women in 1993. The job was combat systems officer aboard the USS *George Washington*, a nuclear-powered aircraft carrier that, with 5,000 servicemen and women on board, could seem like a small, floating city. "If I could go back to sea tomorrow, you could bet I'd be doing it. And if they told me that I'd have to give up a couple of stripes to go back," she adds, "I'd do it in a heartbeat." 

Q&A

An Elite Command

Rear Admiral Sean Pybus '79 takes command of the Navy SEALs.

Interview by Karen McCally '02 (PhD)

THE UNITED STATES NAVY'S SEA, AIR, AND land teams—known as SEALs—are among the most elite members of the military service, with a training regimen the SEALs themselves sum up with the saying, “The only easy day was yesterday.”

Established by President John F. Kennedy in 1962 as a maritime force trained to handle any type of unconventional warfare, the SEALs have made headlines twice in the past several months.

In May, a team of 25 SEALs broke into the compound of Osama Bin Laden and killed the leader of al Qaeda, who had been the United States' most hunted terrorist since even before the September 11, 2001, attacks.

In August, 22 SEALs were among the 38 American and Afghan service members killed when their helicopter was shot down en route to a battle against insurgents.

In between those two events, Rear Admiral Sean Pybus '79, a career SEAL who studied economics while at the University on an NROTC scholarship, took charge of the Naval Special Warfare Command, where he now oversees the Navy SEALs as well as special warfare combatant-craft crewmen. He corresponded with us by email in July.

When did you decide on a military career?

As a high school senior, I applied to ROTC programs with the Army and Navy in hopes of getting a scholarship to pay for college. The Navy gave me a scholarship, so that was my early motivation for military service. I assumed I would do my obligatory time in the service after college and then join the civilian workforce. But the ever-challenging work, frequent travel, esprit de corps, and quality people within the SEAL community were strong draws. And it remains that way today.

When did you become a SEAL, and what can you tell us about the infamous training regimen?

As soon as I graduated from Rochester, I



COMMANDING ROLE: Rear Admiral Sean Pybus '79 (center) is sworn in as the commander of Naval Special Warfare, where he oversees the Navy's sea, air, and land teams—the SEALs—and combatant-craft crewmen.

went to SEAL training, which is the famous Basic Underwater Demolition/SEAL training course, known as BUD/S, with an attrition rate of between 65 to 75 percent.

In 1979, almost all of our instructors were Vietnam veterans. The lessons and instruction they imparted to us many years ago still apply and inform how we operate to-

day, and I'm thankful for that. In my years as a SEAL since BUD/S, I have never been more cold, wet, and miserable as when going through BUD/S in 1979. Doing military special operations in, under, or from the sea is our forte, so most of our selection and training is water-oriented.

A BUD/S student spends much of his

time wet, sandy, and cold. Going to college in Rochester, however, prepared me well to deal with the cold and wet! By Christmas 1979, I graduated BUD/S training and was on my way to my first SEAL assignment in Virginia.

Is SEAL training similar today?

The basic training regime today is remarkably similar to years past. BUD/S has been proven to produce SEALs with remarkable toughness, unconventional thought, and a never-quit attitude.

We're very careful about making adjustments to this program. With regard to advanced training that prepares SEALs for the specific work we do around the world today, it's exponentially better resourced than in years past.


Naval Special Warfare is the maritime component of U.S. Special Operations Command, and we draw a high level of training, equipment, and other resources from it to maintain a high level of capability and preparedness. We also dedicate time working with our sister special operations forces in the Army, Air Force, and Marine Corps. The real strength of special operations is our ability to work as a team. Most of the successes our nation has had within special operations result from a team effort across the services.

In what ways did your liberal arts education prepare you for a military career?

Personally, as a student and young man, Rochester's tough academic regimen forced me to become more disciplined and goal-focused, traits that served me well in the military.

The breadth of Rochester's curriculum has also been an advantage, because naval officers well-versed in subjects from English to engineering have an advantage over specialists, in the long run. Most importantly, I think Rochester has always been committed to helping students learn how to think, not necessarily what to think.

For planning and executing special operations in the military, knowing how to think is invaluable. As the commander of the Navy's special warfare community, I want a diverse officer and enlisted corps, including men and women with a liberal arts background.

We're looking for people with high levels of mental, physical, and moral fitness. They'll come from many different places, and I think that's exactly what we need. 

In the News

THEOFANIDIS OPERA COMMEMORATES 10TH ANNIVERSARY OF 9/11

Christopher Theofanidis '92E (MM) has composed *Heart of a Soldier*, commissioned by the San Francisco Opera and to be premiered by the opera on Saturday evening, September 10. *Heart of a Soldier* is based on the book by James Stewart that chronicles the life of Rick Rescorla, a Vietnam veteran and Morgan Stanley's head of security, who died in the south tower of the World Trade Center after leading more than 2,000 people to safety. Theofanidis, who now teaches at Yale, was teaching at Juilliard, 50 blocks from the towers, at the time of the attacks.

HOCKFIELD '73 TAPPED FOR PRESIDENTIAL RESEARCH GROUP

Susan Hockfield '73, the president of the Massachusetts Institute of Technology, has been selected by President Barack Obama to play a leadership role in the Advanced Research Partnership. The partnership, which Obama announced in June, enlists federal agencies, private businesses, and universities in an effort to improve American manufacturing by promoting research and development of emerging technologies. Hockfield will serve as cochair of the steering committee of the partnership, along with Andrew Liveris, the president, chairman, and CEO of the Dow Chemical Co.



Susan Hockfield '73

GRADUATE TO HEAD NATIONAL DENTAL INSTITUTE

Martha Somerman '78M (Pdc), '80M (PhD) is the new director of the National Institute of Dental and Craniofacial Research, part of the National Institutes of Health near Washington, D.C. Somerman, who completed a periodontal residency at the Eastman Institute for Oral Health and a doctorate in pharmacology at the School of Medicine and Dentistry, was formerly the dean of the University of Washington School of Dentistry in Seattle. She's a recognized leader in research on the development, maintenance, and regeneration of oral-dental-craniofacial tissues.

ROCHESTER ALUMNA IN HOT COFFEE

Joanne Doroshov '76, executive director of the civil justice research and advocacy organization Center for Justice & Democracy, based in New York City, makes several appearances in the HBO documentary *Hot Coffee*. The documentary, which premiered in June, centers on the 1995 New Mexico district court case *Liebeck v. McDonald's Restaurants*, in which a jury awarded significant damages to a plaintiff who had suffered third-degree burns when she spilled a cup of McDonald's coffee in her lap.

LEVI '69 RECOGNIZED FOR CIVIC LEADERSHIP

John Levi '69, a partner in the Chicago office of the law firm Sidley Austin, was awarded the first Abner and Zoe Mikva Corporate Citizenship Award this spring. The award is given by Mikva Challenge, an organization that promotes the development of civic leaders among students in Chicago's public schools. Levi's accomplishments include his election in 2010 as board chairman of the Legal Services Corp., which funds civil legal assistance to low-income Americans, and his role in Sidley Austin's partnership with Chicago's Gerald Delgado Kanoon Magnet Elementary School, as well as in the firm's pro bono programs.



River Campus Redux

A film taken by Herbert Tindall '36 and donated to the University by his son, Bob '65, offers a 'priceless' glimpse of an 'infant' River Campus.

By Karen McCally '02 (PhD)

LAST NOVEMBER, JOANNE BERNARDI, AN AS-SOCIATE professor of Japanese who also teaches in Rochester's film and media studies program, found a welcome surprise in her email inbox.

It was a message from **Bob Tindall '65**, who had read about her course, *Atomic Creatures: Godzilla* ("History in Celluloid," *Rochester Review*, November-December

▲ **FILM FANS:** Films featuring the Marx Brothers were among a collection of 16-millimeter films that Bob and Herbert Tindall donated to the University along with rare footage of the River Campus.

2010). The owner of a large private film collection, he asked her if she would be interested in an original, 16-millimeter film print of *King Kong*. Two days later, after an extended email dialogue, Tindall wrote to Bernardi that he was willing to donate his entire collection to the University.

The commercial films in the collection—classics by W. C. Fields, the Marx Brothers, and Abbot and Costello, for example, all in 16 millimeter—were impressive enough. But what made the collection even more valuable to the University was footage of the River Campus shot by **Herbert Tindall '36**, Bob's father, in 16-millimeter film between 1932 and 1940, the graduation year of Herb's younger brother, **Harry**.

"The film shot by [Bob's] father is, literally, priceless," says Bernardi. "Sixteen millimeter was introduced by Kodak here in Rochester in 1923, which makes him a 'first generation' 16-millimeter filmmaker."

Nancy Ehrich Martin '65, '94 (MA), a classmate of Bob's and now the John M. and Barbara Keil University Archivist, calls the film, which is now accessible to viewers in DVD format, "remarkable."

"When Herb arrived as a freshman, the campus was practically brand new," she says. "He was entering an infant physical campus."

The film, not so much titled as labeled ("University of Rochester, 1932-1940"), is rich in content, including classroom scenes, sports competitions, and the everyday clowning around of a sharply dressed crop of male undergraduates (women remained at the Prince Street Campus until 1955). Most striking, from an early 21st-century

standpoint, say Martin, Bernardi, and others who have viewed the DVD, is not only the homogeneity of the virtually all-white faculty and student body, but the attire: ties and vests to class, to lab, and it seems, everywhere except on the basketball court or the football field.

Today, Herb lives in Lancaster County, Pa., where he spent most of his working life as a country doctor. Bob and his wife, **Janice Clough Tindall '66**, live about 20 miles from Herb. To offer people a sense of his dad's passion for film, Bob has a story he likes to tell.

"My mother was pregnant with her first-born child, which was me. When she went to the hospital to have me, he checked her in, and much to my mother's dismay, he went to the movies. And while he was at the movies, I was born."

It's an account Herb disputes.

"No, no," he says. "I was there for the delivery."

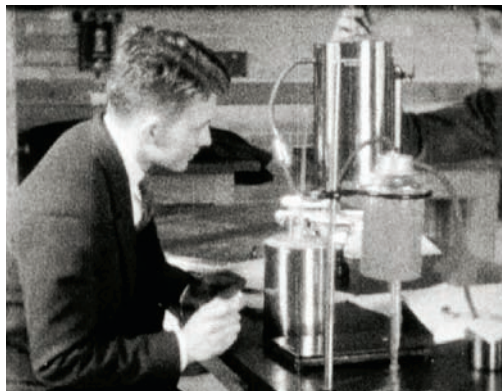
"Oh, listen to this," Bob retorts. (The film, he adds, was *You're in the Army Now*.)

Herb developed an interest in photography and film as a high school student, outside Philadelphia, in the 1920s. "There was a group of us," he says. "We had our own photo-finishing operation. We went around to summer camps and got the kids film so we could process it for them."

In the late 1920s, he purchased a Kodak Model B—a boxy, 16-millimeter motion picture camera introduced by the Eastman Kodak Co. in the late 1920s—and began making home movies.

At the same time, he nurtured his interest in commercial motion pictures by renting and showing them at home to friends. "There was a place downtown, in Philadelphia, where they had a whole collection of old 16-millimeter films, all silent, of course," he says. "You could rent a picture every week for \$50 a year. That's what we did," he says. "It sounds like a lot, but it's only a dollar a picture."

Herb says it was a coincidence that he went to college in the hometown of Kodak.



CAMPUS TIMES: A film made by Herbert Tindall '36 shortly after the River Campus opened captures a wide slice of what it was like to be a Rochester student in the 1930s, including scenes from the new campus, athletic events, classroom activities, and social life.

The son of a salesman for the Remington Typewriter Co., he moved around a lot, and his father had recently been transferred to Remington's Rochester office. ("Before I started at Rochester," Herb adds, "he was transferred to Chicago.")

After college, medical school, and service in the Navy, Herb established a medical practice and lived with his wife, Julie—to whom he was married from 1941 until her death in 1994—and their four kids on a farm in Lancaster County. He continued the tradition of opening his home, and his expanding film collection, to the community.

Bob says the films, shown decades before the availability of VHS videotapes and

VCRs, were well-attended and treasured by his father's many friends. And to illustrate just how much, Bob has another story.

Several months ago, he says, "My stepmother died. And at her funeral, I can't tell you how many people came up to Dad and said to him, 'I remember watching the movies at your farm.' Not that he did this or that. But that he had opened up the farm for people to come and watch these movies."

"Movies are a sociological phenomenon," he continues. "They involve other people. You can sit locked in your room watching a movie that's shown on a projector. But not a lot of people do that. The point of movies is to engage the community." **R**



The Write Place at the Right Time

Native New Yorker John Sotomayor '90 remakes his life as an award-winning journalist in 'the horse capital of the world.'

By Karen McCally '02 (PhD)

BORN IN MANHATTAN AND RAISED IN THE Bronx and Queens, **John Sotomayor** '90 now finds himself in "the horse capital of the world": Ocala, Florida.

The son of immigrants—his father is from Arequipa, Peru, and his mother is from Bogota, Colombia—Sotomayor moved from

▲ **WRITE MAN:** A native Spanish speaker, Sotomayor has won statewide journalism awards in two languages since moving to Ocala, Fla., where he covers tourism, leisure, entertainment, and horses.

New York City to Ocala in 2004, along with his brother, when his parents retired there.

At first, Sotomayor, now founder of Sotomayor Media Creations and associate editor of *Ocala Magazine*, wasn't convinced the move came at the right time.

In New York, he'd floundered in his attempts at a legal career, an experience he talks about freely.

In 2004, he'd just begun to establish himself as a freelance entertainment writer in the largest media market in the world, writing a weekly column on reality television for Elites TV, a web-based entertainment news site.

So what do you do when family commitments draw you to places that seem far from the beaten path? If you're enterprising—as Sotomayor most certainly is—you turn it into a big opportunity.

"I came to Ocala and said, 'Let me use half a year to learn the area and look at the local publications and see what's available.' And I got to know the equestrian circles, the business circles, pretty fast," he says.

Ocala, in north-central Florida, is a small city, of roughly 52,000 people. But it's growing rapidly, as is its Hispanic community. "The Hispanic community is thriving," says Sotomayor. "A lot of people are moving

from the Miami area up North and from the New York area down South.”

Since his arrival in 2004, he's written on an exhaustive array of topics, with a focus on tourism, leisure, entertainment, and of course, horses. In the past five years, he's racked up three awards from the Florida Magazine Association, and three more in the Florida Press Club Excellence in Journalism competition.

A native Spanish speaker, Sotomayor has won awards in two languages. But writing in English was something that, as a grade school student, Sotomayor had to work at to master.

“I never really thought of myself much as a writer,” he says. In grade school English classes, his writing was routinely deemed “awkward.” “That was the common feedback I got on papers—excellent concepts, wonderful vision, awkward phrasing,” he recalls.


At Rochester, he studied political science, but says in hindsight that his most memorable class was a course in science fiction film taught by Constance Penley, who taught at the University from 1983 to 1991.

“I'll never forget. Because she was the toughest teacher I ever had. I thought it was going to be an easy A. It's a film class. You're watching movies and you're writing about it. How hard is that? But she made us work for it. Really, really work for it,” he says.

In 2008, Sotomayor established himself as a limited liability corporation, Sotomayor Media Creations. That allowed him to join the Ocala/Marion County Chamber of Commerce, where he has since become both a member of the board and the chair and founding member of the Hispanic Business Council. In 2010, the City of Ocala awarded him its Mary Sue Rich Diversity Award, recognizing his leadership role in bringing diverse constituencies together.

Jaye Baillie, the president of the Ocala/Marion County Chamber of Commerce, says, “John's very focused, he thrives on building relationships, and it's through those relationships that he's been able to favorably impact our community and our chamber.”

Having become a recognized civic leader in a growing town in seven years, Sotomayor admits he's very goal-oriented.

“I see what's the one-year goal, what's the three-year, what's the five,” he says. “It becomes a little clearer in a town the size of Ocala.” 



APPLAUSE: Robert Ward '39E (above) poses with Eastman students rehearsing for a 2005 Eastman Opera Theatre production of his opera *Claudia Legare* (below). The Pulitzer Prize-winning composer will receive the nation's highest opera honor this fall.

An Ovation for Robert Ward '39E

Robert Ward '39E, a composer whose honors include the Pulitzer Prize, a New York Music Critics Circle Citation, three Guggenheim Fellowships, and an Eastman School Alumni Achievement Award, earned his greatest recognition of all in July: the 2011 National Endowment for the Arts Opera Honor.

The honor that many regard as the highest in opera recognizes a lifetime of major contributions to the art form. Over more than 70 years, until his retirement in 1989, Ward composed, directed, taught, and administered—at Juillard, Columbia, and Duke, and for the U.S. Army band during World War II.

His 1962 opera, *The Crucible*, based on the play by Arthur Miller, which earned him the Pulitzer, is perhaps his best-known work from a catalog that includes eight operas, seven symphonies, four concertos, and many shorter works.

Ward and three other recipients will receive their awards at a concert and ceremony in Washington, D.C., in October.

—Karen McCally