

# SPECTRUM



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**TODAY'S EDITION**  
*See page 3 for spouse/  
dependent scholarship  
information.*

## Congresswoman Waters to give Black History Month keynote

By Clara B. Cox

Congresswoman Maxine Waters (D-Calif.), an advocate for women, children, people of color, and the poor, will deliver the keynote address for Virginia Tech's Black History Month celebration.

Waters will speak at 7 p.m. on Thursday, Feb. 3, in the Donaldson Brown Hotel and Conference Center auditorium. Her talk is open to the public.

Waters represents the 35th District of California, which includes a large part of South Central Los Angeles and the cities of Gardena, Hawthorne, and Inglewood. Now serving her fifth term in the U.S. House of Representatives, she has been appointed chief deputy whip of the Democratic Party for the 106th Congress. She is a member of the House Committee on Banking and

Financial Services, Committee on the Judiciary, and Subcommittee on the Constitution. She is the ranking member of the Domestic and International Monetary Policy Subcommittee and also serves on banking subcommittees on General Oversight and Investigations and on Housing and Community Opportunity.

In Congress she played a major role in winning approval and funding for the Emergency Development Loan Guarantee Program, which authorized \$10 billion in Section 108 loan guarantees to cities for economic and infrastructure development, housing, and small-business expansion; for her Youth Fair Chance program, which received a \$50-million appropriation to establish an intensive job and life-skills training program for unskilled, unemployed youth; and her Community Development Bank Bill, which helped lead to

the president's initiative that provided \$360-million over four years in lending in underserved areas.

She also won expanded U.S. debt relief for Africa and other developing nations and won passage of legislation creating a Center for Women Veterans within the Department of Veterans Affairs to coordinate programs and help implement policies affecting the growing number of women veterans.

Following civil unrest in Los Angeles in 1992, Waters spoke via the national media to urge public understanding of the hopelessness and despair in cities across the country. Peter Jennings of ABC-TV *World News Tonight* described her as "a woman who simply will not go unheard."

To focus attention on the plight of inner-

(See WATERS on 3)



**WATERS**

## Tech earthquake center prepares Southeast for tremors

By Liz Crumbley

The most damaging seismic event in the United States before the 1906 earthquake and fire that destroyed San Francisco occurred in coastal South Carolina in 1886. The Charleston earthquake, which caused structural damage as far away as Richmond and Atlanta, reached an estimated magnitude of 7.3 on the Richter scale—essentially the same magnitude as the shock that killed more than 17,000 people in northwestern Turkey in August 1999.

In addition to the severity of these two earthquakes, another ominous similarity exists. "In terms of seismic vulnerability, many buildings in the southeastern U.S. today are similar to those in Turkey," said James Martin, an associate professor of civil and environmental engineering (CEE) who went to Turkey to study the effects of that earthquake. "In neither place is there adequate structural protection of buildings. If another 7.3-magnitude earthquake hit Charleston today, the city would suffer much the same damage as cities in Turkey."

(See EARTHQUAKE on 4)



**Period photograph illustrates some of the damage incurred during the 1886 earthquake in Charleston, S.C.**

## Search committee named to identify new vice president

By David Nutter

A search committee has been formed to identify a new vice president for development and university relations.

The vice president for development and university relations is responsible to the president of the university for the development and maintenance of effective relationships with the various constituencies of the university, and for the development and implementation of a coordinated program for the generation of private support for the university and university-affiliated organizations.

The vice president also serves as the executive vice president for advancement of the Virginia Tech Foundation. In this capacity, the individual is responsible for managing all activities involving the solicitation of funds and stewardship of donors and for working with the chairman of the board of the foundation to coordinate the board's Development Committee.

Named to the search committee are Minnis Ridenour, chair; Shelley Blumenthal, Tony Distler, Ben Dixon, Jack Dudley, Peter Eyre, David Ford, Rosemary Goss, Clark Jones, Wayne Leininger, Sharon McCloskey, Joe Meredith, Lynn Nystrom, Barbara Pendergrass, Ray Smoot, Bill Stephenson, and Tom Tillar. Other members of the committee include student representative

(See SEARCH on 4)

## Architecture center plays key role in King Memorial Competition

By Sandy Broughton

The College of Architecture and Urban Studies' Washington-Alexandria Architecture Center is playing a key role in the international design competition for a memorial to honor Martin Luther King Jr.

Jaun Holt, director of the center and a Virginia Tech faculty member, and LaVerne Wells-Bowie, a center consortium member and an architecture faculty member from Florida A&M University, are serving as competition consultants for the project. They have designed promotional posters and programs, surveyed the site, coordinated aerial photography and climatological

information, and are receiving design entries.

The National Capital Planning Commission unanimously chose a four-acre site on the Tidal Basin to honor King. The King memorial will be located between the Lincoln and Jefferson memorials, near the tribute to Franklin D. Roosevelt, in one of the nation's most visited and visible open spaces. The Lincoln Memorial was the location where King delivered his "I Have a Dream" speech to millions at the March on Washington in 1963.

Alpha Phi Alpha Fraternity, the nation's oldest traditionally black Greek-letter fraternity, of which King was a member, is spearheading the project and has been given permission by

the Congress of the United States to raise funds for the memorial. "We are truly honored to have the opportunity to build a memorial that will transcend our own time," said Adrian L. Wallace, general president of Alpha Phi Alpha. "It will extend to generations to come an opportunity to follow in the path of non-violence and inclusiveness. This memorial will honor the man, the movement, and the message." The bill to create the memorial was sponsored by Senators John Warner of Virginia and Paul Sarbanes of Maryland.

Public announcement of the King memorial competition was made in December. The

(See ARCHITECTURE on 4)

**Spectrum encourages  
submission of brief uni-  
versity-related news  
items for publication in  
the Bulletins section.**

# ACTIVITIES

## EVENTS

### Friday, 28

**Black History Program**, 11:30 a.m.-1:30 p.m., Women's Center: Myra Gordon.  
**Women's Basketball**, 7 p.m., Cassell Coliseum: Dayton.

**YMCA Open University Registration**, 9 a.m.-6 p.m., YMCA Office.

### Saturday, 29

**Men's Basketball**, 2 p.m., Cassell Coliseum: Massachusetts.  
**Music Program**, 8 p.m., Squires Recital Salon: Audubon Quartet.

### Sunday, 30

**Women's Basketball**, 2 p.m., Cassell Coliseum: Xavier.  
**Music Program**, 3 p.m., Squires Recital Salon: Audubon Quartet.

## FEBRUARY

### Tuesday, 1

**Salary and Wage Paydate.**  
**Black History Month Begins.**  
**University Leadership Development**, 9 a.m.-4 p.m., DBHCC: "Effective Project Management."  
**Book Signing and Reading**, 4-6 p.m., Volume II

Bookstore: Lucinda Roy.

**Black History Program**, 7-10 p.m., DBHCC: Harlem Renaissance Costume Ball.

### Wednesday, 2

**University Leadership Development**, 9 a.m.-4 p.m., DBHCC: "Effective Project Management."  
**Black History Program**, 7-9 p.m., Black Cultural Center: Discussion.  
**"With Good Reason,"** 7 p.m., WVTF: Politics Impolitic, guests include Robert Denton.  
**Women's Basketball**, 7 p.m., Cassell Coliseum: George Washington.

### Thursday, 3

**CEUT**, 3-5:30 p.m., Hillcrest: Peter Doolittle, Writing Better Multiple-Choice Questions.  
**Black History Program**, 7 p.m., DBHCC: Maxine Waters.  
**Men's Basketball**, 7 p.m., Cassell Coliseum: St. Joseph's.

### Friday, 4

**Black History Program**, 11:30 a.m.-1:30 p.m., Women's Center: Prejudice Reduction Workshop.  
**Benefit Concert**, 8 p.m., Squires Recital Salon: Virginia Tech and Radford music departments perform for the Rebecca Orr Memorial Scholarship Fund.

## SEMINARS

### Friday, 28

**Highlands in Chemistry**, 11 a.m., 3 Davidson: Kathryn Uhrich, Rutgers.

### Monday, 31

**Veterinary Medicine**, 8:30-9:30 a.m., Heritage Room, VMRCVM: Carol Wyatt, Washington State.  
**Horticulture**, 4 p.m., 409 Saunders: Elissa Stevens.

### Tuesday, 1

**Natural Resources**, 3 p.m., 315 Cheatham.  
**Geological Sciences**, 4 p.m., 4069 Derring: Knut Bjorlykke, AAPG.  
**Horticulture Gardens**, 7 p.m., Greenhouse Classroom: Becky Heath.

### Wednesday, 2

**STS**, 4-5:30 p.m., 132 Lane: Frederic J. Baumgartner.

### Thursday, 3

**Geological Sciences**, 4 p.m., 4069 Derring: James H. Knapp, South Carolina.

### Friday, 4

**Highlands in Chemistry**, 11 a.m., 3 Davidson: Matthew Tirrell, UCSB.

## BULLETINS

### Hispanic Month planning open to all

Multicultural Programs in the office of the Dean of Students has issued an open invitation to all students, faculty, and staff members to participate in the planning of the fall 2000 Hispanic Heritage Month.

The next meeting of the Hispanic Heritage Month Steering Committee will be Wednesday, Feb. 2, at 6 p.m. in the Multicultural Center, 140 Squires.

For more information, call Edwin Larroy at 1-8485 or the Dean of Students Office at 1-3787.

### BT announces schedule changes

The Blacksburg Transit has announced changes in its route schedule that were effective at the beginning of the semester.

The South Main and Windsor Hills routes have been increased to 15 minute service. The Oak Lane route will be return to 15-minute service frequency during the day.

The Campus Circulator route will add service to the Ramble Road area. Tom's Creek B Loop will operate on Saturdays. The Two Town Trolley will operate on Sundays.

New printed transit schedules that reflect the changes listed above are now available on-line at: <http://www.btransit.org>. Comments on Blacksburg Transit routes or suggestions for service improvements can be e-mailed to the customer advocate at [blacksburg.transit@btransit.org](mailto:blacksburg.transit@btransit.org).

For more information, call 961-1185.

### Dining centers set semester hours

Virginia Tech's Department of Residential and Dining Programs (RDP) has announced its spring operating hours for its nine dining locations.

West End Market is open Monday through Friday from 10:30 a.m. through 8 p.m. West End Market combines an outdoor marketplace into an upscale restaurant atmosphere. Offerings include steak and seafood, pasta made from scratch, wrap and deli sandwiches, soups and salads, freshly baked pastries.

Hokie Grill and Co. houses Chick-fil-A® and Pizza Hut Express®. It also features a soup, salad and fruit bar, and grab-n-go sandwiches. Hokie Grill and Co. is open Monday through Friday from 10:30 a.m. until 9 p.m.

Owens Food Court consists of 12 specialty shops serving international and American favorites. Offerings include pasta, subs, Mexican specialties, Philly cheese steaks, carved meats, stir-fry combinations, or an extensive soup and salad bar, and desserts. Owens Food Court is open seven days a week from 10:30 a.m. until 8 p.m.

Deet's Place offers coffee, pastry, ice cream, 31 flavors of Edy's ice cream and 27 flavored and international coffees, sandwiches, and desserts. Deet's is open from 7:30 a.m. until midnight Monday through Friday and 10 a.m. to midnight on Saturday and Sunday.

The two traditional all-you-care-to-eat venues are the

Depot at Dietrick and Shultz Dining Center. The Depot is open weekdays from 7 a.m. through 9:30 a.m. for breakfast, 11 a.m. through 1:30 p.m. for lunch, and 4:30 p.m. through 7 p.m. for dinner. On weekends, the Depot is open from 10 a.m. through 1:30 p.m. for brunch and from 4:30 p.m. until 6:30 p.m. for dinner. Shultz Dining Center is open weekdays for lunch from 11 a.m. through 1:30 p.m. and for dinner from 4:30 p.m. through 7 p.m. The all-you-care-to-eat menu is priced at \$3.90 for breakfast, \$5.75 for lunch/brunch and \$7.30 for dinner.

The Express at Dietrick offers grab-n-go salads, deli sandwiches and burgers, and late night meals and pizza. It is open seven days a week from 7 a.m. until midnight. The Express at Shultz, open from 7 a.m. until 8 p.m., offers grab-n-go salads, deli sandwiches, burgers and pizza. In addition, the Express features a hot bar for breakfast entrées, a salad bar and a dessert bar. Bagels, fruit, bottled and fountain beverages, coffee and ice cream are also available.

Located in the College of Veterinary Medicine, Vet Med Café serves burgers, grilled or deli sandwiches, soup and salads. Vet Med Café is open Monday through Friday from 7:30 a.m. through 10 a.m. for breakfast and 10:30 a.m. through 1:30 p.m. for lunch.

All dining centers accept Dining Dollars, the Hokie Passport Account, or cash. Departmental groups can also contract with RDP to provide meals in the dining centers and be billed via an ISR. For more information, or to contract for meals, call Julie Kamienski at 1-5721.

# Cardiac Rehabilitation Week features special open house

By Jean Elliott

The Therapeutic Exercise and Community Health (TECH) Center at Virginia Tech is observing National Cardiac Rehabilitation Week (February 6-12) with a special open house. Open to residents of the New River Valley, the TECH Center offers programs designed to increase awareness in health, nutrition, fitness and exercise.

On Friday, Feb. 11, the TECH Center will showcase its offerings with an open house at its location in War Memorial Hall from 7 to 8:30 a.m. The open house is an opportunity to learn more about the center's supervised exercise programs and risk-factor-reduction services.

Participants will also have access to free blood-pressure screenings, activity-level assessment, and may discuss any exercise or nutritional concerns with professional staff members. In addition, representatives from the American Heart Association and the state health department will be on hand for consultations. A continental breakfast will be served and guided tours of the facility will be offered.

The center is a non-profit community service that is operated through the College of Human Resources and Education's exercise physiology program, a branch of the Human, Nutrition, Food and Exercise Department.

The TECH Center serves people with a

broad range of health concerns and goals. It can help people who have coronary risk factors such as high blood pressure, high cholesterol, or a sedentary lifestyle. The program has greatly expanded over the last year to assist those with chronic health conditions such as diabetes, arthritis, chronic back problems, fibro-myalgia or orthopedic problems. There is also screening and rehabilitative programming for people who have blood-flow restrictions in their arms and legs.

The TECH program's medically supervised exercises include walking, jogging, stationary cycling, rowing, swimming, and aqua-aerobics. Services designed to reduce the risk of

disease include nutrition and diet counseling, stress management, and teaching skills for lowering heart-disease risk factors.

In addition to medical personnel and other professional staff members, graduate students in clinical exercise physiology and undergraduate students in human, nutrition, foods, and exercise work with professional staff members to maximize individual attention provided to participants.

Those planning to attend the open house should RSVP. Call 1-7277 or e-mail Wright at [jnwright@vt.edu](mailto:jnwright@vt.edu).

# EMPLOYMENT

## CLASSIFIED POSITIONS

The following classified positions are currently available. More details of these positions, specific application procedures and position-closing dates may be found on the Personnel Services web site at <http://www.ps.vt.edu>. Available positions are also listed on the Job Line, a 24-hour recorded message service. For information on all job listings, call 1-5300. Some of the following positions include state benefits. Positions with numbers beginning with a "W" are hourly and do not include state benefits. Individuals with disabilities desiring assistance or accommodation in the application process should call by the application deadline.

Closing date for advertised positions is 1 p.m. Monday. An EO/AA employer committed to diversity.

### Full Time

**Animal Care Technician B**, 2647M, Grade 5, Veterinary Teaching Hospital.

**Animal Care Technician C**, 2639M, Grade 7, Veterinary Teaching Hospital.

**Applications Analyst**, 7354D, Grade 0, Computing Center.

**Banner Desktop Support Technician**, 7409D, Grade 0, AIS.

**Boiler Operator Assistant**, 338C, Grade 4, Power Plant.

**Budget Analyst**, 6935T, Grade 10, Budget/Financial Planning.

**Capital Outlay Program Manager**, 7545P, Grade 14, Capital Design/Construction.

**Computer Operations Technician Senior**, 1054D, Grade 8, Test Scoring.

**Control Desk Attendant (Office Services Asst)**, 7335G, Grade 4, Recreational Sports.

**Development Associate for Student Calling Program**, 1450C, Grade 8, University Development/Annual Giving for Phonathon.

**Development Program Researcher**, 7556D, Grade 9, University Development.

**Fiscal Technician Senior**, 7448C, Grade 8, University Development.

**Six full-time food-operations positions** available; two part-time positions.

**Food Operations Manager B/Executive Chef**, 1781H, Grade 10, Residential/Dining Programs/Dietrich Dining Hall.

**Food Operations Manager B/Executive Chef**, 0837H, Grade 10, Residential/Dining Programs/West End Market.

**Housekeeping Worker**, 1220H, Grade 1, Residential/Dining Programs.

**Housekeeping Worker**, 0171H, Grade 1, Residential/Dining Programs.

**Housekeeping Worker**, 7261G, Grade 1, Recreational Sports.

**Institutional Traffic/Parking Supervisor**, 1111T, Grade 9, Parking Services.

**Laboratory Instrument Maker**, 3483J, Grade 10, Engineering Science/Mechanics.

**Laboratory Specialist**, 4002M, Grade 8, CVM.

**Laboratory Specialist Senior**, 7546M, Grade 9, CVM.

**Office Services Specialist**, 6693S, Grade 5, University Library/ILL.

**Office Services Specialist**, 2039C, Grade 5, University Bursar.

**Office Services Specialist**, 7508J, Grade 5, Ctr Power Electronics.

**Office Services Specialist**, 468S, Grade 5.

**Operating Systems Analyst**, 1244D, Grade 0, AIS.

**Plumber/Steamfitter**, 7278H, Grade 7, Residential/Dining Programs/Facilities.

**Program Support Technician**, LC090J, Grade 6, Athletics.

**Program Support Technician**, 0028, Grade 6, Scholarships/Financial Aid.

**Program Support Technician Senior**, LC045D, Grade 7, Alumni Relations.

**Program Support Technician Senior**, 7548T, Grade 7, Physics.

**Programmer Analyst**, 2352J, Grade 12, Northern Virginia Center.

**Programmer/Analyst**, 7559D, Grade 12, Educational Technologies.

**Public Relations Specialist**, 7549J, Grade 10, Center for Transportation Research.

**Senior Development Associate of Annual Giving**, 6695D, Grade 10, University Development.

**Student Programs Coordinator**, LC063D, Grade 12, Alumni Relations.

**Trades/Utilities Lead Worker/Mechanic**, 0416H, Grade 7, Residential/Dining Programs/Culinary Services.

### Part Time

**Agricultural Technician B**, W022979M, Grade 5, Veterinary Teaching Hospital.

**Animal Care Technician A**, W022970M, Grade 3, Veterinary Teaching Hospital.

**Conference Registration Specialist (Prog Support Tech)**, W020995G, Grade 6, Continuing Education.

**Fiscal Assistant**, W022977M, Grade 5, Biochemistry.

**Graphic Designer**, W022289M, Grade 9, CVM.

**Housekeeping Worker**, W020574G, Grade 1, DBHCC.

**Housekeeping Worker**, W022490H, Grade 1, Residential/Dining Programs.

**Laboratory Specialist**, W022972M, Grade 8, Dairy Science.

**Office Services Assistant**, W022978, Grade 4, Library.

**Office Services Specialist**, W022340G, Grade 5, Continuing Education.

**Office Services Specialist**, W022170M, Grade 5, Veterinary Teaching Hospital.

**Office Services Specialist**, W022969M, Grade 5, CVM.

**Program Support Technician**, W022973J, Grade 6, Community Design Assistance Center.

**Radiologic Technologist**, W022238G, Grade 7, Health Center.

**Secretary Senior**, W020618M, Grade 5, CVM.

**Student Health Staff Physician**, W022971G, Grade 18, Health Center.

**Trades/Utilities Worker (Trades Helper)**, W022966H, Grade 3, Residential/Dining Programs/Facilities.

### University Only

**Animal Care Technician C**, 7557M, Grade 7, CALS—Middleburg AREC.

### Off Campus

**Animal Care Technician B**, 542M, Grade 5, CVM/Equine Medical Center.

**Evening Announcer**, 1962D, Grade 8, WVTF.

**Executive Secretary Senior**, 6186M, Grade 7, VCE—Southeast District.

**Office Services Assistant**, 6605, Grade 4, HNFE.

**Program Support Technician**, 5792M, Grade 6, VCE—Southampton County.

**Program Support Technician**, 7543J, Grade 6, NVC—Computer Science.

**Secretary Senior**, 5481J, Grade 5, Educational Leadership/Policy Studies.

**Secretary Senior**, 5148M, Grade 5, VCE—Henry County.

## FACULTY POSITIONS

### INSTRUCTIONAL

**Department of Foreign Languages and Literatures. Visiting Assistant Professor of French.** Contact: Judith Shrum, 331 Major Williams (0225). Review begins March 1.

### NON-INSTRUCTIONAL

**Office of Scholarships and Financial Aid. Assistant Director for Scholarships.** Contact: Mac Staples, 222 Burruss (0222). Review begins immediately; continues until position filled.

**Virginia Cooperative Extension. Extension Agent, 4-H Youth Development (re-advertised).** #111808, Craig Co. Contact: John Dooley, 122 Hutcheson Hall (0437). Review begins February 7.

**Virginia Cooperative Extension. Extension Agent, Family and Consumer Sciences.** #FA741, Roanoke Co. Contact: John Dooley, 122 Hutcheson Hall (0437). Review begins February 14.

## Scholarships available for faculty-staff dependants, spouses

As a result of funds donated by Virginia Tech employees scholarships are now available for full-time freshmen or entering transfer students who are dependents or spouses of Virginia Tech staff and faculty members.

The purpose of this scholarship is to assist families of Virginia Tech full-time employees in supporting their dependents and spouses as students at Virginia Tech. Two scholarships of \$500 each will be awarded for freshmen or entering transfer students for the 2000/01 academic year. One scholarship will be awarded

based on need and one will be awarded based on merit.

To qualify for this scholarship you must be a dependent or spouse of a salaried full-time staff or faculty of Virginia Tech; incoming freshman or entering transfer student in a baccalaureate degree program, and enrolled full time at Virginia Tech.

These scholarships will enable more dependents and spouses of employees to attend Virginia Tech, which will further strengthen the Virginia Tech community. Funds for this scholarship

were solicited through the Office of University Development and are administered by the Dependent and Spouse Scholarship Committee.

Contact the Office of Scholarships and Financial Aid for an application and more information on this scholarship. The deadline for receipt of applications is March 1. The web site with information about this scholarship is: <http://www.finaid.es.vt.edu/homepage.html>. To donate to this scholarship fund, contact the Office of University Development at 1-2801.

## WATERS

*Continued from 1*

city communities, she has also hosted numerous government officials and policymakers in her district, including President Bill Clinton, Vice President Al Gore, and Secretaries of Housing and Urban Development Henry Cisneros and Andrew Cuomo.

In 1998 she led Alan Greenspan, chair of the Federal Reserve System, and other federal regulators on a walking tour of the Vermont-Manchester area of South Central Los Angeles to discuss the need for community re-investment.

Waters has long been involved in Democratic Party politics and has served on the Democratic National Committee since 1980. She has been a leader in five presidential campaigns and seconded the nominations of

Sen. Edward Kennedy, Jesse Jackson (twice), and Clinton.

A community organizer and grassroots activist, she co-founded Black Women's Forum, a non-profit organization of over 1,200 African American women in the Los Angeles area. She founded Project Build, which works with young people in Los Angeles housing projects on job training and placement. Following the 1992 civil unrest, she founded Community Build, the city's grassroots rebuilding project.

As a human-rights advocate, Waters worked with African National Congress leader Nelson Mandela in the movement to end apartheid and assure one-person, one-vote democracy in South Africa. She founded the Los Angeles Free South Africa Movement and was arrested in a protest against the apartheid regime. In 1994, she was

part of the official U.S. delegation to Mandela's inauguration as president.

Before her election to the U. S. Congress in 1990, Waters spent 14 years in the California State Assembly, where she rose to the position of Democratic Caucus Chair.

Waters earned a bachelor of arts degree at California State University in Los Angeles, and became a teacher and volunteer coordinator in the Head Start program. Active in political campaigns, she became the chief deputy to a Los Angeles city councilman before her election to the California State Assembly in 1976.

For more information on Black History Month events, call Kimberly Philpott at 1-3787.



VIRGINIA POLYTECHNIC INSTITUTE  
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## IN OTHER NEWS

## On-line courses allow Swenson to jumpstart career

By Sally Harris

Emily Swenson not only will be able to do an internship in Newport News this semester, but, because of the availability of on-line courses, will be able to continue taking courses at Virginia Tech at the same time.

Swenson, a junior political-science major, will not only be working a 40-hours-per-week internship at City Hall in Newport News, where she also worked awhile during high school, but will also be taking four on-line classes and doing an independent study this semester. During her "free" time, she'll be helping build houses for Habitat for Humanity.

"Students can jumpstart their careers by interning during the spring semester of their junior year, as Emily has, combining work experience with regular course work," said Doug Eckel, professor of political science and assistant dean of the College of Arts and Sciences. "They also often encounter less competition for some of the top summer internships, which fill up very quickly. Emily is an excellent example of what students can accomplish using the new instructional technologies such as distance learning and on-line courses in combination with the university's interest in experiential learning and career preparation."

Swenson started her internship the week before the Sugar Bowl, took a week off to watch the Hokies vie for the national championship, and then started working again the next week. "I'm a research-intensive intern," Swenson said of her job at Newport News. She prepares documents to present to the City Council and comparison reports that are too time-consuming for the city manager to do. "I like it," she said. "I really like not being bored."

This semester there's little chance she'll have time to be bored. The weekend before

classes started January 17, she came back to campus for interviews with the professors of her on-line courses. "I hope they will set me on the right path so I can be ready," she said the Friday before classes began.

Swenson is taking, totally on line, Language and Logic from the philosophy department, the Medieval World in the humanities program, Insects and Human Society from the entomology department, and a one-credit computer class about using the internet. Although she has designed a web page on the Internet for Eckel's class, she said, "I know I am deficient."

She's probably not as deficient as she thinks. "She was a very good student in my public administration class this fall," Eckel said, "playing a major role in her group's semester web-page project on use of the Internet for improving citizen participation in local government."

In addition, Swenson has already worked

with Professor Karen Hult in political science about her independent study on youth participation in municipal government. She has already made some contacts so that she is prepared to do that project.

Swenson used a criterion for choosing courses that she had not used before: they were courses she simply wanted to take. "I had heard about the entomology class," she said. "People said it was entertaining." It also fulfills one of her elective requirements.

Swenson is picking courses she didn't have time to take earlier. She is interested in the fields she will study this semester, and the classes she chose will give her the basis for understanding future courses in those fields.

Her on-line experience will help her in her job. The Newport News government, Swenson said, is emphasizing technology. "They are trying to achieve a goal of putting high-tech work stations in every one of their schools," she said. Swenson attended Heritage, a technical magnet

school in Newport News that had a wing devoted to technological subjects; but, as a senior, she was not involved with that program. It did, however, spark her interest with all its mechanical, technological, and electrical apparatus. The government, she said, wants such a technological program in each of its schools.

The city is trying to make everyone aware that technology is becoming extremely important in all aspects of our society and that acquiring knowledge of technology is the way to prepare for the work force, she said. "I think it's great when we have middle-schoolers walking around knowing more about technology than the city manager does," she said, "because then we know we're going somewhere."

## SEARCH

Continued from 1

Brian Slingerland, Parents' Committee representative Carolyn Foreman, and Gene James, past president and member of the foundation board. Kim O'Rourke will serve as search coordinator.

According to Minnis Ridenour, chair of the search committee, "An executive search firm, Baker, Parker & Associates of Atlanta, has been retained to assist the search committee with the recruitment and screening of applicants."

Ridenour said that the search committee intends to bring a small number of finalists to campus for interviews that will involve the university community. After the interviews, the committee will recommend to President Charles Steger approximately three candidates, from which he will appoint the next vice president.

Steger was vice president for development and university relations before being named to succeed President Paul Torgersen.

## ARCHITECTURE

Continued from 1

competition will continue through May, 2000. A panel composed of noted professionals in architecture, landscape architecture, and fine arts will judge entries. The King National Memorial Project Foundation has established a web site, designed and hosted by BellSouth, which will continually update developments surrounding the project. It is located at [www.mlkmemorial.org](http://www.mlkmemorial.org). Individuals or teams may submit entries and inter-disciplinary teams are encouraged to enter. Registration information is available through the Martin Luther King Memorial Project Foundation, Department 211, Washington, DC, 20055-0211, or by calling 410 554-0040, extension 110.

This is the third world-wide competition

the Washington-Alexandria Architecture Center has helped to manage. The center was involved in the Center for Innovative Technology project in 1983 and in the Women in Military Service for America Memorial located at the entrance to Arlington Cemetery in 1987.

The Washington-Alexandria Center and Consortium is an extension of the College of Architecture and Urban Studies in Northern Virginia. It serves graduate and undergraduate architecture students from Virginia Tech as well as a dozen other universities in the United States and abroad including California Polytechnic State University at San Luis Obispo, Florida A&M, Oxford Brookes University in England, Bauhaus-University of Weimar in Germany, and Yokohama National University in Japan.

## EARTHQUAKE

Continued from 1

The South Carolina coast is not the Southeast's only earthquake-vulnerable area. In 1897, an earthquake with an estimated magnitude of 6.0 rocked Virginia Tech—the shock was centered in neighboring Giles County and was felt from Pennsylvania to Georgia. And although we tend to think of Alaska and California as the typical sites of seismic activity in the U.S., eastern Tennessee is one of the most active areas in the nation in terms of the number of earthquakes recorded.

Despite the Southeast's potential for major earthquakes in the future, few engineering studies or emergency response plans have been devised in our region, Martin said. That's why he and Martin Chapman, director of the Virginia Tech Seismological Observatory, have founded the Earthquake Engineering Center for the Southeastern U.S. (ECSUS).

"Recent seismological studies suggest that the southern Appalachian highlands have the potential for even larger earthquakes than have occurred in the past," Martin said. "But now those events would take place in much more highly populated areas."

"Felt" earthquakes don't occur as often in the Southeast as in California, because the tectonic strain rates are different," he said. "We tend to experience large earthquakes isolated by long periods of quiet."

"However," Martin warned, "we are under a significant threat of large, damaging earthquakes."

The Southeast is in the middle of the North American plate, while the large faults in California, such as the San Andreas fault, are on the boundary between the North American

and Pacific plates, Chapman said. The Southeast has fewer frequent major earthquakes because of its location in the middle of a plate.

Nevertheless, Charleston, Richmond and parts of the Tennessee Valley have the potential to experience major shocks, Chapman said. "We can't make forecasts for future quakes in the Southeast," he said, "but geological history shows that during the past 4,000 to 5,000 years the region has experienced about six earthquakes large enough to liquefy the ground." Liquefaction occurs in sandy soils with high water tables, he explains. During a major earthquake, the water pressure in the soil may increase to a level at which the soil actually becomes liquid, and buildings in the area often topple or sink into the ground. This phenomenon was common during the 1886 Charleston quake.

Martin, Chapman and other ECSUS researchers intend to lessen the vulnerability of the Southeast to severe earthquake damage by developing and disseminating critical seismic data and technology.

Funding for the ECSUS already has been provided by the U.S. Geological Survey and more is expected from Virginia Tech, the South Carolina Department of Transportation, and other government agencies and private companies.

Updating seismic hazard maps and earthquake detection and mitigation technology is a major goal for the ECSUS.

"Very little research on seismic hazard mapping has been conducted specific to the Southeast," Martin said. Most of the latest maps for the region have been developed from Virginia Tech's catalog of historical and seismic-instrumentation data, and the university's monitoring network is a key element to future ECSUS work. However, he said, there is an urgent need for regional hazard mapping, especially in urban areas.

Currently, Chapman said, hazard maps available in the Southeast are national maps last updated by the USGS in 1996. These maps offer a good national perspective, but don't provide detailed data for specific sites.

The ECSUS will develop localized hazard

maps and teach the region's engineers to use them. Charleston will be the subject of the first series of maps, developed with the latest Geographical Information System (GIS) technology. GIS seismic hazard maps—computer-based maps showing site-specific potentials for earthquakes—can help engineers and architects determine if a structure is being designed in an earthquake-prone area, and can help local planners develop protective building codes.

GIS technology also will be crucial after an earthquake occurs. "When an earthquake triggers seismic monitors," Martin explains, "the information is fed to a GIS network. Within minutes, a local emergency response team can see where the worst damage likely occurred so that teams can be dispatched immediately to the areas most in need of help."

The ECSUS will manage the transfer of such data and technology to the Southeast. For example, Martin says, engineers who are building a bridge in an earthquake-prone area of South Carolina need to use the latest seismic-engineering technology and building-code criteria, developed primarily in the western U.S., and ECSUS will aid in that information exchange and help adapt the technology to the Southeast.

Building codes are another priority for ECSUS. Codes in the eastern U.S. have been updated to reflect information from 1996 earthquake-hazard maps and recent findings on soil response to strong motion. However, there is no organized effort to inform the engineering community in the Southeast about important new design procedures.

Martin said, "The Southeast needs experts who can address methods of updating building codes and structural designs specific to the needs of the region. We also want to promote the continued evolution of building codes."

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