State’s first Internet2 studio opens

By David Natter

Donald Donaldson, Virginia’s secretary of technology, and Paul Torgersen, the president of Virginia Tech, unveiled Virginia’s first Internet2 Technology Studio at a news conference last week in Richmond.

The studio, which uses the most up-to-date equipment and technology, provides users with the most advanced applications available on the Internet. At the studio, users can watch broadcast-quality video over the Internet. This technology can also be used to provide video-on-demand and virtual-reality technology over the Internet.

“This technology will have important applications for education, business and government,” said Internet2 Studio Director Patricia Jackson. “That is why the studio is open to the public, so they can see and use it.”

Jackson said Internet2 is working to enable applications, such as tele-medicine, digital libraries and virtual laboratories that are not possible with the technology underlying today’s Internet.

Proponents of the Internet hope that early adoption of advanced-communications technologies will provide a competitive edge for Virginia businesses.

Jackson said once people begin to experience the potential of these technologies, “they will create their own applications…applications that today we cannot even envision. The studio will be a catalyst for entrepreneur activity that will open the door to new businesses, just as the current Internet has done.”

Torgersen said the university took the lead in creating the studio because the university “initiated the establishment of current-generation Internet service in Virginia and the university created Net.Work.Virginia, which today provides the Internet2 infrastructure for the state.”

The studio, which is located at 11 South 12th Street in Richmond, will be open to the public free of charge from 10 a.m. to 2 p.m. Monday through Friday. Corporate groups will also take part in an educational event或其他业务支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。与会者将作为在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业支持服务。参与者将参加在教育活动，包括由加拿大国内，更广泛的营销活动，和企业 support services. Participants will also take part in an educational event focusing on Canadian custom clearance issues called Can-Do, and additional business meetings in Montreal.

Canadian Virginia’s largest trading partner, buying $1.54 billion in Virginia goods last year. This volume of trade has increased 50 percent since 1993. Major export industries are across the state. It is a unique study in that, by converting rental costs to percentage of income for low-income families, it enables researchers to develop comparisons over time and between localities.

Among the study’s findings:

Even though 70 percent of Virginians own their own homes, affordable housing has not increased across the income range. While the rent burden index for median-income families decreased slightly from 15.6 percent in 1989 to 15.2 percent in 1996, the rent burden index for low-income families increased from 42.0 percent to 51.2 percent.

Seventeen Virginia localities saw their rent burden indexes more than double from 1989 to 1996.

More than 30 localities have rent burdens for a standard quality unit that exceed 70 percent of income.

Rental costs for a standard quality unit exceed 30 percent of income for low-income families in 131 of 135 jurisdictions in Virginia. On average, low-income families pay about half of their income to rent a decent but modest apartment in Virginia.

Virginia localities with the highest rent burdens include Petersburg, Accomack, Norfolk, and Portsmouth. Virginia localities with the lowest rent burdens include Manassas, Fairfax, Chesterfield, and Loudon.

Koebel says the alarming implication of the study is that the distance between the “haves” and the “have nots” is widening—dangerously. “Housing is so fundamental to everyone. There is no single symbol of American success as globally recognized as the quality of housing we occupy. The low-income families in this study [the bottom 30 percent in each jurisdiction] are primarily working poor with earned income. We are kidding ourselves if we think this disparity won’t cause additional societal problems.”

The full study, Losing Ground in Virginia: The Inaffordability of Rental Housing for Low-Income Families in the 1990s, can be accessed through the Internet at www.arch.vt.edu/ech/echr/va.html and includes maps, graphs, tables, and references.

For more information about the study or to obtain a copy of the research, contact the Center for Housing Research at 1-309-540-8123, Lydiana H. Martin, a graduate student in the Department of Urban Affairs and Planning in the College of Architecture and Urban Studies at Virginia Tech, who co-authored the study.

Koebel will be publicly presenting the results of the study October 13 at an conference sponsored by the Federal Reserve Bank of Richmond.

The Center for Housing Research at Virginia Tech is a university-wide center established by the General Assembly in 1989. Koebel is a professor of housing and urban planning in the College of Architecture and Urban Studies.
Virginia Tech faculty and staff members and students are often the subject of significant national and state-wide news coverage. To better inform the university community about these accomplishments, the Office of University Relations has compiled this news packet on coverage in the Roanoke news-media market. For more information about the events mentioned, contact Julie Kane, university public-relations specialist, at 1-9934, or contact your college public-relations office.

Los Angeles Times (January 31): Christopher Neck, associate professor of management, was quoted in a story, “Zen at work,” about the problems that perfectionists can cause themselves and their co-workers.

Tucker (February 1999): E. Thomas Garman, fellow of the Center for Organizational and Technological Advancement and professor, personal finance employer education, discussed personal finance employer education (PFEED) in a column called “Face Value."

The Washington Post (February 13): Gene Seago, accounting professor, was quoted in the story, “Instructor’s hack rhums off on local government,” about state and county governments’ record surpluses fueled by the stock market boom, which has resulted in higher revenue from capital gains taxes.

Employment Relations Today (Winter 1999): E. Thomas Garman was quoted in an article about education and incentives to improve employees’ financial lifestyles.

Kitchens and Bath Design News (March issue): Rebecca Lovingood, head of the Department of New Environments, was quoted at length during a tour she gave through the Real Kitchens Mirror Real Life.

Richmond Times-Dispatch (March 29): Richard Wokach, management professor, and Christopher Neck, associate professor of management, were quoted in the business section cover story, “Living alive,” that examined whether lying has become more acceptable in business today.

The Montreal Gazette (April 3): Don Chance, finance professor, was quoted in a story, “The Chicagooption,” about the fierce competition being faced by the Montreal Exchange, which aspires to turn Montreal into a derivatives trading capital like Chicago.

Virginia Business Observer (April 12): Janine Hiller, business law professor, was quoted in the story, “The card that knows everything,” about a card with a microchip, an advanced version of the traditional magnetic-stripe card. The “smart card” is currently used primarily in the military but has potential applications in the medical, security, and retail industries.

The Virginian-Pilot (April 18): George Morgan, finance professor, was quoted in a story, “Mergenrmermergergergergergergergergergergergergergerg. An unprecedented number of companies are consolidating,” about the record value of mergers and acquisitions last year, their causes, and the impact on employees.

Washington Post (April 19): E. Thomas Garman was quoted in an article “Taking Care of Our People in Uniform.” He commented that about one in five military personnel are deeply and desperately in debt.


Washington Post, Richmond Times Dispatch, BBC, ABC, Chronicle of Higher Education, Nature (April 22): Articles about Biology Professor Stephen Schecheler’s research about the oldest tree (Arceuthopitrum) has appeared in these and several other media outlets.

USA Today (April 23): In a section called “The Options Game,” E. Thomas Garman made remarks about corporate boards, stock options and shareholders.

Washington Post (April 29): Malcolm McPherson, associate dean for research and graduate studies in the College of Engineering, was quoted in a story “Area Tech Education Heats Up by a Few Degrees.” McPherson talks about the increase in students enrolled in the high-tech areas of the university.

Essence (May 1999): The magazine featured a long conversation, with photos, between Queen Latifah and Virginia Tech poet Nikki Giovanni.

Oakland, CA Tribune (May 1): Giovanni and her latest poetry collection, Blues for All the Changes were featured.

Blue Ridge Business Journal (May 1999): Dan Smith’s editorial featured research and comments by Walter Wiewiorski, professor emeritus of industrial and systems engineering and leader of the human factors and safety group at the Center for Transportation Research. The editorial’s subject was the proliferation of cell phones and other gadgets in automobiles and the dangers they pose by diverting drivers’ attention from the road.

Los Angeles Times (May 9): Nikki Giovanni’s poetry book Blues for All the Changes was listed as number four on its bestsellers list.

(Virginia Public Radio) With Good Reason (week of May 10): Educational Leadership and Policy Studies Professor Lawrence Cross discussed Virginia’s Standards of Learning testing efforts.

Virginia News/Network (May 12): Fishermens and Wildlife Science Professor and Extension Specialist Jim Parkhurst discussed deer populations in Virginia.

San Francisco Chronicle (May 12): Steve Manaster, director of the financial-risk management center, was quoted in a story about the Pacific exchange’s proposed joint venture with a New York broker to launch a computer-based options trading system.

Virginia News/Network (May 14): Alumni Distinguished Professor of History James Robertson Jr. discussed Virginia’s role in the Civil War.

Washington Post (May 17): Nikki Giovanni was prominently featured in a story about “Bring in Da Slam,” the third annual poetry slam and “rent party” held at Bonders in D.C. To benefit the Youth Sports Slam League. The article states that the young poets “came to listen to spoken-word all-stars like the venerable lioness Nikki Giovanni. . . .

Virginia News/Network (May 19): Insect Identification Lab Manager Eric Day disclosed tick problems in Virginia.

Richmond Times Dispatch (May 22): William Velander of chemical engineering was quoted extensively in a front-page article on his work with the American Red Cross. They are using transgenic pigs to produce protein C which will be used for manufacturing pharmaceuticals.

Virginia News Network (May 26): Educational Leadership and Policy Studies Professor Lawrence Cross said there are major problems with the state’s Standards of Learning tests.

Reader’s Digest (June 1999): Rosemary Blosewer, professor of child and family development, is quoted in an article on “How to Mend a Friendship” by Patricia Skalka.

Donna W. Ford, administrative assistant in the Virginia-Maryland Regional College of Veterinary Medicine’s Office of Academic Affairs, has been awarded the 1999 Dean and Department Area Staff Award. The award is recognizes the exemplary behavior of classified staff personnel.

Anwar S. Ahmed, an associate professor in the department of ornithological Sciences and Pathobiology, recently presented papers at two international meetings in India. “Immunological Consequences of Exposure to Estrouge: Aberrant Spontaneous and Induced Lymphocyte Activation,” was presented at the VII International Congress of Reproductive Immunology in New Delhi.

He also presented “Importance of Sex Hormones in Autoimmunity: Implications to Myasthenia Gravis,” at the International Myasthenia Gravis Workshop in Mumbai, India. His international travels were partially supported by the International Congress of Reproductive Immunology.

Grant Turnwald, associate dean for academic affairs at the VMRCVM, has co-authored the third edition of Small Animal Clinical Diagnoses by Laboratory Methods, a major reference text in veterinary medicine. Turnwald is also a professor in the Department of Small Animal Clinical Sciences.

Craig D. Thatcher, professor and head of the VMRCVM’s department of Large Animal Clinical Sciences, recently gave presentations on “Composite Parenteral Nutrition/Solutions,” “Nutritional Assessment of the Critical Patient,” “Enteral Nutritional Support,” “Enteral Nutrition: Case Presentations,” “Parenteral Nutritional Support: Case Presentations,” and “Nutritional Support” at the Western States Veterinary Conference in Las Vegas.

Jerry Roberson, an assistant professor in the VMRCVM’s Department of Large Animal Clinical Sciences, was one of the featured speakers at the National Mastitis Council Annual Meeting, which was recently held in Arlington, Virginia. His presentation was titled “Epidemiology of Staphylococcus aureus on Dairy Farms.”

Nathaniel White, the Theodore Ayer Randolph professor of surgery at the VMRCVM’s Marion duPont Scott Equine Medical Center, recently gave presentations at the Central Veterinary Conference in Kansas City, the ACVS Veterinary Symposium in Chicago, the Sixth Ethn Colic Research Symposium at the University of Georgia and the AAPP/Continuing Education Meeting in Hawaii. White also authored chapters in Current Techniques in Equine Surgery and Lameness, Equine Medicine and Surgery, and Pathophysiology of Obstruction, Strangulation, Strangulation/Obstruction Ischemia.

Two employees of Virginia Tech’s Division of Continuing Education have received the designation of certified program planners (CPP) by the Learning Resources Network (LRN) an international association in lifelong learning.

Donna Raines, executive program administrator, and Rebecca Sheler, program administrator, recently passed an intensive exam to receive this designation. The LRN organization has more than 5,000 members in eight countries. Raines and Sheler will travel to Washington, D.C., in December to receive their certificates and medals at the International LRN Conference, which attracts approximately 1,000 attendees.

Raines has worked in the Division of Continuing Education for 15 years. Sheler has spent the past three of her 15 years at Virginia Tech with the division.

“The CPP designation is a standard of achievement in the knowledge and understanding of lifelong learning,” said LERN President William Draves. “By becoming a certified program planner, Donna and Rebecca have helped to professionalize the field of educational programming.”

In March, Provost Peggy S. Meszaros addressed students in the President’s Emerging Leaders Program at her alma mater, Austin Peay State University. She also served as
Staff Appreciation Day Termed Rousing Success

By Susan Trulove

Virginia Tech faculty members, students, and staff who received 29 patents during 1998 were honored by the university and Virginia Tech Intellectual Properties, Inc. (VTIP) at a reception at the German Club in May.

“We appreciate their creativity and contributions to the growth of knowledge and technology,” said Michael Martin, executive vice president of VTIP.

Graduate students were significant partners in last year’s patents. The College of Natural Resources, Ph.D. candidate Jason Todd’s dissertation research has resulted in a new, low-cost material for purifying proteins. Todd, Wolfgang Glasser, professor of wood science, and an employee of LogiChem, received a patent (No. 5,770,712 June 23, 1998) for “Crosslinked hydrogel beads from chitosan.” Chitosan is a modified form of chitin, a structural component in crab and shrimp shells. The technology is licensed to LogiChem, a startup company in New Jersey. Glasser, who produced and patented a number of cellulose-based separation materials, is continuing to develop and patent chitosan-based materials and products.

In the College of Agriculture and Life Sciences, Richard Fell, entomology professor, and Colleen Cannon, who received her Ph.D. in December, developed an environmentally safe bait to control carpenter ants. The diet they developed, which is highly attractive to the ants and other pests, is licensed to an anti-multinational company and will appear shortly on store shelves. Patent No. 5,850,707 issued less than a week after Cannon graduated.

Also in entomology, retired research sci-

entist Heather Wien received two more patents for compositions and methods for controlling insect pests. The patent received in June (No. 5,770,601) was for a novel material that attracts insects and enhances the deadly effect of other agents. The patent awarded in December (No. 5,852,025) is for a novel combination of two materials that act in conjunction to inhibit vital physiological processes in insects. The mate-
rules have produced effective against mosquito lar-
vae, fly larvae, and some beetle larvae.

(See PATENT on 5)

Conference highlights Tech ETD program

At the end of the second year of requiring students to submit electronic theses and dissertations (ETD’s), Virginia Tech has almost 2,000 ETD’s, and about 65 percent contained some multimedia content, according to Associate Provost John Eaton.

Eaton made his report to the Networked Digital Library of Theses and Dissertations (NDLTD) 1999 Workshop Program at Virginia Tech, which was attended by graduate school and library representatives from 35 universities from across the US and Canada.

Virginia Tech has led the effort to help universities get students’ final research projects into digital format, and has developed student-training materials, software, and procedures that others are beginning to adopt. At the May 16-18 program, other institutions also had experiences to share—such as West Virginia University (WVU), which now requires ETD’s, while still others have pilot projects or attended to learn and discuss concerns.

Virginia Tech computer science professor Ed Fox said NDLTD objectives are for theses and dissertations “to reach the whole world, be sustainable, and be highly visible and useable.”

“I think we should only do things when they help us. I struggle with computers too,” he said. “But ETD’s can be more expressive. Mandating ETD’s will change future scholarship. The people who are doing ETD’s are our future leaders and scholars. NSF is requiring PDF proposals, which are harder than an ETD. So doing an ETD is part of a student’s education.”

“Our institutions often compete,” Fox said. “This is an area where we can work together. There are many schools that are in the same boat.”

Almost 1,100 of Virginia Tech’s ETD’s are available world wide and about 600 of them can be accessed by 3,600 users only. Eaton said: “The rest aren’t accessible either because they contain proprietary information or because parts of them await publication in journals that consider ETD’s to be prior publications.”

Fox said that the concern about publishers who consider ETD’s to be prior publication is being addressed. “The American Chemical Society, for example, has changed their policy. We can work with others,” he urged the universities to object to exclusive copyrights. “Don’t let just the publishers make the rules,” Eaton said.

At Virginia Tech, there are as many as 40,000 accesses per week from some 37,000 hosts per year from around the world. Fox said “Popular areas are engineering and physics—particularly documents with lots of tables and charts.”

Fox said the project team is available to travel, answer e-mail, answer phone calls, and video conference. We almost have a video conference, he said.

CORRECTION

In the May 27 issue of Spectrum, a calendar item incorrectly listed Animal Industry Day on one of the October terms. The statement was correct. The Communication Network Services staff members are encouraged to visit the web site, which is updated and expanded regularly.

The messages are checked daily by members of the Communications Committee on a rotating basis.

4. Orientation Letter. A letter has been composed by the Communications Committee and sent by the president of the Staff Senate for the past three years. The letter is distributed by Personnel Services in the Orientation Packages of each new employee. The letter tells employees about staff governance and staff associations.

5. Trademark for Tag Line. The Staff Senate coined the phrase, Partners in Shared Governance, had a banner made with the word, and has used it as a “tag line” in a variety of ways. Through research, the Communications Committee applied for a limited trademark designation for this tag line. The “TM” designation and its application were reviewed by Michael Martin of VTIP and approved. The web was searched for other users of this tag line; none were found. The tag line is used on senate correspondence, brochures, banners, orientation letters, etc.

6. Staff Association Photo Board. (See STAFF SENATE on 4)

Prepared by Cindy Harrison

The Communications Committee has met once a month. Committee members are Patrick Donohoe (chair), Spencer Allen, Billie Cline, Cindy Harrison, Mike Koecklein, Terry Lawford, Mike Maykowskyj, Mary Donohoe (chair), Spencer Allen, Billie Cline, Virginia Lawrence, Mary Maykowskyj, Carol Maykowskyj, and Janet Town.

Committee members are Patrick Donohoe, Spencer Allen, Billie Cline, Virginia Lawrence, Mary Maykowskyj, Carol Maykowskyj, and Janet Town. Listed below is a summary of the committee’s activities for the past year.

1. Staff Senate Brochure. A brochure was designed including content and artwork, publication and distribution. The brochure is printed in color with three panels. It provides information on the purpose of Staff Senate, the hierarchy of the governance system, and the benefits of participation in staff governance. It can be used as a marketing tool.

2. Staff Senate web site. The web site www.staffsenate.vt.edu was designed and maintained by Maykowskyj. It has been designed so that all Staff Senate announcements, minutes, officers and other documents are displayed. All staff members are encouraged to visit the web site, which is updated and expanded regularly.

3. Staff Senate Telephone. The Staff Senate had a direct telephone number which was being misused by non-Senate personnel. The Staff Senate terminated the telephone, but Communications Network Services put in its place a phone mail box to receive messages (1-2855). The messages are checked daily by members of the Communications Committee on a rotating basis.

VTIP at a reception at the German Club in May.

“We appreciate their creativity and contributions to the growth of knowledge and technology,” said Michael Martin, executive vice president of VTIP.

Graduate students were significant partners in last year’s patents. The College of Natural Resources, Ph.D. candidate Jason Todd’s dissertation research has resulted in a new, low-cost material for purifying proteins. Todd, Wolfgang Glasser, professor of wood science, and an employee of LogiChem, received a patent (No. 5,770,712 June 23, 1998) for “Crosslinked hydrogel beads from chitosan.” Chitosan is a modified form of chitin, a structural component in crab and shrimp shells. The technology is licensed to LogiChem, a startup company in New Jersey. Glasser, who produced and patented a number of cellulose-based separation materials, is continuing to develop and patent chitosan-based materials and products.

In the College of Agriculture and Life Sciences, Richard Fell, entomology professor, and Colleen Cannon, who received her Ph.D. in December, developed an environmentally safe bait to control carpenter ants. The diet they developed, which is highly attractive to the ants and other pests, is licensed to a multi-national company and will appear shortly on store shelves. Patent No. 5,850,707 issued less than a week after Cannon graduated.

Also in entomology, retired research sci-

entist Heather Wien received two more patents for compositions and methods for controlling insect pests. The patent received in June (No. 5,770,601) was for a novel material that attracts insects and enhances the deadly effect of other agents. The patent awarded in December (No. 5,852,025) is for a novel combination of two materials that act in conjunction to inhibit vital physiological processes in insects. The mate-
rules have produced effective against mosquito lar-
vae, fly larvae, and some beetle larvae.

(See PATENT on 5)
We'd like to thank the members of the Staff the VT Licensing Office, and the VT Bookstore awarded throughout the day. Pepsi Products, Debbie Cruise, Amanda Gland, and Janis Grubb. Ladies were Mary Grace Theodore, Debbie Rhea, and several town officials.

The Talbot Memorial Park has been developed by the Rotary Club of Blacksburg in conjunction with Virginia Tech and the Town of Blacksburg. The park is a wayside off the Huckleberry Trail which consists of a gazebo constructed and donated by students from Blacksburg High School, several park benches, and a variety of ornamental plants and trees.

The Talbot Park is located approximately one-quarter mile down the Huckleberry Trail from the Blacksburg Public Library. The site can be accessed from the southern side of the Virginia Tech campus by turning into the university’s Trygfas Research Center from Southgate Drive and proceeding down a dirt road to the park.

Bursar’s announces new cashiers’ windows hours
New cash-receipts software is being installed in the Bursar’s Office to bring it to Y2K compliance. The new software should improve the cash-receipts process. There is a characteristic of the new software, however, that may cause some inconvenience to customers. The system does not allow the cashiers to balance the cash registers individually while the system is in operation, meaning all registers must close at the same time each day.

Effective June 14, and continuing until further notice, the cashiers’ windows will close at 4 p.m. each day to balance receipts and upload transactions. Cashiering operations will be available up until 5 p.m. on student-freepayment due dates.

There are drop slots located in the door of room 227 for phone/modem bills, all other payments, and a slot for department deposits.

The Bursar’s Office will continue to operate on the 8 a.m.-to-5 p.m. schedule each day, all services except the cashier operations at the windows will be available to customers.

For more information, call 1-7271 or e-mail maryvt@vt.edu.

Friday, 18  
Friday Night Out Concert, 6 p.m., Henderson Hall Lawn. Grace Note.

Saturday, 12  
YMCA Bike, 9 a.m., Meet at YMCA, 403 Washington St. Race Fields.

Sunday, 20  
YMCA Bike, 1:30 p.m., Meet at YMCA, 403 Washington St. Angel’s Rest.

Wednesday, 23  
With Good Reason, 7 p.m., WVTF: “Consumed by Swirl,” with Michael Chandler.

STAFF  
Continued from 3


The two finalist teams were: The Loose Wheels composed of Tammi Smith, Latonda Kellison, Jeff Havens, Joyce Vest, and Renee Scruggs. The second place team was Mike and Mary Whitehead, and The Tweedeks. The grand champions were The Loose Wheels. Recognition for team spirit went to The Fudin’ Finance Family ly with Kathy Armstrong as captain. Recognition for creativity went to The Merrymac Hillbillies with Doris Scher as captain.

Offered this year were seven walking tours. Your destinations were: McComas Hall, Merrymac Athletic Center, Deet’s Place, Historical Walk, Horticulture Garden, West End Market, and Wallace Hall Design Kitchen. With a total of 496 spaces available in 15 sections, approximately 419 spaces were filled. This is a record number for attendance, and assists with the coordination of all events. Linda Woodard and Carolie Nickerson served as co-administrative chairs. Other who assisted included Tony Butler, Bridget Mitchell, Margot Murray, Anthony Purcell and Mary Grace Theodore. Assisting them were Rhea, Gland, Diane Karfakis, Cruise, and Cronin.

Many individuals involved in the success of this year’s event. Not only do we rely on the committee and their assistants, but also a large portion of individuals that are employed in the Physical Plant. In particular, we would like to thank John Beach and crew for the entire building setup and preparation.

STAFF SENATE  
Continued from 3

Lawrence worked with Joy Thorn in designing the display board for staff associations. The board has been on display at several locations throughout the university for the past year and will be at Staff Appreciation Day.

The committee has the following proposed projects under review:

1. A Staff newsletter, to be issued quarterly.
2. A ListServ for the classified staff, which does not exist at this time.
3. A slide projector for the Staff Senate and staff governance, including display to accompany each slide.

The committee had no new business and set the date of the next meeting for Thursday, 27.
ACHIEVERS

From continued 2

Panel member at SCT Banner’s conference on technology initiatives. In April, Meszaros made a presentation on “Reengineering Excellence” at Michigan State University. She also met with department heads and administration at the University at Stony Brook to discuss how to develop an academic agenda and create learning communities. In May, Meszaros presented the commencement address at Virginia Western Community College.

Laura Worely Fornash and Mark Schroeder have received a fellowship for their work to develop in the Division of Continuing Education, and Scott Middelft, associate professor of electrical and computer engineering, recently presented at the University Continuing Education Association’s Forum on Competition in the Workforce Education Market. Their program, “Innovation in On-line Delivery: A Model for Continuing Education in Responding to Workforce Education in Information Technology,” overviewed Virginia Tech’s new graduate program in information technology offered at the Northern Virginia Center.

John S. Phillips, economic-development officer, has been appointed to a four-year term as a member of the Montgomery County Industrial Development Authority.

Mellinda Creider, assistant director for assessment, and David Ostroth, assistant vice president of University Unions and Student Activities, recently presented a session on “Student Leadership: Connecting Experience to Skill Development Through Assessment” at the 1999 annual American College Conference in Atlanta.

Judy Cooper, program coordinator for University Unions and Student Activities, recently presented three educational sessions at the National Association of Campus Activities convention. Two were panel discussions: “Current Issues and Trends in Promotions: Concerts on College Campuses” and “The Past, Present, and Future of Film Programming.” The third was a presentation on “The Future of Universities.”

John Maffi, director of the academic-assessment program, recently presented a plenary address at the first annual Congress on the Impact of Technology upon Learning held at Wake Forest University. His presentation was titled “Lessons Learned from a Decade of Assessment.”

Benjamin Dixon, vice president for multicultural affairs, recently presented a speech, “Diversity: Our Community’s Common Wealth” at the Second Regional Conference on Community Relations. Sponsored by the Roanoke City Council, Salem City Council, City Manager’s Community Relations Task Force, Roanoke Valley Regional Community Relations Conference Committee, Roanoke County Board of Supervisors, and Vinton Town Council, the conference focused on “Multiculturalism: Putting an Ideal into Practice.” It was held May 19-21 at the Hotel Roanoke and Conference Center.

Desu and Ph.D. graduate Chi Kong Kwok received a patent (No. 5,817,170 Oct. 6, 1998) for developing a “Low-temperature seeding process for a ferroelectric memory device.” The researchers wrote that, “This novel process makes use of a seeding layer that has a similar crystal structure to ferroelectric materials with desirable compositional but that can be transformed at lower temperatures. The process can be used to apply to any solid solution system that undergoes polymeric transformation.”

Desu, master’s degree graduate Ji Se, who is now at Wafer Tech, and an employee of Wafer Tech received a patent (No. 5,717,234 Feb. 10, 1998) for a fabrication process using metal-organic chemical-vapor deposition (MOCVD) techniques (a method for depositing highly uniform material films on a large wafer area) to produce a high-capacity capacitor for dynamic random access memory applications. The device solves the temperature-dependent dielectric breakdown problem encountered in these applications.
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: Office/Clerical: 1-6196; Technical/Research: 1-6160; Service/Trades: 1-6176; Professional and Managerial: 1-6469; Information Technology: 1-2233. Some of the following positions include state benefits. Positions with numbers beginning with a “W” are hourly and do not include state benefits. Comments about this shortened listing should be made to perserv@vt.edu or by calling 1-5301 or 1-6258 for persons with hearing impairments. Individuals with disabilities may also request assistance or accommodation in the application process should call by the application deadline.

To better serve applicants, the closing date for advertised positions has been changed to 1 p.m. Monday unless otherwise stated. An EOAA employer committed to diversity.

### Classified Positions

- **Food Operations Manager B/Executive Chef, 0029H**: Grade 10, Residential and Dining Programs/Donaldson Brown Dining Center.

### Employment

#### Full Time

- **Agricultural Supervisor, 7457M**: Grade 7, College Farm and Laboratory of Agricultural and Life Sciences. **Auditor—Internal, 2335T**: Grade 11, Auditor—Internal. **Computer Systems Engineer, 7439J**: Grade 14, Center For Power Electronics. **Computer Systems Engineer, 7440J**: Grade 14, Center For Transportation Research. **Computer Systems Engineer, 7444J**: Grade 14, Civil Engineering. **Computer Systems Engineer, 2754T**: Grade 14, Computer Science. **Computer Systems Engineer, 3555D**: Grade 14, Computing Center. **Electrician, 1831P**: Grade 7, Physical Plant. **Enrollment Services Coordinator, 1343P**: Grade 9. **Executive Secretary, 739U**: Grade 6, Materials Science and Engineering. **Executive Secretary, 1228T**: Grade 6, Office of Scholarships and Financial Aid. **Food Operations Manager A (Assistant Manager), 1033H**: Grade 8, Residential and Dining Programs/Dietrick Dining Center.

#### Part Time

- **Housekeeping Lead Worker (Trades Helper), 002243M**: Grade 8, College of Agriculture and Life Sciences. **Housekeeping Lead Worker (Trades Helper), 002246M**: Grade 6, College of Agriculture and Life Sciences.

#### Instructional

Department of Finance, Full Professor and Di-rector of the Financial Risk Management Center in Northern Virginia. The opening is for spring 2000. The applicant must have a distinguished record of scholarly work in finance as well as administrative experience in an academic or government environment. The director will be responsible for fund raising and adminis-tration of the center and will teach two courses per year in the center’s MBA program. Applications should include a curriculum vitae, three references, and examples of current research. Send applications to Don Chance, Department of Finance (0021), Pamplin College of Business, Virginia Tech, Blacksburg VA 24061; 1-6949; e-mail: chance@vt.edu.

#### Executive Secretary

- **Executive Secretary, 7459M**: Grade 13, College of Agriculture and Life Sciences. **Executive Secretary, 7460M**: Grade 13, Office of Distance Education.

#### General

- **Program/Analyst, 0027H**: Grade 9, Administrative Information Systems. **Research Specialist Senior/GIS Specialist, 7450M**: Grade 9, Entomology.

#### Senior Program/Analyst

- **Senior Program/Analyst, 0028H**: Grade 10, Information Technology Acquisitions. **Part Time**

- **Banquet/Setup (Flo-a), 002314G**: Grade 2, Donaldson Brown Hotel and Conference Center. **Equipment Inventory Asst/Fiscal Assistant, 0022627C**: Grade 5, Controller’s Office. **Flight Instructor (Pilot), Airport, 00226617**: Grade 1, Donaldson Brown Hotel and Conference Center. **Food Operations Assistant (Server), 0022531G**: Grade 1, Donaldson Brown Hotel and Conference Center. **Food Operations Assistant A (Dishwasher), 0022579G**: Grade 1, Donaldson Brown Hotel and Conference Center. **Grounds Worker, 0020798G**: Grade 2, Golf Course. **Health Educator, 0022659J**: Grade 8, Institute for Community Health. **Housekeeping Lead Worker (Trades Helper), 002243M**: Grade 8, College of Veterinary Medicine. **Office Services Specialist, 0022413T**: Grade 5, University Registrar. **Pharmacy Assistant A, 0020839M**: Grade 4, Vet-erinary Teaching Hospital. **Programmer, 0022623M**: Grade 10, College of Veterinary Medicine/Biomedical Sciences and Pathology. **Radiologic Technologist, 0022412M**: Grade 7, Veterinary Teaching Hospital.

#### Off Campus

- **Distance-Learning Specialist, 7410D**: Grade 12, Office of Distance Education.

### Faculty Positions

- **Food Operations Manager B/Executive Chef, 0029H**: Grade 10, Residential and Dining Programs/Donaldson Brown Dining Center.

- **Program/Analyst, 6887D**: Grade 12, Adminis-trative Information Systems. **Research Specialist Senior/GIS Specialist, 7450M**: Grade 9, Entomology. **Senior Program/Analyst, 6896D**: Grade 14, Information Technology Acquisitions. **Part Time**

- **Banquet/Setup (Flo-a), 002314G**: Grade 2, Donaldson Brown Hotel and Conference Center. **Equipment Inventory Asst/Fiscal Assistant, 0022627C**: Grade 5, Controller’s Office. **Flight Instructor (Pilot), Airport, 00226617**: Grade 1, Donaldson Brown Hotel and Conference Center. **Food Operations Assistant (Server), 0022531G**: Grade 1, Donaldson Brown Hotel and Conference Center. **Food Operations Assistant A (Dishwasher), 0022579G**: Grade 1, Donaldson Brown Hotel and Conference Center. **Grounds Worker, 0020798G**: Grade 2, Golf Course. **Health Educator, 0022659J**: Grade 8, Institute for Community Health. **Housekeeping Lead Worker (Trades Helper), 002243M**: Grade 8, College of Veterinary Medicine. **Office Services Specialist, 0022413T**: Grade 5, University Registrar. **Pharmacy Assistant A, 0020839M**: Grade 4, Veterinary Teaching Hospital. **Programmer, 0022623M**: Grade 10, College of Veterinary Medicine/Biomedical Sciences and Pathology. **Radiologic Technologist, 0022412M**: Grade 7, Veterinary Teaching Hospital. **Secretary Senior, 0020618M**: Grade 5, College of Veterinary Medicine.

- **Storekeeper, 0022291M**: Grade 4, Veterinary Teaching Hospital. **Trades Helper/Carpenter’s Assistant, 0022219H**: Grade 4, Residential and Dining Programs/Facilities.

- **Distance-Learning Specialist, 7410D**: Grade 12, Office of Distance Education.

- **Faculty Positions**

  - **Center for Science and Technology Studies. Visiting Assistant Professor. Appointment is for one year beginning Aug. 16, 1999. Applications are invited from scholar-teachers who are experienced in the history, phil-isophy, social and cultural studies, and/or politics and policy studies of science and technology. Candidates must have a significant research program and a strong record of teaching, and must be prepared to teach five courses, including one or two at the graduate level. The under-graduate courses will include Science and Technology in Modern Society and Humanities, Technology, and the Physical Sciences; other courses to be negotiated as appropriate, with preference for one or more in the philoso-phy of science and technology. Candidates for this position must have the Ph.D. in hand. Send a letter of applica-tion, CV, writing sample, syllabi for courses taught or teaching portfolio if available, and the names and phone numbers and/or e-mail addresses of at least three people who can offer recommendations (letters of recommenda-tion also welcome). Applications screening begins June 11. The review process will continue until the position is filled. Please send applications to Gary Downey, Director, Center for Science and Technology Studies (0227), Virginia Tech, Blacksburg VA 24061.**
Virginia Cooperative Extension, Agriculture and Natural Resources Agent. Successful candidate will be a full-time professional faculty member. Duties include teaching, outreach, and research. Applicants must have a degree in a relevant field and be able to communicate effectively orally and in writing; ability to recruit, train, and manage volunteers; and experience in developing positive interactions with the public are required. Experience with board development desirable. Submit a letter of interest, a complete resume, official undergraduate and graduate transcripts (copies are acceptable), and three letters of reference. Applications review begins June 30 and continues until position is filled. Send to: Steve Umberger, Virginia Cooperative Extension, 1224 Hinson Hall (0437), Virginia Tech, Blacksburg VA 24061. Inquiries: 1-7619; TDD user: 1-800-828-1120; fax: 1-5545; e-mail: csowers@vt.edu

Virginia Cooperative Extension, Extension Agent, Agriculture and Natural Resources. Successful candidate will be a full-time professional faculty member. Duties include teaching, outreach, and research. Applicants must have a degree in a relevant field and be able to communicate effectively orally and in writing; ability to recruit, train, and manage volunteers; and experience in developing positive interactions with the public are required. Experience with board development desirable. Submit a letter of interest, a complete resume, official undergraduate and graduate transcripts (copies are acceptable), and three letters of reference. Applications review begins June 30 and continues until position is filled. Send to: Steve Umberger, Virginia Cooperative Extension, 1224 Hinson Hall (0437), Virginia Tech, Blacksburg VA 24061. Inquiries: 1-7619; TDD user: 1-800-828-1120; fax: 1-5545; e-mail: csowers@vt.edu

University Libraries, Curator, Historical Manuscript Collections. The position is seeking an energetic, creative librarian who will participate in digital initia- tives and promote online access and use of the libraries’ manuscripts and rare book collections in the Special Collections Department. Collaborating with the department’s librarians and 2 library assistants, this librarian works in a team environment to build on existing strengths, particularly the International Archive of Women in Architecture, American Civil War, and N&W Railway Archives. (See http://scholar2.lib.vt.edu/spec/SpecHighlight2.html). The curator oversees over 7,500 linear feet of manuscript and archival records, 50,000 historical photographs, and 25,000 rare books; responsible for receiving, organizing, describing, interpreting, making available, and selectively digitizing; oversees conservation management and preservation of material in all formats; and oversees all activities related to the implementation of all aspects of manuscripts work.

Virginia Cooperative Extension, Extension Agent, Agriculture and Natural Resources. Successful candidate will be a full-time professional faculty member. Duties include teaching, outreach, and research. Applicants must have a degree in a relevant field and be able to communicate effectively orally and in writing; ability to recruit, train, and manage volunteers; and experience in developing positive interactions with the public are required. Experience with board development desirable. Submit a letter of interest, a complete resume, official undergraduate and graduate transcripts (copies are acceptable), and three letters of reference. Applications review begins June 30 and continues until position is filled. Send to: Steve Umberger, Virginia Cooperative Extension, 1224 Hinson Hall (0437), Virginia Tech, Blacksburg VA 24061. Inquiries: 1-7619; TDD user: 1-800-828-1120; fax: 1-5545; e-mail: csowers@vt.edu

College of Engineering, Coordinator of Student Support Services. The college is seeking to fill a full-time administrative faculty position responsible for recruiting and retention activities within the college. Responsibilities will include oversight of college recruiting efforts including presentations to prospective engineering students and parents, responding to inquiries from pre-college organizations, supervision of a summer program for high-school women, and coordination of the college open house(s). Retention efforts include supervision of various academic support programs including freshman mentoring programs and a College Success Strategies course for freshmen. The implementation of these programs is facilitated by both professional and student support staff members. The position requires occasional evening and weekend work, and some travel. A bachelor’s degree is required, advanced degree(s) are preferred. The successful applicant will have a degree in counseling or a related area or equivalent experience in a student counseling area, and excellent written and verbal communication skills. Experience in making formal presentations to medium to large groups, experience in working with pre-college and college stu- dents, and familiarity with Virginia Tech policies and proce- dures are desired. Submit all resumes with supporting materials in the $30,000-$40,000 range. Applications review begins June 28 and continues until the position is filled. Applicants are requested to submit their resumes to Brian W. Wofford, Chair, Search Committee for Student Support Services, 212 Hancock Hall (0275), Virginia Tech, Blacksburg VA 24061.
In Other News

Three students get Arts and Sciences Dean’s Scholarships

By Sally Harris

A computer scientist who loves to teach, a biology/chemistry major who wants to help the elderly, and a physicist who loves music and the beauty of the ordered universe—the College of Arts and Sciences has presented its scholarships to students who want to improve the world.

James Fogarty, Melissa Loewy, and Steven Hair have received College of Arts and Sciences Dean’s Scholarships of $2,000 each. Fogarty is a senior computer-science major. Loewy is a junior majoring in biology and chemistry, and Hair is a sophomore physics major.

Fogarty’s department, computer science, nominated him for his high academic standards, service to the department and university, research experience, cooperative-education experience, excellent high-school record, and enthusiasm for the game of soccer, according to Sandra E. Birch, assistant to the department head. Fogarty has received several departmental scholarships, a member of Honors Program and UpMuse, Phi Epsilon, the computer-science honorary, as well as Phi Beta Kappa.

He “has devoted hundreds of hours to several tutoring programs,” Birch said, including the YMCA Student Programs High School Tutoring Program, which he leads. He has served as an undergraduate research assistant for Jack Carroll in computer science and is conducting research for an honors thesis in the human-computer interaction field. He has worked three terms at Appropriate Technologies Inc. of Chesapeake.

Loewy “has an attendance record as a student and as a member of her community,” both here in Blacksburg and in her hometown of Grundy, Va.,” wrote Thomas A. Jensen on behalf of the biology department’s Student Awards Committee.

“Pursuing a medical career, Melissa wants to return to her small-town roots to practice medicine, specializing in geriatrics,” Jensen wrote. Jensen said Loewy’s “unassuming nature is further reflected in her volunteer activities, such as coordinating the volunteer fair and mentoring college freshmen, chemistry students, and high-school upward and bound participants.” Loewy volunteers regularly at a local nursing home and hospital physical-therapy department.

Loewy is member of a leadership community at Virginia Tech, is a University Honors Program mentor, and served as a teaching assistant for Upward Bound at Southwest Virginia Community College in Richlands and as an orientation leader at Virginia Tech. She is a member of Alpha Rho Chapter of Phi Sigma Pi, a national co-ed honor fraternity focusing on scholarship, leadership, and fellowship, and of the Alpha Pi Chapter of Pi Sigma, the biological honor society.

Hair has two major passions in his life—the joy of understanding the world in which he lives and “the purest language of emotion,” music. As a child, he took things apart to discover how they worked, and he chose physics as a major because it provided “the tools necessary to fundamentally describe the physical process of the universe.”

COMMANDANT

Continued from 1

In his present private-sector job, he leads human resources, finance, legal, travel, security, marketing, and professional staffing operations for a professional staffing company. He also serves as a mentor to several cadets at the Air Force Academy.

During his last Air Force assignment, he supervised a 115-member headquarters staff, leading operations, logistics, safety, and legal experts. He has also served as the representative for the chairman of Joint Chiefs of Staff in White House meetings, has led a $20-million program that taught 14 European nations to interact with NATO and the United States, and has overseen the operations of 55 different aviation organizations, which employed 50,000 people throughout the United States, Asia, Europe, and Latin America. Additionally, he has overhauled a headquarters’ total quality management system, which reduced contract costs by 40 percent, and has developed and implemented a comprehensive strategic-planning system that now guides U. S. engagement activities with 83 countries throughout Europe and Africa.

A former pilot and flying instructor, he has 4,000 hours flight time and is rated as a command pilot. He has flown B-52, OV-10, FB-111, F-111D, B-1B, and C-130 aircraft.

Allen, whose retirement from the Air Force was effective in March 1998, holds an MBA in management from Golden Gate University and a bachelor’s degree in engineering management from the U. S. Air Force Academy. He has completed courses at the Naval War College and a year-long study of international political and economic issues at MIT.

Among his military awards and decorations are the Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal, Air Medal, and Air Force Commendation Medal, all with one or more oak-leaf clusters, and the Distinguished Flying Cross. He was also recognized by the chairman of the Joint Chiefs of Staff for superior accomplishments and the “highest qualities of leadership, professionalism, and dedication in dealing with the nation’s most pressing security matters.”

Musser retired as commandant at the end of the 1998-99 academic year after serving longer than any commandant in the history of the Virginia Tech Corps of Cadets. Musser, one of the most decorated general officers in the United States, led a resurgence in Corps membership and completely revamped Corps training methods during his 10 years at the university.