

SPECTRUM

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

TODAY'S EDITION
Electronic Spectrum
available at
<http://fbox.vt.edu:10021/news/Spectrum>.

VOLUME 22 NUMBER 3 FRIDAY, SEPTEMBER 10, 1999

University, Wavtrace announce successful LMDS tests

By David Nutter

Virginia Tech, the only university in the nation to own LMDS spectrum licenses, and Wavtrace, a pioneering developer of advanced LMDS equipment, have announced the successful operation of the Virginia Tech LMDS network that was deployed just three months ago.

The Virginia Tech LMDS (local multi-point distribution service) network delivers wireless two-way, high-speed, data, voice and video traffic from a hub site on the Virginia Tech campus to three off-campus office buildings. The transition to LMDS was effortless and transparent to the users who now have far greater bandwidth and speed. The deployment proves how wireless transport can eliminate the bottleneck between existing broadband networks and local end users.

The results of the trial and a live demonstration of the service was presented Wednesday

at a press conference held at the Virginia Tech Museum of Natural History. The press conference was held by Congressman Rick Boucher, an advocate for the development of Internet infrastructure nationally and in Virginia, and included comments from Erv Blythe, vice president of information systems at Virginia Tech, and Steven Warwick, vice president of product strategy at Wavtrace, the technology supplier.

Using the Wavtrace equipment, Virginia Tech officials demonstrated the capabilities of the new technology through the simultaneous wireless delivery of voice, data, and video services. These services include analog voice from the campus PBX, and IP voice, Internet, and videoconferencing from the campus Ethernet.

The successful deployment of the LMDS network is the result of Virginia Tech's early recognition that new LMDS technology would provide broadband access to more locations,

including rural locations, for tremendous economic benefit. The university's Center for Wireless Telecommunications, headed by Charles Bostian, spearheaded the university's involvement in LMDS research. The center has been engaged in microwave and millimeter-wave research for over 25 years.

"LMDS technology is a great equalizer," Blythe said. "It provides a single broadband pipe for voice, data, and video in areas where wireline and fiber solutions may not be economically feasible, and we are committed to making sure more communities have access to its benefits."

Virginia Tech plans to share its experiences to help other rural Virginia communities implement this new technology to provide high-bandwidth services for the support of advanced applications such as distance learning, telemedicine, and videoconferencing. The university and the Center for Wireless Telecommunications formed an LMDS Research Consor-

tium to provide research to accelerate this developing industry.

"The advanced wireless network for internet access that is in place in Blacksburg has the potential to resolve many of the technology and cost issues related to bringing high-speed, multi-media telecommunications services 'the last mile' into homes and businesses, making the services truly affordable to many for the first time," Boucher said.

The transmission equipment used at Virginia Tech is supplied by Wavtrace. It is the first LMDS system in the world based on time-division-duplexing (TDD) technology. TDD allows transmit and receive functions to occur on one channel, a process more efficient than what is possible with the traditional airlink technology, which requires two channels, one for transmit and one for receive. The benefits of a TDD-based LMDS system include more efficient use of bandwidth.

(See UNIVERSITY on 4)

Virtual Jamestown project garnering honors for Shifflett

By Sally Harris and Julie Kane

Short of traveling back in time, Virtual Jamestown is about as close as a modern person is going to get to life in that colonial Virginia fort.

Virtual Jamestown, a web site created by Crandall Shifflett, professor of history and director of graduate studies for Virginia Tech's history department, is earning honors for bringing the realities of the early Jamestown to life for students and teachers.

To students in a classroom, for example, it's one thing to have a teacher say that x number of people died of starvation and diseases in Colonial Jamestown. It's another to go on-line and read the words of Master George Percy in 1607, about his first 90 days in the fort at Jamestown: "The sixth of August there died John Asbie of the bloudie Flixe. The ninth day died George Flowre of the swelling. The tenth day died William Bruster

Gentleman, of a wound given by the Savages, and was buried the eleventh day....The fourth day of September died Thomas Jacob Sergeant. The fifth day, there died Benjamin Beast. Our men were destroyed with cruell diseases, as Swellings, Flixes, Burning Fevers, and by warres, and some departed suddenly, but for the most part they died of meere famine. There were never Englishmen left in a forreigne Countrey in such miserie as wee were in the new discovered Virginia."

Suddenly the people and their stark existence form a vivid picture in the mind, and Virtual Jamestown is reaping rewards as a result. In addition to a \$205,000 grant from the National Endowment for the Humanities (NEH), "Virtual Jamestown: Natives and Newcomers" has been selected as a top humanities site for inclusion as part of the NEH



EDSITEment Project. EDSITEment is "the best of the humanities on the web," a prominent humanities web site that serves as a gateway to the top educational sites in the humanities for students, teachers, and parents. Sites chosen go through a rigorous merit review process "aimed at finding web sites with outstanding intellectual quality, superior design, and genuine educational impact."

Virtual Jamestown can give students who cannot travel to the actual site a picture of the place where our country began. On one web page, for example, they can click and drag on a photograph of the reconstructed Jamestown, and it's as if they are standing in the middle of the fort turning slowly to see all 360 degrees

around them. Students who can't travel to the Library of Virginia or the Library of Congress for research can now have ready "access to our national treasures and documents," Shifflett said.

There are a dozen first-hand accounts, including that of an indentured servant. Students can read the actual words of young Richard Frethorne to his parents back home: "This is to let you understand that I you child am in a most heavy case by reason of the country, [which] is such that it causeth much sic kness, [such] as the scurvy and the bloody flux and diverse other diseases, which maketh the body very poor and weak. And when we are sick there is nothing to comfort us; for since I came out of the ship I never ate anything but peas, and loblollie (that is, water gruel)."

Students and other researchers can see pictures of the stowage of a British slave ship, with slaves chained head to toe, side by side, the entire time of the long, agonizing journey across the sea. Only occasionally were they allowed on deck for sunshine and fresh air. Thousands died during the horrific "middle passage" and were thrown overboard, Shifflett said.

Visitors to the web site can see sketches of the wedding of John Rolfe and Pocahontas, as well pictures of native foods and earthenware. They can read histories and trace the timeline of events in the New World.

Eventually, when the project-in-progress is completed, they can search references to answer questions such as the number of times the word "savage" was used or the words "bloody flux" appeared, and the site will search the text database of first-hand accounts for the answer. Eventually, too, another data base will contain the name of every indentured servant, the name of his "master," the place he came from, and his parents' names. Students can write about the occupational makeup or demographic

(See JAMESTOWN on 4)

Pamplin Movie to be Filmed on Campus

By David Nutter

A film-production company making a movie about the life of Robert Pamplin Jr. will be on campus the week of September 12 filming at various locations.

The Tyee Group will film a movie based on the Pamplin family biography, *Heritage: The Making of an American Family*, from Sunday, Sept. 12, until Sunday, Sept. 19. The biography was written by Robert Pamplin Jr. A large portion of the film is based on Pamplin's first year as a cadet at Virginia Tech in 1961.

The Pamplin family has had a long history of support for Virginia Tech. Robert Pamplin Sr. graduated from Virginia Tech in 1933. In honor of their

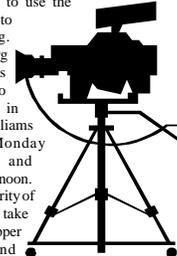
financial and professional support for the university, the College of Business was named in their honor the Pamplin College of Business. In 1996, the Pamplin family funded the Pamplin Scholars Program that bestowed a \$1000 scholarship to one student at every public high school in Virginia.

The actors and crew will arrive Sunday, Sept. 12. All of the crew members will be wearing badges while working on campus. Corbin Bernsen, who starred in the television series, L.A. Law, is slated to play Robert Pamplin Sr.

Filming will be done throughout the week at various locations around campus. Tentative plans call for shooting a scene in front of Burruss Hall on Monday morning, Sept. 13, involving around 100 extras in period dress.

During this time the front steps and lobby of Burruss will be closed off and pedestrians will be asked to use the side entrances to the building. The Blacksburg Transit bus stops will also be moved to in front of Williams for both Monday morning and Thursday afternoon.

The majority of the action will take place on the Upper Quad around



(See PAMPLIN on 4)

ACTIVITIES

EVENTS

Friday, 10

Rosh Hashanah Begins. (Sundown)

Saturday, 11

Rosh Hashanah.

Football, 1 p.m., Lane Stadium: UAB.

Sunday, 12

Rosh Hashanah.

YMCA Hike, 1:30 p.m., 403 Washington St.:
Dragon's Tooth.

Monday, 13

Internet Technology Week Begins.

Family Support Program, noon-1 p.m., DBHCC
conference room C: Dawn Barnes, Extension agent.

Tuesday, 14

Bloodmobile, 10 a.m.-4 p.m., Squires Student Center.

Wednesday, 15

Hispanic Heritage Month Begins.

Bloodmobile, 10 a.m.-4 p.m., Squires Student Center.

Focus on Greater China Program, 11:30 a.m.-1 p.m.,
Cranwell Center: "Let's Talk Chinese."

Organization of Women's Faculty Lunch, noon-1 p.m.,
DBHCC Dining Room.

"With Good Reason," 7 p.m., WVTF: "The Hairstons:
Two Races, One Family."

Thursday, 16

Salary and Wage Paydate.

Bloodmobile, 10 a.m.-4 p.m., Squires Student Center.

Art Exhibit Opening, noon, Armor Gallery: Susan
Shatter and Walter Fields.

CEUT, 12:30-2 p.m., Hillcrest Dining Room: Preparation
for Teaching.

Staff Senate, 5:30 p.m., 1810 Litton-Reaves.

Friday, 10

Highlands in Chemistry, 11 a.m., 3 Davidson: Richard
Helm.

MCBB, noon, 102 Fralin: Richard Cyr, Penn State.

Materials Science and Engineering, 3 p.m., 114
Holden: Robert Kelly, U.Va.

Botany, 4 p.m., 1076 Derring: Bruce Parker, Orson
Miller and Thomas Weiboldt.

Monday, 13

CSES, 4 p.m., 232 Smyth: Robert Melby.

Horticulture, 4-5 p.m., 409 Saunders: S.K. DeDatta.

Friday, 17

Highlands in Chemistry, 11 a.m., 3 Davidson: Paul B.
Keller, UNCC.

MCBB, noon, 102 Fralin: Orion Rogers, Radford.

Botany, 4 p.m., 1076 Derring: Mike Rosenzweig and
David Deshler.

BULLETINS

Foreign service opportunities will be discussed

Bruce Byers of the United States Information Agency (USIA) will discuss the expanding Foreign Service career opportunities for students and faculty in Donaldson Brown Conference Center rooms D and E on Thursday, Sept. 23, at 3:30 p.m.

Individuals interested in foreign service can apply in five different areas: political affairs, economic affairs, consular affairs, administrative affairs and public diplomacy. Recruitment efforts are being expanded to attract candidates with specialties in business administration, financial management and foreign languages in addition to the traditional areas of political science, economics and history. Minorities are strongly encouraged to attend this session. Appointees need not speak a foreign language.

For more information, contact David Britt in the University Office of International Programs, 1-6452, or e-mail: dbritt@vt.edu.

Organization of Women Faculty to meet

On Wednesday, Sept. 15, the Organization of Women Faculty will hold its first lunch of the new year at noon in the dining room of the Donaldson Brown Hotel Conference Center. For more information, call 1-8163 or e-mail callihan@vt.edu.

Women's Center to register voters

The Women's Center at Virginia Tech is sponsoring a voter-registration drive throughout the month of September. Registration forms for new voters, change of address, and absentee requests are available at the Women's Center located in Price House, behind McBryde Hall. The center is open from 8 a.m.-5 p.m., Monday through Friday. For more information, call 1-7806.

Saturday Science begins again

The academic year's first Saturday Science will be September

25, from 11 a.m.-noon at the Virginia Tech Museum of Natural History.

The title is *Autumn Frolics*, and will focus on the changes in Nature as the seasons change from summer to autumn. Saturday Science is for children in grades K-3.

For more information, or to pre-register, call 1-3001.

Programs focus on Greater China

The month of September features a variety of programs designed to focus on Greater China. Each Wednesday, there is a conversational hour at the Cranwell International Center. "Let's Talk Chinese" will allow native Chinese speakers to interact with their language, and let other learn more about the language and culture.

One Thursday, Sept. 23, there will be a Chinese buffet in the Donaldson Brown Hotel and Conference Center from 11:30 a.m.-1:30 p.m. On Thursday, Sept. 30, the film *Pushing Hands* will be shown at 7 p.m. in Squires Haymarket Theatre.

PSP offers training program

By Catherine Doss

Virginia Tech's Public Service Programs (a unit of the university's Outreach Division) and the Virginia Economic Development Partnership have developed an in-house trade-documentation training program to make Virginia's exporters more efficient.

Designed by Pete Ketterer, public-service fellow at Virginia Tech, and Joe Robinson, VEDP international marketing manager, the one-day training session covers contract administration, team work and communication, sales and marketing, production control, shipping, and the international banking industry. The program includes a demonstration of electronically generated documents that coordinate international logistics, invoicing, shipment control, bank presentation, and collection of receivables.

"The training program can enhance the methods and procedures used by businesses involved in international trade or businesses entering the international market place," Ketterer said. "Efficient communication, logistics, and documentation can get the product to the end user faster and help the exporter with timely receipt of payment."

The training program has been presented to several Virginia companies since its inception last spring.

"We found the training very worthwhile," said Edward Noble, plant manager of Kinyo

(See PSP on 4)

New book traces history of cultures

By Sally Harris

From the professor who founded the Popular Culture Association and recently received the lifetime-achievement award from the American Culture Association comes a new book that traces the history of people's cultures from primitive to post-modern times.

Popular Culture: From Cavespace to Cyberspace by Marshall Fishwick, professor of American Studies in the Humanities Program, highlights important historical events such as slave revolts and the American, French, Russian, and Chinese revolutions. It examines the world's changing social movements in the style of a mosaic in which "separate pieces create a complex multilevel awareness." In that way, Fishwick can cover hundreds of topics and years in a highly readable book, giving the reader a broad picture as a result. As he says, "Popular culture has many facets, like a diamond, and can be subversive and explosive. Scorn may be mixed with the fun, venom with laughter; it can be wildly comical and deadly serious." The mosaic model allows Fishwick to touch on all these moods in a few pages.

"You will go on a journey through time, exploring the cultures of the world, venturing from cavespace to tomb space, to temple space then medieval space, to modern space and post-modern epochs, and finally to cyberspace," according to The Haworth Press Inc., the publisher. The book, a comprehensive guide, contains a wide collection of stories covering cultural phenomena such as Tutmania, the Crusades, the Ninja Turtles, Shakespeare, the Global Village, and the coming millennium.

Popular Culture: From Cavespace to Cyberspace includes such events as the 1991 discovery of Oetzi the Ice Man, who is 5,300

years old; the legends of the Greeks, Romans, Egyptians, and Americans; the light that dispelled the Dark Ages; the 20th century, which "McDonaldized" the world; and cyberbia and globalism.

For example, Fishwick shows what Jessica McClure, the Teenage Mutant Ninja Turtles, and General Norman Schwarzkopf have in common: "Each was a star in the popular culture heaven." The world held its breath until little Jessica was safe; at one point "the hunger for all things turtle seemed insatiable"; and Schwarzkopf earned the nickname "Stormin' Norman," but had the sense to retire "before others suggested that he go."

With section titles ranging from "Hurry-Up Time" to "Twisting" to "The Return of the Luddites," the book has only three essays titled with the names of individuals: FDR, "Ray and Ronald," and "Elvis the Incredible." The book has sections titled "Forethoughts," "Time and Space," "Themes," "Links," and "Afterthoughts" and provides a list of further reading for each topic discussed.

The scope of the book reminds the reader of Billy Joel's 1989 song "We Didn't Start the Fire," in which he sings, in rapid-fire order, events and people from Harry Truman in 1949 to "Rock and roller cola wars" in 1989. Fishwick's book includes things as diverse as the atomic bomb, Barbie, the Beatles, Cabbage Patch Kids, Cambodia, Castro, dance, Dylan, Einstein, extraterrestrial creatures, W.C. Fields, Fundamentalism, Bill Gates, God, headhunting, Hitler, the Industrial Revolution, jazz, Keats, Levi-Strauss, the Lost Generation, Madonna, Marx, the Moral Majority, Native Americans, the Odyssey, Plato, poverty, religions, Rosie

(See NEW BOOK on 4)

CAS holds staff picnic

By Sally Harris

The College of Arts and Sciences held its third annual staff picnic, a kick-off to the upcoming school year, on August 12.

Approximately 175 staff members, department chairs, directors, deans, and custodial staff of the college attended.

The college has an appointed committee of staff members who work on staff educational-development events and social events such as this to promote education and morale among staff members. In addition to the picnic, the Staff Development Committee, which is part of the College of Arts and Sciences Staff Association (CASSA), sponsors classes taught by college faculty members for staff members.

For more information about the College of Arts and Sciences Staff Development Committee, contact Bill Bebout at 1-6578 or bbebut@chemserver.chem.vt.edu.

Forestry department still here

There is still a department of forestry at Virginia Tech. It did not disappear when the College of Natural Resources became the new name for the College of Forestry and Wildlife Resources.

Changing the college's name did not affect the departments of forestry, fisheries and wildlife sciences, and wood science and forest products.

EMPLOYMENT

CLASSIFIED POSITIONS

The following classified positions are currently available. More details specific application procedures and position-closing dates are available at <http://www.ps.vt.edu>. Available positions are also listed on the Job Line: Office/Clerical: 1-6196; Technical/Research: 1-6160; Service/Trades: 1-6176; Professional and Managerial: 1-4649; Information Technology: 1-2233. Some positions include state benefits. Positions 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 unless otherwise stated. An EO/AA employer committed to diversity.

Full Time

Animal Care Technician C, 2281T, Grade 7, Biology.

Chemical Safety Trainer (Health Ed. Sr), 7491T, Grade 10, Environmental Health and Safety Services.

Computer Systems Chief Engineer, 7104D, Grade 17, Communications Network Services.

Computer Systems Chief Engineer, 7493J, Grade 17, Fralin Biotechnology Center.

Enrollment Services Assistant (Academic Adviser), 7485T, Grade 7, Computer Science.

Enrollment Services Coordinator, 0049J, Grade 10, Graduate School.

Enrollment Services Coordinator, 0049J, Grade 10, Graduate School.

Executive Secretary, 2021M, Grade 6, College of Veterinary Medicine—Large Animal Clinical Sciences.

Executive Secretary, 7501J, Grade 6, Office of the President.

Executive Secretary, 6416G, Grade 6, Public Service Programs.

Fire Safety Engineer, 7488T, Grade 12, Environmental Health/Safety Services.

Fiscal Assistant, 435P, Grade 5, Physical Plant.

Fiscal Assistant, 6580P, Grade 5, Student Accounts.

Nine full-time food operations positions available; three part-time.

Graphic Designer, 2076D, Grade 9, Publications/University Relations.

Housekeeping Worker Senior, 0269H, Grade 3, Residential/Dining Programs.

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

Housekeeping Worker, 1021H, Grade 1, Residential/Dining Programs.

Laboratory Specialist, 7245M, Grade 8, Biochemistry.

Laboratory Specialist, 7474M, Grade 8, Biochemistry.

Laboratory Specialist, 3428M, Grade 8, Veterinary Medicine.

Mason Plasterer, 6790P, Grade 7, Physical Plant.

Mason Plasterer, 833P, Grade 7, Physical Plant.

Occupational Safety Trainer (Health Ed. Sr), 7489T, Grade 10, Environmental Health/Safety Services.

Office Services Specialist, 3508J, Grade 5, Chemical Engineering.

Oracle DBA, 7433D, Grade 14, AIS.

Pharmacy Supervisor, 6516M, Grade 15, Veterinary Teaching Hospital.

Power Plant Shift Supervisor, 335P, Grade 8, Power Plant.

Program Support Technician, 6624S, Grade 6, University Libraries.

Programmer/Analyst, 2917D, Grade 12, Computing Center.

Programmer/Analyst, 7426D, Grade 12, Educational Technologies.

Public Relations Asst Specialist, 6996C, Grade 8, University Relations/WVTF Public Radio.

Secretary Senior, 2837M, Grade 5, College of Veterinary Medicine.

Television/Video Producer Director Senior, 2324D, Grade 12, University Relations.

Television/Video Producer/Director, 5362D, Grade 10, University Relations.

Warehouse Worker, 7360P, Grade 4, Surplus Property.

Part Time

Animal Care Technician B, W022218M, Grade 5, Veterinary Teaching Hospital.

Housekeeping Lead Worker (Trades Helper), W022081H, Grade 2, Residential/Dining Programs/Culinary Services Maintenance Crew.

Housekeeping Worker, W020574G, Grade 1, DBHCC.

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

Laboratory Specialist, W022855M, Grade 8, Veterinary Teaching Hospital.

Office Service Assistant, W022850S, Grade 4, University Library.

Office Services Assistant, 6895T, Grade 4, Center for Interdisciplinary Studies.

Office Services Assistant, W022874C, Grade 4, Office of Family Support.

Office Services Assistant, W022870P, Grade 4, Physical Plant.

Office Services Assistant, W022875T, Grade 4, Undergraduate Admissions.

Office Services Assistant, W0228835S, Grade 4, University Libraries.

Office Services Specialist, W022276P, Grade 5, Bursar.

Office Services Specialist, W022322T, Grade 5, Undergraduate Admissions.

Program Support Technician, W022538M, Grade 6, Animal/Poultry Sciences.

Programmer, W022878M, Grade 10, College of Veterinary Medicine.

Public Relations Assistant Spec/Radio News Announcer/Reporter, W020344C, Grade 8, University Relations/WVTF Public Radio.

Radiologic Technologist, W022412M, Grade 7, Veterinary Teaching Hospital.

Research Specialist, W022865M, Grade 8, Fisheries/Wildlife Sciences.

Research Specialist, 4540M, Grade 8, Horticulture.

Security Guard(Dorm Watch), W020470T, Grade 2, Police.

Storekeeper, W022291M, Grade 4, Veterinary Teaching Hospital.

University Only

Office Services Specialist, ULC068P, Grade 5, Hokie Passport.

Off Campus

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

Program Support Technician, 6652M, Grade 6, Virginia Cooperative Extension-Culpeper.

FACULTY POSITIONS

INSTRUCTIONAL

Department of Electrical and Computer Engineering. Tenured and/or tenure-track faculty members at all levels. Contact W. L. Stutzman, Bradley Department of Electrical and Computer Engineering (0111) Applications accepted until March 31, 2000 or until suitable candidates selected.

NON-INSTRUCTIONAL

Center for Academic Enrichment and Excellence. Program Coordinator for McNair Program. Contact: Anita Price, 110 Femoyer Hall (0276). Review begins September 15 and continues until position filled.

Virginia Cooperative Extension. Extension Agent, Family and Consumer Sciences. Position #FA628. Nutrition and Wellness, Surry County. Contact: John Dooley, Virginia Cooperative Extension, 122 Hutcheson Hall (0437). Review begins September 27, and continues until position filled.

Virginia Cooperative Extension. Extension Agent, 4-H Youth Development. Position #11808. Half-time position in Craig County. Contact: John Dooley, Virginia Cooperative Extension, 122 Hutcheson Hall (0437). Review begins September 27, and continues until position filled.

TO THE EDITOR

As an assistant department head, each week I talk to several high-school students and their families as they visit us on their tour of prospective universities. It is not unusual in the course of our conversations to hear comments about the beauty of the Virginia Tech campus and I know this observation often plays a very

important role in their ultimate choice of a university home. Our spacious and well-planned campus stands in stark contrast to the industrial-park-style clutter of many of our peer institutions.

Unfortunately, such comments about the beauty of our campus seem to be made less frequently in recent years and part of this, I believe, is due to the likelihood of finding the aesthetics of our academic surroundings marred by the ugliness of seemingly hundreds of "service vehicles" parked all over sidewalks, in building entranceways, and on the grass.

As we and our visitors use the walkways around our campus we see frequent signs warning of dire consequences for anyone who might dare ride a bike down the path, yet we often find ourselves in the middle of a combination freeway and parking lot bustling with trucks of all sorts.

The problem seems to get worse each year. As for me, I'm seriously considering buying an old white pick-up truck and printing "Harris" on the side so I, too, can park on the sidewalk outside my office door!

Jim Marchman, aerospace and ocean engineering

Police officers polish leadership skills at Pamplin's campus institute

By Sookhan Ho

More than two dozen police and other public-safety professionals from across the state came to Virginia Tech this past summer to hone their leadership skills in a new program organized by the Pamplin College of Business in cooperation with the Virginia Police Chiefs Foundation.

Known as the Institute for Leadership in Changing Times, the week-long workshop was attended by individuals representing local and campus police agencies, sheriff's offices, regional jails, communication centers, training academies, and state agencies.

The institute, which will be offered again next year, was developed "to fill a void in the professional development of supervisors and mid-level managers in the public-safety field," says Sharon Scott, director of Pamplin's Management and Professional Development Programs. "The program does not teach policing skills. Our goal is to help participants develop leadership characteristics and communication and problem-analysis skills that will help them

improve their decision making and interact more effectively with their co-workers and the public."

The college was selected out of 23 schools that submitted proposals for the institute to the Police Chiefs Foundation last year, Scott said. She said the institute comprised three distinct components: the summer workshop, on-the-job application of the concepts taught, and a three-day evaluation session on campus next month during which participants will assess what they learned and were able to implement in their workplaces.

"The institute provides an opportunity for participants to practice what they have learned, adapt the materials to their needs, and develop a support network through their classmates," Scott said.

The topics covered included "managing change," leadership, self-leadership and motivation, ethics, principles of communication, effective listening, and study skills. The faculty members included management professors Jim Lang, Jon Shepard, and Wanda Smith, MBA associate director Barry O'Donnell (who led a team of eight MBA-student assistants), business librarian Ellen Krupar, materials science and engineering instructor Eric Pappas, assistant professor of teaching and learning Peter Doolittle, and CommonHealth coordinator Bridget Mitchell.

The 27 participants, who were selected out of 40 applicants, will receive certificates on their successful completion of the program. Next year's institute is planned for July 9-14 and October 12-14.

Virginia Tech

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Spectrum, a faculty-staff tabloid, is published each Friday during the academic year, with the exception of certain holidays, exam weeks, and the summer. Copy deadline is noon Friday. No advertising is accepted.

Spectrum is a non-profit publication of the Office of University Relations: Lawrence G. Hinkler, associate vice president for University Relations; David Nutter, associate director for Public Affairs.

Editor

John Ashby, 1-6961

Assistant Editor
Christian Moody, 1-8538

Production Manager
Melinda Shaver, 1-8524

Business Manager
Sherri Box, 1-8819

Letters to the editor and questions for "Ask *Spectrum*" should be addressed to the editor, 105 Media Building, Virginia Tech, Blacksburg, VA 24061.

Virginia Tech does not discriminate against employees, students, or applicants on the basis of race, color, gender, sexual orientation, disability, age, veteran status, national origin, religion, or political affiliation. Anyone having questions concerning discrimination or accessibility regarding the programs described in this newspaper should contact the Equal Opportunity Affirmative Action Office: 540-231-7500 (v), 540-231-9460 (TTY).

ACHIEVERS

The following university individuals are being recognized as achievers: **Paul Torgersen, Belinda Pauley, Judith Davis, Sybil Phoenix, Ezra Brown, Kent Holliday, Terry L. Papillon, Sam G. Riley, Deborah J. Milly, Jeff Corntassel, David Gao, Werner Kohler, Margaret Murray,**

Bill Greenberg, Peter Linnell, Joseph A. Ball, Dave Russell, and Robert C. Rogers.

For full information regarding their achievements, refer to the on-line edition of *Spectrum* at <http://fbox.vt.edu:10021/news/Spectrum>.

IN OTHER NEWS

Contemporary artist here to complete visual-theatre piece

By Erin Hanley

If you can't make it to New York City, let New York City come to you.

Ping Chong, one of America's most renowned contemporary theater artists, is in residence at Virginia Tech with the Department of Theatre Arts this month. He comes to Blacksburg from New York City to complete a new visual-theatre piece that explores American culture, society and violence. The residency culminates in the world premiere of *American Gothic* Sept. 30-Oct. 10.

American Gothic was created in collaboration with Michael Rohd, founder and artistic director of Hope is Vital and an MFA candidate in directing at Virginia Tech, and Jeffrey Wiseman, an actor and visiting artist from Kent State University. The piece asks questions about society, culture and violence through the prism of a fragmented representation of our "real" daily lives. The work was developed with support from the Koh Festival of Performance at Amherst College.

Chong also will present a public lecture on new theater styles Friday, Oct. 1, at 3:30 p.m. as part of the Department of Theatre Arts' new two-year initiative inviting guests to campus to participate in the *Theatre Forum Series*. The intent is to engage leading figures in the arts community in the quest to understand and explore adjustment to a changing view of what constitutes the "theatrical event" as we approach the next century. The forums will sharpen the view of what theater in the future might be like.

Exploration is the key as participants begin to discover how they, as theatre artists, educators and patrons, will need to change during the next 10 to 20 years. The forum will be in the Squires Studio Theatre. It is free, but seating is limited. An informal reception will be held in Squires Williamsburg Room immediately after Chong's presentation.

Chong began exploring the meaning and

relevance of contemporary theatre and art on a national and international level in 1975. He is now at the forefront of experimental theatre, and his New York-based company has won world-wide acclaim for its visually arresting multi-media stage productions that examine history through the perceptive eye of image and allusion.

Born in 1946 to a Chinese opera family in Toronto, Canada, and raised in New York City's Chinatown, Chong studied film-making and graphic design at the School of Visual Arts and the Pratt Institute before starting his theatrical career as a member of the House Foundation run by Meredith Monk. His background in a diversity of media has spurred his rise to world-class prominence as a theatrical director, choreographer, video producer and visual-arts installation artist.

Chong's work features carefully constructed vignettes, each rooted in a specific historical or human event. His productions do not build towards a single thematic conclusion, but instead present a series of distinct tales or case studies, each with its own specific insight or message to convey. Each medium he works with has its own distinct purpose. A film clip, puppetry sequence or slide projection thus presents its own narrative rather than serving a larger perspective of dramatic action.

Chong has received a Guggenheim Fellowship, two McKnight Playwriting Fellowships, six National Endowment for the Arts fellowships, a National Institute for Music Theatre award, and an Obie award. His theatre work, videos and visual-arts installations have been presented at theatres, festivals and museums throughout North America, Europe and Asia.

For more information, call the School of the Arts information line at 1-5200. For tickets, call 1-5615.

Improvements highlighted

PARKING

Over the summer many faculty/staff lots have been improved. The largest project was in C-Lot, the large commuter lot behind Litton-Reaves Hall, at the corner of Washington Street and Duck Pond Drive. C-Lot has improved drainage, and new paving, and painting at a cost of \$175,000.

The Tennis Court Lot, located on Washington Street, has had drainage work done to it and has been paved and painted (cost: \$21,000). The Tennis Court Lot is open for faculty/staff parking. Other faculty/staff lots have been resurfaced and relined (cost: \$16,000). These lots include Upper and Lower Stanger Lot, located on Stanger Street; the Hancock service vehicle area, and the Track/Soccer Lot (painted only), located at the corner of Southgate Drive and Spring Road.

ROADWORK and WALKWAYS

Old Turner Street, between Stanger Street and Turner Street, has had drainage work, been paved, and had new sidewalks constructed.

Due to building construction, the Drillfield road, near the Mall entrance, had become rough and uneven. Over the summer it was smoothed and paved.

The roadway coming out of Aggie Quad has had a right-turn lane added. Tech Center Drive was resurfaced between Southgate Drive and the Tennis Pavilion. A walkway was constructed at the Cranwell International Center. The walkways in the Eggleston Quad have been repaired. Walkway work will continue throughout the fall, weather permitting.

Traffic Advisory

Parking and traffic changes will be in effect again this weekend for the home football game. The procedures are the same as used for last weekend's game.

On Friday, parking will be prohibited after 5 p.m. in the following lots: Litton Reaves/Wallace Lots (located off Washington Street and Duck Pond Drive), Coliseum Lot (located off Washington Street and Spring Road), the gravel lot located behind the Jamerson Center, and the Stadium, Track/Soccer, and Maintenance Lot (located off Spring Road and Southgate Drive). Parking will also be prohibited on Spring Road and Washington Street (from the Coliseum to the tennis courts). Vehicles will be removed from these lots and streets after 10 p.m.

At noon Saturday traffic on Washington Street, Tech Center Drive, Southgate Drive, Spring Road will become one way toward the football stadium. Traffic on Duck Pond Drive will become one way toward B-Lot.

Traffic advisories are broadcast on 1260 AM.

The public will be charged \$5 for parking during football games. This only applies for vehicles not displaying a valid Tech parking permit. Lots used by the public will be: B-lot (large commuter lots off Prices Fork Road), and Derring, Davidson, Solitude, Price/Saunders, and Engel/Harper all along West Campus Drive. On campus, Blacksburg Transit will run shuttles every 10 minutes from the public parking area of B-Lot (located off Perry Street) to Cassell Coliseum starting two hours before the game.

PSP

Continued from 2

Virginia, Inc., a Tidewater-based manufacturer of offset-printing equipment. "It opened our eyes to the various options in international trade."

The program is one of many joint projects provided by PSP and VEDP to enhance international trade in Virginia. It is offered free of charge to Virginia-based companies. For more information, contact Chad Miller with Public Service Programs by telephone at 1-8324 or by e-mail at chadm@vt.edu.

UNIVERSITY

Continued from 1

width and higher throughput, as well as a more simplified radio architecture, which translates into a less complex and easier installation.

"Our partnership with Virginia Tech is a perfect example of how a university/private sector collaboration can advance the rollout of new technology into the marketplace" said Thomas T. van Overbeek, CEO of Wavtrac. "The system was put through a process of rigorous testing by a world-class engineering school, a process of tremendous value in ensuring the system's commercial viability."

With this early LMDS rollout, Virginia Tech continues to expand its already extensive communications and advanced Internet research and development initiatives such as the Blacksburg Electronic Village, Net.Work.Virginia (a state-wide ATM network and nationally recognized prototype for the next generation Internet, and MAX, the Mid-Atlantic Crossroads (the first Washington, D.C., area aggregation point for advanced information services.)

In early 1998, Virginia Tech became the first university in the nation to participate in a Federal Communications Commission (FCC) spectrum auction and was awarded four LMDS licenses covering 16,507 square miles of Virginia, and portions of North Carolina and Tennessee. The region has an estimated population of 1.6 million.

JAMESTOWN

Continued from 1

composition of indentured servants who came to Virginia or can even find out if their ancestors came to America that way.

The Virtual Jamestown project began in 1996; in 1997, it received ASPIRES funding at Virginia Tech. In March 1999, it won an NEH Educational Development and Demonstration Grant of \$205,000, to begin in September 1999 and continue until 2001. In September, Shifflett will present a computer and poster demonstration on Virtual Jamestown at King's College, London, England, and meet with Public Record Office and local archivists.

Virtual Jamestown is a collaborative project involving the University of Virginia's Center for Digital History and research assistants at Virginia Tech, the University of Virginia, the College of William and Mary, the Colonial Williamsburg Foundation, and Jamestown Rediscovery, the archaeological site of Jamestown Fort.

Virtual Jamestown figures to be a major contributor to the national and international dialogue during the upcoming Celebration 2007, a commemoration of the 400th anniversary of the first permanent English settlement in America, said Albert Moyer, head of the history department. Virtual Jamestown can be found on the website <http://jefferson.village.virginia.edu/vcdh/jamestown>.

NEW BOOK

Continued from 2

the Riveter, Shakespeare, *Sports Illustrated*, Sputnik, technopoly, televangelists, UFOlogy, the Vietnam War, the Volkswagen Beetle, Wal-Mart, Tiger Woods, Woodstock, the X-Files, Yuppies, and Franco Zeffirelli.

Fishwick is past president of the Popular Culture Association and serves on the advisory board of the *Journal of Popular Culture* and the *Journal of American Culture*. His other books include *Great Awakenings: Popular Religion and Popular Culture* and *Go and Catch a Falling Star: Pursuing Popular Culture*.

Non-Profit
 Organization
 U.S. Postage
 PAID
 Blacksburg, VA
 Permit No. 28

Virginia Tech
 Blacksburg, VA 24061