

Technician

North Carolina State University's Student Newspaper Since 1924

Volume LXXI, Number 53

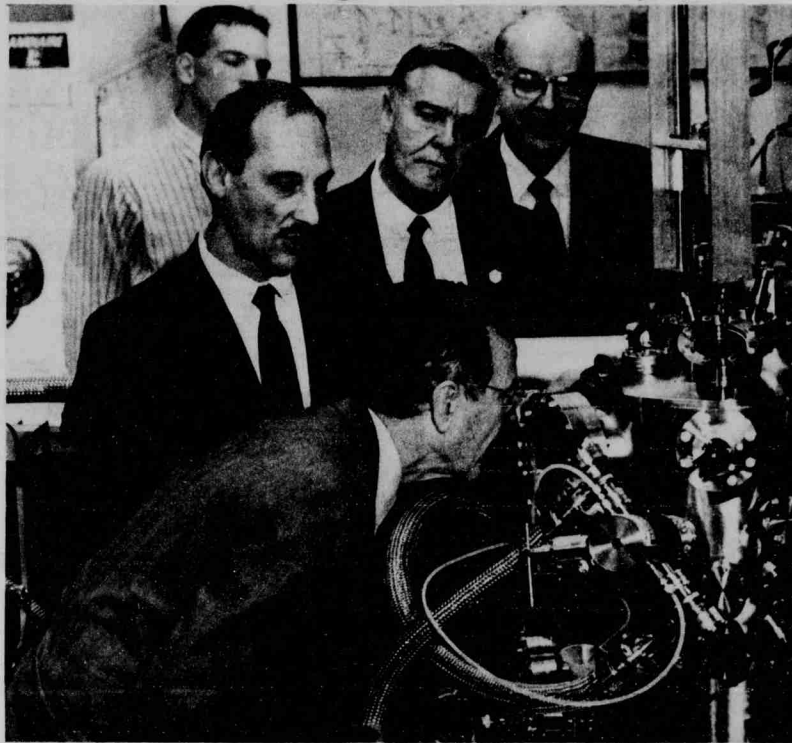
Monday, February 5, 1990 Raleigh, North Carolina

Editorial 737-2411/Advertising 737-2029

Bush visits labs, joins in roundtable



Protestors outside of Harrison Hall during President Bush's visit.



President Bush inspects some equipment in a physics research laboratory during to campus Friday.

President's visit draws protestors

Technician News Service

Protestors assembled on the Brickyard Friday to show President George Bush their feelings and try to influence his decisions.

The President toured two physics labs and participated in a roundtable discussion with North Carolina business leaders Friday morning.

Approximately 200 people chanted, sang and heard speakers during the gathering that targeted Bush's proposed budget and the United States' intervention in Central America.

"Money for peace, not for war," was chanted from the crowd and signs saying "subsidy Education" were waved mocking Bush's actions as president.

Joe Levine, a professor of philosophy at N.C. State, represented Triangle CISPES and spoke about a "redirection of priorities" from military intentions to domestic policies and reaching for peace. He stressed the problems in the relationship between domestic policies and those policies concerning El Salvador.

Joe Burton, professor of genetics at NCSU, spoke of citizens who were killed in the Panama Invasion and said that President Bush "does not care because they are poor." One sign claimed "All we are saying, is give Peace a chance," while another "We shall Overcome" echoed the civil rights movement of the 60s.

Signs were also carried representing NARAL, a pro-choice group that opposes Bush's stand on abortion.

Bush: N.C. State visit 'worthwhile'

By Amy Coulter
News Editor

President George Bush arrived at N.C. State Friday morning, despite the fog which delayed his landing, to tour two physics laboratories and participate in a Hi-Tech Competitiveness Roundtable Discussion with North Carolina business leaders.

The president was scheduled to land at 9:20 a.m. but because of weather conditions, his plane did not arrive until 9:45 a.m. On the Air Force One flight from Washington D.C., Bush was accompanied by N.C. Senators Jesse Helms (R) and Terry Sanford (D), Energy Secretary, James Watkins, Education Secretary, Lauro Cavazos and several members of the

national press were also part of the president's entourage.

The president's tour began in Robert Nemanich's surface science laboratory. Nemanich, an associate professor of physics, is studying the properties of semiconductor surfaces with researchers and students who are aiming to engineer higher quality products and improve silicon technology.

Bush was shown several semiconductor processing systems including an ultra-high-vacuum which prevents contamination of surfaces.

He also saw how electron beams and intense ultraviolet light are used to clean film deposits from these surfaces. Nemanich said that there are more than 100

steps before the silicon becomes a computer chip.

Bush visited two more labs in the Cox Hall basement.

Gerald Lucovsky showed the president how wafers, small slices of silicon used to make semiconductors and integrated circuits, are transferred to Lucovsky's multi-chambered systems. Here the wafers are coated with thin silicon films by a new method that uses low processing temperatures.

Bush ended his tour in the lab of Jan Schetzina.

The president was shown "see-in-the-

See BUSH, Page 3

1990 Emerging Issues Forum

More events, closed-circuit coverage for event in its fifth year

By Wade Babcock
News Editor

The Emerging Issues Forum for 1990 will offer more events and information to more people, thanks to an expanded schedule and a closed circuit broadcast to locations on campus.

The EIF, now in its fifth year, will be part of a three-event, two-day program featuring the forum itself, a building dedication and a scientific symposium featuring Carl Sagan.

The EIF will start Thursday morning at N.C. State's McKimmon Center with a discussion of public policy regarding the global environment. The topics will range from chemical pollution, greenhouse effect consequences and the future of the world climate.

Speakers will include the director of the Woods Hole Research Center, George Woodwell, and Gro Brundland, the former prime minister of Norway.

Later Thursday will be the dedication of

Jordan Hall and the Natural Resources Research Center on Western Blvd.

Thursday night will be one of the highlights of the forum schedule, according to Betty Owen, director of the Emerging Issues Forum. Sagan, director of the Laboratory for Planetary Studies at Cornell University, will deliver the keynote address at 7:30 p.m. at the McKimmon Center.

His speech is to be carried live on N.C.

See FORUM, Page 2

Governor talks money with leaders from schools

By Shannon Morrison
Assistant News Editor

Student leaders from the UNC system met with Governor Jim Martin Friday afternoon to discuss the effects of the budget cuts on individual schools and to suggest possible solutions.

Martin said that his department had proposed a budget very close to the actual revenue amount.

However, he said, the General Assembly adopted a larger budget and has come up short \$170 million.

Martin said there was four main reasons for the deficit in revenues.

- the General Assembly changed the tax codes so that state forms would comply with federal forms which in turn came up short in projected income.

- capital gains taxes from the R.J.Reynolds sell out were less than predicted.

- Hurricane Hugo cost \$21 million. Total damages in North Carolina and South Carolina were more than damage costs for the California earthquake.

- the General Assembly had intended to raise all public employees pay six percent.

Student leaders were not as concerned about the current cuts as they were about upcoming cuts in the fourth quarter.

Gene Davis, N.C. Student Government Association president, said this was the second time, recently, that student leaders have had to face a budget cut.

It is hurting education, he said, "and if we allow (education) to continue to slip away, it would be devastating."

"We need to help education, Davis said, "so people will continue to come to N.C."

See BUDGET, Page 2

Best denied new trial

N.C. State wrestler Thomas Best will not get a new district court trial for his role in an assault on another NCSU student, his wife and a friend last September.

The ruling, made Wednesday by Wake Superior Court Judge Gregory Weeks, means that Best's November conviction of assault inflicting serious injury still stands.

Best had been granted a motion for a new trial by District Court Judge Joyce Hamilton in December after three other students who pleaded guilty in the incident testified that he was not there. Weeks' ruling overturned Hamilton's ruling.

Best's lawyer, Richard Gusler, said he would appeal the conviction to Wake Superior Court, where Best will receive a jury trial.

Best also is charged with breaking and entering. On Sunday night an off-duty Raleigh police officer found Best and wrestling team captain Steve Kinard in a room they had not paid for. They were eating pizza and watching a movie.

She's destined to always misplace her... lose her... um... hey wait...

I'm a loser.
I'm not a loser in the geek sense of the word. Instead, it's more along the lines of the "I can't find my keys!!!" sense of the word.

I can't find a thing. If it can be lost, I will lose it. I'm one of those people who wander aimlessly through parking lots in search of their car.

No kidding.
I once thought I had lost my head, but when I got the idea to look for it in the classifieds, I realized I had used my brain. So I figured if my brain was back, my head couldn't be far behind.

I must be the youngest recorded person with Alzheimer's disease. At the young age of 23, I am the cluc-

Jennifer Holland Cruisin'

less wonder.
It all started in the eighth grade when I was vacationing with my family. Half way from Savannah to Orlando I realized I had left my purse, which contained the most money I had ever saved at that time (\$60), on the hotel steps.

Dad was pissed.
Believe it or not, we found my purse in the hotel office three hours later and I was one happy camper. But I've not always been so lucky.

In the same year, I threw my dental retainer in the lunch room trash can. My mom offered a few willing (and disgusting, I might add) classmates \$50 to whomever found my retainer in the mounds of gloppy food waste. Much to my demise, it was never found. That was three retainers ago.

I'm the same way with keys. My mother made five copies of my car keys and placed them in various drawers around my apartment. Then she gave a set to each of my friends.

So no matter where we were, at least one of my companions could open the door if I had locked my keys in the car or just haphazardly put them down somewhere.
I've never held on to a driver's

license for more than six months or a student ID card for more than a semester and a half. I've sunk at least \$45 into those blasted ID cards over the past four years. If it weren't for the saint who turned mine in last week, I would have been forced to throw away another \$15.

As for the many driver's licenses I have lost along the way, I shutter to think how many 17-year-old Jennifer Hollands are boozing in bars every Friday night. I'm just waiting to be arrested for giving an underage delinquent a fake ID card.

Clothing is second on my list of most often lost articles. I've never taken a trip without losing a blouse

or a shoe. Not both shoes, just one shoe. And most often the blouse or shoe is among my favorite fashion pieces. I can never bring myself to throw away that one shoe I made it home with, hoping that some twist of fate will bring the shoes together again.

Currently I have three brand new unmatched shoes in my closet that are crying out to be worn with the outfits I bought them to wear with.

My disease is not limited to the loss of personal possessions. My memory is bad, too. If I can't take care of whatever I was supposed to remember in the initial five minutes, I won't ever remember it again, or at least not until it is too late. Once I was introducing a date

to my parents and forgot his name. First and last.

My mother asked me to subscribe her to Technician last August (so she could monitor what I write. Hi, mom.) She got her first subscription last week.

Maybe my constant loss of personal possessions and memory can be attributed to my constant lack of consciousness. When I was young, my mom used to check in on me every 10 minutes when I was getting ready for school to make sure I was not sitting on my bed in a daze. Five minutes by myself and I was zoning off to an unknown galaxy.

I just hope nothing ever happens to my datebook. Otherwise, I might forget where I put my life.

Corrections and Clarifications

Technician is committed to fairness and accuracy. If you spot an error in our coverage, call our newsroom at 737-2411, extension 26.



Feb. 5, 1990

IMPORTANT DATES AND ANNOUNCEMENTS

The last day to change to credit only, withdraw or drop a course at the 400 level or below without a grade or to change from credit to audit at the 400 level or below is Thursday.

A support group is available for students who have experienced rape/sexual assault. If you are interested contact Merry Ward of Student Health Services at 737-2563. In this group you share resources, share with others and find support for your feelings.

For all students, and staff interested in displaying their art, CLASSWORKS will be displaying the project for the month of April. Get started on your projects. Accepting material at the end of March. Look for flyers. For more information, call Krishna Shah at 831-0879 or Gina Falcone at 859-4427.

MAJORS OF AND TRANSFERS INTO PSYCHOLOGY: those interested in the Human Resource Development option should complete an application (which are located in Room 640 of Poe Hall) before March 15. Contact Denis Gray (712 Poe Hall) at 737-2251 for further information.

SPECIAL EVENTS

The Womens Resources Coalition will meet at 4:15 p.m. today in Room 4704 of Boston Hall. The WRC addresses the needs and concerns of women at NCSU.

A Commodore Computer users meeting will be held on Saturday from 10 a.m. to noon. For more information, call Andy at 737-3147.

Vietnamese Night will be held on Sunday at 6 p.m. in the University Student Center Ballroom and Stewart Theatre. Tickets available at the Stewart Theatre Box Office beginning Friday, Feb. 5. Admission is \$4 for NCSU students with ID and \$6 for general admission.

A blood drive for the American Red Cross will be held at the Sigma Phi Epsilon House on Feb. 14 from 2-7 p.m. For more information call Jeff Sagraves at 834-2729.

The NCSU Racquetball club will host a charity racquetball tournament Feb. 16-18 at Carmichael Gymnasium. Proceeds will help troubled youths of Wake County lead better lives. Entry forms available at the intramural office. For more information, call Tor at 832-2529 or Kip at 828-9087.

A College Life Forum called "What Dr. Ruth Never Told you About Sex", a humorous look at sex and relationships, will be held on Feb. 20 at 9 p.m. in the NCSU dining hall. For more information, call Laura at 833-4771 or Shane at 859-5333.

LECTURES/SEMINARS/ SESSIONS/WORKSHOPS

A Kodak Photographic Seminar will be held tonight from 6:30-9:30 p.m. in Thompson Theatre. Admission is \$12.50 but discounts are available. Register at the Craft Center in the lower level of Thompson Building in South campus. For more information, call Christy Woodings at 737-2457.

Dr. Norris Johnson, Associate Professor, Department of Anthropology will speak on "Transformation of the Consciousness and the Garden in Theru-ji Temple, Kyoto, Japan" on Wednesday at 3:30 p.m. in G-107 Caldwell Hall. For more information, contact Tony Moyer at 737-3450.

"What Do You Want To Be Now That You're All Grown Up?" For the individual who wants to rediscover their abilities. The workshop is Saturday from 9:30 a.m. to 1:30 p.m. Registration is required and a \$15 fee covers all materials. Additional workshops are March 17 and April 7. For more information, call Char Safley at 737-2396.

"Job Hunting Strategies", a small group workshop will help you to improve your interviewing skills. Advance registration is required, the fee is \$5. These sessions will be held on Feb. 12, 14, 19 and 21 from 6:30 to 8 p.m. Call 737-2396 to reserve a space.

Compiled by Jay Patel

N.C. State Critic: For anyone 'right of center'

By Bill Holmes Senior Staff Writer

Conservative students at N.C. State now have a publication to voice their opinions, the N.C. State Critic.

The magazine is for anyone with a political view "right of center," said Paul Daniels, NCSU's editor for the Critic, except radicals. "I've been interested in starting up a publication for quite a while," said Daniels, a graduate student in international development.

While seeking technical advice on starting an alternative publication, Daniels said he was pointed toward the Carolina Critic because they were a well-respected organization with a conservative viewpoint.

He said another feature of the magazine that attracted him was the even-sided treatment they gave

issues. "We're pretty even," said Daniels. "We like to bring in people who don't have our viewpoint."

There are currently five staff members of the NCSU edition of the Critic and several more interested in joining the staff, said Daniels. Two faculty members have committed to serving as sponsors for the group.

The Critic is produced for four other schools besides NCSU: UNC-Greensboro, UNC-Charlotte, UNC-Chapel Hill and Wake Forest. The Critic has a total circulation of 13,000, while the NCSU edition has a circulation of 4,000.

A board of directors oversees the business end of the publication, but they have no editorial control over the magazine, said Daniels.

"There is no pressure at all from our board of directors or benefactors," said Daniels. "I think that is

the great thing about (this), is that we have that kind of freedom. Our policies aren't influenced by anyone but the publishers and editors from the campuses. We've got quite a bit of autonomy on the campus level."

The magazine features a main topic each month it is published. Two opposing viewpoints are contained in the magazine to allow readers to make their own decisions, said Daniels.

"The idea of this magazine is to attract the intellectual reader," said Daniels. "We try to provide a forum where we can debate the issues on a higher level."

Daniels said his magazine was not trying to compete with campus news publications. Daniels said a monthly publication could not be as timely as a newspaper, but that the Critic did have more room to debate topics.

The N.C. STATE CRITIC



"What all of us (the Critic staff) have in common is we feel the need for an alternative voice on campus. I think there is an editorial bias in the paper. It's consistently left of center."

Flu cases down with good weather

By L. Scott Tillet Staff writer

According to Dr. Gay Strickland, a physician with N.C. State Student Health Services, this year's outbreak of influenza "is not nearly as bad as in some other years."

Flu, as the condition is commonly called, is an upper-respiratory ailment caused by a virus. Symptoms include fever, muscle aches, headaches and respiratory problems. The virus is usually contracted through inhalation.

While winter is typically the peak season for flu epidemics, it is not necessarily cold weather

that causes it. Crowding indoors to escape the weather facilitates the spread of the infectious disease, but this season's mild weather has made being outdoors a more pleasurable experience.

Since the start of this semester, recorded flu cases at the infirmary have grown from the initial 21 reported in the week ending Jan. 12 to 103 in the week ending Feb. 2. Said Dr. Jerry Barker, Director of Student Health Services, "It's not as severe numerically as last year."

Barker went on to say that while flu patients at the infirmary are not the only patients, "they are a percentage that demands considerable time." This is due in part to the fact that cultures from some flu patients are taken and sent to the state agencies."

However, he said, "there may be some agencies out there who haven't been cut yet, but could in the fourth quarter."

"Anything we can do to keep the quality of education," said Davis, "we should do."

Martin said that education was the largest part of the budget, comprising 66 percent of it.

"I have not applied (a cut) to our public schools," he said. "It would have cut your problems in half if I had let it go to public schools."

The reason Martin said was because in the past, leaders have "supported higher education better than public education. Historically we've shorthanded our public

schools."

As for retention of quality professors, Martin said, N.C. is "third out of 15 South Eastern states in professor pay on a per capita basis."

Raiford mentioned the possibility of a limited time quarter cent sales tax similar to the one California has implemented for a year to pay for recent earthquake damages.

"There is the alternative of calling the General Assembly in," said Martin, "but what could they do?"

"They could make a sales tax increase," he said, "but I just tried that two years ago."

"If I couldn't do it in a non-election year," Martin said, "I don't think I can do it in an election year."

lab for testing and typing. Assessment and consultation with a nurse practitioner and a doctor also add to the time that the patient spends in the infirmary.

Drugs used in treating flu include Amantadine and Symmetrel, which are also used in treating Parkinson's Disease. These drugs work against the type-A influenza.

"If you start treatment early, chances are you can get better quicker," said Strickland.

Barker said, "This is the time of year with a large percentage of upper respiratory ailments." Barker says that students should know influenza symptoms so that they will be able to take care of themselves.

UNC-CH Student Body President Brien Lewis said he would like the schools to have more control over their budget.

"If we had more control over our fiscal year, we could better handle a cut," he said. "We could make effective use of the money."

N.C. School of the Arts Student Body Vice President Josh Mark said "our budget and school are a lot smaller."

"It's starting to effect school programs," he said. "It makes it difficult to compete with other schools."

Nixon said that, with the recent tuition increase and the sudden cost of classes to pay for tests and course packets, a big strain has been put on students.

Budget

Continued from Page 1

and say they have the best system of all, how can we be more like them."

NCSU Student Senate President Brooks Raiford reiterated some of Davis' thoughts in saying that there should be a strong effort to retain quality professors.

Raiford asked Martin the feasibility of prioritizing departments to cut, instead of an across the board cut. "We do want to pay our share," said N.C. State Student Body President Brian Nixon. "We are

Forum

Continued from page 1

Public TV and will also be on the closed circuit broadcast to NCSU. (Technician will carry a full schedule of EIF events on Wednesday).

Friday the EIF continues with

more discussion on the future of the environment including U.S. Senator Al Gore from Tennessee, and Gilbert Grosvenor, president of the National Geographic Society.

Also speaking Friday on the topic of "Environmental Issues: A Public Policy Perspective," will be N.C. native and governor of Alaska, Steve Cowper.

The closed circuit broadcasts have not been done for previous EIFs

and will enable many who have not seen the events to enjoy them, said Owen. The forum is only open to about 1000 people and is limited by the space available at the McKimmon Center, she said.

Owen said the EIF has not had to make any major concessions due to the state mandated budget cuts. The only cutback made was the omission of a poster that was to be printed and distributed on campus.



I DON'T NEED DRUGS... (Cartoon of a smiling man)

A Residential Condominium RENTAL UNITS AVAILABLE. Features: Like-New Condition, Efficiency, 1 1/2 Bdrms, Fully Furnished, Eleven-story Building, Adjoins NCSU Campus, Free Bus to Classes, On Wolfline & CAT routes, On-Site Management, Night Security Personnel, Laundry Facilities, Carpeted & Air Conditioned. 4700 Westgrove St. (Bellline at Western Blvd.) 859-2100 WESTGROVE TOWER

Could You Use Extra Income? Earn up to \$130 a month by donating lifesaving plasma at the Raleigh Plasma Center. The first fully automated plasma in North Carolina. Plasma donations help millions of people live normal, healthy lives by SUPPLY THE CLOTTING FACTOR NEEDED BY PEOPLE WITH HEMOPHILIA, PREVENT RH SENSITIZATION IN PREGNANT FETAL DEATHS, DEVELOP PRODUCTS FOR USE IN TREATMENT OF BURNS, SHOCK AND OPEN-HEART SURGERY, PROVIDE COMPONENTS USED TO TREAT BLOOD TYPES AND BLOOD DISEASES, PROVIDE AN EXPERIMENTAL DRUG TO PREVENT ORGAN REJECTION IN TRANSPLANT PATIENTS. First Time Donors Bring This Coupon And Earn \$20 On Your First Donation. If You Have Not Donated In The Past 3 Months Bring This Coupon And Earn \$15 On Your Next Donation. Maiden Lane • Raleigh • 859-1590 (across from NCSU Bell Tower) • Monday-Friday 9-4 New Hours Beginning Feb. 12, Tu. & Th. 10-5:15

SAY 'NO' TO DRUGS!

"ATTENTION NCSU STUDENTS" The New DON MURRAY'S BARBEQUE & SEAFOOD OWNED BY THE ORIGINAL DON MURRAY'S OF RALEIGH

Register To Win \$400 N.C. State Red Mtn. Bike with each food order 832-9100 Drawing April 1st Mission Valley Shopping Center Next to the A.B.C. Store

Join the National Student Exchange Program (NSE) Study at one of 87 different colleges and universities in the USA for up to a year. QUALIFICATIONS 1. Be a full-time student. 2. Be a sophomore or junior during the exchange. 3. Cumulative GPA of 2.5. Courses and credits transfer to NCSU. Tuition assessed is the current rate you pay to attend NCSU. Your financial aid may be used.

If Interested, contact Charles A. Haywood, NSE Coordinator, 2120 Student Services Center, 737-3499 or 737-3837 APPLICATION DEADLINE 2/15/90

PAID VOLUNTEERS NEEDED FOR COLD STUDY Individuals 15 yrs old and older with recently developed cold symptoms or individuals that frequently have colds needed to evaluate a currently available medication. Paid incentive and free office visit, if qualified. Call Carolina Allergy and Asthma Consultants at 881-0309

SWENSEN'S BIG MEAL DEAL THRU FEBRUARY 15 IT'S ALMOST MORE THAN YOU CAN EAT! 1/3 LB. HAMBURGER WITH FRIES + REGULAR SODA DRINK + DESSERT SUNDAE ONLY \$4.99 Plus Tax Nobody does ice cream like Swensen's! REGULARLY \$8.95 2811 Hillborough St. Raleigh, N.C. 27607 834-9997

Bush

Continued from page 1

dark" semiconductors. Schetzina demonstrated new lasers which use these materials. This new class of semiconductors is made from materials which are the basis for devices capable of detecting and emitting infrared radiation.

With the techniques described by Nemanich, Lucovsky and Schetzina, NCSU researchers have been able to achieve many breakthroughs in technology and have improved the quality and versatility of these materials, according to a press release from the NCSU Department of Physics.

Nemanich said that most of the equipment was designed and built by students and faculty members themselves, which has kept costs down for the physics department.

Bush also met graduate students David Alderich, Hyeongtae Jeon, Yvonne LeGrice and Thomas Schneider, who showed him a chamber designed by one of them. They also showed him examples of high-resolution microscope images of various materials with which they work.

One reporter asked of the president, "Why should tax money go into this lab?" Bush said that there was a definite need for "competitiveness education to help to keep that competitive edge."

NCSU Interim Chancellor Larry Monthie added that "new industries are created out of this research."

After the president completed his tour, he sat in on a roundtable discussion, to listen to panel members' plans to promote education and research in North Carolina and in the nation.

John McCredie, the director of External Research Operations for Digital Equipment Corp., discussed

the key role of cooperative efforts on the part of researchers and industrialists and their impact on universities.

Much of the funds generated from investing revenue, said McCredie, go to product development "that is why partnerships with research universities such as N.C. State are so important to (industry)."

These universities provide companies such as Digital Research Corp. with basic and long term applied research which they need to be competitive, he said.

McCredie said that the federal government can support such research and development activities at the university level in four major ways: (1) support of university research programs by doubling the National Science Foundation budget, (2) make tax credit permanent, (3) confirm hi-tech markets around the world, and (4) provide a better education program in the United States.

Ray Rinne, Development and Applications Engineering director for DuPont Electronics based in RTP, said that DuPont Corp. believes in maintaining a strong research effort in the U.S.

Research will ensure it's competitiveness among foreign markets. Rinne said that 45 percent of DuPont's sales is outside the U.S.

DuPont's goal, he said, is to "train our people to be customer and market oriented...the role of education at DuPont is threefold." This policy includes support of secondary schools through such programs as Newton's Apple and the distribution of 40,000 educational kits for science teachers around the country, and university support for research.

Another panel member, Frank Lewis, senior vice president and assistant to the CEO at Harris Corp. headquartered in Washington D.C., told Bush of his company's research and development goals.

Lewis said that Harris Corp. has a major internal program for assess-



Chris Hondros/Staff

President George Bush and his entourage descends the ramp from Air Force 1 Friday Morning at Raleigh-Durham International Airport.

ing the quality and improving technology within the company. He said the program demands greater involvement of employees.

The corporation regularly teaches its assembly workers statistics and statistical control, a practice which most businesses have never implemented.

Lewis said, "at the national and local level...we are making grants (and) sponsoring research...we believe there is a lot yet to be done to restore the competition of U.S.

companies."

Lewis told the president, "we need sound fiscal policy to reduce the cost of capitalism."

Richard Daugherty, site manager and vice president of IBM Corp., located at RTP, said "I believe that the renewed emphasis on quality throughout industry in this country is very encouraging."

Daugherty explained that his company has a "continuous-flow manufacturing process," a sophisticated system in all areas of manufactur-

ing. It is a twofold plan which involves employee involvement and improving efficiency to reduce cycle time and costs.

Larry Sumney, president of Semiconductor Research Corp. based in the RTP, told Bush that "both the industry and federal government have shared responsibilities."

Sumney said, "Mr. President, we in industry are working very hard to reverse the trends that have seen our country's stature in technology begin to decline. In these efforts, we need the leadership that only you and the federal government can provide, to make the efforts successful in education, in research and in technology."

Leadership and cooperation are the keys to success in responding to industrial competition and ensuring our children a bright future," he added.

At the roundtable, Gov. Martin discussed North Carolina's role in world research.

Martin said, "we've got three world-class research universities—N.C. State, Chapel Hill and Duke University. They've anchored the corners of Research Triangle Park. They've brought many of these businesses and well-known research institutes here into North Carolina."

"If America and North Carolina are going to continue to beat the competition in science-based industry, we've got to improve the entire spectrum," said Martin.

Martin called attention to the special need of raising science and math education levels, especially in secondary schools.

Martin said that on Thursday he announced "a brand new North Carolina program to improve the relevancy of the math and science education in our public schools."

"We have a rather unique residential high school for math and science which serves a select group of students. We know that there's a much bigger population" that must

be served, he said.

Martin also said that the model school's classrooms affect the actual applications of math and sciences, which seems to be more exciting and beneficial to students.

North Carolina's educators and leaders must develop programs which encourage both schools and businesses to excite and recruit students for technological careers, said Martin.

He also emphasized the need to encourage more women and minority students in industry.

In his closing statement, Martin said his goal was to better educate college-bound students and to make work-bound high school graduates more trainable.

Bush said that he was impressed with the commitment of researchers and teachers, particularly with "this dedicated generation of young aspiring Ph.D.s," referring to the graduate students whom he met on the tour.

Bush noted the success aspect of NCSU's Department of Physics.

The president briefly outlined some of his education and research improvement goals which he addressed in his State of the Union message Wednesday evening.

Bush later said, the concept of academic excellence and cooperation between the administrative departments at NCSU and researched-backed industries, including those located at RTP, is of particular importance for education, business and political leaders in our state.

When asked why he made the trip to NCSU, the president said that he found it "interesting and educational" to see in practice what he outlined (in the State of the Union Address) to improve education.

Before leaving the roundtable discussion, Bush said the two and a half hour visit was "worthwhile...it's been a good day, a good learning day."

Feeling tense? Tied up in knots? Massage those troubles away

By Craig Cunningham
Staff Writer

Students interested in the art of the Swedish massage got a chance to learn some of the basics Saturday.

A massage workshop was sponsored by the Center for Health Directions in Clark Hall Infirmary. The participation fee was \$10.

Gayle Stone, a registered nurse and certified massage therapist, conducted the four hour workshop where she discussed and demonstrated the techniques of the Swedish massage.

Stone went over various techniques such as effleurage, which was defined by a massage packet supplied to each participant, as any stroke that glides over the skin without attempting to move the deep muscle masses.

Other methods of massages were things like:

- + Friction, which involves moving superficial tissues over deeper tissues (muscles).
- + Petrissage, in short, the kneading of movements like grasping and lifting tissue.
- + Vibration, which is a fine motion that is used to help release contracted muscles.
- + Joint manipulations, which uses

the motion of the skeletal structure to increase range of motion, reduce stiffness and stretch the body.

+ Tapotement, which is any series of brisk blows in rapid alternating succession. The muscle system, body mechanics and the reasoning behind each aspect of massage were discussed between participants and Stone.

The workshop started with two very informative handouts, and discussions on body mechanics, different massage strokes, some pressure points and what the workshop was about. This enabled participants to learn how best to make others comfortable while paying attention to their own body mechanics.

Many of the benefits of massage and reasons for each stroke were also discussed.

Then Stone demonstrated the techniques to be learned on a volunteer from the 13-person group, and further discussed each technique.

Time was then left for the people to pair off with massage oil and practice these techniques, and offer feedback at the end.

Each partner had about one hour of practice and one hour of being the one practiced on, except one group of three which worked two at a time and all shared in the time allotted to be massaged.

During this time the partners discussed classes, majors and feedback on each others' techniques.

This feedback was stressed by Stone who explained that the purpose of a massage is for relaxation. Feedback is one of the few ways of knowing if a person is enjoying their massage, has any previously injured areas that need to be avoided or if the eyes need to be avoided (such as the case of a person with contacts) and many other things that need to be communicated.

Other ways this information can be communicated are the observation of the breathing rate, facial expression and tension of the person being massaged. All are signs that can be used to help determine if a person is enjoying a massage or bearing with it because they think it's good for them.

Many of the participants commented that they really enjoyed the workshop.

Such as David Wilkins, a sophomore in Pre-med, who said, "It was a blast," and "I think it was pretty cool."

G. Bryan Collins, Jr. Attorneys at Law



Handling DWI and traffic Cases
Come in for a Free Consultation
call for an Appointment

530 North person St. Raleigh 829-0323

**KISS HER
ON VALENTINE'S
FOR \$19.95**

Finely crafted sterling silver kiss also available in larger size for \$39.95, plus 14K or 18K gold, and diamond accented versions.

HENRY J. YOUNG
Fine Jewelry in A Comfortable Setting
CAMERON VILLAGE 829-7337
NORTH HILLS MALL 767-1422

NEPTUNE'S GALLEY SEAFOOD SPECIALS

- | | |
|------------------------------|------|
| FRIED BABY SHRIMP, 8 OZ. | 5.20 |
| FRIED CLAM STRIPS, 8 OZ. | 4.95 |
| FRIED DEVIL CRAB (2) | 4.95 |
| FRIED FILET OF TROUT, 10 OZ. | 4.95 |

Steamed Oyster Bar Only

Served With French Fries & Slaw
Drinks Extra

ALL YOU CAN EAT
Snow Crab Legs 15.95 per person

Mon.-Thurs.

851-4993

5111 Western Blvd.

No Substitutions on Specials

USCopies
is not open 24 hours a day.

You can go to
our kompetitor
and pay

6¢

per copy for self-service

(at three in the morning)

or you can go to

USCopies

and pay

2 1/2¢

(and sleep at night!)

Daylight Savings.

Sing for your grade

By Kathleen Pillsbury
Staff Writer

Everyone has heard of singing for your supper. But singing for your grades? There is no such thing, right?

Wrong. Many N.C. State students do not realize that such a class exists and it is open to everyone: Music 110 — Choral Music. Music 110, section 001 is the Varsity Men's Glee Club, currently directed by Stephen Shearon, assistant director of music.

To some, the words "Glee Club" may conjure up images of singing groups of the past. The Glee Club is very much alive and well on our campus today. Presently boasting 35 members, this group performs a variety of choral arrangements, including pop music, classics, spirituals and folk songs.

In addition to singing three times a week in class, the Glee Club also performs in Stewart Theater as well as at Peace and Meredith colleges.

According to Shearon, the Glee Club is the oldest choral group on campus, dating back to when NCSU was known as North Carolina State College and had an all-male student body.

Although choral singing was more popular in those days, the Glee Club today still attracts student performers as well as alumni from previous Glee Clubs.

In fact, alumni Glee Club members recently performed the national anthem at the NCSU-Maryland game.

In addition to receiving academic credit for Music 110, Shearon says the Glee Club is also "a social club and a place where friendships are formed."

Interested in the Varsity Men's Glee Club? You need only be male and enroll in Music 110 — section 001. Oh, there is also an audition, so put on your best Michael Jackson impression and take a shot at it.

Women, do not despair. There is also a coed class, Music 110, section 002 — The University Choir. Under

Music 110, section 002 — The University Choir. Under the direction of Elizabeth Beam, this group also performs a variety of different styles of music.

The University Choir was formed over 15 years ago on this campus, and like the Glee Club, it also performs outside of the classroom. This group has performed for the Friends of the College as well as at Stewart Theater.

The University Choir currently has 50 members, and Beam feels that a choral group this size is a great way for a student to make many friends as well as represent their school.

"The class is a good break from labs and studies and being involved in the arts helps a student balance out their schedule while still giving the student identity and skills that they will have after leaving here," Beam says.

As well as being a fun and creative release, Beam also believes that the class has academic merit because the students learn about different time periods through music.

Like the Glee Club, participation in the University Choir requires an audition and enrollment in the class.

So, the next time you are making out your schedule and you are wishing that you could take a different and fun class, think about the Varsity Men's Glee Club or the University Choir.

All you need to do is contact the current director at 737-2981 in Price Music Center. Or, if you would just like to check out one of their performances, the Glee Club will be on tour during Spring Break in Winston-Salem, Asheboro, Charlotte, Greensboro and wrapping up in Stewart Theater on March 11 at 8:00 p.m.

The University Choir will be performing with the Glee Club for a pops concert in front of the Student Center on April 17 from 11:00 a.m. to 12:30 p.m. The University Choir can also be seen on March 25 at 8:00 p.m. in Stewart Theater.



Technician File Photo

The NCSU men's Glee Club offers students a chance to sing and socialize all with just one audition.

The tragedies of being a senior

Life as a senior is tough, and don't let anyone tell you otherwise.

It's not enough for us to worry about what job we're interviewing for, or what state we are moving to, or if we'll be able to support ourselves after that much mused check from the parents comes to an end. No, we still have to worry about passing all of our classes so we can finally escape.

I'm also addressing those who chose (or were forced) to take two elective classes this last semester. It may be easier to goof off with only six hours of credit and all that free time. Just resist the temptation.

Most of us unfortunate souls don't even have the time to be tempted. We have a bit more to deal with than easy breezy electives this semester.

Take editors, for instance. Just imagine having to put together a section of this newspaper while having an interview at 8 a.m. and an exam at 9 a.m. the next day. Or — God forbid — think about putting together an entire paper.

I guess I'm getting at respect here. Yes, we seniors deserve respect.

We can't even get respect from our brains, let alone our teachers. Nightmares haunt us day and night — like the one when our English professor turns into Freddy Krueger

Tor Blizzard Commentary

and screams: "You slimy senior — you're never going to graduate!" "Heh, heh, heh, heh, fresh meat." "I'll keep you back for eternity!" Then, before you know it, Bruce Poulton comes into the scene: "Remember him?" Freddy gargles. "He'll tell you what to do."

You know what I mean. You've had this nightmare since last semester.

Why can't we do like the Japanese?

Their higher education system is entirely different. Japanese students are so well prepared after high school that college just becomes an exercise in socializing and job hunting. A college students paradise, right?

Japanese high school education takes care of all the intense studying. That's the way it should be — college as a breather between serious school work and a lifetime of high stress employment.

Our system of rigorous studying while job hunting already generates enough stress to power the city of Raleigh. Sometimes it's just too

much for a senior to handle. I'm not suggesting we move to Japan to get an education — after all, we do still have quite an edge over them in research and development. But changes would be greatly appreciated. Of course a little money might help too.

Maybe educators could develop a curve in the intensity of our college education. By concentrating on specific studies during the sophomore and junior years, seniors would have more time in the job search. After all, it's more important to becoming employed once school's over than taking some BS elective like underwater fire safety.

But don't let me discourage you. If you are taking underwater fire safety, I'd like to see you get an A and graduate, rather than risk being ridiculed if you happen to fail. Usually, it's better to save face and graduate.

If you still can't decide which is more important, job search or graduation, just remember one important thing: If you can nail that job now, you can always nail it later.

So, no matter how sick it sounds, be sure to sit down and study the books — and believe me, it will pay off later.

Valentine's Day Musical Dedications



"Listen, honey. They're playing our song..."

Ever flipped on the radio and heard a tune that reminded you of that special someone? Because Valentine's Day is a traditional time to remember your loved one, and because music is a lovely way to do it, let us help you get the message across. Just fill out

this coupon, clip it and deliver it to our office, Suite 3121 in the University Student Center. Just tell 'em Cupid sent you.

Song _____

To: _____

From _____

Con/sen/su/al - 1. by mutual consent or voluntary agreement. 2. without coercion or trickery.

If it is sex and it is not consensual, its probably rape. For more information on RAPE Prevention, contact Merry Ward at 737-2563

Keep it Consensual &
Keep it Covered.

A Condom Sense Message
brought by Center for Health Directions

Center for Health Directions Student Health Service

ATTENTION STUDENTS

RESIDENCE HALL SPACES
AVAILABLE ON CAMPUS FOR
SPRING 1990 HOUSING

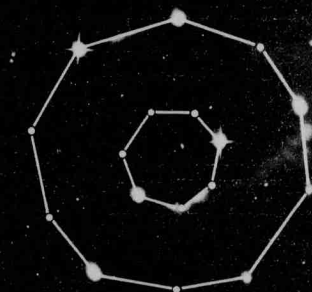
MAIN CAMPUS
NORTH HALL
SOUTH HALL
WATAUGA HALL

MALE OR FEMALE SPACES

DOUBLE ROOM SPACES ONLY
NO SINGLE ROOMS

COST WILL BE PRORATED
ACCORDING TO DATE OF CHECK-IN

For more information, come to the Housing Assignments Office, 1112 Student Services Center 737-2440



BRUEGGER'S IS AN AQUARIUS.

And that's a great sign for bagel lovers.

Aquarians are creative. Tasteful. Generous to a fault. And slightly quirky, too. That's why, to celebrate our birthday, we want you to get the presents. Just come to any Bruegger's this Tuesday, Wednesday or Thursday before 10 AM. Wish us a Happy Birthday. And we'll give you three free bagels, fresh from the oven. So come to Bruegger's. And help us thank our lucky stars.

Come in and say "Happy Bruegger's Birthday" and get 3 bagels — free!



Raleigh: Pleasant Valley Promenade,
Hillsborough Street and North Hills
Durham: Ninth Street, Chapel Hill, West Franklin Street
Cary: Open soon at Kildaire Farm & Maynard Road

Interview Session

at Mission Valley Inn
Monday, February 12
1-4 pm Room Expo D

UNITED PARCEL SERVICE
PART TIME EMPLOYMENT
MALE/FEMALE

MONDAY-FRIDAY
WORK WEEK
THREE CONVENIENT WORK SHIFTS

5pm-9pm
11pm-3am
4am-8am

EXCELLENT WAGES
STARTING PAY \$8 PER HOUR
APPLY AT:

EMPLOYMENT SECURITY COMMISSION
700 Wade Ave.
8:30am-4pm
MONDAY THRU FRIDAY
AN EQUAL OPPORTUNITY EMPLOYER

Manning: Balanced game could propel Wolfpack to Final Four

By David Honea
Senior Staff Writer

If you think N.C. State women's basketball starts and ends with Andrea Stinson, think again. There may be another star on the Wolfpack team.



Manning

When the 11th-ranked Wolfpack beat Old Dominion 102-69 Saturday, junior center Sharon Manning's 19 points and 10 rebounds were both team highs. Her point total included the first four points in a 15-0 second-half run that turned a close game into a blowout.

And in the Pack's current five-game win streak, Manning has been the team's high scorer four times, while averaging 20 points and 10 rebounds over the period.

Granted, Stinson is still making moves usually confined to the NBA and is well on her way to her second consecutive ACC scoring title. But it looks like opposing teams may have to start paying special attention to Manning as well.

Manning has seen that kind of attention before. As a freshman,

she led the Pack in scoring and rebounding and was named the team's Most Valuable Player.

But last year, the arrival of Stinson and center Rhonda Mapp changed Manning's role to that of a support player.

It appeared she would have a similar role this season, until Mapp was forced to sit out the season for disciplinary reasons.

Suddenly, Manning became the primary inside player on a team with a dominant perimeter game.

"We used to not get the ball inside (to Manning)," said State coach Kay Yow Saturday. "She couldn't score a lot of points if we didn't get it to her."

Manning credits State's outside players, particularly Stinson, for helping her get open.

"A lot of people when they think of N.C. State, think of Andrea Stinson, so we know she's going to be double-teamed and someone will be open," Manning said. "We just play our offense, and don't try to force it to her."

"We have other weapons, too," Manning continued. "Kristina (Kilburn) and Nicole (Lehmann) hit from the outside and that opens it up for us inside."

Manning's stats have also benefited from Yow's push for more balance in the Wolfpack offense.

"Early on, we weren't getting the points or the boards inside,"

Yow said. "We knew if we didn't have the strong inside game, we couldn't be the team we want to be."

An extreme example came early in the season at Providence. Stinson scored an ACC record 50 points, but State lost 112-111 in overtime.

Since then, the team has worked hard at getting more people involved in the scoring.

"Coach Yow has been striving for an inside/outside game and that means the post people have got to do their share," Manning said. "I'm just trying to do that."

Apparently, everyone on the team has done their share lately. In last week's 90-65 rout of 15th-ranked South Carolina, the Pack scored 45 points on the inside and 45 on the perimeter.

"All our inside people have improved and it's made a difference for our team," Yow said. "It's really nice to see the success they're having after their hard work."

Manning has moved up among the ACC statistical leaders with her latest success. She now stands tenth in scoring with 13.3 points per game and fifth in rebounds with 7.8 per game.

But her goals go beyond numbers.

"I think we've got everything going good now," Manning said. "I see us going to the Final Four."

Swimmers crush Notre Dame

By Mic Cover
Staff Writer

The N.C. State women swimmers faced a hard-hitting weekend, with match-ups between Notre Dame and South Carolina Saturday and Sunday. The Wolfpack's final count was 1-1.

The Pack crushed Notre Dame 168-123 by a combination of successful efforts in the relays and the individual events.

The Pack dominated both the 200-meter medley and the 200 freestyle relays. The team of Kathy Littig, Laura Mazur, Niki Adams and Crissy MacMillan combined to topple Notre Dame in the medley with a time of 1:50.97.

In the 200 free, State finished with first and second places. The team of Littig, MacMillan, Julie Kimball and JoAnn Emerson led the event with a time of 1:40.68.

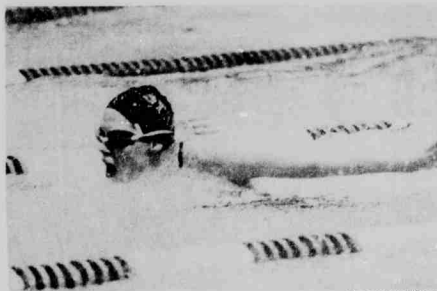
The meet was a time to shine for the State divers as well, as Dianne Prosser and Heidi Candler achieved first and second places in the one-meter and three-meter events.

Prosser's total points for the events were 162.95 for the one- and 167.80 for the three-meter.

Littig was an example of vital individual effort. The junior won both the 100 and 200 backstroke with times of 1:00.10 and 2:08.52, respectively.

Littig was part of a first, second and third sweep in the 200 back, with Heather Anderson and Kristen Trubey placing second and third.

Emerson's success in the 200 free relay was matched by placing first in the 100 freestyle with a time of



Buzzy Conroll/Staff

The Pack crushed Notre Dame before falling to South Carolina Sunday.

0:54.09. And MacMillan followed suit by placing first in the 500 free with a time of 5:07.95.

Mazur also complemented her relay success by winning the 200 breaststroke with a time of 2:23.39.

Julie Pananen toppled the fighting Irish by achieving first in the 1650 free with a time of 17:55.67.

Unfortunately, the Pack was unable to repeat its success Sunday and lost to South Carolina 130-104.

Despite the loss to the Gamecocks, the team displayed some impressive times in the relays as well as in the diving events.

The Pack showed off its talent in the relays, winning both the 400 medley and the 400 free.

The medley team of Littig, Mazur, Adams and Emerson finished with a time of 3:59.64. Littig,

MacMillan, Anderson and Kimball won the 400 free at 3:43.74.

The roles were reversed from the day before in the diving events, as Candler and Prosser won first and second places.

Candler's total points were 229.13 for the one and 235.58 for the three-meter.

State's only individual first place in the meet went to Suzanne Gardner, who won the 200 butterfly with a time of 2:09.59.

Mazur proved her consistency again for the Pack by placing fourth in the 200 free and second in the 200 breaststroke.

The Wolfpack will have another chance to repeat its success in the Women's ACC Championships Feb. 15.

Hockey Club splits pair with Terps

By Jeff Drew
Staff Writer

CARY — The N.C. State Hockey Club, buoyed by a strong defensive effort, overcame injuries and fatigue in beating Maryland 2-1 Saturday afternoon at the Cary Ice House.

The victory assured the Wolfpack of a berth in the Southern Collegiate Hockey Association playoffs and avenged a 6-2 loss to Maryland Friday night.



Chris Hondros/Staff

Wolfpack coaches Charlie Newsome and Robert Moccock were pleased with the Pack's effort.

"We were happy to win," Moccock said. "Maryland played really well. We had to play without Danny (Stevens), Dave (McAleenan) and Paul Kelcey, who are all injured."

"The guys sucked it up, the defense played back and we won as a team."

The hard-hitting contest featured two major and 13 minor penalties, including a 1:20 stretch at the end of the first period in which six penalties were called. The rash of penalties produced four-on-four, four-on-three and even three-on-three situations as the teams attempted to adjust to the fluctuations in manpower.

"The penalties definitely disrupted the game," Newsome said. "It makes it tough to get into any kind of a flow."

Sophomore Randy Palmer (#9) scored the winning goal in State's 2-1 win over Maryland Saturday.

The teams struggled through a scoreless first period but then exploded for two goals in a 24-second span early in the second period.

The Wolfpack tallied first as John Donofrio scored off an Andre Fontaine assist but lost the lead when Craig Costello tied on a breakaway goal with 9:36 left in the period.

The Pack took the lead for good with 17:01 left in the third period as Randy Palmer fed Ken Szeliga for the goal.

The State defense, keyed by netminder Timmy Bennet, then turned

away several Maryland chances, including one in the final ten seconds, to preserve the win.

Bennet finished with 22 saves, 12 in the third period, and was pivotal in the Wolfpack's success. The Pack goalie, however, preferred to praise the rest of the defense.

"I was really pleased with the defense," Bennet said. "Maryland likes to screen out the netminder's view and I like to come out but the defense really backed me up."

"I'm proud of them, especially considering the injuries."

"We were a lot better tonight than

on Friday night," Newsome said Saturday. "We're still not skating as well as we can but we beat a very good Maryland team, ranked 12th in the country. Also, Timmy Bennet played really well."

Saturday's victory improved State's record to 12-0-1. The Wolfpack will play North Carolina Tuesday at 8 p.m. at the Daniel Boone Ice Skating Rink in Hillsborough.

The Pack closes out its home schedule Thursday against Duke. Game time is 7:15 p.m. at the Cary Ice House.

Pack football team loses defensive coordinator

Continued from Page 5

ing (over 28 points a game) and is among the ACC leaders in field goal percentage, 3-point field goal percentage, free throw percentage and rebounds. The only category he's not in is assists, but when you can shoot like he can, why bother to pass?

Second team — Bryant Stith, Virginia. The surprise player in the conference, Stith is fourth in the conference in scoring (over 20 points per game).

Third team — Rick Fox, North Carolina. Again, laugh if you want, but Fox is one of the best shooters in the ACC.

Not to be sexist, I'll present the Montgomery Halfway All-ACC Women's Team By Position next week.

The N.C. State football team lost one of its most important members last week when Joe Pate decided to take a job at Arkansas.

Pate was the Pack's defensive coordinator and was largely responsible for the team's defensive prowess the last couple of years. He'll be the defensive coordinator at Arkansas.

Pate will be replaced by Buddy Green, the former defensive backs coach under Dick Sheridan. Green has some big shoes to fill.



- Lock up your things. • Stealing is wrong.
- Never hitchhike!

Cherrill's
UNIVERSITY OF HAIR STYLING
CAMERON VILLAGE

*Haircuts \$3.50
*Hairshaping with Shampoo and blow dry (curling iron \$3.00 extra) \$4.50

FEBRUARY SPECIAL
NEXXUS PERM \$25.00

821-2820
No appointment necessary
All offers valid with student ID and coupon for monthly special

WILDFLOUR BOSTON PIZZA

2 Large Cheese Pizzas \$13.99
(Toppings Available)
We Deliver

Good only at Avent Ferry Location
Expires 2-19-90 **851-4500**

Nutra Sun, Inc.
"The Ultimate Tan"

Located in the Electric Company Mall
2526 Hillsborough St.
Suite 209-2nd Level

The newest salon in the Raleigh Student Area invites you to come in and give us a try.

Your 1st visit is free!
We feature the American Wolff SCA TAN Beds.
Students receive 10% discount on any package with proper lid.
(Doesn't include single sessions.)

SPECIAL OFFER
One month's unlimited for only \$35.00
(Student discount not valid with this offer.)

OFFER GOOD Feb. 5th - Feb. 17th

Call us at 834-2944 to schedule an appt. today!

MasterCard VISA

RALEIGH WOMEN'S HEALTH

General Anesthesia available. For more information call 783-0444 (Toll-free in state 1-800-532-5384. Out of state 1-800-532-5383) between 9am - 5pm weekdays.

Gyn Clinic
Pregnancy Testing
Abortions from 7-18 Weeks of Pregnancy

5505 Creedmoor Rd. Suite 110 783-0444

Valentine's Balloons

Free Delivery when ordered by FEB. 6

Prepaid Only MINIMUM PURCHASE REQUIRED cards, etc.

The Final Touch
2302 Hillsborough St.
832-1687

can include other items, too!
- TOWELS
- CARRY-OUTS
- GIFTS

Free Delivery Area

A computer hacker disrupted service at a N.C. State computer in early January.

"He didn't take anything, but we brought the system down (in order) to determine that," said Larry Roberson, assistant director for system support, security and special projects. "It cost a lot of time and effort as well as postponement of active projects," he said.

Roberson said, "We will prosecute for computer break-ins. We have prosecuted in the past and we have prosecuted successfully," said Roberson. In the past, he said, a convicted person paid a fine and performed community service.

After the current incident, the Computing Center made the Public Software Access Service unavailable for three days. Under normal circumstances, people use the system to copy public domain and inexpensive software.

In addition, the Computing Center warned account holders on their other systems to change passwords due to recent hacking activity.

Publicity of the recent incident worries NCSU Computing Center employees because it could spark copycat crimes, said Harry Nicholas, a Computing Center system programmer. "The problem is, any time you talk about it, it's entirely likely to give people ideas," said Roberson. "We don't want to spark a whole new round of hacking incidents."

"We're still recovering from the last one and it's taken a lot of time," Roberson said. "Look at our users on the VAX. They lost a lot of computing time," said Sam Moore, a Computing Center system programmer.

"It's still under investigation. We're still working with CERT (Computer Emergency Response Team). We don't want anything to happen to hinder that investigation," said Roberson.

CERT was established after Robert Morris, a graduate student from Cornell, wrote a program which shutdown Internet, an international network of university and research institution computers.

In the recent incident, a system administrator on another campus computer noticed the hacker first. "They were monitoring what he was doing and saw he was trying to break in here," said Roberson.

When a hacker gets into a computer system "he does whatever he can get away with. It's less doing damage, (than) actually destroying data. It's a feather in their cap. Somewhere they put a notch," said Moore.

For some, "It's a game to share information about a machine and see who can break into it first," said Moore. Hackers spend an inordinate



Angela Medrini/STAFF

To hack or not to hack

When an overzealous user, a hacker, breaks into a computer system, is that a criminal offense? N.C. State Computing Center Director Carl Malstrom says yes and compares it to breaking and entering.

amount of time on breaking into computer systems Moore said.

To gain access to computers, hackers first must discover a legitimate account number and password. They often use a trial and error method. They try common names like Smith for IDs and common words for passwords. Other hackers write computer programs to try and break in. With a list of common names and dictionary words, the program will plug away untiringly.

"Some of the hackers are not smarter than anyone else, just more persistent," said Moore.

Sometimes hackers steal the account ID's or passwords required to gain illegal access to computers. "It's kind of like a drug habit. They become addicted to breaking into computers," said Nicholas.

In some cases, administrators identify hackers by "noticing someone logged in that is normally not logged in or shouldn't be logged in," said Roberson.

Sometimes administrators discover hacking activity by "automatic software that reports when things happen, (like) a bunch of failed logon (attempts)," said Roberson.

"Illegal access to mainframe computers has been going on for years and years, but the scope of it has increased tremendously due to network capabilities. In the past, hackers were usually local people," said

have to go through a lot of hoops," Nicholas said.

After a break-in administrators worry about the security of their computer systems. After a break-in "you spend \$10,000 on security," said Moore, exaggerating.

There is a big trade-off between security and convenience. "One of the things we work on is easy accessibility to our machines. We

"Most installations that are on the Internet have had break-ins," said Moore.

In computing circles, lists of machines with public access are distributed. Computer buffs like to get on there and look at what computer files are stored. Most do not try to gain illegal access to computer resources.

But once on such machines, hackers sometimes use holes in the computer's operating system to gain access to other parts of the computer's resources.

A hole is a way to gain unauthorized access, to get on a machine you do not have an account on, or to gain higher privileges said Moore.

"One of the biggest problems is that vendors systems have holes in them where people can get from non-privileged to privileged accounts," said Moore. "We hear from the vendor or we find our system has been broken into."

"(The hacker) didn't take anything, but we brought the system down (in order) to determine that. It cost a lot of time and effort as well as postponement of active projects."

Larry Roberson, NCSU Computing Center assistant director for system support, security and special projects

Roberson. Protecting against a break-in "is an on-going situation," said Roberson. "There is access to our computers from all over the world. We can start tightening things down," said Moore. "But then users would

try to make things as open as possible. At the same time, we try to maintain security," said Moore. Comparing a computer system to a building, Nicholas said, "If you have one door that's not locked, the building is not secure."

Robert Morris, who used a hole in the sendmail routine of the Berkeley Ultrix operating system to gain access to many computers on Internet, has been convicted and is awaiting sentencing. "He's a criminal. He should serve a sentence just like any other convicted criminal," said Nicholas.

Moore said he does not want to see Morris on the lecture circuit in the future. According to Moore, if Morris becomes a hero in the minds of young people, then soon they will be hacking at systems.

Computing Center Director Carl Malstrom said that hacking your way into a computer is equivalent to breaking into a house. Hackers may not have stolen anything, but they have violated your property.

REGISTERED NURSE

Rex Hospital, a 394-bed, private, not-for-profit hospital, with a well deserved reputation for quality health care, is currently seeking a registered nurse to work with our modern and expanding Radiology Department. Position is full-time 2:30pm - 11:00pm, Monday-Friday. **IN ADDITION TO NO WEEKENDS AND NO HOLIDAYS, THIS POSITION OFFERS EXCELLENT SHIFT DIFFERENTIAL.**

Rex is known for providing the community with progressive medical care and for providing their employees with a superior working environment. If you are interested in becoming part of such an environment, send resume or call: **Mary Custer, Employment Manager, REX HOSPITAL, 4420 Lake Boone Trail, Raleigh, NC 27607. (919) 783-3169.**

REX

SPECIAL STUDENT DISCOUNT
off the lowest prices in the area on diamonds, 14K gold, and watches. Just mention this ad.

Raleigh Jewelry Co.
A Triangle Tradition For Thirty Years
523 Downtown Blvd. (near Peace St.) 832-5511

THE CUTTING EDGE
"We Carry Nexxus, Paul Mitchell & Fermodyl Interactives"
\$2.00 off Haircut - guys & gals
\$5.00 off Bodywave
ONE BLOCK FROM CAMPUS
Appointment or walk in
2906 Hillsborough St. across from Hardees
Hours: Mon - Fri 8am - 9pm Sat 8am - 3pm 832-4901
EXPIRES 2/12/90

KARL E. KNUDSEN
ATTORNEY AT LAW
N.C. STATE GRADUATE - 10 YEARS OF TRIAL EXPERIENCE
CRIMINAL LAW
DUI, Alcohol, Drug & Traffic Offenses, Larceny, Home Invasions
PERSONAL INJURY
WRONGFUL DEATH
Auto accident, Negligence, Malpractice
Suite 507 Raleigh Building
5 West Hargett St.
Raleigh, NC 27602
(919) 828-5566
FREE INITIAL CONSULTATION



the LOOKOUT

2526 Hillsborough St. (at Electric Co. Mall) 821-4453

DINNER SPECIALS				February 5 - February 11		
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Steak, Chicken or Combo Fajitas w/ all the wens	Hawaiian Chicken w/ fries, cottage cheese and pineapple	Open-faced Turkey Sandwich w/ Gravy and Fries	Surf & Turf Ribeye Steak and Popcorn Shrimp w/ baked potato and salad	Deep-dished Lasagna w/ salad and garlic bread	Open-faced Roast Beef Sandwich w/ french fries and gravy	All You Can Eat Spaghetti w/ Meatballs salad and garlic bread
\$5.95	\$3.95	\$3.95	\$5.95	\$4.95	\$3.95	\$3.95

4pm-10pm *Free Refills on Soft Drinks

Look For Our Other Daily Specials

Lookout Meal Deal !!!
Buy four entrees, get fifth one Free!!!

Late Night Specials
10pm til Closing
"ALL YOU CAN EAT" Specials every Sunday evening 4-10pm. Live Entertainment Sunday & Tuesday evening 8:30pm-11:30pm

Daily Lunch Specials (11-3)

SUMMER JOBS
Be a sales representative for one of our campus telephone directories nationwide.
Gain valuable experience in sales, marketing and advertising.
Travel to Chapel Hill, NC for a five-day expense-paid training program.
Earn an average of \$3,400 in 11 weeks.
Interviewing on Campus, Friday, February 16
Sign-up, Career Planning and Placement

University Directories
The Nation's Largest Publisher of Campus Telephone Directories

A visit from the

Commander-In-Chief

By Michael Russell

Photo Editor

For those of you who missed the Friday night news, the President of the United States really did come to N.C. State.

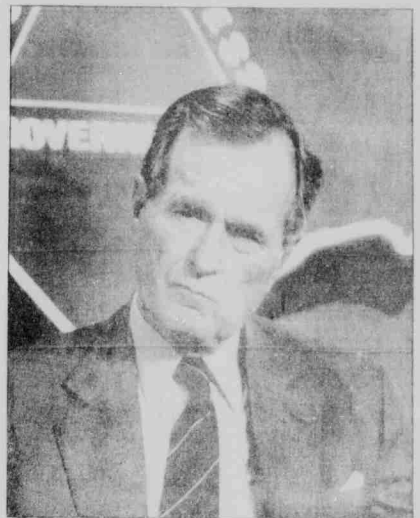
In his first visit to North Carolina since the election, President Bush came to campus to tour physics labs and to take part in a roundtable meeting with leaders of various industries in the Research Triangle. Most students only caught a glimpse of Mr. Bush as his motorcade whizzed

through campus. His presence was clearly visible by the dozens of Secret Servicemen talking into their sleeves, the barricades set up around Cox Hall, and the gunships circling overhead.

The campus had been scrubbed clean, from the repainting of the "Free Expression Tunnel" to the squeaky-clean shine of the lab floors in Cox Hall. Every detail of the President's two and a half hour visit had been diligently planned. And though the fog at Raleigh-Durham International Airport was thick, Air Force One landed after a 15-minute delay.

As hundreds of students, supporters and protesters lined up around Cox and Dabney Halls, the black limesines rolled up. Along with distinguished guest such as Governor Jim Martin, Senator Jesse Helms, Interim Chancellor Larry Monteith, Bush toured several research labs. Afterwards, he sat in at the roundtable meeting where he learned of the advances being made in the state.

At noon, Mr. Bush headed back to the airport to leave for his next engagement in Tennessee. Bush stated that he found the whole experience "terribly interesting".

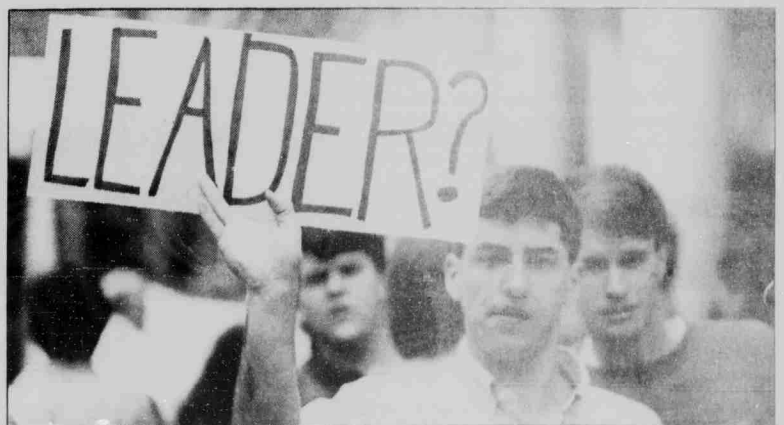


President Bush (right) receives a certificate from a woman (left) during his visit to N.C. State.

Photo by Michael Russell



Chris Hendrix/Staff



Michael Russell/Staff

