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THE GEORGIA TECH WHISTLE

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President Crecine Looks Ahead To The Decade For Georgia Tech In State Of The Institute Address Given On Oct. 30

"A State of the Institute address typically looks back on the past year and forward to the year ahead. I am taking a much longerterm view this year, because I believe our actions during this academic year are critical to our success later in this decade and beyond. If our collective choices over the next several months are even moderately strategic and wise, the 1990s could be the greatest decade in the history of Georgia

It may appear slightly Pollyannish for me to stand here, grandly optimistic when Georgia Tech has

just taken a disproportionate (4 percent versus 3 percent systemwide) budget cut from the State, when the State and national economy are in precarious positions, when Federal R&D dollars are subject to great uncertainty, and when the demographic trends for students are so negative. But I truly believe the next ten years will be "the decade of Georgia Tech." This is a belief firmly rooted in the way Georgia Tech is currently positioned for the future. Some of this positioning comes from our traditions, some from an institutional willingness to seriously address fundamental issues during the past several years, and some of our positioning comes from discovering and exploiting opportunities in recent years. We are one of the handful of quality institutions in the nation with a clear technological focus in an age where technology is increasingly important and, in some instances, where technology is dominant. We are an urban university with the potential for a residential campus in the heart of America's leading new city. We are a public university in an age where access to education is more dependent on resources than intellect, where the costs of quality private higher education are soaring. We are a public technological university in a state where public support for public higher education is often linked with economic development goals; economic development is a natural objective for any technological university.

In one form or another, Georgia Tech has made remarkable progress on a set of fundamental issues over the past year. We have in place three new colleges. The Colleges of Sciences and Computing give dramatic new focus and visibility to two areas fundamental to the success of any university of the next century, particularly a technological See Address, page 2



Homecoming is a time for Georgia Tech students and alumni and their families and friends to gather at the Tech campus and remember good times. These Ramblin' Wreck Parade spectators had plenty to be amused with as various contraptions rolled through the streets. Later in the day, everyone celebrated as the Yellow Jackets were victorious over the Duke Blue Devils by a score of 48-31.

1996 Committee Is Ready To Begin Working On Tasks Of "Olympic" Proportions

By Jackie Nemeth

The 1996 Committee, which consists of student, faculty and staff representatives from all parts of the Georgia Tech community, had their first meeting on Oct. 24 to begin planning for Georgia Tech's role in helping stage the best Olympic Games ever. To help accomplish that task, Acting Executive Vice President Michael E. Thomas said an academic and research programs logistics taskforce will be the first group formed under the auspices of the 1996 Committee. The task force will be charged with minimizing any disruption to normal Tech life from the Olympics.

"The 1996 Committee's task is to plan for and anticipate the changes and opportunities the 1996 Summer Olympics present to Georgia Tech," Thomas said. "We want to plan for the Olympics in a way that will not dominate Tech's main missions education, research and service."

Thomas said the Olympics will

allow Tech many new opportunities and facilities.

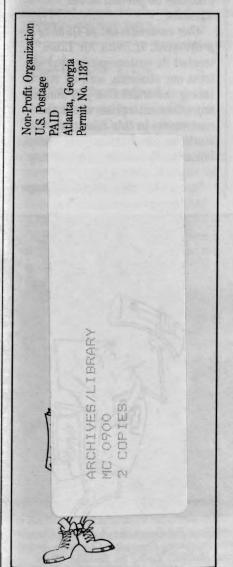
"There is more national and international interest in Georgia Tech, and that will translate into opportunities for improved faculty and student recruitment," Thomas said. "We will also gain a natatorium, housing for an additional 4,500 students, and many other important new facilities."

Executive Assistant to President John P. Crecine and Vice President for Strategic Planning Joseph E. "Tim" Gilmour said the Olympics provide an unparalleled opportunity to enhance Tech's campus.

"Georgia Tech is not only challenged to plan for the best Olympics ever, but also to make Georgia Tech an even better place in 1997," Gilmour said. "We plan to strengthen our facility development capacities here, and we will do everything possible to build and operate these facilities in plenty of time for the 1996 Olympics."

Special Assistant to President

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File Phot President John P. Crecine gave the State of the Institute address on Oct. 30 in the Electrical Engineering Auditorium.

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university. Both units are functioning beautifully. The new Ivan Allen College of Management, Policy, and International Affairs has been the primary mechanism for broadening Georgia Tech's educational and research agenda. Through the College we are dramatically increasing the degree options for our current students and broadening Georgia Tech's appeal to prospective students, at the same time increasing the educational opportunities for engineering, science, and architecture students. The Ivan Allen College strongly complements existing strengths at Georgia Tech. With one or two minor exceptions, the Ivan Allen College is running smoothly with good leadership and remarkably strong student interest in a range of new degree programs. The academic reorganization, designed to support new and broader academic programs, is complete and it is working as intended. As we enter the decade, it is important to do so with a set of programs well matched to our traditional strengths and responsive to the challenges of the future.

Another fundamental issue on which we have made dramatic progress involves our most important resource base, our Resident Instruction appropriation from the State. Following nearly three years of effort, Georgia Tech has finally received a signal from the Board of Regents that they better understand Georgia Tech's severe and chronic underfunding and that they have made a serious commitment to deal with the problem.

That commitment comes in the form of a Revised Regents' Request Formula, the vehicle used by the University System to justify its lump-sum allocation from the Governor and the Legislature.

Unlike the original formula, the revised formula recognizes the extra and unique costs associated with: providing a technological education; advanced graduate study in computing, the sciences and engineering; the recruitment of faculty in a national market; and an aging physical plant. The formula also rewards the units in the System — not just Georgia Tech, but UGA, Georgia State and the Medical College — for their success in attracting sponsored research funds.

A new formula that better captures the cost of the institutions that comprise the State University System means a new deal for Georgia Tech — a fair deal — and a promise of a more appropriate level of funding so we can address embarrassing shortcomings like a student/faculty ratio of 21:1. This is not an instant solution: a four or five-year implementation is a reality, as is the state's overall budget crunch.

When new resources come, and they will come, these resources will not be distributed across the board, and will not reflect the status quo. New resources will go first to areas of strategic importance, and to areas that have shown leadership and success in fulfilling their missions. Success in attracting students, effectively teaching, and graduating students will be rewarded. Student decisions on courses and majors will have a major role in the rescurce allocation to particular academic units. So will outside supporters, such as donors and research sponsors: we will endorse their support of areas with resources of our own. Simply put, new resources will be used where they will do the most good for the overall institution. In most cases, resources will reward demonstrated performance more than promises for better performance.

The formula revision is the most important and fundamental step toward a stable and adequate funding base for Georgia Tech during the past twenty years. Over the long term, this fundamental change will mean more to Georgia Tech than the Olympics.

Another fundamental issue, seriously addressed during the past year, is the formation of the Georgia Research Alliance this past summer. A consortium of the six research universities in the State along with the economic leadership in the State, the Research Alliance is the organizational equivalent of the Research Triangle in North Carolina Our nurnose is both to create external visibility and focus for Georgia's impressive-but-largelyunknown research capabilities and to create a mechanism for supporting, nurturing and creating the infrastructure (facilities and equipment) for research, utilizing the State's research universities. The

Georgia Research Alliance has a strong, legislative agenda and is built on the new level of cooperation among the leadership of the State's research universities.

I will mention an extraordinary opportunity, Atlanta's hosting of the 1996 Summer Olympics. Our involvement in Atlanta's Olympic bid was early, it was strategic, and Georgia Tech people made a truly significant contribution to its success. This is an opportunity that Georgia Tech helped create. Our involvement, past and present, has been predicated on our ability to simultaneously pursue two goals: helping to make the Atlanta Bid and the Atlanta Olympics the best ever, and leaving Georgia Tech after the bid and after the Olympics in an overall better position as a university. As the site of the Olympic Village, Georgia Tech must attend to the kind of infrastructure and housing issues for the Olympic family that we ought to be attending to for the benefit of the Georgia Tech family, especially for our students. The visibility of Georgia Tech — in terms of our contributions to the Bid and our role as the site of the Village already has created some truly extraordinary opportunities for us in research, often not directly related to the Olympics. This heightened visibility is the source of many opportunities for every group and program in the institution students, faculty, and staff; research, education, service, and athletic missions., We only need be strategic in pursuing opportunities, following up on those that promise to strengthen our educational, research, and service missions, while still helping Atlanta to stage the best Olympic Games ever.

Georgia Tech's extraordinary potential for the future owes much to the progress we have made on some fundamentals over the past couple of years. It also owes much to an extraordinary set of opportunities that we face. The 1990s

will not become the best decade in Georgia Tech's history by accident. We will all have to work hard, and "work smart." We also need a continued commitment to institutional goals as well as personal goals, and a focus on several critical areas:

-The renewed commitment to education, especially undergraduate education. In our very successful drive to become a major research university and increase our production of Ph.Ds, undergraduate education suffered from a lack of attention and resources. While bolstering our research and doctoral programs remain major commitments, our academic reorganization is a clear signal that education, especially undergraduate education, is of central importance to the Institute.

This is a commitment that will continue and will be expanded. We need to provide better advising to our students, and pay more attention to keeping them until they get a degree. We need to think more like educators and coaches instead of judges: the days are over, forever, where the main purpose of some so called "foundation" courses were to "select out" large numbers of students. This does not mean that the Institute will be any less rigorous or demanding: if anything the reverse should be true. With the quality of our students, with our expanded number of technologically-based academic options, and with better academic support and a significantly larger faculty, there is no reason why we shouldn't aim to graduate 80 percent of our students.

-Our commitment to Quality Improvement. If Delta Air Lines treated its customers the way we treat our students, we'd all still be taking the train. Can you imagine any other enterprise where the customers—in this case, our students—sign a long-term contract, but only 60 percent take delivery of

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Tech alumnus and Chairman of the Olympic Village Sub-Committee A. Russell Chandler III (L) and former Atlanta Mayor and Atlanta Organizing Committee Chairman Andrew Young waved to the crowd and served as Grand Marshals during the Ramblin' Wreck Parade on Oct. 27.



Gary Meek

"Buzzin' Around The World" was the theme for 1990 Homecoming festivities and the students who made this display definitely had the theme in mind with the Eiffel Tower incorporated into their design.

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the finished product — a Georgia Tech degree? Can you imagine a business that would require its customers to stand in one long line, merely to take a piece of paper to another long line ten feet away? Can you imagine a landlord that would require his or her tenants to move out (furniture, books, all effects) four times a year for the convenience of the landlord's employees?

Can you imagine an enterprise that would have an empty parking lot with a high parking fee next to an overcrowded lot with cars circling the lot where there was an extremely low charge? We have to treat students more like customers and less like inmates. There are myriad reasons for our attrition problem, but the problem is only a symptom of a deeper malaise: a blurring of the institutional focus on why we are here and who we exist to serve.

Georgia Tech is here to serve our customers, and those customers are not only faculty, researchers, staffers, or administrators. The customers are not only state government, or the Board of Regents, or professional organizations. Our primary customers are those who pay for the services we provide: the students we educate, the sponsors for whom we conduct research, and those we serve through our economic development efforts. There are some customers of Georgia Tech we treat comparatively well: our research sponsors and our economic development clients for example. It is time that we put our students into that category, too.

-A Marketing Orientation. Like it or not, Georgia Tech's monopoly on the best students in the Southeast with an interest in a technical education is over. The days of just taking applications and expecting the best and the brightest to show up every fall are done. Georgia Tech is a great institution, but to exploit its full potential, we must market it just as we would any other enterprise.

We have enormous comparative advantages: our cost, our quality, our Atlanta location, our technological focus, the lure of the Olympics, the co-op program, even the success of our sports teams contributes to our overall attrac-

tiveness. We need to do a better job of telling the world our virtues, and of exploiting our resources. Each of you is a potential salesperson for Georgia Tech, just as each student is a potential advertisement and each alumnus is a potential recruiter.

A marketing mindset is even more important if we are to meet the demographic challenges of the future. It doesn't take a genius to predict the mix of 18-year-olds in the year 2000: just look at the 8 year olds of today. Those children are increasingly minority and increasingly female, a trend that should be important to any institution like Georgia Tech that has traditionally relied on white males to make up the bulk of its student body.

We need to market to more than potential students. We need to tell the city and the State the story of Georgia Tech's economic development contributions: tell them about the Scientific Atlanta's, the Hayes Microsystems, the ATDC graduate companies, and the NCR's, as well as the resource Georgia Tech is to the general citizenry of the State. We need to emphasize the importance of our graduates to the success and Georgia locational decisions of IBM, Bell South, Georgia Power, Georgia-Pacific, and the like. We need to market our research capabilities as well.

-Georgia Tech must remain flexible as an organization, "light on its feet." Strategic planning can take an organization only so far as the organization can predict the future with accuracy and confidence. Successful organizations need an ability to react quickly to new opportunities and marketplace challenges. In any system with as little slack as Georgia Tech has, we must be able to react quickly or our ability to compete - for students, for external support, for faculty, etc. - diminishes greatly, as does our ability to exploit opportunities like those that are coming our way because of our involvement in the Atlanta Olympics.

Our academic restructuring proved that we can change quickly given the proper impetus. We accomplished the most significant academic reorganization of a major research university during the past twenty years in under two years, and we will shortly have nine new degree programs to show for our efforts. I am very proud of what we were able to do in so short a time and of how high quality the degree programs turned out to be. Another case in point is our research program, which by all accounts is tremendously healthy but overly dependent on Department of Defense funding. Our research program leaders, particularly in GTRI, have moved quickly to leverage our strengths into related fields, in-

cluding environmental research.

This "organizational flexibility" is a characteristic that we need to consciously attend to, and work to improve.

I talked about many of these issues and focal points during my State of the Institute address last year, when I laid out a set of goals for 1996. (Last year, the choice of 1996 was arbitrary: this year, it is not.) Goals are without much value if you do not regularly attend to them, so I want to update our progress.

On the faculty side, our student/faculty ratio remains an obscene 21:1. We desperately need progress on this front, not just for our goal of 15:1 by 1996 but to maintain our educational quality. We were gladdened by a 20 percent increase in the number of female professors, but the number of black faculty remained flat. As we add faculty to reduce our student/ratio, we will work toward our goal of tripling the number of female and minority faculty. Our commitment to racial and sexual diversity remains strong.

The news is mixed from the student point of view. Our average SATs fell last year, as did the number of National Merit Scholars, making the goal of a 1225 average SAT and 175 merit scholars by 1996 more of a challenge. This is not so much a reflection of Georgia Tech, but of the competition we face. The graduation rate increased slightly, but we need to make a big jump if we are to graduate 80 percent of our students. Our recent decision to build the Success Center as a recruitment tool and the new academic options resulting from the restructuring will help achieve our goals here. The Olympics gave us good news on the housing front, assuring us of being able to house our goal of 75 percent of the student body on campus if we manage the situation correctly.

In terms of graduate students, we are making impressive strides. Our graduate students are up, both in number and in quality. Accounting for the growth are Ph.D. programs, helping us achieve our goal of a 2:1 Ph.D. to master's ratio. As we aspire to be a national research university, our Ph.D. programs are crucial. Especially worthy of note is a 19 percent rise in minority Ph.D. enrollment, helping to propel us upward in the ranks of engineering and science minority Ph.D. producers. The only discordant note is the Master of Science in Management program, where resource constraints have kept us from increasing enrollment.

In terms of resources, we met one of our important goals when our endowment grew by \$32 million dollars this year, a 12 percent hike. The amount of research also grew quickly, up to a total of expenditure of \$174 million dollars. We still will

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Making festive displays to put in front of fraternity and sorority houses and the residence halls is a long standing tradition for Homecoming. Here, these students put the final touches on their display.

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need to increase the growth rate if we are to reach \$375 million by 1996. Despite our hopes for an increase in state resources, extramural funding remains Georgia Tech's "margin of sustenance" instead of our "margin of excellence."

My final goal was the one most easily accomplished - to maintain competitive Division I athletic programs. In the short run, I have people like Dennis Scott, Kenny Anderson, Shawn Jones, and Ken Swilling to thank for that. In the longer run, we have Homer Rice, Bobby Cremins, Bobby Ross, and Jim Morris to thank and an athletic program that has for a decade paid attention to the fundamental values of Georgia Tech and to the fundamentals of building a strong program, around strong leaders, and student-athletes with motivation and character."

Environmental Forum To Bring "Much Ado About Oil" Nov. 8

The Environmental Forum will host a panel discussion focusing on the current oil shortage problem on Nov. 8 in the Student Center Theater at noon.

The discussion, entitled "Much Ado About Oil" will feature the following speakers and topics: Dr. Leland Long, professor in the School of Earth and Atmospheric Sciences, on "Oil Reserves and Extraction Methods;" Dr. David Ray, professor in the Department of History, Technology and Society, on "The History of OPEC;" Dr. Augustus W. Giebelhaus, acting department head of the Department of History, Technology and Society, on "A Historical Perspective;" and Dr. Erik Ferguson, professor of City Planning, on "Alternate Fuel Sources and Transportation Modes."

Your Thoughts And Ideas Are Needed For "Faculty Forum"

Normally, the *Whistle* staff and its contributing writers are the primary sources for story ideas in this paper. However, the "Faculty Forum," a new feature of the *Whistle*, depends on *your* input.

The "Faculty Forum" is designed to be an open column through which Tech faculty and staff can express their views on a variety of campus issues. Possible ideas could range from the parking situation to campuswide recycling or from academic issues to the 1996 Summer Olympics.

A faculty review committee will be responsible for reviewing and selecting material for the "Faculty Forum." The committee includes: Bud Foote (Literature, Communication and Culture), Ruth Hale (Library) and Eugene Comiskey (Management). Whistle Managing Editor Jackie Nemeth will adjust the piece to Associated Press Style Book format without changing the piece's content.

At the end of each "Faculty Forum" piece, a disclaimer box will list editorial review committee members, what type of material is appropriate for the column, and where to send essays for selection.

The following disclaimer will also be printed in the box: "Opinions expressed on this page (or these pages) do not necessarily reflect the views of the administration of the Georgia Institute of Technology, the Editorial Review Committee, or the Whistle staff."

If you are interested in sharing your thoughts about issues that affect the Tech community, please submit a double-spaced essay (under 750 words) to Foote, 326 Skiles, mail code 0165. If you have questions about the "Faculty Forum," please call Foote at 4-2730, Hale at 4-4254, Comiskey at 4-4394, or Nemeth at 4-2453.

Georgia Tech Hosts Seven-County, Griffin Area Showcase During Homecoming

By Pam Rountree

Leaders of business and industry, legislators, students, teachers and media representatives from the seven-county area (Butts, Clayton, Fayette, Henry, Lamar, Pike and Spalding) surrounding Griffin, Ga., were invited to attend Homecoming activities at Georgia Tech on Saturday, Oct. 27 as part of a Griffin Area Showcase celebration.

Tech representatives welcomed the group to campus Saturday morning at 9 a.m. when they arrived on buses at Alexander Memorial Coliseum. The adults in the group were taken to view the Ramblin' Wreck Parade, a tradition at every Tech Homecoming. The students were given a campus tour which included viewing the parade and visiting the Student Athletic Complex, the Student Center, campus residence halls and classrooms.

A presentation was given to Showcase participants in the Luck Building. They were welcomed to the campus, viewed a video of Tech's "success stories," and heard about Tech's research and new degree opportunities.

Showcase participants enjoyed a picnic lunch at Peters Park, and the group members were honored guests at the Yellow Jackets' Homecoming football game against the Duke University Blue Devils.

Those attending the Griffin Area Showcase came from a seven-county are surrounding the city. Tech hopes to add Griffin to its list of extension office sites soon.

Griffin is one of five locations which Tech has identified as sites for future Industrial Extension Service regional offices. Because the budgets of the regional offices are a line-item category in the state budget, however, the actual opening of these offices hinges on the appropriation of operating funds by

the Georgia General Assembly.

The proposed Griffin office would serve the seven counties listed above. They contain 377 manufacturing firms which employ almost 20,400 people. The office would be staffed by two engineers and a secretary, meeting the goal set by Tech and supported by the University System of one engineer per 200 manufacturing firms.

Tech's Showcase programs are designed not only to acquaint communities throughout the state with the services and opportunities available at and through Georgia Tech, but also, to provide Georgia Tech with a better understanding of each area's needs.

The Industrial Extension Service includes 12 regional offices, which are strategically located around the state and staffed by engineers who have experience in private industry and economic development. Currently, the seven counties surrounding Griffin are served by the Carrollton and Macon regional offices.

The regional offices have been a vital resource for the past 30 years, especially for small and mediumsized businesses who do not have the in-house technical expertise of large firms. The offices offer services at no direct cost to the local businesses in areas such as energy efficiency, management, computerization, plant floor layout, technology upgrades and economic development strategies. They are also conduits to the Tech campus, enabling communities throughout the state to tap into the college's educational, research and service resources.

Job Hunting?

If you're looking for employment opportunities, call the Job Line in the personnel office—ext. 4-4592.



Billy Banks

Tom Mallon (L), a member of Pi Kappa Phi and a civil engineering student, and Amy Hebert, a member of Alpha Delta Pi and a chemical engineering student, were the winners of the Freshman Cake Race on the morning of Homecoming.

Georgia Tech Governmental Affairs Committee Straw Polls Student Body

The Governmental Affairs committee of the Georgia Tech Student Government Association conducted a straw poll of the student body on Oct. 23, 1990. Over six percent of the student body participated in the poll.

Students were polled on their preference in the upcoming Gubernatorial, Lieutenant Governor, and Insurance Commissioner races. Because of an error on the ballot, the Lieutenant Governor race had to be thrown out.

Governor's Race (642 voters participating)				
Candidate	Number Of Votes Received	Percent		
Isakson	345	54%		
Miller	216	34%		
Rand	34	5%		
Other/Undecided	47	0.10		
o macaraca	71	7%		

Insurance Commissioner Race (479 voters participating)

Candidate Number Of Votes Received	Percent
Lovett 225	47%
Ryles 158	33%
Other 96	20%

The poll also sought information on the student body's political party affiliation, whether they supported public funding of abortion and whether they were in favor of a lottery.

Political Party Preference (622 voters responding)

Party Number Of Votes Received	Percent
Republican 373	60%
Democratic 155	25%
Other/Independent 94	15%

Public Funding For Abortion (718 voters responding)

Response Number Of Voters Received	Percent
Yes 241	34%
No 374	52%
Indifferent 103	14%
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Lottery In Georgia (614 voters responding)

Response Number Of Votes Received	Percent
Yes 407	66%
No 135	22%
Indifferent 72	12%

General Faculty Adopts Proposed Changes To The Statutes

The following proposed changes to the Statutes of the Georgia Institute of Technology were presented in a First Reading to the General Faculty on 24 April 1990 in accordance with the Statutes, Sections 2.5.1.3. and 2.8. The General Faculty voted on and adopted the proposed changes to the Statutes during its Oct. 30 meeting. Pending President John P. Crecine's approval, the proposed changes to the Statutes will be sent to the Chancellor's Office at the Board of Regents for final approval.

The proposed changes are designed to clarify the link between Administrative titles and the responsibilities referenced in the Statutes. The changes are as follows:

Article II, The Administration (second paragraph): "...Through memoranda and organizational charts, the President advises the Institute of organizational changes and shifts in the responsibilities of members of the Administration. Hereafter in these Statutes,

members of the Administration will be referred to as administrators. Administrators referenced by their function and designated certain responsibilities by the Statutes are as follows:

Administrator in charge of counseling and career planning, development, graduate students, institute relations (or planning), public relations, publications, student affairs; chief academic officer; chief financial officer; chief operating officer of the Georgia Tech Research Institute; Director of Libraries (Administrator in charge of Libraries); and Registrar (Administrator in charge of Recording Courses Offered).

The President shall designate on an annual basis an appropriate administrator to fulfill the responsibilities of these Administrative functions identified in the Statutes.

Section 2.5.2.2 (b): "Without the right to vote: The Administrator in charge of student affairs, the chief financial officer, the Administrator

in charge of institute relations, the Administrator in charge of development, the Registrar, and the chief operating officer of the Georgia Tech Research Institute."

Section 2.5.2.3 (a): "The elected representatives shall be distributed among the Departments of Instruction, the colleges without such departments, the operational units and a unit of Administration and Services of the Georgia Tech Research Institute, and a composite unit of Services and Central Administration in the ratio of one representative for each twenty members of the General Faculty (rounded)."

Section 2.5.2.3 (b): "The representatives from Services and Central Administration shall be elected proportionally from the Libraries, the Office of the Administrator in charge of student affairs, and the aggregate of others"

Section 2.5.2.3 (c)(3): "In the Georgia Tech Research Institute a subunit is defined as an operational unit or a unit of Administration and Services or other subunit which the chief operating officer of the Georgia Tech Research Institute may recommend to the Executive Board for approval as a constituency unit."

Section 2.5.2.6 (a): "Representatives of a Department of Instruction (a School, Department, or College without departments), a subunit of the Georgia Tech Research Institute, the Libraries, and the Office of the Administrator in charge of student affairs shall be elected by a process to be determined by the members of that unit, except that the nominations shall be open and a secret ballot used."

Section 2.5.2.6 (b): "Nominations for representatives of the aggregate units in the Services and Central Administration (other than the Libraries and the Office of the Administrator in charge of student affairs) shall be supervised by the Executive Board (with nominations by petition admissible)..."

Section 2.5.2.7 (a) "Representatives from Departments of Instruction, colleges without such Departments, subunits of the Georgia Tech Research Institute, and Services and Central Administration shall be elected early in Spring Quarter of the biennial election year."

Section 2.5.4.2 (b): "Without the right to vote: The Administrator in charge of student affairs, the Deans of the Colleges, the Administrator in charge of graduate studies, and the Registrar."

Section 2.5.7.3 (b) (1): "The Graduate Committee shall consist of representatives of the Administration, the Academic Faculty, and the Students, with all members having voting privileges. The Administration shall be represented by the Administrator in charge of graduate studies and by the

Registrar who shall be Secretary..."

Section 2.5.7.3 (d) (1): "The Student Academic and Financial Affairs Committee shall consist of five members — Faculty members. The Administrator in charge of counseling and career planning shall be an ex-officio member without voting rights."

Rousseau Joins Conference On Academic Issues

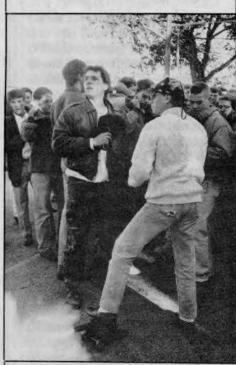
Dr. Ronald W. Rousseau, director and professor in the School of Chemical Engineering, recently joined research scientists from 30 leading universities as special guests at the Hoechst Celanese Corp. University Day conference in Warren, N.J.

The theme of the conference was "Bridges to Academe." Participating scientists, many of whom serve as deans of schools of science and engineering and as heads of natural science departments, shared their views on such issues as: ongoing change in the U.S. university system, what universities want from industry, what industry expects from universities, and models of university-industry interaction.

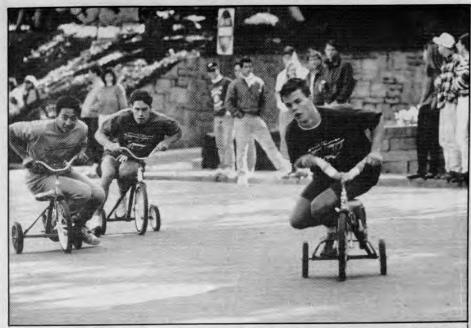
Participants were joined by scientists who play pivotal roles in Hoechst Celanese Corp. research and technology management at facilities devoted to advanced materials, fibers, film, pharmaceuticals and specialty chemicals.

Send Those Receipts!

Help Techwood Tutorial Project help others — send your Kroger receipts to TTP at mail code 0458. This is part of a student-organized, campus-wide effort to raise \$400,000 in receipts to get computers for the two schools served by the program.



These students fired the cannon to signal the beginning of the annual Ramblin' Wreck Parade on Oct. 27.



These students rode their tricycles fast and furiously during the Mini 500 on Oct. 26, the day before Homecoming.

Tech Ranked Among Nation's Best As NSF Announces Research Expenditures Results

By Jackie Nemeth

According to NSF FY 1989 data, Georgia's three major research universities Georgia Tech, the University of Georgia, and Emory University, expended an astounding total of \$385,330,000 in research funding for the year.

Vice President for Research and Graduate Programs Demetrius T. Paris said Georgia's research universities expended a larger amount of research funding than the North Carolina Research Triangle universities — North Carolina State University, Duke University and the University of North Carolina at Chapel Hill. The Research Triangle schools expended \$382,078,000 in research funding during FY 1989. Georgia Tech led the way for all six universities with a record setting \$174,664,000

in total expenditures.

"These new rankings represent a significant change in the position we had in 1988," Paris said. "We are also proud that Georgia Tech's and Georgia's research operations rank highly on the national level."

Georgia Tech was ranked 19th (up from 27th) among the top 100 U.S. colleges and universities in total and federally financed R&D expenditures during fiscal years 1988-89.

In FY89, Tech earned \$21,346,000 which resulted in a fifth place finish among the top 100 U.S. colleges and universities in industry-sponsored R&D expenditures. Other schools in the top five include the Massachusetts Institute of Technology, Pennsylvania State University, the University of Michigan and North Carolina State University.

1996 Committee . . . them secure, and how to coordinate the cooperative education program.

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Crecine Norman Johnson said the Olympics present Tech with the opportunity to make Georgia Tech and Atlanta "the greatest neighborhood in the nation and a place where everyone can feel welcome."

"When the Olympics are over, we want everyone across the nation and around the world to think that Georgia Tech is a great place to go to school with great people working and going to school there," Johnson said. "We want everyone to feel they have a place at Georgia Tech."

Special Assistant to President Crecine John F. Friedmann said everyone's involvement is needed for solutions to the problems and uncertainties that the Olympics will present. Challenges include how to structure the 1996 summer quarter, how to keep ongoing research programs in operation and how to keep for Tech include writing a definitive history of the modern Olympic Games and operating a computer bulletin board to keep everyone informed about Tech's progress in Olympic related matters. Friedmann stressed the importance of

Other "Olympic" oppportunities

Olympic related matters. Friedmann stressed the importance of the Tech community knowing about Olympic developments and making suggestions or asking questions.

"We need to make sure everyone is kept aware of Olympic developments," Friedmann said. "People who see an issue or a potential problem related to the Olympics needs to let someone on the 1996 Committee know what is on their minds and how we can work together on it."

The 50 members of the 1996 Committee and their respective organizations are as follows:

Officers: President John P. Crecine (Chair), Norman Johnson (Vice Chair, Community Affairs), John F. Friedmann (Executive Coordinator), and Joseph E. "Tim" Gilmour (Vice Chair, Facilities).

Ex-Officio: Aaron Bertrand (Chair, Executive Board), Michael D. Furman (GTOC), J. R. Gray (Editor, The Technique), Homer Rice (Director, Athletics), Stacia Smith (President, Student Government Association), Blake Swaggart (President, Graduate Student Senate), and Michael E. Thomas (Acting Executive Vice President).

Members: John Aderhold (Georgia Tech Advisory Board member, Alumni Board member), Thomas M. Akins (Facilities Executive Board, and Director of Cooperative Division), Rolla Bargeron (Plant Operations, GTOC), Ronald Bell (Vice President, Georgia Tech Research Corp.), Thomas D. Boston (School of Economics), Linda Brady (Department of International Affairs), Donald Bratcher (Director, Office of Human Relations), Robert Cannon (Interim Dean, Ivan Allen College of Management, Policy and International Affairs), John Carter (Vice President and Executive Director, Alumni Association, and Student Recruitment Task Force Chairman), William Chameides (Director, School of Earth and Atmospheric Sciences), Donald Chapman (Georgia Tech Advisory Board member, Alexander-Tharpe Fund Board member), Rich DeAugustinis (Interfraternity Council, GTOC).

Also, Lowell Evjen (ATDC), Nicholas L. Faust (GTRI), Peter Freeman (Dean, College of Computing), H. Wayne Hodges (ATDC), Denney Freeston (College of Engineering, Continuing Education), Don Giddens (Director, Aerospace Engineering, and Alumni Association Board member), Andrew Harris (GTRI), John J. Jarvis (Director, School of Industrial and Systems Engineering), James M. Langley (Vice President, External Affairs), Linda Martinson (Vice President, Planning, Budget and Finance), Bernadette McGlade

(Associate Athletic Director), Robert C. McMath (Ivan Allen College of Management, Policy and International Affairs), A Raymond Moore (Facilities Executive Board, Office of Interdisciplinary Programs).

In addition, James Murphy (Associate Athletic Director), George Nemhauser (School of Industrial and Systems Engineering), Blake Patton (Georgia Tech Advisory Board member, varsity swimming), Dan Pittard (alumnus, McKinsey & Co.), James Priest (Director, Plant Operations), Catherine Ross (College of Architecture), David Sawicki (Facilities Executive Board, School of Public Policy), William Sayle (School of Electrical Engineering), Michael J. Sinclair (Office of Interdisciplinary Programs), Terry Sichta (Housing), David Spence (Executive Vice Chancellor, Board of Regents), Cedric Stallworth (Georgia Tech Advisory Board) and Dr. F. L. Suddath (Vice President for Information Technology, College of Sciences Faculty Member).

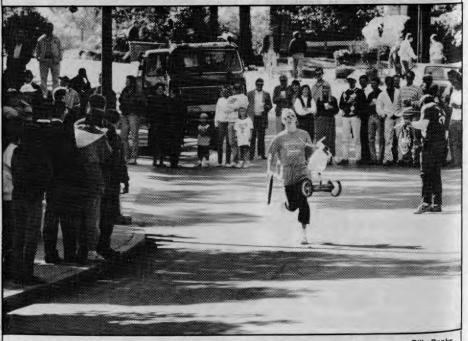
People

Electrical Engineering

Kevin F. Brennan recently published "Random Well Width Superlattices as One-Dimensional Artificial Amorphous Materials and Their Possible Exploitation in a New Ovshinsky Switch," Applied Physics Letters, Vol. 57, pp. 1114-16, Sept. 10, 1990.

M.M. Mirsalehi and T. K. Gaylord recently published "Analytic Expressions for the Sizes of Logically Minimized Truth Tables for Binary Addition and Subtraction," Applied Optics, Vol. 29, pp. 3339-44, Aug. 10, 1990.

C. T. Lea recently published "Multi-Log₂ Networks and Their Applications in High-Speed Electronic and Photonic Switching Systems," *IEEE Transactions on Communications*, Vol. COM-38, No. 10, pp. 1740-49, October 1990.



His tricycle did not quite make it through the Mini 500, but this student was bound and determined to make it to the finish line—even if he had to carry the tricycle with him!

Crecine Addresses Mandated Cuts To The 1990-91 Operating Budget

(This memo from Tech President John P. Crecine was dated Oct. 22).

"I believe most of you are aware of the budgetary situation in the State of Georgia. There has been a shortfall in anticipated revenues for the current budget year, FY 1991. and the State University System has been required to immediately reduce its FY91 State Appropriation by 3 percent. The State University System first eliminated or severely cut some parts of their budget and then spread the remaining cuts equally among the 34 units of the System. Because the initial budgetary items that were eliminated or severely cut were concentrated among university-level institutions, the research universities in the State System have taken somewhat greater cuts than the 3 percent System total. We all hope this will be the last round of mandated budget cuts and we are working with the Chancellor to ensure this.

"The purpose of this memo is to communicate to you the policy position adopted by me, the Institute Resource Allocation Advisory Committee, and the Academic Council in making cuts to various budgets and to indicate the general philosophy we followed. This was a particularly difficult task for Georgia Tech because our current Resident Instruction Budget and State Appropriation is far below what it should be. Indeed, if one uses as a benchmark the current Regents' Policy and the new funding Formula the Regents have adopted for calculating their re-



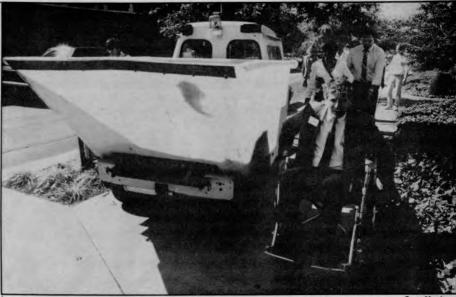
Vice President and Dean for Student Affairs James Dull recently participated as a visually impaired person during Disabilities Day, a part of Human Relations Awareness Week.

quest to the Governor, Georgia
Tech is currently underfunded by
more than 40 percent. I realize that
there is no slack out of which to
take these cuts. There is no question that several units will have to
fundamentally rethink their operations in order to accommodate mandated cuts. In several units layoffs
and personnel reductions may be
required. Given our current situation there is no painless way for
Georgia Tech to absorb its portion
of the mandated cuts in the State
Budget for 1990-91.

"An across-the-board cut for Georgia Tech units is inappropriate. We have different priorities for various parts of Georgia Tech, different units have different needs, there are different levels of performance among units, and there is a differential capability for absorbing reductions. Our core missions are education and research, and our first priority is our students. The unacceptably high student faculty ratio we have at Tech cannot be allowed to go higher and consequently in distributing budget cuts, the academic and research units were given the lowest reductions. The academic support organizations (libraries and computing) were given the next lowest reductions, along with student services. The administrative and service organizations were asked to shoulder the greatest share of the budget cuts. In some cases, the cuts are severe enough to require personnel reductions at some level. We all regret that any cuts were necessary, especially in light of our overall funding situation.

"In administering budget reductions at the unit level, we want to give unit managers the widest latitude possible in specifying where they are to be taken. We need to ensure, however, that overall Institute priorities are not forgotten when specific personnel and program reductions are identified. Consequently, I am appointing a Faculty-Staff Review Committee which must approve personnel reductions or layoffs necessitated by Budget reductions, before any reductions are made. We want to ensure that Institute personnel policies and affirmative action objectives are not overlooked in this very difficult process. In particular, we do not want cuts in personnel to fall disproportionately upon those who directly serve our students or upon employees in entry-level positions.

"I appreciate the cooperation we have already received in dealing with a situation that none of us desires. Thank you in advance for your continued understanding."



Gary Meek

Tech Police Chief Jack Vickery maneuvered his way through campus in a wheelchair during Disabilities Day, a part of Human Relations Awareness Week. Eleven Tech administrators volunteered to view the Tech campus from the view of a wheelchair bound, blind, or mobility impaired person on crutches on Oct. 18.

Managers Simulate Mobility Impairments During Human Relations Week

By Vera L. Dudley

In recognition of Disabilities Day during Georgia Tech's Human Relations Week, 11 of Tech's top administrators volunteered to view campus logistics from the view of a blind, wheelchair bound or mobility impaired person on crutches.

After viewing a thoughtprovoking videotape produced by
Tech students, most of whom are
members of the Student Disabilities
Association (SDA), the officials
were divided into groups of four or
five and escorted across campus
using the same mode of transportation and routes to locations most
disabled students frequent. The
goal of the videotape and exercise
was to point out areas that can be
improved upon and to demonstrate
the recent attention Tech has given
to the issue of accessibility.

Examples of recent accommodations are the bridge across North Avenue which joins main campus to the Burge Parking Deck and the Alumni/Faculty House, ramps at the Athletic Association Building, the Catholic Center, the Centennial Research Building, and powered doors at the ISyE/Management Complex

Complex.

The video also portrayed examples of poor designs and neglect such as curb cuts on slopes which can cause wheelchairs to tip over and deposit a person into the street, drop-offs in sidewalks, and extremely high emergency telephones over an unpaved ground. Others had no advance warning of construction repairs on sidewalks or buildings, no signage indicating the availability and location of elevators or ramps, and blockage of curb cuts by vehicles.

SDA members, Sarah Endicott, an occupational therapist and information specialist at the Center for Rehabilitation Technology, and Rosemary Watkins, assistant to the Vice President of Student Affairs/coordinator of the disABLED and Non-Traditional Student Program, are aware of the enormous construction cost associated with these problems. However, they agree that the benefits to Tech could be equally as great.

"A lot of people don't consider Tech because of accessibility," Watkins said. "If we were to show that Tech is proactive in making our campus more accessible, a larger number of students with impaired mobility would apply. We try to assess the need before there is an outcry from the students. We then present a recommendation to Facilities to be incorporated in their plans."

Administrative participants included Associate Vice President for Academic Affairs E. Jo Baker, Vice President and Dean for Student Affairs James Dull, Tech Police Chief Jack Vickery, Vice President for Operations Dick Fuller, Assistant Vice President for Student Affairs Carole Moore, Assistant Vice President and Director for GTRI Pat O'Hare, Auxiliary Services Director Roger Wehrle, Office of Human Relations Director Don Bratcher, Personnel Director John Gibson, Associate Dean for the College of Sciences Thomas Tornabene, and Director for Student Affairs Gary Schwarzmueller.

Another interesting event during the Human Relations Awareness Week was a panel discussion with Tech students who were either born or have lived in the Middle East. Though the intent was to sensitize members of the Tech community to the position of students from Middle Eastern countries and to re-evaluate the justification of individual prejudices, most of the students' comments expressed disenchantment with the American presence in Saudi Arabia.

What's next

ACADEMICS

November 7 - Academic advisement for Winter Quarter 1991 and early registration (through Nov. 9) Early registration (Phase I) for Winter Quarter 1991, through Dec. 5

ARTS & ENTERTAINMENT

November 5 - TTN, "Rebel Without A Cause," through Nov. 11, Student Center,

November 6 - Astrology Lecture & Demonstration, "Thank Your Lucky Stars," 11:05 a.m., Student Center, 2nd floor lounge

"The Devil You Say?" an evening of conversation with the Prince of Darkness, 7 p.m., Student Center Theater, \$2

November 9 - Movie, "No Way Out," 7 p.m., 9:30 p.m. and midnight shows, Architecture Auditorium, \$2

November 10 - Movie, "In Country," 7 p.m., 9:30 p.m. and midnight shows, Architecture Auditorium, \$2

LECTURES & SEMINARS

November 5 - CIMS Seminar, Michael O'Brien, TDK Corp. of America, "Kanban in Japan Behind the CIMS," 4 p.m., Instructional Ctr., Rm. 211

November 6 & 9 - Institute of Paper Science & Technology Seminar, "Alkaline Chemical Recovery Technology," call Dani Denton at 3-9525 to register

November 8 - Textile & Fiber Engineering Seminar, Hawthorne A. Davis, "On The Mechanism By Which Polymer Molecules Produce Fiber Properties," 11 a.m., Hightower Textile Bldg., Rm. 310
Structural Mechanics Seminar, "Refined Buckling & Post-Buckling Analysis

Of Two-Dimensional Delaminations," Wan-Lee Yin, Georgia Tech, 3:05 p.m., Weber (SST) Bldg., Rm. 2

November 9 - Chemistry & Biochemistry Seminar, John Prausnitz, Georgia Tech, "Putting The Pieces Together: The Synthetic Character Of Molecular Thermodynamics," 3 p.m., Boggs Bldg., B6A

November 12 - CIMS Seminar, David Gregerson & Christopher Allen, NCR Corp., "Computer-Aided Engineering: Where CIM Begins," 4 p.m., Instruc-

Aerospace Engineering Seminar Ph.D. Dissertation Presentation, John Anastasiadis, "Stability Of Cylindrical Laminates By Higher Order Shear Deformable Theories," 4 p.m., Montgomery Knight Bldg., Rm. 317

November 10 - Football vs. Virginia Tech, 1 p.m., Bobby Dodd Stadium/Grant

Faculty Women's Club Events -The Georgia Tech Faculty Women's Club will be keeping busy during November with the following activities. On Nov. 14, the club will learn "the art of rug hooking" at 10:30 a.m. at the Sandy Springs Branch of the Atlanta/Fulton County library (395 Mt. Vernon Hwy. NE). The club will host an Arts & Crafts Festival Nov. 28-30 from 9 a.m.-4:30 p.m. in the Student Center; proceeds from the fair will go toward a student award. Volunteers will also be needed for the Festival of Trees coming up on Dec. 5. For more information about these events, call Rosalind Ho at 633-3830 or Jan Gaylord at 261-5083.

Education Extension Courses -Education Extension will offer the following courses in November. For more information on registration. call 4-2547. Nov. 5-9, "Principles of Modern Radar," \$995; Nov. 5-16, "Knowledge Engineering Certificate Program," \$3,650; Nov. 6-9, "Electronic Publishing," \$900; Nov. 6-9, "Advanced Video Processing and Applications," \$900; Nov. 6-9, "Advanced Computer Visualization Techniques and Applications," \$900; Nov. 12-13, "Parking Finance and Facility Design," \$395; Nov. 13-16, "Phased Array Antenna Design,

\$895; Nov. 14-16, "Techniques for Resolving Transportation Conflicts," \$595; Nov. 26-27, "Quality Systems Standards for the 1990s International Registration of Quality Systems," \$595; Nov. 26-30, "Airport Noise and Land Use Planning," \$795; Nov. 27-30, "Far-field, Anechoic Chamber, Compact and Near-field Antenna Measurements," \$975; Nov. 27-30, "Fluid Sealing Technology," \$850; and Nov. 30-Dec. 1, "Practical Construction Project Documentation," \$295.

Georgia Tech Groups To Give Concert

The Georgia Tech Chorale and the Technicalities will present "An Evening with the Music of Andrew Lloyd Webber" on Nov. 9 at 8:30 p.m. in the Architecture Building. Admission is free.

Performances will include songs from "Phantom of the Opera," "Jesus Christ Superstar," "Cats," "Starlight Express," "Evita," 'Aspects of Love," and "Song and Dance."

Greg Colson will direct the two groups and Sue Goddard will play the piano. The Georgia Tech Chorale consists of 85 voices, and the Technicalities, an auditioned subset of the Chorale, has 21 voices.

<u>Classifieds</u>

House For Rent - 3 BR, 1 BA brick ranch, South DeKalb area, MARTA line. \$600/mo., \$300 deposit. Call J.W. at 378-3996.

For Rent - 2 BR, 21/2 BA townhouse, W/D furn., fplc., double storage, lge. kit., 20 min. from Tech, roommate floor plan. \$600/mo., \$250 deposit. Call Doraine at 662-0970.

For Sale - Serger, White Superlock 534; 3/4 thread, overlock stitch, rolled hem, decorative edging, only 3 yrs. old. Retails at \$700, will sell for \$350. Call JoBeth at 977-8285.

For Sale - 3 BR, 2 BA contemporary home in Acworth near Lake Allatoona & Red Top Mountain. Lge. family rm. w/vaulted ceilings, fplc., deck, & sep. DR. Finished lower-level den w/office/mother-inlaw suite & lge. cedar closet, 2-car garage w/openers. \$87,900. Call Art at 259-7322 (GIST) or Fannye at 928-7710.

For Sale - 1980 280ZX 2+2 Datsun, black w/gold interior, new paint, good condit. Call Lynette at

Teleconference On Moral Leadership Coming Nov. 14

Education Extension will present a teleconference on "Management and Moral Leadership" on Nov. 14 from 9:30 a.m.-2:30 p.m. in the Paul Weber (SST) Building.

The teleconference will address how to hold people's respect and allegiance under highly demanding circumstances. Also covered is how the individual can maintain selfrespect, dignity and resolve in manipulative situations.

The cost is \$100 per person with a discount available for groups sending additional participants. For more information or registration, call 4-2547.

Cost/\$685

Callahan Receives Signal Corps Honor

Dr. Leslie G. Callahan Jr., Professor Emeritus in the School of Industrial and Systems Engineering, recently received the Signal Corps Regiment Silver Order of the Mercury Award in a ceremony in the ISyE Building conference room. The award was presented by LTG (Ret.) William J. Hilsman of the Signal Corps Regimental Association.

This honor is being awarded to Callahan based on his 45 collective years of serving as a soldier and a scientist.

"Griff" Callahan joined the Georgia Tech faculty in 1969 after serving 25 years and retiring as a Colonel in the U.S. Army. His second retirement came in 1989 after serving 20 years at Tech as a professor in the School of Industrial and Systems Engineering.

Following retirement from Tech, Callahan established the Institute of Military Education within the Department of Continuing Education. Among the short courses he developed, Modeling, Simulation and Gaming of Warfare continues to attract leaders from government, industry and academia, and has for more than a decade.

A graduate of West Point, Callahan is a co-founder of the Army Operations Research Society (AORS). He was a troop leader in the Philippines and Korea, and he has commanded the Harry Diamond Laboratories and the Army Avionics Laboratories. As a professor at Tech, Callahan directed more than 300 Army officers through Operations Research graduate programs.



It brings out the best in all of us."

whistle

News for the Georgia Tech Community

Charles Harmon Editor Gary Meek......Photographer Margaret Barrett Photographer

Publication is every Monday during fall, winter and spring quarters and biweekly summer quarter. Deadline is Friday noon, 10 days before publication. Address: News Bureau, mail code 0181 (Wardlaw Center, 177 North Avenue), 894-2452. Tech PROFS computer users may file news items with the News Bureau by sending electronic mail addressed JLNEMETH.

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