

State of the Institute Address

November 18, 1994

President G. Wayne Clough

Fellow alumni, faculty, students, and distinguished visitors. I am pleased to be with you today to bring to you the State of the Institute Address. Of course, a year ago, I had no expectation of having this opportunity. Yet I knew then that I would be here on this day. In fact, I knew ten years ago I would be here on this day. Because ten years ago, I found myself unable to join my classmates in our 20th reunion, and I vowed then that I would be here for my 30th reunion. And so it is, that tomorrow night, my fellow members of the class of 1964 and I will celebrate our 30th reunion.

The State of the Institute Address provides the opportunity to assess where you are and to posit thoughts about what might come for the next year. As we think about where we are, I note that I have no claim to the many accomplishments that can be cited for Georgia Tech. I have been gone from campus for 30 years, and during that time, Georgia Tech meant much to my development, but I had little effect on Georgia Tech's development. Credit goes to those whose efforts were applied to the task. I do wish to acknowledge as prominent among those my immediate predecessor, John Patrick Crecine, who served as the ninth president of Georgia Tech for six years. His tenure will be remembered for its energy and vision, and his contributions will be important for our future. I know we all thank him for the work he did for Georgia Tech and wish him well.

As a good engineer, my instincts when I am up against something new is to take things apart to learn how it ticks. In my first State of the Institute Address I will begin by looking at the component parts that make up the Georgia Tech of today. Then I will tell you my thoughts on how these pieces can fit together to realize a shared vision of the greater Georgia Tech of the future. My focus will be on Georgia Tech's key parts: Students, Faculty, Staff, Alumni, and Administration.

I'll start with our students. By almost any measure, we find evidence of the quality of our students. The results speak for themselves: the highest average SAT scores for the entering freshman class for any public university with a 1233 average; number one in the number of freshmen National Merit Scholars attending any public university in the nation with 109 choosing to attend Georgia Tech; and number one in the country with the largest voluntary co-op program.

Today, we enroll 3,688 graduate students and 9,213 undergraduate students. While we continue to maintain a large undergraduate program, 1994 illustrates the maturation of our graduate program. This year, we graduated the highest number of Ph.D. and MS degree students in our history -- 202 Ph.D.'s and 1061 MS's.

Our graduates increasingly reflect the population of our country and region, and this is an essential development. We can be proud that Georgia Tech ranks first in the nation in the numbers of engineering degrees awarded to African American students and second in terms of engineering degrees awarded to all minorities. Even so, there is much room for improvement, and I join you in our commitment towards greater diversity in our student body.

We also can be proud that more than 25 percent of our students are women, a considerable improvement over the 2 percent that were here when I was an undergraduate in the 1960's. Although we should be pleased that the number of women attending Georgia Tech continues to increase from year to year, the professions represented on our campus lag others that used to be predominately male. Last year as Provost at the University of Washington I was struck by the fact that women made up 70 percent of the College of Pharmacy; 50 percent of the College of Medicine and 60 percent of the Law School. These statistics are not greatly different at our neighboring universities in Georgia. As a technological university it is up to us to see that our professions are open and hospitable to women as well.

While bare statistics tell us some things about our students, we do them no service if we ignore their broader accomplishments. Alongside our faculty and staff, thousands of Georgia Tech students give of their time in community service. From the 1,500 member Georgia Tech Olympic Committee volunteer work force to the 84 tutors in the Techwood Tutorial Program, the enthusiasm and dedication of the Georgia Tech community are far-reaching and express themselves in a wide array of service activities.

Our students also find outlets for their talents by participating in 200 clubs and organizations with over half of our student body participating. An example of the success in this area is provided by our symphonic band, which this year was the only such collegiate group asked to perform at the Georgia Music Educator's Annual Conference.

Many of our intercollegiate teams have achieved successes we could only dream about a decade ago. For example, last year our student athletes in baseball and golf captured ACC titles (golf for the fourth year in a row), with the baseball team going on to win the NCAA Western Division and ending their quest one game short in the finals of the Collegiate World Series. This

fall, our women's volleyball team tied for the top spot in ACC, and they are now moving on to the NCAA national competition for the first time.

But even more important than a winning record, we take pride in our student athlete graduation rate. Year after year, the NCAA ranks Tech in its list of top 12 schools in the U.S. for football player graduation. Dr. Homer Rice is to be commended for all the work he has done for our student athletes; we are lucky to have him.

As is likely apparent, my impression of the student "part" of our Institute is positive and we have much evidence to support this assertion. However, there is no room for complacency, since we have clear challenges ahead. In addition to issues of diversity in our student body, we will be increasingly asked to fulfill student needs for engineering and related technical education in areas of State of Georgia outside of Atlanta.

Our faculty lie at the heart of our enterprise. They are the mainspring of our mechanism and can claim a large part of the credit for the recent recognition attained by Georgia Tech in national rankings.

Although many of our faculty hold national honors, I'd like to single out two as representative of the larger faculty who received special recognition this past year. Dr. Ron Schafer is our John O. McCarty Chair in the School of Electrical and Computer Engineering. Ron has been with Georgia Tech since 1974, and was recently named to the National Academy of Engineering. Membership in that august society is the highest professional distinction for engineers. It is also pleasing to see our faculty outside of engineering recognized for their national prominence. Dr. Mostafa El-Sayid, a member of the National Academy of Sciences has recently joined Georgia Tech as the Julius Brown Professor of Chemistry and Biochemistry. We are honored that he has come here from UCLA.

While our senior faculty are winning honors, I would be remiss if I did not note the strength developing in our young faculty. 40 of the young faculty serving today have received Presidential or National Science Foundation Young Investigator Awards, and three are recipients of the prestigious Presidential Faculty Fellow Awards. This bodes well for our future.

In addition to improving their national visibility, our faculty also are among the most entrepreneurial in the nation. The extramural research volume generated at Georgia Tech has now reached almost \$170 million and this can be directly attributed to the hard work by faculty. Our 1,500-plus academic and research faculty in all five of our Colleges and the Georgia Tech Research Institute are engaged in our energetic and creative research enterprise which produces concrete results for government, business and

industry, as well as providing an excellent training ground for Tech's student body.

We could measure our faculty in other ways, but these I have cited illustrate the positive growth in our faculty reputation due to a commitment to quality and productivity. My goal is to continue to bring to Georgia Tech new faculty who have the talents and motivation to teach and conduct research at the highest levels.

Our staff represent the glue that holds our institutional pieces together and keep us operating as a system. Nothing works without their efforts. Georgia Tech was recently cited by the U.S. News and World Report as one of the most effective universities in the country, a recognition that directly reflects our staff contributions. The future will place even greater demands on our staff in the face of technology advancement and developments in the information age. We will provide additional training to help adjust to these changes. At the same time, human relations remain paramount if we are to succeed. I will ask our staff to work on improved communication and greater reliance on finding common ground in dispute resolution. I am committed to assuring our staff that we will work to achieve a fair and open environment for each person to be productive. In part this can be done through the continuous improvement process that is under way in parts of the Institute. We will move forward with vigor in this endeavor.

Alumni represent yet another major part of our Institute fabric. Those of us who are alumni and have lived outside of Georgia often find ourselves explaining that Georgia Tech is not a private school. How did such a notion develop? Part of this perception is created because our alumni are such dedicated supporters of this institution that they are more like those of private school graduates than public school graduates. Georgia Tech is fortunate to have some of the most loyal and supportive alumni in the country. Our alumni give to the Roll Call, our annual fund, at a rate of 33 percent. To the best of our knowledge, that is the highest percentage for any public institution in the entire nation. The alumni also vigorously work to find, and provide scholarship funding for, the best and brightest of the students in this state and outside of it.

Alumni also work with the Institute in giving targeted funds to support key areas of need. Consider the Class of 1969 which has pledged to underwrite the Teaching Fellows Program. This program gives financial support to untenured faculty and gives these beginning teachers a forum for advice, support and continuing education. Their gift is a generous one and benefits both the students at Tech and Tech's young faculty.

One other alumni story concerns another type of giving. In fact, this \$5 million gift matched Tech's highest monetary gift ever. It was given by

alumnus Tom E. DuPree Jr., and establishes the new DuPree Center of Entrepreneurship within the Ivan Allen College. Through this gift, we are able to move quickly towards a long term goal to provide business education that supports the modern era of technologically driven enterprise.

The final part of our system I will examine is the administration. In the last few years, this part of Georgia Tech, fairly or unfairly, has been buffeted by ill winds from financial management and human resource audits. These problems have detracted from the overall good work done by the administration. Although some negative perceptions remain, efforts by our people have addressed many of the issues that caused the problems. I am committed to continuing our improvement and making our administration one that is as good as the students, faculty and alumni it serves. We will accomplish this with a lean and aggressive organization that will hold itself accountable to the highest standards.

With the completion of our examination of the parts of the Georgia Tech enterprise, I conclude we have the elements of a system that can run reasonably well as they are. Indeed, as opposed to many of our fellow higher education institutions, we are blessed by the prospects of positive support from Governor Zell Miller and a legislature who have demonstrated their commitment to higher education. We also have the assistance of a new Chancellor of the University System of Georgia and a supportive Board of Regents. Even if we exercised minimal creativity and effort, some good would come our way. However, we will betray our possibilities unless if we assemble the pieces of our enterprise so they can be more than the sum of the parts. I believe this is the noble goal, for in this process, to borrow an Olympic metaphor, we will reach for the gold medal, not the bronze.

To create the institution we want to be, we have to ask, and answer a series of fundamental questions:

- What is our vision for the future?
- Should we continue to grow, or are there limits to our future size?
- How will we participate in state-wide delivery of technological education given expected growth in student populations and development of new delivery systems such as distance learning?
- Within our mission, how can we maintain and enhance our traditional strengths and, at the same time, play a major role in important issues of the future such as biotechnology, the public policy and ethics of technology, sustainable development, and creative endeavor in a technological world?

- How will we utilize the exciting new facilities legacy from the Olympics?
- How will we participate in the emerging new environment coming from the exciting developments in educational technology?
- What will Georgia Tech do differently to better utilize its existing financial and human resources?
- Where will the funding be derived to allow us to achieve our aspirations for national and international prominence and improved delivery of education to our students?

All of these questions will be answered in the future, either for us, or by us. I submit that if it is the former, we at best win the bronze medal. If it is the latter, we can win the gold.

We are embarking on the process of addressing the fundamental questions through a strategic planning effort from the Institute-wide perspective. Our Strategic Planning Task Force is in place and is being supported by a Reconciliation Committee designed to distill the thoughts and ideas in the many existing unit plans. All of the shareholders of the Institute are involved, including students, faculty, staff, and alumni. We will create a shared vision for the future of Georgia Tech.

Next year at this time, I will bring to you this vision and its supporting goals and plans. I also promise that we will not stand still while we are planning since there is too much to risk by doing nothing.

In developing our strategic plan, we will answer the fundamental questions posed earlier. In an unconstrained environment, the possibilities are almost limitless, and as the swamp philosopher, Pogo, observed, we will be surrounded by insurmountable opportunities. A context is desirable and this is provided by guiding principles. A starter set would include:

- Set high goals that will lead Georgia Tech to realize greater national and international visibility.
- Insist on the highest quality attainable in the education we provide for our students.
- Look to new avenues to encourage self learning by our students while providing for more effective use of faculty time in the learning process.
- Seek an environment that encourages creativity at all levels.

- Focus use of resources to the key missions of the Institute with allowances for flexibility in application.
- Identify resources needed within the context of the goals and link these to sources that can be developed over the plan's life.
- Improve collaboration with state and other institutions of higher education; work within the basic guidelines of the developing Board of Regents Strategic Plan.
- Recognize all successes are people-based; we need the best and should have systems that allow maximum use of their energies.
- Build on our traditions, while not being bound by the past.

The next year will be an eventful one for all of us. I make the commitment to you that if you work with me, no one will work harder than I in leading Georgia Tech to its rightful future.

As we stand together, you will find me a joyful warrior in this journey, for I am humbled by the opportunity handed to one born of Georgia soil and educated on these grounds.