## REMARKS BY GEORGIA TECH PRESIDENT G. WAYNE CLOUGH Savannah Rotary Club, June 17, 2002

It is a great pleasure to be back in Savannah again. My wife Anne and I love to visit this gracious historic city, and I always look forward to seeing the many good friends that Georgia Tech has here.

Some of you have just come from the Technology and Engineering Campus at the intersection of I-95 and Jimmy DeLoach Parkway, where we broke ground this morning for the first building for the Georgia Tech Regional Engineering Program. If you missed it, I want you to know that it was the hottest event of the morning, not only because we were out in the middle of a field of dirt in summer, but also because the vision that is beginning to take shape out there is so exciting.

As Georgia's oldest and best preserved city, Savannah has always had one foot firmly planted in history. But this morning we were looking to the future, and the creation of a high-tech hub for southeast Georgia that will make this region competitive in the knowledge-based economy of the 21<sup>st</sup> century. And Georgia Tech is very proud and excited to be a partner with this community and your institutions of higher education in helping Savannah educate its bright young people and achieve its economic potential.

Coastal Georgia grew by 16 percent during the 90s, and a lot of that growth was around Savannah. This kind of growth gives you an opportunity to shape the direction of your economy in positive ways. You can target industries that build on your strengths, and develop interactive clusters of industry that will anchor your economy. But the resources you need for a strong economy are different in this new century than they were in the old.

The economy of the 20<sup>th</sup> century was an industrial economy, and the way to beat the competition was to produce things faster, better, and cheaper. The economy of the 21<sup>st</sup> century is knowledge-based, and the way to beat the competition is to be first with a new idea. That calls for more research to develop the new ideas and for a skilled workforce that can make something of them. Universities are the source of both of those things, which means that universities are becoming more central to economic development.

The Southern Growth Policies Board recently did a national study called "Innovation U: New University Roles in a Knowledge Economy," and what they discovered, much to our great delight, was the Georgia Tech has the most comprehensive program to support state and local economic development of any research university in the United States.

Of course, we had a little bit of an edge, because Georgia Tech has always had an economic development mission. When we were founded, the Civil War had just laid waste to the South's agrarian economy, and our mission was to help move Georgia into the industrial age. Today, nearly 120 years later, our mission is pretty much the same – to move the Georgia's economy to the next level by providing education, research, and economic development programs. And as our name implies, it is a mission to the entire state.

We have had a regional economic development office here in Savannah for almost 40 years, and in a typical year it serves about 70 different industries and economic development organizations in the greater Savannah area, helping them solve problems, become more energy efficient, and plan for future development.

We have always had students from Savannah at Georgia Tech – usually about 200 from Chatham County alone, then another 100 or so from adjacent counties. But in 1999, Georgia Tech's presence in Savannah took on an exciting new dimension with the creation of the Georgia Tech Regional Engineering Program.

When I returned to Georgia to become president of Georgia Tech in 1994, one of the first visitors I had was from Savannah, asking if I could help this community with an engineering education program. I had grown up in Douglas, in south central Georgia, and I knew firsthand the challenges facing this part of the state. I wanted to help, so I went to see the chancellor of the University System of Georgia to see what could be done.

Now, putting together a high-quality engineering program requires a pretty significant level of resources, and the folks at the Board of Regents were not ready to do it unless there was a demonstrated need for engineers in this part of the state. But, as I noted a few minutes ago, the Savannah area was growing and changing during the 90s, and by 1998 a need-based study demonstrated that there was a role for onsite engineering education in southeast Georgia.

Once that need was demonstrated, we didn't waste any time. We began a dialog with the three public universities in this region – Savannah State, Armstrong Atlantic State, and Georgia Southern in Statesboro – and they became our partners. We also had the advantage of the industry connections our regional Economic Development Office had

developed, and we began a dialog with SEDA – the Savannah Economic Development Authority – and BETA – the Business, Education and Technology Alliance.

With all of this local help and support, we were able to develop a program very quickly, and one year later – in the fall of 1999 – we enrolled our first group of 100 students in the Georgia Tech Regional Engineering Program. This creative new program enables students in southeast Georgia access to one of the best engineering schools in the nation without ever leaving home.

The GTREP program works like this: Our partner institutions – Savannah State, Armstrong Atlantic State, and Georgia Southern in Statesboro – provide the first two years of the curriculum. Then, during their junior and senior years students take courses that are taught by Georgia Tech professors who are based here in southeast Georgia and offered from our campus in Atlanta through distance learning technology. When they finish, they earn a Georgia Tech engineering degree.

The first eight GTREP graduates came to Atlanta last December to walk with the rest of Georgia Tech's graduates in our commencement ceremony. Five of them graduated with honors, which pleased us very much, because we are determined that this program will offer the same high quality and academic rigor of our programs in Atlanta. Another seven students just graduated in May.

The engineering degrees offered through GTREP are designed to meet the workforce needs of southeast Georgia industries. We began with two degrees that industries were looking for: Computer engineering, which will help southeast Georgia participate fully in Governor Barnes' Yamacraw initiative to make Georgia a center of broadband design. And civil engineering, which is an especially good fit, because our civil engineering program at Georgia Tech has a strong environmental focus that is important in this fragile coastal environment.

Georgia Tech has faculty and students at the Skidaway Institute of Oceanography, and Skidaway is another important partner that will greatly enrich the environmental education and research portion of the GTREP program.

It didn't take long for Savannah industries to see the potential of the GTREP program. Gulfstream Aerospace soon approached us about offering a degree in electrical engineering with a special emphasis on aerospace. And we are adding that degree with the help of the University System's Intellectual Capital Partnership Program. We are also seeing a growing interest in mechanical engineering, especially if the DaimlerChrysler plant moves to Pooler, which is just down the road from our new campus. And we will soon add a mechanical engineering degree program as well.

In addition to these undergraduate programs, we also offer master's degrees in mechanical engineering, computer and electrical engineering, and civil engineering through GTREP. These are degrees that we offer over the Internet, but having Georgia Tech faculty based here in southeast Georgia in these fields enables us to enrich the online experience with onsite classes, hands-on research opportunities, and in-person faculty advising.

In a knowledge-based economy, industry needs research as well as a skilled workforce, and any well-rounded engineering program at a top university includes research as well as education. In fact, the two go hand-in-hand, and students often say that the opportunity to participate in research projects is one of the best parts of their education. So GTREP has been developing research programs related to the curriculum.

Faculty and students in civil engineering are studying the nearshore impact of offshore dredging, for example, and they have been to New York, using new digital technology to assess the structural damage to buildings around the World Trade Towers from the September 11<sup>th</sup> attack. Faculty and students in computer engineering are busy developing education technology adaptations that will make GTREP the model of a new system for delivering engineering education. Their goal is not only to get the maximum impact in the classroom from distance learning technology, but also to use technology effectively to link institutions and provide students with maximum flexibility. GTREP students work together in online chat rooms, for example, and use Palm Pilots to connect to computer networks.

We started out in 1999 with 100 students enrolled in GTREP and nine Georgia Tech faculty based here in southeast Georgia. When school starts in August, we will have more than 300 GTREP students and 18 Georgia Tech faculty. And we expect this rapid growth to continue as we add new degree programs. We have been making do with leased space, which is less than optimal because it is not designed for engineering education and research. And we are continually outgrowing our space.

Then SEDA came to the rescue with an invitation to build a GTREP campus at Crossroads Business Centers, which it has under development where Jimmy DeLoach Parkway crosses I-95 just north of the airport. This is an outstanding location not only because of its convenience, but also because it allows us to develop a new model of coordinated economic development services. What we are going to create here is a technology hub for the entire region. It will be a hub for GTREP with spokes reaching out to our three partner universities and the Skidaway Institute of Oceanography. But it will be much more, because we will colocate all of Georgia Tech's economic development services to this site. In addition to the regional economic development office, this will also be the location of the new business incubator that our Advanced Technology Development Center will operate.

By placing these education, research, and business services together on the same campus, and by providing adjacent land for business who want to take advantage of them – all in a very attractive and convenient location – we believe we can home-grow a technology hub that will help Savannah's economy to prosper in the new economy of the 21<sup>st</sup> century.

These are really exciting times for Savannah. The opportunities are wide open before you, and Georgia Tech is delighted to be a partner with SEDA and the Savannah community in this undertaking. We look forward to continuing to work together with you in serving the education and economic development needs of this community.