REMARKS BY GEORGIA TECH PRESIDENT G. WAYNE CLOUGH
Savannah Rotary Club, July 12, 1999

It is great to be back in Savannah and have this opportunity to meet with my fellow Rotarians. Savannah is a city of charm, and unique history, and I believe a city with a future of great potential. Tourism is big business here. All you have to do to confirm that it is getting bigger is to look across the river at Hutchinson Island where the new International Trade and Convention Center and the Westin Savannah Harbor Resort are going up.

Hollywood has also discovered Savannah’s charm and you are capitalizing on it. After “The Garden of Good and Evil” and “The Gingerbread Man,” Hollywood is finally moving in the right direction with Robert Redford coming to film “The Legend of Bagger Vance.” My interest in this movie is that it involves the story of a caddy in a fictitious golf match that includes the great Georgia Tech alumnus Bobby Jones.

Still, under the glitter and charm, Savannah also has a strong industrial base that began with the first Georgia exports in 1735. It extended through the heydays of the cotton warehouses on River Street, and is expressed today in your vibrant port, Gulfstream Aerospace, Union Camp, Fort Howard and many other successful industries.

Georgia Tech is not quite as old as Savannah – you’ve got about 150 years on us – but we are old enough to have developed some strong connections with this community... with alumni and friends like Tom Coleman, Bryan Moss and Mike Rowland of Gulfstream, Vreeland George of Thomas Hutton Engineering, Matt Gignilliat of Savannah Electric Power, and Dan Bradley of Bradley Plywood.

Another connection that has always tied Georgia Tech to Savannah is students. Savannah sent more than 200 highly qualified students to the Tech campus during the past school year. We also have co-op students working in Savannah companies, alternating school and work, earning their way through college and getting valuable job experience in the process.

For the past 35 years, Georgia Tech has had an economic development office here in Savannah, helping small and mid-sized manufacturing industries to be more efficient and competitive. Charlie von Ohsen is the director of this office. Charlie, please stand. Charlie and his staff have helped Savannah manufacturers go high-tech with robotic work cells and automated product inspection stations. They make energy cost comparisons and do water conservation studies to help companies become more efficient. And we hope your company will call Charlie and his staff whenever you need any kind of technical assistance.

Georgia Tech has been an active participant in the development of Skidaway Institute of Oceanography and the research done there. We have professors from a range of disciplines conducting research, and up to 15 graduate students are working there at any given time. To date, more than two dozen Georgia Tech PhD graduates completed their research projects at Skidaway.
As you can see, Georgia Tech has developed varied and strong connections with Savannah that we are very proud of. But much more is yet to come and that is what I am here to speak to you about.

We are presently in the midst of one of the most massive economic shifts in history. The entire world is moving rapidly from an industrial economy to an economy based on technology. Nationally, high tech accounted for 40 percent of the economic growth of the past decade. Georgia joins Texas and California at the top of the list in creating high-tech jobs. From 1990 to 1997, Georgia added 46,000 new high-tech jobs paying an average salary of $53,000 – 77 percent more than the average salary of other jobs.

It is clear that the future will rely more than ever on the talents and skills of engineers, scientists and technologically trained workers. We are now in what some call a “talent war,” and the signs are everywhere. Even the nation’s premier technology community, Silicon Valley, has sounded a warning that it cannot get enough engineers and scientists to do the work that is waiting to be done.

Your situation is different than Silicon Valley, but this area is seeing a technology talent gap grow, and there are reasons to believe that priming the pump now will not only satisfy the needs of your present economy, but offer great potential for growth in the future.

A year ago, we began work with Chancellor Portch with the approval of the Board of Regents, to create the infrastructure to offer four-year and master’s level engineering degrees from Georgia Tech through the Georgia Tech Regional Engineering Program here in Savannah and Statesboro. We have a habit of giving things long names, then making acronyms out of them, so the Georgia Tech Regional Engineering Program has become GTREP for short.

GTREP is being designed on the basis of six principles:
1. GTREP seeks the best solution that serves the needs of the student, both traditional and non-traditional.
2. The program should have a strong economic development impact and capitalize on the relationships with our Economic Development Institute, Skidaway, the Georgia Research Alliance, and industry, particularly utilizing Georgia Tech’s strong industrial contacts. Our research programs are among the nation’s top in the amount of work done with industry, and our partners include a who’s who of corporations involved in manufacturing, telecommunications, computing and biotechnology. Being able to tap into this network is a key advantage.
3. GTREP builds on the traditional faculty/student concept of learning, but where appropriate uses the latest in technology to deliver the most comprehensive and best educational offerings.
4. GTREP uses a collaborative approach, so that each of the University System of Georgia institutions in Statesboro and Savannah can fill important roles.
5. All GTREP programs will be developed on the basis of quality that will be respected nationwide.
6. GTREP will provide a foundation that will allow for growth and long-term stability.
GTREP is not starting from zero, but rather builds on our existing engineering transfer program that Armstrong Atlantic State University and Georgia Southern already participate in, and that Savannah State is joining. Students in this existing program take the first two years of Georgia Tech’s engineering curriculum here in Savannah or Statesboro, then transfer to Atlanta for their junior and senior years.

GTREP – the regional engineering program – will allow students to use the foundation provided by the transfer program, then stay here to complete their education. We are starting GTREP by offer two degrees: a bachelor of science in civil engineering, and bachelor of science in computer engineering.

GTREP will involve four universities: Georgia Tech, Georgia Southern, Armstrong Atlantic and Savannah State, and courses will originate from three locations: Savannah, Statesboro and Atlanta. To understand its structure, think of a triangle. One point is here in Savannah, and it includes faculty at Armstrong Atlantic and Savannah State as well as Georgia Tech faculty at the Coastal Georgia Center. Another point is in Statesboro and includes Georgia Southern University and Georgia Tech faculty. And the third point is Georgia Tech faculty in Atlanta. The GTREP faculty based here in southeast Georgia will be divided about equally between Savannah and Statesboro.

Students will begin with the two-year transfer curriculum, as they do now in the existing transfer program, then officially become Georgia Tech students at the beginning of their junior year. The key factor in deciding when and how classes will be delivered will be demand and availability.

Here in Savannah we are basing our GTREP faculty at the Coastal Georgia Center to make them equally accessible to both Armstrong Atlantic and Savannah State, and to have the flexibility to accommodate student demand at both of these partner universities.

GTREP is being planned for the long haul, and we are going to provide the same level of quality and excellence here in southeast Georgia that caused U.S. News & World Report to rank Georgia Tech’s College of Engineering third in the nation a few months ago.

Distance learning, using both the Internet and other systems, will play a role in GTREP. First, it will allow students at any one of the participating locations in Savannah and Statesboro to receive a lecture without having to travel to the site of its origin. For example, students from Savannah State and Armstrong Atlantic can take courses from Georgia Southern at the Coastal Georgia Center without driving to Statesboro – something of particular importance to non-traditional students who may be taking time off from their jobs.

Second, we will be able to substantially enrich the offerings, particularly early on, by bringing in specialized courses available from Georgia Tech faculty in Atlanta. Third, we offer distance learning master’s degrees in civil and environmental engineering, and in electrical and computer engineering. So after they complete their bachelor’s degrees, students can get their master’s degrees without leaving southeast Georgia.
The decision to begin with degrees in computer engineering and civil engineering was based on the economic needs of this region. Civil engineering addresses the basic infrastructure needed for economic development. Computer engineering was chosen because of workforce demand—which indicates that you already have a high-tech information component as part of your economy.

The GTREP major in computer engineering also goes hand-in-hand with the Yamacraw Mission, which was announced by Governor Barnes last fall and supported by the legislature last session. What exactly is Yamacraw? OK, you understand its local connotation better than anyone, but we stole the name to use as a code for something else. Yamacraw in this new incantation is a code for a project dealing with the combination of hardware and software, or the combination of microchips and electronics. In essence, it is about the creation of intelligent devices that will underlie virtually all of the electronics, computing, telecommunications and entertainment technology of the future.

This little device I have in my hand is a Palm Pilot V made by 3Com. It is actually a computer and a communications device. In terms of its computing power, I’ve got 125 times more memory here in the palm of my hand than the IBM PC had when it came out in 1981. And this little thing goes far beyond that early IBM in other respects. I can send e-mail and data, either by plugging it into a computer from this end, or by shooting the data on an infrared beam from the other end. The newest generation of these devices already will allow you to access the Internet and conduct stock transactions whenever you like.

This is just a forerunner of the computer and communication tools of the future that Yamacraw is focused on. At Georgia Tech, we join Governor Barnes and Chancellor Portch in believing that Yamacraw is a key element in Georgia’s gaining its share of the new economy. Today, talent is the key to attracting industry and growing your own, and one of Yamacraw’s principal objectives is to significantly increase the number of computer design engineers working in Georgia. The GTREP program is specifically planned so that southeast Georgia will have its share of the talent base needed for the Yamacraw industry of the future.

But there is more to the future than information technology, and the Skidaway Institute of Oceanography represents another element of development for both Georgia Tech and Savannah—biotechnology and environmental technology. We are already expanding our research programs, increasing collaborative research relationships with other institutions, and attracting increased research funding to Skidaway. In fact, we just recently recruited an eminent scholar in environmental biology who will be based at Skidaway, and we’re renovating a building to serve as his research facility.

The Board of Regents has also joined in partnership with the State Department of Industry, Trade and Tourism and the Savannah Economic Development Authority to develop Skidaway Research Island—a technology park that will work in tandem with the research institute and the technology development center to be built by the Georgia Research Alliance. Georgia Tech will contribute to this effort by providing the expertise of our Advanced Technology Development Center, or ATDC, to support a high tech business incubator on Skidaway. ATDC has been into
high tech business incubation since 1983, and will provide the personnel to staff the technology
development center at Skidaway.

As with Yamacraw, GTREP has a role in the plans for Skidaway. In this case GTREP civil and
environmental engineering faculty will participate in research there and help provide graduates
who can staff the jobs that will be created in the research park.
So we are talking about a lot of pieces, and putting them in place will take time. You are not
going to see much change tomorrow or even next year – although we do hope to move a little
faster than the Truman Parkway. But Savannah has tremendous potential for economic
development, if it can be done in a way that respects and accommodates the environmental
sensitivities of this fragile coastal region and the beauty of your city.

I look forward to seeing the long-term growth of Georgia Tech’s partnership with Savannah and
southeast Georgia. You have my commitment that we will work with you and listen to you all
along the way. I am personally committed to this effort, and it means all the more to me because
of my deep roots in this region and my many memories as a child growing up here.