GEORGIA INSTITUTE OF TECHNOLOGY

TWO HUNDREDTH AND TWENTY-SECOND COMMENCEMENT EXERCISE

ALEXANDER MEMORIAL COLISEUM

August 5, 2005, 9:00 A.M.

(Faculty and President's Party will assemble at 8:00 a.m. in the Hyder Room, second level of the Coliseum).

Processional	Georgia Tech Commencement Ensemble, Dr. Frank Clark
Master of Ceremonies	Dr. G. Wayne Clough, President
Reflection	Steve Fazenbaker, Director and Campus Minister, Wesley Foundation at Georgia Tech
National Anthem	Georgia Tech Commencement Ensemble
Commencement Address	Dr. Thomas K. Gaylord Julius Brown Chair and Regents' Professor, Electrical and Computer Engineering
Presentation of Doctoral Degree Candidates	Dr. Charles Liotta, Vice President for Research and Dean of Graduate Studies
Conferring of Degrees	Dr. Clough

Presentation of   Dr. Liotta
Master's Degree
Candidates

Conferring of Degrees   Dr. Clough

 Introduction of   Dr. Liotta
 Academic Deans

 Presentation of Undergraduate
 Degree Candidates

College of Computing
Assistant Dean Merrick Furst

Ivan Allen College
Dean Sue V. Rosser

College of Architecture
Dean Thomas D. Galloway

DuPree College of Management
Dean Terry C. Blum

College of Sciences
Dean Gary B. Schuster

College of Engineering
Associate Dean J. Narl Davidson

Conferring of Degrees   Dr. Clough

Induction into   Mr. Joseph P. Irwin

Alumni Association   President, Georgia Tech Alumni Association

Alma Mater   Georgia Tech Commencement Ensemble and Chorale

Faculty Recessional   Georgia Tech Commencement Ensemble

"Ramblin' Wreck"   Graduates and audience recess

(Dr. Clough)

> Good morning, ladies and gentlemen. Will everyone please stand for the reflection by Steve Fazenbaker, Director and Campus Minister of the Wesley Foundation at Georgia Tech. Please remain standing for our national anthem.

(Rev. Fazenbaker)   Reflection

(Commencement Ensemble)   National Anthem

(Dr. Clough)

> Please be seated. Once again, good morning. It is my pleasure to welcome everyone to Georgia Tech's two-hundred and twenty second commencement exercises. This morning we are celebrating with 856 students and their families who are here to graduate from Georgia Tech education. 114 of you will receive PhDs, then 344 master's degrees will be awarded, followed by 398 bachelor's degrees.

> All of these talented young people have received a technology-oriented education that is increasingly valuable and rare among the thousands of graduates from our nation's universities, and they will be a key resource in helping our nation remain great for the future. As you know from news reports our nation is at risk of falling behind the global competition because too few of our young people are choosing to study fields like engineering and science. Each of the talented young people before today has chosen the less traveled path, one that called for them to work hard, develop a disciplined approach to life, and to compete with some of the best and brightest our nation has to offer. I know you join me in my pride in being among them on this special day.

> The world around us is changing rapidly, and these young graduates have been educated in

what it takes to be leaders in creating the technology, policy, and resources that are required to address the challenges and solve the problems of the 21st century. This assessment is based not only on their talents and academic achievements, the quality of our faculty, and the rigor of our academic programs, but also the track record of the Tech graduates who preceded them.

Just look around at the billion-dollar companies whose CEOs are Georgia Tech alumni – Sears, AT&T, Wal-Mart USA, Invesco, Gulfstream Aerospace, Dollar General, GE Commercial Finance, Newell Rubbermaid, Shaw Industries, SEI Investments, Earthlink – and I saved the best for last – the CEO dream job of many a Georgia Tech graduate, held by alumnus John Brock who lives in Brussels and heads up Interbrew, the world's largest brewer of fine beer with more than 200 brands.

You, today's graduates, are the recipients of that same education; you are the inheritors of those same traditions – including the ability to think clearly on just a few hours of sleep a night, an abiding appreciation for chili dogs from the Varsity, cheering on the Yellow Jacket athletic teams, pulling all-nighters during "dead week," and being gently awakened by the sweet sound of the Whistle or a little jack-hammering on the latest construction project.

As we celebrate the completion of this phase of your life today, we hope and believe that the knowledge and skills you carry with you from this campus will continue to shape and influence your lives in ways you cannot even imagine. And we look forward to seeing you step to the fore to provide the technological and ethical leadership our nation and world will need in the days ahead.

We hope and believe you have learned to rise to a challenge… to be creative in solving problems… to adapt to change, and even to anticipate and provoke it. These abilities will stand you in good stead your whole life long. Most importantly, we hope and believe that

here at Georgia Tech you have learned that the goal is not merely to "have more," but also to "be more." As Lily Tomlin once noted, even if you win the rat race, you'll still be a rat. And we hope and believe that you set forth from this day, prepared not only to live in the world, but also to help make it a better place.

Today, as we celebrate the successful conclusion of one chapter of your lifelong education, it is important to acknowledge that you have not done it alone. With you every step of the way – at least in spirit – were your parents and for some of you, your spouses, who made all the difference in your success. The faculty and staff of Georgia Tech and our graduates would like to thank parents and spouses for your support. Would you please stand so that we may recognize you.

(*LEAD APPLAUSE*)

Additional support for our graduates came from our outstanding Georgia Tech faculty. I know that when you got your tests back you did not always feel loved by the faculty, but today they are here to testify that you earned their respect. So now is the time for all of our graduates to say thanks to all the help they received over time from the faculty and I would like to ask the faculty present today to rise and be recognized.

(*LEAD APPLAUSE*)

Of course, those who deserve the most recognition on this momentous day are the graduates, who entered this room a few minutes ago as students and who will leave as Georgia Tech alumni. Would all of you please stand so that we may recognize you and your achievement?

(*LEAD APPLAUSE)*

The highest honor that Georgia Tech can bestow upon any member of its faculty is the Distinguished Professor Award, which is presented each spring to a professor whose teaching, research, and mentoring of students has been especially outstanding. It is a

Georgia Tech tradition that the faculty member who has been chosen as Distinguished Professor has the honor of delivering the summer commencement address. This year, the recipient of that high honor is Dr. Thomas Gaylord.

Dr. Gaylord is a Regent's Professor who holds the Julius Brown Chair in Electrical and Computer Engineering. He holds a bachelor's degree in physics and a master's degree in electrical engineering from the University of Missouri, and a Ph.D. in electrical engineering from Rice University. And he is the human embodiment of Georgia Tech's goal to intertwine research and education as inter-related components of the discovery and learning process.

He is an expert in optical digital parallel processing, which explores ways to use light to bypass the mechanical limitations of today's electronic computers, creating a new generation of machines that are faster and capable of story extraordinary amounts of data. For example, we think of holograms as fun artwork or as a counterfeit prevention device. But to Tom Gaylord, holograms hold tremendous potential as a means of storing and retrieving information.

He also experiments with using photons instead of electrons to do computing. Photons do not interact with each other like electrons do, so you can't make them trip a switch. So Dr. Gaylord is developing optical gratings, which are patterns of lines that bend the light pulses that pass through them, steering them to specific locations or even blocking certain wavelengths.

These are just a few examples of Dr. Gaylord's research, which has produced some 170 technical journal publications. And if you look at the patents that the Georgia Tech Nanostructure Optoelectronics Group lists as its most important, his name is on every one. So it is not surprising the Dr. Gaylord is the recipient of many research awards.

But he is also fully engaged with his students, and they have tremendous respect for him as a teacher and advisor. Tom receives top ratings by our students for his teaching, and he has graduated a large number of master's and Ph.D. students, many of whom are teaching at other universities. He recently helped create our exciting new Nanoscience and Technology Certificate Program, giving Georgia Tech students a unique edge in this emerging field. I find it interesting that Dr. Gaylord can win the admiration of students when the names of his courses and research activities -- photonics, electro-optics, and nanotechnology – are probably not even recognizable to most people. You have to be a good teacher to do that!

As a result, it is perhaps not surprising that Tom Gaylord connects with his students outside the classroom as well. Last February some of his students challenged him to run in the Georgia Tech Alumni Association's Pi Mile Road Race, and he accepted. Although he had walked the Tyler Brown Pi Mile Running Trail many times, this would be his first competitive race since he was in elementary school.

He began building stamina by taking the course at a slow jog instead of just walking it. By race day, he had a sore knee. During the first half-mile about 200 racers passed him. However, during the second half-mile, only about a dozen people passed him. Then, as he reached the first mile marker, a miracle happened – he passed two people who had slowed to a walk. And by the time he reached the finish line, he had passed another 20 runners. He didn't come in first, but he didn't come in last either. And he proudly wore his t-shirt to class. After the race was over, he said it was rather like doing a Ph.D. thesis – "slow, discouraging, and painful at the start, tedious in the middle, and some modest glory at the end."

Today we are celebrating the glory at the end for each one of our degree recipients – bachelor's and master's as well as Ph.D.'s. And I am proud to introduce Dr. Thomas Gaylord to address our graduates with a few parting words of wisdom before they leave

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Georgia Tech.

Thank you Dr. Gaylord. To show our appreciation to you for spending the morning with our graduates and sharing your insights with them, I would like to present you with this special gift.

(PRESENT GIFT)

We now come to the time that all of you have been waiting for – the conferring of degrees. At this time Dr. Charles Liotta, Vice Provost for Research and Dean of Graduate Studies, will present the candidates for the doctor of philosophy degree.

(Dr. Liotta)   Will the candidates for the doctoral degrees please rise.

(Dr. Liotta)   Dr. Clough, I have the honor of presenting to you for the doctoral degrees those candidates who have completed all requirements for those degrees.

(Dr. Clough)   Upon the recommendation of the faculty of the Georgia Institute of Technology and by authority of the Board of Regents of the University System of Georgia, I confer upon each of you the degree of doctor of philosophy with all the rights, privileges, and responsibilities thereunto appertaining.

Congratulations on your earning of Georgia Tech's highest academic degree. Will you please come forward and receive your diplomas.

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(Dr. Clough)   Please join me in congratulating these doctoral graduates.
 (LEAD APPLAUSE)

                        At this time Dr. Liotta will present the candidates for the master's degree.

(Dr. Liotta)   Will the candidates for the master and Master of Science degrees please rise?

(Dr. Liotta)   Dr. Clough, I have the honor of presenting to you for the master's and master of science degrees those candidates who have completed all requirements for those degrees.

(Dr. Clough)   Upon the recommendation of the faculty of the Georgia Institute of Technology and by authority of the Board of Regents of the University System of Georgia, I confer upon each of you the master's degree, with all the rights, privileges, and responsibilities thereunto appertaining.

(Dr. Clough)   We shall now present the diplomas. Will the faculty marshals please bring the candidates forward.

(Dr. Clough)   Please join me in congratulating these master's graduates.
(LEAD APPLAUSE)

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(Dr. Clough)	Now, Dr. Liotta will introduce the academic deans who will then present the candidates for the bachelor's degree.
(Dr. Liotta)	Assistant Dean Merrick Furst will introduce the undergraduate candidates for degrees in the College of Computing.
(Dr. Furst)	Candidates for the Bachelor of Science degree in the College of Computing please rise and remain standing. *(Pause)*
(Dr. Furst)	Dr. Clough, I have the honor to introduce to you those candidates for the Bachelor of Science degree who have completed the requirements for this degree.
(Dr. Liotta)	Dean Sue Rosser will introduce the undergraduate candidates for degrees in the Ivan Allen College.
(Dr. Rosser)	Candidates for the Bachelor of Science degree in the Ivan Allen College please rise and remain standing. *(Pause)*
(Dr. Rosser)	Dr. Clough, I have the honor to introduce to you those candidates for the Bachelor of Science degree who have completed the requirements for this degree.
(Dr. Liotta)	Dean Thomas Galloway will introduce the undergraduate candidates for degrees in the College of Architecture.
(Dr. Galloway)	Candidates for the Bachelor of Science degree in the College of Architecture please rise and remain standing. *(Pause)*

(Dr. Galloway)	Dr. Clough, I have the honor to introduce to you those candidates for the Bachelor of Science degree who have completed the requirements for this degree.
(Dr. Liotta)	Dean Terry Blum will introduce the undergraduate candidates for degrees in the College of Management.
(Dr. Blum)	Candidates for the Bachelor of Science degree in the DuPree College of Management please rise and remain standing. *(Pause)*
(Dr. Blum)	Dr. Clough, I have the honor to introduce to you those candidates for the Bachelor of Science degree who have completed the requirements for this degree.
(Dr. Liotta)	Dean Gary Schuster will introduce the undergraduate candidates for degrees in the College of Sciences.
(Dr. Schuster)	Candidates for the Bachelor of Science degree in the College of Sciences please rise and remain standing. *(Pause)*
(Dr. Schuster)	Dr. Clough, I have the honor to introduce to you those candidates for the Bachelor of Science degree who have completed the requirements for this degree.
(Dr. Liotta)	Associate Dean Narl Davidson will introduce the undergraduate candidates for degrees in the College of Engineering.
(Dr. Davidson)	Candidates for the bachelor's degree and Bachelor of Science degree in the College of Engineering please rise and remain standing.

(Dr. Davidson)   Dr. Clough, I have the honor to introduce to you those candidates
                      for the bachelor's degree and the Bachelor of Science degree who
                      have completed the requirements for those respective degrees.

(Dr. Clough)   Upon the recommendation of the faculty of the Georgia Institute of
                      Technology and by authority of the Board of Regents of the
                      University System of Georgia, I confer upon each of you the
                      bachelor's degree, with all the rights, privileges, and responsibilities
                      hereunto appertaining.

(Dr. Clough)   Please be seated. We will now award the degrees. Will the faculty
                      marshals please bring the candidates forward.

*(College of Computing candidates will come forward, then IAC, Architecture, Management,
College of Sciences, and College of Engineering. Dean presents diplomas and Dr. Clough shakes
hands. Announcer will pause between colleges to allow the Dean time to come forward)*

(Dr. Clough)   Now, please join me in congratulating these fine new graduates of
                      Georgia Tech.

 (LEAD APPLAUSE)

(Dr. Clough)

Near the close of the 1800s, an aspiring young writer sent a sheaf of poems to the foremost
American author of the day to be critiqued. Ralph Waldo Emerson read the manuscript,
which was entitled "Leaves of Grass" and was destined to become one of America's best-
loved volumes of poetry. And he wrote back to the young Walt Whitman: "I greet you at
the beginning of a great career."

As I look out over this sea of newly minted young Georgia Tech alumni, I echo his words. I greet you at the beginning of a great career. As of this moment, you are no longer merely students. You are the technological leaders of tomorrow… and the role models for future generations.

Georgia Tech has more than 120,000 living alumni around the world, including some who are here today, and I would like to ask all Georgia Tech alumni to stand at this time and be recognized.

(LEAD APPLAUSE)

Among the alumni who are here is Joe Irwin, who rose through the ranks of the Russell Corporation to become president of the Jerzees Division before Georgia Tech brought him back to serve as president of the Alumni Association. At this time Joe will induct our new graduates into this special group.

(Mr. Irwin)   Induction of graduates into the Alumni Association.

(Dr. Clough)

We invite all of you to join us immediately after this ceremony for a special reception in honor of today's graduates and their families and friends. The reception will be held in the Bill Moore Tennis Center, directly across Fowler Street from the Coliseum.

I would like to express my appreciation to the Georgia Tech Music Department for their participation in our program this morning. Thanks also to Dr. William Johnson for calling the graduates' names. And many thanks to all my associates for arranging this important event.

At this time, the Georgia Tech Commencement Ensemble will lead us in the alma mater, followed immediately by the faculty recessional. The graduates and the audience are requested to rise for the alma mater and remain standing for the faculty recessional. Then I invite all of you to join in the singing of the Ramblin' Wreck, which will accompany the student recessional.

Thank you for your attendance this morning.

(At the end of the alma mater, the mace bearer will be the first one off the stage. Dr. Clough will immediately follow then the remainder of the President's Party, Deans, and Faculty.)