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Issue No.

#### Woodruff Distinguished Lecture

- Norman R. Augustine

The George W. Woodruff School of Mechanical Engineering presented Norman R. Augustine, President and CEO of the Lockheed Martin Corporation, at the Annual Woodruff Distinguished Lecture, Wednesday, May 8, 1996 at 3:30 in the Electrical Engineering Auditorium at the Georgia Institute of Technology.

Dr. Ward O. Winer introduced Mr. Augustine who addressed the crowd with the topic, "Yes, But Will It Work In Theory?" The lively slide presentation featured examples of the lessons of experience including the topics, The Lessons of Scar Tissue; Leave Nothing to Chance; There's No Such Thing as a Random Failure; If It Involves Humans, Make It Foolproof; and To Err is Human, To Forgive is Against Company Policy.

Mr. Augustine assumed his current position on January 1, 1996. He previously served as President of the Corporation, a position he assumed upon the merger of Lockheed and Martin Marietta in March 1995. Before the merger, Mr. Augustine served as Chairman and Chief Executive Officer of Martin Marietta Corporation from 1988-1995.

Mr. Augustine is a past chairman of the NASA Space Systems and Technology Advisory Committee and past chairman of the Defense Science Board. He is chairman of the Aerospace Industries Association Board of Governors. He is also chairman of the Council of Trustees of the Association of the U.S. Army and chairman of the Board of Governors of the American Red Cross and President of the Boy Scouts of America. He has been a member of the Air Force Scientific Advisory Board and has chaired advisory councils for Princeton University, the American University, and the Lincoln Laboratory of the Massachusetts Institute of Technology.

Mr. Augustine is an Honorary Fellow and Past President of the American Institute of Aeronautics and Astronautics, a Fellow of the American Astronautical Society, an Honorary Fellow of the Society for Technical Communication, a Senior Member of the International Academy of Astronautics, chairman of the National Academy of Engineering, and a Fellow of the Institute of Electrical and Electronic Engineers.

Mr. Augustine has four times received the Department of Defense's highest civilian award, the Distinguished Service Medal, and has also received the James Forrestal Memorial Award of the National Security Industrial Association, the Defense Meritorious Service Medal, the Army Distinguished Service Medal, and the Air Force Exceptional Service Medal.

The George W. Woodruff Annual Distinguished Lecture was established in 1990 to honor an engineer who has made an outstanding contribution to society and to provide a forum for that person to address the Georgia Tech community.

Support for the lecture is made possible by a generous endowment made to the School by the late George W. Woodruff: an alumnus, influential businessman, civic leader, and philanthropist.

#### ANNOUNCEMENT

The 1997 George W. Woodruff
Distinguished Lecture will be held on
Thursday, April 24, 1997 at 3:30 p.m. in
the auditorium of the Van Leer Electrical
Engineering Building on the Georgia Tech
campus. The lecture will be presented by
Charles M. Vest, President of the
Massachusetts Institute of Technology
and Professor of Mechanical Engineering.
Dr. Vest's topic will be: "What We Don't
Know: Challenges for the Next
Generation." Guests will be invited to a
reception after the lecture, and free
parking will be available in the Visitor
Parking Lot. Don't wait to receive your
invitation in the mail - reserve this
important date now.





# A Message from the Chair WARD O. WINER

Our recovery from the Olympic experience is nearly complete. Fall quarter began on the unusually late date of October 6, 1996. The Olympics were fun and beneficial for Georgia Tech and Mechanical Engineering. However, it slowed the pace of education and research. As we embark on the next academic year, we are faced with two major academic challenges for the Woodruff School. They are preparing for an ABET accreditation visit in the fall of 1997, and the Regent's mandated conversion of our calendar from quarters to semesters. Both require a great deal of work for faculty and staff. They also represent excellent opportunities to improve our programs.

We are one of six schools that are "guinea pigs" in the implementation of ABET's new Criteria 2000. Criteria 2000 represents a shift from ABET's procedures of accounting for different topics in the degree programs to a performance and outcomes-based criteria. We will be the first large program evaluated under these criteria and should help set the standards and procedures for future ABET 2000 accreditation activities.

The second major task is the conversion to a semester calendar which Georgia Tech will begin in the fall of 1999. We must have all our degree requirements, course syllabi, and scheduling ready by the fall of 1997 for the 1998 catalog. We will approach the semester conversion very much like we did our curriculum revision in the early '90's, by taking a zero-based approach; it will be as if we were starting a new program from scratch. We are fortunate to have Professor Jerry Ginsberg agree to chair an ad hoc committee for oversight of the semester conversion process. Jerry led the effort in our undergraduate curriculum revision in the early '90's and did an outstanding job of negotiating all the different desires and objectives. I, for one, having had experiences as both a teacher and a student under both a quarter and a semester system, believe that you can have an outstanding educational program in either system, and we will.

Because of the tasks ahead, and Georgia Tech's embarking on a \$400,000,000 Capital Campaign, which will require more of my involvement, I have asked Professor Ray Vito to accept the position of Associate Chair for Undergraduate Programs. The School is fortunate to have Ray available and willing to take on this task. Ray has 22 years of experience at Georgia Tech and has demonstrated over the years considerable interest in, and contributed to the advancement of, our Undergraduate Programs. Ray has agreed to work with Al Larson, Bill Wepfer, and me in the administration of the School. Al Larson will continue to free up more of my time to be involved in the Capital Campaign by assuming increased administrative responsibilities.

Now I come to how you can help us in creating a new and better curriculum under the semester system. If you have thoughts on your experience as an undergraduate or graduate student, and how it related to launching your career, please take the time to write us and give us your advice. I don't promise we will incorporate it all, but we are certainly interested in considering your ideas.

Also, you may soon be receiving in the mail a survey sent out by the Dean's office to graduates of particular years asking for their opinion on a number of issues relating to their educational experience at Georgia Tech. I urge you to take the time to respond to that questionnaire, which will be used by us to develop our new programs and to prepare for the ABET visit.

Finally, let me assure you that the reputation of our undergraduate degree is secure and improving all the time. We will continue to improve our programs and make them the best available anywhere.

# Harold W. Gegenheimer Named Distinguished Alumnus

The 1996 Woodruff Distinguished Alumnus Award was presented to Harold W. Gegenheimer, Class of 1933. Dr. Ward O. Winer, School Chair, presented the award to Mr. Gegenheimer at the 1996 ME Spring Banquet hosted by students in the Woodruff School.

Mr. Gegenheimer received his bachelor's degree in mechanical engineering from Georgia Tech in 1933. He is the retired Chairman Emeritus of the Baldwin Technology Company, an international manufacturer of material handling, press accessory, and prepress equipment for offset printing. He has been associated with printing all his life as a machinist, machine design engineer, inventor, product development manager, and corporate chief executive officer. His inventions, for which many United States and foreign

executive officer. His inventions, for which many United States and foreign patents have been obtained, were keys to the great growth of the offset process in the post-World War II period.

Mr. Gegenheimer was President of the National Printing Equipment and Supply Association from 1977 to 1979. As an officer or director of other industry associations and recipient of technical and educational awards, he was elected 1983 Graphic Arts Man of the Year. As an inventor, he continues to express interest in the great advances made at his alma mater through innovative programs that link industry with graduate and undergraduate studies. An

endowment from Mr. Gegenheimer to the Woodruff School provides for the annual Harold W. Gegenheimer Lecture Series on Innovation. (See a related story in this issue.)

The 1996 Woodruff Distinguished Alumnus Award was presented to Harold W. Gegenheimer, Class of 1933.



Burt Rutan, speaker at the 1996 Harold W. Gegenheimer Lecture Series on Innovation.

# Gegenheimer LECTURE

The 1996 Harold W. Gegenheimer Lecture Series on Innovation featured Mr. Burt Rutan, an aeronautical engineer, designer, and entrepreneur. Mr. Rutan designed the record-breaking Voyager, the first airplane to circle the world nonstop without refueling. His company, Scaled Composites (named for its trademark use of carbon-fiber composites), has developed projects as diverse as a sail for an America's Cup challenge and the gondola for Richard Bransen's attempt to balloon nonstop around the world. Mr. Rutan also developed an all-composite car body for General Motors (producing a car that averages 100 miles per gallon).

Mr. Rutan is a member of the National Academy of Engineering, has received many awards including, "Engineer of the Year" by Design News, ABC's World News Tonight's "Person of the Week," the British Gold Medal for Aeronautics, the Collier Trophy, and the Presidential Citizen's Medal.

The lecture was titled, "Innovation: Use It Or Lose It" and was given in the Manufacturing Research Center auditorium at Georgia Tech on December 5, 1996.

The Lecture Series on Innovation was established through an endowment from Mr. Gegenheimer to support student programs that encourage creativity, innovation, and design. Through the lecture series and support of capstone design projects, students are exposed to processes that stimulate creativity and lead to inventions and patents.

#### PARTNERS IN PROGRESS

## The Successful 1996 Graduate Student Symposium

The Sixth Annual Georgia Tech Graduate Student Symposium was a shining success! The theme, "Partners in Progress," focused on facilitating networking between students and guests from industry. This networking is vital to establishing the mutually beneficial professional partnerships of tomorrow. Both students and guests progress as partners by sharing new ideas and opportunities.

The Graduate Symposium is an annual forum where graduate students present their research results to guests from industry and academia. This interchange gives Georgia Tech graduate students the opportunity to establish a professional network which is vital in any employment search. Guests have an opportunity to establish contacts with potential recruits as well as learn more about the Georgia Tech community. Dr. William Wepfer is the faculty advisor of the student-run, multidisciplinary Graduate Symposium organizing committee.

A novel session format was developed by the organizing committee to promote networking between students and guests. Students gave a brief presentation of their work to the general audience during the first session. This was followed by an extended poster session which allowed the students to speak informally about their exhibit. The extended poster session gave students the time to expand on their work while allowing for detailed and more focused questions from guests.

Dr. Clough gave the keynote address in which he spoke about industry/academic partnerships in the future research university. Presentations and poster exhibits were given by 83 graduate students from seven engineering schools (ME, AE, ECE, COC, ISyE, MATE, CE, ChE). The George W. Woodruff School of Mechanical Engineering was the lead sponsor along with the AE, ECE, COC, ISyE, MATE, and CE schools, the College of Engineering, the Graduate Student Senate, and Student Services.

Joe Lavert, 1996 Committee Chairman, contributed to this article.

**NOTE**: The 7th Annual Graduate Student Symposium will be held on March 5 and 6, 1997 in the Manufacturing Research Center on the Georgia Tech campus. The theme will be Transferring Innovation, and a keynote address will be given by Bill Todd, President of the Georgia Research Alliance. For more information contact Dr. Bill Wepfer at (404) 894-3204 or by e-mail at symposium@me.gatech.edu.

Carter Paden, Jr. Establishes Distinguished Chair in Metals Processing

An endowment to the Woodruff School has established the Carter N. Paden, Jr. Distinguished Chair in Metals Processing. The endowment will impact the metals processing program by providing high-caliber undergraduate and graduate instruction and research in related fields: metallurgy, solidification processing, casting, and machining. A search committee will soon be formed to fill the Carter Paden Chair, and we hope to have someone assume the position by the end of this year.

Carter N. Paden, Jr. graduated from Georgia Tech in 1951 with a bachelor's degree from the School of Industrial Management. He is currently the Chairman of SW Centrifugal, Inc. in Chattanooga, Tennessee. The company specializes in the manufacture of bronze gear blanks.

Endowed/distinguished positions within the School include the Southern Nuclear Distinguished Professorship held by Dr. Said Abdel-Khalik; the Georgia Power Distinguished Professorship held by Dr. William Black; the Morris M. Bryan, Jr. Chair in Mechanical Engineering for Advanced Manufacturing Systems held by Dr. Steven Danyluk; the George W. Woodruff Chair in Mechanical Systems held by Dr. Jerry H. Ginsberg; the Parker H. Petit Distinguished Chair for Engineering in Medicine held by Dr. Robert M. Nerem; the Rae and Frank H. Neely Chair in Mechanical Engineering held by Dr. Peter H. Rogers; the Callaway Professorship in Nuclear Engineering held by Dr. Weston M. Stacey, Jr.; the Eugene C. Gwaltney, Jr. Chair in Manufacturing Systems held by John A. White; and the David S. Lewis, Jr. Chair held by Ben T. Zinn.



1996 DEA Awards were presented to (L-R): Wayne Knox, Kyle Turner, John Till, Ward Winer (School Chair), William Thacker, Donald Traviss, Robert Millikan, and William Collins. Not pictured are John E. (Chip) Akridge, III, J. Wayne Littles, and Carolyn Meyers.

# ME and NE Alumni Honored by College of Engineering

Nine mechanical and nuclear engineering alumni were honored with selection into the Academy of Distinguished Engineering Alumni. The award is intended for alumni who have sustained and distinguished contributions to Georgia Tech, the profession, or the society at large. The 1996 group included: John E. (Chip) Akrigde, III (B.M.E. '68), William R. Collins, Jr. (B.M.E. '57, M.S.I.M. '62), Wayne H. Knox (M.S.N.E. '73), J. Wayne Littles (B.M.E. '62), Carolyn W. Meyers (M.S.M.E. '79, Ph.D. Ch.E. '84), Robert J. Millikan (B.M.E. '59), William L. Thacker (B.M.E. '67), and Donald P. Traviss (B.M.E. '68, M.S.M.E. '70).

In addition, sixteen of the School's young alumni were inducted into the Council of Outstanding Young Engineering Alumni. Membership is reserved for those individuals under the age of 40 who have distinguished themselves through professional practice and/or service to Georgia Tech. The 1996 group included Kim L. Berry (B.M.E. '79), D. Fort Flowers, Jr. (B.M.E. '83), Jeffrey S. Lane (B.M.E. '82, M.S.M.E. '84, Ph.D. M.E. '93), Donald K. Lorenzo (B.N.E. '77, M.S.N.E. '77), Jed S. Lyons (B.M.E. '84, M.S.M.E. '87, Ph.D. M.E. '90), John C. Moosbrugger (M.S.M.E., Ph.D. M.E. '89), Pamela Norris (M.S.M.E. '89, Ph.D. M.E. '92), Barry E. Powell (B.M.E. '89, M.S.M.E. '91), William D. Salyer (B.N.E. '78), Marcus W. Shute (M.S.M.E. '91, Ph.D. M.E. '94), Alan F. Sides (B.M.E. '83), T. S. Srivatsan (M.S.A.E. '81, Ph.D. M.E. '84), William Gregory Stubbs (B.M.E. '85), W. Wes Sullins (B.M.E. '81, M.S.M.E. '82), Linda M. Wells (Forssell) (B.M.E. '87), and Richard K. (R.K.) Whitehead, III (B.M.E. '87).

Three alumni were inducted into the College of Engineering Hall of Fame. The ME alumni inducted were Harold W. Gegenheimer (M.E. '33), Edgar H. Justus (M.E. '48, deceased), and Jack C. Stein (M.E. '28).

### **Woodruff School Awards**

**Professor Said Abdel-Khalik**, Southern Nuclear Distinguished Professor, was elected to the grade of Fellow by the American Nuclear Society.

Professor Wayne Book was elected a Fellow in the Institute of Electrical & Electronics Engineers.

**Professor Yves Berthelot** was elected Fellow of the Acoustical Society of America, and was also awarded a patent for "Method and Apparatus for Vector Measurement of Surface Vibrations with Three Coherent Light Beams."

**Regents' Professor William Black**, Georgia Power Distinguished Professor, was elected to the membership grade of Fellow in the Institute of Electrical & Electronics Engineers. He also received an Order of Omega Award from the College of Engineering at the University of Illinois.

Assistant Professor Bert Bras was selected Metro Atlanta Engineer of the Year in Education.

**Regents' Professor Emeritus Mario Goglia** was presented the Renaissance Engineering and Science Award by the President of the Stevens Institute of Technology.

**Professor David Ku** was the recipient of the 1996 American Society of Mechanical Engineers Gustus L. Larson Memorial Award. Dr. Ku was also named the Georgia Tech Outstanding Doctoral Thesis Advisor for 1995. He received patents for "Flow-Induced Artifact Elimination in Magnetic Resonance Images," and "Flow Differentiation Scheme for Magnetic Resonance Angiography."

Associate Professor Thomas Kurfess received the Society of Manufacturing Engineers 1996 Philip R. Marsilis Outstanding Young Manufacturing Engineer Award. He also received a Best Paper Award at the International Symposium for Automotive Technology and Automation Conference, Stuttgart, Germany.

Assistant Professor Christopher Lynch received an ONR Young Investigator Award.

**Professor David McDowell** was elected to the grade of Fellow by the Board of Directors of the American Society of Mechanical Engineers. He was also named a Regents' Professor by the University System of Georgia, and a member of the U.S. National Committee on Theoretical and Applied Mechanics of the National Research Council.

**Assistant Professor Shreyes Melkote** received the 1996 Research Initiation Award from the Society of Manufacturing Engineers Education Foundation.

**Associate Professor Jianmin Qu** received a 1996 Ralph R. Teetor Educational Award which recognizes outstanding engineering educators.

**Professor Richard F. Salant** received patents for "Secondary Gas/Liquid Mechanical Seal Assembly" and "Mechanical Seal with Compliant Face." Dr. Salant was also the recipient of the 1996 American Society of Mechanical Engineers Worthington Medal.

**Regents' Professor Weston M. Stacey**, Callaway Chair, received the Outstanding Technical Accomplishment Award from the Fusion Energy Division of the American Nuclear Society.

**Regents' Professor Ward Winer**, School Chair, received the Donald Marlow Award from the American Society for Engineering Education for creative and distinguished leadership in engineering education.

## **Student Awards**

Wei Chen received the Sigma Xi Outstanding Ph.D. Dissertation Award.

**Jill Conley** received a Samuel P. Eschenbach Memorial Award. She also received the Sigma Xi Outstanding M.S. Thesis Award.

**Richard W. Cowan** was the recipient of a Phi Kappa Phi Faculty Recognition Award and also received the Richard K. Whitehead, Jr. Memorial Award.

Jeff Favorite was the winner of the 1995 Mark Mills award from the American Nuclear Society.

Charles R. Ferguson was presented the Outstanding Scholastic Achievement Award, Nuclear Engineering.

**Stephanie L. Goff** received the Joe T. LaBoon Award at the 1996 Honors Day Ceremony at Georgia Tech.

**Randy Grimes** received 2nd Prize in the Young Investigator Contest at the American College of Cardiology Annual Scientific Sessions in Orlando.

Gareth Hammond received the Walter O. Carlson Memorial Award, Atlanta Section, ASME.

**Keith Herrmann** received the George W. Woodruff School of Mechanical Engineering Outstanding Scholar Award.

Cliff E. Johnson received a Samuel P. Eschenbach Memorial Award.

Lisa D. Mitchell was named the Pi Tau Sigma Outstanding Sophomore.

Kristen Moore was the recipient of a Georgia Engineering Foundation Senior Design Award.

Jennifer A. Morrisette received an award from the Chair of the Woodruff School.

**Christopher Pascual** was named a Georgia Tech Outstanding GTA.

McRae J. Smith was the recipient of a Georgia Engineering Foundation Senior Design Award.

Michael J. Wautlet received the Pi Tau Sigma Outstanding Senior Award.

**Adele Wright** was presented the AWIS Betty Vetter Award.

Jeffrey Wright was selected the ASHRAE Student Engineer of the Year.

Jeffrey Zickus was the recipient of a Phi Kappa Phi Faculty Recognition Award.



#### STAFF AWARDS

The School continues to implement the Staff Outstanding Achievement Award for Classified Employees which was established in 1991 to commend and encourage outstanding performance among staff. Winners are selected quarterly based on nominations from faculty and staff, and employees receiving the quarterly award are eligible for the yearly award. Quarterly winners for 1995-96 were Butch Cabe, Jessica Gordon, Sherron Lazarus, and Sterling Skinner. The recipient of the 1995 yearly award was Butch Cabe, Mechanical Specialist.

Butch Cabe, Mechanical Specialist, received the Staff Outstanding Achievement Award for Classified Employees yearly award.

## **Capital Campaign**

 ${f I}$ t is my special privilege to serve Georgia Tech at this historic moment and to be the first alumnus as its president. The years remaining in the twentieth century provide me, my fellow alumni, and other friends of the Institute with the opportunity to build the foundation for unprecedented success in the twenty-first century.

G. Wayne Clough, President, from his letter to launch the Campaign for Georgia Tech.

The \$400 million Campaign for Georgia Tech is well underway with the public announcement and kickoff held by President Clough in May 1996. A successful Campaign promises a bright future for Georgia Tech by providing the resources to pursue its strategic goals. Ms. Connie Parish, Director of Development for the Woodruff School, stated that an ambitious \$30 million goal has been set for the Woodruff School. The School's Campaign Council is in place under the leadership of Parker H. "Pete" Petit, who is serving as Council Chair. Other Council members include Paul Duke, honorary chair, G.B. Espy, Robert Hill, Bob Milliken, Charles Ray, Oliver Sale, and Larry Ybarrondo. The faculty representatives are Gene Colwell and Sam Shelton.

#### ALUMNI PROFILES

**Derrick Adkins** (B.M.E. '93) won a gold medal in the 400-meter hurdles during the 1996 Centennial Olympic Games.

**Rob Evans** (B.M.E. '82) is a Product Leader for Networking Products for IBM's PC Company. He and his wife, Jeni, live in Cary, N.C.

**Jim Ravitch** (B.M.E. '83) is now employed by Lockheed Martin at Cape Canaveral Air Force Station as a Systems Engineer.

**George F. Smith** (M.S.M.E. '73) retired from the U.S. Army after 30 years of active service. He is currently employed by the Georgia Department of Defense as Executive Assistant to the Adjunct General. He and his family reside in Woodstock, Georgia.

#### **Alumni News Form**

Let us hear from you! If you've received an award, changed occupations, or have other professional news you'd like to share with your classmates, please complete this <a href="form">form</a> and submit it.



The Campaign for Georgia Tech

#### The Threshold of a New Era

Georgia Tech graduates are known for their drive to succeed. The future success of Georgia Tech relies on our ability to provide technological leadership to students, alumni, taxpayers, and citizens. Following is a breakdown and brief summary of our \$400 million goal:

Superior Knowledge

Endowed Chairs	\$50,000,000
Endowed Professorships	\$10,000,000
GRA Eminent Scholars	\$3,000,000
Young Faculty Endowments	\$12,000,000
Eminent Practitioners Endowments	\$5,000,000

**Students** 

Students Scholarships \$30,000,000 \$30,000,000 **Fellowships** Public Service Cooperative \$10,000,000 Program Cooperative Education

Endowment

\$75,000,000

**Educational Technology** 

High-Tech Classrooms \$10,000,000 Educational Technology \$8,000,000 Completion of \$7,000,000 FutureNet 1

\$25,000,000

\$5,000,000

The Learning Environment

Student Life Initiatives \$11,000,000 \$8,000,000 Library Residence Hall Programs \$6,000,000 Support for Innovative \$5,000,000 Teaching Creative Arts Center \$5,000,000 \$35,000,000

**Facilities** 

Laboratory Upgrades \$25,000,000 Bioengineering/Biosciences \$15,000,000 Building Land Purchases/Building \$5,000,000 **Projects** 

\$45,000,000

**Endowment** 

Unrestricted Endowment \$70,000,000 Growth College and School \$35,000,000

\$105,000,000

**Athletics** 

Endowments

Program \$35,000,000 Growth

**CAMPAIGN TOTAL** 

\$400,000,000

#### Superior Knowledge

Students stay at the forefront of emerging and rapidly proliferating knowledge through contact with those most likely to produce the knowledge. The Campaign earmarks \$80 million for building and enhancing the quality of our faculty. By increasing the number of endowed chairs and professorships and recruiting promising young Ph.D. recipients and noted practitioners, the Institute can enrich its reservoir of knowledge, strengthen the curriculum, and multiply its human and financial resources.

#### **Students**

Georgia Tech places a premium on attracting students with the character, determination, and intelligence necessary to meet the \$80,000,000 demands of a first-rate technological education. To recruit and keep these minds, we must offer scholarship and fellowship funds. Additionally, the \$75 million sought for student support will endow the Cooperative Education Program and establish a Public Service Cooperative Education Program.

#### Educational Technology

To produce the finest technological minds, Georgia Tech must use the most sophisticated technological tools. The Campaign will provide \$25 million to outfit and create special high-tech classrooms. It will also enable the completion of FutureNet, a stateof-the-art campus communications infrastructure.

#### The Learning Environment

Top-quality student minds require innovative stimulation inside and outside the classroom. The Campaign will provide \$35 million for student life programs, encompassing community service and cultural activities. Funds will also create and endowment for the Library and complete the housing initiated for the Olympic Games.

#### Relevance and Responsiveness

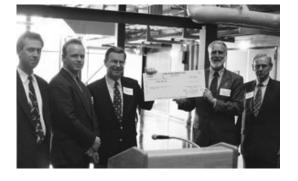
A stable endowment is the hallmark of a maturing and prestigious institution. To help take advantage of fast-breaking opportunities and weather unexpected storms, \$105 million is reserved for endowment growth.

#### **Facilities**

To provide first-rate facilities for academics and research, Georgia Tech must be able to acquire new facilities and renovate existing ones. The Campaign will raise \$45 million in funding for the physical development of campus, including buildings, additions, and laboratory upgrades.

#### **Athletics**

Georgia Tech currently competes at the highest athletic levels in 16 sports. The Campaign will provide \$35 million for the addition of men's and women's soccer and women's swimming and tennis.



A donation from Ford Motor Company will be used to build and equip an anechoic or "echo-free" chamber in the Manufacturing Research Center. Shown here is Robert Transou, Group Vice President of Manufacturing for Ford Motor Company presenting a check to President G. Wayne Clough. (L-R): Professor Yves Berthelot, Professor Ken Cunefare, Robert Transou, President G. Wayne Clough, and School Chair, Ward Winer.

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