HOW TO SUCCEED IN MANUFACTURING
BY REALLY TRYING

Roy Richards, Jr., CEO of Southwire Company of Carrollton, Georgia, delivered a keynote address on the impact of manufacturing in Georgia to a standing-room only audience just before the groundbreaking ceremony for MRDC II. Georgia has 11,000 manufacturing companies and a payroll of more than $15 billion, so manufacturing is extremely important to the state. In fact, Georgia created more high tech jobs last year than any state in the country. Richards spoke briefly about the links between Georgia Tech and Southwire, including Roy Richards Sr. (the company's founder) and Jr. and Peter Cofer, all mechanical engineering students.

According to Richards, "Manufacturing today is about imposing or bringing science or new technology to what is already there, to improve it, to make it better, and make it world class. That's what we try to do at our company and that's why what you're doing here is so important. Our company is an example of what can happen when you bring science to bear on a manufacturing business."

He said that the effect of electricity was profound, particularly for women. His father understood this and one of his motivating factors to form the company was to help his mother - by building rural power lines and later, power cable. Today, Southwire employs 5,000 people and is the largest producer of electrical power cables in the country. "Georgia," he said "manufactures everything from Bob's Candies down in Albany to the F22 Raptor in Marietta - everything from the lowest of the low tech to the highest of the high tech."

Richards' concept of manufacturing is to "apply science to the art we are practicing and to make what we're doing exact, repeatable, and perfect. We've got to do it better, faster, cheaper, and make a high quality product in a more timely fashion. Thus to succeed in manufacturing you have to bring science to the art form of manufacturing."

Brief Biography

Roy Richards, Jr. began to work at Southwire Company when he was 13 years old and was hired to sweep floors and stack boxes. He continued to perform odd jobs at Southwire throughout high school and college. After attending Georgia Tech as a student in mechanical engineering, he joined the company in 1980 full-time as a draftsman.

During the years that followed, he moved into key positions in the company, including project coordinator of the Copper Rod Mill, general manager of Southwire Machinery Division, technical assistant to the president, and group vice president and co-president. He became chief executive officer in 1988.

Mr. Richards was an Ernst & Young 1990 Manufacturing Entrepreneur of the Year, past chairman of the Georgia Partnership for Excellence in Education, and the 1997 Chairman of the Georgia Chamber of Commerce.
Following the keynote address on manufacturing given by Roy Richards, Jr. (see the accompanying article), a groundbreaking ceremony was held for the new Manufacturing Related Disciplines Complex building (MRDC II). The $27 million, 135,000 square foot research and laboratory facility, designed by the architectural firm of Nix Mann Perkins & Will, will be located on a site between the Groseclose Building and MARC. The new building will provide additional space for the Woodruff School (about two thirds of the space) and house the School of Materials Science and Engineering. This is the third building in a manufacturing complex being developed on the northwest side of campus that includes MRDC I and MARC.

MRDC II will house state-of-the-art research and laboratory facilities in acoustics and dynamics; fluid mechanics; thermal systems; and nuclear and radiological engineering, health physics, and fusion. The building will have several special laboratories with unique features, three classrooms, an atrium, a high-bay area, and faculty, staff, and graduate student office space.

The groundbreaking ceremony for the new building was held on October 30, 1997 at the building site. Construction will begin in January 1998, and MRDC II should be ready for occupancy by fall 1999.

Pictured from left to right are: Dr. Jean-Lou Chameau, (Dean of Engineering), Mr. Roy Richards, Jr. (CEO Southwire Co.), Dr. Ward O. Winer (Regents' Professor and Chair of the Woodruff School), Mr. Parker H. Petit (Woodruff School Advisory Board), Dr. Ashok Saxena (Professor and Chair of the School of Materials Science and Engineering), Dr. John W. Koger (Chair of the External Advisory Board of the School of Materials Science), Mr. George Hook (Chairman of the Georgia Senate Committee on Appropriations), and Dr. G. Wayne Clough (President of Georgia Tech).

A Message from the Chair
WARD O. WINER

This has been a busy time for the Woodruff School of Mechanical Engineering, which is not unusual because the past two years have been busy. We hope that things will settle down soon to a normal steady state. Many items that have been high on our agenda are the subjects of articles in this issue; for example, the Roy Richards lecture on the importance of manufacturing, and the groundbreaking of MRDC II. The Harold Gegenheimer lecture on innovation given by Jim Adams of Stanford University was also a highlight.

The Georgia Tech Lorraine Mechanical Engineering Master's Degree Program began this fall with 23 students enrolled. This is an excellent opportunity for us and we are optimistic about the program's future. We were also able to furnish the lobbies and the display cases in MRDC I as a result of a generous gift from Jack Zeigler; students and visitors are enjoying the new look in the lobbies. In addition, installation is
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nearly complete on an anechoic chamber, which was funded by the Ford Motor Company and the National Science Foundation. This is an outstanding addition to our already strong acoustics capability in the School.

On a somewhat different note, Ph.D. student and research faculty member, Richard Cowan, has been selected by the ASME to be a U.S. Congressional Fellow and will work in Washington, D.C. for one year. This is a terrific opportunity for Rick, and a real credit to the Woodruff School. We look forward to learning about his experiences as he walks in the halls of power.

In cooperation with the College of Architecture, we are supporting an Artist in Residence for Georgia Tech. Clark Ashton of Atlanta, who specializes in metal sculpture relating to technology, is working in a small, temporary facility in the Coon Building. In the fall quarter, he started a seminar course and drew a surprisingly large number of students - 17 students from a variety of disciplines, including mechanical engineering.

On a less happy note, we lost Connie Parish, the Woodruff School's Director of Development. She has been promoted to Director of Corporate Development for Georgia Tech, and left the Woodruff School at the end of November. She has done a tremendous job for us for nearly three years, and will be sorely missed. We hope that she will not forget the Woodruff School and will continue to help us obtain funds to enhance our programs.

From an academic standpoint, our two largest tasks have been to finalize the semester conversion program for both mechanical and nuclear engineering and the ABET visit. We are essentially finished with semester conversion, and turned in the materials to the Dean's Office December 1st for approval by the appropriate faculty committees in the Institute. We have taken this opportunity to completely review the Undergraduate Programs and believe that the semester calendar programs that we have developed will be even better than our current programs.

The second major curriculum item was to prepare for the ABET visit November 2-4, 1997. We were the first large research institution to submit to the ABET 2000 criteria, which are very different from the previous criteria used to accredit programs. Although we had a lot of apprehension associated with preparing for this visit, we believe that it has turned out to be an excellent experience. We will not know the outcome of the accreditation until the summer of 1998 when the ABET Council meets and passes judgment, but we are convinced from comments received from the ABET visitors and those made during the exit interview with the president, that both our Mechanical Engineering and Nuclear programs will receive full accreditation. We also hope that we did a sufficiently good job to be held up as models for the new ABET 2000 criteria.

In spite of the extra projects that we wrestled with in 1997, I assure you that our base programs are going well. Both our Undergraduate and Graduate Programs are strong, with top quality students. You can still be proud of your mechanical or nuclear engineering degrees from Georgia Tech.

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**TECH'S NEW DEAN OF ENGINEERING**

Dr. Jean-Lou Chameau is the new Dean of Engineering. He sent a message to faculty, staff, and students of Georgia Tech that is repeated here for our alumni:

![Image of Dr. Jean-Lou Chameau]

As November 1st has come and gone and I am now "official," I wanted to let everyone know how pleased I am to be working with you in the College of Engineering.

The opportunity to help shape the future of one of the best engineering programs in the country is very exciting, but I am also very humbled with the associated responsibility and the challenges we face. You have worked very hard to raise the College of Engineering to the level it enjoys today - poised to become one of the premiere engineering programs in the world - and I promise to do everything I can to build upon this and help us attain this goal.

There will be a transition period with regard to the duties of the office of the vice provost for research, but I want to assure you that I am fully committed to the College of Engineering and I ask for your patience during this time.

I do feel passionate about engineering at Georgia Tech and I am convinced that we will make it one of the
best programs in the world. Although the dean of a college has to play an important role, it is the faculty, staff, students and alumni of the college that define it and are the true leaders. As dean of the College of Engineering, I ask for your help and support as we take our program to the next level.

WOODRUFF SCHOOL SETS EDUCATIONAL OBJECTIVES FOR ABET ACCREDITATION

Georgia Tech is one of six universities that are test cases 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. Georgia Tech was the first major engineering research institution evaluated under these criteria and should help set the standards and procedures for future ABET 2000 accreditation activities. See From the Chair to learn about the Woodruff School's recent ABET visit.

Educational Objectives
The faculty of the Woodruff School strives to continuously improve our undergraduate programs in Mechanical and Nuclear and Radiological Engineering. To this end, the faculty worked with the Woodruff School Student Advisory Committee (WSSAC) to develop the following educational objectives:

- To prepare students for successful careers and life-long learning;
- To train students thoroughly in methods of analysis, including the mathematical and computational skills appropriate for engineers to use when solving problems;
- To develop the skills pertinent to the design process, including the students' ability to formulate problems, to think creatively, to communicate effectively, to synthesize information, and to work collaboratively;
- To teach students to use current experimental and data analysis techniques for engineering applications;
- To install in our students an understanding of their professional and ethical responsibilities.

NOTE: These objectives are part of the ABET (Accreditation Board for Engineering and Technology) Reports. To review these documents, see our web page at http://www.me.gatech.edu (click on ABET Reports).

SCHOOL HONORS JACK M. ZEIGLER - DONATION FURNISHES SCHOOL LOBBIES

On Friday, September 26, 1997, the Woodruff School honored Mr. Jack M. Zeigler (BME 1948) with the dedication of the Woodruff School Lobbies in MRDC I. Furnishings for the lobbies were made possible through the generosity of Mr. Zeigler. The donation to the School provided: student study areas on the second and fourth floors; the donor commemorative exhibit, the George W. Woodruff Memorial, and guest seating, all on the third floor; and the display cases on all three floors to highlight the legacy of the Woodruff School. The display cases will include: About the Woodruff School (books by faculty members and publications and events at the Woodruff School); Famous Alumni (Bobby Jones), The Olympic Torch, Zeigler Models; GT Motor Sports; MRDC II; Woodruff School History; Patents; and the Engineering Hall of Fame.

The day began with Dr. Winer conducting Mr. Zeigler and guests (many of his family members came for the dedication) on a tour of the facilities. After the dedication ceremony, a reception in the form of the Graduate Student / Faculty / Staff Cookout was held on the lawn between MARC and MRDC I. This was an opportunity for everyone new to the School to get acquainted.

Brief Biography
Mr. Jack M. Zeigler (class of 1948) received his bachelor's degree in mechanical engineering after interrupting his education with 3 1/2 years of service in the U.S. Army. While at Georgia Tech, he was a co-op student at two companies, where he worked primarily as a draftsman. In one company he earned $1.25 an hour; this was a raise from $0.55 per hour at the other
Mr. Zeigler is the retired President and Owner of Fabrication Engineering Service Company, Inc. (FESCO). FESCO specializes in the made-to-order fabrication business using high quality alloy steels to produce tanks for the chemicals industry and pressure vessels for textile manufacturers.

Until his retirement in 1989, Mr. Zeigler was a registered professional engineer in Alabama, Georgia, North Carolina, South Carolina, and Virginia, and he is a lifetime member of the American Society of Mechanical Engineers and the American Welding Society.

Mr. Zeigler has been very supportive of Georgia Tech. He was the chairman of the Charlotte Regional Campaign Steering Committee of the Georgia Tech Centennial Campaign, a member of the Alexander-Tharpe Fund Board of Trustees, a member of the class of 1948 40th Reunion Fund Committee, and past president of the Charlotte Georgia Tech Club.

He is also the recipient of the 1994 Woodruff School Distinguished Alumnus Award, and the 1994 Distinguished Engineering Alumnus Award sponsored by the College of Engineering at Georgia Tech.

Jack Zeigler was born in Thomasville, Georgia and resides, with his wife, Sarah, in Charlotte, North Carolina.

JIM ADAMS GIVES GEGENHEIMER LECTURE

The third annual Harold W. Gegenheimer Lecture Series on Innovation featured Professor Jim Adams of Stanford University speaking on Creativity Versus Control: Their Impact on Innovation. He spoke about the control necessary to individuals, groups, and organizations that may be in conflict with the creativity needed in innovation. This is especially true in large organizations. There are a number of commonly accepted methods of increasing creativity, such as: the use of idea techniques, promotion of intellectual diversity, reallocation of resources, changes in the reward systems, alterations of group behavior, and modifications of organizational culture. Dr. Adams discussed these methods. The successful employment of these methods, however, demands a good understanding of the creative process. He outlined the present state of this understanding and talked about his personal experience in attempting to apply it as an engineer, a teacher, and a consultant. He used short exercises and examples throughout his lecture to help members of the audience better apply general beliefs about increasing creativity in their own lives.

ME Students Cross The
Each summer since 1994 Georgia Tech students have traveled to Oxford, England to study and travel as part of the Oxford Summer Study-Abroad Program. This past summer 130 students participated in the five-week program, which is centered around Worcester College. Two mechanical engineering classes were offered: Case Studies in Rehabilitation Design and Introduction to Biomechanics. Both courses can be used as technical electives and the first course can be used as a design elective for students who have taken ME 3110. In addition to mechanical engineering, there were courses offered in electrical engineering, history, music, architecture, literature, and international affairs. Students can take up to 12 credit hours with a maximum of six hours in engineering.

Students live in the dormitories and eat with faculty in the dining hall. Before the program begins, the students can travel in Europe. Once on campus, the students adhere to a somewhat rigorous schedule: breakfast is at 7:45 a.m., classes begin at 8:30 a.m. and end at 5:30 p.m., and dinner is served promptly at 6 p.m. Weekends may be spent touring the countryside.

Since the program began five years ago, more than 600 Georgia Tech students have participated. For more details about the program and the fees, view the web site at http://www.ece.gatech.edu/academic/oxford, or contact Professor Art Koblasz at art.koblasz@ee.gatech.edu. The deadline for the summer program is March 2, 1998; applicants are accepted on a first-come, first-served basis. Also, for the first time, there will be a Winter Study-Abroad Program Down Under; approximately 35 students will travel to New Zealand and Australia.

Mechanical engineering students who participated in the 1997 program are: Andrew Bell, Nathan Brunell, Deborah Butler, Joseph Carroll, III, Matthew Dobbs, Jeffrey Fowler, Stephanie Goff, Jennifer Hill, Erica Kronen, Nicole Lawhorn, Daniel Lee, Eric Lincoln, Daniel McCarthy, Jason Musheno, Eric Paz, David Prichard, William Sande, Rahul Saxena, Robert Sexton, Valerie Speredelozzi, Henry Stafford II, Raquelle Thigpen, Nzinga Tull, Felipe Varela, Todd Wells, and Michael Wyman.

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Fall 1997 marked the introduction of an MSME program at Georgia Tech Lorraine (GTL), the European campus of Georgia Tech. GTL is located in Metz, France, not far from the borders of Germany, Luxembourg, and Belgium.

In partnership with the Ecole Nationale Supérieure d'Arts et Métiers (ENSAM), the premier mechanical engineering school in France, the Woodruff School offers a dual-degree program leading to a master's degree in mechanical engineering from Georgia Tech and a diploma from ENSAM. Students spend fall and winter quarters at the GTL
The MSME degree at GTL is granted by Georgia Tech, and the admission and degree requirements are identical to those for students pursuing graduate study in Atlanta. As in many study-abroad programs, students benefit from immersion in another language and culture and opportunities to travel. The chance to view a different culture is an experience that is increasingly important to professional development in a global engineering environment.

The instruction at GTL is in English, and courses are taught by faculty from Atlanta who go to Metz on a rotating basis. These courses are augmented by courses from the video-based instruction program from the main Tech campus. Students may also take courses offered by the Electrical Engineering faculty at GTL.

The GTL building in Metz contains 50,000 square feet dedicated to instruction and research. Students are housed in the residences of SUPELEC or ENSAM, GTL’s two partner schools, which are a short walk away from GTL.

This summer GTL will also be offering a one-quarter program for undergraduates. It will combine mechanical engineering courses taught on-site by Woodruff School faculty with humanities and social science courses taught by faculty from other units of the university system.

For more information about the GTL program, see the brochure titled, *Bonjour, Georgia Tech: The George W. Woodruff School of Mechanical Engineering Introduces a Graduate Program for Study in France*, go to our web site at http://www.me.gatech.edu and click on GT Lorraine Program (France), or send an e-mail to gtl@me.gatech.edu.

(Thanks to Dr. Mike Wileman, Adjoint au Directeur de Génie Mécanique, Metz, France.)

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**STUDENTS REPORT FROM FRANCE**

In a truly international spirit, six Georgia Tech students (five of whom were born outside the U.S.), and twelve French students began classes at Georgia Tech Lorraine in acoustics, dynamics, tribology, and thermodynamics. Every Tuesday and Friday morning, faculty members become students themselves, and join their students in the French course offered at GTL. Even though the French culture is being embraced by the people from Georgia Tech, a bit of the American culture has also crossed the Atlantic. On October 31st, students and faculty at Georgia Tech Lorraine participated in a social centered on the traditions of Halloween. The events of the gala included a pumpkin carving competition, pin-the-nose-on-the-pumpkin, and swinging at the Halloween piñata. This event exposed French students and staff to some typical American traditions, strengthened student-faculty relations, as well as relations between the two schools represented at GTL - the Woodruff School of Mechanical Engineering and the School of Electrical Engineering.

Barring the presence of schoolwork, students and faculty members at GTL participate in various sports such as basketball, volleyball, tennis, and rock climbing. Basketball is the most popular sport, and a mixed team including students and faculty engage in friendly competitions against the French Electrical...
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Engineering College (SUPELEC). Other outdoor activities include cycling or jogging around the lake, which is located directly in front of GTL. The feeding of the gaggle of geese, which inhabits the tiny island located at the center of the lake, is also a popular event.

The central location of Metz greatly facilitates traveling. At the beginning of the fall quarter, GTL students were invited by the students of SUPELEC to go to Munich for Oktoberfest. In Munich, students had the opportunity to savor the German culture by tasting the local cuisine and appreciating the magnificent buildings. Students have also visited Luxembourg, Belgium, Holland, Italy, Vatican City, and Monaco.

(With special thanks to Maria Brathwaite and Saiful Mdramli, Woodruff School students at GTL.)

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RICHARD COWAN NAMED CONGRESSIONAL FELLOW

Richard Cowan (MSME 1992, Ph.D. candidate 1998), Program Manager of the Multiuniversity Center for Integrated Diagnostics in the Woodruff School, will participate in the Congressional Science and Engineering Fellowship Program coordinated by the American Association for the Advancement of Science. The Program is a cooperative effort of approximately 25 national engineering and scientific organizations; each organization sponsors one or more mid-career professionals for a one year fellowship in Washington, D.C.

Rick’s fellowship is sponsored by the ASME, which has participated in the Program since 1973. Fellows are selected in a national competition from among outstanding, mid-career scientists and engineers.

"The purpose of the Program is to provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to make practical contributions to the more effective use of scientific and technical knowledge in government." Rick will go to Washington, D.C. in early January 1998 and will look to work with the professional staff of a U.S. Senator or Representative or a congressional committee that has similar interests to Rick’s in public policy matters.

Rick is interested in: shaping future roles of industry, academia and government in support of research and development; enhancing manufacturing productivity and competitiveness; addressing problems with aging facilities, plants, and infrastructure; and identifying educational needs and solutions of national interest. He will keep us posted on his position and the issues on which he is working.

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GRADUATE STUDENT PROFILE:

SAMUEL GRAHAM

Samual Graham, a mechanics of materials graduate student in the Woodruff School, has been awarded the Outstanding Young Investigator Award by the board of directors of the International Thermal Conductivity Conferences. This award, given once every two years goes to someone in the early stage of his/her career (that is, either a graduate student or less than three years beyond the Ph.D.) This is a physics award in the area of heat transfer and thermophysical property measurement, which is a little out of the ordinary for a mechanics student to receive.

Sam won the award for his development of a nondestructive method of measuring thermal conductivity of anisotropic materials (including thin and thick ceramic matrix composites). The method takes only a few seconds and has some general applications, such as measuring jet airplane parts or microelectronic components. The method allows for the taking of measurements in a new way. He has demonstrated this technique
through experimental work at the Oak Ridge National Laboratory High Temperature Materials Lab as well as through finite element calculations.

Sam received an undergraduate degree in mechanical engineering from FAMU/FSU College of Engineering in 1993. He received his MS from Georgia Tech in 1995 and is about a year away from defending his thesis. In his remaining time at Tech he will do a lot of damaged composite analysis and measurements.

Sam has two older siblings, who are both engineers and patent attorneys, and two younger siblings, who are still in school. He is married, involved in his local church, and is interested in travel, photography, and playing the drums. Sam is a TA in ME 4055, the senior experimental lab. Sam would like to get an academic position when he completes his degree.

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**ANNOUNCEMENT**

The 1998 George W. Woodruff Distinguished Lecture

Robert A. Lutz

Vice Chairman, Chrysler Corporation

Thursday, April 23, 1998, 3:30 p.m.

Georgia Institute of Technology

**CHECK OUT OUR WEB PAGE:**

http://www.me.gatech.edu

The use of the Woodruff School's web page has increased significantly from last year. The number of hits per day from April 1997 to November 1997 has more than doubled, and nearly quadrupled at some points, than during the same time period in 1996.

Over 57,700 hits were recorded on the World Wide Web page from July 1, 1996 to June 30, 1997. These were from over 15,000 (individual) computers on over 8,400 different subnets. Only about 1,400 of these machines were at Georgia Tech. As of November 1, 1997 nearly 90,000 hits had been recorded since the implementation of the page in April 1996.

The trend is expected to continue as more information is made available via the Woodruff School home page. We have made a number of revisions and additions since our last report: go to http://www.me.gatech.edu and look at ABET Reports, People, Facilities, and Résumé Book. See the additions to the Calendar of Events, Academic Programs, and Woodruff School Publications. Finally, we have established a new address for the nuclear and radiological engineering program; see http://www.me.gatech.edu/ne_re_hp. We will continue to make design changes to the page and hope to soon add an audiovisual "tour" of the Woodruff School. If you have any questions about the page or you would like to see something added, please contact rona.ginsberg@me.gatech.edu.
ANOTHER CONTRIBUTION FROM FORD

The Woodruff School's state-of-the-art anechoic (echo-free) chamber is being installed in the high-bay area of the Manufacturing Research Center (MARC). The thrust of the facility is to provide the capability for closely integrated product design, modeling, and testing for vibration and acoustic considerations. The facility will include a scanning laser vibrometer, systems for acoustic holography and intensity mapping, a VXI-based data acquisition system, and two workstations. It will be in use by December 1st for research purposes and will be used for classes beginning winter quarter 1998. The chamber will be part of an integrated effort to model and test the production and control of sound from engineering objects, such as vehicle assemblies and panels and motor housings.

In 1996 Ford Motor Company gave the School $300,000, Georgia Tech contributed $140,000, and the National Science Foundation matched these funds with $440,000. The chamber will be used for undergraduate and graduate classes in noise control and instrumentation. It will also be used for ME 4055, the senior engineering mechanical engineering lab.

In the accompanying photo, Ford Motor Company gave the School the second installment of $100,000 (of their $300,000 contribution) for the anechoic chamber to (from left) Professor Ken Cunefare; Regents' Professor and Chair of the Woodruff School, Ward O. Winer; James D. Moore, supervisor, Ford Powertrain Core Competency; and Professor Yves Berthelot.

NEW PUBLICATIONS

We are pleased to announce the publication of The 1996-1997 Annual Report of the Woodruff School of Mechanical Engineering. If you are interested in receiving a copy of the redesigned report, please let us know, or check it out on the web page under Woodruff School Publications.

In addition, the Résumé Book is now available. It contains the complete résumés of all Ph.D. students who will be completing their degree in 1998 and are looking for positions, particularly in academia. If you are interested in receiving a copy, please contact bill.wepfer @me.gatech.edu or see our web page and click on Résumé Book (this will be available soon).

STUDENT NEWS & AWARDS

Sixty-one students in the Woodruff School will have their names included in the 1998 edition of Who's Who in American Universities and Colleges. The students are chosen based on their academic records, service to the community, leadership in extracurricular activities, and potential for continued success. The students are: Amanda Adams, William Anderson, Laura Atkinson-Schaefer, Robert Reid Bailey, Eric Barth, Matthew Bauer, Steve Benintendi, Harris Bergman, Scott Billington, Zrinka Bilusic, Sophie Biz, Bryan Blair, Maria Brathwaite, Jason Brown, Lisa Chiang (HP), Peter Christiansen, Andre Claudet, Tal Cohen, Frederick S. Cowan, Richard W. Cowan, Nathan Peter Davis, Winncy Du, Jesse Ehner, Jeffrey Ellis, Jan Emblemsvag, Dawn Foley, Mark Gillespie, Christie Gooch, Francois Guillot, Paul Hausgen, Samuel Heffington, Andrew Honohan, Sandra Hopko, Clifford Johnson, Wayne Johnson, Stephanie Kladakis, Leonard Lay, Timothy Lieuwen, Thomas Logan, David Loganbach, Matthew Marston, Mark McIntosh, M. Scott McKinley (NE/HP), Bradley A. Miller, Ryan Morrissey, Gregory Mumpower, Taryn Narrow,
Jeff Favorite, Scott McKinley, Diane Norris, and Michelle Sutton (all NE graduate students) represented the Georgia Tech design team at the finals of the American Nuclear Society Graduate Design Competition in Albuquerque, New Mexico; they were awarded first place for the design project, "A Tokamak Tritium Production Reactor." The design was done by the NE/HP 6753 Advanced Nuclear/Radiological Engineering Design class in summer 1996. Professor Weston Stacey taught the course.

Samual Graham has been awarded the Outstanding Young Investigator Award by the International Thermal Conductivity Conferences.

Melissa Sandlin received the ASME Marjorie Roy Rothermal Scholarship. Melissa received her BSME in May 1996 from the University of Illinois.

FACULTY NEWS & HONORS

George W. Woodruff Chair and Professor Jerry Ginsberg was elected Chair of the Technical Committee on Structural Acoustics and Vibrations of the American Society of Acoustics (ASA). In addition, he is a member of the Technical Council.

Professor Iwona Jasiuk gave birth to a daughter, Pauline Marie, on October 28, 1997. At birth, she weighed 8 lbs. 4 oz. and was 20 1/2 inches long. Professor Winer believes this is the first child born to a Woodruff School faculty member.

Regents' Professor David McDowell received the 1997 Nadai Award from the American Society of Mechanical Engineers (ASME). The award recognizes distinctive contributions to the field of engineering materials.

Professor Shreyes Melkote has received the Dell K. Allen Outstanding Young Manufacturing Engineer Award for 1998. The award is given by the Society of Manufacturing Engineers (SME) for significant achievement and leadership in the field of manufacturing engineering.

Assistant Professor Richard Neu was selected as the first recipient of the Keith J. Miller Young Investigator Award. The award is given by the American Society for Testing and Materials (ASTM) to recognize outstanding researchers in the area of fatigue and fracture within seven years of leaving school.

Assistant Professor Suresh Sitaraman received a 1997 Career Award from the National Science Foundation. The award will support Dr. Sitaraman's research efforts in the area of thermomechanical modeling and miniaturization of implantable microelectronic devices. The award is for a four-year period beginning September 1, 1997, and has an estimated budget of $300,000.

Dr. Michael Wileman was hired as an Academic Professional to coordinate the Georgia Tech Lorraine program in mechanical engineering in Metz, France.

STAFF NEWS & HONORS

Debbie Finney received the Summer 1997 Outstanding Achievement Award for Classified Employees of the Woodruff School.

Melody Lynn Foster is the new Administrative Secretary in the Woodruff School; she will provide general secretarial services and be the receptionist for the Administrative and Finance Offices.

Joyce D. Jones joined the School as the Senior Administrative Secretary for the Mechanics of Materials research group.

Mike Murphy received the Spring 1997 Outstanding Achievement Award for Classified Employees of the Woodruff School.
Gail Payne joined the staff as an administrative assistant to Dr. Wayne Book.

WOODRUFF SCHOOL STAFF RECOGNIZED

The George W. Woodruff School of Mechanical Engineering Outstanding Achievement Award for Classified Employees was started in winter quarter 1991 at the impetus of some staff members. This award recognizes a staff member who has made a significant contribution to the School in the previous quarter. Any full-time staff member with at least six months service is eligible to receive the award.

A volunteer committee (six members and one tiebreaker) of staff members selects the winner from nominations received from any employee of the Woodruff School. Only the chair person knows who the nominees or nominators are until the selection has been made. The winner receives a plaque, a check for $75, and lunch with the committee and Dr. Winer. Plaques that display the yearly winner (in 1996 the winner was Donna Rogers and in 1995 it was Butch Cabe), quarterly winners, and the present winner are located on the second floor in MRDC I. We especially encourage faculty members reading this publication to submit nominations. The yearly winner receives another plaque and a check for $150.00.

Where Is He Now?
Alumni Profile: Harris Saunders

For Harris Saunders (BME 1945), his first year on Life Support was one of adventure, challenge, and intrigue. But it's probably not the kind of life support you are thinking about. Life Support for Harris is his beautiful trawler, which he has taken from Vancouver, British Columbia to Guatemala and Belize. Equipped with a captain, chef, and deck hand (who are often one in the same), Harris charts his adventures and takes to the high seas. Coco Island's waterfalls and buried pirate treasure, miniature Kuna Indians on the San Blas Islands, and the jungle tributaries of beautiful Rio Dulse are all experiences that Harris has enjoyed with Life Support.

Harris earned his bachelor's degree at Georgia Tech in the Navy V12 program. After graduation, he served in the Navy, which included duty at Bikini Atoll for the first post-war atom bomb test. After the stint in the Navy, he spent the next forty years building Saunders Systems, Inc. (Birmingham, Alabama) into the third largest truck leasing company in the United States before selling the company to Ryder Systems of Miami. Upon retirement, he was involved in the development of Saunders, Inc., a company serving the trucking industry, which he sold in 1993 and began his second retirement.

Mr. Saunders served on the board of SouthTrust Bank and Energen Corporation. He was also the founding chairman of the Truck Rental and Leasing Association, and chairman of the United States Business and Industrial Council. He was inducted into the Georgia Tech Engineering Hall of Fame in October 1997.
ALUMNI HONORS

Three mechanical and nuclear engineering alumni were inducted into the College of Engineering Hall of Fame at the COE Alumni Awards Induction Ceremony on October 24, 1997. This designation is the college's most prestigious award and is based on life-long career accomplishments. The alumni inducted were: Robert T. "Bobby" Jones (deceased) (BSME 1922), Albert L. "Buddy" Luce, Jr. (1945), and Harris Saunders, Jr. (BME 1945).

Three mechanical and nuclear engineering alumni were honored with selection into the Academy of Distinguished Engineering Alumni of the College of Engineering. The award is intended for alumni who have sustained and made distinguished contributions to Georgia Tech, the profession, or the society at large. The 1997 group included: J. Don Brock (Ph.D. ME 1965), Robert E. Cannon (BME 1951), and John R. Markley (BME 1956).

In addition, two 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 1997 group included: Coleman T. Bentley (BME 1982, PE) and Margie Lewis (BNE 1979).

Pictured above, left to right - Front row: Albert L. Luce, Harris Saunders.

ALUMNI NEWS

David P. Adams III (BSME 1986) is President of Adams Capital, Inc., which provides business valuation services and merger and acquisition services. He lives in Atlanta, Georgia and is married to Pamela Adams; they are the parents of Porter, 21 months, and Trevor, born on October 23, 1997.

Rudolph D. Bennor III (SME 1984, PE) started a mechanical engineering consulting firm in Norcross, Georgia on December 20, 1996 called Bennor Engineering, LLC. He resides in Norcross, Georgia.


Matthew Johnson (BSME 1996) is the Principal of Calvary Christian Academy in Cincinnati, Ohio. He and his wife, Rebecca, are the parents of a baby girl, Clara.

David R. Kaufman (BME 1985, PE) was recently promoted to Director of Engineering at EMS Technologies, Inc. (an Electromagnetic Sciences Company). He resides in Atlanta, Georgia.
Mary Jacquelyn "Jackie" Brown Kirkpatrick (BSME 1970, MSME 1972) passed away June 1, 1997 in Richardson, Texas. She is survived by her husband, Carroll Stone Kirkpatrick (MSME 1972), and three daughters. A memorial fund in honor of Jackie has been established at Trinity Fellowship Church for Camp Cherith, a camp for boys and girls, which she supported for many years.

Kim Lacov-Carnahan (BME 1990) gave birth to a son, Cole Bryant, on July 13, 1997. He joins his big sister, Taylor. Kim resides in Beaverton, Oregon.

Frank Perkins (BSME 1951) has published Travel Adventures on the Company's Nickel, which describes his experiences in odd corners of the world during 30 years of business travel. The book includes some practical travel hints, and encourages a relaxed philosophy of making the best of inevitable travel glitches. The book is available from Oak Publishing at 5225 Crane Road, Melbourne, Florida 32904 for $14.95.

David E. Pilcher (BME 1981, MSME 1987) took an early retirement from the U.S. Navy to accept a position as Manager of Quality Programs with the Burlington Northern Santa Fe Railway Company. He resides in Forth Worth, Texas with his wife, Jane and children, Michael and Stefanie.

Preston Rahe (BME, MSNE 1964) was recently named President of Westinghouse Safety Management Solutions, Inc., a newly formed subsidiary providing safety and hazard analysis, and other safety management services to the nuclear and chemical industries. Mr. Rahe was previously Vice President and General Manager of the Engineering and Construction Division at the Savannah River Site. He resides in Aiken, South Carolina.

Susan Sandford (BME 1983) has accepted a position as Program Manager of Ride & Show Engineering at Disneyland in Anaheim, California (effective September 1997). She resides in Tustin Ranch, California.

Peter R. Seckinger (BME 1985, PE) has founded Seckinger Design Associates, Inc., a mechanical and electrical consulting engineering company, located in Fayetteville, Georgia. He and his wife, Jena, reside in Fayetteville with their two children, Morgan and Ethan.

Randolph Whitfield (BSME 1932, MSME 1934) was married on September 15, 1997 to Julia Gatewood Pearson, widow of T. Brooks Pearson (COM 1929) in Jackson Hole, Wyoming. The couple resides in Atlanta, 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 form and submit it.

DONOR LIST

The following people have generously given to the Capital Campaign for Georgia Tech and designated their gifts for the Woodruff School. If you want to participate or learn more about the School, call the Director of Development at (404) 894-3200.

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The husband-and-wife, Georgia Tech alumni, flying team of Larry and Cathy Lee won the first World Air Race (also called the Aviation Olympics) by two seconds. Their Piper Malibu, aptly named the Rambling Wreck, had to race more than 6,500 miles over a ten-day period from Iceland to Turkey. Woodruff School faculty member, Sam Shelton, was one of two faculty advisors for the project; he taught a course during summer quarter to prepare the plane for the trip. There were 20 entrants from ten countries, however, the Tech plane was the only one with a university flight preparation and support team.