

GeorgiaTech

Alumni Magazine

September/October 2009

Pulp Fashion



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Sidney Goldin

ChE 1930

(1909-1995)

- Member of ANAK and Zeta Beta Tau fraternity; lettered in tennis and basketball; participated in the GT Band.
- Career with Shell Oil Company.
- Lt. Commander in the U.S. Navy in WWII; awarded the Bronze Star.
- Married to Hazele Goldin (1909-1996) for 54 years.
- College of Engineering Distinguished Alumnus; member, GT Athletic Hall of Fame and Engineering Hall of Fame; J. M. Pettit Distinguished Service Award.
- Through a bequest, established the Sidney Goldin Scholarship Fund for students with financial need.

Jordan Garner

Class of 2010

Goldin Scholar

- Grew up in Maryland; parents are both teachers; two siblings also in college.
- Chose Georgia Tech because she wanted to study computer science at a leading technological university, and because of the opportunities Tech offers its students to be well-rounded.
- Working on bachelor's degrees in computer science and management.
- Plans to use her education to enhance the understanding between technology and business, in turn fostering business growth.
- Participating in the Co-op Program; member of Phi Mu sorority.

Sid Goldin is among Founders' Council's 1,014 members who have made bequests or life-income gifts in support of Georgia Tech's future.

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THE BUSINESS SCHOOL AT GEORGIA TECH



38 Joyrides

In their drive for a better ride, Georgia Tech researchers, students and alumni are working to improve automotive design and efficiency. *Illustration above by Van Jensen*

50 Pulp Fashion

The Worn Slippers, shown on the cover and created by Liz Mitchell, are among the runway-worthy paper clothes on display at Hartsfield-Jackson Airport. *Cover photo by Jacqueline Hawthorne*

56 GTRI at 75

For three-quarters of a century, scientists have been solving problems and making world-changing discoveries at what began on campus as the Engineering Experiment Station.

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GAS SOUTH





Georgia Tech Alumni Magazine

Volume 86, Number 1

10 Letters

13 Alumni House

14 Life Jackets

16 Jackets Required

19 Tech Topics

24 Tech Notes

25 What's in a Name?

26 Office Space

28 Within Walking Distance

30 Student Life

37 Ten Questions

63 Burdell & Friends

65 Ramblin' Roll

74 In Memoriam

82 Yellow Jackets

94 Mental Floss Quiz

96 Calendar

98 In Retrospect

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KIM WATERS

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Friday, November 6, 8 p.m.

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Saturday, December 5, 8 p.m.

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NATALIE MacMASTER

and **DONNELL LEAHY:**
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DE AMALIA HERNÁNDEZ

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Friday, March 12, 8 p.m.

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Saturday, March 27, 8 p.m.

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Publications and Alumni Changing

Welcome to the new and improved GEORGIA TECH ALUMNI MAGAZINE. We hope you'll enjoy the publication as much as you always have. Things do change, and along those lines I want to share a snapshot of your fellow alumni with you today. You may be a little surprised.

Georgia Tech now has 121,000 alumni living around the world. Of this number, 106,000 live in the USA. Almost 50,000 live here in the state of Georgia, with the bulk of our state contingent residing in metro Atlanta. Geographically we're quite a dispersed group, because with most public universities, you'll see a majority of their alumni living in state. Outside the state, our top alumni populations are in Florida, California, Texas and North Carolina.

We're getting younger too. We now have 32,607 alumni who graduated in this decade. That's more than any other single decade. Engineering is still our dominant college with more than 74,000 alumni or 61 percent of the total. That's followed by Management, 16 percent; Sciences, 8 percent; Architecture, 6 percent; Computing, 6 percent; and the Ivan Allen College, 2 percent. Our gender mix is changing slowly but that has accelerated over the past 20 years. In fact, this year's freshman class is comprised of one-third females.

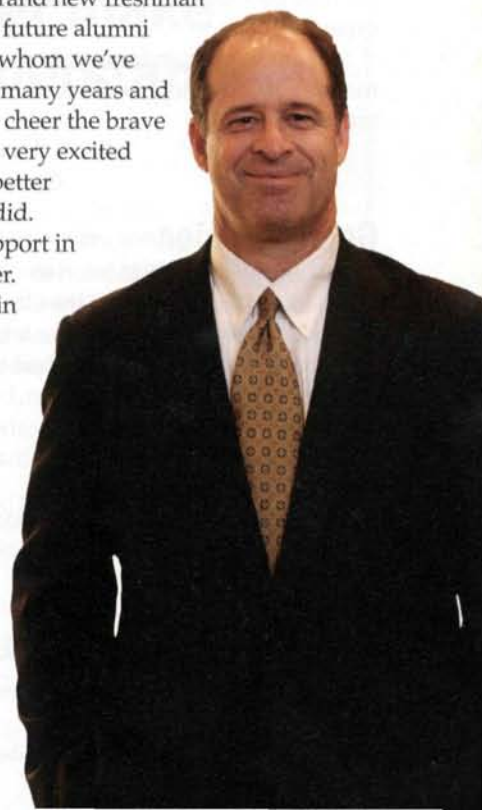
We have 28,000 alumni who received only a graduate degree here; 79,000 who received an undergraduate degree; and almost 10,000 who earned both or more. I know, that doesn't add up to 121,000. We have more than 3,000 non-degreed alumni too.

It's almost time for the new academic year to begin, and despite the economic maelstrom we're all enduring, there are a lot of positive things going on here. For one, President Peterson's investiture will take place on Sept. 3, and we hope you join us here for that. Homecoming, the Young Alumni Reunion and much more are right around the corner.

And, of course, we have a brand new freshman class — and it's a great group of future alumni that includes daughter Jennifer, whom we've dressed in white and gold these many years and are finally putting on campus to cheer the brave and bold. Needless to say, we're very excited and anticipate her doing much better academically than her old man did.

Finally, Tech needs your support in these tough times more than ever. Your generous support of Tech, in every way, is the secret to our future success.

Joseph P. Irwin,
President of the Georgia Tech
Alumni Association



Letters

Walk Down Memory Lane

I just finished reading the last issue of *Tech Topics* and was surprised and flattered to find myself quoted extensively in the article about the tabloid's discontinuation. The story of my editing the last issue of the *Alumnus* magazine brought back memories. It was interesting and amusing, especially the references to the "green pencil" comments scrawled on my memo to the Alumni Publications board. I never saw those at the time, of course, but can make some pretty accurate speculations as to the author.

It seems that life is a cycle: The GEORGIA TECH ALUMNI MAGAZINE is going back to what it was when I first became editor and what I fought to continue — a bimonthly that strives for quality writing, graphics and printing. Your beautiful product of today puts my pale efforts in the shade, however, though the good freelancers who helped me in my chief-cook-and-bottle-washer effort did a good job. I'm particularly proud of the graphics created by Cavett Taff, the first truly professional designer I hired in the Georgia Tech Office of Publications. (The *Alumnus* was a freelance effort of my own, bringing in a munificent \$5,000 a year or so. It's amusing that the publications board at the time considered that a burdensome expense.)

Thank you again for a walk down memory lane. I enjoy your efforts immensely.

Ben L. Moon, IM 62
Carrollton, Ga.

Good Decision

I agree with your decision to consolidate [*Tech Topics* and the GEORGIA TECH ALUMNI MAGAZINE]. We have been very fortunate in that we have had two of the very best alumni publications, but practicality necessitates that they should be merged, especially during these financially unstable days.

In view of the past performance of the Alumni Association, there is no reason to

believe that the emerging publication will not be as good as or even better than its predecessors. I'll keep my enrollment in the Alumni Association.

Keep up the good work.

John Gaines, ChE 40
Prairie Village, Kan.

I Remember Him

What a thrill to see your article about Steve Bowes ["Model Worked for Food"] in the last *Tech Topics*. Steve and I, as freshmen, were housed at the Naval Air Station campus at Chamblee. We lived in converted barracks, open but partitioned off. His partition was just one away from mine. He and I were among the few non-World War II veterans in our wing, and, like him, I was a co-op student. He used to practice gymnastics by walking on his hands up and down the hall.

I remember him most because in the winter of 1947 the area had a light snow. Steve, being from Florida, had never seen snow before. He woke the whole barracks up with glee just before he went out to play in it.

Bruce D. Smith, EE 51
Hancock, N.H.

Where Is the Other Sculpture?

Thank you so much for the fine article about me and my modeling experiences at Tech and with Julian Harris. I feel honored that the sculpture is on the Architecture Building and that I had a small part in its conception.

I am curious as to what happened to the companion sculpture that was done at the same time.

Steve Bowes, ME 52
Jacksonville, Fla.

College of Architecture professor Robert Craig solves the mystery: The Pygmalion sculptures, sometimes referred to as "Architecture" and "Sculpture," were intended for the west wall of the west wing of the library. After the library donor vetoed the idea of nude male figures on a building dedicated to her



Julian Harris was photographed for the March-April 1971 edition of the *Georgia Tech Alumnus*.

husband, the commission was canceled. The sculptor kept one of the figures on his garden studio wall at his Fifth Street home. That sculpture is now owned by Harris' daughter. Harris gave the second figure to Paul Heffernan, who affixed it to the rear wall of his house. This piece is now on the Architecture Building.

Foundation Paid for Field

The article in the Spring ALUMNI MAGAZINE titled "Shirley Would Be So Proud of Mewborn Field" and written by Van Jensen was excellent. Thank you for recognizing Shirley. However, there was an error in the article that I must bring to your attention. The article gives me credit for the \$5 million that it cost to build it. I do wish that was true, but the money was loaned to Tech by the Georgia Tech Foundation.

I was happy to see that the softball team won the ACC this year. I do hope that this outstanding facility helped the women achieve this great honor.

Duke Mewborn, Cls 56
Marietta, Ga.

Send letters to: Georgia Tech Alumni Magazine, 190 North Ave. N.W., Atlanta, GA 30313, or e-mail editor@alumni.gatech.edu.

Dean Dull's Sage Advice

I was saddened to hear about Dean Dull's death. Although he would never have known it, I credit him for pulling me through my years at Tech.

Dean Dull [at right] welcomed us to Tech as freshmen and gave us some sage advice. For me, it wasn't the advice about what to do if we were arrested. It was one of the final things he said to us that stuck with me. Paraphrasing, he told us that Tech only admitted students who were smart enough to graduate, so we could make it through if we tried hard enough. If we didn't, we had only ourselves to blame.

Those words stayed with me throughout my four years — especially one very late night in my junior year, studying for a bear of a physics test, when, exhausted, depressed and questioning my sanity, his words were literally the only thing that kept me going.

Candy Shedden, Phys 72
Boca Raton, Fla.



Where Are the Older Alumni?

For some years I have enjoyed the quality and insight of your work. But in the most recent issue of *Tech Topics*, the Ramblin' Roll started with the 1960s! What happened to the 1940s and 1950s? Please include them in the next issue.

Harlow E. Lichtwardt, IE 49
Palmetto, Ga.

We welcome Ramblin' Roll entries from all alumni. Unfortunately, no one who graduated

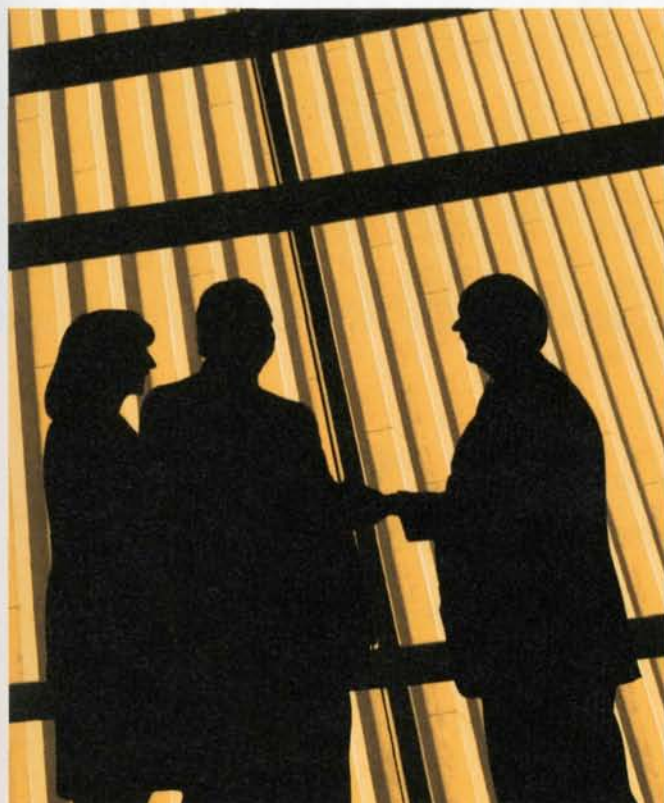
earlier than 1961 submitted a class note for the final edition of Tech Topics. We're happy to report that two 1940s graduates sent us news for this issue. And we've reformatted our submissions form, which appears on page 70.

Duke Is Delta Sigma Phi

I noticed in the final edition of *Tech Topics* that it was incorrectly mentioned that Mike Duke, the new CEO of Wal-Mart, was a member of Delta Sigma Chi while at Georgia Tech. He was actually a member of Delta Sigma Phi, which has been on the Georgia Tech campus since 1920. Delta Sigma Phi is a professional chiropractic fraternity that has never been on the Tech campus.

I know that my fellow brothers as well as the Tech community are very proud of Mike's achievements so I wanted to get that affiliation right.

Zach Trinite
Management student, Delta Sigma Phi



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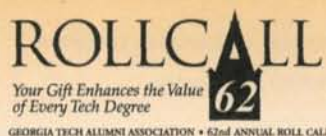
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Homecoming: A Tech Tradition

Homecoming, from the parade pageantry to the gridiron glory to the rousing renditions of the fight song sung at the reunions, is one of Tech's finest traditions. Fittingly, "Tradition" is the theme for this year's Homecoming from Oct. 15 to 17.

There will be plenty of longtime fixtures, including the parade, tailgate party and class reunions. This year will mark the establishment of future traditions, including the State of the Institute address delivered by Tech President G. P. "Bud" Peterson, who will open the floor to questions following his speech.

"Homecoming is one of the very best times to come back to Tech," said Alumni Association president Joe Irwin. "Not only do you get to explore some of the breadth of Tech's academic mission, you get to enjoy the pageantry, passion and color of Southern college football in the fall."

Two new features this year are a welcome reception with President Peterson and his wife, Val, from 7 to 8:30 p.m. Oct. 15 at the Global Learning Center in Technology Square and a Homecoming concert Oct. 16 staged by the Student Center Programs Council.

"Buzz Under the Big Top" is the theme for this year's Buzz Bash on Oct. 16. The all-alumni family festival will be complete with clowns, midway games, fireworks and Buzz as the ringmaster.

Free seminars and campus tours in the morning and early afternoon of Oct. 16 will showcase the best of Tech, including the recently opened Marcus Nanotechnology Research Center. Walking tours will be led by Student Ambassadors, themselves among the best of Tech.

Traditions, specifically those unique to Tech, will be the subject of one seminar presented by Marilyn Somers, director of Living History, who also will give a program on dining spots popular with students over the years.

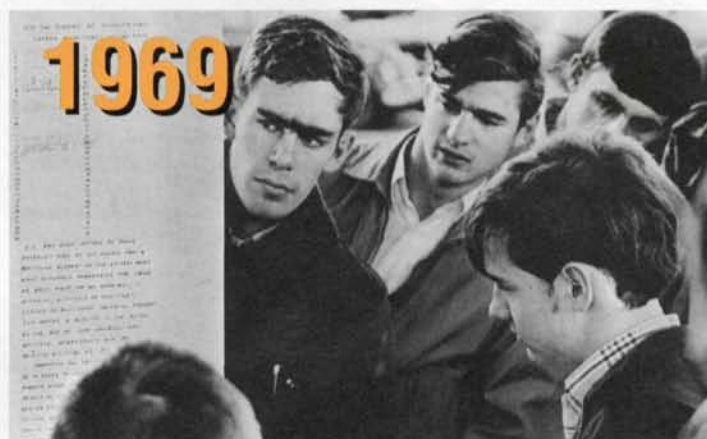
Milestone reunions with sure-to-remember parties are in store for the classes of 1959, 1969 and 1984. The classes of 1959 and 1969 are raising money for need-based scholarships. The Class of 1984 is supporting the Ramblin' Reck program and raising funds for a commemorative tree and bench. The classes will present checks to President Peterson at their reunions.

Both the 25th and 40th reunion party attendees and their guests will be admitted to Buzz Bash. The 50th reunion gala at the Georgia Tech Hotel and Conference Center will have classmates saying it seems like old times.

Two and a half hours prior to kickoff, the Alumni Association will welcome alumni and friends to the Tech Tower lawn for the tailgate party before the Yellow Jackets meet the Virginia Tech Hokies on the football field.

More information about all Homecoming events is available at gtalumni.org/homecoming.

"There simply is not a better place to be," Irwin said. "Join us!"





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Put Your Best Face Forward

Are you coming across as someone who has it together?

Nadia Bilchik poses that question when teaching women how to effectively communicate. Bilchik anchored the leading network news program in South Africa. But when she and her family relocated to Atlanta in 1997, Bilchik had to restart her journalism career.

"I had to convince and persuade a whole new group of people to hire me," she told a packed Women on Wednesdays audience at the Alumni House.

Bilchik advised the women to command attention; be interested and interesting; reach out to new people; and network the most when it's least needed.

"People like to do business with people who seem to have it together," she said.

Today, a businesswoman also must consider her virtual presence. "The mistake people make is they think that it's fine to have this wonderful LinkedIn presence and then on Facebook they're dancing on the table. You need to have the same Facebook presence," Bilchik said.

— Kimberly Link-Wills

Wolf: If You Can't Beat 'em, Join 'em

Erin Wolf, author of *Lessons From the Trenches: A Woman's Guide to Winning the Corporate Game*, believes females need to join the "good-old-boy network."

"Even though women make up 50.6 percent of professionals in the work force, the business world is still run by men," Wolf said. "Women are barely visible at the top of the Fortune 500."

Wolf is the founder and managing partner of SuiteTrack, a firm dedicated to helping companies improve their bottom lines by tapping into the potential of their high-performing female associates. She told a Women on Wednesdays gathering in June that females in the workplace must understand the boys club code.

"Hard work is almost never enough to vault us into the executive suite," she said. "It's in all that stuff that goes on in the business world that really has nothing to do with the bottom line. Advancing in today's world I think has as much to do about learning the rules and then deciding which ones you want to follow and which ones you don't as it is about talent and results."

Women must "apply for membership in the good-old-boy network," Wolf said. "The reality is you need to join it. [If you are] in a company that the leadership team or those who are in power are men and you can't figure out a way to connect with them, then you're doing yourself a disservice."

— Kimberly Link-Wills



Eric Turner

Panel of Recruiters Offers Job Hunt Tips

Engineering has been hit as hard with layoffs as any field, according to National Public Radio's "Marketplace" program. To help Yellow Jackets seeking jobs, the Alumni Association brought recruiters from four companies to a panel discussion at the Global Learning Center to provide advice.

Call ahead. "Don't be scared to call and find out who the recruiter is and ask specific questions," said Laura Fincher of EMS Technologies.

Explain any time spent out of work. "Put down there [on your resume] 'family time.' Account for the breaks in your work history," said Deborah Salter of Vanderlande Industries.

Network. "After you apply, find out via LinkedIn who the hiring manager is and see if you know anyone who's connected to them. Send a message and say, 'I just wanted to say hello. If you'd like, please take a look at my recommendations,'" Fincher said.

Don't be afraid to change industries. "We look at people in other industries we think we can bring in and cross train," said Aaron Smith of Enercon.

Follow up the right way. "There's a difference between being interested and being a pest. Just ask what they prefer, then respect that," Fincher said.

Adjust your effort for each job. "Create your resume for the entry you

are seeking. Tell me why it is you want that particular position. Don't send the same resume for every one," Salter said.

Avoid acronyms. "People use a lot of acronyms. I don't have time to look up what that means," Fincher said.

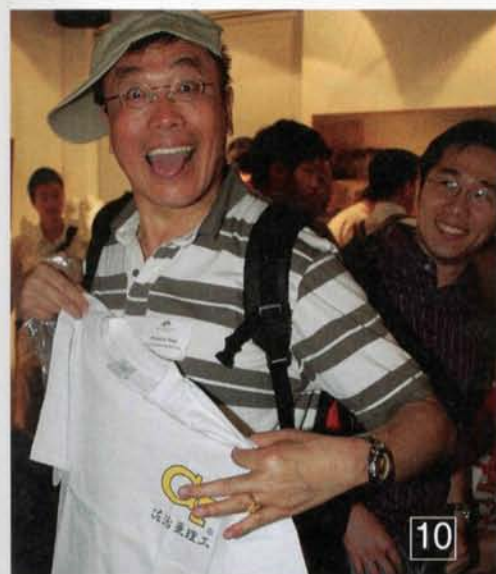
Demonstrate your development. "We are looking for that leadership. Have you made progression?" said Iris Jackson of Waffle House.

More job-hunt advice is available by contacting Caroline Taylor Player, director of Career Services at the Alumni Association, at caroline.player@alumni.gatech.edu or by visiting gtalumni.org/pages/career.

— Van Jensen

Jackets Required: Gatherings of Tech Grads and Friends





1. And they're off to the tee box at the Young Alumni golf tournament in June at Country Club of the South. 2. Dan Shinedling, IE 92, greets Dallas Cowboy Tashard Choice, HTS 07, at the Tashard Choice Golf Classic, which raised money for North Texas/Dallas Georgia Tech Club scholarships. 3. On a business trip to Yokohama, Japan, Hitachi Communications Technologies' Scott Wilkinson, EE 90, PhD EE 96, and David Foote, EE 80, share news from campus with Colonel Sanders. 4. Tech President G. P. "Bud" Peterson speaks to the Columbus, Ga., Georgia Tech Club in July. 5. Taking a break from training for a Half-Ironman in New Hampshire in August to raise funds for the Caroline Can! campaign to support a traumatic brain injury rehabilitation center are, left to right, Reid Owen; Whitney Owen, IntA 03; Jay Owen, HTS 03; Mary Hodgins; Michael Niederhausen, BC 99; Amisha Patel; Chris Babcock, AE 04; Jacob Gelbaum, IntA 02; and Anthony Priest, EE 88, MS IE 90. The alumni all are members of the Washington, D.C., Georgia Tech Club. 6. James C. Smith, ME 50, winner of the Augusta, Ga., Georgia Tech Club's lifetime achievement award, shakes hands with Willie Reese, Mgt 89, director of operations for Tech's men's basketball team, at a June club gathering. 7. Jeanne Hsieh, IE 04, won two rounds of golf at the Coca-Cola Georgia Tech Scholarship Tournament in June. 8. Gary May, EE 85, chair of the School of Electrical and Computer Engineering, visited the Arizona Georgia Tech Club at a Honeywell-sponsored meeting in Tempe, where he congratulated club scholarship winner Jackson Du, an incoming freshman. 9. Jack Amason, ME 59, carved an ice sculpture to welcome President Peterson to a meeting of the Golden Isles Georgia Tech Club. 10. Francis Yep, MS ME 78, was elated to receive a Tech T-shirt in Shanghai, China, where more than 100 alumni and friends gathered to hear College of Architecture Dean Alan Balfour and Steve McLaughlin, vice provost of International Initiatives. Find a local Georgia Tech Club at gtalumni.org/pages/clublisting.

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Alumni Among Institute's Greatest Strengths

President G. P. "Bud" Peterson marked his first 100 days in office in July and reported his early impressions as Tech's leader. Following are excerpts from the reflections he shared with the campus community.

By G. P. "Bud" Peterson

I quickly learned that Tech is a truly incredible place, one that is making a tremendous impact on the lives of our students, on the state's economy and on the larger global community. One of the important aspects of my role as president is to share our story with numerous groups and individuals in an effort to communicate the many ways in which Georgia Tech enriches the lives of our various constituencies and to strengthen strategic partnerships, while at the same time listening to valuable feedback.

I have met with students, faculty and staff from Georgia Tech; alumni here in Atlanta and across the country; and legislators, regents and other city, state and national leaders. As a continuation of this effort, [in July] we began traveling throughout the state to meet with current and prospective students, alumni and local community and government leaders. As part of this process, [we made] 13 stops in seven cities in three days.

Without question, Tech's biggest fans and supporters, and one of our greatest strengths, are our alumni, here in Georgia and throughout the world. Over the course of the past three months, Val and I have met hundreds of them at various events. I have held individual meetings with more than 100 government and community leaders and more than 100 of our principal donors and supporters throughout the country — and more are scheduled.

We met members of the Georgia Tech Black Alumni Organization to communicate to them the importance of diversity. We have a lot to be proud about with Georgia Tech, particularly things related to diversity and underrepresented minorities. We have in the past 10 years gone from 30 percent of our graduates who were students of color (i.e. Asian, Black / African-American, Hispanic and Native American) to 40 percent. As you may know, we are the second-largest producer of African-American engineers in the country.

With our global focus, we can also boast that we have more international students than any university in Georgia. We will build on the good work that has already been done. In addition to gender and ethnicity, there is also intellectual and geographic diversity. At Tech we are bringing together the best and the brightest from throughout the world.

We are very proud of the contributions Tech alumni are making in their communities and are especially grateful for their long-standing tradition of giving back to the Institute. In this challenging economic environment, we are fortunate to have the support of alumni and other friends from business and industry to partner with us for vital projects, programs and facilities.

Since my arrival the first of April, I have participated in the formal opening of the Marcus Nanotechnology Building that will allow us to expand important research in that field and the groundbreaking for the Zelnak basketball practice facility that will

provide much needed practice space for both the men's and women's teams. Construction is now under way for the G. Wayne Clough Undergraduate Learning Center. All of these are visible reminders of the wonderful resources ahead for Tech students, faculty and staff.

In addition to supporting facilities, our alumni and other friends are helping to make a dream come true for students participating in the Tech Promise program. Through their generosity, we are able to offer qualified in-state students whose families meet the income requirements a debt-free Georgia Tech education.

One of the most rewarding parts of my job is being with students, cheering them on at recognition events or athletic competitions or just talking with them on campus. This fall we will welcome the largest, best

qualified and most diverse freshman class in Tech's history. Freshman applications are up 15 percent from last year. We had 11,000 applications for 2,400 slots. We [will welcome] more than 60 new President's Scholars from 20 states. ... These scholars excel not only academically, but also in a myriad of other areas including sports, music and community service. Some have already done research. They have barely stepped foot on campus and they are already innovators. We will know we have done our job when we prepare these and other students to use their gifts and talents to make a difference in an ever-changing world. As a top-10 research university, Georgia Tech is poised to play an even greater role in our society.

We have already begun our work to develop a university-wide strategic plan to envision what the Institute should look like in 25 years at the 150th anniversary of its founding. The process will be inclusive and comprehensive, and in fact, we plan to invite the entire campus community to join in a series of directed discussions on Sept. 3 as part of the investiture activities. I am looking forward to the investiture as an opportunity for us to showcase Georgia Tech to the community and as a celebration of good things to come.



Larry Harwood

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*From Georgia Tech Global Learning Center (GLC) meeting evaluation, an online survey sent to planners of meetings held at the GLC.

Larry King Talks Heart to Heart

Health Across America campaign raises awareness of sudden cardiac arrest

By Kimberly Link-Wills

Eight hundred men, women and children will die in America today because of sudden cardiac arrest.

"For every minute that bystander CPR doesn't get started, your chance of survival is 10 percent less," Clyde Yancy, medical director of the Baylor Heart and Vascular Institute, told Larry King during a panel discussion the CNN talk show host moderated at the Global Learning Center in June.

Hosted by Georgia Tech and Saint Joseph's Hospital, the Larry King Cardiac Foundation brought renowned physicians and a health fair to Technology Square to raise awareness of sudden cardiac arrest and the need for widespread availability of portable automatic external defibrillators.

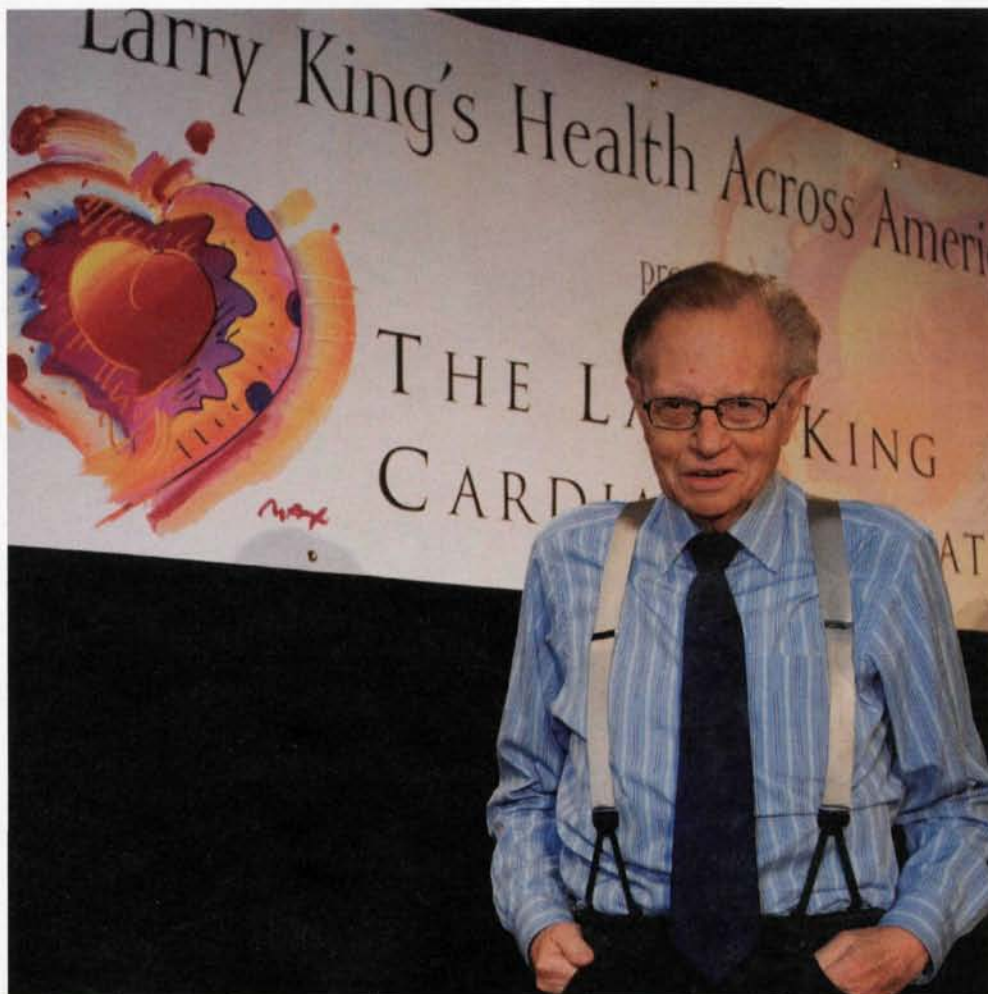
"Everyone in here can learn to save a life today," Yancy said. "The AEDs are incredibly easy. You open them up and listen. That's all you have to do. The CPR is straightforward."

Audience member Sue Cunnold provided proof for the physicians' assertions that sudden cardiac death can occur without any warning signs. Her husband, Derek Cunnold, a retired professor from Tech's School of Earth and Atmospheric Sciences, collapsed and died on a tennis court six weeks before the panel discussion. [An obituary appears on page 80.] CPR was performed, but a defibrillator was not available.

"He was 68. He had just had a complete physical," she said. "His doctor said he was one of his healthiest patients."

Many Americans, however, increase their risk for heart disease by failing to keep their weight, cholesterol and blood pressure in check.

"You can't wait until you're 60 to decide to get healthy," said Gina Price Lundberg,



Eric Turner

founder and director of the Heart Center for Women at Saint Joseph's Hospital.

King asked, "If you had the power, would you ban M&M's?"

Yancy interjected, "I'm a fan of chocolate M&M's actually. Like every other indulgence, it needs to be handled in moderation."

King retorted, "M&M's are impossible in moderation."

Lundberg said that advances are being made in technology as well as pharma-

cology, but "human nature still takes over."

"Most of my patients do not want to get off the couch and exercise. They don't want to forgo the doughnuts and bagels. They don't want to eat healthy and make the difficult lifestyle changes. Right now 60 percent of women in America are overweight or obese," she said.

King asked, "So we're killing ourselves?"

Lundberg nodded. "We're making bad choices."



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Elton John, Institute Share Stage at BIO Convention

By Leslie Overman

The 2009 BIO International Convention put Georgia Tech on a world stage beside such big-name performers as Sir Elton John.

More than 14,000 people from 58 countries participated in the four-day convention in May at the Georgia World Congress Center in Atlanta.

John, founder of the Elton John AIDS Foundation, said in a keynote speech that despite the many advances in AIDS/HIV treatment and research the disease is still winning and the bio industry must do more to combat it.

"We are in the third decade of this epidemic," he said, "and, shockingly, the American public health establishment isn't resourced well enough to fully deploy existing treatments and technologies that are proven to save lives."

"There are new biomedical technologies ... which must be evaluated for potential use. This is why our professional efforts and your advocacy are desperately needed," John said.

In a press conference later that day, Georgia Gov. Sonny Perdue announced the creation of the Global Center for Medical Innovation. Georgia Tech, which was an exhibitor at the BIO Convention, will be teaming up with Saint Joseph's Translational Research Institute, Piedmont Healthcare and the Georgia Research Alliance to establish the center, which will bring together physicians, scientists and engineers to ramp up development and commercialization of next-generation medical devices and technology.

The center will be located adjacent to campus in Technology Enterprise Park and will include a medical device prototyping center. The first of its kind in the Southeast, the center initially will focus on devices in cardiology, orthopedics and pediatrics.



One Giant Tweet for Mankind

In a day sure to be enshrined in the annals of social networking, Astro_Mike, aka Mike Massimino, a former associate professor at Tech, posted the first Tweet from space at 1:33 p.m. May 12. Massimino gave his Twitter followers an inside look at the NASA space shuttle mission to repair the Hubble Space Telescope. Here is a selection of his Tweets:

@foxnews thanks for the great article, you mention our mission is risky — how come nobody told me about that? I'm always the last to know 8:39 AM Apr 7th from web

Cooking dinner for me and my family, we are having tostadas, too bad I can't make them in space (would be too messy) 4:29 PM Apr 7th from TwitterBerry

no plans to service hubble after shuttle, our mission will be the last, hopefully the telescope will work for another 5 to 10 yrs. 9:40 PM Apr 21st from web in reply to ScottMB1

All morning class on spacewalk repair of damaged space shuttle, fixing shuttle tile is almost like spackling drywall but with cooler tools 10:43 AM Apr 30th from TwitterBerry

Going over all of our checklists and notebooks for the flight, spaceflight is an open book exam — thank goodness! 1:11 PM Apr 30th from TwitterBerry

Practicing the install of the new hubble wide field camera which will take really cool space images, unlocking the secrets of the universe 12:14 PM May 4th from TwitterBerry

Putting notes in my flight notebook, making phone calls, and trying my best to relax, adrenaline is starting to flow 12:16 PM May 7th from TwitterBerry

I'm going to put my spacesuit on, next stop: Earth Orbit!! 6:11 AM May 11th from TwitterBerry

From orbit: Launch was awesome!! I am feeling great, working hard, & enjoying the magnificent views, the adventure of a lifetime has begun! 1:33 PM May 12th from web

From orbit: Hard to sleep last night after my spacewalk, images of the work and the views still vivid in my mind. 8:36 AM May 18th from web

From orbit: Our fifth and final spacewalk is over, everyone is happy, time for a crew dinner to celebrate! 1:25 AM May 19th from web



From orbit: Eating chocolates in space, floating them in front of me then floating and eating them like I am a fish 1:26 AM May 19th from web

From orbit: Getting ready for bed, sleeping in space is cool, tie down your sleeping bag and float inside of it, very relaxing 1:27 AM May 19th from web

From orbit: Listening to Sting on my ipod watching the world go by — literally 3:04 PM May 19th

From orbit: The stars at night in space do not twinkle, they look like perfect points of light and I can clearly see the milky way galaxy 5:33 AM May 20th from web

Just got home after landing in California, it was an awesome mission, but it is good to be safe at home with Hubble all fixed up 9:36 PM May 24th from web



Lorraine's Record Numbers

The perilous state of the economy, and the resulting lack of opportunities for students, is proving to be a boon to Georgia Tech-Lorraine in Metz, France.

Enrollment at the Institute's first international campus reached a record level for the summer session. Last year, 127 students were admitted to the program. That number increased dramatically this year as 250 students sought to spend the summer semester in France. Only 200 were accepted, a 58 percent enrollment increase.

"In today's economy, we've noticed a significant decline in domestic internship opportunities," said Yves Berthelot, president of Georgia Tech-Lorraine. "Given Georgia Tech-Lorraine's strong reputation for academics and research, it represents a tremendous value and opportunity for students to study and experience Europe in the heart of France."

Lorraine provides students with international experience to prepare them for today's competitive global marketplace.

"We try to take advantage of our unique location in Europe," Berthelot said. "For instance, this summer the 200 students and faculty were invited by European member of Parliament Nathalie Griesbeck for a special tour of the EU parliament in Strasbourg, just 90 minutes from Metz."

Newest Cancer Scholar

Manu Platt, who joined the faculty of the Wallace H. Coulter Department of Biomedical Engineering at Tech and Emory in January, has been named by the Georgia Cancer Coalition as one of 19 scholars for its Distinguished Cancer Clinicians and Scientists program for 2009-10.

Platt, PhD BME 06, will receive \$50,000 each year for five years to support his research efforts. The coalition selects scientists engaged in the most promising areas of cancer research. Currently, Georgia Tech has 11 active distinguished cancer scholars.

Platt earned a biology degree at Morehouse College. He did postdoctoral training at MIT.

He will continue his research on stem cells, focusing on their reparative and



Manu Platt, above, and John McDonald, below, are among the scientists at Georgia Tech who are engaged in cancer research.



regenerative abilities, with particular attention to their homing and integration into damaged tissue.

Urgent Aircraft Upgrade

When the Air Force found that one of its key combat aircraft needed more protection from an enemy missile threat, a multi-disciplinary team from the Georgia Tech Research Institute went into action.

The problem was a pressing one. The A-10 attack aircraft, an Air Force workhorse, needed important additions to its electronic warfare countermeasures systems.

At issue was the ability of the A-10 to detect infrared signals from certain classes of enemy weapons. The A-10, an attack aircraft that flies at lower altitudes to use its heavy guns and missiles against ground targets, could be vulnerable to those weapons.

The effort, called the A-10 Infrared Countermeasures Program, was on a tight

schedule from the start, with 200 days to move from concept to flight test. Engineers from across GTRI pulled together to meet the deadline, and the upgrade is now active on the U.S. A-10 fleet worldwide.

Snake Slithering Secrets

In news that's sure to be of interest, or terror, to ophidiophobes everywhere, the mechanics of snake movement have been discovered to work quite differently than previously supposed.

Researchers at Georgia Tech and New York University have learned that snakes slither using friction generated by their scales and redistribution of their weight, according to an article in the journal *Proceedings of the National Academy of Sciences*. Previously, scientists believed snakes moved by pushing laterally against rocks and branches.

"We found that snakes' belly scales are oriented so that snakes resist sliding toward their tails and flanks," said the paper's lead author, David Hu, an assistant professor in Tech's George W. Woodruff School of Mechanical Engineering. "These scales give the snakes a preferred direction of motion, which makes snake movement a lot like that of wheels, cross-country skis or ice skates."

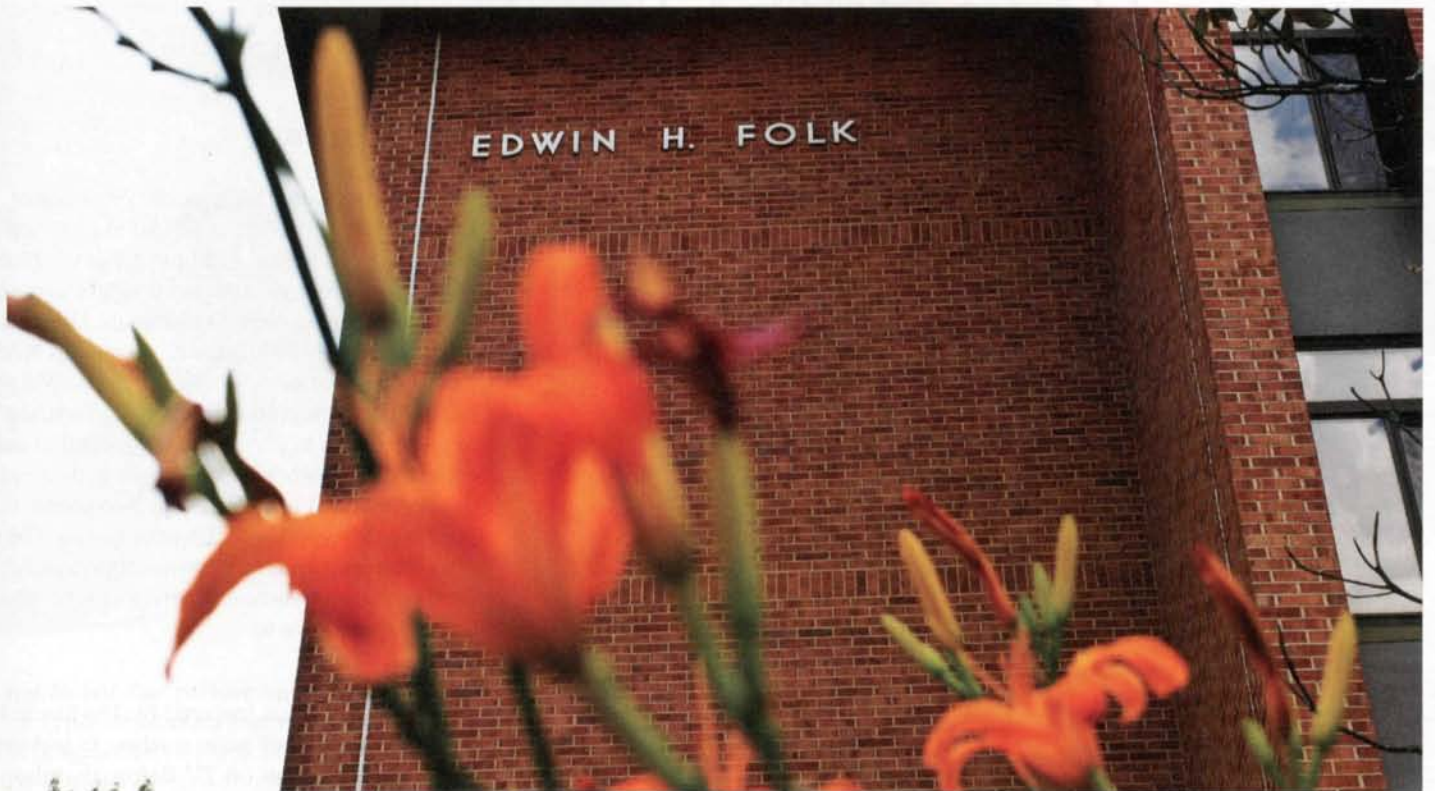
Snakes on ice skates. Now that's terrifying.

The Cost of Intelligence?

The fact that chimpanzees showed lower rates of cancer than humans has long intrigued John McDonald, chair of the School of Biology and chief research scientist at the Ovarian Cancer Institute.

In an article in the journal *Medical Hypothesis*, McDonald examined gene expression patterns in chimps and humans and found differences in apoptosis — programmed cell death, and one way the body destroys cancer cells — that suggest humans don't "self-destroy" cells as effectively as chimps do.

"We believe this difference may have evolved as a way to increase brain size and associated cognitive ability in humans, but the cost could be an increased propensity for cancer," McDonald said.



Eric Turner

Edwin H. Folk Residence Hall

The year of 1959 was a "rare and tragic one," wrote the editors of the 1960 *Blueprint*. That December, Georgia Tech lost two of its "finest teachers and gentlemen," Hal C. Brown and Edwin H. Folk. The yearbook was dedicated to the professors, both members of the English department.

In September 1969, nearly 10 years after Folk died in an Atlanta hospital following a short illness, the Edwin H. Folk Residence Hall opened as part of a new dormitory complex on the west side of the Tech campus. A program published upon the opening of the complex stated that the dorm would accommodate 160 seniors and juniors, with rent at \$117 per quarter.

Aside from a one-year stint teaching English and Latin at a high school in Brunswick, Ga., Folk spent his entire career at Georgia Tech, instructing students in literature, composition and public speaking for 35 years.

"To the young student he appeared to be almost a typification of the college English teacher — remote, blase — a man perfectly capable of reciting *The Iliad* without opening a book," wrote Georgia



Tech *Alumnus* editor Bob Wallace in February 1960.

Despite his aloof demeanor, Folk often is referred to in documents housed in the library's archives as one of the most popular English professors of his time. Folk made a point of teaching his students, many of them preparing for careers in engineering, not just how to communicate through writing but also through speaking, encouraging them to read aloud in class and assigning them oral reports.

In 1940, he co-authored with English department head A.J. Walker *Handbook for Public Speaking*, a textbook that was used in Tech's public speaking courses.

Outside of the classroom, Folk was an adviser to the Tech Debating Society. He took pride in the post and often referred to himself as Coach Folk, said Wallace, who recalled in the *Alumnus* how Folk recruited Yellow Jackets football players Wade Mitchell and Dickie Mattison for a 1956 match against Harvard about the merits of college football.

"College debates normally don't draw crowds but this one did. And nobody was happier about it than Ed Folk."

— Leslie Overman

Ayanna Howard: The Life Robotic



Eric Turner

By Leslie Overman

Ayanna Howard, an associate professor of systems and controls in the School of Electrical and Computer Engineering and founder of the Human-Automation Systems Laboratory, works to equip robots with human cognitive abilities. Howard came to Georgia Tech in 2005 after 12 years with NASA's Jet Propulsion Laboratory, where she developed software for the Mars exploration program. At Tech, she's turned her focus to Earth-bound robots that assist people in their homes and scientists in the field. In June, she traveled to Alaska with two graduate students to test out SnoMotes on a glacier. The robots, which look like miniature snowmobiles, gather scientific data in treacherous environments so scientists don't have to.

As seen on TV: I was inspired by *The Bionic Woman*.

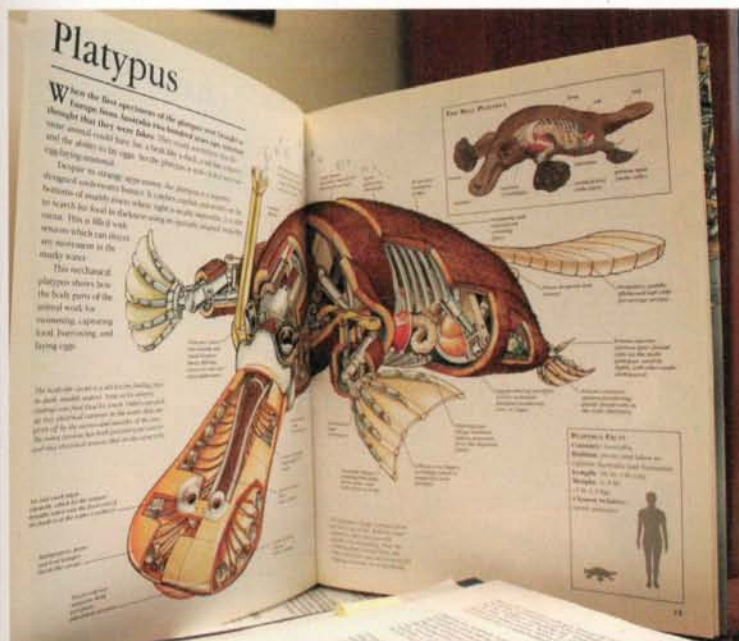
At that time, they were starting to put very powerful females on TV. Before that they were always real girlie. I watched *Wonder Woman* and *Charlie's Angels*, but when this one came on, I just thought it was so cool she was bionic. I said, "That's what I want to do in life — I want to build the bionic woman."

Collector's item: Someone gave [a *Bionic Woman* comic book] to me. In fact, someone gave me an autographed picture of Lindsay Wagner. They came into my office and said, "My mom knows her. She lives down the street from us."



Research focus: I do what you would call robotics that are required to interact with people. For robots to interact with people, they should think a little bit like people.

On SnoMotes: What we want to do is provide scientists a tool to pull science data in these icy, very cold, hazardous types of terrains. In terms of looking at climate change and what's going on with the ice sheets and how they're melting, it all deals with how much data you have.



About her Robot Zoo picture book: This artist went through all of the types of animals that exist and made them into robots. As an engineer, I can look at the mechanics of them and look at the sensors. It's just about being inspired, basically taking art and making it reality.

In the works: I'm designing a robot playmate for children with motor impairments, focusing on children with cerebral palsy. It's a robot piano maker. What happens is you use a switch to act as your communication device. We'll put a virtual piano on a screen and integrate it with the switch. You choose your keys and that will be sent to the robot, and the robot will play whatever the child wants to play.

If she built her own Transformer it would: Transform into a hybrid personal assistant to fetch my mail (it will need legs to climb the steps), make my tea (it will need an automatic brewer onboard) and drive me to work (it will need wheels).

Hackers: Georgia Tech students are really good at hacking. This was originally a toy, and we hacked it. One of the challenges I face is that because [our robots] are for typical people, the cost can't be like what we, as researchers, buy. If you start with toys, you can do it with something that's low-cost and put the real guts and challenge in the software. Then you have something you can sell at Target for 300 bucks instead of 30,000.



What robotics really

is: One question I was asked recently was:

"There are really no robotics jobs, so if I go into robotics, what will I do?" What robotics really is is systems engineering. You have to figure out how to get everything to work together. Our society is full of systems. Robotics people make really good project managers.



Hometown: I was born in Rhode Island, but I was there for maybe a year and then we moved to California. So I'm basically a California girl. Up until four years ago, I'd actually lived in California all my life.

A family affair: My son will be 7 in September. His name is Zyaire. He wants to be a train conductor or a train engineer, an astronaut, an architect.

Inspiration: I'm inspired by toys. One of the things I do is when I have an idea or have a concept, I go out and try to find a toy that matches what I'm thinking.

On appearing in TIME "Rise of the Machines" article in 2004: Reagan had passed away maybe a month before, so he was on the cover. I was like, "Oh my gosh, everyone's going to have this for his whole story." That was exciting, and they did a good job.



Robots on film: I don't like watching movies with bad robots, like *Terminator*. I think that just gives us a bad name. When a robot movie comes out, I usually try to see it. I think that robotics is totally inspired by art, by the creative. One of the things about watching those movies, it gives you a public perception of what people would want or really think about robotics.

Popular robotics: Lately I've seen an upsurge of students wanting to do robotics. It used to be, "I want to do Internet stuff, I want to do computer stuff," and now they're saying, "I want to do robotics" — even if the movies aren't always good.



The Trim Shop

Eli Sotto's skills as a barber helped him survive the Nazi concentration camps

Story and photographs by Van Jensen

Just across West Peachtree Street from Technology Square, beside the Biltmore's entrance, stands an innocuous wooden sign advertising the Trim Shop Barber Shop inside the hotel's lower level.

There, in a broad, many-mirrored room with three barber chairs and a ceiling of

exposed pipes, an unassuming 87-year-old barber goes about his trade. Eli Sotto talks softly in a heavy Greek accent as he skillfully cuts hair and shaves stubble.

His hands move in motions memorized over his seven decades in the business — the last 56 of which have been near Tech's campus. A Buzz bobblehead nods approvingly from the counter.

It's a calm scene that could have inspired a Rockwell painting. Then one of Sotto's regulars, a large man with a thick Southern drawl, pointed to Eli and said, "You know he's a Holocaust survivor, right?"

Sotto's story, it turns out, is not so unassuming after all.

Born in Greece in the 1920s, Sotto was raised in a Jewish family of nine in

Thessaloniki. Life was peaceful, Sotto remembered.

The only struggle came when Sotto's father, a barber, fell ill. Eli and his brother took over the business to support the family. Then, in 1940, at Hitler's urging Italy invaded Greece, and German troops soon followed.

Jews were segregated into ghettos and starved. Sotto stood suddenly from his barber's chair, explaining how the German soldiers would break from their marching to attack women and children on the sidewalks.

"They would kick and step on the stomachs of children, of babies!" he said, miming the action. "How a man could do that?"

Eventually, Sotto, his family and the other Jews in the city were taken to Auschwitz, the first of seven concentration camps Sotto would be held at before war's end.

"I don't know myself how I survived," he said. "A miracle. Five times I was selected to go to the gas chamber, but each time it was busy or I slipped away."

Sotto's stories go on for hours, tales of miraculous survival. None stand out like when he was in Landsberg, Germany, during the last year of World War II. He was asked if he had any skills, and he offered that he was a barber.

Sotto was sent to the barracks to shave the head of the German commander. Inside, he was handed a razor as guards leveled their rifles. As Sotto tensely carried out the task, he suddenly nicked the commander's ear. Having no towel to stanch the blood, he tried stopping it with soap and discreetly wiping it away.

Once Sotto had finished, the commander rose and examined himself with a mirror. Putting it down, he jotted a quick note and handed it to the guard, who then escorted Sotto outside.

"I said, 'That's no good,'" Sotto said. "I thought I was dead."

The guard took Sotto into another building and handed the note to another German, who took Sotto into a back room. There, he handed Sotto bread and cheese.

"A miracle," Sotto said again, finishing the story.

He and a younger brother were the only family members to survive the camps. Sotto returned to Greece and married another Holocaust survivor, Lucy Levy, and later immigrated to the United States. They came to Atlanta after hearing its climate was similar to that of Greece.

Lucy Sotto died in 1994. Eli said he keeps working because he doesn't want to be alone at home, left with only photographs and memories.

As he talked, the TV showed President Obama visiting the D-Day memorial in Normandy. Sotto's eyes filled with tears, his thoughts lost in memory.



World War II Story Inspires Student Project

Marisa Benson, a history, technology and society graduate student at the Institute, first heard about Eli Sotto from her husband, a regular at the Trim Shop.

"I think the first time [Sotto spoke of the Holocaust] was when my husband wanted to know how Eli knew so many languages, and Eli responded that he'd learned them in the camps," Benson said.

About the same time, Benson had an assignment in a methodology class to gather qualitative information covering both sociology and history. Immediately she thought of Sotto.

"I decided that I'd do much more than what the assignment called for and actually get Eli recorded on a DVD and transcribe the entire hourlong interview so that I could give both the DVD and transcript to his family," she said. "I turned that in as the assignment, but then as I started finishing the product for his family, I started researching each name that was unfamiliar to me."

What resulted is a slim, black hardcover volume titled simply *Eli Sotto: An Oral History*. The book is filled with footnotes, showing Benson's research into some of the lesser-known bits of history that Sotto witnessed.

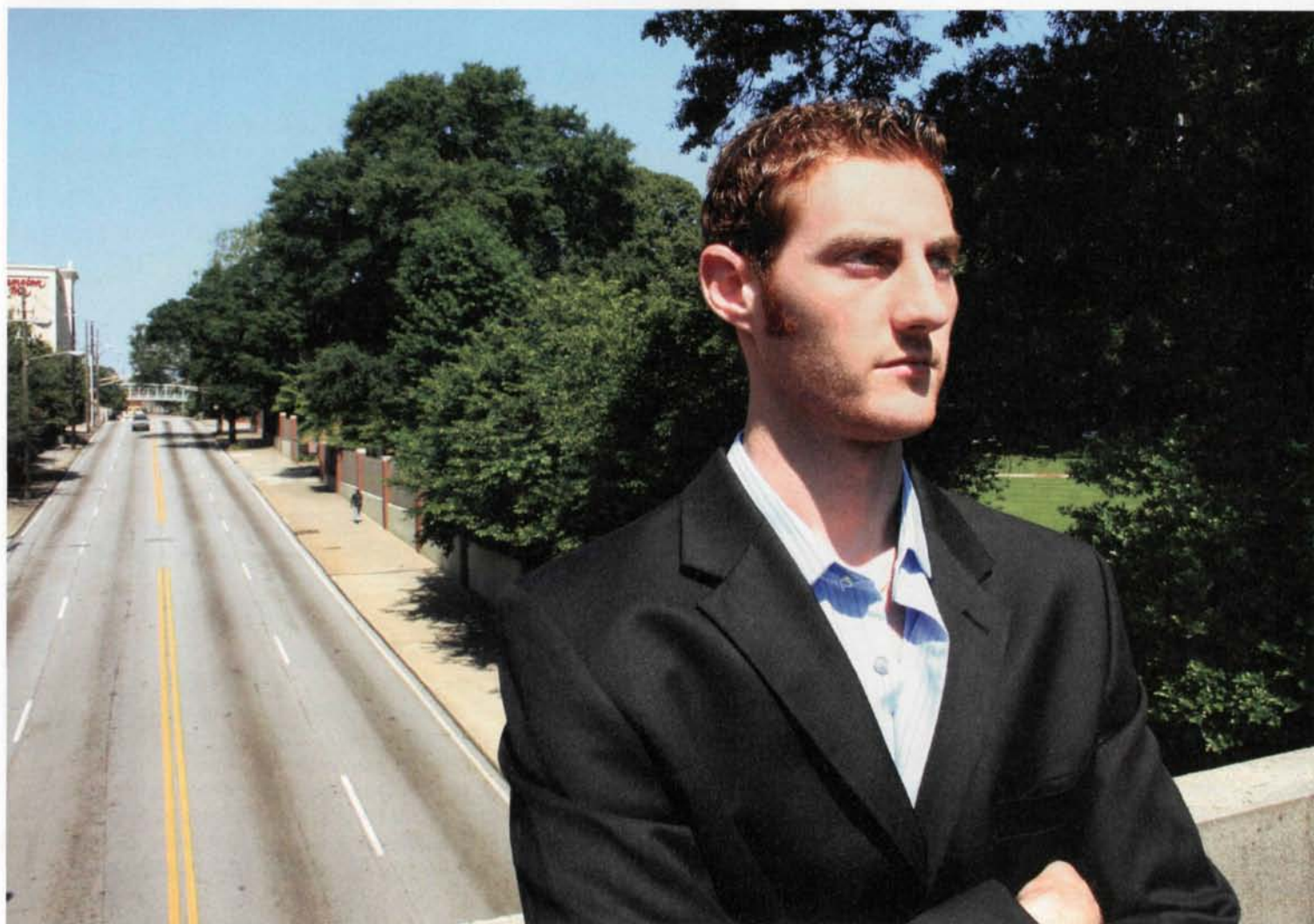
Benson had always focused on World War II in her studies — she and her husband visited Auschwitz in 1996 — but she hadn't known much about the forced migration of the Jewish community in Greece to concentration camps in Poland and Germany.

The biggest surprise was the language history of that Jewish population in Greece.

"The Sephardic Jews in Greece, and other places, spoke Ladino, a Spanish derivative from the time of their origins in Spain before being booted out in 1492 by Isabella and Ferdinand," she said.

— Van Jensen

After Shooting, 'Life Tastes Better'



Van Jensen

By Van Jensen

Until Patrick Whaley was shot through the chest and left for dead, the mechanical engineering student never slowed down.

Before what Whaley refers to as “the whole incident,” he lived a frenetic and fearless life in pursuit of big dreams. Before high school, he’d started two successful ventures mowing lawns and setting up

computer networks for businesses. Then came American Revolutions, an automotive parts distributorship, in high school.

A natural athlete, Whaley would climb trees his friends were trying to saw down, pushing them back and forth until they cracked and fell, leaping to safety at the last second. He would shoulder roll out of moving golf carts for fun. Later he became an Eagle Scout and excelled in football, weightlifting and swimming.

“I guess I thought I was invincible,” Whaley said.

While at Tech, the fifth-year student has completed three co-op rotations, filed two patents and registered a trademark for Omega Wear, his invention of weighted fitness clothing. In 2008, Whaley nearly put together a \$70 million deal for a luxury auto dealership. He still wants to own a dealership — and a winery and real estate and a hospitality services company.

"I want to own one of everything really," he said.

His end goal is to own the Tampa Bay Buccaneers. "But I'd settle for almost any NFL franchise," Whaley said. "I want one by the time I'm 30. It shouldn't be hard, as long as I make billions."

On May 4, Whaley was continuing along his planned path, moving into a new apartment on 10th Street west of campus and readying to take summer classes in order to graduate next spring. Then, as he walked into the apartment's parking garage, three armed men stepped into his path.

"I thought it was a joke at first, that they had a toy gun," Whaley said.

The robbers pushed him to his knees and took his wallet. When one pushed a gun to the back of Whaley's neck, he felt the weight of it and knew it was no toy. The robbers yanked him to his feet. One told him to get into their van, another told him to stay where he was. When Whaley told the robbers to decide what they wanted him to do, one stepped forward with the gun.

"I could see his finger start to compress, and I heard the safety click. I laughed because he didn't even know how to work the gun," Whaley said. "I thought, 'You're not going to get two shots at me.' By the time I reached out to get it, he pulled the trigger."

At first, Whaley didn't realize he'd been shot. His assailants jumped into the van and sped off, and Whaley ran to his car to get his phone and call 911. Running only about 50 feet, he felt out of breath.

"I looked down and saw a circle of blood no bigger than a silver dollar," he said. "The bullet must have been so hot it cauterized the wound."

But the bullet had struck an artery before exiting through his back. Whaley had no idea that he was quickly bleeding to death. All he could feel was the pressure in his chest as his right lung collapsed. He fell to his hands and knees, trying to guide the 911 operator to the now-empty garage.

Suddenly, the elevator door opened and three women stepped out. Whaley slid his phone across the floor to them, asking for help. One went outside and flagged the ambulance driver, who hadn't been able to find the garage entrance. Another woman

stayed with Whaley, asking him again and again if he could remember his birthday. "I was like, 'We can talk about regular stuff,'" he said with a laugh.

Whaley credits staying calm and not going into shock with saving his life. Even at the hospital, he remained coherent.

"When they cut my shirt off, I was like, 'Damn, that was my favorite shirt. I could've just pulled it off!' In the ER, I was so coherent they didn't know how much trouble I was in," he said.

It wasn't until a week later that Whaley realized how close he'd come to dying. He asked his surgeon how soon he could return to exercising, and the doctor explained that Whaley was the only living person he'd ever seen come through an operating room who had a bullet rupture his inferior vena cava artery.

The bullet had come within a breath of striking Whaley's spinal cord and heart. It missed the latter organ only because Whaley's heart contracted as the bullet ripped through his chest.

Whaley lost 60 percent of his blood and 20 pounds. Surgeons had to break two of his ribs and remove 30 percent of his right lung. "I don't know if I can body build again. I don't know if I can swim again," he said.

In late June, police arrested three Atlanta teenagers believed responsible for the shooting and other armed robberies around campus.

While Whaley said he wasn't scared during the confrontation, he said he continually has nightmares reliving the attack, but in his current, weakened condition. Whenever his girlfriend or any friend is late to his apartment, he now feels anxiety. He worries for his mom, who cries herself to sleep every night since the attack, he said.

"I realize I need counseling in order to best manage my life without this apprehension, but I sincerely believe this is a normal grieving process that is necessary to experience fully in order for me to recuperate physically, emotionally and spiritually," Whaley said.

"I fully intend to devote closer attention to my most important life matters and to not take any moment for granted, as none of us

have any guarantees in life," Whaley said.

While he said the whole incident has calmed him down, Whaley hasn't lost his drive to succeed. He's used the attention from the shooting to help promote Omega Wear, the skintight athletic shirt filled with solidified hydrogel.

Even stuck in the hospital bed, drugged with morphine, Whaley was coming up with ideas. One is for an underlying mesh on hospital beds that could be moved. The current models of hospital beds compress your body when you adjust them, he said. "If you have internal injuries, that hurts a lot."

Whaley plans to graduate in May and immediately start working on an MBA, also at Tech. "I absolutely love it at Tech," he said.

Looking back at the shooting, he first said, "I just happened to be in the wrong place at the wrong time." But then he thought a moment and said, "Maybe it was meant to happen. I don't know why I would be here unless there's a purpose."

"This incident has changed my life. Everything tastes better. Life tastes better."

Campus Safety Initiatives

"Georgia Tech, led by President Peterson and other key administrators, has developed and implemented a number of very serious and significant plans that will enhance the safety and security of our students, faculty and staff on campus," said Alumni Association president Joe Irwin. "Many of the crimes taking place are 'around' Georgia Tech, not on the campus proper, which calls for excellent collaboration between Tech and Atlanta police. That collaboration is under way and both security forces are working very well together."

"One of the most critical initiatives is building awareness among our campus community and visitors about their personal safety," Irwin said, adding that more information is at studentaffairs.gatech.edu/parents/pdf/Safe_Campus_Initiatives.pdf.

Kayaking the River Mild

Club welcomes novices to have a go at paddling the Chattahoochee

By Van Jensen

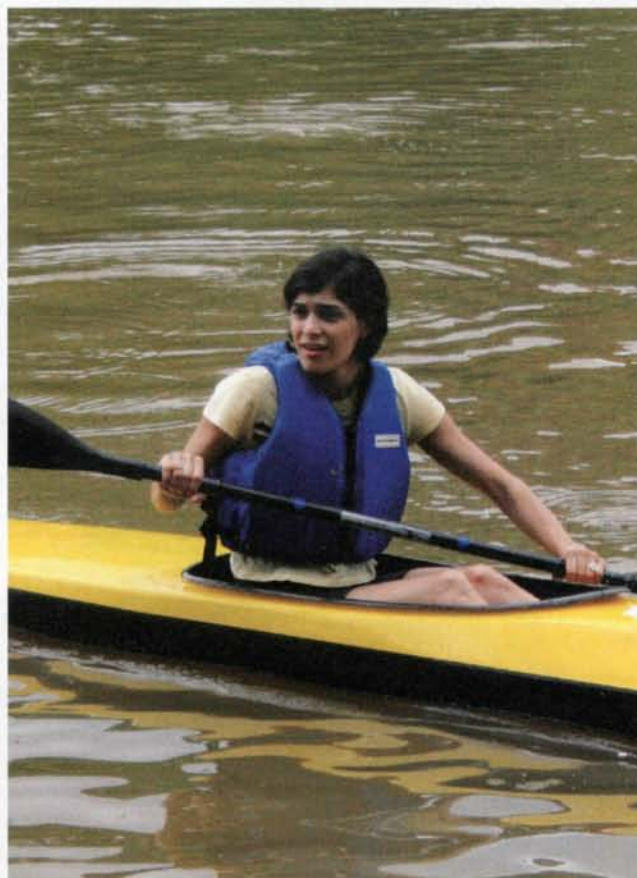
When Johanna Stark, president of Tech's kayaking club, asked me to come visit a Saturday morning practice, she warned to "bring an extra pair of clothes." Trying one's hand at kayaking, it appeared, meant good odds of getting wet.

I met up with Stark, a fourth-year chemical engineering major, and six other members of the 20-person team at a Roswell country club, where they launch into the Chattahoochee and glide up and down the smooth river. The kayaking club, founded in 2000, competes in flat-water racing only, so no rapids or oceans.

The day's training plan began with stretching and continued with a jaunt upstream and then back down, a couple of hours total on the water.

For myself and Mehrsa Raeiszadeh, a second-year chemical engineering student and fellow first-time kayaker, the goal was much more modest. "We'll work on staying balanced," said David Goodman, Arch 04, M Arch 06, one of the club's founding members and its current coach. "It's more sturdy than it looks. You just have to convince yourself you're not going to fall."

We carried the boats down to the launch. As most team members swiftly paddled off down the river, through groups of honking geese, Goodman explained the basics of paddling to Raeiszadeh and me. There's a one-two-three-four rhythm to it, he explained, noting to keep the paddle low.



Photos by Van Jensen

First-time kayaker Mehrsa Raeiszadeh quickly takes to the water.

Having experience on rafts and canoes, I was moderately confident that, at least, I wouldn't embarrass myself. Raeiszadeh, however, was nervous. As she watched the other team members glide off, she sounded as if she had second thoughts about the entire endeavor.

Goodman joined the team in its inaugural year as a freshman, having never kayaked before. He's always stressed a casual approach. When the Tech team first organized the collegiate kayak championship, its members pushed to

include a recreational division. That makes it easier to grow the sport, Goodman said.

"We do it for fun," he said. "Of course, we also won five straight championships."

For Goodman, that mix of skill levels means training the more experienced team members in nuances of technique and, on occasion, helping first-timers simply stay afloat.

That was the task at hand as he showed Raeiszadeh and me how to plop into the narrow 15-foot-long boats as they bobbed beside the launch. Even just sitting there, gripping the dock, it was a challenge to avoid falling. Anything short of perfect balance seemed to send the small boat into tremors.

"Oh, I don't know about this," Raeiszadeh said, waving her arms to keep from tipping. Meanwhile, I fared pretty well even as Goodman reached out and shook the edge of my kayak, bobbling but keeping level.

Then Goodman handed us paddles.

Raeiszadeh grabbed hers and tentatively dipped it in the water.

Then, in a flash, she paddled off, a duck in water, so to speak.

While she shot away — "Stay upstream, where I can see you," Goodman called out — I took my first stab into the water. And the second my paddle touched Chattahoochee, I felt my balance cave and — SPLOOSH — right in the river. "The water's actually pretty warm today," Goodman said. Warm being a relative term.

"Flip it over," Goodman said as I swam the boat back to the launch. I pulled myself up, and he said, "Don't worry about it. I



Tony Reass, a fifth-year civil engineering major, carries his kayak to the Chattahoochee River at a Roswell country club to launch an upstream training run.

stopped counting about the 200th time I fell in."

The second time I fell in — again, as soon as paddle touched river — he reminded me to hold the paddle lower to maintain balance. "One of our best paddlers took a month to make it 100 yards," he said. I would've settled for one.

The third time I fell in — after one successful stroke! — I pulled myself out again and marveled at Raeiszadeh, who zoomed across the water. "It's easier for girls," Goodman shrugged.

Realizing I wouldn't make it any

farther for the day, I told Goodman and Raeiszadeh to go ahead and paddle around some.

"It was nice knowing you," she called out as they receded into the distance. A joke, I think.

When practice brought the team back near the launch, they put on a sprinting display, paddles striking the water violently but smoothly, the kayaks rocketing along.

Adam Moore, a fourth-year civil engineering major, was easing back to the dock when, suddenly, he yelled out, "Oh,

I'm falling," and promptly keeled over into the water. With an embarrassed grin, he pulled his kayak onto the dock.

He and Matthew Stone, AE 06 — alumni are allowed to compete in all but one competition — joked about their first efforts at keeping balanced. When I mentioned my repeated falls, Moore said not to worry about it.

"It was two weeks before I even held a paddle without falling in," he said. "It's a tough sport, and it just takes a lot of patience."

"A lot of patience," Moore echoed.

Have Kayak, Will Travel

When Sarah Vaden began packing for a two-and-a-half-month summer sojourn in Europe, the rising second-year aerospace engineering major had to make some sacrifices. She stuffed all of the essentials into just one suitcase — ditching a hair dryer and her favorite pair of jeans — to reserve her other bag for a 10-foot inflatable kayak.

In a travel blog chronicling her European vacation, Vaden described the wide-eyed expressions of onlookers as she pulled the inflatable boat from her backpack May 31 to take part in the Vogalonga, an annual 30K regatta through the canals of the Venice lagoon, at which she snapped the photograph of part of her face at right.

"The look on people's faces when they saw me take my kayak out of the backpack, inflate it and then hop on the water was absolutely priceless," Vaden wrote. "I think I win the prize for the most portable boat."

A member of the Tech Canoe and Kayak Club, Vaden told the ALUMNI MAGAZINE, "Kayaking for me is something I couldn't go a whole summer without — especially a summer in Europe with tons of new places for me to explore by paddling."

Vaden squeezed the daylong trip to Venice in between a two-week stay in Ireland for a course in contemporary Irish literature and a two-month stint in Belgium, where she performed research at the von Karman Institute for Fluid Dynamics.

Using the institute's "plasmatron" wind tunnel, Vaden and other researchers simulated the harsh environment space



vehicles encounter upon re-entering the atmosphere. "In short," Vaden said, "we research the re-entry of a space vehicle into the atmosphere in order to design better thermal protection systems."

Vaden also made time to explore other parts of Europe, visiting Buckingham Palace and Normandy Beach, spotting seals on the Blasket Islands, riding horseback through the Dingle, Ireland, mountains and planting a kiss on the Blarney Stone.

She also used her travels to practice her French. In response to an ill-fated attempt at kayaking in Strasbourg, France, in late June, Vaden wrote in her blog, "C'est la vie."

Team Curious Wins Honors at Imagine Cup

A team from Georgia Tech received worldwide recognition during the 2009 Imagine Cup world finals in July sponsored by Microsoft Corp.

Georgia Tech's Team Curious placed first in the competition's MashUp category and was the only U.S. group to receive first-place honors in one of the nine invitational categories.

Team Curious includes Marc Pare, a mechanical engineering student, and Kathy Pham, CS 07, a computer science graduate student. The program they developed aggregates information from traditional news sources on the Web and ultimately presents an authoritative view.

Team Curious was selected from a total of 444 students from 149 teams representing 70 countries and regions around the world.

The Imagine Cup world finals were held in Cairo, Egypt, and included competition in software design, embedded development, game development, robotics and algorithm, photography, short film and design.

Freshmen Born When Braves Lost, Bulls Won

Georgia Tech begins its 121st academic year as the fall semester gets under way Aug. 17.

More than 2,730 freshmen join the Institute this year, including those who enrolled over the summer.

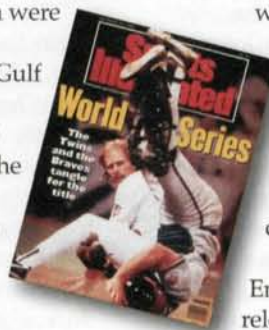
Tech received 11,500 applications, an increase of 11 percent from 2008 and a school record. Those applications came from 79 countries and every state except North and South Dakota.

Females make up 33 percent of the

freshman class, up from 31 percent in '08.

Most of the incoming freshmen were born in 1991. That same year:

- The United States began the Gulf War to liberate Kuwait from Iraq.
- The worst-to-first Braves lost game seven of the World Series to the Minnesota Twins.
- Nirvana's *Nevermind* became the top-selling album, introducing the world to grunge rock.
- Comedy Central launched.



- Michael Jordan and the Chicago Bulls won their first NBA championship.

- U.S. President Zachary

Taylor was exhumed to determine if he was poisoned. He wasn't.

- The Soviet Union collapsed.
- The Super Nintendo Entertainment System was released in America.



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And all the way, to guide their chime, with falling oars they kept their time. -Andrew Marvell

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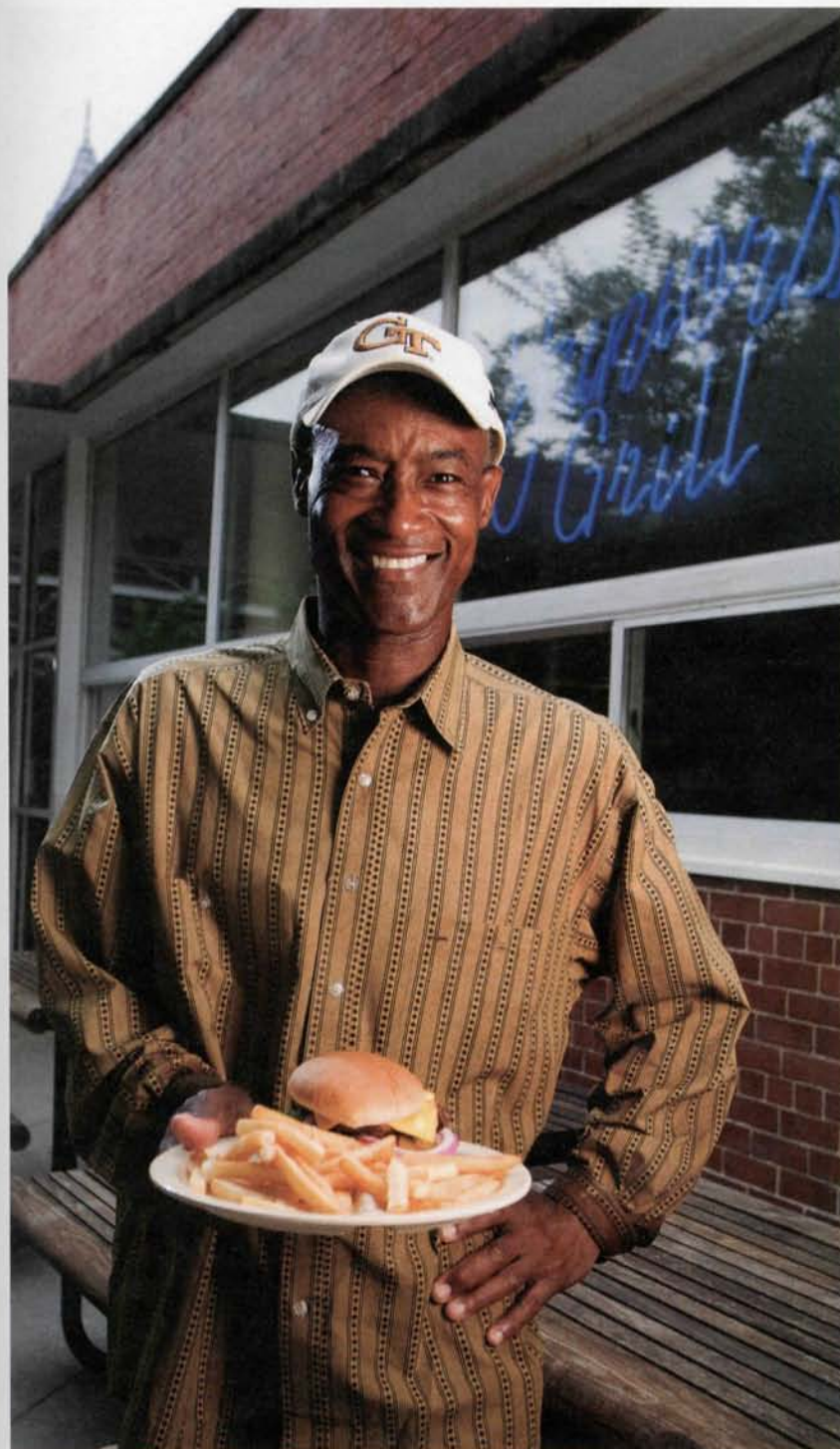
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Walter: The Man Behind the Counter



Eric Turner

Anyone who's stopped in at Junior's for breakfast or lunch has seen him. Walter, the tall, slender man with a ball cap set at an angle atop his head as he takes orders and buses tables. We caught up with Walter to learn more about the man behind the counter.

1. What's your last name?

Gilbert. G-I-L-B-E-R-T.

2. How long have you worked at Junior's?

Oh, you're going to catch up with my age. It's about 41 years. A lonnnng time.

3. What do you like most about working here?

To be around Tech students. Sometimes they come in for a rally, they'll start singing. The students are very nice.

4. Where did you grow up?

In Atlanta, Georgia. My whole life.

5. How did you start at Junior's?

A friend of mine told me about a job at the old place on North Avenue. I was there for a long time.

6. Do you have a family?

I don't. I'm single, never been married. Don't think I will, unless I marry somebody rich.

7. What's your favorite thing on the Junior's menu?

Everything is good on the menu, but what I really like is the cheeseburger basket.

8. What do you do outside of work?

I'll go play basketball at Underground Atlanta. I've been playing almost all my life. I'm old school. I play guard. I hit anywhere on the court.

9. Anything else?

I do like movies. Like *Predator*. And *Samson and Delilah* and *The Ten Commandments*.

10. What do you want to do when you retire?

Win the lottery. [He laughs.] Well, I'm not looking forward to retirement. I'll go all the way to 90 if I can.

— Van Jensen





Joyrides

By Van Jensen

Georgia Tech and cars. The two always have been linked by grease and gears. The Tech community had a love for the automobile even before the Ramblin' Wreck became a manifest symbol of that bond. In 1914, the *Blueprint* made a winking reference to the "Tech Auto Department" — students developing a car called 50, so named either for the number of years it would take to build or the miles it could travel before falling to pieces.

As the automotive industry grew, the bond only deepened. Who developed the Jeep? That would be Roy Evans, a Tech student in the 1920s. What about the Mazda Miata, the best-selling sports car of all time? That would be Norman Garrett, ME 81. The PT Cruiser? That's Bryan Nesbitt, Cls 92.

Tracking down all the tendrils of the relationship is Sterling Skinner, ME 91, MS ME 95, director of instructional labs in the School of Mechanical Engineering and a certified car nut.

"I just keep coming up with more and more connections," he said. "Georgia Tech people have made an enormous impact from the very beginning."

His latest revelation is that Tech's campus and the surrounding area served as the primordial stew that birthed NASCAR. According to *Driving With the Devil*, a history of the sport written by Neal Thompson, NASCAR's roots trace back to Raymond Parks and Jerome "Red" Vogt. Each owned an auto shop at opposite corners of campus where they forged the Southeast's first racing cars. They also supposedly raced through campus.

"There had to have been Georgia Tech students involved, working at those filling stations," Skinner said. "There's no doubt in my mind."

Now, as the auto industry overhauls itself again, we look not only to the past, but also to the current members of the Tech community playing roles in that overhaul. There are student groups making strides in solar power and efficiency. There are researchers working to improve aerodynamics and exploring alternate fuel sources.

There are many Tech alumni making an impact, including Crissy Rodriguez, who helped design 2010's car of the year, the revamped Ford Taurus. And there are students still building cars, like Andrew Fida, who put together a race car from scrap in his spare time just because he loves cars.

Melanie King
A Lamborghini owned by Ed Bolian, PubPol 08, of SuperCar Rentals, was among the super expensive vehicles displayed at the Presidents' Dinner in May.

The Drive for a Better Ride

By Kimberly Link-Wills

Our love of the automobile has not waned despite the economic woes of the industry. And Georgia Tech's students, faculty and graduates are playing vital roles in keeping the carmakers' hearts beating.

"There are significant challenges to the auto industry," said mechanical engineering professor Ken Cunefare, "but industry and academia are rising to the challenge. The industry has not been sitting on its laurels, and Georgia Tech is going to have a major role, I believe, in that transformation through the enabling technologies and through the students."

Tech students serve as sounding boards for a number of technologies important to carmakers. For example, Cunefare said Tech has one of the top acoustics programs in the United States. He ought to know. He runs the Integrated Acoustics Laboratory. "One of the major consumers of our students is the automotive industry. ... Every single ME undergraduate comes through my lab to get an exposure to acoustics and vibration."

"Ford funded my laboratory," Cunefare said of the estimated \$1.3 million the corporation provided for acoustics research.

Cunefare illustrated why acoustics are important to carmakers. "Ford could have made the Escort sound like a Lincoln. They didn't choose to because it was a market discrimination. They wanted to make sure the Escort sounded like a cheap car."

Still, Ford lost at least \$1,000 for each Escort it produced, according to Cunefare, in order to meet federal Corporate Average Fuel Economy regulations, enacted by Congress in 1975, while other automakers opted to pay penalties — to the tune of more than \$500 million.

"There are some people who slam Detroit for not producing fuel-efficient vehicles. They have been producing fuel-efficient vehicles. How much profit do they earn on those vehicles? Usually a negative number," Cunefare said.



Eric Turner

Mechanical engineering professor Ken Cunefare runs the Integrated Acoustics Laboratory.

American consumers were buying far more 5,000-pound vehicles than lightweight Escorts. "The composition of the fleet is driven by us," Cunefare said. "The fuel-economy situation we find ourselves in is a consequence of the market."

"Right now the total U.S. vehicle fleet is over 200 million vehicles. Even today if we started producing nothing but 50-mpg vehicles, it's going to take 10 years to replace the fleet," he said.

Still, cars are significantly more efficient now than they were in the 1970s, Cunefare said. "My SUV now gets 24. The Suburban that I drove as a teenager got 12."

Cunefare said about 5 percent of the world's population is responsible for 20 percent of hydrocarbon emissions.

"What will that fraction become if India and China achieve our standard of living and our same rate of energy consumption from hydrocarbon sources?" he asked. "If we continue to consume energy at the rate we are from hydrocarbon sources and the economic growth worldwide, you're going

to see a continuing increase in atmospheric greenhouse gases."

A land mass the size of India would be needed to produce enough corn to meet the energy need with ethanol, Cunefare asserted.

"The United States is 8 million square kilometers," he said, "but only 20 percent of the United States, roughly, can be used to produce crops. There's not enough arable land in the United States to turn it over completely for ethanol production."

"I think corn ethanol is silly," Cunefare said. "The energy balance is not sufficiently positive to merit doing it, and there are significant environmental and cost-of-living impacts."

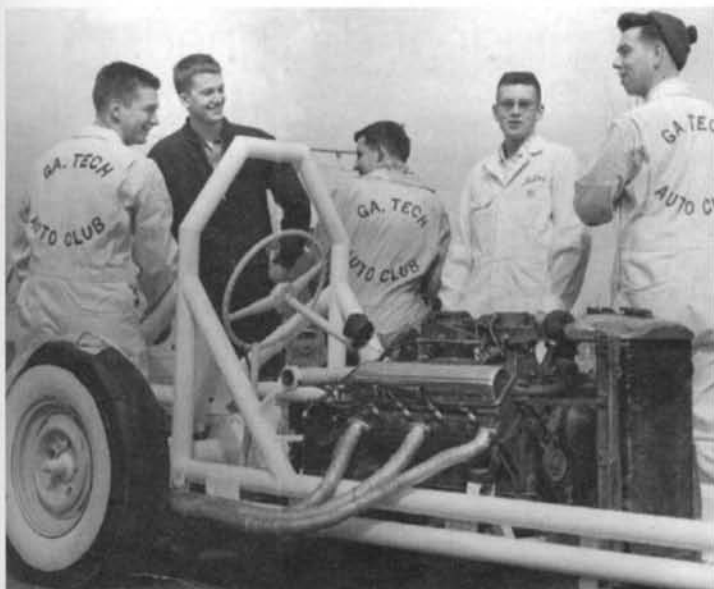
Cunefare does not think the work of colleague John Muzzy is silly. Muzzy, a School of Chemical and Biomolecular Engineering professor emeritus, is converting Southern pines into cellulosic ethanol.

"There is a technology developed at Tech that continues to be scaled up that shows soft wood feedstock produces an ethanol product," he said. "The output target is 80 gallons of ethanol for a ton of wood coming in. The goal is to have a viable production plant in service by 2012."

Tech researchers also are working on improving vehicle aerodynamics. Among them is the Georgia Tech Research Institute's Bob Englar, a principal research engineer in the Aerospace, Transportation and Advanced Systems Laboratory who has developed a technology to shape the airflow around semi-trailer trucks.

"A semi truck driving down the road is just punching a big hole in the air, and it's expending an awful lot of energy just punching that hole in the air," Cunefare said, explaining that Englar's patented technology is reducing aerodynamic drag, a "significant contributor to fuel economy."

"It literally blows air into the air stream coming around the truck, and it prevents the creation of turbulence behind the truck that causes the drag. In the wind tunnel they're showing obscenely good drag reductions."



Fathers of the Georgia Tech Auto Club

In 1954, Tech student Jack Lane brought together some classmates who shared his love of cars and formed the Georgia Tech Auto Club. According to Lane, ME 57, the group started out by building a dragster from scraps of other cars. The first engine came from a Cadillac, and they tested the car above 90 mph, despite having an open cockpit. Some early members, above from left to right, were Lane; Bruce Moore, Cls 58; Fred Lieb, ME 58; Julius Hughes, IE 60; and Clyde Gilbert, AE 61.



Eric Turner

Annual Show Spotlights Gearheads

The Georgia Tech Auto Show roared through campus this spring for the sixth straight year. Students, faculty, staff, alumni and friends mingled among the variety of gas-powered prowess on display. Vehicles included a Cobra, a Mazda racer, motorcycles and plenty of classic muscle cars, like the Camaro above.



President Peterson Remembers Cars of Yesteryear

Georgia Tech President G. P. "Bud" Peterson had a love of cars long before he came to the Institute. He dug up photos of four cars from his teen and college days: 1959 and '60 Morris Minors, a 1959 Austin Healey Bugeye Sprite, above left, and a 1964 Pontiac LeMans convertible, above right, in which he whisked away his bride, Val, on their wedding day.



Above: The GT Motorsports team hoists its new racer after coming in eighth at the SAE Michigan competition. The vehicle has a 60-inch wheelbase, weighs 429 pounds and has a top speed of 55.7 mph. At right: A member of the GT Off-Road team guides the team's new racer through a competition. The vehicle has a 58-inch wheelbase, weighs 400 pounds and tops out at 36.2 mph.

Student-designed Racers Speed Ahead

Members of the GT Motorsports and GT Off-Road teams may love race day, but most of their focus goes to everything leading up to it. The clubs work year-round to design vehicles then tweak each component. This past spring, both teams debuted new cars.

The Motorsports club in May claimed an eighth-place finish, its best in six years, at the Society of Automotive Engineers Michigan competition. Mechanical engineering professor Ken Cunefare has been the Formula One racing team's faculty adviser since 1992.

"It's developing students in a multidisciplinary environment — schedule driven, cost driven, performance driven. It's developing the sorts of skills [automakers] want their engineers to have," he said.

Cunefare also advises the Off-Road team, an up-and-coming program similar to Motorsports, with the notable exception that the vehicle must float through a water hazard. Earlier this year, the Off-Road club finished in the top 25 at the Baja SAE Wisconsin competition.





Solar Jackets Shine Light on Green Power Sources

The Georgia Tech Solar Jackets this spring completed the conversion of a 2001 Audi TT from a gas-powered sports car to a first-of-its-kind solar-assisted electric vehicle. The car runs on a combination of batteries and solar power. Lightweight solar cells coat the car's roof and hood. The solar ray provides 12 volts of power to support the power windows, radio, brakes, power steering and the lights. The Solar Jackets' vehicle also has four-wheel drive. A 120-volt battery pack powers the Audi engine, giving it a 70-mile radius between charges. The car plugs into a conventional wall outlet through a cord that extends from the gas cap.

The Right to Remain Silent

Featuring everything short of the stuffy artificial intelligence of KITT from *Knight Rider*, the Carbon Motors E7 is the first law enforcement vehicle designed from the ground up with policing in mind. Researchers from the Georgia Tech Research Institute assisted Atlanta-based Carbon Motors Corp. in creating the vehicle, which offers greater interactivity for drivers. Production on the vehicle will begin in 2012. The E7 features an automatic license plate reader, radiation detection and night vision. It cannot, however, say, "Right away, Michael."



EcoCAR Team Going Beneath Saturn Surface

Tech is among 17 schools developing next-generation automobiles for the EcoCAR Challenge, sponsored by the U.S. Department of Energy and General Motors, in which teams design, build and validate a hybrid power train for a Saturn VUE. The challenge pits teams of engineering students against each other, tasked with developing the most environmentally friendly vehicles while maintaining performance, safety and consumer appeal. The Georgia Tech team's goal is to develop a vehicle capable of running on 85 percent ethanol fuel, while other teams are focusing on flex-fuel engines.





Ford

FORD'S DYNAMIC DESIGNER

Crissy Rodriguez helps automaker revamp its line

Story by Van Jensen

Photographs by Sam VarnHagen

Crissy Rodriguez walked into the interview room at Ford's Dearborn, Mich., headquarters, dressed sharply, her long hair flowing around her face. One might have mistaken her for an executive until she flipped a pair of clear safety goggles onto the table.

"I was making some little changes," she said with a slight Puerto Rican accent.

With the launch of the 2010 Ford Taurus creeping ever closer, Rodriguez, ME 95, was grabbing every second she could to make Ford's new flagship sedan the best it could be. As the vehicle dynamics engineer on the relaunched Taurus, she's responsible for the steering, ride and handling, a delicate balancing act of engineering that can be the

difference between a car that's a pleasure or a pain to drive.

So far, the Taurus has been falling squarely into the "pleasure" side, having been named car of the year by *Esquire* magazine.

"That was pretty exciting," Rodriguez said. "In this industry, people criticize or comment a lot. You work so much on some things, and all of a sudden people don't like it too much. So far, we've had a great response."

The Taurus' success has brought the spotlight to Rodriguez, the only female among Ford's vehicle dynamics development engineers. It's a role she handles with grace, though she doesn't hesitate to make

it clear she's more comfortable in the design room with tools in hand.

Posing for a photographer beside the Taurus, she grimaced every time a passerby looked her way.

"This is so not me," she said before turning to wipe a stray blade of grass off one of the Taurus' tires.

Her engineering focus surfaced early. Rodriguez was born to a chemical engineer father and a mechanically inclined mother, both of whom fled Cuba as teenagers during the 1959 revolution and eventually settled in Puerto Rico.

She and her mother worked on the family's Mini Cooper, but Rodriguez admitted that she didn't take great care of her first



car, an Oldsmobile Cutlass Supreme.

"It was in pretty decent shape when I got it," Rodriguez said. "It might not have been in pretty decent shape once I handed it down to my brother."

During high school she decided to go to the United States for college, and Georgia Tech was a natural fit with a strong engineering program and good tennis team — Rodriguez, always an athlete, played her first two years at the Institute.

She graduated in four years and said she had a great experience, thanks in no small part to the Office of Minority Educational Development. She also became president of the Institute's chapter of the Society of Hispanic Professional Engineers. Rodriguez had never been involved in automotive groups, but Ford was an SHPE sponsor and, after she graduated, offered her a scholarship to the University of Michigan to work on a master's degree.

During Rodriguez's two years at Michigan, she spent each summer interning at Ford, her first exposure to the auto industry.

"I grew into it," she said. "I always enjoyed driving. I was pretty critical of vehicles. But I didn't know how to convert that to a mechanical systems point of view until I got here.

"I guess the rest is history."

A large part of Rodriguez's job is driving vehicles on Ford's test tracks, making sure each engineering tweak improves the driving experience. Many dynamic engineers come from a racing background, so she said she spent as much time as she could on the track, training her body to become another instrument in testing the vehicles.

"Your hands on the steering wheel can feel the response, your legs, your back against the seat," she said. "Even your innards. You become very in tune."

Speaking of innards, Rodriguez described her job as engineering each vehicle to have "the Ford DNA."

"It's the same theory as human DNA," she explained. "We have a set idea of what we want a Ford vehicle to feel like. From the Focus to the Fusion to the Taurus, you want to know you're in a Ford."

For the modern lineup of Fords, that means a more athletic and engaging feel to match the updated exteriors, interiors and class-leading technology. Asked if she's happy with how the Taurus turned out, Rodriguez said she's eager to drive one once it's released.

She's also happy to be at Ford, the lone automaker not to request a bailout from the federal government.

"Ford has a great business plan,"

Rodriguez said. "We're in business to make the best vehicles. My goal is to get a product out there that's in line with those plans.

"The 2010 Taurus is a glimpse of what our product is going to be: exciting, engaging, safe. Quality is always the number one thing."

Now that the Taurus is rolling off the assembly lines, Rodriguez is moving onto those next projects. Though future car designs are always shrouded in secrecy, she said her team of engineers will be expanding the Ford DNA on "a next-generation global platform," including the Ford Fiesta, due next year.

Thinking over her successful 12 years at Ford, Rodriguez said much of her career owes to lessons from Tech. Particularly, she recalled a project in Mechanical Engineering 3110.

The class divided into teams, each tasked with building a system to transport a pound of flour from one point to another on a course. She said a lot of "sleepless nights" went into the project, preparing her for the long hours at Ford.

Asked what her team created, Rodriguez smiled.

"It was a little car that we launched off a ramp," Rodriguez said. Then, with a voice full of regret, she added, "But it had no suspension."



Tech Women Built Ford Tough

Crissy Rodriguez is far from the only Georgia Tech alumna taking a lead role at Ford. From left to right are a few of the nearly two dozen Tech women helping shape the automaker's future at its Dearborn, Mich., headquarters: Rodriguez; Linda Griffin Cash, ISyE 84, director of North American vehicle operations; Valencia Mitchell, ME 95,

MBA 99, supervisor of future model program planning; Isabelle Groome, ME 86, MS ME 88, component engineer; Michelle Rarey Boschert, ME 97, evaporative emissions calibration engineer; Erin Brown Walkowicz, ME 97, emissions compliance engineer; Janice K. Johnson Smith, MS ME 92, powertrain operations program leader; and Kimberley Cook King, ME 99, MS ME 02, hybrid battery systems engineer.

Rodriguez Helps Lift Taurus From Butt of Jokes to 2010's Automobile of the Year

When Conan O'Brien opened his first night as host of *The Tonight Show* in late spring, he opened with the latest of a long string of video skits mocking his 1992 Ford Taurus.

Since being named *Motor Trend's* car of the year in 1986, its first year on the market, and appearing in the 1987 film *Robocop*, the Taurus gradually lost market share to Japanese sedans and became widely criticized.

In 2004, Ford discontinued the model.

The completely redesigned 2010 model represents one of Ford's great hopes, with a sleek design, powerful engine and top-notch features. So far, the response has been strong. *Esquire* said, "The rea-

son we care about the new Taurus can be boiled down to four words: Looks good, goes fast," in calling the 2010 incarnation the car of the year.

Similar praise has echoed from most auto critics, though the crucial test remains: How will car buyers respond?

While driving around the Dearborn, Mich., Ford headquarters in the new Taurus, someone joked to Rodriguez about opening the car up and spinning a doughnut. She smiled, confident in the vehicle's dynamics systems.

"Well, it's safe," she said.

— Van Jensen

'A Labor of Love'

Andrew Fida, entering his fifth year as a mechanical engineering major, wanted to learn how to build a race car. So he figured there was no better way to learn than to do it himself. After nearly two years of working five to 10 hours a day on the car, he's more than pleased with how his "labor of love" turned out.

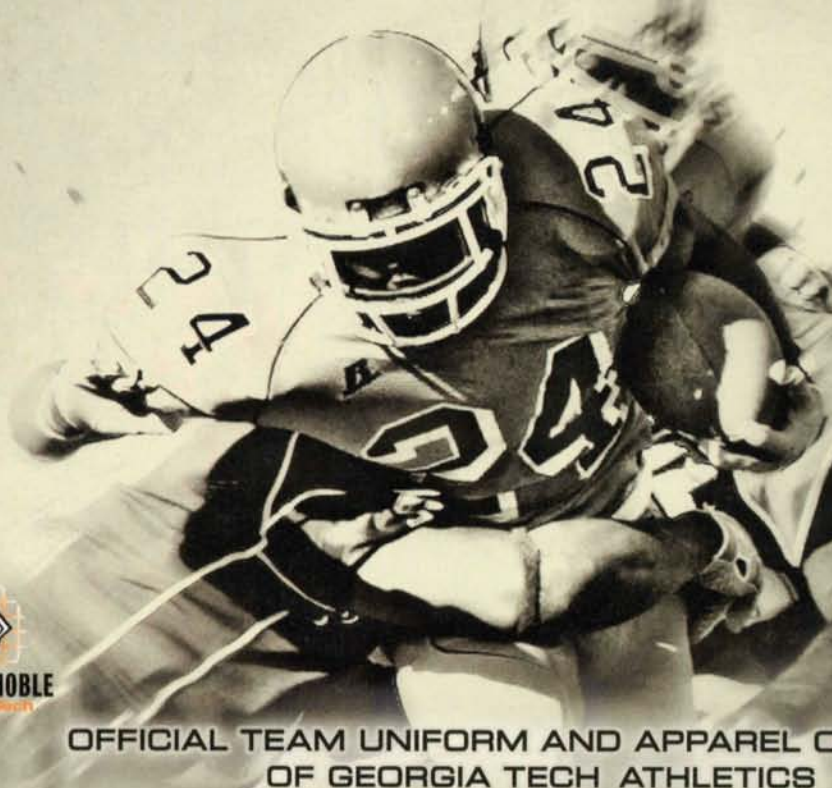
I took the engine and drive train from a 1984 Toyota Celica. The engine is a 2.4-liter, single-overhead camshaft, four-cylinder "22-RE." It's connected to a five-speed transmission and Celica rear end. The car has four-wheel disc brakes and a quick-ratio Triumph Spitfire steering rack that's been narrowed to fit the car. The front and rear suspension are double A-arm, and I designed the geometry. Adjustable coil-over-shocks handle bumps, and 7-inch-wide tires connect the car to the ground.

Driving the car is exhilarating. It's nimble and extremely responsive. The engine noise flows through the open cockpit, and there is a great feeling of speed from being so close to the ground. You quickly get used to looking at people's tires and the underside of trucks while waiting at stoplights.

I was born a tinkerer. I had done some basic automotive work before, but this car was my first major automotive endeavor. The project was really started as a means to learn about cars, car building and suspension design.

I am looking for an automotive-related job, and I would enjoy working for a race team. I would like to continue following my passion and see where it takes me.





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ATHLETIC.

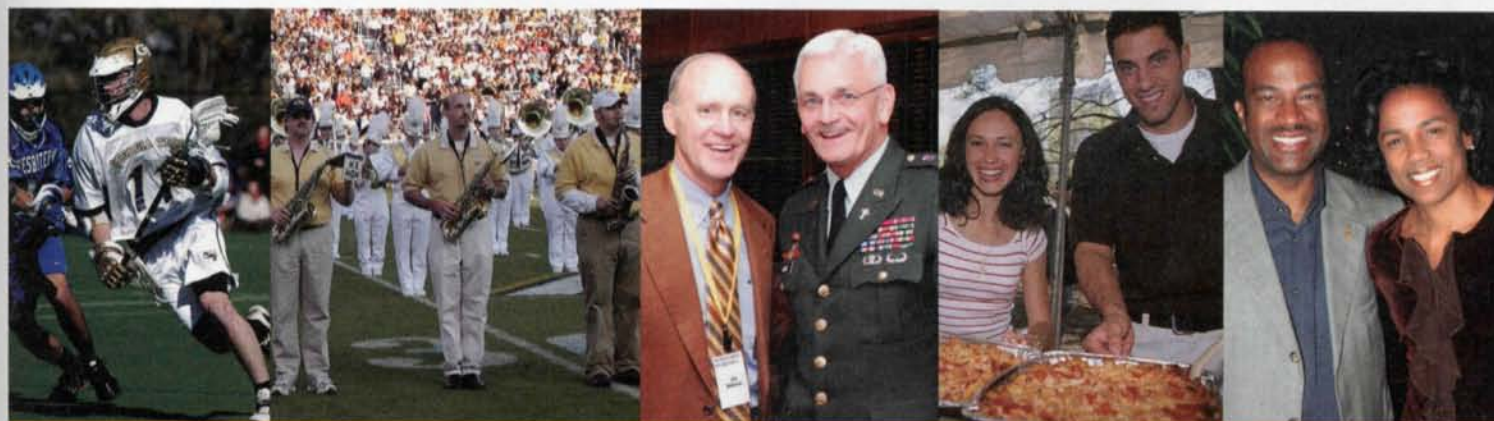
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This gown, **Ariadne**, designed by Julie McLaughlin and Mary Snyder Behrens from gampi, kozo and abaca fibers, is named for the daughter of King Minos in Greek mythology who helped her love Theseus find his way out of the Labyrinth with thread to mark his path.

Pulp Fashion

By Leslie Overman

Photographs by Jacqueline Hawthorne

Escorted by a couple of Hartsfield-Jackson employees, a motley crew of artists, reporters and professors crossed the crowded floors of the world's busiest airport, skirting travelers burdened with luggage and carry-on bags.

It was a peculiar trip to the Atlanta airport, going through the motions of preparing for a flight — handing over photo IDs and shedding jackets, shoes and handbags to pass through security — with not one boarding pass among them.

Cindy Bowden, director of the Robert C. Williams Paper Museum at Georgia Tech, had secured permission for the group to visit the airport's T-gate exhibit space, sans airline tickets, to see an art installation curated by the museum.

"The Paper Runway," which continues a yearlong run at the airport through January, features more than 50 works of wearable paper art, including party frocks sculpted from handmade paper and necklaces formed by strands of paper beads. Several artists recycled items found in trash bins or on littered city sidewalks. One created a jacket out of a patchwork of used tea bags. Another crafted a suit of many colors from old lottery tickets.

Guiding the group through the show, Bowden, who curated the exhibit along with the paper museum's program manager Juan Chevere, stopped in front of a towering ball gown. Playful, romantic shapes — hearts, doves, flowers and words of love — had been cut out of the top layer of black paper fabric, revealing glimpses of a white-paper petticoat underneath. The images reminded Bowden of initials carved into trees by teenage sweethearts. The dress appeared on the cover of *Vogue* a few years ago.

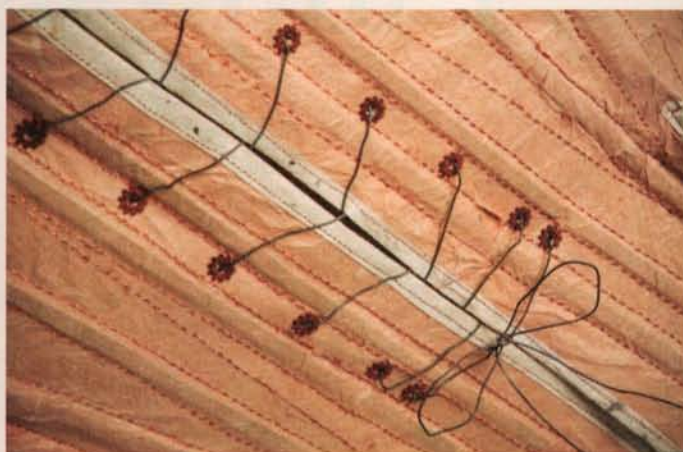
The international juried exhibition showcases the work of artists from such countries as Canada, Chile, Israel, Japan and Tibet.

As the group passed in front of the display cases, pausing before each piece for comments from their guide, a few travelers slowed their steps to peer at the paper apparel.

The exhibit, the second collaboration between the paper museum and the airport, is expected to draw nearly 18 million visitors before it closes Jan. 12, bringing international exposure, and hopefully more foot traffic, to the museum.

Located on the first floor of the Institute of Paper Science and Technology at the northwestern tip of the Georgia Tech campus, the paper museum is home to the world's most extensive collection of paper artifacts. Nearly 20,000 people visit the museum each year to tour its permanent collection, attend art openings or take part in workshops in papermaking and bookbinding.

The paper fashion exhibit will continue to bring attention to the museum long after its run at the airport comes to a close. In March, Bowden and Chevere will travel to Chile, where the exhibit will be installed at the Galeria de Arte de Sala in Santiago.



Fairy Tale is a whimsical frock from Susan Cutts, who makes paper by hand using traditional European papermaking tools and techniques. Working with complex raw fibers, Cutts is able to create sculptural pieces that require no glue, stitching or armatures. The **Paper Corset** was designed by artist Mary Cat Tepper. For this piece, Tepper used a diverse collection of media, including handmade paper, hair, metallic thread, copper wire and washers. The **Kozo Fiber Shoes**, crafted from cast, laminated and stitched Thai kozo fibers and waxed linen, are from artist Jill Powers.



For **Dancing With the Stars**, artists Jennifer Davies and Nancy Eisenfeld used plastic bubble wrap for the core of the dress and garden netting, which they stained an electric blue with pigmented kozo pulp, for the skirt.



For her **Thumbprint Dress**, designer Michelle Bayer used an enlarged image of her thumbprint as a pattern. Using the ridges of the print as a guide, Bayer cut paper into strips, which she then reassembled and sewed together.

PAPER TRAIL



Eric Turner

By Leslie Overman

Tucked away in a hall at the back of the Institute of Paper Science and Technology building's first floor, Cindy Bowden's office is littered with photographs of past Robert C. Williams Paper Museum art installations, tomes on papermaking and anthologies on the works of noted paper artists.

Seated at her desk, Bowden confessed she "didn't know a darn thing about paper" when she became director of the museum in 1993.

"I'd been working in museums for a long time," she said, "but I didn't know anything about papermaking. That's part of the fun of working in museums, you get to play with all of the toys."

The paper museum's toys amount to more than 100,000 paper and paper-related artifacts, the largest collection of its kind in the world.

Its permanent exhibit traces the history of papermaking from its roots in China to its eventual spread to the Middle East and later to Europe. In addition to some 2,000 rare books, the museum's collection includes ancient manuscripts, antique papermaking tools and watermarks once used for currency.

The museum became part of Georgia Tech in 2004 when the Institute of Paper Science and Technology was integrated into the Institute.

The bulk of its collection comes from the early-20th-century travels of artist and paper historian Dard Hunter, who first opened the Dard Hunter Paper Museum to share his artifacts with the public in 1939 at MIT.

Hunter moved the museum to the Institute of Paper Chemistry, the forerunner of IPST, in Appleton, Wis., in 1955. When the paper institute moved to Atlanta in 1989, the museum came with it, opening in 1993

"That's part of the fun of working in museums, you get to play with all of the toys."

once construction on its new facility was complete. In 1996, the museum was renamed the Robert C. Williams Paper Museum in response to an endowment gift from the James River Corp. in honor of its co-founder.

The museum's collection is so extensive, roughly 80 percent of its pieces are in storage when not on loan to other museums, Bowden estimated, pausing to look up as program manager Juan Chevere poked his head in the doorway of her office.

"They're here," said Chevere, referring to a group of students from Griffin Technical College who had arrived for a guided tour of the museum and a crash course in paper-making.

A few minutes later in a classroom up the hall, a couple of interns assisted Chevere and education curator Fran Rottenberg as they walked each student through the steps

of making a single piece of paper. A handful of students at a time were beckoned to the front of the room, where an assembly line had been set up on a long table. Chevere supervised at one end as a student dipped a mold and deckle, a contraption of wood and wire mesh resembling a picture frame, into a tub filled with a murky solution of water and paper pulp. The hum of a Shop-Vac filled the room as Rottenberg, stationed at the opposite end of the table, helped students dry their sheets of paper.

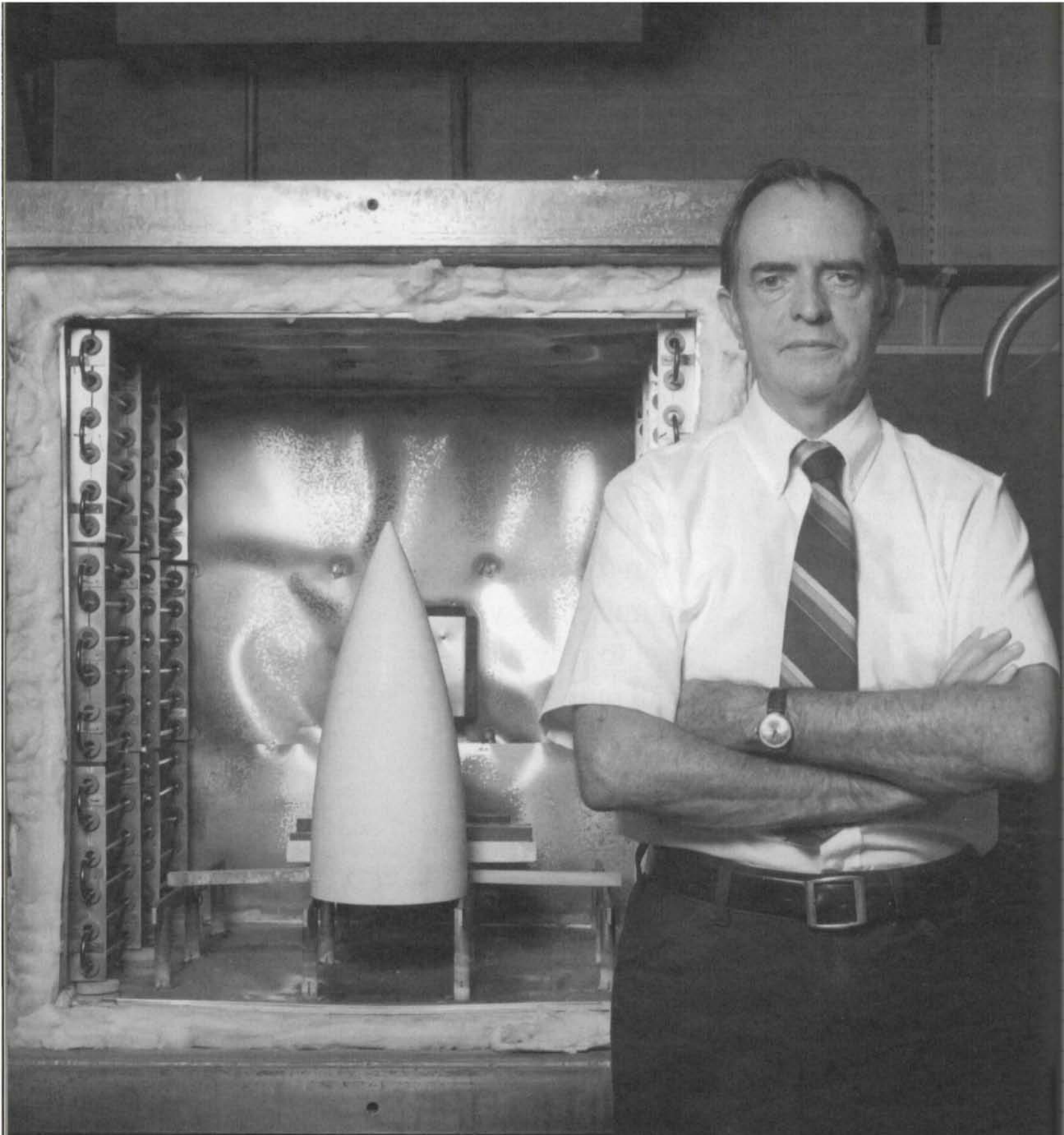
Several Saturdays out of the year, the classroom is filled with schoolteachers, Girl Scouts or book enthusiasts who turn out for inexpensive artist-led workshops in papermaking and bookbinding offered by the museum.

In recent years, the museum has expanded its educational offerings into Georgia Tech classrooms. Each spring, Bowden teams up with August Giebelhaus, a professor in Tech's School of History, Technology and Society, to teach Introduction to Museums, a three-hour credit course in which students complete the semester by curating an exhibit.

To Bowden's surprise, not just history students enroll in the course. Quite a few of her pupils have been engineering majors. Bowden hopes to offer more courses in museum studies in the coming years.

"Our goal is to educate people about papermaking and to get them interested in the subject," she said, "whether they turn out to be machine papermakers or hand papermakers or just somebody who likes to look at it."

The Robert C. Williams Paper Museum, located in the Institute of Paper Science and Technology at 500 10th St. N.W., Atlanta, is open from 9 a.m. to 5 p.m., Monday through Friday. Admission is free, but donations are appreciated. To schedule a guided tour or sign up for a workshop, contact education curator Fran Rottenberg at franceen.rottenberg@ipst.gatech.edu or (404) 894-5726 or visit the paper museum's Web site at ipst.gatech.edu/amp/index.html.



Researcher J.D. Walton with
an early GTRI radome project.

Georgia Tech Research Institute at 75

SOLVING PROBLEMS, MAKING DISCOVERIES

By Gary Goettling

Photographs courtesy of the Georgia Tech Research Institute

Shortly after World War II, Georgia Tech's Engineering Experiment Station was burnishing a newfound reputation in military electronics, particularly radar, when one of the station's researchers made a startling discovery.

According to George M. Jeffares, ChE 46, who worked at the station part time while completing his senior year at Tech, one of the electrical engineering professors found that certain electromagnetic frequencies would heat food. To explore the phenomenon further, the researcher built a box fitted with devices that would bombard the interior with microwaves when a toggle switch was flipped on, Jeffares said. Sweet potatoes cut into half-inch-thick slices were placed inside the "radar range" and various cooking times were tested with a stopwatch.

"The only things the EES would give him to cook were sweet potatoes and peanuts," Jeffares recalled in a 1997 interview for the Alumni Association's Living History program. Jeffares was recruited along with other handy personnel to periodically "taste the sweet potatoes to see if they were done." But because of military research priorities, the discovery was never developed further, and the radar range — or microwave oven — was relegated to the realm of EES lore.

Georgia Tech scientists have been

making discoveries and solving problems for 75 years. It all began halfway through the Great Depression, when the University System of Georgia Board of Regents was searching for ways to leverage its education infrastructure to grow an industrial base in the state. Associate professor of ceramics W. Harry Vaughan, a 1923 engineering chemistry graduate, and a group of fellow Georgia Tech faculty, pointed out that the General Assembly had authorized — but not funded — an engineering experiment station back in 1919.

The Regents backed the idea with \$5,000 in startup money, and the State Engineering Experiment Station officially opened for business on the Georgia Tech campus on July 1, 1934.

The EES was housed in the basement of the Old Shop Building, situated on the west side of the Tech Tower, until its demolition in 1968. The director's office was in another building, and tools were rented from the mechanical engineering school. With Vaughan as director, there were 13 part-time researchers drawn from the Tech faculty and a handful of teaching assistants.

Research was still a novelty at Tech, where professors faced heavy undergraduate teaching workloads. Yet the EES accumulated some impressive achievements in its

first years, focusing primarily on textile and ceramics work. Researchers developed cotton roving and spinning processes that were three to five times faster than what was common in the industry at the time as well as the first rayon from Georgia pine pulp, according to Vaughan in a 1984 interview with *Tech Topics*.

EES' reputation as a leader in helicopter research started in the '30s with its work on aviation's marvel of the time, the autogyro. Other early projects included a study of the properties of abietic acid, high-quality fire bricks produced from Georgia kaolin and an X-ray study of the effects of processing on synthetic fibers.

When Vaughan resigned in 1940 to take a job with the Tennessee Valley Authority, his legacy included a research building, constructed the year before, and a portfolio of research projects worth \$260,000 for 1940 alone.

The volume of work coming into the EES picked up sharply during World War II and included sensitive research in communications for the Pentagon's Office of Scientific Research and Development. EES' military contracts put Georgia Tech's foot in the door in what would become an increasingly vital field in years to come.

One project with far-reaching



implications was a study on the propagation of electromagnetic waves that was followed by a large Navy contract for radar research and development. This work set the stage for Tech's future standing as the country's pre-eminent innovator in radar and defense electronics, a role it occupies to this day.

By the 1943-44 fiscal year, a little more than half of the station's budget was funded by government and textile, pulp and lumber industry contracts. More than 30 projects were under way at any given time, employing 17 full-time and nearly 100 part-time researchers.

The prospect of a peacetime economic boom provided ample reason for optimism. But the research station's long-term outlook was jeopardized by a Board of Regents rule requiring that all money received in a year had to be spent that year. This presented a problem for the station, where multiyear contracts, a staple of government work, were viewed as key to long-term growth.

The solution was to charter an independent, nonprofit corporation that would solicit contracts with research customers then hire EES to perform the actual work. The organization could accumulate and redistribute funds and thus carry over projects from one fiscal year to the next. It was named the Georgia Tech Research Institute; nearly 40 years later, the EES would take the GTRI name for itself, and the contracting agency would be designated the Georgia Tech Research Corp.

The station's chronic lack of space was mitigated somewhat with yet another addition to the Research Building. The entire structure was renamed for Atlanta dentist Thomas Hinman, whose memorial foundation's contribution had made the new construction possible. The occasion was soon followed by another milestone: In 1949 EES research income topped the \$1 million mark for the first time. It would double within five years.

The idea of forming a company to commercialize EES innovations had been kicked around the station for a few years. Then in 1952 associate director James E. Boyd, a Georgia Tech physics professor and nationally known radar expert later to become the EES leader, persuaded director Gerald Rosselot and six other EES staff to each contribute \$100 toward starting the company that became Scientific Atlanta.



A STUDY ON THE PROPAGATION OF ELECTROMAGNETIC WAVES SET THE STAGE FOR TECH'S FUTURE STANDING AS THE COUNTRY'S TOP INNOVATOR IN RADAR AND DEFENSE ELECTRONICS.

"The idea was to manufacture some of the developments at Georgia Tech that were suitable for the commercial market and not appropriate for a university," said Living History interviewee Glen Robinson, Phys 48, one of the founders and longtime president and CEO of Scientific Atlanta.

Later, Scientific Atlanta would become widely known for its pioneering development of satellite Earth stations and cable television equipment.

During the 1950s and through the '60s, the EES welcomed a large number of "over-the-transom" projects characterized by their remarkable scope and variety. Thomas Elliott, ME 39, who joined the station in 1949

as head of the mechanical design section, was responsible in whole or in part for a number of innovative solutions developed during this time.

Elliott's wide-ranging 14-year engineering and design legacy at EES includes a machine that cut, sewed and packaged baby diapers; a paint thickness gauge; a machine that removed meat from chicken necks; and the first high-speed dental drill.

Elliott's eclectic portfolio also included a device for automating the yo-yo assembly process. "A machine would get the two halves, stick them together with the string in there, and then it would wind the string up," Elliott said. "That was a difficult job. It sounds simple, but it's hard to do."

The new science of computing rapidly gained prominence at Georgia Tech in 1955 with construction of the Rich Electronic Computer Center, the first facility of its kind in the South. The first computer installed there was a large-scale, high-speed UNIVAC 1101 measuring 38 feet long and 20 feet wide with a rotating magnetic drum providing the equivalent of 48 kilobits of memory.

"We had to program it by counting drum revolutions and putting ones and zeros on it," said Fred Dyer, Phys 57, MS Phys 61, who started working for EES in the radar development branch while a graduate student. "There wasn't even a compiler. I said that computers would never be practical!"

Maurice Long, EE 47, MS Phys 47, PhD Phys 59, was selected EES director in 1968 after 22 years as a researcher and electronics division chief. He brought to the job an emphasis on graduate education. "I've always thought of a research organization to be like a university hospital — a teaching organization," he explained in a 1996 Living History interview. "You instill in the student that your education is a continuing process. One way you can do this is to have students work on relevant projects and participate as important investigators in the research — not just as a helper, but as a significant investigator." Today, GTRI is the largest employer of Georgia Tech students.

Radar remained prominent among EES' defense activities in the '70s and '80s. Long favored by the military for its exceptional resolution and ability to track through smoke and dust and over difficult terrain, a number

This page: A GTRI engineer adjusts what at the time was the world's highest frequency millimeter wave radar in 1981. Pictured opposite: An industrial engineering wire recorder for time measurements is tested in 1951.





U.S. Department of Defense

Engineers showcased their expertise in the modernization of existing military hardware through their work on the MH-53 Pave Low helicopter.

of millimeter radar technologies and systems emerged from EES labs.

Civilian applications for millimeter wave technology devised at EES included a radar detector, originally designed to locate plastic land mines, put to use detecting cavities and weak spots underneath highway pavement. Other radar devices helped police spot drug smugglers and catch speeders.

An offshoot of radar work was the improvement in production cost, design and efficiency of satellite dishes. That progress led Pat Burns, chief of the microwave systems division, to speculate that, one day, every family would be able to afford its own satellite dish in its backyard.

Antenna research, another long-standing hallmark of EES innovation, prospered with projects such as a pedestal-mounted scanning antenna for the Air Force and an air-defense antenna for the Army Missile Command. The latter was developed at the Huntsville Research Laboratory in

Huntsville, Ala. Started in 1979, the lab was Georgia Tech's first off-campus research center, and it has played a central role in R&D for the Army. Today, the Huntsville lab focuses on software engineering and systems engineering for a number of Department of Defense programs.

In October 1984, on its 50th anniversary, the Engineering Experiment Station officially became the Georgia Tech Research Institute to better reflect the applied research focus of the organization. The contracting agency was renamed the Georgia Tech Research Corp.

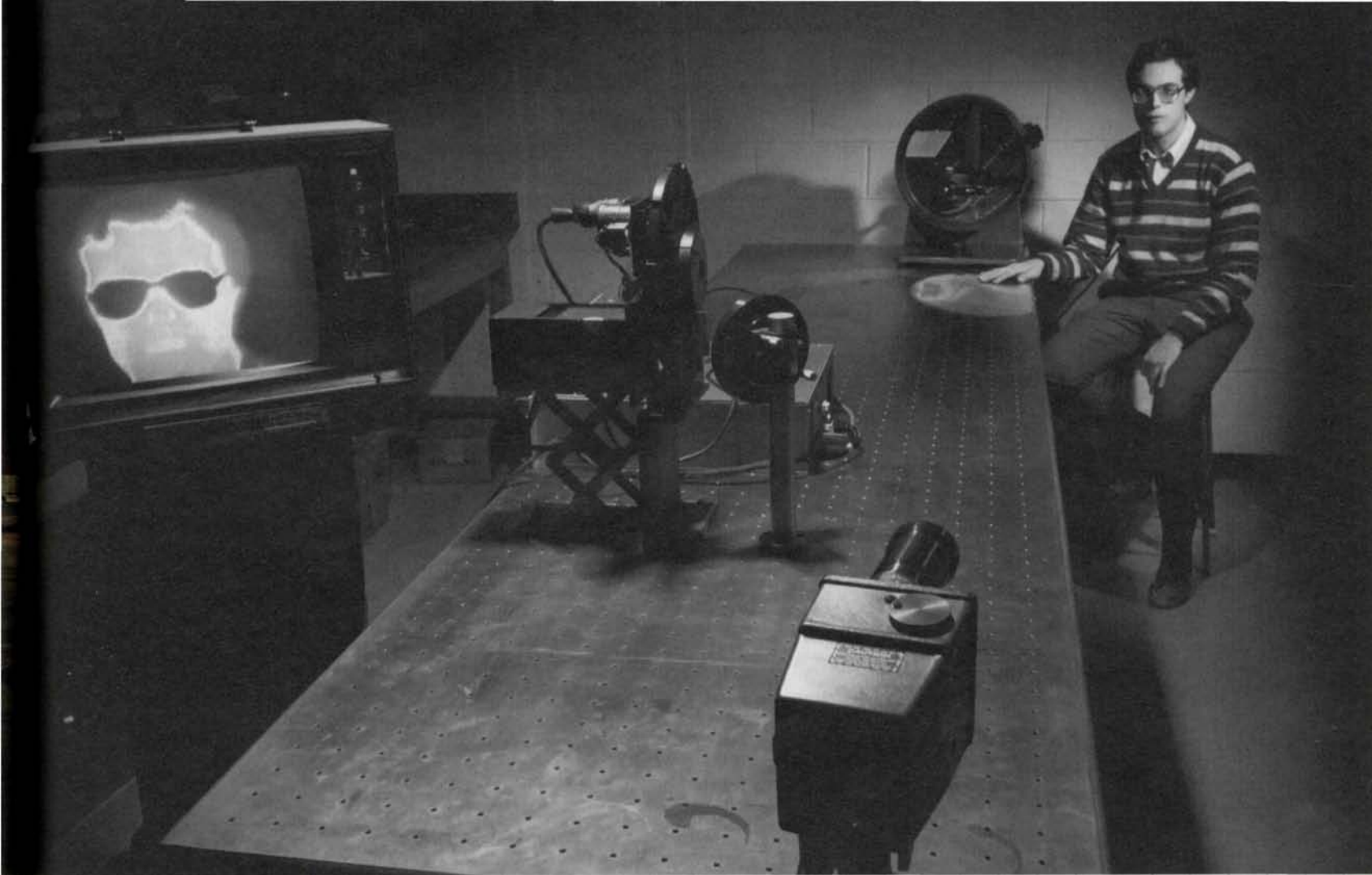
The following year, coinciding with Georgia Tech's 100th birthday, the ribbon was cut for the Centennial Research Building on the northern edge of campus. The \$12.5 million, six-story structure provided desperately needed lab and office space for GTRI's growing research portfolio. Known as the CRB, it was one of several new facilities that opened in the '80s, including a multimillion dollar electromagnetic test and

evaluation facility at GTRI's Cobb County Research Facility, acquired in 1978.

GTRI landed its largest contract in 1986 with a \$14.7 million deal to design and build a simulator of a Soviet surface-to-air missile system. The simulator project underscored GTRI's astonishing progress. Not only was it a worthy engineering challenge, but the contract was more than double the entire research budget for both Georgia Tech and the EES in 1972.

The next year, the steady climb of Georgia Tech and GTRI toward the spotlight of national recognition was rewarded when the National Science Foundation named Tech the top university in the country for engineering research and development.

In September 1990, the International Olympic Committee announced that the 1996 Centennial Games would be held in Atlanta. The centerpiece of Atlanta's Olympic bid package was a 7-foot-tall, three-screen interactive videodisc system equipped



GTRI's Darrell Lamm tests a forward-looking infrared system, which would later be mounted on a helicopter for testing in the early 1980s.

with touch screen and trackball controls. Developed by Georgia Tech and GTRI researchers with assistance from other universities and off-campus organizations, the presentation combined virtual-reality techniques, computer graphics, animation and aerial photography to allow viewers to take a virtual airborne tour of proposed Olympic venues.

The technological roots of the cutting-edge Olympic interactive video system could be traced to earlier military projects at the Engineering Experiment Station, according to Fred Dyer. He remembered a flat-panel visual display he helped build for use in submarines. The device allowed commanders to plan their order of battle electronically using touch-screen technology instead of a keyboard — in 1964. “We knew about multimedia before it was called multimedia,” Dyer chuckled.

After a record 16 years as director of GTRI, Don Grace retired in late 1993 and was



succeeded by Richard H. Truly, AE 59, a retired vice admiral, former NASA administrator and space shuttle astronaut. One of Truly's first moves was to create a strategic plan of his own, written on both sides of a single piece of paper.

His categorical blueprint reflected a fundamental new factor: the collapse of the Soviet Union. Defense spending — GTRI's main source of contracts — was cut by about 66 percent, freeing up the so-called “peace dividend” for the Clinton administration's priorities in environmental protection, transportation and communications.

One previously under-utilized avenue involved technical research for the state of Georgia, according to Edward K. Reedy, who became the director in 1997, when Truly resigned to lead the National Renewable Energy Laboratory. For example, at the Severe Storms Research Center, scientists applied advanced image processing, artificial intelligence, neural networks and other



The Network Calculator is operated in 1950. Below, GTRI software was installed in aircraft for electronic warfare functions.

algorithmic data to Doppler radar information in an effort to identify the exact conditions that signify the impending formation of tornadoes.

But Reedy considers the Food Processing Technology Research Building his top accomplishment. The project was completed thanks to a unique pairing of government and industry resources. Opening in 2005, a year and a half after Reedy's retirement, the 36,000-square-foot facility includes laboratory and office space, a high-bay prototyping area, an auditorium and meeting space.

In September 2003, Stephen E. Cross was named GTRI director and a vice president of Georgia Tech. He also was named a professor in the School of Industrial and Systems Engineering to foster a deeper understanding of both academic and industry-oriented research perspectives between Tech and the highest level at GTRI.

Sharing data was the impetus for the GTRI-developed National Information Exchange Model, a communications tool that allows information to be quickly and seamlessly shared among different kinds of computer systems. Its best-known application is the AMBER (America's Missing: Broadcasting Emergency Response) Alert system.

Interoperability also was the goal in a 2004 project for the Georgia Office of Homeland Security and Georgia Emergency Management Agency. The problem was that first responders in different jurisdictions did not operate with the same radio equipment or on the same frequencies.



**HARRY VAUGHAN
AND HIS COHORTS
WOULD NO DOUBT
BE IMPRESSED
AND AMAZED WITH
WHAT THEY STARTED
75 YEARS AGO.**

The solution devised by GTRI engineers employs Internet networking components and voice-over-Internet-protocol software to connect existing radio communications systems in each Georgia county and the city of Atlanta, along with a variety of state agencies.

One of GTRI's most successful Department of Defense products of the 1990s proved to be one of its most versatile in the 2000s. FalconView is a software package that analyzes and displays detailed geographical data crucial to mission planners. It has been expanded for diverse noncombat objectives

including disaster-relief efforts, fire fighting and drug interdiction.

Education has been a staple of GTRI's mission since its beginning but in recent years has grown exponentially. Today, 41 GTRI research faculty teach in Georgia Tech's academic colleges, while more than half of all courses offered through the Distance Learning and Professional Education program are taught by GTRI experts and engineers.

Last year, Georgia Tech's first professional engineering graduate degree won approval from the University System of Georgia Board of Regents. Developed by GTRI and the College of Engineering, the professional master's in applied systems engineering will be taught in large part by GTRI research faculty when it begins this fall.

Harry Vaughan and his cohorts would no doubt be impressed and amazed with what they started 75 years ago. And while those pioneering scientists who worked in the basement of the Old Shop would scarcely recognize many aspects of the modern-day GTRI, its fundamental purpose would ring familiar.

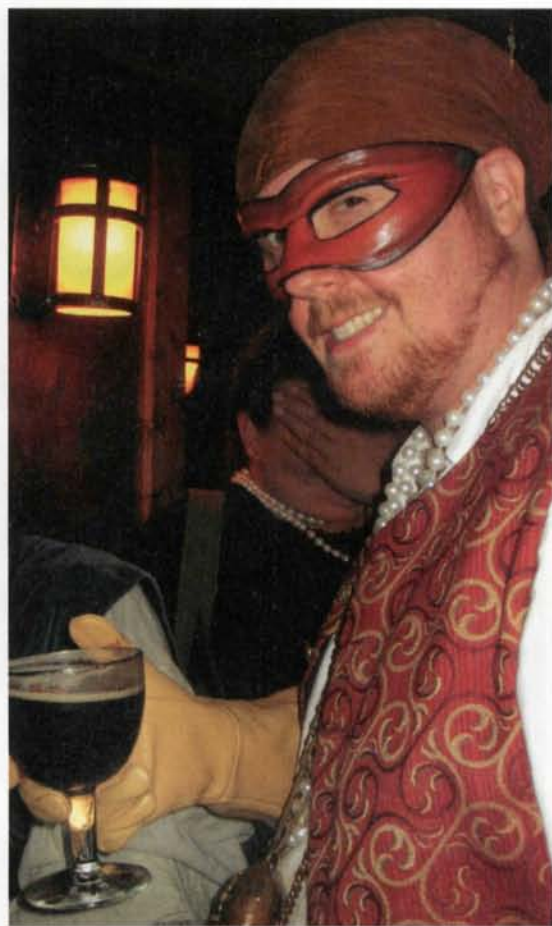
"Our mission," Cross said, "remains unchanged — to rapidly mature and transition new technologies into the marketplace and provide innovative engineering solutions for the technically challenging problems facing the state, nation and world."

GTRI will host a 75th anniversary alumni brunch and lab tours during Homecoming on Oct. 16. More information is available at gtri.gatech.edu/gtri75.



HOW DID THAT NERD ON THE LEFT BECOME THAT PIRATE ON THE RIGHT?

By Van Jensen



Two decades ago, Andrew Duncan appeared in *Tech Topics* as a boyish, clean-cut, bespectacled sophomore who'd won a writing contest and earned the chance to visit the set of Tim Burton's first *Batman* film.

On a recent Friday evening, a very different Duncan settled onto a barstool. The glasses were gone, and his red hair hung long and askew, joined by a rough goatee. The blame belongs to the Caped Crusader.

"I got distracted by Batman," said Duncan, Arch 91. "Batman really derailed me."

The intense and irreverent mood on the set inspired Duncan not only to pursue a career in film but also to focus on the lighter side of life. Thus came a set of architecture trading cards, a Georgia

license plate designed especially for film crews and Cardboard Troopers — during Dragon*Con, Duncan and friends dress in roughly made cardboard costumes and infiltrate the Storm Trooper parade.

Mostly, Duncan's sillier side has manifested in PiratePalooza, the Decatur, Ga., pub crawl with only one requirement: Come dressed like a pirate.

"I think I'll build an empire out of that," Duncan said, pointing out his skull-and-crossbones-emblazoned shirt, "a very, very strange empire."

Five years ago, he read a Dave Barry column about Talk Like a Pirate Day, held every fall, and decided to spin off an event of his own. It's burgeoned into a massive gathering with hundreds of pirates and wenches pillaging through Decatur. Now Duncan is writing a screenplay for a behind-the-scenes movie about the filming

of a fictional PiratePalooza documentary.

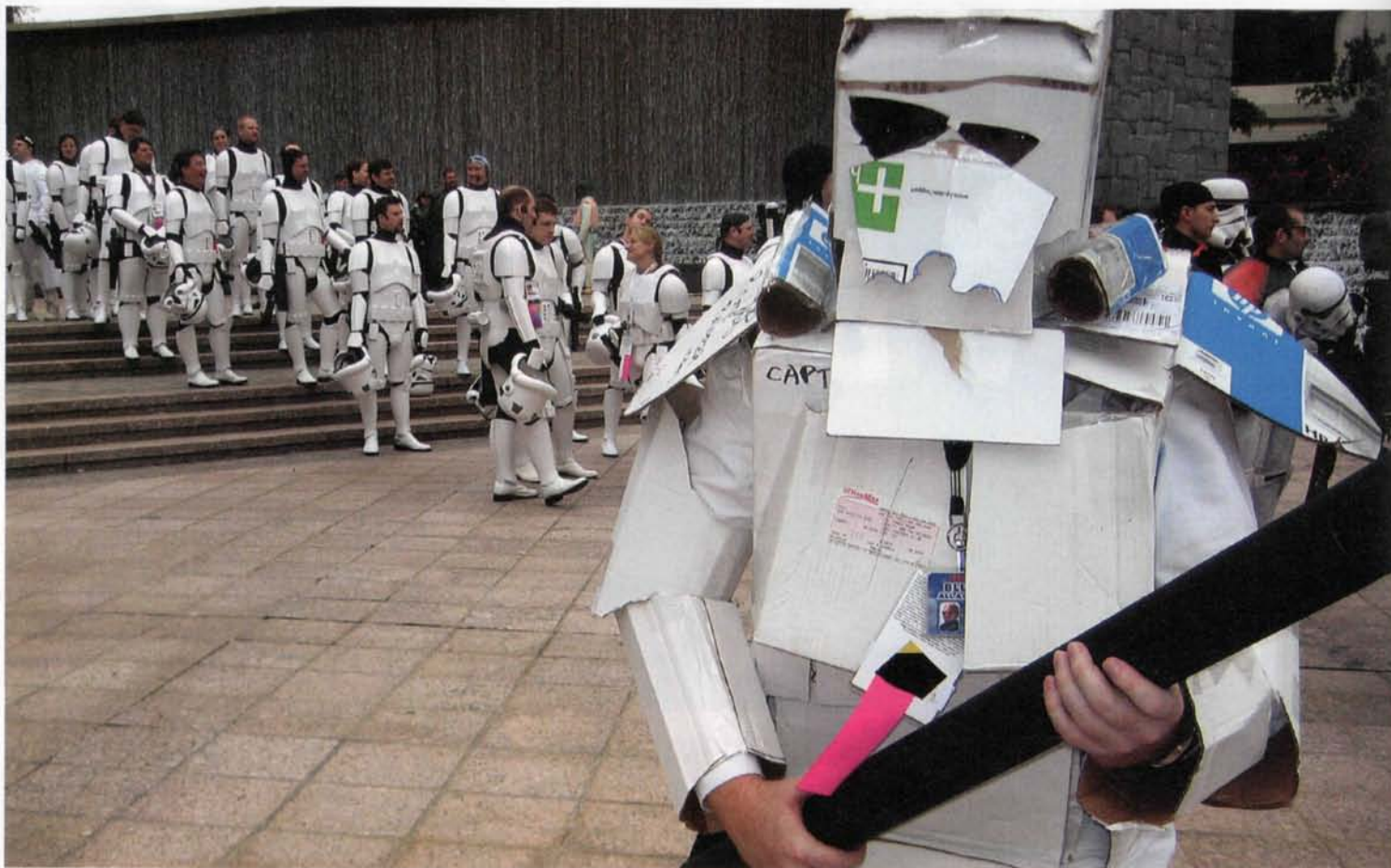
"It's about the most damn silly thing you could do," Duncan said of the event. "Well, next to dressing like a cardboard trooper."

Duncan serves as the emcee of PiratePalooza under the guise of Captain Drew, whom he refers to only in third person. When Duncan noticed some people taking the event too seriously, he gave Captain Drew a new background.

"I said, 'OK, Captain Drew is a space pirate,'" said Duncan, citing Douglas Adams as inspiration for his subversive humor. He said he wants people to realize, "Everybody's an idiot here. It's OK. We all are."

When reminded of the photo that accompanied the 1989 *Tech Topics* article, Duncan acknowledged how much he'd changed. "I barely remember having a

"It's about the most damn silly thing you could do. Well, next to dressing like a cardboard trooper."



Andrew Duncan models the Cardboard Trooper uniform he wears to infiltrate the Storm Trooper parade at Atlanta's Dragon*Con.

personality in high school. Working on a film, that changed my personality."

After the *Batman* experience, during his senior year at the Institute he signed on for an unpaid internship assisting with *Robocop 3*, filmed in Atlanta. Despite the 12-hour days, he managed to make the Dean's List.

"One day they sent me out to find a holster," Duncan said. "The bad guy had a Desert Eagle, which is a big-ass gun. I had a meeting with my architecture counselor and was saying how I couldn't find a holster. She perked up and said her boyfriend, a Navy SEAL, would know. Sure enough, he brought in a holster that made it into the film. I thought, hey, this isn't that hard. All you do is start talking to people."

After graduating, Duncan worked as

an assistant prop master and set designer on more than 20 films and television projects.

"I have been yelled at by Denzel. I have dropped Kevin Costner. I've had my nipple grabbed by Mare Winningham," Duncan said. "But Hollywood I'm not that interested in pursuing. It's a fickle mistress."

When Louisiana passed huge tax incentives for film productions in 2002, most filming in the Southeast migrated to that state and away from Atlanta. Duncan had worked off and on as an architect for George Heery, Arch 51. With film work drying up, he took a full-time graphics and design job at Heery's Brookwood Group.

Georgia since has enacted its own incentives, and movie and TV projects have begun returning to Atlanta. Duncan

plans to ease back into the industry.

"There's nothing like working on a movie," Duncan said of his time in the industry. "It's like being in a battle. The people are so much more alive and dynamic than in any office. Actors come across as being so cool, but the entire crew is like that."

For now, he's recovering from having his prostate removed after being diagnosed with cancer earlier this year.

"I'd like to have a family, but I'm not sure about being able to have kids," he said as lyrics by the Flaming Lips came over the bar's speakers: "There's nothing to be afraid of. You got to hold on."

But the serious moment couldn't last, and Duncan smiled his sly, knowing smile. "I think I've got a lot more fun things to come up with."

1940s

Chester A. Crowell Jr., Arch 42, retired in 1988 after practicing architecture in Macon, Ga., for 41 years, specializing in schools and banks. He and his wife, Billie, live in Gainesville, Fla. His son C. Arthur Crowell III received a bachelor's degree in electrical engineering from Tech in 1975, and his grandson C.A. "Chace" Crowell IV is a student in the College of Engineering. Crowell writes that his granddaughter Ciera intends to attend Georgia Tech as well.

Maurice W. Long, EE 47, MS Phys 57, PhD Phys 59, revised and updated the third edition of the textbook *Antennas: Fundamentals, Design, Measurement*, published this year by SciTech Publishers. Long was director of the Georgia Tech Engineering Experiment Station, now the Georgia Tech Research Institute, from 1968 to 1975. He and his wife, Beverly, live in Atlanta.

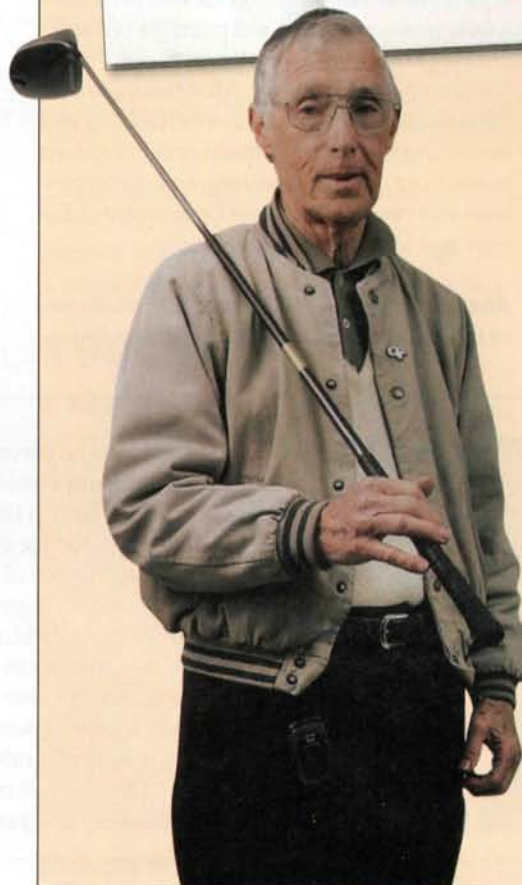
1950s

Jerry Abbott, CE 55, was awarded the 2009 Outstanding Alumnus of the Year award from the Birmingham Area Georgia Tech Club. He has held several club offices and for the last several years has headed its TEAM Buzz Community Service Day project. Abbott retired as senior plant design engineer in the corporate engineering department of Vulcan Materials Co. after 29 years with the company.

Ray Anderson, IE 56, has partnered with Georgia Tech to found www.missionzero.org, a Web site designed to allow companies and individuals to learn from and assist each other in becoming more sustainable. Members may join groups, post articles and blogs or ask for advice on environmentally friendly practices. Anderson is a previous winner of the Alumni Association's Dean Griffin Community Service Award and the founder of carpet manufacturer Interface Inc.

1960s

George Harper, IM 64, of the Miami-based firm Harper Meyer, has been elected the 2009-10 president of the Inter-American Bar Association. Harper is the first American since 1997 to be appointed president. He aims to strength-



75 Years, 75 Holes

Stealing a page out of Jack LaLanne's book, Balus Chastain, IM 58, spent his 75th birthday golfing 75 holes at the Hendersonville, N.C., Country Club. Chastain, who previously worked for the Army Corps of Engineers and currently runs his own real estate company, recorded 354 swings during his 11 straight hours on the links.

He's been golfing his age in holes every birthday since he turned 62. "We have a divergent situation here," Chastain told the *Hendersonville Times-News*. "My age is working against me. ... The last 27 or so holes, it was rough."

On his scorecard, Chastain noted he covered about 16 miles, taking 29,000 steps. That's right, his birthday tradition requires that he doesn't use a golf cart.

Ramblin' Roll

en the ties between the U.S. and Latin American legal communities and to actively support the association's membership drive. Harper has served as chair of the international law section of the Florida Bar and is a recipient of the *Inter-American Law Review* Lawyer of the Americas award.

Charlie Jerabek, IM 67, has been named vice chairman of OSRAM SYLVANIA. Jerabek, president and CEO of the lighting manufacturer since 2001, will assume the post Oct. 1. He will continue to serve on the OSRAM SYLVANIA board of directors and support the company in legislative activities and industry associations. Jerabek, who holds an MBA from Boston University, began his career with the company in 1973 as a sales engineer.

Richard C. Kessler, IE 69, MS IE 70, president and CEO of the Kessler Collection of luxury hotels, has opened the Grand Bohemian Hotel Asheville. The 104-room North Carolina boutique hotel includes a spa, fitness center, restaurant and art gallery.

William R. Thomas, IM 65, was elected an honorary life member of Pi Sigma Epsilon, the national professional fraternity in marketing, sales management and selling. It is the fraternity's highest award. Thomas has been a member of Pi Sigma Epsilon since joining it as a Tech student in 1964. He served as its national president from 1978 to 1980. Thomas was instrumental in establishing the fraternity's educational foundation and its *Journal of Personal Selling & Sales Management* and in promoting fraternity membership and leadership by women and minorities. Thomas re-



Ricardo Martinelli, Panama's newly elected president, stands at the side of Georgia Tech alumnus **Juan Carlos Varela**, ISyE 85, as he is sworn in as the country's vice president by his brother, **Jose Luis Varela**, IM 84, president of the National Assembly, at an inauguration ceremony July 1.

tired as professor emeritus of the University of South Carolina's Moore School of Business after 36 years of service.

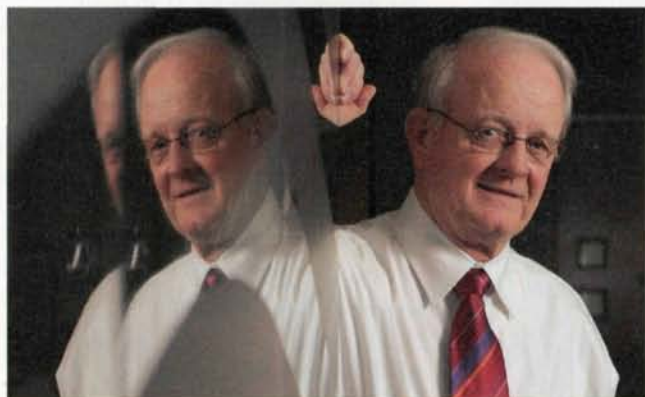
1970s

Douglas J. Allen, GMgt 73, was promoted to senior vice president and manager of the environmental division of Professional Project Services Inc., or Pro2Serve. Allen has more than 30 years of operations experience handling and managing radioactive, mixed and hazardous waste from decommissioning and decontamination of nuclear facilities at Department of Energy and Defense facilities.

Alan Barfoot, IE 76, was named Practitioner of the Year by the U.S. Manufacturing Exten-

sion Partnership. Barfoot, who has been with Georgia Tech since 1989, is central Georgia region manager for the Enterprise Innovation Institute, for which he provides technical assistance to manufacturers, assists community developers with infrastructure assessments and planning, partners with other educational institutions and government agencies and mentors professional staff and co-op students.

Dennis Corn, IM 79, has joined Rentech Inc. as director of project development for its 28,000-barrels-per-day, coal-to-liquids project located near Natchez, Miss., that will utilize the company's proprietary Fischer-Tropsch technology. Corn and wife Elaine live in Kingsport, Tenn., and have a son, Kevin, who is studying to be a chemical engineer.



Sunday Telegraph

Bill Coley, EE 66, who served as chief executive of British Energy, part of EDF Energy, was appointed an honorary commander of the Most Excellent Order of the British Empire by Queen Elizabeth this past spring in recognition of his service to the nuclear power industry. In an e-mail to the Georgia Tech Office of Development, Coley wrote, "That's 'very high cotton' for a redneck engineer from Georgia Tech!" Coley, who worked out of British Energy's Paddington office in central London, completed his work with the company in July. He and his wife, Jane, will be returning to the states in September after enjoying some free time in the United Kingdom. "It's been a great experience living here for both of us, and I have enjoyed every minute of working with the employees of British Energy," Coley wrote. "They are not only highly competent nuclear professionals, they are also very fine people."

Water Filtration Nonprofit Takes Shape

By Josh Wilkinson

A 2005 volunteer trip to teach pottery in Tanzania led Tracy Hawkins to help create an international nonprofit dedicated to providing clean drinking water.

Formerly a project manager at Equifax and IBM, Hawkins, IE 85, uncovered the technique of ceramic water infiltration while in northern Tanzania to establish a pottery school. She saw the opportunity to help stop the spread of disease through contaminated drinking water and developed Safe Water Ceramics of East Africa.

According to estimates, more than 1.5 million people die each year because they lack clean water.

In 2007, Hawkins collaborated with AguaPure, a company with similar goals in the Dominican Republic, to create FilterPure Inc. At the cost of about \$30, a ceramic pot nestled in a 5-gallon plastic bucket can filter contaminated river water into clean drinking water for a family for five years.

Based in Atlanta as vice president of FilterPure, Hawkins recently was invited to meet with the humanitarian logistics research team in Tech's Stewart School of Industrial and Systems Engineering. The team is helping refine FilterPure's business plan as it hopes to obtain funding for manufacturing locations in other countries. Tech also is investigating alternative distribution models that might help reduce FilterPure's supply chain costs.

Hawkins hopes through FilterPure to introduce water-filtration programs around the globe.

"That's where Georgia Tech is really helping us with some of the complicated challenges that we now have to overcome," she said.



AP Photo/Atlanta Journal-Constitution/Jason Getz

Roy Crawford, ME 74, who is chairman of the engineering sciences section of the American Academy of Forensic Sciences, recently returned from a trip to Kazakhstan with some of the academy's scientists. The group was assisting the country's crime laboratories and other forensic specialties in their efforts to become internationally accredited.

W. Allen Morris, BMgt 75, was named the 2009 Real Estate Business Leader of the Year by *South Florida Business Leader* magazine. Morris is the chairman and CEO of The Allen Morris Company, a full-service commercial real estate firm. He began working alongside his father, the company's founder, in 1975 and became president and CEO in 1980.

James A. "Rusty" Warren, AE 76, MS AE 77, retired from the Boeing Co. in May 2008 following more than 30 years of service at Mc-

Donnell Douglas and Boeing in St. Louis. The Warrens now live in Monteverde, Costa Rica.

1980s

J. Kevin Fletcher, EE 81, of Fayetteville, Ga., has been appointed by Georgia Gov. Sonny Perdue to the State Workforce Investment Board. Vice president of community and economic development for Georgia Power, Fletcher serves on a number of boards, including Georgians for Better Transportation, the Metro Atlanta Chamber of Commerce's economic development committee and the Quality Growth Initiative Task Force. Fletcher also serves as the board chairman for Junior Achievement of Georgia. He and his wife, Tammy, have three children, including son Joshua, a student in the College of Architecture.

Richard M. Kramer, Arch 80, M Arch 82,

has been promoted to principal with the firm of Pieper O'Brien Herr Architects. Kramer also is chairman of the Alpharetta Design Review Board. He lives in Alpharetta, Ga., with his wife, Regina, and children, Caroline and Michael. The couple's son Christopher graduated from Tech with a computer science degree in 2007.

Don Pital, CerE 83, MS CerE 85, the growth services manager for Georgia Tech's Enterprise Innovation Institute, was named Innovator of the Year by the U.S. Manufacturing Extension Partnership. In 2008, he was selected to start the growth services group to identify growth opportunities for manufacturing-related clients. As a certified business growth coach, Pital, who joined Tech in 1998, guides companies through ideation process management.

Rob Wilhite, ICS 85, has been named one of

Ramblin' Roll

Consulting Magazine's top 25 consultants for 2009. Wilhite, recognized for excellence in energy consulting, is the senior vice president of KEMA Consulting's global Intelligent Networks and Communications practice. He also was a primary author of KEMA's book, *Utility of the Future*. He lives with his wife, Lori, and three teenage children in Waxhaw, N.C.

1990s

Roger "Roddy" Bailey, Mgt 93, was ranked the No. 3 leader in the field of corporate/mergers and acquisitions in the 2009 edition of *Chambers USA: America's Leading Lawyers in Business*. Bailey is an attorney with Miller & Martin PLLC in Chattanooga, Tenn.

M. Brian Blake, EE 94, has been promoted to professor and associate dean of engineering and strategic initiatives at the University of Notre Dame. After 10 years at Georgetown University, including two years as department chair of computer science, Blake plans to return to research and work on national issues of enhancing the IT work force.

Matt Casiano, ME 98, MS ME 00, an engineer at NASA's Marshall Space Flight Center in Huntsville, Ala., received a Silver Snoopy Award in April. The prestigious award, which is presented by NASA astronauts, recognizes outstanding contributions to human space flight mission safety and success. An individual may receive only one Silver Snoopy Award in his lifetime. Casiano, who joined Marshall following graduation, received the award for fluid dynamics work performed and expertise

Astronaut **Timothy Kopra's** first trip to space will be a long one. Kopra, MS AE 95, who headed to the International Space Station as a mission specialist aboard the most recent space shuttle Endeavour flight, is spending three months at the station as flight engineer and science officer. A former Army pilot who served in Operations Desert Shield and Desert Storm, Kopra joined NASA at the Johnson Space Center in 1998 as a vehicle integration test engineer and was selected as an astronaut in 2000. Endeavour launched July 15.



NASA

exhibited during the investigation of the space shuttle flow control valve failure. He currently is working on the Constellation Program.

Angela McMath Clark, Biol 94, and her husband, Darin, announce the birth of son Nolan James on Feb. 4. Nolan joins brother Jackson, 2, at the family's home in Smyrna, Ga. McMath Clark is an associate vice president with e2M, a full-service environmental and engineering company.

Darren Cutter, IE 98, and his wife, Laura, announce the birth of a son, Wade McGuire, on Oct. 10. Wade joins his brother, Davis, 3, at the family's home in Marietta, Ga. Cutter

is a neuroradiologist in metro Atlanta.

Meredith Gibson Farruk, MS PubPol 99, and her husband, Terry, announce the birth of son Gabriel Gibson in May. The family lives in Carlsbad, Calif.

Meridith Ann Green, Mgt 99, and **Andrew Bush**, Mgt 97, were married May 9. The couple live in Orlando, Fla.

Courtney Begina Harkness, IntA 98, MS Mgt 02, and Daniel H. Harkness III, EE 00, announce the birth of daughter Katherine Alida on Jan. 26. Katherine joins brother Jackson at the family's home in Atlanta. Courtney is a senior account supervisor with Edelman Public Relations, and Daniel works as a sales engineer with Sprint Nextel Corp.

Patrick Inglett, Biol 97, and his wife, Kani-ka, announce the birth of a son, Watson Amar, on March 11. The family lives in Gainesville, Fla., where Inglett is an assistant professor of wetland and aquatic biogeochemistry at the University of Florida.

Aaron David Kahn, AE 99, MS AE 01, married Laura Catherine Hill on May 23. Kahn works with the U.S. Naval Research Laboratory. The couple live in Arlington, Va.

Kyle Klatka, EE 96, Econ 99, and his wife, Kirsten, announce the birth of their daughter

Todd Long, CE 89, MS CE 90, was appointed director of planning for the Georgia Department of Transportation by Gov. Sonny Perdue. Since August 2008, he has served as director of all engineering, IT and business-related projects for the Georgia Regional Transportation Authority. Prior to that, Long spent 18 years working in various positions with the DOT. Upon naming Long DOT director of planning in June, Gov. Perdue said, "I think all Georgians want a statewide transportation plan based on our needs that provides value for our tax dollars, and we are taking a big step in that direction today." Long lives in Lilburn, Ga., with his wife, Kelli, IE 90, and their four children.



Big Leap With Teeny Cake

By Leslie Overman

After visiting her first “cupcakery” in a 2007 trip to New York City, Michelle Lane returned home to San Francisco and began a search for the city’s best cupcakes. When none compared to those she had in the Big Apple or the confections her mother made for her growing up, she set out to perfect the vanilla cupcake on her own.

Lane, Chem 98, now is the owner and sole employee of Teeny Cake, a cupcake business she runs out of her home. She has grown the business through word of mouth and by setting up booths at several farmers markets.

Customers in the San Francisco area may place orders through the company’s Web site, teenycake.com.

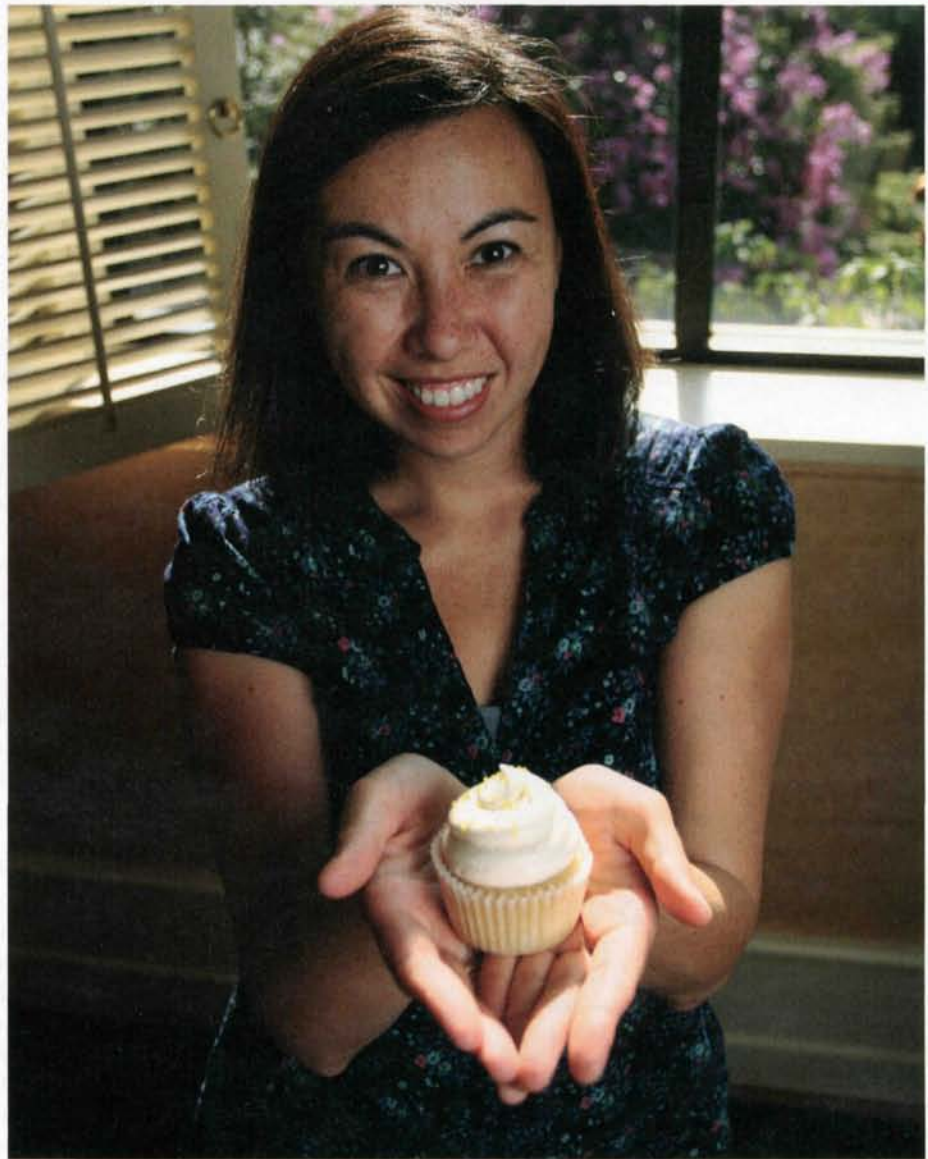
In early July, Lane quit her job as a project manager for Cato Research, a contract research organization for pharmaceutical companies, to make teeny cakes full time.

“It is super scary to make the leap,” Lane said, “but it was becoming too much to juggle both a full-time career and pursuing my dreams.”

Lane described her Teeny Cake operation as a “one-woman show.” For small orders, she bakes the cupcakes in her home kitchen and for larger orders and catering gigs rents a commercial kitchen by the hour. Her boyfriend, Kevin, helps out in day-to-day activities, pitching in with baking and frosting duties.

Lane likens baking to performing chemistry experiments. “If you add too much of an ingredient, it can go from great to horrible in a hurry,” she said. “I think my chemistry background has definitely helped in my understanding of baking and also assisted me with the fine-tuning of recipes.”

It took Lane three to four months to hone in on the perfect ingredients for her vanilla cupcake. Her signature Duo of Vanilla starts with a cake infused with Madagascar Bourbon vanilla extract that



Eric Turner

Michelle Lane, owner of Teeny Cake, is in the process of creating a cupcake shop on wheels. “It is a mobile truck with a delivery window,” she said, “like an ice cream truck but with cupcakes.”

is then topped with a generous mound of vanilla buttercream frosting.

“I think the tinkering paid off,” Lane said. “My customers love that cupcake.”

She now has nearly 20 flavors, including Chip a Dee Doo Dah, a chocolate cake with chocolate chips sprinkled throughout the batter and a spread of chocolate-chip-vanilla buttercream on top, and Darling Peach, a

spice cake topped with caramel cream cheese frosting and a dollop of peach compote. Teeny Cake’s top seller is Southern Tradition, Lane’s spin on a red velvet cake.

Lane has trouble picking her own favorite. “My favorites change all the time, especially as I develop new flavors,” she said. “I do love my vanilla and can eat that cupcake anytime.”

Ramblin' Roll

Marley Ellen on May 18. She joins her sister, Ellery, 3, at the family's home in Arlington, Mass. Klatka is employed as a product manager with Teradyne.

Michael David Knight, AE 96, was presented a General Dynamics Innovation Award in April in Washington, D.C. A preliminary design systems specialist with Gulfstream, Knight led the external vision system team, in collaboration with NASA, to design, develop and coordinate the testing of a concept for replacing natural forward pilot vision with video imagery. Knight lives in Savannah, Ga., with his wife, **Clarissa Cochran Knight**, ME 96, and their children, Jake, 4, and Suzanna, 7.

Suzanne Dickerson Krpata, Mgt 99, and her husband, Lance, announce the birth of a son, Zachary, on April 3. Krpata works as an account executive for supply chain sales for RedPrairie. The Krpata family lives in Cumming, Ga.

Brandon Lockhart, Mgt 98, an assistant professor at the University of Nebraska-Lincoln, earned a PhD in finance from the Uni-

versity of Florida. He has presented his research at conferences in Dallas; Prague, Czech Republic; San Diego; Chicago; and Reno, Nev. A paper from his dissertation won the Western Finance Association's 2009 Trefftz Award for best student paper. He and wife **Kristy Payant Lockhart**, CE 98, a full-time mother, live in Lincoln with their children, Nate, 5, and Mari Cagle, 7.

Amy McLean Penka, IE 95, MS Stat 97, and **Adrian Penka**, IE 97, announce the birth of a son, Finn Anderson, on March 24. Finn joins his brother, Aiden, 2, at the family's home in Sandy Springs, Ga. Amy is a full-time mother, and Adrian is a senior manager with CapGemini Consulting.

Matt Silveston, CE 94, was elected to serve on the board of directors of WPC Inc., an environmental and geotechnical engineering and construction materials testing firm headquartered in Charleston, S.C. He continues to serve as the firm's senior geotechnical engineer and director of business development. Silveston, who has been with WPC for 12 years, received a master's degree in geotechnical engineering from the University of Texas at Austin in 1996. He lives in Charleston with his wife and two children.

Robert Alexander "Alex" Susor, IntA 99, has been named a 2009 co-recipient of the Georgia Association of Criminal Defense Lawyers' Case of the Year Award in recognition of his work as co-author of the appellant's brief in the Georgia Supreme Court case *Garza v. State of Georgia*. The case overturned 40 years of lower court precedent and adopted a new legal standard for interpreting Georgia's kidnapping statute. Following the court's decision, Susor was invited to testify as an expert witness on the issue before the judiciary committees of both the Georgia Senate and Georgia House of Representatives. Susor, who graduated from the Georgia State University College of Law in 2006, is an associate attorney at L. David Wolfe PC in Atlanta.

Candace Morgan Taylor, IE 99, and **Jim Taylor**, IE 99, announce the birth of a daughter, Mia Ansley, on May 15. Mia joins her brother, Trey, 2, at the family's home in Alpharetta, Ga. Candace is a release manager for Radiant Systems, and Jim is a technical architect with Accenture.

Brian C. Thomas, Mgt 98, has been sworn in as president of the Black Lawyers Association of Cincinnati and has become a member of the Cincinnati Bar Association board of directors. An associate with Graydon Head, he practices in the area of employment litigation. Prior to joining the human services industry group, he gained experience as a litigator in the workers' compensation field. Thomas graduated from the University of Cincinnati College of Law in 2001.

Tyler Townsend, IE 98, of Columbus, Ga., was nominated and selected as one of "5 Under 40" recognized in the July / August issue of *Columbus and the Valley Magazine*. He is an associate planner with Townsend Financial.

Greg Willis, ChE 94, has relocated to Singapore, where he is the merchandising director for the consumer division in Dell's Asia-Pacific region. Since joining Dell in 2000, Willis has worked in various marketing and sales management leadership roles in the company's U.S. consumer division in Austin, Texas. He worked for Andersen Consulting from 1994 to 1998 and received an MBA from the University of Virginia's Darden Business School in 2000.

Richard Wingate, ABiol 99, announces the formation of Hallman & Wingate LLC in Marietta, Ga. The firm specializes in resolving complex environmental legal issues. Wingate and his wife, Kelly Dadson Wingate, ME 02, MS MedPhys 07, live in Smyrna with their sons, Ben, 3, and Gray, 5.

R. Scott Winstead, Phys 92, received a doctorate in pharmacy, cum laude, from the University of Florida in May. Winstead began a postgraduate hospital practice residency in the summer with the Veterans Affairs hospital in Lake City, Fla.

Jason Witt, CerE 95, MS CerE 97, and wife Gretchen, of Atlanta, announce the birth of Abraham Thomas on June 10. Witt is a senior manufacturing engineer with EMS Technologies.

Dave Zielinski, EE 98, and his wife, Lindsay Raymond Zielinski, announce the birth of son Bennett David on April 9. The couple's first son, Scoville, is 2 years old. Zielinski, a lieutenant commander in the Navy, is a student at the Naval War College in Newport, R.I.

Dynamics
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What have you been up to?

To have your news included in the Ramblin' Roll, clip out this form and send us the details at Ramblin' Roll, 190 North Ave. N.W., Atlanta, GA 30313 or e-mail us at ramblinroll@gtalumni.org. Please include your graduation class, degree and up-to-date contact information. Submissions may be edited for clarity and space.

Circular Motion
 $\vec{a}_c = \frac{v^2}{r}$
 $F_c = \frac{mv^2}{r}$

Kinematics
 $\vec{x}_f = \vec{x}_i + \vec{v}_i t + \frac{1}{2} \vec{a} t^2$
 $\vec{v}_f = \vec{a} t + \vec{v}_i$
 $\vec{v}_f^2 = \vec{v}_i^2 + 2 \vec{a} \Delta \vec{x}$

Radioing the Race

By Van Jensen

For all his involvement with Atlanta's racing scene, David Ziskind, EE 05, admits it's his love of amateur radio, not running, that brought him to this point. While Ziskind was at Georgia Tech, he began providing communications at the AJC Peachtree Road Race and Atlanta Marathon.

A team of about 24 amateur radio operators play a crucial role in each race, relaying information, organizing volunteer efforts and tracking any medical situations. "You only get one chance to get this right, and in the case of the AJC Peachtree Road Race, 55,000 runners are counting on you, along with volunteers and spectators," Ziskind said.

He also helps with the ING Georgia Marathon races. While he's plenty busy with his job at Polytron Inc. in Duluth, Ga., as an electrical controls engineer, Ziskind couldn't pass up the chance to enjoy another race day.

"A really neat and satisfying moment occurred during this year's ING Georgia Marathon," he said. "As the event was wrapping up, a family was anxiously awaiting the arrival of their daughter at the finish line. I was able to look her up in our tracking system, confirm that she was



Gary Meek

David Ziskind, EE 05, joined other Georgia Tech young alumni in Rappel for Roll Call last year.

not treated by medical providers and see where her last tracked position on the course was, along with an estimated finish time. The family was relieved."

Ziskind also is a newly elected member of the Alumni Association's Young Alumni Council. His goal is to increase involvement of recent graduates.

His mother, an accomplished musician, lost her battle with breast cancer in 2006. She had nearly completed

a doctoral thesis in music performance at the University of Georgia, which awarded her a PhD posthumously at its August 2007 commencement.

"Prior to the ceremony, we met with President Michael Adams," Ziskind said, "and despite the circumstances, I could not resist the opportunity to tell him that I was a Georgia Tech alumnus, although on that day I also considered myself to be a part of the UGA community."

2000s

Amanda Avery, PFE 08, and **Devin Dannemiller**, Cls 08, were married May 24. Avery works as a process engineer with Cabot Corp., and Dannemiller is completing a degree in mechanical engineering at Louisiana State University. The couple live in Baton Rouge, La.

Yi Shy Cauble, EE 04, and **David Cauble**, BC 03, announce the birth of their son Cason Hill on June 14. Cason joins his brother, Zimri, 2, at the Cauble family's home in Tallahassee, Fla. Yi is a full-time mother, and David is an associate pastor with Crossbridge Christian Church.

Corinne Caviness, CE 08, married **David Walker**, CE 09, on May 30. Caviness, who is the daughter of Christopher Caviness, CE 77, and Cheryl Caviness, TE 79, is a staff engineer at CAPE Inc. Walker is an engineer with Parsons. The couple live in Atlanta.

James P. Cellini, ABiol 05, received a doctorate in veterinary medicine from the University of Georgia in May.

Shannon Dobbins, ChE 00, was hired as a process engineer/project engineer at the firm of Ford, Bacon & Davis in Greenville, S.C., in April.

Lindsay Egglar, IE 01, married Nathaniel Totten on June 1. The couple, both Air Force pilots, live in Las Vegas.

Pete Fierro, ChE 00, received an MBA from Emory University's Goizueta Business School in May. Fierro will join A.T. Kearney as an associate in September. He and his wife, **Kelly Chickini Fierro**, Mgt 01, live in Atlanta's Brookhaven neighborhood.

Ramblin' Roll

Casey Fiesler, Psy 03, MS HCI 05, was presented a 2009 Burton Award for an article, which was published in the *Vanderbilt Journal of Entertainment and Technology Law*. The Burton Awards for Legal Achievement were established in 1999 as a way to honor the best writing in the legal profession. Fiesler, who received a law degree from Vanderbilt University in May and will begin doctoral work at Georgia Tech in human-centered computing this fall, received the award for her article "Everything I Need To Know I Learned From Fandom: How Existing Social Norms Can Help Shape the Next Generation of User-generated Content."

Janae Futrell, M Arch 07, has been selected for an Erasmus Mundus scholarship. Futrell will spend the first of her two years of study at the Technische Universitat Darmstadt in Germany and the second year at the Universitat Internacional de Catalunya in Barcelona to earn a master's in international cooperation and urban development and a master's of international cooperation in architecture.

Daniel H. Harkness III, EE 00, and Courtney Begina Harkness, IntA 98, MS Mgt 02, announce the birth of their daughter, Katherine Alida, on Jan. 26. Katherine joins her brother, Jackson, at home in Atlanta. Daniel is a sales engineer with Sprint Nextel Corp., and Courtney is a senior account supervisor with Edelman Public Relations.

Megan Kirk Heffern, IE 03, MS IE 06, MS IntA 06, and husband **Robert Heffern**, AE 04, will celebrate their one-year wedding anniversary Sept. 27. They work for the Department of Defense. Megan is an analyst, and Rob is a program manager. The couple live in Annapolis, Md.

Michael G. Johnson Jr., IE 00, and his wife, Elizabeth, announce the birth of a son, Whitley Luke, on March 5. Johnson is an account executive with Fortna. The family lives in Holly Springs, Ga.

Marshall Rogers, AE 03, received a master's degree in aerospace engineering from the Air University of the Air Force Institute of Technology at Wright-Patterson Air Force Base in Ohio. An Air Force captain, he is assigned to Kirtland Air Force Base in New Mexico.

Bike Rider With a Cause

Paul Supawanich, IE 06, pedaled away from San Francisco in late July to begin a 2,848-mile bike ride to his hometown of Gibson City, Ill., to raise money for the Atlanta Bike Coalition and the Ford County Youth Soccer Club.

"I became an everyday cyclist while in Atlanta, and it is the city that initiated my passion to work on transportation issues," Supawanich said. "Since that time, I moved west to Berkeley, California, to attend graduate school to study those same topics."

"Even though I am now on the West Coast, I try my best to stay informed about local Atlanta issues and cycling," he said of his decision to raise funds for the coalition. "As I've progressed into my current career as an urban

planner, I realize how much of an impact cycling can make in certain parts of the United States in reducing our dependence on vehicles and increasing our health, among other benefits."

Supawanich said he chose to support the Ford County Youth Soccer Club in Gibson City because of his experiences as a youngster. "Playing soccer ... was an activity that really shaped me into the person I am today, not only combining the importance of fitness and teamwork but also leadership and discipline."

Supawanich, who hopes to raise \$4,000 to support the two organizations, expects to arrive in Gibson City on Sept. 9, give or take a few days. To follow his journey, visit his blog at supaonbike.blogspot.com.



Cyclist Paul Supawanich hoists the bike that is carrying him across the country to raise money.

Courtney Ann Bove Rosenthal, Chem 04, received a doctorate in veterinary medicine from the University of Georgia in May.

Walker Stewart, Mgt 03, vice president of the Birmingham Area Georgia Tech Club, received the club's 2009 Outstanding Young

Alumnus of the Year award. In 2007, Stewart earned a juris doctor degree from the Cumberland School of Law at Samford University, where he served as managing editor of the *Cumberland Law Review* and was a Judge Abraham Caruthers teaching fellow. Stewart works in the litigation section of Burr & Forman LLP.



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1930s

Robert Wesley Boyd, ME 39, of Roanoke, Va., on May 17. After spending many years designing heating and air-conditioning systems with the Trane Co., he founded ThermoTrol Corp. in 1970. He retired in 1995. A Navy veteran, Mr. Boyd served stateside during World War II. He was a member of the Williamson Road Lions Club and a square dancer.

combat missions during World War II and 52 different aircraft during his military career.

Vernon Everett Lyons, ChE 36, of Sheffield, Ala., on May 11. Following graduation from Tech, where he was a member of Phi Kappa Phi, Mr. Lyons worked as a chemical engineer with the Tennessee Valley Authority Office of Agricultural and Chemical Development at Wilson Dam in Alabama, producing munitions and new fertilizers. He retired as chief of the

six two-year terms as a Decatur city commissioner, including three years as mayor pro tem. In the early 1970s, he was appointed to the state advisory committee on factory-built housing by then Gov. Jimmy Carter. He had served as president of the DeKalb Municipal Association; district vice president and member of the board of directors of the Georgia Municipal Association; and president of the Southeastern Chapter of the Society of Fire Protection Engineers and Phi Sigma Kappa honorary fraternity at Georgia Tech.

William Ashley "Ash" Verlander, IM 39, of Jacksonville, Fla., on June 12. Mr. Verlander was a certified public accountant and insurance examiner for the state of Georgia before moving to Jacksonville in 1956 and becoming a co-founder of American Heritage Life Insurance Co. Mr. Verlander served as president of the company for 25 years and retired as chairman and CEO in 1994. He served as president of the Jacksonville and Florida state chambers of commerce. He was president of the Gator Bowl Association in 1965 and a member of the Gator Bowl Hall of Fame. The Gator Bowl game winner's trophy, at right, is named for him. Mr. Verlander, who was just 15 years old when he enrolled at Tech, served as a Georgia Tech Foundation board member and received the College of Management's Alumnus of the Year award. Survivors include his son Chris, IM 70, and grandsons Michael, Cls 98, and Scott, MS Mgt 00. Memorials in Mr. Verlander's name may be made to the Georgia Tech Foundation for the Goldin-Verlander Scholarship.



Scott Bruhn

Eddie Hewlette Pitman, IM 39, of Newnan, Ga., on May 25. Mr. Pitman retired from a 41-year career with Swift & Company as Southeast regional purchasing agent and began a second career in sales as a representative for several manufacturers of packaging materials. A baseball letterman at Tech, he entered military service in 1946.

Henry deLeon Southerland Jr., Cls 33, of Mountain Brook, Ala., on April 26. After retiring from U.S. Steel as manager of Southern lands and timber, Mr. Southerland studied history at Samford University, receiving a master of arts degree in 1983. He co-authored *The Federal Road Through Georgia, the Creek Nation, and Alabama, 1806-1836*, first published in 1983. The book received an Outstanding Non-fiction Award from the Alabama Library Association. A member of Sigma Alpha Epsilon fraternity at Tech, Mr. Southerland was a World War II veteran and retired from the Army Reserve as a full colonel. He served as president of the Alabama Sons of the Revolution, governor of the Alabama Society of Colonial Wars and as a member of First Families of Virginia and the American Society of Civil Engineers.

Samuel Hall Fowler Sr., CE 38, of Toccoa, Ga., on June 3. He retired after more than 30 years with Coats and Clark Inc. Earlier in his career, Mr. Fowler worked for Bell-Aircraft-Marietta and Freeport Sulfur Co. He served two terms as a Toccoa city commissioner and a year as mayor. He was a past president of the Toccoa Kiwanis Club and a past chairman of the advisory board of the Salvation Army.

James "Ernie" Haile Jr., ME 38, of Las Vegas, on June 6. After retiring from the Air Force as a colonel, he began a career in mechanical engineering, working with the Battelle Institute and Stencil Engineering. In 1971, he and his wife started a real estate company in Hendersonville, N.C., that they operated until 1990. Mr. Haile, who was commissioned as a second lieutenant in the Army Air Corps in 1939, flew 23

plant chemical control branch in 1976. He also was a consultant to the governments of Korea and India regarding the installation of high-nitrate fertilizer plants. During retirement, he worked in antiques with his wife.

William Calvin "Bill" Painter, IM 38, of Decatur, Ga., on June 4. In 1982, he retired from the Insurance Services Office after a lengthy career with the organization and its predecessor, the Southeastern Underwriters Association. Mr. Painter, who was commissioned in the Army in 1939, served as a second lieutenant on active duty from 1941 to '46, at which time he returned to Army Reserve status. In 1965, he was promoted to colonel and assumed command of the 449th Quartermaster Depot, which he led until his retirement in 1971. His decorations include the Legion of Merit. Mr. Painter served

1940s

Julius Aldrich "Andy" Anderson, ChE 48, of Monroe Township, N.J., on April 12. In 1983, he retired from PPG Industries after working in market development and sales for 35 years and receiving a distinguished service award. Mr. Anderson earned a bachelor's degree in chemistry from the University of South Carolina in 1939 and enlisted in the Navy in 1940, serving as a gunnery officer aboard the USS Jarvis. He was discharged with the rank of lieutenant commander in 1945.

Leo Thomas "Tommy" Barber Jr., CE 43, of Moultrie, Ga., on June 15. He worked with his father and brother at the Barber Contracting Co. in Moultrie and supervised power-line construction projects built by Barber and Gibson Contractors. He served as a director of Southwest Georgia Bank and its predecessors from 1951 to 1999 and as chairman of the board from 1989 to 1999. Mr. Barber and his wife were charter members of the Georgia Conservancy, for which he served as a trustee from 1968 to 1991 and as chairman from 1979 to 1981. The couple's wildflower photographs were published in numerous wildflower guides and magazines. In 1971, Mr. Barber was appointed by then Gov. Jimmy Carter to the Georgia Department of Natural Resources board, on which he served until 1978. He was named Conservationist of the Year by the Georgia Wildlife Federation in 1982 and received the Rock Howard Award from the Georgia Board of Natural Resources in 1984. A World War II veteran, Mr. Barber served in France and Germany as a first lieutenant in the Army Corps of Engineers and retired from the Army Reserve with the rank of lieutenant colonel in 1972.

David Maxwell Barton, Phys 47, a resident of La Puebla, N.M., on June 20. Mr. Barton retired from Los Alamos National Laboratories. During World War II, he was studying nuclear physics at the University of Michigan and preparing to join the Army when a professor recommended him for the Manhattan Project. At Los Alamos in 1944-45, Mr. Barton witnessed the detonation of the first atomic device at the Trinity site near Alamogordo, N.M.

Danforth Parker Bearse, Arch 48, of Atlanta, on May 1. Mr. Bearse worked for Hartford Insurance Co. and Georgia Pacific. He served with the 42nd Rainbow Division during World War II and was awarded the Bronze Star and Purple Heart.

Robert Gaston Bennett Jr., IE 48, of Stone Mountain, Ga., on May 19. Mr. Bennett retired from Reliance Electric Co. as an account manager. He was an Army Air Forces B-24 pilot during World War II.

Wallace H.C. Colly Jr., Cls 44, of Atlanta, on May 31. Mr. Colly retired from the Georgia Department of Transportation. He served in the Army during World War II and was a founder

of the Dogwood City Grotto. Survivors include his son, Wally Colly, BC 74.

Robert "Bob" Culver Jr., EE 48, of Baton Rouge, La., on June 25. Mr. Culver retired from Plantation Pipeline Co. after 40 years of service. During World War II, he served as a lieutenant in the Army Air Corps.

Roy Washington Ferguson Sr., Cls 41, of College Park, Ga., on April 21. He retired as a Boeing 747 captain with Delta Air Lines in 1977. A mechanical engineering major and cross-country runner at Tech, he left the Institute to join the Army Air Corps, serving as a flight instructor during World War II. In retirement, Mr. Ferguson built an airplane from scratch. Survivors include his son, Roy Ferguson Jr., EE 67.

Robert W. "Bob" Gibeling Sr., Arch 41, of Atlanta, on June 30. Mr. Gibeling retired in 1991 after a lengthy architecture career in which he designed Lutheran churches; supervised the design and construction of hospitals and health facilities in 23 years with the eight-state Atlanta regional office of the U.S. Public Health Service; and worked on health centers, fire stations and county buildings in six years as a consulting architect with the Fulton County Public Buildings Department. His design for the Atlanta Lutheran church St. Matthew's earned him induction into the Church Architectural Guild. A dedicated supporter of Georgia Tech's Lutheran campus ministry, Mr. Gibeling in 1996 loaned it half of the funds needed to purchase a house on Fifth Street for the Lutheran Center. He was appointed to the College of Architecture's development council upon its establishment in 1993 and served on it until his death. Mr. Gibeling was a Navy veteran of World War II. Memorials in Mr. Gibeling's name may be made to the Georgia Tech Alumni Association or Lutheran Campus Ministry at Georgia Tech. Survivors include his son Bob Gibeling Jr., BMgt 72, and brother Alfred Gibeling, ME 43.

Metin R. Hamarat, Cls 42, of Savannah, Ga., on June 3. He worked at Union Bag, and later Union Camp, for more than 40 years, retiring in 1986 as executive vice president. Mr. Hamarat, who first joined the company in Savannah as an engineer draftsman in 1942, returned to his native Turkey to join the family textile business in 1945. During World War II, he served

as an officer in the Turkish army, working with American forces as a translator. Survivors include son Nedim Hamarat, IE 63.

Joseph Thomas "Joe" Hamrick, MS ME 49, of Roanoke, Va., on April 21. Mr. Hamrick, who founded Aerospace Research Corp. in 1961, performed research and wrote numerous articles about the use of gas turbines for energy conservation and patented 15 turbine-related products. During World War II, he served in the Army Air Forces as an intelligence officer under Gen. Douglas MacArthur.

John Martin Holder, Cls 44, of Hapeville, Ga., on June 20. Following military service, he took over the family business and renamed it Holder Tire and Auto Service. Mr. Holder, who joined the Air Corps in 1942, was trained as a bombsight mechanic and aerial gunner and served as a crew member on the B-17 and B-24. He received a bachelor's degree in commercial science from Georgia State University in 1949 and a law degree from Woodrow Wilson Law School in 1952. He was director of the Hapeville Chamber of Commerce for many years and served the Hapeville Development Authority for 10 years, including two years as vice president.

Lewis William "Bo" Hook, IM 49, a resident of Statesboro, Ga., on April 16. Mr. Hook retired as owner and CEO of Robbins Packing Co. in 2000. A Statesboro city councilman for 24 years, he also served as police commissioner and mayor pro tem and organized the Bulloch County Alcohol and Drug Council. During World War II, he was a B-24 bomber pilot in the Army Air Corps. A high school baseball, basketball and football player, he was inducted into the Savannah Athletic Hall of Fame. He was a three-year letterman in baseball at Tech and played on football coach Bobby Dodd's first team and on the 1947 Orange Bowl team. He was an accomplished amateur golfer, playing in the British, Canadian and U.S. senior amateur championships.

Robert Justice "Rabbit" Jordan, IM 48, of Anniston, Ala., on June 11. In 1987, Mr. Jordan retired as president and CEO of Choice Vend Inc. after 26 years with the company and returned to his hometown of Anniston. He then worked as a part-time director of the Cavalier Co. of Chattanooga. A football, basketball and

In Memoriam

baseball player at Tech, he made the All-SEC sophomore team, was an All-American sophomore pick and played in three bowl games. An Air Force veteran of World War II, he declined offers from Detroit and Philadelphia to play professional football and went into the vending machine business as a field engineer for Vendo Inc. following graduation.

Lawrence Irving Lefstead Jr., Cls 49, a resident of Wilmington, N.C., on May 3. Mr. Lefstead worked with Pure/Union Oil, receiving recognition and awards for residential and commercial designs. An Army veteran, he served in Gen. George Patton's Third Army, 90th Infantry Division, in World War II, storming the beaches of Normandy on D-Day. He received the Bronze Star and in 2008 was awarded the Jubilee of Liberty Medal from France.

Joe Olin Mangum Jr., Cls 44, a resident of Fayetteville, Ga., on June 6. He worked in flight operations and served as a pilot with Delta Air Lines for many years, retiring in 1983. Mr. Mangum earned a pilot's license as a teenager and flew for the Civil Air Patrol during World War II. In retirement, his hobbies included collecting and cutting gem stones.

Jose Justo "Joe" Manzanilla, ME 41, of Mobile, Ala., and Tavernier, Fla., on April 30. A native of Havana, Cuba, he moved his family to the United States in the 1960s.

Dixon R. Olive Jr., PHE 41, of Columbus, Ga., on Dec. 27. Mr. Olive retired from the Georgia Department of Human Resources. A member of Alpha Tau Omega fraternity at Tech, he received a master's degree in public health engineering from the University of North Carolina at Chapel Hill. He served in World War II and retired from the Reserve as a lieutenant colonel.

Dan Pierce Pulley ChE 43, of Richmond, Va., on June 28. He worked most of his career for Virginia-Carolina Chemical Co., retiring from Mobil, which acquired the company, in 1987 as a managing engineer. He also worked for five years at the family furniture business, The Holladay House. Mr. Pulley coached Little League and was an assistant Scoutmaster.

Bruce Walker Ravenel, EE 41, of Medford, Ore., on April 23. After receiving a master's degree in social work from the University of Denver in 1966, he worked as a social worker in child psychiatry at the University of Colorado Medical School and later at the Booth Memorial Home for Teenage Girls. He moved to San

Jose, Calif., in 1984 and worked for Hospice of the Valley in Santa Clara. Following service in the Army during World War II, he received a master's degree from the Virginia Theological Seminary in 1949. Ordained as an Episcopal priest later that year, he served in parishes in Washington, Texas and Colorado.

John H. "Jack" Summer, Arch 49, of Atlanta, on April 26. In 1961, he started his own architectural firm, John H. Summer and Associates, later Summer/Wise and Associates, and designed many churches and hotels. A member of the 82nd Airborne Division during World War II, he was among the first paratroopers to land in Normandy on D-Day. Mr. Summer served on the board of the 507th Parachute Infantry Regiment Association, and he helped lead the effort to have a monument erected in Amfreville, France, in 2002 to honor the regiment's fallen members.

Gerald A. Zell, Chem 49, of Brunswick, Ga., on June 9. Mr. Zell operated Brunswick Gas Fuel for most of his career and later worked in real estate.

1950s

William King Anderson Jr., AE 57, of Clarksdale, Miss., on June 22. A lifelong resident of Clarksdale, he farmed the King & Anderson plantation until he retired in the early 1980s. A member of Sigma Phi Epsilon fraternity at Tech, he was a captain in the Air Force, serving as a F-100 fighter pilot and as an alternate Thunderbird pilot.

William S. Barnes, MS Phys 57, PhD Phys 63, of Lake Zurich, Ill., on March 31. He retired from Northeastern Illinois University, where he was a professor of computer science. Earlier in his career, he worked at Lawrence Livermore National Laboratory in California. He served in the Army during World War II.

Norman Batho, Cls 53, of East Windsor, N.J., on Dec. 16. He worked in insurance and horticulture before embarking on a 20-year career with the state of New Jersey as a programmer/analyst and later systems administrator in the treasury and personnel departments. A collector of bicycle memorabilia, he had served as treasurer and editor of *The Bicycle Stamps Magazine*; president of the Bicycle Stamps Club; and board member and president of the Princeton Freewheelers. He also was a longtime member of the Wheelmen, an antique bicycle

organization, for which he spent 10 years as editor of its magazine. He served two years as a lieutenant in the Army Transportation Corps, stationed in France during the Korean War.

Thomas Russell "Russ" Boughnou, EE 59, of Dallas, in May. He joined Texas Instruments in 1962 and retired as vice president of its defense systems and electronics group in 1994. A pioneer in the development of tactical guided missiles, he held two patents and received a master's degree in electrical engineering from Southern Methodist University.

Robert C. Carter, EE 50, of Atlanta, on July 1. He retired from Southern Polytechnic State University, where he taught courses in circuits. Mr. Carter wrote several instruction manuals and a textbook. A ham radio operator in his youth, Mr. Carter instructed pilots in international Morse code while serving in the Army Air Corps during World War II.

John Lauren Clark Jr., Cls 51, a resident of Cairo, Ga., on May 21. A Marine Corps veteran, Mr. Clark joined his father in operating Clark Funeral Home in Cairo following his mother's death in 1955. He also was a licensed funeral director in the state of Florida. Mr. Clark was a deacon at his church and a member of American Legion Post 122 and the Georgia Funeral Directors Association.

Porter C. Craighead, Arch 53, of Columbia, S.C., on June 9. He retired from the South Carolina Board of Engineers.

Melbourne Warren Croft, ChE 55, a resident of Lynchburg, Va., on June 9. Mr. Croft retired from Babcock-Wilcox as a nuclear engineer after 35 years with the company. He served as a first lieutenant in the Army.

John "Pete" Curtis, ME 58, of Tempe, Ariz., on May 28. A co-op student and a member of Phi Kappa Tau fraternity and the Bulldog Club at Tech, he was a former account manager with Siemens Energy & Automation Inc.

Edward Martin Davis, IM 50, a resident of Melbourne Beach, Fla., and Atlanta, on May 16. Mr. Davis was a retired engineer with Lockheed Martin and Heery International.

C.L. Deadwyler Jr., Cls 50, of Atlanta, on June 8. Mr. Deadwyler sold real estate and was a residential contractor and real estate appraiser in Atlanta. Mr. Deadwyler retired in 1993. A graduate of Georgia State University, he served in the Navy from 1945 to 1947.

Former Georgia Aquarium Director Swanagan Dies at 51

In his youth, Jeff Swanagan watched Jacques Cousteau's underwater adventures on TV and dreamed of someday becoming a marine biologist. As an adult, he headed the world's largest aquarium, providing people with the opportunity to partake in undersea exploration without dipping a toe into the water.

Mr. Swanagan, MS TASP 93, who returned to his native Ohio in 2008 to serve as executive director of the Columbus Zoo and Aquarium after seven years at the helm of the Georgia Aquarium, died of a heart attack June 28 at his home in Columbus. He was 51.

In a statement posted on its Web site, the Georgia Aquarium described Mr. Swanagan as a "dedicated educator whose passion for making a difference for wild things in wild places was evident through all of his work and leadership."

Ground for the aquarium had not yet been broken when Mr. Swanagan was hired as its executive director in 2001. He participated in the earliest stages of the attraction's development, accompanying founder Bernie Marcus on trips around the world to visit other aquariums and acquire specimens.

The Georgia Aquarium brims with more than 8 million gallons of water and more than 100,000 animals. Mr. Swanagan's dedication to education is evident in the facility's numerous interactive exhibits, including touch pools in which children may dip their fingers to feel stingrays and sea urchins.

In a 2006 GEORGIA TECH ALUMNI MAGAZINE photo shoot, Mr. Swanagan posed in front of the aquarium's 6-million-gallon fishbowl as children pressed their noses against the glass viewing window to get a better look at the whale sharks, the largest fish on the planet.

"It's a privilege to dive in a tank like this," Mr. Swanagan



Gary Meek

told the ALUMNI MAGAZINE. "I get in on Sundays and help clean."

A native of Cleveland, Mr. Swanagan earned a science degree from Ohio State. He began his career at the Columbus Zoo, hired by animal expert and TV personality Jack Hanna as a zookeeper. He later served as its education curator before heading to Atlanta to pursue graduate studies at Tech. In more than a decade with Zoo Atlanta, he worked his way up to deputy director and played a major role in the zoo's renovation. He was serving as executive director of the Florida Aquarium in Tampa when he was hired to create the Georgia Aquarium.

Survivors include his son Brian Swanagan, AMath 06.

Peter Dunlap, Text 53, of Plymouth, Mass., on June 4. A Navy veteran, Mr. Dunlap enjoyed off-shore fishing in Nantucket.

Louis Elwyn Fay III, Chem 53, Phys 53, of Fort Walton Beach, Fla., on May 6. Dr. Fay, who earned a PhD from Clemson University, retired from his teaching career with Georgia Military College in Milledgeville. He served in the Air Force from 1945 to 1948 and later taught in Liberia and Trinidad with his wife. Dr. Fay also was a Fulbright professor in Sierra Leone and taught in Kenya with Teachers for Africa. He is survived by five children, including Anne Fay, APhys 77, MS EE 78; Robert A. Fay, CE 79; and John F. Fay, ESM 79.

Robert Philip "Bob" Gross, CE 50, a res-

ident of Avondale Estates, Ga., on April 20. An Army veteran, Mr. Gross worked with the Tennessee Valley Authority and Robert & Company before joining Armour Agricultural and Chemical Co., from which he retired as an executive. During his career, he was responsible for the construction and management of several fertilizer manufacturing plants throughout the country. He joined the Avondale Estates city council as a commissioner in 1969 and served as mayor from 1970 to '74. He was elected president of the 4th district of the Georgia Municipal Association in 1972 and appointed chairman of the Avondale Estates Downtown Development Authority in 2001.

Lake Kelly, IM 56, of Flemingsburg, Ky., on March 5. Mr. Kelly retired from high school ad-

ministration work in Kentucky. In two stints as head basketball coach for Austin Peay State University in Clarksville, Tenn., he led the team to three NCAA tournament appearances. He became head coach of Austin Peay in 1971 and was named Ohio Valley Conference Coach of the Year in 1973. He left the university following the 1976-77 season and coached at several high schools and universities, including Kentucky, before returning to Austin Peay as head coach in 1985. An Army veteran, Mr. Kelly completed his coaching career at Fleming County High School, leading its Panthers to Sweet Sixteen appearances in 1998 and 1999.

Donald Charles Kilby, Chem 53, MS Chem 57, of Tallahassee, Fla., on May 31. A member of Theta Chi fraternity at Tech, Mr. Kilby retired

In Memoriam

from the Latin America / West Africa division of Texaco after 35 years of service with the company in Texas, New York, Brazil and Florida. He served for 20 years in the Navy and Navy Reserve, retiring as a lieutenant commander.

Judson A. Kizer, MS AE 55, of Chamblee, Ga., on March 8. Mr. Kizer retired from Lockheed Martin Aeronautics Co.

Daniel Isaac Lee Jr., IE 51, of Atlanta, on June 3. Mr. Lee retired in 2006 from Lee Products, a company he founded. A member of Kappa Alpha fraternity at Georgia Tech, he joined the Navy upon graduation and was stationed at Louisville, Ky., as an officer.

John Andrew Lines, IM 50, of Franklin, Tenn., on June 23. Mr. Lines retired as deputy director of operations with the Knoxville office of the U.S. Department of Housing and Urban Development after 28 years of service. An Army Air Corps veteran, he served in the Pacific during World War II. Mr. Lines was a member of Gate City Masonic Lodge 2 and a Shriner with Scottish Rites.

John K. Maloy Jr., CE 52, of Waynesville, Ohio, on June 24. An Air Force veteran, he retired from SofTech in Dayton.

Emmett Winston McKay Jr., IM 50, of Dothan, Ala., on May 5. Mr. McKay, who had a master's of education degree in administration and leadership from Auburn University, retired as principal of Girard Middle School in the Dothan City Schools System following a 30-year career as an educator. An Air Force veteran of World War II, he served with the 900th Signal Company during the Normandy invasion at Omaha Beach. He worked for several years with the Civil Aeronautics Administration in Atlanta in the field of radio technology.

Jarmon Clayton "Mac" McKinney Jr., IE 50, of Huntsville, Ala., on June 19. A member of the Army Civil Service for nearly 30 years, he served as director of the U.S. Army Primary Standards Laboratory at Redstone Arsenal from 1967 until his retirement in 1980. Mr. McKinney attended Tech on the GI Bill following service in the Army Air Corps as a C-47 pilot in the European theater during World War II. He retired from the Air Force Reserve in 1980 as a major. He was a member of the Huntsville City School Board from 1961 to '68, serving one year as its president.

Bill Moy, IM 54, of Hollywood, Fla., on June

26. He owned and operated Moy's Restaurant. Mr. Moy also was a director for First National Bank of Hollywood before founding American Bank of Hollywood, for which he later served as chairman of the board. He was a captain in the Army.

Homer B. Nicholas, IM 58, of Hodgenville, Ky., on May 15. Mr. Nicholas spent his career working in investment banking in Atlanta and Louisville, Ky., as well as in farming in central Kentucky. An Army veteran, he served three years in Germany.

Robert Jackson Rooks Sr., ChE 50, of Jamestown, N.C., on May 16. In 1982, he retired from Dow Corning Corp., for which he worked as a chemist, focusing on silicone applications for the textile industry. A World War II veteran, he served in the Army in India. A collector of coins and antique watercolors, he taught an adult Sunday school class for about 30 years.

Norman George Statham, IM 51, a resident of Augusta, Ga., on May 31. Mr. Statham, who received an MBA from the University of Chicago, retired from Shell Oil Co. in 1980 after 27 years as the U.S. compensation manager. He served 13 years as an Air Force pilot, achieving the rank of major. A World War II veteran, he was among the pilots who dropped paratroopers over Normandy on D-Day, his 24th birthday.

Charles H. Taylor, EE 51, of Arlington, Va., on April 3. Mr. Taylor received a master's degree in engineering administration from George Washington University and was employed by the Navy Department from the mid-1950s to the mid-1970s, serving as a technical adviser to the chief of naval operations and later as a project manager at Naval Air Systems Command. In retirement, he worked for several years as a landing systems consultant. Mr. Taylor served in the Navy during World War II and in the Army during the Korean War.

Paul H. Wallace, Cls 55, of Stone Mountain, Ga., on May 2. Mr. Wallace retired as a structural engineer. An Air Force and infantry veteran of World War II, he attended monthly meetings of a World War II roundtable. He was a 33rd degree Mason and Scottish Rite Mason and a charter member of the Embury Hills Republican Club.

Selman Dan "Danny" Waller Jr., IM 58, a resident of Lake Sinclair in Putnam County, Ga., on April 17. A former employee of Flori-

da Power & Light Co., he retired from Mingledorff's Inc. in Atlanta. Mr. Waller served in the Air Force Reserve.

William R. Wells, AE 59, of Las Vegas, on May 22. He served as the founding dean of the Howard R. Hughes College of Engineering at the University of Nevada, Las Vegas. A professor for 40 years, Dr. Wells, who also earned degrees from Harvard and Virginia Tech, published extensively in technical journals, worked at NASA during the dawn of the space age and was a member of the California-Nevada Super Speed Train Commission.

C.W. "Bud" White, Arch 58, of Gainesville, Ga., on April 30. An Army veteran, he worked with the General Services Administration in Atlanta and served as a consultant for the Postal Service before establishing his own architectural firm, C.W. White Architect. The firm provided design and construction supervision for numerous post offices and remodeling plans for postal and federal facilities. He retired in 1997.

1960s

William P. "Will" Carter Jr., IM 63, a resident of Hartwell, Ga., on May 14. He retired from the Owens Corning Fiberglass Anderson Plant after 27 years as a quality control engineer. A graduate of the Navy Supply School in Athens, Ga., he served in the Navy as a lieutenant aboard the USS Guam during the Vietnam War. Mr. Carter was a member of the Sons of the Confederacy, Sons of the American Revolution and Civil War Roundtable, and he served on the boards of directors for the Hart County Department of Family and Children Services and Hartwell Housing Authority.

Robert T. "Bobby" Cole, AE 64, MS AE 67, PhD AE 70, of Marietta, Ga., on April 21. During his career in the aerospace industry, Dr. Cole held research and development positions at McDonnell Douglas Aircraft and Lockheed. He also headed the Southeastern office of Ciba-Geigy Composites for 10 years and worked as an independent contractor with Gulfstream in Savannah. Dr. Cole attended Tech on a football scholarship and was a letterman. He served in the Army Ordnance Corps, completing a tour of duty in Vietnam as a captain.

Walter "Walt" Saunders Fleming, Chem 63, of Quincy, Fla., on May 11. During his career, he worked as a professor of chemistry and computer science at Georgia Tech, a senior en-

gineer with CSE Corp. and as a self-employed consultant. He was a member of the Rotary Club of Quincy.

David Hanson, ME 65, of Roswell, Ga., on June 6, of colon cancer. He served as president of the Norcross-based SyncroFlo Inc. from 1973 to 2006. In 2005, he helped charter the Rockbridge Commercial Bank, for which he served on the board of directors and loan committee. A deacon and Sunday school teacher, he was a woodworker, tennis and card player and an heirloom tomato gardener. Survivors include son Richard D. Hanson, IE 89; daughters-in-law Beth Ann Hanson, MS ME 93, and Amy Harper Hanson, EE 94; and son-in-law Carl W. Plowden, Mgt 91.

James G. "Jim" Knight, ME 69, MS IE 71, of Charlottesville, Va., on June 6. Dr. Knight worked in private medical practice. After receiving a medical degree from the Medical College of Georgia, he completed residency training in internal medicine at the University of Virginia and joined the staff at Martha Jefferson Hospital, for which he served as chief of medicine and chair of the board of directors. Dr. Knight also participated in medical mission trips to Haiti and Brazil and was an accomplished woodworker and pilot.

Horace A. MacIntire, MS EE 60, of Brentwood, Tenn., on Dec. 25. He was a retired Army colonel and environmental engineer with the state of Tennessee.

Roger Wayne Parian, Phys 67, MS Phys 69, of Savannah, Ga., on Feb. 22. Mr. Parian retired in 1999 after 22 years as director of the Georgia Bureau of Investigation Coastal Regional Crime Lab in Savannah. He first joined the GBI in 1972 in its Division of Forensic Sciences in Atlanta. During his career, he served as president of the Southern Association of Forensic Scientists. He also was an associate professor of mathematics at DeKalb Junior College and Armstrong Atlantic State University. As a co-op student at Georgia Tech, he worked for Boeing and NASA. Survivors include daughter Asha Parian, TEM 06, and his brother Ronald Pariani, ME 73.

Ulysses Roumillat, EE 60, MS EE 78, of Jackson, Ga., on April 12. Mr. Roumillat retired from Georgia Power.

Sidney "Sid" T. Schell III, EE 67, of Concord, N.C., on April 26. An electrical engineer, he worked in the disk-drive industry in Cali-

fornia, most recently for Seagate Technologies.

Dennis L. "Denny" Stanford Jr., Text 69, of Columbus, Ga., on June 17. Mr. Stanford worked for Coca-Cola for nearly 15 years, traveling the globe as a transportation procurement manager, and most recently worked as a procurement agent for KBR, stationed in Kuwait, Dubai, Iraq and Afghanistan. A member of Pi Kappa Alpha at Tech, he served 10 years in the Air Force, including two tours in Vietnam with the 433rd Tactical Fighter Squadron. He received an MBA from the Thunderbird School of Global Management in Glendale, Ariz.

Robert Arnold Tucker, EE 64, of Buford, Ga., on June 6. Mr. Tucker retired from OSRAM/SYLVANIA Lighting.

Chesley G. "George" Williams Jr., IM 68, of St. Augustine, Fla., on May 2. He served in the Air Force from 1968 to 1988, retiring as a major, and then worked as a civil servant with the government until 1996. He received an MBA from Georgia College & State University and a master's in computer resource management from Webster University. A long-distance runner, he participated in marathons and half marathons and accumulated 33,000 miles in 25 years of running.

Paul H. Wright, PhD CE 64, of Atlanta, on May 10. A professor emeritus of Georgia Tech, Mr. Wright taught civil engineering at the Institute for 32 years. He was an elder and deacon at his church.

1970s

Larry Keith Allen, AMath 77, of Quincy, Fla., on June 20. He received a master's degree from Florida State University.

George H. Balkcom Jr., AE 70, of Fort Worth, Texas, on June 18. He worked for 33 years with General Dynamics/Lockheed Martin in Fort Worth as a senior propulsion engineer on the F-16 fighter jet, retiring in 2007. After graduating with honors from Tech, Mr. Balkcom worked at the West Palm Beach, Fla., manufacturing facility of Pratt & Whitney. An Air Force veteran, Mr. Balkcom was assigned to Grand Forks Air Force Base in North Dakota as a missile maintenance technician and later to the F-16 fighter jet preproduction project at Wright-Patterson Air Force Base in Ohio.

G. Steve Bass, IM 70, of Woodstock, Ga., on June 16. He was vice president of Southeastern

operations for Pilgrim's Pride. He served as vice president of sales and marketing for Seaboard Poultry and general manager of ConAgra. He was a member of the Georgia Poultry Processors Association and served on the boards of the Georgia Poultry Federation and Georgia Poultry Improvement Association.

William Edward "Ed" Baumgartner, IM 70, of Yorktown, Va., on June 1. He was a calculus teacher at Hampton Roads Academy. A Vietnam War veteran, Mr. Baumgartner retired from the Navy as a captain in 1994 after 24 years as a naval aviator. He also played the trumpet.

Rufus Estes "Rudy" Bohler Jr., Cls 71, of Augusta, Ga., on July 2. A commercial real estate broker, Mr. Bohler was the president of Bell Investment Co. He also was a graduate of Southern Tech and a member of the Augusta Kiwanis Club.

Ulrich "Uli" Geldmacher, IE 72, of Stamford, Conn., on May 25. He retired as a managing director of Deutsche Bank and global head of its chemical investment practice in 2008. Mr. Geldmacher, who earned an MBA from Harvard Business School, worked with Exxon-Mobil Corp. and Gleacher & Co. before being recruited by Deutsche Bank in 1989. He started the company's chemical investment practice in 1993. Born in Berlin in 1947, he and his parents were smuggled out of the city on a Red Cross train just ahead of the Russian blockade. Mr. Geldmacher grew up in Dormagen, Germany, and from 1966 to 1968 served as a sergeant in the German Luftwaffe. Chairman of the board of the German School of Connecticut for many years, he also was a member of the German fraternity Wingolf, the Society of Plastic Engineers and the council of the Strategic Planning Institute.

Gregory K. Gordon, IM 70, of Valdosta, Ga., on April 10 in an automobile accident. He was a private contractor and later a facilities supervisor at the Atlanta Botanical Garden; plant operations manager for Georgia Perimeter College; and associate director of the physical plant at Valdosta State University. He served seven years in the Marine Corps and received a master's degree in accounting from Georgia State University.

Mike Hall, CE 75, of Katy, Texas, on June 27, of complications following surgery. An engineer in the oil and gas industry, he worked for Transocean for more than 30 years. Mr. Hall earned an MBA from Harvard.

In Memoriam

Henrietta Mitzner, M CP 71, of Atlanta, on June 22. Following graduation, Mrs. Mitzner began a career as a city planner with Eric Hill & Associates. After more than a decade with the firm, she returned to her earlier career as a fashion designer. She developed a new Rabbit Skins children's clothing line for L.A.T Sportswear, a Ball Ground, Ga.-based business owned by one of her sons. Mrs. Mitzner began her career as a dress designer for a children's clothing line in Manhattan in the late 1930s. Upon moving to Atlanta with her husband in 1950, she launched a facility to manufacture her own clothing. Mrs. Mitzner, who also was an artist, was best known for her sculptures, exhibited at shows throughout Georgia, Alabama and Florida.

David Blair Purcell, ME 70, of Asheville, N.C., on April 21. He worked at the Newport News Shipyard as a design and test engineer before joining American Enka as a corporate engineer in 1973. He was the founder and president of Quality Environments, a member of the Acoustical Society of America and a member and past superintendent of the Land of Sky Model Railroad Club.

Michael D. Rosinski, IM 75, of Plantation, Fla., on June 27, of cancer. He finished his career as the controller for Frenzel Enterprises. Mr. Rosinski earlier worked in computers at IBM and Digital Systems before starting his own business, MRI Computers. A guard on the football team while at Tech, he later coached his children in sports.

James Greer "Bear" Tripp, IM 74, of Middletown, Ohio, on April 17.

1980s

Bruce Hoben, M CP 81, of Canton, Conn., on June 15. He co-founded Planimetrix, a leader in comprehensive planning in Connecticut. Mr. Hoben, who was stationed in the Dominican Republic while serving as a first lieutenant in the 82nd Airborne Division from 1964 to '66, became the first town planner for Avon, Conn., in 1975 and was the planning director for Farmington, Conn., from 1980 to '87. An active member of the American Planning Association, Mr. Hoben served on the Connecticut chapter's executive committee for 23 years, including five years as chapter president. He served on the Canton Planning Commission from 1972 to 1975 and chaired the Canton Housing Authority from 1981 to 2008.

Retired Professor Derek Cunnold

Derek M. Cunnold, 68, a noted atmospheric scientist and professor emeritus of Georgia Tech, died April 18 of sudden cardiac arrest while playing tennis.

Dr. Cunnold, of Dunwoody, Ga., was a principal research scientist and an acting chair and professor in the School of Earth and Atmospheric Sciences for 27 years.

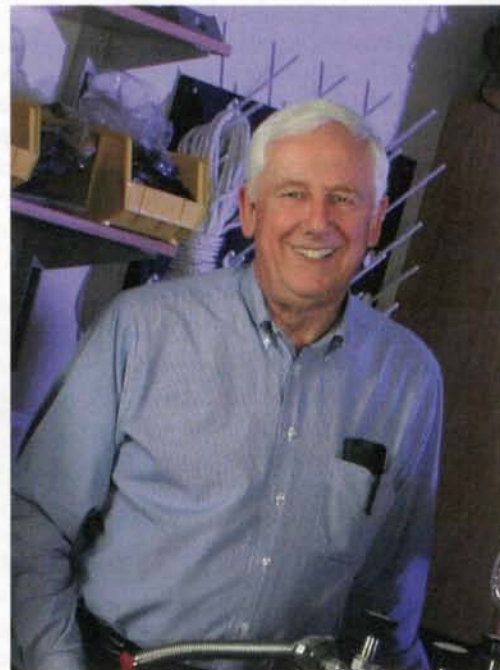
He also was a pioneer in climate change and ozone depletion research, using computer models and satellite measurements to study the effects specific gases have on the ozone. He played a key role in establishing the Montreal Protocol on Substances that Deplete the Ozone Layer. In 1992, he was awarded the NASA Medal for Outstanding Achievement. He was a co-founder of the international

Advanced Global Atmospheric Gases Experiment; lead author for the most recent United Nations Ozone Assessment; and a member of nine NASA international satellite experiment teams.

Born in Reading, England, Dr. Cunnold received bachelor's and master's degrees in applied mathematics from St. John's College in Cambridge, England, and a PhD in electrical engineering with a focus in aeronomy from Cornell University.

He was a longtime competitor in Atlanta Lawn Tennis Association matches. An April 25 memorial service for Dr. Cunnold was scheduled late in the afternoon to allow the ALTA team he captained to attend after completing a seasonal league title game, the *Atlanta Journal-Constitution* reported.

His survivors include daughter Carolyn Holcomb, MS Mgt 91, and son David Cunnold, ME 93, MS Mgt 95.



Caroline Joe

James Scott Kavanaugh, AE 84, a resident of Savannah, Ga., on May 6. He worked for Northrop Grumman from 1985 until 2000, when he became a liaison engineer at Gulfstream Aerospace.

Kelsey Lance Kennon Jr., Mgt 89, a resident of Columbus, Ga., on May 13. Mr. Kennon was a computer consultant with Elite Systems. As a student at Georgia Tech, he was a member of Phi Delta Theta fraternity.

Darrell Clifford Taylor, ME 88, a resident of Alpharetta, Ga., on June 13. He worked in mechanical engineering and later in informa-

tion technology with several companies in the Atlanta area, most recently InfraScience of Alpharetta. After graduation, he was a mentor to engineering students at Tech through a national mechanical engineering society.

2000s

Jesse Hinton, Mgt 08, of Stockbridge, Ga., on May 31. Mr. Hinton enjoyed music, golf, snowboarding and skydiving.

Richard Heng Yee, CmpE 08, of Alpharetta, Ga., on June 16. He worked as a computer engineer for American Data Processing.



Call for Nominations Georgia Tech Alumni Association Gold & White Honors

Each year the Georgia Tech Alumni Association recognizes alumni for exemplary service to Tech, the community and the world. Nominations are being accepted through October 2 for the Outstanding Young Alumnus and Dean Griffin Community Service awards.

Dean Griffin Community Service Award

Recognizes a Georgia Tech alumnus who has performed exemplary community service work. The four primary considerations are:

- Service in a long-term volunteer capacity
- Impact on the quality of life of others
- Demonstrated leadership and creative ability to deal with societal problems proactively
- Setting an example for others to follow

Outstanding Young Alumnus Award

Honors a Georgia Tech young alumnus who has not yet reached the age of forty and whose graduation year is within 20 years of February 18, 2010. This award recognizes one who has demonstrated outstanding achievement in his/her profession and significant service to Georgia Tech and the Alumni Association. The three primary considerations are:

- Service to Georgia Tech and the Alumni Association
- Service to the general welfare of his/her community
- Service to his/her profession

Nomination forms available online at www.gtalumni.org/awards

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'Chicks Hit the Long Ball'

Story by Van Jensen
Photographs by Mary Beth Nolan

After winning the 2008 National Pro Fastpitch championship as a rookie with the Chicago Bandits, former Tech shortstop Aileen Morales, Mgt 08, is helping the team to a dominating 2009 season. She's also rejoining the Yellow Jackets in the coming season as an assistant coach. Here she talks about life in professional softball, her hobbies and what it's like being on a team with ESPN's "most attractive athlete," Jennie Finch.

What did you learn in your rookie season that has helped you this year?

Team chemistry was vital to building a winning season. With so much talent, you have to realize that everyone's role is important, regardless of what it is. My rookie season really helped to build that concept. Everyone on the Bandits was a stud and leader during their collegiate careers, and it is important for each player to establish their new role within the Bandits.

For people who don't know about the league, what is your pitch to get them to come to a game?

There was an old Nike commercial with the line: "Chicks dig the long ball." When you come to an NPF game it's: "Chicks hit the long ball." It is very seldom we play a game without a homer being hit. It's a fast-paced game with some of the best athletes in the world. It's also a great family environment. We have a strong appreciation for our fans and sign autographs after every home game.

Does Jennie Finch still draw a lot of gawkers?

Honestly, I think we're more in awe of her fan following, whereas she is more accustomed to it by now. Our team doesn't give

her too hard of a time, but every now and then we will crack a joke about her bringing all the fans in her bat bag.

Softball players are known for having superstitions. Any weird or notable ones on the Bandits?

Our head coach, Mickey Dean, won't let the bats get crossed during a game. Pitcher Kristina Thorson has about a billion pregame rituals, from chewing gum to how she puts on her makeup. Back when I played with Tech, I used to be very superstitious. I had to put a certain cleat on first, always put on the left-hand batting glove before the right. My junior year I had to eat a bacon, egg and cheese bagel for breakfast before any home game. How about that for superstitious?

What do you do off the field?

I am a big movie buff. I like to rent or go to the theater. If it's a good movie, I am there. I love the beach and laying out, but there isn't that much time in our schedule to do it. So instead I go to the tanning bed. It's a vice, and I am trying to quit.

What's your favorite part about playing?

Competition, period. Regardless of the outcome, competing in a close game is exciting. Knowing that you have to bring your best to the field each and every day and that anyone can win at any time really makes it a fun atmosphere. I am extremely blessed to continue to have the opportunity to play the game I love at such a high level.

Are you excited to come back to Tech?

I am a Yellow Jacket at heart and there is nowhere else that I would love to start my coaching career. I am extremely excited to come back and start working with the girls. I know the commitment our players give to be successful in the classroom and on the field.

A Patriot Off the Field



AP Photo/John Bazemore

By Van Jensen

Most college football players dream of making the NFL, signing for millions of dollars and playing before rabid fans on Sundays.

James Liipfert, a Tech linebacker immortalized in a photograph of hedge-biting glory after the Georgia game, shared that dream, but with a twist. He wanted to make it as a pro, just not on the field. That's how he became the newest scout-in-training for the New England Patriots.

"I'm very lucky to be here," said Liipfert, Mgt 08. "I wouldn't want to be with any other team, that's for sure."

It could be argued that Liipfert's route into the NFL was even more challenging than that of a player looking to make the roster. The Patriots drafted 12 college players this year, but the front office had only a handful of openings.

After graduating in December, Liipfert, who knew he wanted to get into the business and personnel sides of sports, contacted the Indianapolis Colts.

During the February NFL draft combine, Liipfert helped the Colts staff with all the measuring, poking, prodding, observing and interviewing that goes into analyzing potential draftees. The Colts also told him to network, as management wasn't sure what front-office jobs would be available.

Liipfert met with Bill O'Brien, a former Tech assistant coach currently working for the Patriots, and decided to pursue a job there. The Patriots, after all, have won three of the past eight Super Bowls and appeared in one more.

"I had a phone interview on a Wednesday, then they flew me up for an interview the next day," Liipfert said. "Then I had to wait. Those two weeks were really long."

The call came on Friday, May 15 that he'd gotten the job. The Patriots brass asked if he could start Monday. "When they ask you to come, there's no sense in waiting," Liipfert said.

He explains his job as being "the lowest on the totem pole," which means running errands, driving people to and from the airport, tracking any roster moves on all NFL teams and watching college football news to see if players are hurt or in trouble.



Georgia Tech Athletics

"I try to learn as much as I can," Liipfert said. "I watch a lot of film. We're preparing for next year's draft already."

Even in the short time he'd been with the Patriots, Liipfert said he could see why the team has had such success.

"It's a good atmosphere, but there's not a lot of back patting," he said. "You're expected to do your part. It's very organized, and everyone has that one common goal to win it all. There's no clicking around on the Internet."

Playing football at Tech was good preparation, Liipfert said, because between athletics and academics there wasn't the opportunity to waste time.

As for his future plans, Liipfert at first said he's not planning ahead. Instead, he's focused on the moment, learning as much as he can about scouting and personnel management. But he did allow himself, briefly, to look to the future.

"When I'm ready, I want to be a GM. But who can know when that is?" he said. "Many years down the line, if I could, it'd be nice to be the commissioner. But Roger Goodell has a lot on his plate."

When Liipfert has an infrequent extra moment he'll hang out with Gary Guyton, Cls 08, and Darryl Richard, Mgt 07, MS Mgt 08, the two Tech players on New England's roster.

But Liipfert's role creates a different paradigm among the former teammates. As a scout, Liipfert is responsible for watching Patriots players too, knowing their strengths and weaknesses, whether they'll make the roster or be cut. And that knowledge is something he can't share with anyone.

"The information is all very top secret," Liipfert said. "You'll lose your job if it gets out that you're talking. But Darryl and Gary are pros, so they wouldn't ever ask me."

Though Liipfert will be busy most weekends at Patriots games, he's planning to watch the 2009 Yellow Jackets any time he can get a "cheap flight to Atlanta."

Liipfert finally has stopped getting calls and e-mails about the photo that appeared in the *Atlanta Journal-Constitution* of him celebrating after the Georgia game. But "I still get chills," he said. "I'm just glad we got 'em."

Asked if a Patriots Super Bowl could top that high, he paused for a moment.

"That might top the Georgia game if we win it all," he said. "But I'm just focused on the work I have to do right now."

Sports Briefs

Cink's New Game Triumphs at Turnberry

All the drastic changes Stewart Cink made to his golf game over the past year were validated in July as Cink, Mgt 95, topped the field at the British Open.

Cink finished the 2008 PGA Tour season with a series of poor performances and decided an overhaul was needed if he was to contend for major tournaments. So he switched out his long putter for a short one and developed a regiment of mental preparation for each shot.

That helped him beat 59-year-old Tom Watson in a four-hole playoff to claim the British Open — Cink's first major — in Turnberry, Scotland.

"I really did not have much of a pre-shot routine working," Cink told reporters after his win. "I decided I needed to get something more regimented, a routine I could lean on under pressure."

"I thought if I stayed with the long putter it would be easy for me to fall back into the old warm and fuzzy feeling, so I decided to scrap everything and start over with the short putter."

Athletics Dives Into Social Networking

Fans of Georgia Tech athletics can now keep tabs on the Yellow Jackets through Twitter and Facebook.

With nearly 5,000 fans, the Georgia Tech Athletics Facebook page is growing quickly. There, fans can find news and photos detailing what's new with the Yellow Jackets. Find it at facebook.com/gtathletics.

At Twitter, you can find an exhaustive list of updates about current Yellow Jackets and alumni in the GTAthletics feed at twitter.com/GTAthletics.

Three Tech coaches have joined Twitter as well, with women's basketball coach MaChelle Joseph — under GT_Coach_Jo — leading the charge. Her posting includes basketball insights but offers up much more.

On June 28, she wrote, "I am sooo sad about Michael Jackson! I loved his music, style, individuality and creativity." On July 5, she wrote, "What a great 4th of July! I learned how to surf!" And on July 6, she wrote, "We don't grow much when everything is easy." She's leading all coaches with 152 followers.

Head men's golf coach Bruce Heppler's Twitter feed — under Coach_Heppler — focuses almost entirely on his sport, including practice schedules and weather updates. He's in a distant second with 19 followers.

Just behind Heppler is women's tennis coach Bryan Shelton — under CoachBShelton — with 18 followers.

As of press time, Shelton had yet to Tweet.

— Van Jensen



MaChelle Joseph

Gospel Truth About Tonya Johnson

Tech's new volleyball coach reveals her plan for a bigger, badder team

By Van Jensen

At first, new Tech volleyball coach Tonya Johnson said she has no weird hobbies or habits. Then she remembered one thing.

"I listen to a lot of gospel music when I'm driving in to work, to get the day going," she said. "I've been doing that for years. Does that count?"

It doesn't, but it does serve to illustrate how focused the Yellow Jackets' new coach is on the task at hand. Her office is spare, the only adornment a signed volleyball and a racketball racket.

Johnson had been five months into the job at that point, her summer spent juggling various volleyball camps, then diving into recruiting. And once that concluded it was time to start preparing for the Aug. 28 season opener against Georgia.

"I tell all my friends and family, 'I'll see you at Christmas,'" Johnson said. "Let me tell you, it has been busy. But it's a good busy. It's been great so far."

One early task was simply familiarizing herself with everything Georgia Tech. Before interviewing for the position, Johnson had been to campus only once before, as an assistant coach at LSU when the Tigers faced the Yellow Jackets in 2001.

Tech cruised in that matchup in straight sets. Johnson said all she remembered was how loud it was in O'Keefe Gym.

"I remember not being able to talk to the team," Johnson said. "I'll have to figure that



Tonya Johnson brings Final Four experience as a coach and player to the Yellow Jackets and hopes to lead her new team there as well.

out. I think we have a little spot."

Johnson led the recruiting effort as an assistant coach at Texas before coming to Tech and helped the Longhorns to top-rated classes year after year. One hurdle in bringing top players to the Institute, she said, is the perception of academics.

"When people think Georgia Tech, they think, 'Oh my God, engineering!'" she said.

"So I have to explain to them that we do have different things," Johnson added.

"They just call those majors something

different here. Then the lights come on."

Johnson said Tech has plenty of strong selling points, particularly its location in Atlanta. But, she added, it's separate enough that students can have a true college experience.

Her goal is to have a taller and more physical team than what the Yellow Jackets have fielded previously. "When fans come, they see the physicality, they see girls jumping out of the gym," Johnson said.

Johnson's goal as a coach, she said, is to relate to her players. "I certainly know the struggles are there," she said. "It can be overwhelming."

She also can share with them her experiences at the top of college volleyball. Johnson has been to the NCAA Final Four both as a player and a coach.

While a star player at LSU, Johnson and the Tigers faced a two-game deficit against Texas in Austin but came back to win and claim a Final Four appearance. "It's vivid,"

Johnson said of the memory.

Then Johnson suddenly remembered another hobby.

"I love to read. It's nothing for me to read a book in two days," she said. "The last book I read was *The Shack*. It's pretty deep, a very good book. I think I'm going to read it again. And I'm a huge James Patterson fan, anything with detective Alex Cross or the Women's Murder Club, I'm going to buy it on the first day it's out."

OK, maybe that's a tiny bit weird.

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*Sat., Sept. 26 vs. UNC (Family Weekend)
*Sat., Oct. 17 vs. Virginia Tech (Homecoming)
*Sat., Nov. 7 vs. Wake Forest
Sat., Nov. 28 vs. Georgia

Away

*Thurs., Sept. 17 at Miami -7:30pm
Sat., Oct. 3 at Mississippi State
*Sat., Oct. 10 at FSU
*Sat., Oct. 24 at Virginia
Sat., Oct. 31 at Vanderbilt
*Sat., Nov. 14 at Duke

* ACC Games



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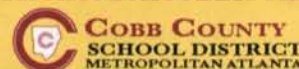
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Mental Floss Quiz

By Sandy Wood and Kara Kovalchik

1) What city was the primary setting for the Oscar-winning *Slumdog Millionaire*?

- [a] Delhi
- [b] Hyderabad
- [c] Surat
- [d] Mumbai

6) According to the long-running advertising slogan for Kellogg's Raisin Bran, how many raisins are included in each box?

- [a] three cups
- [b] two scoops
- [c] four bunches
- [d] a handful

10) Which profession regularly deals with fenestration?

- [a] architect
- [b] accountant
- [c] attorney
- [d] acupuncturist

11) The Charles Dickens character Jack Dawkins is better known by what name?

- [a] The Littlest Hobo
- [b] The Man in the Yellow Hat
- [c] The Artful Dodger
- [d] Oliver Twist

12) Which of these continents stretches farthest south?

- [a] Africa
- [b] Oceania
- [c] Asia
- [d] South America

13) According to the U.S. dry measurement system, which of these units is the largest?

- [a] bushel
- [b] peck
- [c] pint
- [d] quart

2) What planet in our solar system has the shortest day (fewer than 10 Earth hours)?

- [a] Jupiter
- [b] Neptune
- [c] Mercury
- [d] Saturn

3) What poet claimed taking the "road less traveled" can make all the difference?

- [a] Langston Hughes
- [b] Walt Whitman
- [c] Robert Frost
- [d] Emily Dickinson

4) What element appears first on the Periodic Table with the atomic number 1?

- [a] Helium
- [b] Oxygen
- [c] Hydrogen
- [d] Carbon

5) Which U.S. currency note does not include a portrait of a U.S. president?

- [a] \$5 bill
- [b] \$10 bill
- [c] \$20 bill
- [d] \$50 bill

7) How many total syllables comprise a haiku poem?

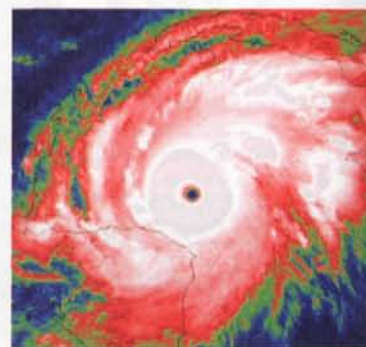
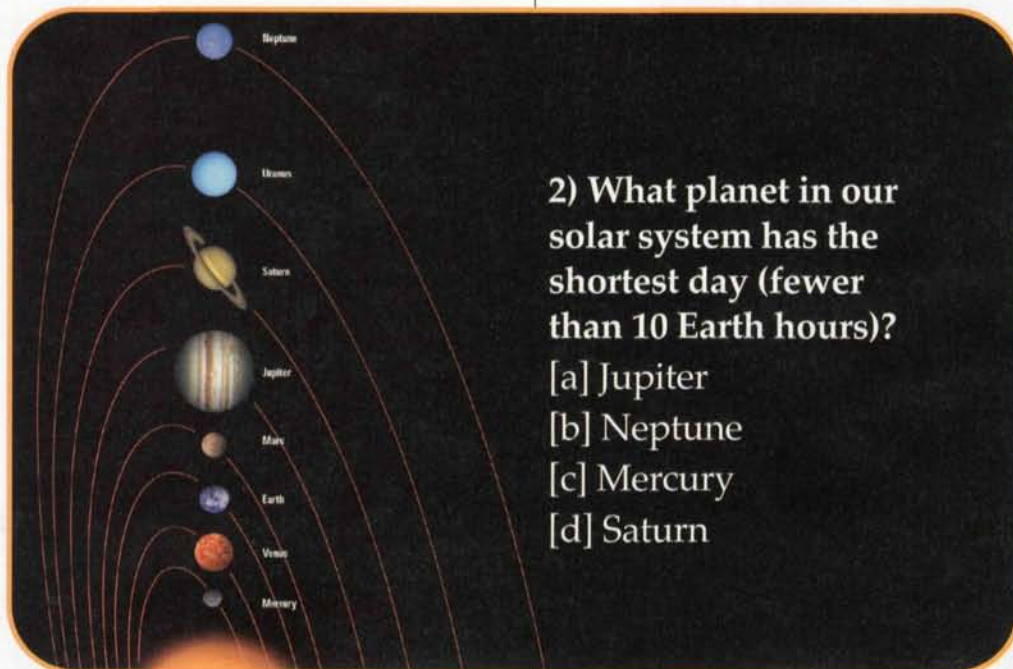
- [a] 3
- [b] 10
- [c] 15
- [d] 17

8) The Engineering Experiment Station at Georgia Tech opened in what year?

- [a] 1930
- [b] 1940
- [c] 1924
- [d] 1934

9) On a pro baseball field, what's the distance between home and second base?

- [a] 60 feet 6 inches
- [b] 90 feet
- [c] 127 feet 3 3/4 inches
- [d] 180 feet



14) Which state has experienced the most hurricane strikes during the past century?

- [a] Texas
- [b] North Carolina
- [c] Louisiana
- [d] Florida

15) What international retailer was originally called Tote'm?

- [a] Wal-Mart
- [b] Tesco
- [c] 7-Eleven
- [d] IKEA

16) Which salad was invented in Mexico?

- [a] Cobb
- [b] Caesar
- [c] Waldorf
- [d] Nicoise



17) In the Harry Potter series, how many children are in the family of Harry's best friend, Ron Weasley?

- [a] three
- [b] five
- [c] seven
- [d] nine

18) Which car manufacturer markets the Routan?

- [a] Volkswagen
- [b] Nissan
- [c] Mitsubishi
- [d] Honda

19) Tentatively scheduled for release later in 2009, what number will apply to the newest version of Microsoft Windows?

- [a] 7
- [b] 8
- [c] 11
- [d] 12



20) What is the name of Paul Bunyan's faithful blue ox?

- [a] Buster
- [b] Babe
- [c] Buddy
- [d] Bertrand

21) What's the title of the highest enlisted rank (E-9) in the U.S. Army?

- [a] staff sergeant
- [b] sergeant first class
- [c] sergeant major
- [d] master sergeant

22) Which of these Walters won three best supporting actor Oscars?

- [a] Walter Huston
- [b] Walter Matthau
- [c] Walter Pidgeon
- [d] Walter Brennan

23) What island nation is named for the bearded fig trees that once flourished there?

- [a] Barbados
- [b] Maldives
- [c] Malta
- [d] Bahrain

24) If you're dining on squab, you're eating what type of bird?

- [a] quail
- [b] partridge
- [c] pigeon
- [d] grouse

25) The Georgia Tech Alumni Association was founded in what year?

- [a] 1888
- [b] 1900
- [c] 1908
- [d] 1921

Answers

1) d 2) a 3) c [The quote appeared in his 1921 poem "The Road Not Taken."] 4) c 5) b 6) b 7) d [A haiku has five syllables in the first line, seven in the second and five in the third.] 8) d 9) c 10) a [Fenestration refers to the placement of windows in a structure.] 11) c 12) d 13) a [A bushel is 4 pecks; a peck is 8 quarts; a quart is 2 pints.] 14) d 15) c 16) b [Caesar Cardini created it in his Tijuana restaurant in 1924.] 17) c [In addition to Ron, there are Bill, Charlie, Percy, twins Fred and George and sister Ginny.] 18) a 19) a 20) b 21) c [Master sergeant is E-8, followed by sergeant first class E-7 and then staff sergeant E-6.] 22) d [In 1936, 1938 and 1940.] 23) a 24) c 25) c

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September



Investiture of President Peterson

will begin at 11 a.m. Sept. 3 at Alexander Memorial Coliseum. A campus celebration is planned. gtalumni.org/events



Keiko Matsui, Japanese Jazz Artist,

performs at 8 p.m. Sept. 25 at the Ferst Center for the Arts, now under the direction of George Thompson, who began his performing arts career as a dancer with the American Ballet Theatre. Keyboardist Matsui has recorded 20 albums. ferstcenter.gatech.edu

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Game Day Recycling

is in its second year at Tech. Hours before each home game kicks off, volunteers spread out across campus distributing blue recycling bags to tailgaters. Last season, nearly 12 tons of glass, aluminum and plastic were collected. gatech.edu/greenbuzz/gamedayrecycling



Family Weekend

registration is under way for the Sept. 25-26 convergence of parents on campus for seminars, receptions and tailgating now hosted by the Georgia Tech Parents Program. Register by Sept. 9 to save \$10. familyweekend.gatech.edu

October



Enlisting Volunteers

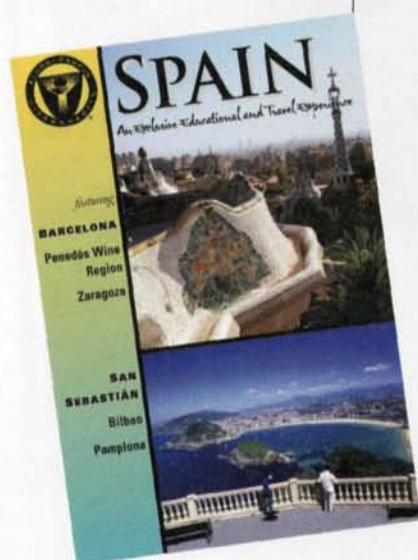
on campus and from Georgia Tech Clubs across the country, the TEAM Buzz Community Service Day on Oct. 10 will include building and landscaping projects and aid for those in need. jane.stoner@alumni.gatech.edu

D.C. Club Bus Trip

to the University of Virginia for Tech's gridiron clash with the Cavaliers is Oct. 24. Transportation, game tickets and tailgating are included in the Washington, D.C., Georgia Tech Club event. gtalumni.org/clubs/dc



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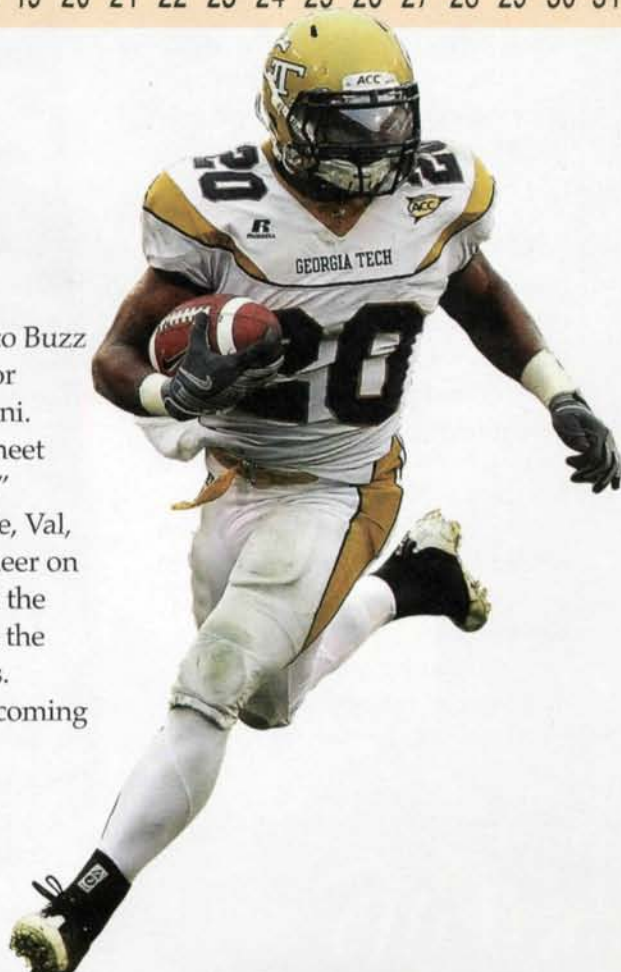


Spain,

from Barcelona to the Penedes wine country to San Sebastian and Bilbao, will be explored by alumni travelers Oct. 7-17. See the entire list of upcoming travel opportunities at gtalumni.org/tours.

Homecoming,

from class reunions to Buzz Bash, is a tradition for legions of Tech alumni. From Oct. 15 to 17, meet President G. P. "Bud" Peterson and his wife, Val, at a reception and cheer on the Yellow Jackets as the football team tackles the Virginia Tech Hokies. gtalumni.org/homecoming



| In Retrospect

In Summer of '69 Ramblin' Rafts Took to Chattahoochee

On July 26, 1969, Tech student Larry Patrick, Text 73, and some Delta Sigma Phi brothers kicked off a novel event — a raft race down the Chattahoochee. That first year of the event, a race in name only, 500 people took part.

"The next year, we had over 1,000," Patrick told the *Atlanta Journal-Constitution* last year.

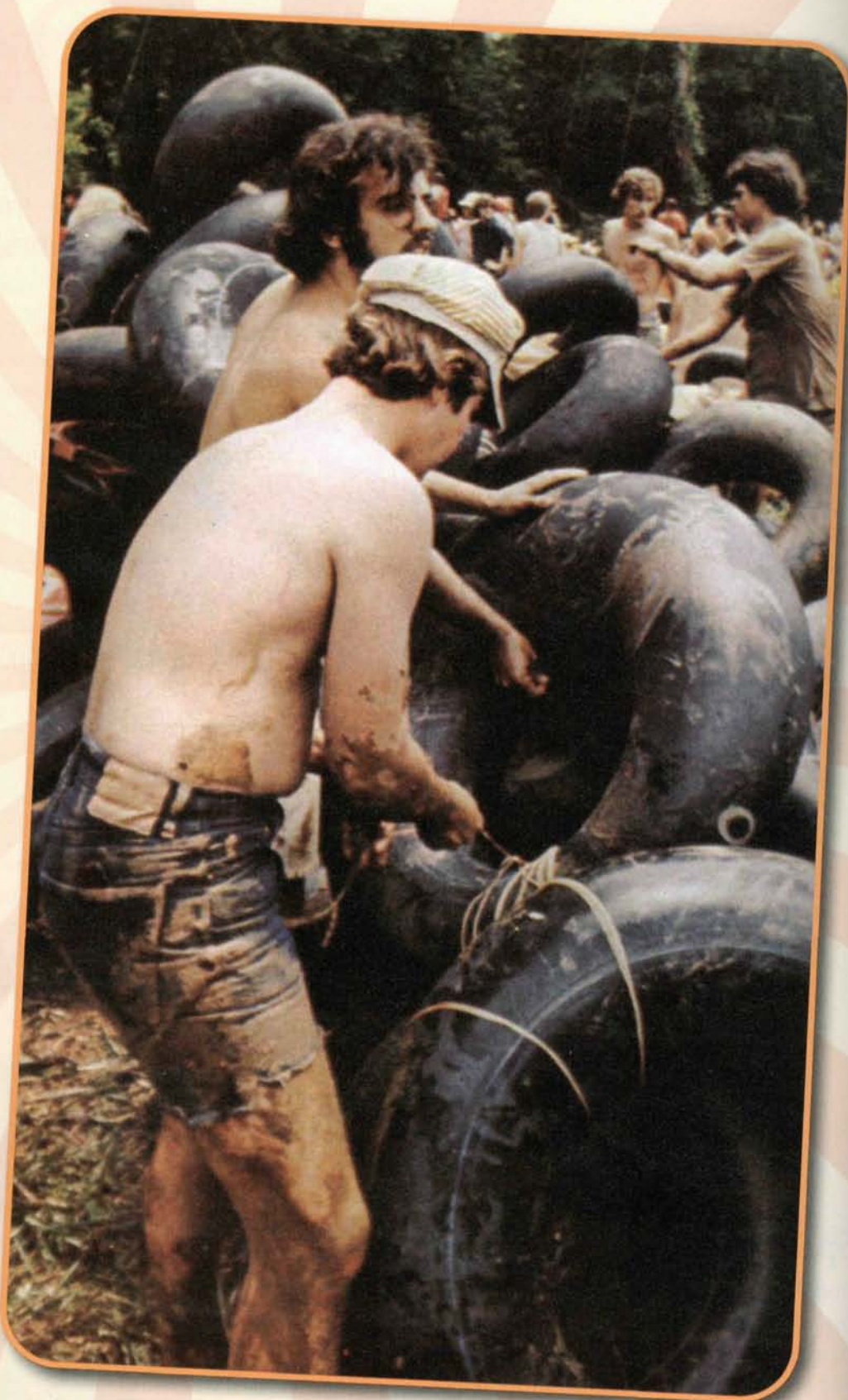
From there, the event exploded as radio station WQXI became a sponsor. Within just a few years, hundreds of thousands were taking part, earning the Ramblin' Raft Race a spot in the *Guinness Book of World Records* as the world's largest spectator sporting event.

Participants have recalled one could almost walk across the river without getting wet because there were so many rafts in the water.

Quentin Dastugue, CE 77, remembers the event for the elaborate — and bizarre — rafts people created for the race, including submarines, houses, tiki huts and more. As president of Tech's American Society of Civil Engineers chapter, Dastugue led the group in constructing an enormous raft built entirely of beer cans.

The race lasted until 1980, when the National Parks Service refused to pick up the reported \$55,000 tab for cleaning up after the race.

"It was such a good time for so many people," Patrick said. "We look at each other and say, 'Man, didn't we have fun!'"





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