Mailroom Gets New Name

GTRI's Mailroom has been renamed the Mail Center, and has relocated to Rm. 18 of the O'Keefe Building.

The GTRI Connector
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Internet2 Holds Promise for Researchers
By Joey Goddard, OCA

Georgia Tech is poised to play a major role in the development of the next generation of Internet. Internet2 (I2), as the project is called, involves collaboration of more than 100 colleges and universities and various commercial partners. The goal is to create a high-performance, large-scale research and development network that existed before the rise of the commercial Internet.

"I2 is not a network, it's a project," explained Ron Hutchins, the head of the Engineering Group for the Southeastern I2 initiative. "I2 will enable education and research to thrive without competition from commercial Internet traffic," he said. Hutchins likens the project to NSFNet, the National Science Foundation's (NSF) network that preceded the commercial Internet.

National connectivity for I2 will initially go through NSF's very high speed Backbone Network System (VBN), Hutchins says. The VBN has an Acceptable Use Policy which restricts the use of I2, however, this policy is consistent with the project's mission.

"There will be a transition to many more uses as we get experience with the new network," Hutchins said.

The I2 project differs from the commercial Internet in two ways. It will be 10 to 20 times faster and it will be Internet Protocol version 6 (IPv6) compliant.

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GTRI's Newest Lab: Arlington Research Laboratory
By Joey Goddard, OCA

The Arlington Research Lab (ARL), GTRI's newest lab, was established in July 1996. The office has existed since 1992, when it was part of the Concepts Analysis Group. It then became a division of the Electronic Systems Laboratory (ELSYS) and was later moved to Research Operations, says ARL Director Ed Eagar.

"Last summer Admiral Truly called me and said, 'You look like a lab. You function like a lab.' It just made sense for us to become a lab," Eagar said.

ARL's work includes providing specialized support to the Air Force in test and evaluation (T&E) resource planning and combat training range development.

"The type of work we do demands close contact with the customer," Eagar explained. "Our original work was to provide test and evaluation support to the Pentagon. We needed to have a presence in terms of engineering and research in this geographic area to serve the needs of our customers."

The lab has grown from supporting Air Force T&E to working with the Marine Corps Operational Test and Evaluation Activity, and is now branching into work with private industry. Eagar is confident of the abilities of his

Continued on page 4

Observed & Noted

Are you suffering from Terminal Professionalism? Try Eliseh Lane and Catherin Joseph report that there's help for all of us on page 5.

Georgia Tech continues exploring ways of enhancing its R&D and administration processes. Read an update on page 5.

Looking forward to owning an electric or hybrid vehicle one day? Rob Michelson updates you on GTRI's contributions to EV and hybrid research on page 4.

The recently organized SLO is building on an almost 30-year tradition of research expertise. Read about what SLO has accomplished, and learn about the lab's future plans on page 5.

Annette Weinberger inspired many of her colleagues with her courage and her smile. Take a minute to recall Annette's contributions to GTRI on page 6.

What do an aspiring actress, a writer and a former swim team member have in common? They all are new GTRI employees — meet them on page 7.

As usual, page 8 is filled with professional activities and personal news. Flip this issue over to get up-to-date on your colleagues.

The GTRI Connector is on line at <http://www.gtri.gatech.edu/connector/ctwelcom.htm>.
Meet the ERB MAPS Group

The MAPS team in the Electronic Research Building (ERB) provides support to the Information Technology and Telecommunications Lab (ITTTL), Huntsville Research Operations (HRO) and two divisions of the Sensors and Electromagnetic Applications Laboratory (SEL). Under the leadership of manager Jerry Lett, this group helps with proposal preparation and supports projects directors with all of their administrative needs, from tracking deliverables to managing overruns.

Jerry Lett is the manager of the ERB MAPS group. Jerry came to GTRI 13 years ago and worked in accounting for one of the labs. When the MAPS team was created in 1990, Jerry became a manager. He handles the financial part of proposal preparation, tracks and monitors contract deliverables, prepares lab reviews for director briefings, and takes care of other administrative and financial support duties as necessary. Before starting work at GTRI, Jerry was an officer in the Air Force for 21 years. Jerry grew up in Mobile, Ala., but traveled a great deal with the military. He earned his undergraduate degree in accounting from the University of Nebraska. Jerry also has two master's degrees in business administration: one in operations research and management science from the University of Michigan in Ann Arbor, Mich., and one in accounting from Western North Carolina College in Springfield, Mass. Jerry and his wife, Patricia, have three children and two grand children. His hobbies include jogging and landscape gardening. Jerry also keeps busy as a minister in the clergy of the Catholic Church.

Cynthia Fellers is a research associate who began her career at GTRI as a student assistant. After earning a bachelor's degree in industrial management from Georgia Tech in 1984, she started work on GTRI, moving to the MAPS group when it was formed in 1990. Cynthia currently works with special projects and performs other MAPS duties. For example, she provides financial analysis and support to the FalconView project team. A native of Athens, Ga., Cynthia broke with the family tradition of attending the University of Georgia to come to Tech. She now lives in Marietta with her husband, Ronie. When she's not at work, Cynthia enjoys reading and gardening. She and Ronnie have camped all over the Georgia, from the Okefenokee Swamp to Goulindale Canyon.

SELECTED JUNE 1997 AWARDS

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Mary McKenna has been with GTRI for 17 years and began work with MAPS when it was created in 1990. She originally worked in the Cobb County Facility, but transferred to campus after five years. Mary provides support to the Information Technology and Telecommunications Laboratory (ITTTL). Some of her duties include preparing cost proposals, troubleshooting and maintenance of lab accounts, putting together monthly reports and review materials, and processing time sheets and deliverables.

Mary says that her family is the light of her life. Her busy household includes her daughter, Tracey, Tracey's husband, Todd, and her two grandsons Josh, 7, and Nickle, 15 months. She also has two dogs and six cats. When she's not busy with her family, Mary loves reading, movies and gardening.
Are You Suffering From Terminal Professionalism?

By Elisha C. Lane & Catherine B. Joseph, EOEMI

One of the recent Lunch 'n Learn sessions in EOEMI's Safety, Health and Environmental Technology Division was a barrel of laughs — literally.

We spent almost an hour making ridiculous sounds, forming funny faces and laughing together while viewing the National Technological University video "Humor in the Workplace." The experience was an eye-opening opportunity to take a good look at ourselves and how seriously we take our work life.

Humor comes from the Latin word "umor," which means fluid, like water. This implies flexibility.

Unlike comedy, which is an art form, humor is a set of psychological and physical skills developed over time. These skills help us remain "fluid" during stress and trauma in our lives.

Terminal Professionalism: "It is the tendency to become "dead serious" about our jobs. Although there is nothing wrong with being professional or serious, according to the video's host, it is important to maintain a sense of humor in our lives. This goal can be easily forgotten in today's workplace. Each of us gets caught up in professional competition complicated by date books and "grievances" filled with papers, proposals and deadlines.

Why? We were raised in a culture that says "when the going gets tough, the tough get going." If "the going gets tough once or twice a year," this works — but if life gets extremely tough, we get tight, and then eventually become so brittle that some small incident can break us.

Part of avoiding Terminal Professionalism is maintaining balanced perspectives on combat and competition in the work environment. How many times has each of us heard the phrase "It's a war out there?"

"We're under the gun? We've got to kill the competition before they kill us? If we think of work as a battleground, we go home each day feeling that our jobs ARE killing us — even though a bad workday is nothing like combat. In war, people die; in business, we may lose profits, standing, job, money, houses, clothes...but we are still alive!"

In addition to keeping our perspective, we must remember to re-generate our spirits by playing. Play is loss of tension through satisfying behavior, when winning and losing are not the primary goals. It is not the place for competition. Learning to play is not easy for most of us. To play, we must overcome physical and psychological fears of foolishness and failure; these fears discourage us from taking risks.

So, once in a while, let go and don't worry what other people think of you. Keep in mind that most others are worried about what you think of them! You must be disciplined to find, see, per-pendicate, and strengthen the joy, fun and play that exist in life. These are the primary characteristics of a healthy personality and a creative

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Internet

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100 times faster, and will be capable of providing quality of service (QoS) to those using the network.

"QoS means that you can reserve bandwidth for a particular application and be guaranteed that it will be available," Hutchinson said.

Eventually, users will be required to pay a fee for having QoS available to them.

"The commercial Internet is still in formation and has the same priority," said Hutchinson. "With QoS researchers can be assured that they will be able to perform research without network interruptions."

"QoS will allow for increased collaboration between computers," added Mary Trauner of UI. "For instance, students at Tech will be able to perform research on scarce or specialized resources elsewhere in the country."

Some of the applications being considered for use on L2 include distance learning, high-performance computing, teleimmersion and digital libraries. "It is important that we consider all the possibilities for BAND that L2 has to offer," Trauner said.

"This information will be used in the campus-wide developing the performance requirements for the network."

"The academic community can be excited about Tech's "L2 Applications Task Force," which seeks information on projects that will need QoS."

"We need to develop applications that will use the network, and then the network will advance to meet the needs of these applications," she said.

"The technology that is developed for L2 will eventually be rolled into the commercial Internet," Hutchinson added.

"Tech, in cooperation with Georgia State University (GSU) and the Board of Regents, was recently awarded a two-year grant to be a VINS site. Tech will also serve as a regional network interconnection point, or gigapop, for the L2 initiative."

"We're providing the interconnection site, but our expertise is being combined with others to make this happen," said Hutchinson. "It's truly a collaborative project of the best kind."

"The Tech gigapop, known as the "Southern Crossroads, will eventually interconnect 13 states in the Southeast from Washington, D.C., to Florida and to Kentucky."

"The Southern Crossroads is the southeast's implementation of L2," Hutchinson said. "It will bring L2 connectivity to most of the region."

Hutchinson explained that Tech was a natural choice for a gigapop. "Atlanta is a connecting point for almost every major computer network in the country," he said.

Hutchinson also cited the campus-wide networking initiative, FutureNet, as being instrumental in the decision to make Tech an L2 hub. "It is because of some of this work that we have the expertise to do the Southern Crossroads," he added. Hutchinson's "being a gigapop opens up many doors for Georgia Tech, and puts us in a wonderful place to shine."

Update

Study to Enhance Georgia Tech Research Development and Administration Processes Continues

Although the research environment at Georgia Tech is becoming increasingly competitive, Georgia Tech's research funding has continued to grow rapidly for a number of years. To ensure that our faculty, staff and students are working in the best possible research environment, President Wayne Clough recently appointed a Research Development and Administration Steering Group to address improvements in this process.

The project is jointly sponsored by the Administrative Excellence Task Force (AETF), chaired by Robert Thompson, scientific support of operations, and the Research Council, chaired by Jean Lou Chameau, vice provost of research and graduate studies. Chuck Duffy, interim director of grants and contracts accounting, serves as project team leader.

To conduct a comprehensive assessment and redesign effort of the entire research development and administration process, the project has been organized to include a Steering Group, Process Research Group, Focus Groups, and Project Staff to manage project activities. Additionally, consultants from Coopers and Lybrand will be called upon for assistance throughout the project.

Gerald Smith, interim director of GTRI research operations and Sam Blankenship, director of TERES in ELSYS, are members of the Steering Group. Barbara Walsh, manager of GTRI fiscal services, serves on the Process Resource Group.

The project will be divided into three phases. Phase One is an assessment of what Georgia Tech is currently doing in its research development and administration process; Phase Two will generate recommendations to create the best research environment possible; and Phase Three will involve the implementation of Phase Two recommendations.

A June 26 orientation meeting was held for the Project Steering and Process Resource Groups. Since that time, project staff from the Office of Management Services have been busy conducting detailed interviews and focus groups with those involved in the research administration process, to gain a clear understanding of the current process.

In coming weeks, the project staff also will be administering a web-based survey to gather information about researchers' and administrators' satisfaction with, and utilization of, various services provided here on campus.

A summary of findings and survey results from Phase One will be complete in the fall. For further information about this project, please contact Chuck Duffy, project team leader, at 894-1025, or send e-mail to chuck.duffy@business.gatech.edu.
Focus on Research

Modeling Tomorrow's Electric and Hybrid Vehicles

By Rob Michelson, AERO

Georgia Tech is involved in the design of electric and hybrid electric vehicle models. A team from GTRI and the School of Electrical and Computer Engineering led by Rob Michelson (AERO) is writing computer models for advanced battery chemistry, rapid charging motors and motor controllers, as well as integrated heating and air conditioning.

These models are being incorporated into a larger Defense Advanced Research Projects Agency (DARPA) model for the overall electric vehicle system. Others supplying models are the University of Texas’ Institute for Advanced Technology, the University of Hawaii and the Southwest Research Institute.

Electric vehicle technology is of interest to the military because it offers potential for a quiet, more easily refueled armored vehicle (perhaps using electrical weapons such as “rail guns”). DARPA recognizes that the technology also has tremendous civilian potential as well, so it has been sympathetic to the funding of electric buses and cars. To efficiently design electric vehicles for military and civilian uses, models such as those being created at Georgia Tech are needed to provide the analytical “what if” results researchers desire before they bend the first piece of metal.

Thomas Habietzel (ECG) is providing models for various types of synchronous AC motors and controllers which would provide the primary drive for all kinds of electric vehicles. Krish Aluja and Ph.D. student Baha Salehman (both of AERO) are modeling the heat transfer into and out of a generic electric vehicle. Their model can predict heat loads and transfers for electric vehicles operating under different conditions at different times and latitudes.

Free energy is important to use and control. Heat from the sun, or “waste heat” from brakes or motors can be channeled to where it is needed. More importantly, it can be used intelligently to keep systems and occupants cool without requiring additional scarce energy input from the batteries to run air conditioning compressors.

The models are being written for use in not only electric vehicles, but for hybrid electric vehicles, as well. Hybrid electric vehicles couple high efficiency internal combustion engines to electrical motors to form a motor-generator set. This is not unlike a diesel-electric train engine in which an optimized diesel motor runs at a constant speed to produce electricity which then runs the train’s traction motors.

Hybrid electric vehicles have the advantage of extended range and quick refueling. The enabling technology necessary to allow fully electric vehicles to become popular is the battery. Current battery technology does not allow sufficient vehicle range to satisfy either the military or the general public. While commuter cars are possible using only battery power, the ability to take trips longer than 100 miles is still difficult in a car with the amenities of our present internal combustion designs.

Yi Ding (AERO) is not only modeling battery electrochemistry, but also is working to improve battery charging so that a battery cell requiring eight hours to charge, can instead be charged in eight minutes. Once this technology is fully demonstrated, the need for hybrid-electric combinations will diminish. In a related project directed by Chuck Stanel (AERO), Georgia Tech recently was responsible for integrating the components necessary to create a hybrid electric bus using hydrogen gas as a fuel to power the hybrid motor-generator. In the future, when battery technology improves and charging can be done quickly, such buses will be entirely electric, benefiting from the significant reduction in weight associated with the elimination of heavy metal hydride hydrogen storage tanks.

AERO has invested in precision computer controlled battery charge/discharge equipment to not only support code validation as part of the ongoing DARPA modeling program, but to develop the new rapid charging algorithms which will make electric vehicles common place.

ARL From page 1

research team and support staff in GTRI’s smallest lab.

"Every function that has to occur in a lab, we do,” he said. “There’s not a facet of operations that we don’t touch.”

ARL is slightly different from fellow campus labs because, in addition to technical and engineering products, its work focuses on management and economic issues that impact technology.

“We approach our work from across several technical and business specialties,” Eager said. "Although most of our staff has solid technical education, their career paths and experience have tended more toward engineering management, systems engineering and program management of large defense programs. As a result, our research staff has a broad general technical background. Where deep technical expertise is required, we draw on campus talent.”

Almost all ARL researchers are graduates of the Defense Systems Management College Program Managers' Course, a five-month course given by the Department of Defense.

"This is a very intense course and it is essential for the area we work in and the customers we support," Eager said.

One current ARL project is the Test Resource Management System. This system provides the Air Force with an interactive tool to help manage its T&E resources.

"The Air Force has assembled a lot of information in the T&E area," explained Eager. "We took it and segregated it into key processes. This system helps the Air Force manage its $600 to $700 million a year T&E budget.

The lab also is working on a Combat Training Range Management System for the Air Force. This system provides web-based interactive capability for Air Force staff in the Pentagon to assess range activities, such as utilization rates or environmental issues, at more than 80 worldwide installations. Missions and workloads can readily be adjusted to reflect changing priorities based on real-time assessments.

The lab has almost doubled customer sales during its first year, ending the fiscal year with just under $3 million in awards. Researchers in the lab have performed several noteworthy accomplishments. Among them, John Meeuwissem, ARL associate director, traveled to Paris in June to represent Georgia Tech as an exhibitor in the Paris Air Show. Meeuwissem, who is fluent in French, was instrumental in pulling together Tech’s first entry in the show. Ron Smith was a member of the White House Commission on Aviation Safety and Security and is mentioned, along with Georgia Tech, in the commission’s final report. Smith recently received a letter from Vice President Al Gore thanking him for his contributions to aviation research.

ARL also houses representatives from Research Operations and two other labs, Jim Allen, GTRI/ERO, whose activities are directed at business and contract development across the spectrum of GTRI activities,
Lab Overview:

SDL: 30 Years of Expertise, Recognition

By Charles Wilson, SDL

The Systems Development Lab (SDL) is active in research and development of foreign threat system simulation and associated technologies. With almost 30 years of experience in foreign systems analysis and development, the lab has received national recognition for its work in development of threat radar and threat-related system simulators, foreign technology assessment and system exploitation, and development of C3 and support systems.

“We try to replicate foreign systems as closely as possible so that U.S. forces are better able to defend against similar threats,” explained lab director Jeff Sitterle. “The systems we develop are used mostly to test and evaluate the effectiveness of U.S. systems, and also to train U.S. forces.”

“As a consequence of the nature of our research, in the past we have generally performed the majority of the work solely within SDL, because our sponsors know the level of support they can expect from us and have confidence in our expertise,” Sitterle said. “However, SDL has now begun multi-laboratory initiatives that will foster greater cooperation across all of GTRI.”

In July, Sitterle completely reorganized the laboratory to more effectively meet the challenges of a changing DoD market. The new organization is made up of six branches which bring a variety of technical skills to SDL’s research mission, and are organized according to the technical expertise of individuals within each branch.

“We have been looking at our strategic plan for two to five years into the future,” Sitterle said. “With this new organization we are more in a better position to meet our goals.”

Located at the Cobb County Research Facility, the lab’s six branches bring a variety of technical skills to SDL’s research mission.

The Systems and Mechanical Engineering Branch, led by Rob Muzio, is composed almost totally of senior and principal engineers. In this branch are most of the background and experience for project management, system engineering and mechanical system engineering.

Allan Williams heads up the Transmitters and Microwave Systems Branch. Williams and branch personnel offer unique, long-term experience in high-power microwave systems, an area addressed by few organizations in the United States.

The Analog and Digital Processors Branch, under the oversight of Duane Patterson, is made up of research professionals with strong backgrounds in various types of electronic hardware used in modern radar and communication systems, as required for state-of-the-art signal processing.

Todd Johnson heads up the Software and Computer Systems Branch, the second largest of the six branches. The size of this branch indicates the vital role of computers and software in modern electronic systems.

Because SDL develops and delivers major electronic hardware systems, extensive documentation is an inherent element of each program. To meet this need, the Drafting and Documentation Branch, headed by Mitch Cole, was formed under the new lab organization. Mitch and his staff bring to SDL’s programs a wealth of talent in quality documentation.

Vince Camp is head of the Hardware and Fabrication Branch, which includes 16 electronics and mechanical technicians. This group is vital to SDL’s success. Members turn engineers’ designs into physical hardware systems that meet customer requirements for robustness and reliability over the item’s lifetime. The lab also is expanding threat simulation research.

“In the past, our focus has been very narrowly focused on ground-based threat simulation, but lately we have begun seeing more work with airborne threat simulation and training systems,” Sitterle said. Researchers in SDL have been developing systems that simulate radar and missile systems on foreign aircraft.

Although Sitterle is new to the job of lab director, he is not new to GTRI. He worked for six years as a systems engineer on the XM-TAS radar development project, and has major roles in other SDL programs. He was the chief of the Advanced Concepts Division for 3 1/2 years, and spent two years as chief scientist. In October he was named director after Joe Parks retired.

One priority identified by the lab’s new leadership is standardization of program management tools and processes, including configuration management and quality assurance.

“The management of large, multi-year projects, which make up most of what we do, requires a great deal of oversight,” Sitterle explained. “Standardizing will make project management easier and leave more time for research.”

The lab also has initiated a software process working group to steer the lab’s efforts in reaching Level Two in the government’s Capability Maturity Model (CMM), which assesses an organization’s software development processes.

SDL remains GTRI’s third largest lab with some 75 employees. The lab’s contract awards of $11.4 million for FY 97 show 19 percent growth over last year.

Sitterle hopes the lab will continue growing this fiscal year, not only in terms of awards, but also expertise level.

“We’re trying to expand both our technology and sponsor base,” he said. “This lab has existed in one form or another for almost 30 years. We think we are on track to be around for 50 more.”

Focus on Research

ITTL’s Lisa Sills demonstrates courts-related technology for Tommy Sexton, center, director of the Southeast Regional Law Enforcement and Corrections Technology Center and Jim Scott, right, Center staffer, as Tom Horton, left, looks on. GTRI became an R&D associate of the Center on June 25. (Photo by Yantic Adir)

ARL

From page 4

has an office there, as does Bob Beasley, GTRI/STL, and Kim Wood, GTRI/ELYS. Located in Arlington, Va., the lab offers conference rooms, high-tech communications, and state-of-the-art computer capability. In the past year, the lab has had over 1,500 visitors use its facilities, including customers, professional associations, business and government contacts, and visitors from campus. Nevertheless, Eager is always mindful of the lab’s mission.

“We have an identity crisis in that people assume we are a marketing group rather than a lab doing technical research,” he said. “Of course, when we hear of opportunities for Georgia Tech or GTRI we will let people know — but we are here because the research we do demands close contact with our customers.”

ARL has strong ties to other GTRI labs, and Eager looks forward to continued joint efforts.

“We are always looking for ways that we can leverage our capabilities with organizations on campus, whether they are from GTRI or academic units,” he said. “I always tell potential customers that we may have a small organization here in Washington, but we have more than 600 engineers in Atlanta on our team.”
Focus on Folks

Courage and A Smile: Annette Weinberger was A GTRI Inspiration

By Lea McLees, RCT

Annette Weinberger evoked wonder, amazement and respect in the best of GTRI colleagues. For years she faced debilitating illness with faith and a smile and offered the best of friendship and service to GTRI colleagues — even when her doctors encouraged her to go on 100 percent disability, she continued to work 50 percent time, recalled Pat Rose (TITL).

"Annette loved coming to work at GTRI, and that work kept her going," said Rose, Annette’s friend and colleague. Annette died late July 25 from complications resulting from scoliosis and an upper respiratory infection. Her funeral brought together more people than she ever expected, said her husband, Bill Weinberger, because of the impression she made.

"I think she touched the hearts of a lot of people," he said. Annette came to GTRI in 1985 as a clerk in the former RAIL group, working for Charles Brown. She advanced to various administrative secretary positions between then and 1994. Working in RIDL, for Evan Chastain, and in SDL, and in AERO, as well.

"She was always sweet, kind and considerate of her co-workers," recalls friend Phyllis Finton (SEAL). "Her smile could melt the angriest of engineers!"

Maggi Hurdon (AERO) prepared paperwork to hire Annette, and also had the sad task of putting togethers Annette’s final paperwork.

"Throughout her entire employment, Annette was an excellent worker, always dependable, with high ethics — and a real pleasure to work with," Maggi said. "I never remember her being unpleasent, negative or unhelpful. I feel we were all lucky to have known and worked with her.

"During all of this Annette faced major back surgery, traction and pain. For a long time, she had to wheel an oxygen tank everywhere she went."

"Annette showed a lot of courage and stamina to keep working," Chastain said. "She always carried her workload.

But amazingly, she never became angry or frustrated about the situation, and she never lashed out at others. Colleagues attributed this strength to her incredible faith.

"She would talk to me about her health, but always ended by saying, ‘I’m trusting in Jesus,’" recalled Barbara Crantfill (AERO). "She was always smiling and had a sweet disposition that spilled out to everyone around her."

Adds Chastain: "To be that kind of a person, in spite of what she was dealing with — how many people do you know who could be in constant pain that they knew would never end, and still be cheerful? But she was cheerful, no matter what."

And Annette kept her friends Phyllis and Pat laughing — so hard, at times, that they had to retreat to the mail room at CCR to regain their composure. The three went to lunch at Pizza Hut every week for a while to collect all the hand puppets from the Disney movie "Beauty and the Beast" for their children and grandkids.

We ate so much pizza trying to get those hand puppets," Phyllis recalled.

Annette leaves behind a family of three: her husband, Bill Weinberger, son, Jason Paul, 20, an Eagle Scout who attends Kennesaw State University, and daughter, Amy-Elizabeth, 15, a Harrison High School junior varsity cheerleader. She also leaves her mother, two brothers, a sister, and a niece, Deann, whom she helped raise.

A National Bank account has been set up to accept donations for Annette’s family. The account number is 3260492410, and the name is “Family of Annette Weinberger, aka William R. Weinberger.” Donations can be made at any National Bank branch, and are tax deductible.

Recycling on Campus: Here’s How

1. Recycling pick-up day on campus is every TUESDAY.
2. Containers are moved from inside the building to their designated pick-up locations outside no later than 8 a.m., and are moved back inside by 6 p.m.
3. Items recycled on campus:
   - **MIXED PAPER** — No need to remove staples and paper clips.
   - **Acceptable:** Catalogs, white office paper, magazines, telephones, books, junk mail, newspaper, brochures, computer paper, colored office paper and Post-It Notes.
   - **Not Acceptable:** Food-contaminated paper (i.e. pizza boxes, napkins), paper towels, tissue paper and facial tissue.
   - **ALUMINUM CANS**
   - **4.** Individuals are provided with blue desk-side containers for collecting mixed paper.
   - **5.** The individual must put the paper from the desk-side container into the larger blue bins marked ‘Recyclable Mixed Paper Only.’
   - **6.** Arrangements can be made to pick up large quantities of materials or other recyclable items (i.e. cardboard, books).

For further information, or if you are having a problem recycling in your building, contact Cindy Jackson at 404-894-2004 or send e-mail to cindy.jackson@prod.gatech.edu.

Laughter

From page 3

Problem-solver.

The video we viewed offered some specific advice on how to achieve a "humer perspective" in our business lives: take yourself lightly; take your work or your challenges seriously. Several perspective tools are suggested in this video, including making funny photos of yourself in a photo booth and posting them at your desk; practicing "humaerobics," the making of funny facial expressions; and keeping a joy list of the experiences that uplift you and give you hope. You can also keep a "playtimer" calendar that devotes lots of space to weekends and a meters out a few tiny spots for weekdays.

The video also suggests marking the end of each workday and the beginning of your free time — for example, wear a clown's nose on your commute home, or play a harmonica with your nose before leaving the office. The video also suggests giving our best 90 percent each workday, so that we may take an additional 50 percent of ourselves home each weekend for ourselves and our families.

Just remember: Laughing at yourself and accepting others for who they are definitely can help you get through stressful times at work.
GTRI Greetings

Welcome to some of our newest employees!

Ten Good Things We Know About

Amy Fleming

1. Amy is an Office Automation Systems Coordinator for the Sensors and Electromagnetic Applications Laboratory (SEAL).
2. Her duties include computer support and technical services. She does everything from building computers to troubleshooting and resource management.
3. Amy worked for GTRI part-time for 1 1/2 years before starting full-time in January.
4. She is a graduate of Southern Polytechnic Institute where she received a degree in Management of Technology.
5. Amy is pursuing a bachelor’s degree in computer science from Southern Tech, and hopes to graduate this summer.
6. In the fall, she plans to begin a master’s degree in information systems.
7. A Georgia native, Amy grew up in Newnan, and now makes her home in Marietta.
8. When she’s not busy working or studying, Amy is an amateur actress. She has performed in several productions and was the drama leader for the Baptist Student Union and a member of the Southern Tech Theatre Society.
9. Another of Amy’s talents is cooking. Her specialties are lasagna and cheesecake.
10. She also enjoys outdoor activities, particularly hiking and rafting.

Ten Good Things We Know About

Kathryn Knox

1. Kathryn has been a project coordinator for the FalconView project, rounding out a team of 10 technical research engineers.
2. Before coming to GTRI, Kathryn worked in sales and sales management and sold "just about everything" from vitamins, health-club memberships and computers to lingerie and designer clothing.
3. Kathryn is an Air Force "brat," never living anywhere for longer than 4 years, and was also an Air Force herself as a Communications Computer System Operator.
4. While in the Air Force for three years, she traveled a lot, living in Texas, Mississippi, California, Denver and Korea.
5. Kathryn was born in Okinawa, an island off the coast of Japan. Home is Fort Walton Beach, Florida, "as that is where she lived the longest and is where her parents are now.
6. Kathryn is single and lives in Gwinnett County.

8. She considers herself mostly a "cat person;" however, she is the proud owner of a Biewer, Guinna, who is 5.
9. In her free time, Kathryn enjoys creative writing, working out, doing a variety of "Atlanta" things with friends and being outdoors.
10. Writing is her real passion. She pens everything from poetry to novels and movie scripts.

Ten Good Things We Know About

Andrew Old

1. Andrew began working as a graduate research assistant for the Information Technology and Telecommunications Laboratory (ITT) in January.
2. Andrew is pursuing a bachelor’s degree in computer science from Southern Tech, and hopes to graduate this summer.
3. Before coming to GTRI, Andrew worked for a health care consulting firm in Monroe, Louisiana.
4. Andrew grew up in Houston, Texas, but lived in New Orleans, Louisiana, for two years before moving to Atlanta to attend college.
5. A Tech graduate, he completed a bachelor’s degree in industrial engineering.
6. Andrew is now working on a Tech master’s degree in operations research.
7. He will graduate in December, and hopes to pursue a career in simulation.
8. As an undergraduate, Andrew was a member of the Yellow Jacket swim team. He was team captain his senior year, and holds the school record for the 400-meter individual medley.
9. He lives in Smyrna with two roommates and three cats.
10. In his free time, Andrew likes to read, watch television and work out.

Personal Notes

Our Sympathy

...to retiree George Fowell, whose mother, Mary P. Fowell, died July 11. George works hourly as needed.
...to David Brani, whose father-in-law died in mid-July.

Cradle Roll

Lisa McDonald (MAPS) is an aunt for the 23rd time! Her newest nephew, Jordan Alexander Lucas, was born on May 16.

Rose and Glenn Hopkins welcomed a daughter, Mary Danielle Hopkins, on May 25.

Focus on Folks

Georgia Tech’s PCS
One of State’s Top Printers

By Toni Mills, OIT

The Office of Information Technology’s Printing and Copying Services (PCS), formerly PCC, brought home two awards this year from the Printing Industry Association of Georgia’s (PIAG) 1996 statewide Print Excellence Competition.

PCS won awards of excellence in two categories: Brochures/Pamphlets, for its work on the "Graduate Studies in Mathematics" brochure; and Booklets, for its work on the "College of Computing Course Calendar."

The awards were presented April 12 during PIAG’s 1997 “Celebration of Print” gala at Cobb Galleria Centre in Atlanta. PCS competed with 29 other companies in Division Two, for firms with six to 55 employees.

PIAG’s Print Excellence Competition is the only competition in Georgia that recognizes artistic and craftsmanship in the printing industry. The event attracted 1,361 entries from 82 printing companies throughout the state. Each company was placed into one of five divisions based on number of employees or facility function.

A panel of judges issued one best of category (first place) and one award of excellence (second place) award per category. Judging criteria included neatness of impressions, quality and effectiveness of the entire piece, overall visual impact, and the construction and format of the entry.

PCS is the only organization reproduction facility on the Georgia Tech campus, processing more than 6,000 orders annually. For more information about PCS’ services, visit <http://shubu.ppc.gatech.edu/ ppc_home.html> on the Web.

Robin and Jim Sangston welcomed a daughter, Amanda Hadley Sangston, on June 14.

Beth and Mike O’Neill (AIRL) welcomed a second son, Andrew Patrick, on May 5.

Wedding Bells

Carey Floyd’s (SDU) son, Chip, married Denise Lyle on July 26.

Get Well Soon!

Our thoughts are with John Cotton (SEAL), who is recuperating from open heart surgery. Get well soon, John.
Focus on Folks

Professional Activities

Electro-Optics, Environment and Materials Laboratory
The Georgia Tech Plasma Programs conducted a seminar and demonstration of the plasma technology for members of the Orange-Wake-Durham County, North Carolina Waste Management Group, representatives from the Orange County Department of Transportation, and the Federal Highway Department, and members of the North Carolina Energy Research and Development Center at Clemson University. Georgia Tech was represented by Dr. James Tisinger, chairman of the Science, Technology, and Industry Committee. The Georgia Tech Plasma Technology participants included Thomas Galloway and Lou Cicero (ARGC). Orlando Forrester (Industrial Programs), John Neneth, Bob Newsom and Lamar Cotner (FERMIL). Georgia Tech Plasma Programs presentations and demonstrations were conducted in June and July by Newsom, Carnes and Cicero for 13 participants in the College of Engineering’s Pre-college Engineering Program (PRIP). P2 was the College of Engineering’s Minority Introduction to Technology (MITE) Program (two sessions), and 3 members attending the Mid-South Business Roundtable Quarterly Meeting held July 10-11 at Georgia Tech.

State Government

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Moving On
Faisal Ahmad, William Ballard, Benjamin Buchanan, Matthew Dinkins, Jennifer Hsu, Dwight Ingram, Han-Song Kim, Carol Minn, and Carl Scherer (SEAL), David Antopolsky and Curt Niebur (AEING), Evan Haus, Timothy Mathis, Tim Reel, Stephanie Rimbert, and Robert Shively (STLI) Robert Bloos, Timothy Brosnan, Laura Brown, Daniel Floyd, Jerry Hicks, Joselyn Hoffman, Gregg Hulock, Cornall Lawrence, Randall Manock, Calvin Mapp, Kelly Paradise, Woonjhang Park, Susan Phillips, Michael Singletary, Christen Stollers, Gilmer Villalobos, and Peng Zhang (ECORE), Andrew Howers, Nicola Giberti, Matthew Howser, and Padma Raa (AIIST), Michael McKown and Michael Seymour (SDL), Vicky Coon, Sean Fornay, Kenneth Merry, and Donald Scott (ELSYS). Cynthia Davis, Bruce Harvey, Jason Kau, Michael King, Kevin Mobley, Mary Munn, Robert Nibens, Kelly Reece, William Simcoe, and Marcus Smith (ITTL), Billy Griffin (BO), Walter Griffin, Benjamin Hoflick, James Langley, Lynn Murphy, Stefanie Sherwood and Bert Watkins (SDM), Jannie Holloman (MAPP), Kathryn Holwell (RCL), Debra Lockwood and Mary Wall (APPO, Amy Mannino and Jennifer Sled (VPD); Robert Mapples (HBO), Gina Robinson (PST) are moving on.

Congratulations!
Paul Catallani (AEING) GRA and one of the Shackelford Fellows recently received an AIAA award: the 1997 “Dr. Abe M. Zarem Award for Distinguished Achievement” in the aeronautics category. The Zarem Graduate Student Award was established by AIAA and Zarem as a means for students pursuing advanced degrees in aeronautics and astronautics to showcase their talent and work. This award is a result of the paper Paul presented at the National Student Conference in January 1996 at Reno, Nev.: “Transformation of the Syracuse University LECH Tube into a Hypersonic Facility.” AIAA will fund him to present this paper in the International Student Conference session at the 48th International Astronautical Congress in Torino, Italy in October. Paul is studying the role of velocity profile shaping.

Personnel News

New Hires
STL welcomes Mark Brothers, Administrative Manager; and David Maybury, Student Assistant. HBO welcomes Charles Bosco, SES, and Mark Smith, Laboratory Technician. SDL welcomes Bruce Kerkemeyer, RE I; Rebecca Rock, Student Assistant; and Roger Steineke, RE I. AO welcomes Christopher Rundolf, Student Tempo. BSD welcomes Dennis Saylor, Accounting Manager. ELSYS welcomes George Harrison, Lab Director; Karri Johnson, Student Assistant; and Stephen Kuhi, Student Assistant. FERMIL welcomes Valerie Belcher, RE I; Robert Hendry, RE II; Patrick Manigault, Graduate Temps; and Annie Pearce, RE I; and David Stall, Student Assistant. ITTL welcomes Erick Beebe, Computer Services Spec. IV; SEAL welcomes Robert Hemphill, RE I; ARL welcomed Steven Elze, Professional Advisor; and Marlin Sow, Administrative Assistant. I. SSD welcomes Robert McGaher, Maint. Worker II. PST welcomes Alan Golievsky, Program Coordinator; and Kevin Mobley. Systems Analyst II. BSD welcomes John Burke, Security Specialist. Admin. welcomes Andrea Pendleton, Receptonist/Secretary.

Correction
ELSYS' new director, George Harrison, is a retired Air Force major general, not a retired Army major general.