Architecture and GTRI cooperate on construction research studies

By Martha Ann Stegar, RCO

The United States faces a monumental problem with the cancer-causing material asbestos—not only with its safe removal from buildings, but also with its safe disposal once removed. The hazardous waste must be taken to special EPA-approved landfills, which are gradually disappearing with public concern over landfill siting. As dump sites become ever more limited and remotely located, asbestos disposal will become even more difficult and costly.

But a technology developed 20 years ago to simulate recent temperatures on heat shields for the space program holds promise as a potential solution. Under a contract with the Army Corps of Engineers’ Construction Engineering Research Laboratory (CEL), GTRI research engineer Guillermo Villalobos is evaluating the use of plasma arc technology to destroy asbestos waste-containing materials. The study is part of a joint effort by Georgia Tech’s Construction Research Center and two private companies: Asbestos Abatement Technology, Inc., and Plasma Energy Corporation.

“Plasma technology could provide the only proven pollution-free solution to the long-term disposal problem of asbestos,” says Dr. Louis J. Circeo, director of the Construction Research Center (CRC). A plasma torch can routinely achieve controlled temperatures ranging from 1,500 to 7,000 degrees Celsius, high enough to melt the fibers that make asbestos unsafe, along with the asbestos-containing materials, he explains. The resultant chemically inert glass-like solid residue is not considered to be asbestos and can be taken to any disposal site. Another hazardous material that has only recently been revealed as a nationwide problem in buildings is lead-based paint. The level of lead in the blood deemed “safe” is steadily being lowered as more research results are revealed. The neurological injury to children has been shown to be especially severe, not only from eating peeling paint chips, but also from contact with airborne lead dust. The hazard is there, and it is widespread—but how can lead be efficiently and economically detected in paint and how can it be safely removed or encapsulated?

To assist in determining the research needed to solve the problem of lead paint abatement, CELI again turned to the Construction Research Center and GTRI. Jan Gooch, like Villalobos a researcher in the Materials Science and Technology Laboratory, has taken on this task.

**Question of the Month**

When was the last time you wrote a hand-written note thanking a colleague, a subordinate or a boss for a specific job well done? We all thrive on people noticing when we do something especially well. Yet not enough people invest that extra couple of minutes to communicate that they notice, care and appreciate.

Make it a goal to let people know that they’re appreciated. Get in the habit of complimenting at least one person a week.

—Communication Briefings, July 1990

**Continued on page 2**

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**Observed & Noted**

Ben James went to India this summer to evaluate that country’s industrial extension services. Read his impressions on page 2.

It’s time to think about the annual GTRI Research Awards again. Learn how to nominate someone on page 2.

Everything you ever wanted to know about desktop top publishing but were afraid to ask. Read it on pages 4 and 5.

Turn to pages 6 and 7 to find out what they’re doing and why.

Questions. Anyone? Is back after a couple of months’ vacation. To see what Charles McCollough has to say, look on page 5.

William S. Rogers, Jr., has joined the Concepts Analysis Lab as head of the Integrated Effectiveness Branch. Read all about him and other news of the GTRI family on page 8.

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President John P. Crecente and members of his staff visited the acoustics and aerodynamics facilities at GTRI—Cobb County in July. Shown from left to right: Charles Brown, Laboratory Group director; Bob Cassanovas, Aerospace Lab director; Krish Ahuja, Acoustics Branch head; Demetrius Paris, vice president for Research and Graduate Programs; Joseph Gilmore, vice president for Strategic Planning; GTRI Director Don Grace; Charles Crawford, Aviation Technology Branch head; Bob Englar, Aerospace Lab senior research engineer; Ed Reedy, GTRI associate director and Laboratory Group director. (Photo by Anita Edwards)
Construction Research
Continued from page 1
Ivery contracts based on proposals CRC submitted that identified more than 100 faculty members at Georgia Tech with expertise in CERL's areas of research concern. Some two thirds of these experts are in GTRI. One contract, for $2 million over a 24-month period, is to provide research support in the area of facility life cycle, processes and related studies. CERL may issue task orders in 21 technical areas relating to computer-aided engineering and architectural design, habitability studies, facilities engineering management, computer and information technology, military engineering, military programs analysis, and construction management. Dr. Circeo is program manager.

The other contract, for $500,000 and 24 months, is for research support in the area of engineering materials and related sciences. Major thrust areas are corrosion and coatings, metallurgy and quality assurance, engineering studies, construction and maintenance, electromagnetic pulse, and polymer applications. This proposal was submitted jointly by CRC and the former Energy and Materials Sciences Laboratory of GTRI. Dr. Circeo is program manager and Dr. Daniel J. O'Sullivan is program coordinator.

The Construction Research Center has submitted another $2-million proposal to supply research support in the area of environmental engineering and related sciences. If awarded to Georgia Tech, the Environmental Engineering Branch of the School of Civil Engineering will be the principal academic unit and the Environmental Sciences and Technology Laboratory will be the principal GTRI unit conducting research under this umbrella.

The indefinite-delivery contracts grease the wheels for research activity, but they don't deliver the funding for actual research projects. Dr. Circeo points out, "For that, the researchers at Tech need to beat the bushes at CERL to find out what their specific needs are, then work with CERL researchers to develop 'white papers' to carry out the required tasks."

— Louis Circeo

"Researchers at Tech need to beat the bushes at the Construction Engineering Research Laboratory to find out what their specific needs are, then work with CERL researchers to develop 'white papers' to carry out the required tasks."

— Louis Circeo

"Gung Ben' looks at industrial extension in India

By Lincoln Bates, ESTL

Ben James, a veteran of GTRI's industrial extension and education efforts, spent six weeks this summer in India as a scout for the World Bank. With a Canadian government, he performed a preliminary survey and evaluation of India's industrial extension services.

The statement of work, he says, involved (1) investigating and documenting the range of industrial extension services for small-scale industries, (2) gathering data on the effectiveness of these services, and (3) recommending further areas of study.

"Originally, they wanted a 10-page report of preliminary data, but later changed that to a full-blown report of 40 to 50 pages," says James. The report, he adds, will give the World Bank baseline information to design a broad study of India's small-scale industry and its problems. "We may be asked to return and assist in the larger study," he says.

The secretary of the Ministry of Industry arranged for the team to visit five of 27 federal centers—in Bombay, Bungaluri, Delhi, Madras, and Calcutta—that serve the country's small-scale industry. The director of each center, in turn, arranged meetings with representatives of other industrial extension sources in their region, such as banks, state agencies, and trade associations.

To counter the possibility that much of the tour was staged, the team, when it returned to Delhi, met with several industrialists to find out the presence of government officials. James declines to discuss findings until the World Bank receives and reviews the report, but he does note that it's difficult to compare industrial extension activities here with those in India, where numerous layers of bureaucracy contribute to inertia. Also, roads and the communications network are not in great shape, conditions that can affect industrial extension efforts anywhere. And, he observes, there's a shortage of critical materials because the government is limiting imports and allocating materials to help control the country's balance of payments.

Most employment in India remains in agriculture or agribusiness, but, says James, industry has accelerated recently. Employment in the small-scale sector, for example, has grown by 12% over a four-year span. (India defines small-scale industry solely in terms of investment in machinery and equipment. It has nothing to do with land, buildings, or number of employees, James says.)

James and his colleague were warmly received. "The temperature was 116 degrees when we arrived. Later, the monsoons started, which lowered the temperature to 95, but the humidity was 99%.

In the lasting-impressions department, he says, "The traffic was horrendous. There seem to be three motor scooters for every person in India, and you spend a lot of time dodging cows."
Professional Activities

Computer Science & Information Technology Lab

Jeff Grover recently participated in a review of proposed changes to the Ada programming language. Organized by the National Computer Security Center, the forum dealt specifically with the information security and data integrity implications of the proposed language changes. Forum attendance was limited to 10 invited members of the Ada Run Time Environment Working Group. Results of this review will be submitted to the Ada 95 project committee.

Contemporary Design Lab

David Flowers, Tom Pruitt, Jack Landgren, and Armand Massi presented briefings at the Crossbow-S Symposium on Monopulse Countermtermeasures (CM) in Huntsville, Ala., July 17-18. The briefings were based on results obtained from contracts on the Semiactive Monopulse Missile CM, the Cross-Polarization ECM study, and the Phased Array Vulnerability Estimate.

Economic Development Lab

Charles Oates has been appointed to head a joint committee between GTRI and the Department of Technical and Adult Education to investigate ways the two groups can work cooperatively.

J. Roy Milling was elected treasurer of the Georgia Society of Professional Engineers at its annual meeting in June.

Georgia has received chapter status in the Technology Transfer Society, according to IDL director Dave Swanson.

In early July, Susan Griffin and Bob Springfield attended a strategic planning workshop in La Jolla (CA) which focused on how to lead an executive group through a strategic planning process. They plan to impart these techniques to both internal and external audiences.

In mid-August, Art Brown attended an advanced symposium at the University of Oklahoma's Economic Development Institute and took the Certified Industrial Developer examination.

Electro-Optics Lab


Nick Faust was invited to the Stevens Space Center to participate in the fourth meeting of the National Center for Geographic Information and Analysis Initiative 12—Remote Sensing and GIS. This working group is tasked with defining research issues in the integration of remote sensing into geographic information systems of the future. Faust is responsible for defining topics associated with future computing resources and visualization of multidimensional data.

Electronic Support Measures Lab

at the Government Neural Network Applications Workshop in San Diego August 20-23. Katherine Schlag will present a paper entitled "Neural Network Applied to Intracranial Pattern Recognition." Environmental Science & Technology Lab

At the International Conference on Indoor Air '90 in Toronto last month, Charlene Bayer presented two papers: "An Investigation into the Effect of Building Break-Out Conditions on Building Materials and Furnishings" and "Exposure Assessments of Volatile Organic Compound Emissions from Textile Products."

Steve Hayes presented the Trenching and Excavation Awareness Program at Southern Tech July 18. Also in July, he received designation as a Certified Safety Professional.

Huntsville Research Lab

Barry Ballard presented a paper entitled "Rotary-Wing Radar Signature Analysis" at the Innovative Anti-Air Weapons Systems Conference held in late June at Johns Hopkins University's Applied Physics Laboratory in Laurel (MD).


Radar & Instrumentation Development Lab


Threat Systems Development Lab

TSDL presented three papers at the 19th Power Modulator Symposium, held June 20-26 in San Diego (CA) and sponsored by the IEEE Electron Devices Society and several research laboratories of the military services. George Ewell presented "Protection of Medium-Power Pulse Electronics," coauthored by Tracy Wallace of GTRI and E.W. Magee of Varian Associates. Istvan Nogradi presented "The Envelope Technique for Trigger Amplifiers," and Bill Dittman (MATDL) and Nogradi presented "Cooling and Insulating Small Hard Tube Modulators." Some 500 delegates from the U.S. and eight foreign countries attended.

Your guide to the new alphabet soup

Are you confused by the abbreviations for the new labs that you see? Here is a list to aid you. You may want to clip and save it for future reference.

Laboratories:

ATL = Advanced Technology Lab
ASTL = Aerospace Science & Technology Lab
COML = Communications Lab
CSFL = Computer Science & Information Technology Lab
CSF = Concept Analysis Lab
CMLD = Countermtermeasures Development Lab
EDL = Economic Development Lab
EEL = Electromagnetic Environmental Effects Lab
EANL = Electromagnetic Science & Technology Lab
ESNL = Electronic Support Measures Lab
HOL = Electro-Optics Lab
ISEL = Intelligent Systems Lab
ESTL = Environmental Science & Technology Lab
HRL = Huntsville Research Lab
MATL = Materials Science & Technology Lab
MATDL = Microwave & Antenna Technology Development Lab
PSL = Physical Sciences Lab
MAL = Modeling & Analysis Lab
RSDL = Radar Systems Applications Lab
RIDL = Radar & Instrumentation Development Lab
STL = Signature Technology Lab
TSDL = Threat Systems Development Lab

Program Incubators:

AVF = Acoustics/Vibration/Flow Control
MFT = Manufacturing Technology
TPF = Technology Policy
Support Groups:

FMD = Facilities Management Department
HRD = Human Resources Department
IRG = Instrumentation & Calibration Group
MAPS = Management & Project Support Group
MRD = Mechanical Services Department
RAD = Research Accounting Department
RCD = Research Communications Office
RPM = Research Property Management
RSD = Research Security Department
SSD = Supply Services Department

Program Offices:

ENWT = ENWT Techniques Analysis
SOF = Special Operating Forces

Field Sites:

DRO = Dayton Research Operations
EGO = Eglin AFB Research Operations
FGO = Ft. Monmouth Research Operations
WOO = Warner Robbins Operations
Desktop publishing: a tool for the research environment

By Stephanie Babbitt, ESTL

Desktop publishing (DTP) technology first became available for personal computers around 1986. Now, virtually everyone at Georgia Tech who has access to a personal computer or minicomputer has basic DTP capabilities. DTP means using a computer program to format and prepare a document for final printing (which can be anything from photocopying to four-color presswork). Users can choose DTP software ranging from high-end word-processing programs (such as WordPerfect or Microsoft Word) to professional layout software (such as PageMakers, Ventura Publishers, or FrameMakers).

In the research environment, DTP technology is especially useful because it often shortens the time required to typeset and prepare a document and because it allows for tighter security controls.

The author used a scanner and an image-editing program to salvage the photo she wanted by electronically opening a scientist's eye. The photo at left shows him with his eye closed, and the altered photo at right shows him with it open. (Photos courtesy ESTL.)
By Charles McCullough, HRD

Now that you've explained what happens when an employee goes on a reduced percentage of time, explain one other thing: How is my salary calculated at a reduced percentage when only a partial month's salary will be paid?

It depends on the pay cycle on which you're paid. For biweekly-paid employees who are paid for a partial pay period at a reduced percentage of time, there is nothing complicated (or even mysterious) about the process. A biweekly-paid employee just reports the number of hours worked each day whether it's eight or four or one; and for every hour reported on their timesheet, they get compensated at their hourly rate of pay. It's really straightforward and simple.

In marked contrast, however, the salaries of employees paid on the fiscal pay cycle (the one where you receive one check a month at the end of the month) have nothing to do with what's reported on the timesheet. Salary calculations are treated entirely differently when a reduced percentage of time is in effect, that is, when the employee will be paid for only part of the pay period (with the pay period being the same as the calendar month).

What invariably confuses fiscal-paid employees is that THE COMPUTER assumes that an employee working at a reduced percentage of time works that reduced percentage each and every day. If you are working at 80% time, you might logically work four days per week. But THE COMPUTER bases its output by making the irrevocable assumption that you work 80% of each workable day or precisely 6.4 hours per day five days a week.

For months during which a fiscal-paid employee will be paid for only part of the month (for example, the start of a leave of absence without pay), you must match THE COMPUTER's calculations and apply the reduced percentage of time to the less-than-whole portion of the month in order to determine pay for that month. Since you're making a lot of assumptions here, let's assume that you are fiscal-paid, earning $36,000 per year (at 100% time: $3,000 per month). Let's further assume that you are currently at 75% time (so you are actually being paid $2,250 per month) and that you are going to begin a leave of absence without pay. Your first day in an unpaid status is Monday, 15 August 1990.

August 1990 has 23 calendar days and you will be working for only eight days (3-5 August and 6-10 August), so you will be paid for 8/23 of the month or 34.78%. Since you're at 75% time, you'll be paid for 75% of that: 34.78% x 0.75 = 26.06% of your full-time salary of $3,000 per month. 26.06% of $3,000 = $782.61.

If you're really perceptive, you'll notice that the number of business days in the month has a very direct impact on these calculations. If that same $36,000 per year fiscal-paid employee works only eight days in February 1991 while at 75% time, the calculations would be as follows: 8/20 of the month = 40% of the month: 40% of ($3,000 x 75% time) = $900. Why the big difference between the dollar amount of eight days in August versus eight days in February? Because all fiscal-paid employees' salaries are first and foremost based on the monthly rate; therefore, the dollar worth of a work day in a short month is greater than the dollar worth of a work day in a long month.

What would happen if a fiscal-paid employee at 75% time worked eight hours a day during the first 75% of the month and then terminated at the 75% mark? If you said he'd get his full 75% pay, you flunked. In order to get his full 75% of a month's salary, he'd have to be in our employ for 100% of the month (100% of 75% = 75%). If the terminated three-quarters of the way through the month, THE COMPUTER will pay him for only 75% of 75%, or 56.25% of the month's salary he'd earn if at 100% regardless of his eight-hour-a-day effort for 75% of the month. The only thing that reporting 75% on the final timesheet would do would be to require the preparation of a revised timesheet showing 56.25% because time sheets do not create pay for fiscal-paid employees only THE COMPUTER creates pay and then only according to whatever it has been told by a Personal Services Form.

Before you start arguing with these figures because you ran them on a mainframe that calculated everything to 341 digits to the right of the decimal, keep in mind that all payroll calculations are performed using only the first two digits to the right of the decimal. Payroll calculations are neither rounded up nor rounded down.

While these examples involve an employee starting a leave of absence without pay, the same general rules of math would apply for any other situation in which an employee at a reduced percentage of time will only be paid for part of a month, such as a determination of an employee's exact employment date if the employee was starting off at something less than 100% and the first day of work was a day other than the first business day of the month.

Personnel Tip of the Month: Long-time readers of "Questions, Anyone?" may remember the first topic ever covered in this column: how to check your social security record to ensure that your earnings are being accurately credited to you. Financial experts have long advised that all wage earners should check their social security account at least once every three years.

Nowadays, investigating the state of your social security account is simpler than ever. Just call 1-800-243-5772 and request a "Personal Earnings and Benefit Estimate Statement" form. When you receive the form, fill it out and mail it in. In about a month, you'll receive your statement from the Social Security Administration. Look it over carefully. If you have any questions about what's shown on that form, call the telephone number shown on the form for further information. Last year, the Social Security Administration received nearly 10 million requests for this form and, out of those, between 70,000 and 75,000 involved discrepancies.
Georgia Tech shows environmental awareness

By Kathie Googler Prado, CAL

This year, the 20th anniversary of Earth Day, the people at Georgia Tech have joined the citizens of the world in taking a hard look at what the future holds. Many environmentally concerned people at Georgia Tech say that it was the activities surrounding Earth Day that motivated them to do their part toward solving the problems that plague the planet.

Some of the most prevalent problems brought out during Earth Day activities are:
- Depletion of the ozone layer
- The greenhouse effect
- Water pollution
- Air pollution
- Deforestation, and
- Overuse of landfills.

The issue of deforestation is not a small one. An abundance of forests is necessary in managing water drainage, controlling the greenhouse effect, and providing clean air. (In fact, the Amazon rain forests are often referred to as "the lungs of the world.") Deforestation and wasted tree products, on the other hand, contribute to these problems.

Tree products have become an American way of life, and doing without them won't be easy. But if the current rate of cut and consumption continues, it has been estimated that there will be no old growth forest left in the U.S. in five years. Without trees, not only will our way of life be diminished, the future of the planet will be bleak.

Changing habits

The Georgia Tech community is doing its part at home and at the office to help solve one of the nation's most critical problems: waste management. Individuals within GTRI are reporting that they are taking action by changing their personal habits. Some of the things they are doing to contribute in their own way are described below.

In the area of product choice, many people such as Laurie Tucker are making a concerted effort to buy recyclable or recycled products such as recycled writing paper and greeting cards made from this paper.

Another change in preference is in choosing colors. Kathryn Gilbreath reports that white paper; for instance, requires an extensive bleaching process that requires chemical processing to purify the water used. Even with thorough processing, bleaching adds to the water pollution problem. Other colors require dyes. Beige is the natural color of paper products. So the products of choice are now beige writing paper and beige toilet paper.

Although grocery stores are offering shoppers their choice of evils (plastic versus paper bags), some people are beginning to provide their own grocery bags when shopping. This requires no recycling at all and is the norm in Europe.

Many individuals at GTRI are reporting that they have installed garbage separators at home. What are they doing with it all? Some are changing from garbage collection to waste management services. For a small fee, such as $12 per month, their personnel deliver color-coded reusable drawstring bags and pick up both regular garbage and recyclable items. At the end of each year, the customer receives a check based on the amount of material recycled.

Other people are gathering up their goods and delivering them to recycling centers. Employees such as Ann Dunswich are contributing their recyclable products to charitable efforts sponsored by church groups, whose receptacles are located in the church parking lots. Still others are contributing their recyclable products for community improvement projects, whose receptacles are typically found at local fire stations.

Conscientious employees

GTRI employees save as many trees as possible by utilizing their electronic mail system (IPROPS network), circulating their rough draft reports electronically instead of on paper, and by separating their recyclable products from actual garbage. Boxes are cropping up in photocopyst rooms and in individual offices. But what next? Where can it go from there?

Carl Boster, manager of the Cobb County Research Facility, circulated a questionnaire concerning recycling at his facility, also in response to activities surrounding Earth Day. He says, "There were so many individuals talking about the importance of recycling that I felt that we could make a difference in our community. More than 200 people at CCRF responded to his questionnaire, indicating that they would participate in a program; and 26 people said they would volunteer to help run the program. So he gathered data on his own time about recycling. Boster also wrote the Environmental Protection Agency for ideas on how to meet the demands of his facility.

The volunteers held a meeting during lunch on August 3 to discuss the pros and cons involved with recycling. They agreed that the key is to make it convenient for everyone, but not an eyesore. Another important factor brought out was that sorting should not overburden people. Other issues included making it known why recycling is necessary and what the benefits of recycling are. One of the attendees commented: "No selling is necessary for individuals in our organization. We understand the need. Let's just figure out what to do and set it in motion."

Georgia Tech to start recycling pilot program

EDITOR'S NOTE: The following article is based on a telephone interview with John Stone, Director of Property Control for Georgia Tech, by Kathie Googler Prado.

Georgia Tech will begin a paper recycling program this September. The first three buildings to participate will be the Carnegie Building, the Administration Building, and the Library. As funds are generated, other buildings will be brought into the program.

"The concept of recycling is not new to the state or the University System," says John Stone, director of Property Control at Georgia Tech. He says Property Control has always recycled such items as metals, tires, and batteries. In fact, all used equipment is transferred to the state warehouse, to other state agencies for further use, or sold at auction. Everything purchased on campus with Georgia Tech funds must be handled and disposed of by Property Control.

Until now, paper has been nothing more than garbage; and has been disposed of as garbage by state contractors. The main deterrent to paper recycling in the past has been that "it wasn't cost effective" in terms of man-hours required to handle it versus the return, Stone says. The return is thought of in terms of the dollar amounts required to dump it versus managing it.

Paper is a small item by itself, but the amount of waste produced by a major university is more than a mammal would, and it is regularly generated. The amount of effort needed to get this volume of paper waste recycled requires more manpower than the Property Control office has had available, says Stone.

Paper recycling at Georgia Tech through Property Control became a possibility more than a year ago when students involved with the Environmental Forum came to Stone. They offered to volunteer their time on a paper recycling project, thus making available the manpower required to get the effort off the ground. Three different companies were called and questioned about the methods and costs involved with the endeavor. Stone chose Recycle Consulting Services because its system is simpler and its personnel will train
indivduals involved in the program. The training provided by Recycell Consulting Services involves separation of paper. At this time, the company will take only computer paper and white bond because of the amount of fibers they contain. Newspapers, for instance, have the least amount of fibers and are of no value to the company. Colored paper is also unusable.

Georgia Tech will purchase the recommended desktop sorters and distribute them to interested offices, according to Stine. This is how the system will work: Computer paper must be placed in one sorter and white bond in the other. When they are full, the individual will be expected to take the sorters to the appropriate intermediate containers, which will be centrally located. Custodians will empty these containers into “Otto” (Recycell Consulting Services’ container). The Otto will be located outside each building so that Recycell Consulting Services can pick them up and leave empty ones. The company will make as many pickups as necessary to keep the space available for more input.

If Recycell Consulting Services personnel find more than 2% contamination in their Otto, then the effort and money used to collect the material is wasted, they won’t process the entire container because of the man-hours required to separate the paper.

Of course, if the program ever generates a profit, the money will be returned to the system to encompass other kinds of paper for recycling or for similar endeavors.

The project to begin in September will be on a pilot basis. Before it can be considered a permanent activity, Stone says, “It must become self-sustaining, that is, it must break even. It can’t cost the state money.” He feels that conditions in the current marketplace make breaking even possible, especially with the volunteers from the Environmental Forum here on campus. However, “the only thing that could hold the program back or cancel it would be if individuals don’t cooperate.”

The main question is: Will everyone become involved and cooperate? Eventually, everyone who uses a desk at Georgia Tech will have a desktop sorter, and it will be up to each individual to use it.

**GTRI to cooperate in recycling program at Tech**

The GTRI Connector • August 1990

T he Gobb County Research Facility (GCRF) will cooperate in the Georgia Tech paper recycling program, says facility manager Carl Baxter. Volunteers will begin collecting white and computer paper in September. Until the facility is brought on line with the campus pilot program, hopefully within a couple of months, the paper will be stored. Baxter has been conducting an aluminum can recycling project for several months.

A small pilot project on the fourth floor of the Centennial Research Building, begun in January by members of the Electronic Support Measures Laboratory, will continue. Mark Foreman, who spearheads the GCRF pilot project, says they recycle all kinds of paper and cardboard. In addition, Tim Stike has started a program to recycle aluminum cans. Facilities Management manager Tom Jones says the paper collected is being stored temporarily in a basement storeroom off the low-bay area until it can be hauled away by Recycell, the company chosen to handle Georgia Tech’s paper recycling. Since January, over 8,000 pounds of paper and cardboard have been collected.

Jones has set up a sub-budget for monies earned from recycling as a kitty to buy recycling bins. “We can’t expand right now,” Jones says. “Because of the startup costs of purchasing collection containers, they can’t be purchased with state money. Small pilot projects can get by with makeshift containers, but to go building-wide or GTRI-wide, we need to buy a sufficient number of aesthetically attractive containers so that they will be conveniently located and not an eyesore.” But eventually all campus buildings will be brought into the Georgia Tech recycling program.

According to Recycell, approximately 94% of the waste generated in the average office is white paper and computer paper. These are the items they will handle. They say, “For every ton of office paper we recycle, we can save 20 trees, 440 gallons of fuel, and eight cubic yards of landfill space. Not only does recycling produce energy savings of 52-76%, it also lowers air pollution by up to 74%.”

Mark Foreman explains that computer paper should be separated from white paper (paper from a laser printer or photocopier) because the ink is much easier to remove from computer paper and it commands a higher price. For as newsprint, it is the lowest grade of paper, composed of very short fibers.

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**Want to get involved? Here’s how to pitch in**

The Environmental Forum of Georgia Tech is a student-led organization that includes participation by faculty, staff and Physical Plant representatives. It has a small recycling site on the parking deck side of the Student Center with separate bins for glass, aluminum cans, and white and computer paper, and has been trying to obtain a larger site.

Started two years ago, the Forum has an active recycling committee that is working closely with the Tech administration on campus-wide paper recycling plans. According to student Matt Bruner, they also are assisting the campus landscape architect, Paul Vanderbeek, in an investigation of setting up bins in all the campus office buildings to collect aluminum, plastic and glass.

The Forum will resume its weekly meetings fall quarter, and all interested persons are invited to participate. The group will meet every Thursday at 11 a.m. in Room 351 at the Student Center. For further information or to receive their newsletter, call the Student Government office, send a note addressed to the Environmental Forum, or contact Todd Smiley, chairman of the recycling committee, at 877-9145 or at campus P.O. Box 376.

Patrick Forest, station manager for WREK at Georgia Tech, is now airing the “Environment Show” weekly on Thursdays at 6:30 p.m. This show is broadcast from Los Angeles, California, and its emphasis is on both a national and individual scale. Reports in-
Focus on Folks

In July, several people were promoted and others were transferred to new GTRI units.

Advanced Technology Lab
Tony Gunther resigned on August 3.
Aerospace Science & Technology Lab
Bob Cassanova has moved to Gobb Country to assume his new position as interim director of ASTL. His new secretary is Frances Shifflett, formerly of EML.
Mike Walker has joined ASTL as an RE II, coming from Lockheed—Georgia.
Computer Science & Technology Lab
Janet Leining has been appointed associate laboratory director to provide backup to the director and daily management of the lab.
Jeffrey Grover has been appointed chief scientist. His primary responsibilities will include management of program and development activities for new technology areas with particular focus on internal research, assistance in management of equipment resources to meet internal and sponsored program requirements, and recruitment and selection of research staff.
Concepts Analysis Lab
William S. Rogers, Jr., has been named head of the Integrated Effectiveness Branch. Before coming to GTRI in June, he served as program manager at the Aeronautical Systems Division of Wright-Patterson Air Force Base (OH). He recently retired as a lieutenant colonel after 25 years of service. He holds a BS and MS in electrical engineering from the Air Force Institute of Technology, and a BS in biology from the University of South Carolina.
Rogers has considerable experience in systems acquisition management, particularly with electronic warfare, intelligence, and reconnaissance systems. His last assignment in the Air Force was as the joint program manager of a tri-service (Army, Navy, and Air Force) program to develop a countermeasures dispenser system for use on numerous military aircraft. His plans for the Integrated Effectiveness Branch include continuing to promote the group's excellent reputation as one of the nation's leading centers for modeling and simulation of electronic warfare systems.
He was awarded the National Joint Service Medal in 1989 and the Commander's Award for Merit while serving in the Foreign Technology Division in 1986. He earned the Marvin E. Gray Award for Exceptional Scholarship from the Air Force Institute of Technology in 1973.
Ted Doll transferred to the Electro-Optics Laboratory, effective August 1.
Judy Fitzpatrick was promoted to accountant I and transferred to the MAPS group. She is now working for Richard Oden.
Kathie Coogler Prado has been promoted to technical writer I. Her degree is in journalism, and she occasionally provides editing services for other laboratories to ensure that documents meet military format and English grammar standards.
Andrew S. Slack began work for the Test Process Development Branch July 16 as an RE I.
Breast Darley began work as a co-op for the Sensor Performance Branch and the Test Process Development Branch in June.

Personnel News

Countermeasures Development Lab
Suzy Calvert has transferred to OOD and is now working for David Clifton.
Economic Development Lab
Alice Brown is transferring to the Columbus Regional Office, scheduled to join full time in October.
Chris Downing, formerly with EDL's Energy Resources Branch, has transferred to ESL's Environmental Monitoring Research Branch, where he will work on indoor air quality studies and projects.
Electro-Optics Lab
Arvilia Jennings has been promoted to word processing specialist.
Engineering Sciences Lab
Dorothy Baskin was promoted to word processor operator in July.
Radar & Instrumentation Development Lab
Annette Weinberger has been promoted to administrative secretary.
RIDL welcomes Debbie Powers, clerk I. The Experimental Branch has gained Lacey F. Moore, RE II, and Hans Toome, co-op.
Lucien C. Bomar has been appointed head of the Systems Branch, and Don J. Strasburger is a new RE II.
Radar Systems Applications Lab
Marysue Hunt has joined RSL as a clerk I.

Biographer seeks stories

Georgia Tech English Professor Edith Bicksler is seeking human interest stories, and anecdotes for a biography she is writing about Tech basketball player Dennis Scott, who is joining an NBA professional team. Send material to Professor Bicksler at the Department of Literature, Communication, and Culture, Mail Code C016.

Child Care Fair scheduled again

The President's Child Care Development Center Committee is sponsoring another Child Care Fair on Monday, September 24. The fair will be held from 10 a.m. to 5 p.m. in Room 5 of the Paul Weber Building (Space Sciences and Technology Building). More than 100 nearby day care centers and child development centers have been invited to exhibit, along with organizations sponsoring family day care providers. All members of the Tech community are welcome to come and gather information about child care options.
Further information can be obtained from Margaret Horn, GTRI, 894-5578, or from the Office of Graduate Studies (Phyllis Bay), 894-2400.