

the GTRI connector

Published monthly for employees of the Georgia Tech Research Institute

Volume 3 Number 5

March 1987

Cost Reduction Teams Look at GTRI Work Systems

Eight teams of project directors and service/support group representatives are hard at work searching for more cost-effective ways for GTRI to accomplish its mission. They are examining and documenting the way GTRI currently operates, and will make their recommendations for improved approaches to reduce costs in early May.

"We all share a considerable anxiety for the negative impact that the current high levels of our cost recovery system could have on our research sponsorship," says GTRI Associate Director Howard Dean. "Since these levels directly reflect the costs we are experiencing, which must be recovered to survive, our only avenue for moderating these levels is to reduce costs."

"This is a grassroots approach," Dean explains. "We want this study done from the project directors' perspective

because they are the backbone of GTRI and their projects are what the system is set up to support."

The teams are the first to take a comprehensive look at work systems that have evolved piecemeal over several decades. They will be seeking innovations, shortcuts and more effective ways of doing things.

The task groups began work the second week in February, and are spending an average of one day a week on this effort for a three-month period. The teams are as follows:

Technical/Mechanical Supporting Services: Calvin Jameson (ECSL), leader; Ken Johnson (EDL); James Cox (STL); William Howard (OOD).

Lab Management and Reporting Systems: Richard Prater (STL), leader; William Petty (SEL); Paul Wine (EML); William Holm (RAIL); Billy Atcheson

(ACCT); Barbara Turner (OOD).

Contract Development, Proposals, and Award Systems: Charles Ryan (ECSL), leader; George McDougal (SEL); Guy Morris (RAIL); David Hendrix (OCA).

Personnel-Related Activities and Systems: Kathryn Logan (ECSL), leader; Craig Wyvill (EDL); James Higgins (STL); Charles McCullough (HRD).

Timekeeping and Travel Related Systems: Charles Estes (EDL), leader; Fred Eisele (EML); Yalcin Peker (RAIL); Billy Atcheson (ACCT); Paul Thomas (HRD).

Reports and Proposal Publication Procedures and Systems: Robert Michelson (RAIL), leader; Carol Aton (EDL); Earnestine Smith (OCA).

Staff Development and Training: William Whitworth (EDL), leader; Linda Harkness (RAIL); Michael O'Bannon (OOD);

William Howard (OOD).

Materials and Subcontracts Acquisition Systems: Norman Ellingson (ECSL), leader; Wallace Shakun (ECSL); Benjamin Perry (RAIL); Martha Farley (SSD); Garry Hutchison (OCA).

An executive team is providing overall guidance and direction for the cost-reduction study. Team members are laboratory directors Edward Reedy and David Clifton; OOD representatives Howard Dean, Robert Shackelford and Patrick O'Hare; and Ronald Bell from OCA. Ned Ellington, an industrial engineer in EDL, is working with the executive team to supply professional expertise in systems and procedure evaluation. Additional task teams will be created later to address areas not covered by these first assignments, Dean says.

ECSL Predicts Effects of Damage in Navy Antennas

What happens to the performance of a radar antenna when the antenna suddenly finds itself full of holes? That is the question addressed for the Navy by Vic Tripp and Paul Friederich, both of the Electromagnetic Effectiveness Division of ECSL.

This would not be a serious problem as a post-mortem analysis. The antenna would simply be mounted on a pattern range and measured. In this case, however, it is a problem that requires investigation for two reasons: (1) the crew may need to know immediately whether the antenna can continue to operate; and (2) the damage is random—each case will be different. Shielding antennas against such damage is usually not a solution because they must transmit and receive radio waves.

The Navy first brought this problem to Georgia Tech about seven years ago, and Tech has just completed the third phase of its investigation. At this point, ECSL has provided the Navy with techniques and computer programs to predict the performance degradation due to damage in reflectors, traveling-wave (TW) arrays, phased arrays, and spaced arrays.

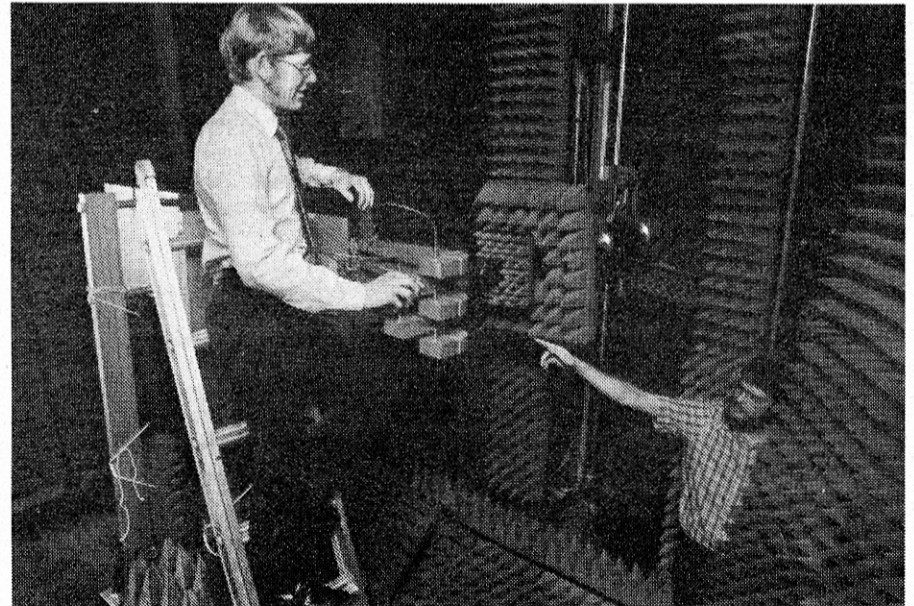
How was it done? "With a technique combining experimental measurements and mathematical modeling," says Tripp.

"A completely experimental method would require us to take 50 or 100 antennas out and shoot them up. Then each one would be measured and the results would be averaged over all the damaged antennas." Clearly, a less expensive approach was desirable.

A completely analytical approach would require the modeling of scattering from complex holes and dents in the antenna surface. Such modeling is generally not cost-effective, and may not even be feasible in some cases. Therefore, the following technique was developed by ECSL personnel:

- Sacrifice one antenna by introducing one typical damage defect.
- Measure the perturbation in the aperture electric field caused by the defect.
- Obtain the radiation pattern perturbation by Fourier transformation.
- Use numerical techniques to obtain the pattern statistics for an arbitrary number of such defects randomly positioned on the antenna.

ECSL developed mathematical models to accomplish the last step. The next problem to arise was the need to verify the models without "shooting up" a lot of expensive antennas. For this purpose, the researchers



ECSL researchers Vic Tripp (on ladder) and Paul Friederich used this near-field range for experimental measurements in a project to determine the susceptibility of radar reflectors, traveling-wave antenna arrays, and phased arrays to random damage. They then developed mathematical models and computer programs for predicting the performance degradation due to damage in these antenna types. (Photo by Charles Haynes)

developed computer programs to numerically simulate such an ensemble of damaged antennas. For most antenna and damage types, the results of the model and the simulation are in excellent agreement.

ECSL then applied this technique to three of the Navy's widely used antennas, the SPG-60 reflector, the SPS-48 TW array, and the SPY-1 phased array.

How can the Navy use these

analysis tools? Tripp answers: "First, it is possible that a ship's captain could use a table of our predictions to decide whether to continue to operate a damaged antenna. More often, our predictions probably will be used in the procurement decision process to determine which kinds of antennas are least vulnerable. Finally, in the longer term, our analyses can help the Navy incorporate damage hardening features in the design of future antennas."

Anti-Fouling Technology Could Protect Water Cleaning Membranes

by Mark Hodges, RCO

The most advanced water purification technologies now depend on membranes to separate out pollutants. Unfortunately, the deposited pollutants quickly clog membrane surfaces, greatly increasing the energy and dollar costs of operation. Harsh cleaning techniques are necessary to remove these foulants, but in the process they shorten membrane lifetimes.

Scientists in the Energy and Materials Sciences Laboratory are optimizing special coatings that keep pollutants from fouling separatory membranes. They work much as Teflon does in keeping food from sticking to a frying pan.

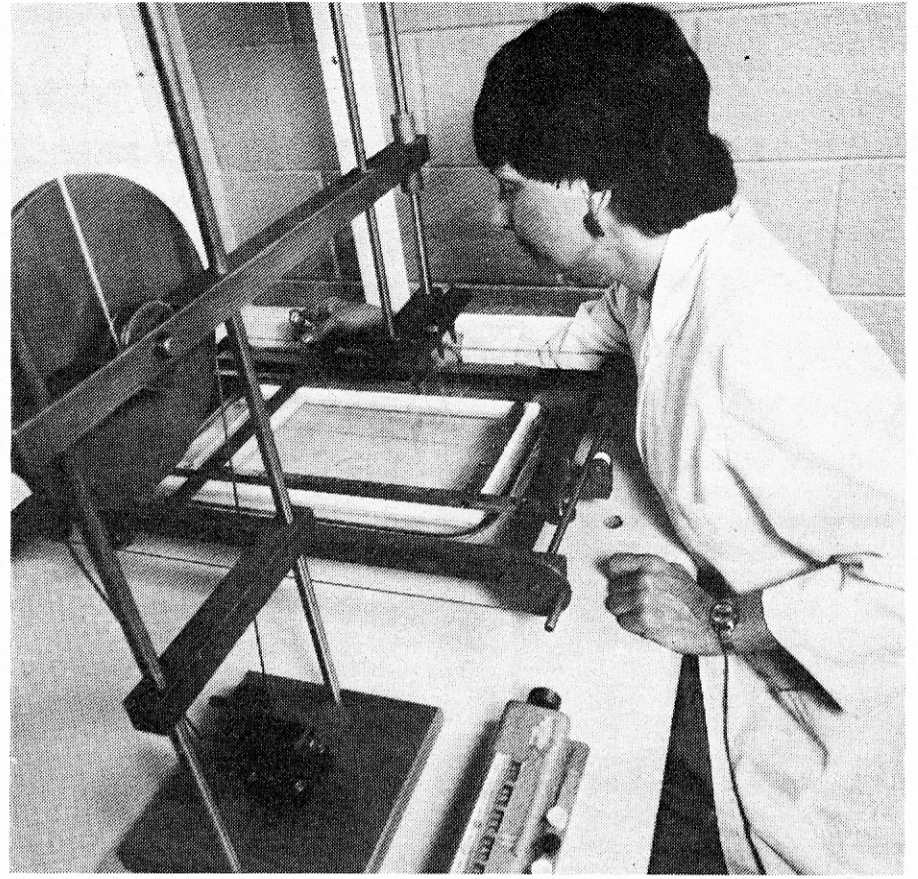
These coatings, composed of Langmuir-Blodgett (LB) layers, are being optimized for application in reverse-osmosis, ultrafiltration, and electro-dialytic water treatments. The films are molecularly thin (approximately 20 angstroms thick) and composed of fluorinated compounds.

"The unique value of LB layers is that the scientist can select and arrange their molecules with precision," says project director Dr. Lois Speaker. "To some extent LB-layered materials may be

regarded as a fourth state of matter. In the LB layers we are now testing, the outermost portions of the LB-layered molecules are fluorinated, so that they repel waterborne pollutants."

Georgia Tech has patented and is in the process of granting licenses on Speaker's method of coating membrane surfaces with LB layers. The current research is being funded by the Department of the Interior, the federal agency responsible for the nation's water supplies. Huizhen Gao, a visiting scholar in Tech's School of Civil Engineering, is performing laboratory work on antifouling membranes and the mechanisms of fouling. Dr. E.S.K. Chian is collaborating with Dr. Speaker as Gao's research adviser for her doctoral dissertation.

Gao became interested in this research topic because of the growing water quality problems in her native country, the People's Republic of China. She says that industrial development in China is beginning to raise the level of man-made pollutants in rivers and streams. Because the Chinese are interested in membrane technology for water purification, Gao believes her expertise will be of special value to



Lois Speaker (EMSL) uses this Langmuir-Blodgett trough to build thin-film layers which keep membrane surfaces clean of foulants. (Photo by Charles Haynes)

her country in years to come.

Speaker says that the purification of drinking water won't be the only application of this technology: these LB layers also could be useful in the commercial de-watering of foods, which now consumes enormous amounts of energy each year,

and in many additional industrial unit steps.

There are a host of other potential applications for this anti-fouling technology. Speaker's research group is engaged in identifying and optimizing them and protecting them by patents.

QUESTIONS, ANYONE?

by Charles McCullough, HRD

Vacations, snow days, sick leave, holidays — we love 'em almost as much as our paychecks. But paid absences, one of our most important fringe benefits, are often shrouded in a fog of mystery and misconceptions. Here's a collection of Qs and As to get you better informed.

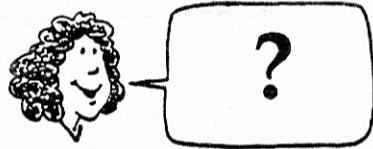
Q: If a monthly paid employee is on paid absence for a full calendar month, and the standard charge-out rate of 4.6% is used, the total on the month's timesheet will never equal 100%. What gives?

A: What gives is the 4.6%. A full calendar month, even if it's all paid absence, must total 100% on your white timesheet. For simplicity, you'd use 4.6% for each day of holiday, court duty, and/or administrative leave, then distribute the remainder proportionately to other paid absence accounts as appropriate. And remember that vacation and sick leave accruals and time actually taken are calculated and posted in hours, not percentages of a month.

Q: I'm a biweekly paid classified employee approaching my five-year service anniversary. Just when will my vacation accrual increase from 15 days to 18 days per year?

A: Your accrual rate will increase on Day #1 of the pay period in which your anniversary date occurs.

Monthly paid classified employees with a 5- or 10-year anniversary oc-



curing on or before the 15th of the month will see their accrual rate increase for that month. If the anniversary date is the 16th or later, the accrual rate increases the following month.

If you're approaching a 5- or 10-year anniversary, be sure to bring this to the attention of any project directors for whom you're working. An increase in your vacation accrual will increase the cost of your personal services to the projects and/or accounts to which you charge your time.

Q: If a lengthy medical absence (say three months) is covered by adequate V-500 and V-100 balances, does an employee need to be placed on a leave of absence?

A: No. Leaves of absence for medical or personal reasons are necessary only when an employee will be in a non-pay status (meaning that both vacation and sick leave balances have been exhausted) for over 40 working hours. (A non-pay status of 40 hours or less is handled by way of a timesheet for biweekly paid employees and a Personal Services Form for monthly paid employees.)

Q: Why do the accrual rates for vacation and sick leave change periodically for biweekly paid employees? The number of days earned per year stays the same.

A: The Board of Regents determines vacation and sick leave in terms of days. But a biweekly paid

employee accrues his paid absences in terms of hours for which he is paid, up to a maximum of 80 hours per pay period. (They say "Tomato," we say "Tomaahhto.") Because some fiscal years have 2,080 working hours and some have 2,088, the accrual rate has to fluctuate now and again so that the number of days earned remains constant and in compliance with Board policy.

Q: How is compensation for unused vacation paid at termination?

A: It's paid by check (he quipped). As far as how it's calculated, here are the formulae:

For biweekly paid employees, it's the hourly rate of pay times the number of vacation hours, including fractions, remaining at termination.

For monthly paid employees, it's the daily rate of pay (annual salary divided by 260 or 261, depending on whether the fiscal year has 2,080 or 2,088 working hours) times the number of days, including fractions, remaining at termination.

For all employees, the maximum amount of unused vacation that will be paid at termination is 360 hours. So much for the old wives' tale that vacation hours in excess of 360 are only rolled back on 31 December!

Q: A student assistant in our lab had to come in to work for a few hours on our recent snow day. There's no problem in getting her paid for those hours, is there?

A: No, if one simple procedure is followed: hourly-as-needed personnel reporting time worked on a day that the campus was not open (a holiday or a snow day, for example) must have EACH ENTRY on the timesheet for that day initialed by the supervisor, as well as having the timesheet signed by the supervisor.

Q: I'm considering a transfer into a position in a department outside GTRI. What effect will a transfer have on my vacation and sick leave?

A: Plenty. Or none. It depends on the department into which you're transferring. (This kind of answer is known as "hedging one's bets with a vengeance.")

When an employee transfers from one department to another, the employee's sick leave balance is transferred intact with him to his new department. Vacation, however, is transferred at the discretion of the new department. Your new department head may elect to accept all of your accrued vacation, some of your accrued vacation, or may insist that it all be used before the transfer goes into effect. (When transferring from a GTRI unit to another GTRI unit, the transfer of all vacation and sick leave is automatic and unquestioned.)

When talking to another campus unit about a possible transfer, you'd be well advised to bring up the subject of accrued vacation and get a firm commitment from your potential new boss. Then, at the time paperwork is done to put the transfer into effect, the vacation and sick leave hours you'll be taking with you are specified in black and white on the transferring paperwork.

For you collectors of little-known facts, here's a really obscure one: sick leave and vacation may be transferred to another unit of the University System of Georgia if there is not a break in service. If you're ever faced with this possibility, give HRD a call to help you preserve your hard-earned paid absences.

GTRI Tackles Lead-Based Paint Hazards

by Carrie Stikeleather, EDL

Peeling paint is a common sight in low-cost housing, and while it may seem only an eyesore, it can pose a serious health threat to children if they chew or eat it. When the paint contains lead, as it often does, the cumulative result of exposure can be brain damage or, in extreme cases, even death.

Prompted in part by a new U.S. Department of Housing and Urban Development (HUD) regulation which requires that all paint in public housing be tested for lead in place, EMSL's Materials Characterization Branch and EDL's Environmental, Health, and Safety Division

recently combined forces to present a course on lead-based paint identification and control. The course is designed to show public housing administrative personnel how an effective survey is conducted.

The new regulation, which covers all public housing constructed prior to 1978 (the year manufacturers stopped making lead-based paint), requires that a technology known as x-ray fluorescence (XRF) be used to do the measurements. But because there are no reference materials or standard methods for XRF, Stan Lewis and Garth Freeman of EMSL are working to set some.

"X-ray fluorescence is the best

method available," says Lewis, "but it must be used effectively. Our goal is to develop standards and methods of analysis to be used in the field by non-technical personnel."

Once the lead is detected, it must be abated, but as yet there are no prescribed abatement or cleanup methods for removing the paint. Lewis and Freeman want to develop a procedure that will minimize the worker's exposure to the hazardous aerosol lead and lead dust which would result from an abatement method such as sandblasting.

Seventy-four people from all over the U.S. attended the February 23-25 course, including public housing officials, contrac-

tors, architects, public health officials, and government personnel. Some of the topics addressed were toxicology of exposure to lead-based paint, abatement methodologies, disposal methods, analytical methods, and building survey techniques.

Course directors Stan Lewis (EMSL) and Ken Smith (EDL) have been invited by the Region I Director of Public Housing to present the course in Boston, and by the Director of Policy/HUD to present it in Washington, D.C.

"Meanwhile," says Lewis, "we're working on training and certification courses for the future."



Software Review

by John Dillard, CRSD

The Computer Related Services Department of GTRI offers researchers many options for computing in the VAX environment. The available VAX computing resources are described below.

In March 1986, CRSD installed a DEC VAX 8600 to replace one of its VAX 11/780 systems. With this installation GTRI increased its available computing power fivefold. Coupled with the purchase of the VAX 8600, arrangements were made with the Office of the Vice President for Research to purchase 100 VAXstation II workstations. Each VAXstation system is roughly equivalent to a VAX 11/780, and programs developed on the VAXstation may be run on the VAX 8600.

The 100 VAXstation systems have been installed throughout the academic departments and research laboratories at Georgia Tech. Ideally, these VAXstations are used for editing, program development, test runs, graphics display, etc., while the VAX 8600 is targeted for large, com-

putationally intensive jobs. Since the VAX 8600 was purchased at a large discount, its rates are effectively only one fourth those charged for the VAX 11/780 it replaced, making it an ideal machine for CPU-intensive applications.

The VAX 8600 system includes a wide variety of peripherals and software to handle almost any computing application. On-line storage is provided by three 456 Mbyte DEC RAB1 disk drives, giving users access to over 900 Mbytes of storage. For users with their own media, a DEC RL02 10.4 Mbyte cartridge drive and two DEC RX02 0.5 Mbyte floppy drives are also available for data transfer.

Off-line storage is currently provided by two autoloading TA78 tape drives which are capable of processing 1600 and 6250 bpi 9-track tapes. Within the next few weeks, CRSD will be installing two additional DEC TU77 tape drives that can process 800 and 1600 bpi tapes.

Users can obtain hardcopy printouts at 800 lines per minute on 11 x 15 inch greenbar computer paper from the DEC LA27. For letter quality output, a DEC LN01 laser printer is installed on the DEC 8600. The LN01 uses 8.5 x 11 inch cut sheet paper and is capable of printing 12 pages per minute.

Users can access the VAX 8600 asynchronously through GTNet at speeds up to 19.2 KBaud. For PCs

and other non-DEC systems, KERMIT is generally the method of file transfer through GTNet, although TCP/IP is available to CRB resident systems. While KERMIT and TCP/IP can be used for file transfer between the VAX 8600 and a VAXstation, DECNET is the preferred method.

For VAXstations attached to GTNet's ethernet cable through a DEQNA, DECNET offers greater accuracy, speed and transparency over KERMIT and other file transfer methods. Other advantages of DECNET include remote login capability and the sharing of VAX peripherals between remote DEC systems.

Currently, CCRF is served by DECNET through a 9600 Baud leased line. Within the next few weeks, CRSD will convert to a 56 KBaud DECNET link through a T1 leased line, which should greatly improve both the speed and reliability of this link.

Unlike the former VAX 11/780, the VAX 8600 has a rich set of software tools and applications. DEC VMS Version 4.5 is currently serving as the operating system for the VAX 8600, but DEC Shell and Eunice are available to those who prefer or require a UNIX simulated operating system environment.

Researchers have many high-level languages from which to choose. These languages include DEC's ADA, C, LISP, FORTRAN and BASIC. Database tools are provided by DEC's RDB and Datatrieve. WPSPLUS, DEC-PAGE and DEC-SPELL are available for document preparation, and EDT, DSR and TPU provide fast and efficient text editing. Numerous non-DEC software products also are available, including IMSL (math and statistical library) and ISSCO Graphics.

For more information on the VAX 8600 or to establish an account, call the CRSD Helpdesk! at 894-7173.

Software Training Schedule

Computer Literacy (9-4:30): Apr. 2.
PROFS. Beginning (9-12): Apr. 9.
Intermediate (9-11): Apr. 23.
DOS. Beginning (8:30-12): Apr. 14;
 24. **Advanced** (1:30-4:30): Apr. 23.
Symphony. Beginning (9-4:30): Apr. 1.
WordPerfect (9-12): Apr. 6-13-20 (3 days). (9-4:30): Apr. 29.
Organizing the Hard Disk (8:30-12:30): Apr. 10.

Lotus 1-2-3. Beginning (9-4:30): Apr. 7.
Intermediate (9-4:30): Apr. 21.
dBASE III Plus (1:30-4:30): Apr. 27-28.
On-Line Catalogs (1:30-4:30): Apr. 16.
C Programming Language (9-4:30): Apr. 15-22 (2 days).
Freelance (1:30-4:30): Apr. 17.
 Call 4-6206 to sign up for classes.

PROFESSIONAL ACTIVITIES

ECONOMIC DEVELOPMENT LAB

David Hogue is chairman of the National Asbestos Council's publications committee, which has as a primary task the production of the *NAC Journal*.

On February 10, **Nancy Davis** presented a seminar entitled "Copying Software: Bending the Law or Breaking It?" to faculty and students in the School of Information and Computer Science.

The Environmental, Health, and Safety Division will host the Fourth Annual Conference and Expo on the Environment, Health, and Safety April 7-10 at the Peachtree Plaza Hotel in Atlanta.

On February 18-20, **David Mayer** coordinated and presented a new course on leaking underground

storage tanks, a problem which the Environmental Protection Agency says is of national proportions. A course demonstrating proper methods for installing tanks and detecting leaks will follow in June. It will be the first of its kind in the country, Mayer says, and will receive an EPA funding grant.

ELECTROMAGNETICS LAB

Ron Bohlander presented a paper, "How New Developments in Guidance Controls Will Influence AGVS Applications," at the Material Handling Institute Annual Trade Show in Chicago February 10-11.

ENERGY & MATERIALS SCIENCES LAB

Hans Spauschus has been elected chairman of the U.S. Na-

tional Committee of the International Institute of Refrigeration for 1987-91. In this position, he will lead the U.S. delegation at the XVII International Congress of Refrigeration in Vienna later this year.

EMSL was well represented at the Solar Thermal Program Annual Research Symposium in Golden (CO) February 18-20. **Dan O'Neil** chaired a session on Direct Flux Utilization, and **Lois Speaker** served on a panel for the Workshop on Reflector Soil Resistance and Cleaning. **Garth Freeman** presented a paper, "Solar Effects on Advanced Carbon Properties," coauthored with O'Neil, **Paul Mackie** and **Steve Bomar**. **Jack Lackey** presented a paper on "Solar Enhanced Chemical Vapor Deposition," coauthored with Freeman and Mackie.

The Zeolite Research Program held its second annual multi-sponsor meeting March 19-20 to review re-

cent advances in fundamental zeolite science at Georgia Tech. Ten industrial sponsors participated.

The international journal, *Zeolites*, has accepted for publication a paper by **A. Meagher, Vinayan Nair, and Rosemarie Szostak** entitled "A Mossbauer Study of ZSM-5 Type Ferrisilicates." And the *Journal of Catalysis* has accepted for publication "Gallosilicate Molecular Sieves: The Role of Framework and Non-Framework Gallium on Catalytic Activity," coauthored by Szostak, **Donald Simmons, Pallava Agrawal, and Tudor Thomas**.

SYSTEMS ENGINEERING LAB

An article by **Ted Doll** and **Dennis Folds** appeared in the December issue of the international journal *Applied Ergonomics*; it was entitled "Auditory Signals in Military Aircraft: Ergonomics Principles Versus Practice."

PERSONNEL NEWS

ECONOMIC DEVELOPMENT LAB

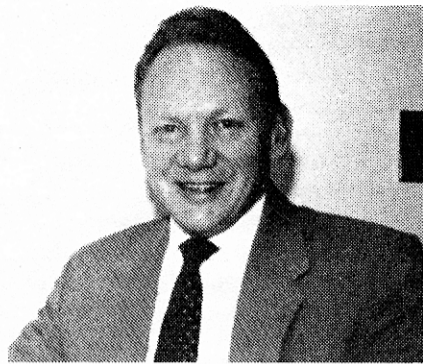
Frank Lisella has joined the Environmental, Health, and Safety Division as a PRS to head the biosafety program. He previously was director of the Office of Biosafety at the federal Centers for Disease Control. An environmental health specialist with a 23-year career in the U.S. Public Health Service, Dr. Lisella received his Master of Public Health from Tulane University and his PhD in preventive medicine and environmental health from the University of Iowa.

Lea Scott is a new RS I in the Safety Group, previously employed at Scientific Atlanta as safety coordinator.

The Asbestos Group has another new staffer—**Vicki Ainslie**, RS I—who will operate EDL's recently acquired electron microscope.

Charles Catlett, RA II, has joined the Industrial Extension Division, where he will work with the EDA program and the Procurement Counseling Center.

EHSD's **Yvonne McClary** has been promoted to staff assistant, and



Frank Lisella

the new senior secretary is **Schryl Rose**, who transferred from Property Control.

ELECTROMAGNETICS LAB

The Millimeter Wave Technology Division welcomes **Arthur "Chip" Rahn**, who transferred from ECSL.

ELECTRONICS & COMPUTER SYSTEMS LAB

Good-bye to **Young Kwon**, SRE in the Electromagnetic Effectiveness Division.

RADAR & INSTRUMENTATION LAB

Former co-op **Glenn Petterson** is now a GRA pursuing his MSEE.

Danny Lunsford and **Richard Broad** have resigned.

SERVICE GROUPS

Welcome to **James Langley**, machinist in Mechanical Services, and welcome back to **Abbie Hendricks**, accounting clerk in Accounting & Budgets.

Congratulations to **Tam Muto** on her promotion to accounting assistant in Accounting & Budgets; and to **Susan Wassman**, who is leaving CRSD to become network administrator in Georgia Tech's Office of Computing Services.

Good-bye to **Sandra Keesler**, clerk II in Research Security.

Welcome to **John Toon**, new assistant director for media relations in Research Communications. He previously was marketing director at the Georgia Department of Industry and Trade; prior to that, he was manager of research and publications at ATDC.

SYSTEMS ENGINEERING LAB

Congratulations to **Gary Reed**, January Employee of the Month. A technician in the ESM Division, he was rewarded for his initiative and responsibility to transform an electrical schematic and mechanical

layout into a chassis that was judged superior in both appearance and performance.

Laurie Tucker "graduated" from co-op to systems analyst I in the Concepts Analysis Division upon receiving her BSEE from Georgia Tech in December.

The Countermeasures Development Division has been restructured, going from three branches to two: the Techniques Development Branch (TDB) and the Advanced Countermeasures Branch (ACB). The Test and Evaluation Branch was dissolved and its staff combined with half of the ACB personnel. The remainder of the ACB staff was combined with the TDB. The shift will give each branch a balance of skills in both hardware and analysis, increasing their contract development potential.

Bob Beasley and **Steve Livesay** have resigned.

SYSTEMS & TECHNIQUES LAB

STL welcomes **James P. Jacobson**, RE I, as well as two former co-ops: **Kenneth A. Oberkofler**, electronics specialist, and **Glen D. Hopkins**, RE I.

Marvin R. Hill, Jr. has been promoted to research technician I.



EDL/EHSD's Edd Valentine (right) explains a model of an anaerobic fixed-film reactor wastewater treatment system to a visitor to the Georgia Tech booth at the 1987 Southeastern Poultry and Egg Association International Trade Show. Tech's highly successful exhibit, "Engineering the Future," was cited in the March issue of *Canada Poultryman* as one of only 31 (of some 2000) that displayed particularly innovative technologies. (Photo by Stephanie Babbitt)

PERSONAL NOTES

EDL: Congratulations to **Claudia Huff** and **Bill Riall**, who tied the knot in Nairobi, Kenya, last month.

Congratulations as well to Macon Regional Office director **George Lee** and his wife, Sally, on the birth of Jonathan Henry on February 23.

ECSL: Best wishes for a speedy recovery to **Betty Dulaney**, EMC Division administrative secretary.

Jeanne Balsam and her husband, John (formerly of RAIL), announce the birth of a second son, Jeffrey Reid, on March 7.

RAIL: Our sincere condolences to

Mel McGee, whose father died February 21 in Mississippi, and to **Betty Pope**, whose father died December 29 while visiting her for the Christmas holidays.

SEL: **Jim Marks** became a proud father for the second time February 19, when Joseph Lance was born to him and his wife, Mary.

Frances Shiflett and her husband, Vann, had a girl, Allison Brooke, February 26.

Jerry and **Sandy Miller** welcomed a new son, Stephen Nicholas, March 2.

Personnel Announces Courses

The Georgia Tech Personnel Department has a new training coordinator, Pat Hughes, who has been hard at work scheduling training and development courses for Tech employees. Following is a partial list. For more information and to register, call Pat Hughes at ext. 4-3850.

Seminar on New W-4 Forms. March 27.

Interpersonal Effectiveness Seminar. April 8-9.

Secretarial Workshop. April 22-23.

You may also register for two management programs offered through the State Merit System by calling Pat Hughes. They are:

Georgia Certified Public Manager Program.

Certificate in Supervisory Practices.

If enough Georgia Tech employees enroll in the Merit System programs, the series can be scheduled on campus. Otherwise, courses of one-week duration are held at various Atlanta locations.

SECURITY NEWS

Research Security Coordinator Al Becker reports that the recent government inspection generally went well.

"We were disappointed," he says, "to find that, despite publishing special memoranda on proper procedures for handling 'working papers,' a significant number of people were found to have been in non-compliance. But we were gratified to find that those people working with automatic data processing equipment had done an outstanding job, for which they were complimented by the inspectors."

Becker adds that he has been informed that extensive revisions to security regulations are forthcoming for implementation in the near future. He anticipates that the procedures are going to be tightened considerably as a result of the findings and recommendations of the Secretary of Defense's Blue Ribbon Commission, which reviewed security policy and procedure.

When the new regulations are received, they will be summarized in the *GTRI Connector* as well as published in memoranda and a revised *Security Manual*.



"ARE YOU SURE THEY'RE ONLY WORKING ON A CONFIDENTIAL ILLUSTRATION?"

the GTRI connector

Published monthly for employees of the Georgia Tech Research Institute

Vol. 3 No. 5

March 1987

Editor

Martha Ann Stegar, RCO 4-6988

Associate Editors

Dee Ramunno, OOD 4-3401

Lincoln Bates, EDL 4-6091

Gail Tucker, EML 4-3500

Joann Ward, ECSL 4-3542

Ginny Myers, EMSL 4-3678

Maggi Harrison, RAIL 424-9621

Bill Williams, SEL 4-7250

Vickie Fennell, STL 424-9611

Pat Mathiasmeier, CRSD 4-2416

Charles McCullough, Services 4-3445

Published by the Research Communications Office, Centennial Research Building, Georgia Institute of Technology, Atlanta, GA 30332. Georgia Tech is a unit of the University System of Georgia. Typesetting and printing by Walton Press, Inc., Monroe, GA. The deadline for submission of copy is the first Tuesday of each month.