GTIMS Shifts into High Gear

The Georgia Tech Information Management System (GTIMS), a powerful, comprehensive computerized management tool for EES project directors, is now on line in most EES administrative units.

EES Director Donald Grace views GTIMS as a vital part of EES's commitment to a growing base of research projects. "We recognize that adequate support of project directors is essential to EES's continued success and that computerized planning tools are important components of that support," he said. Associate Directors Gerald Carey and Howard Dean have provided overall guidance and support in the development of GTIMS.

Every laboratory is using the time reporting module, and many are keeping track of management reports, accounting data, and other employee items through the system, thereby providing timely management data on such items as project costs. Of the service groups, Research Property Management, Personnel Services, and Supply Services are on line, with the other units soon to follow.

GTIMS is one of the tools used by the Georgia Tech Research Network. The Office of the Vice President for Research has provided each research unit with at least one IBM PC with which they can communicate with the VAX minicomputer in the Electronics Research Building. The VAX, in turn, communicates with the Tech CYBER, and will communicate with the Burroughs in the Office of Contract Administration when it comes on line. Addition of the new IBM 4361 minicomputer this fall will allow a significant increase in the number of individuals on the Research Network. Associate Vice President for Research Albert Sheppard expects to involve all research units, principal investigators, and project directors.

What GTIMS Can Do

"GTIMS can assist project directors during all phases of a project—at the pre-proposal, proposal, and after-award stages," said Fred Dyer, who has guided the development and implementation of the system since its inception. "It also provides support to all aspects of EES research management. GTIMS won't replace the need for direct management involvement in a project. But it is a tool to make the manager's job easier, to help select those projects which need a closer look, and generally aid in the communications between manager and project director. For instance, the system will produce a list of projects likely to overrun, but early enough to allow adjustments to be made. I believe this feature alone will save us enough in overruns to pay for the cost of running the program."

How to Plug In

Dyer and Dr. Gerald Mackey, manager of the MiniComputer Service Facility, are available to make presentations explaining GTIMS to the senior staff of each laboratory. For assistance in using the system, contact the GTIMS Support Group (ext. 6200), located at 226 Hinman Building. Art Vandenberg heads the group, assisted by Wanda Fox and Rob Steele. The GTIMS Development Group, also in Hinman, consists of Dr. Jay Gowens (head), Ed Anderson, John Barkshad, Jeanne Hall, Pat Mathiasmeier, and Lindsay Morris.

Training in the use of GTIMS is provided through the Software Training Facility (ext. 6206), since GTIMS is based directly on a number of popular commercial software packages that are included among the courses currently taught. GTIMS training also has been incorporated in the project director training offered under the staff development program headed by Dr. Neil Hilsen (ext. 4545).

Plummer Names News

Station News has a new name—The GTRI Connector—and the winner of the $100 prize is Dave Plummer of the Systems Engineering Lab. Plummer says he coined the name "to reflect the concept of the publication being a mechanism for providing improved two-way communications." Thanks to all the contestants, who submitted a total of 109 entries. Watch for the inaugural issue of The Connector in October.
Readers Critique

STATION NEWS

Last month, in an effort to improve STATION NEWS, the editor conducted a reader survey. Several thousand questionnaires were inserted in copies of the July-August STATION NEWS that went to full-time EES employees. Of these, 182 (slightly more than 20%) were returned in time to be included in the tabulation of results, although survey responses continue to trickle in. Following are the results:

1. Do you regularly read STATION NEWS?
   Yes: 93% No: 7%


3. Which of the following do you read and how often? (% of respondents to each item; total responses ranged from 161 to 171.)

<table>
<thead>
<tr>
<th>News stories</th>
<th>Research articles</th>
<th>&quot;People&quot; stories</th>
<th>Policies, benefits</th>
<th>Photos/captions</th>
<th>Strictly Personal</th>
<th>Min/Comp News</th>
<th>Historical mat’l.</th>
</tr>
</thead>
<tbody>
<tr>
<td>39%</td>
<td>27%</td>
<td>38%</td>
<td>39%</td>
<td>65%</td>
<td>57%</td>
<td>24%</td>
<td>27%</td>
</tr>
<tr>
<td>Often</td>
<td>Seldom</td>
<td>Seldom</td>
<td>Always</td>
<td>Always</td>
<td>Always</td>
<td>Always</td>
<td>Always</td>
</tr>
</tbody>
</table>

4. Which of the above would you like to see more of? (124 answers) less of or eliminated? (Only 72 replies to either or both of these parts; answers are combined here.)

<table>
<thead>
<tr>
<th>News stories</th>
<th>&quot;People&quot; stories</th>
<th>Research articles</th>
<th>Policies, benefits</th>
<th>Photos/captions</th>
<th>Strictly Personal</th>
<th>Min/Comp News</th>
<th>Historical mat’l.</th>
</tr>
</thead>
<tbody>
<tr>
<td>39%</td>
<td>38%</td>
<td>39%</td>
<td>31%</td>
<td>20%</td>
<td>19%</td>
<td>10%</td>
<td>6%</td>
</tr>
</tbody>
</table>

5. Which of the following would you like to see added? (% of respondents to each item; total responses ranged from 160 to 171. Since aggregates of “Oppose” and “Strongly Oppose” answers totaled only from 2% to 10%, they are not given here.)

<table>
<thead>
<tr>
<th>Human interest features</th>
<th>Humor/light pieces</th>
<th>Reader feedback</th>
<th>Reader question/answer</th>
<th>Reader opinion/editorial</th>
<th>EES Director column</th>
<th>Employee work features</th>
<th>Back-page social notes</th>
<th>Notable contract awards</th>
<th>Calendar of events</th>
</tr>
</thead>
<tbody>
<tr>
<td>21%</td>
<td>18%</td>
<td>17%</td>
<td>20%</td>
<td>18%</td>
<td>14%</td>
<td>12%</td>
<td>13%</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
<td>Favor</td>
</tr>
<tr>
<td>48%</td>
<td>46%</td>
<td>49%</td>
<td>37%</td>
<td>41%</td>
<td>35%</td>
<td>45%</td>
<td>49%</td>
<td>49%</td>
<td>63%</td>
</tr>
<tr>
<td>Don’t Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. How would you like to receive STATION NEWS? As currently distributed: 72%. Individually addressed: 17%. Don’t care or No reply: 11%. (Ed. Comment: Although it would seem that the majority like the present distribution method—bulk mailing for distribution within the research unit, the fact that only 20% of the questionnaires were returned implies that perhaps many employees do not regularly receive or pick up STATION NEWS. Thus, perhaps the “silent vote” is for individually addressed copies.)

7. Ranking of sources of information. (125 people gave partial or full answers in both columns: 35 answered in one column only.) Although results are inconclusive, analysis indicates the following:

   | Ranking in Order of | 1 How Get | Info from | Prefer to Get | Info from |
   | Importance           | 2 Memos/letters | Supervisor | 3 Memos/letters | Grapevine |
   | 1 MEMS/LETTERS       | 2 Supervisor   | 3 MEMS/LETTERS | 4 STATION NEWS | 5 Bulletin boards |
   | 8. I would best describe STATION NEWS as: (Check no more than 4) (175 respondents)
   | Informative          | 73%            | Objective      | 10%          |
   | Interesting          | 50%            | Technical      | 9%           |
   | Easy to read         | 49%            | Propaganda     | 5%           |
   | Adequate             | 35%            | Boring         | 5%           |
   | Entertaining         | 21%            | Inadequate     | 3%           |
   | Accurate             | 15%            | Biased         | 2%           |
   | Bland                | 15%            | Useless        | 2%           |
   | Helpful to work      | 11%            |               |              |

9. Profile of respondents.
<table>
<thead>
<tr>
<th>Job Category</th>
<th>Management</th>
<th>Technical</th>
<th>Clerical</th>
<th>Service</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Campus</td>
<td>62%</td>
<td>24%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>Length of Employment</td>
<td>0-2 years</td>
<td>36%</td>
<td>37%</td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>65%</td>
<td>Female</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Under 30</td>
<td>28%</td>
<td>30-55</td>
<td>66%</td>
<td>Over 55</td>
</tr>
</tbody>
</table>

10. Other comments about STATION NEWS. (Ed. Note: 27 people made comments, of whom 7 simply commended us for doing a good job. Selected criticisms and suggestions are given below.)

   “Too much emphasis on the big wheels. How about more material and names of the little ‘gears’ that make things run? Need more humorous material!”
   “Could add an (un)professional Activities category for the ‘peons.’
   “It needs to be more timely.”
   “More photos.”
   “Should include employee improvement section (i.e., ways of advancement, and how EES helps employee development and advancement).”
   “Keep it light, simple, and interesting; I get enough boring business information through channels.”
   “Need to focus on off-site offices also.”
   “Would like to see more personal stories.”
   “Some associate editors are inactive, making it appear that the labs or organizations they represent are inactive. Others report trivial activities, making it appear that their labs are engaged in trivial activities. Achieve consistency.”

11. Additional comments regarding STATION NEWS. (Ed. Note: Your associate editors would appreciate your volunteering information. They need your help in nosing out the news.)

   “Strictly Personal should be made inclusive.”
   “My marriage and the birth of my daughter were not mentioned, while those of others are. The hiring of some persons is included while not others. Either treat everyone equally or drop it.”

(Ed. Note: We can’t write about your milestones if we don’t know about them. Report them to the associate editor for your unit or send them directly to STATION NEWS.)

“We never receive enough copies of STATION News to distribute to all staff.”

“Waste of time, money and paper.”

Thanks to everyone who responded to the survey. We heard what you said and will try to implement your suggestions whenever and wherever feasible. To those who didn’t respond, we hope you’ll write or call whenever you have an opinion to share.

Research Awards

Nominations Due

Do you know someone in EES that you feel deserves recognition for outstanding performance in research, program development, management, research support, or as a student employee? Now’s the time to get your nominations in to your lab director or service group manager. Each EES unit must submit its official entries to the Awards Review Committee by October 1. The 14 winners will receive their awards on December 6 at a reception in the Student Center ballroom.

Cobb County researchers helped alleviate the Red Cross’s acute blood shortage by holding an emergency blood drive August 27. Even on one day’s notice, they donated 43 pints.

Software Training Schedule

Sept. 25. LOTUS 1-2-3, 9:45-10.
Sept. 27. DOS, 1:30-4:30.
Oct. 4-5. GTIMS, 9:45-10.
Oct. 9. DOS, 1:30-4:30.
Oct. 25. DOS, 1:30-4:30.
Contact Software Training Facility, 325 Hinman, ext. 6206, for information.
Professional Activities

ECONOMIC DEVELOPMENT LAB

Frank Brown is a member of the Community Advisory Council of the Correctional Facilities and Services Committee of the State Bar of Georgia and serves as an instructor in courses to help inmates learn what will be of them when they return to the world of work.

Art Brown was a panelist on "Strategies for Providing Technical Assistance to Women and Minorities in Business" at the National Association of Management Assistance Conference on July 20 in Atlanta.


Bill Ewing, William Spain, and Rachel McCain presented the asbestos abatement course in July. In June, 66 attendees from 18 states, Spain also helped teach a course on "Safety and Health Program Assistance" in St. Petersburg, FL.

Larry Edens was graduated in August from the Economic Development Institute at the University of Oklahoma, while Sherman Dudley, Bill Darley, and Phil Loveless completed their second year of this three-year professional development program of the American Economic Development Council.

ELECTROMAGNETICS LAB


ELECTRONICS & COMPUTER SYSTEMS LAB

John Mills recently shared an award from NASA with Allan Pierce (Mechanical Engineering) and W. G. Hadden (Texas A&M) for a brief, "Sound-Burst Generator for Measuring Coal Properties.

ENERGY & MATERIALS SCIENCES LAB

At the NASA Solar Dynamic Power Systems Workshop held in Houston, TX, August 1-3, Tom Brown gave a paper on "Concepts and Research and Development Needs for Concentrating Solar Thermal Power Systems in Space."

At the National Heat and Transfer Conference and Exhibition recently held at Niagara Falls, NY, Paul Mackie gave a paper on "In-Situ Emissivity Measurements with a Four-Wavelength Infrared Pyrometer," coauthored with R. S. Zabor and W. S. Lewis, and Doug Naile gave a paper on "Water Gas Production with a Solar Thermal Direct Flux Chemical Reactor," coauthored with Bob Cassanova.

OFFICE OF THE DIRECTOR

Jim Wittke is the author of three new articles: "Millimeter-Wave Radar Features: Unique Characteristics and Designs" appeared in the May issue of Microwave Systems News; "Millimeter-Wave Sensors Technology" was featured in the Summer issue of Military Technology; and "History of Millimeter and Submillimeter Waves" will be published in the September IEEE Centennial Special Issue of IEEE Transactions on Microwave Theory and Techniques. He also was session chairman at the IEEE International Microwave Symposium in San Francisco in June.

RADAR & INSTRUMENTATION LAB

Nick Curry and the RAIL staff in August in presenting a short course on "Techniques of Radar Reflectivity Measurement" to 52 students. The text was a book by the same name, published in April by Artech House. Curry edited the book, which had the following coauthors: Joe Bruder, Archie Corrith, George Ewell, Bob Hayes (retired), Margaret Horst, Gene Knott, Maurice Long (retired), Jim Scheer, Bill Steinway (fellow employees), Bob Trebbit, and Mike Tuley.

SYSTEMS & TECHNIQUES LAB

At the IEEE Antennas and Propagation Society 1984 International Symposium in Boston during the week of June 24, Alton Dunn presented a paper entitled "Axial Ratio Measurement with a Variable-Polarization Reference Antenna," and Larry Corey gave a paper entitled "Modeling Triangularly Packed Array Antennas Using a Hexagonal FFT," Don Bodnar participated in the APS Administrative Committee meeting and chaired the IEEE Antenna Standards Committee.

TECHNOLOGY APPLICATIONS LAB

Craig Wyvill presented a paper entitled "An Assessment of the Potential for Water Reuse in the U.S. Pulp and Paper Industry" at the Water Reuse Symposium Ill in San Diego on August 27.

Jim Walsh was invited to serve as one of three panel chairmen at a workshop on standards in biomass sponsored by the National Bureau of Standards on August 1-3 in Gaithersburg, MD.

EES to Develop New Solar Materials

One of the greatest problems holding back the application of passsive solar technology to buildings is the practical means of storing solar energy for release when the sun stops shining, as at night. Methods currently used are costly and severely restrict building design and construction.

New materials being developed in a G.S. Department of Energy-funded project at EES could break through these design and cost barriers to widespread adoption of passive solar energy technology in buildings. The new materials are expected to result in much cheaper and more efficient passive solar heating systems than are possible with the bulky materials and structures commonly used today, such as brick, stone, masonry and water-filled units.

The Georgia Tech project will focus on two proprietary approaches, currently under patent review, for the storage of thermal energy in the comfort range of homes and buildings. According to Principal Investigator Daniel O'Neil of the Energy and Materials Sciences Lab, the advanced materials being developed at EES are composites of thermoplastics and ceramics. They are intended for structural applications such as walls, ceilings and tiles, as well as for thermal energy storage.

The structural strength and dimensional integrity of the building materials will be retained during passive solar heating and cooling cycles.

On the basis of a cost-to-volume strength ratio comparison, Dr. O'Neil forecasts that the Tech-developed materials will show a 2-to-1 advantage over comparable conventional building materials, while providing a five to tenfold advantage in thermal energy storage capacity.

Phase One has been funded as a 12-month feasibility study, while Phase Two is expected to result in engineering development of about four designs. A demonstration phase also is projected which will involve commercialization of the designs with private sector participation.

The EES project is one of six contracts issued by DOE's Passive and Hybrid Solar Energy Division following a nationwide solicitation for new and innovative concepts in passive solar energy.
MINICOMPUTER NEWS

The VAX 11/780s at the Electronics Research Building and at the Cobb County Research Facility now have a 56 kilobit connection. This high-speed Digital Data Service line lets users work on a remote machine as easily as on a local machine, with effective throughput of 9600 baud whether local or remote.

This dateline presently is used with DECNET, Digital Equipment’s networking for the VAX 11/780s. Users logged on their local VAX can use the SET HOST (node) command to log on the remote machine. This capability should be helpful in allowing users to switch to a lightly loaded VAX to do their work. File transfers are quickly done, so remote development can be used, but results still can be printed or delivered to local sites.

The Cobb County VAX, in particular, often has only a handful of users compared with the many on the ERB VAX. Establishing an account on both VAXes can allow for flexibility and balancing of computer usage.

In the future, this 56 kilobit line will be used to support the Ungermann-Bass implementation of Xerox Corporation’s ETHERNET. This will not only maintain the link between the ERB and CCRF VAXes, but also tie them into the campus-wide ETHERNET, making the VAXes easily accessible from many locations.

This new inter-VAX connection is an important link in our network. To discuss how it can be used in your group’s program development and applications, call 894-3175 (ERB) or 424-0898 (CCRF).

SEL awarded Lydia Geeslin a Master of Material Sciences degree at a retirement reception on August 23. Lydia retired August 31 after 21½ years at Georgia Tech, about half of them at EES. She had been an administrative secretary at SEL’s Cobb County location since January 1979. Lydia and her husband are retiring to Florida.

TAL Training News

Training programs are an important component of the activities of the Technology Applications Lab (TAL). Here are some of the latest offerings:

The Federation of Arab Scientific Research Councils sent 11 administrative leaders of research departments and laboratories in 11 Arab countries to Georgia Tech July 23-August 3 to participate in a training program on Research, Development and Information Centers. In addition to hearing lectures by 12 Georgia Tech research leaders and professors, they visited various industries, government agencies, and research institutes. Bob Kyle coordinated the program.

The Industrial Education Department (IED) hosted its 17th Annual Industrial Training Conference at Jekyll Island on August 13-16. More than 100 industrial trainers and human resources personnel heard 15 industrial leaders discuss such topics as ergonomics, quality control, interactive video in training, robots in industry, and employee motivation.

IED also recently conducted a three-day training program in modern techniques of supervision for more than 90 first-line supervisors at the Ford Motor Company auto assembly plant in Hapeville, Georgia.

Finally, the Technology Transfer Branch is assisting the U.S. Department of Energy, along with Battelle Pacific Northwest Laboratory, in conducting a High-Temperature Waste Heat Recovery Conference in Chicago on September 28.

Strictly Personal

ECOLOGICAL DEVELOPMENT LAB
Willie Coleman Duncan and Donna Fong-Taylor have resigned.

The Analytical Laboratory has two new chemists, Zhanna Geshkin and Berta Shneyberg.

Industrial Extension Division: Elliot Price is a research associate II in the Douglas office. Keith Nelms is a new research engineer I in the Atlanta office, transferring from TAL.

ELECTRONICS & COMPUTER SYSTEMS LAB
Barbara Call has been promoted to administrative secretary in the Command and Control Division. Joan Bunch and Tommy Thompson have resigned.

ENERGY & MATERIALS SCIENCES LAB
Welcome to Jerry Lott, research associate II, and belated welcomes to John Bearden, research engineer II, and Dave Henderson, research engineer I.

Dan O’Neill has transferred from the Technology Applications Lab.

RADAR & INSTRUMENTATION LAB
Faye Carpenter has transferred from SEL to work in the Instrumentation and Measurements Division.

SERVICE GROUPS
Accounting: Nancy Kelly lost her mother on August 9.

Facilities Management: Brenda King and Jerry Hill (EML) were married on August 11.

Personnel Services: Welcome to Diane Trimble, personnel assistant I. Debbie Coleman is transferring from the Office of Computing Services as an administrative assistant.

Kay Clark has resigned. Cynthia McCreed has transferred to OOD as administrative secretary for the new Training and Staff Development Program. Chris Gaddis was married on August 4 to Tracy Smith (GIT Personnel).

Research Property Management: Sandra Alford has transferred from OCA as an administrative assistant.

Supply Services: Diane Kelly was married on August 5 to Mark Collins.

SYSTEMS & TECHNIQUES LAB
Constance Green has transferred from SEL to the Microwave Systems Division.

David Price has been promoted to research technologist I.

Tom Vincent has resigned.

SYSTEMS ENGINEERING LAB
New employees are Rod Beard, research engineer I, and Betty Mitchell, word processor operator.

Former GRAs Dennis Folds and John Scholz have received professional appointments as research scientist I and research engineer I, respectively.

SEL recently said good-bye to Adrienne Harrington, Bill Weatherford, William Allen, and Jon Gedymin.

Alexis and Steve Livesay had a daughter, Elizabeth, on July 18. Barbara and Mike Linebarger had a son, Thomas, on July 9.

Ron Strickland was married to Suzanne Bellam on August 20.

SEL has started a new outstanding employee monthly award program. Honorees for July were Robin Poole (Cobb County) and Neil Laroe (ERB).

Station News

Vol. 15 No. 2 September 1984

Published monthly for employees of the Engineering Experiment Station, Georgia Institute of Technology, Atlanta, Georgia. Georgia Tech is a unit of the University System of Georgia.

Editor
Martha Ann Steger 3405

Associate Editors
Dee Ramunno, OOD 3400
Anne DeCurtis, EDL 3844
Gail Tucker, EML 3500
Nadine Johnson, ECSL 3542
Charlotte Sanders, EMSL 3460
Maggi Harrison, RAIL 424-9621
Janice Manders, SEL 3519
Vickie Fennell, STL 424-9611
Deborah Lockman, TAL 3623
Art Vandenber, MCGS 6020
Marianne Thompson, Services 3445