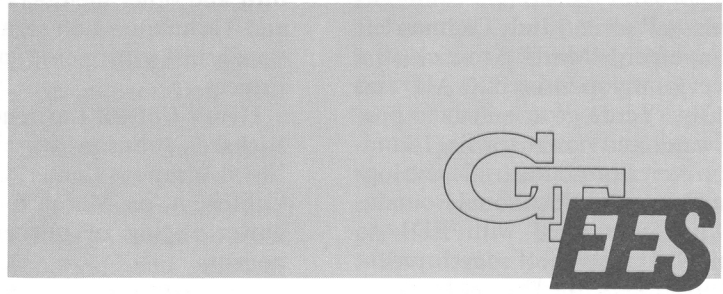


STATION NEWS



ENGINEERING EXPERIMENT STATION • GEORGIA TECH

VOLUME 6 NUMBER 2

MARCH, 1977

TWO LABS REORGANIZE

Reorganization of AEL and STL

As part of a continuing effort to realign personnel within the Station to strengthen the focus of research program areas and enhance technical interaction, Dr. Donald J. Grace, EES Director, announced that reorganization of the AEL and STL groups has been completed.

Bob Goodman continues as Director of a laboratory which retains the title *Systems and Techniques Laboratory*, but with many organizational changes. This laboratory now has four divisions reporting to the Director: Electromagnetic Effectiveness, Fred Cain, Chief; Systems & Antenna Applications, Lee Edwards, Chief; Countermeasures, Dick Hodges, Chief, and Systems Development, Sam Alford, Chief.

The other newly formed laboratory will be known as the *Radar and Instrumentation Laboratory*, under the direction of Ed Reedy. Working directly with Reedy will be Jerry Eaves, serving as Associate Director for Radar Technology and Fred Dyer serving as Associate Director for Technology Development. Eaves has three new branches reporting to him (Analysis, Development and Experimental); Dyer has two branches (Computer Applications and Software Development) and two groups (Simulation and ESM). Not all of the branch and group leaders had been selected at the time of publication, so none will be announced at this time.

Another change involves the *Systems Engineering Division* of the old

AEL, which now operates as a separate entity, under the direction of Bob Zimmer, working interactively with several laboratories in the Station and reporting to the Director's Office. Archie Corriher is serving as staff liaison for the Director's Office. SED's work is of a sufficiently broad nature that it can contribute to a wide variety of existing, identified research program areas within the Station.

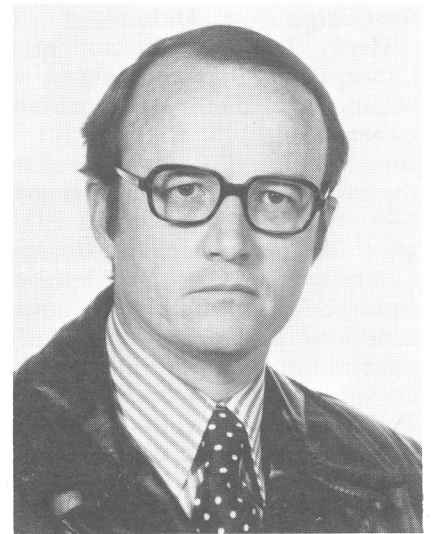
In the coming months, further changes and personnel realignments will be resolved in other parts of the Station, with the eventual intent of establishing clearly defined areas of focus for each operating unit which have little overlap with other units.

"My eventual hope," according to Dr. Grace, "is to reduce destructive competition within the Station to an invisible level and to encourage cooperation on the part of all of the staff so that the Station can continue to be one of the finest research organizations in the nation."

Dr. Edward K. Reedy, senior research engineer and director of the newly formed Radar and Instrumentation Laboratory, has been with EES since 1970.

He was in the class of 1963 at the University of Tennessee where he received his B.S.E.E. and then his M.S.E.E. and Ph.D. at the same university.

Prior to coming to Georgia Tech, he was a project officer with the U.S. Army Electronics Command. He has been Chief, Radar Applications Division at EES since 1975.



Dr. E. K. Reedy, heads the Radar and Instrumentation Laboratory.

He has authored over 30 professional papers and reports and his special fields of interest are: radar systems; analysis and synthesis of unconventional radar techniques; operational and error analysis; digital signal processing and radar vulnerability to ECM.

Reedy currently supervises 75 full-time professionals but he expects the new laboratory to double in staff size within the year. "One of the strengths of EES is the people," Reedy says, "and we attract those professional people with talents."

A sports enthusiast in his spare time, Reedy plays basketball and baseball and has served on a winning church softball league for two years.

Reedy, his wife Delta and son, Myles, reside in Marietta.

New EDL Projects

Nelson Wall and **Judy Cadman** left for Cape Verde March 3 to kick off a project jointly sponsored by AID and the Cape Verde government to provide water and power for Sal Island.

The American Industrial Development Council's Educational Foundation has contracted with EDL to develop a matrix of development organizations in the U.S. and to field-test a new self-analysis system by which these organizations can evaluate their effectiveness. **Bob Cassell** will direct the 18-month-long project.

David Clifton heads a new project to update EDL's 1973 study of the economic impact of Georgia's deep-water ports and to project future port needs. He is assisted by **Nick Gibson** and **Larry Edens**. Project sponsor is the Georgia Ports Authority.

Hardy Taylor is director of a rather unusual project aimed at helping hotel/motel and restaurant owners along U.S. Highway 301 in southeast Georgia find ways to offset the adverse effects of the opening of I-95. Funded by a \$38,500 EDA grant to the Altamaha Georgia Southern Area Planning & Development Commission, the technical assistance program will help 71 establishments still operating in the corridor stretching from Sylvania to Folkston. Other project personnel are **Larry Edens** (Savannah Area Office), **Edwin Lewis** (Douglas Area Office), **Charles Wommack** and **Bill Howard**.

Systems & Techniques Lab

Fred Dyer, **Bill O'Dowd**, **Mike Tuley** and **Steve Zehner** met with Mr. R. Brooke and J. Mayor of NAVALEX at Georgia Tech for discussions on the STONEGATE effort.

Fred Dyer, **George Ewell**, **Bob Goodman**, **Berry Pyron** and **Sam Alford** gave a presentation at Eglin AFB, Florida, 21 February on the simulation work at EES.

Fred Dyer and **Ross Gagliano** visited Aberdeen Proving Ground, Maryland, on 22 February for technical discussions.

Nick Currie and **Fred Dyer** have had a paper on millimeter measurements accepted for presentation at the RADAR-77 Conference in London, England, in October.

Jim Williams, U.S. Army Missile Command, and **Gene Hendrix**,

U.S.A.F., ADTC, visited **Sam Alford** and other members of Systems and Techniques Lab regarding additional tasks proposed on an EES Project.

Henry Cotten, **Lawrence Cail** and **Richard Johnson** traveled to the Naval Weapons Center, China Lake, California, on March 8-11 for high power testing of microwave components.

The Systems Development Division welcomes new employees **Gene Griffin**, Mechanical Technician, and **Debra Fuller**, Secretary, who will be working under the supervision of **Sam Alford**.

Bob Hayes visited DARPA, Tactical Technology Office, to discuss advance seeker concepts during January. He also visited B.R.L. as a member of the review committee for SADARM program.

George Ewell traveled in Italy December 7-14 to visit Segnalamento Marittimo ed Aero, Inc., (SMA) in Florence for the purpose of viewing prototype system tests at La Spezia, and to confer with the Italian National Research Council and with the Italian Navy. In the course of his travels, properties of the local wines were evaluated, their effectiveness assessed, and recommendations for further investigations were formulated.

ETL News

ETL welcomes two new Secretary II's — **Paula Byrd** and **Merle Milloff**. Paula is secretary for the Electromagnetic Compatibility Group, and Merle is secretary for the Communications Technology Group.

Bob Rice presented a paper at the 1976 Bicentennial Winter Simulation Conference held in Washington, DC December 6-8, 1976. The conference was sponsored by NBS, AIIIE, IEEE, ORSA, SIGSIM/ACM, SCS, and TIMS.

Richard Moss participated in an invited workshop sponsored by the Federal Paperwork Commission and held in Washington, DC on December 17, 1976.

Jimmy Woody attended the Grounding Workshop Technical Committee Meeting in Melbourne, FL on January 5, 1977.

Ron Wallace attended the Annual Meeting of the Transportation Research Board in Washington, DC on January 26, 1977.

Personnel Categories

The official personnel policy of the Board of Regents of the University System of Georgia identifies three categories of employees:

1. Faculty
2. Professional and Administrative
3. Staff.

At EES, personnel with "Research" titles and certain administrative personnel are in Category 2 (Professional and Administrative); most of them also are members of the Georgia Tech General Faculty as defined in the statutes. The remainder of EES employees are in Category 3 (Staff).

In the past, personnel in Category 3 often have been referred to as "non-professionals." This term does not have a desirable connotation, and since it is not an official employee category, we should delete it from our vocabulary. In other words, let's start referring to our employees as "professional" or "staff."

Bette Justice

Bette Justice who has been assistant to **J. Donovan** in the publications and information office has left EES for a position with the advertising department of Edwards Pie Company, Atlanta.

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PTAL Hosts Wood Energy Conference

A conference on "Potentials of Wood for Energy" was hosted by PTAL on February 24.

Discussions of new technologies for burning wood as a clean boiler fuel for industrial and commercial plants was presented by Don Elliot, head of marketing and engineering for the Packaging Corporation of America.

Ray Shirley, director of the Georgia Forestry Commission discussed the state's production of wood, and future uses of wood to supply energy. **Dr. Don Grace, Rudy Yobs, Jerry Birchfield, Dan O'Neil**, represented EES.

Hugh Denny Cited

Jim Toler, President of the Electromagnetic Compatibility Group of IEEE recently sent the following letter to **Hugh Denny**, Ch. EMC Grp. of ETL:

Dear Hugh:

At our Summer 1976 meeting of the International Group on Electromagnetic Compatibility (G-EMC) of the Institute of Electrical and Electronic Engineers (IEEE), your technical activities in the area of electronic signal grounding were noted. These activities were considered to be of significant benefit to the entire EMC community. As a means of recognizing these activities, the G-EMC Administrative Committee voted to present to you the enclosed IEEE CERTIFICATE OF ACHIEVEMENT acknowledging outstanding contributions in the development of both methods and standards for electronic signal grounding.

Let me also add to this IEEE recognition my personal appreciation for your contributions to and support of the EMC discipline over the past decade. Without such contributions and support, our professional organization could not accomplish any of its beneficial functions.

Sincerely,
Jim Toler

Rudy Yobs and Jerry Birchfield visited the National Science Foundation on January 18 and 19 to discuss project development specifically relating to the State Productivity Center.

"Georgia Productivity Profile" Seminar

On March 25, Georgia College, at Milledgeville, in cooperation with the Department of Commerce, is hosting a productivity seminar which will feature speakers from the Department of Commerce, and representatives of Georgian businesses, universities, and government. Topics will range from ideas for productivity improvement to productivity measurement. Featured speakers: Senator Sam Nunn, **Rudy Yobs** — EES, Dr. Jack Thornhill — Georgia College, Mr. Tom Lahey — Grumman Aerospace Corporation, Mr. A. Wroley Brown — Rock-Tenn Company.

EML News

J. D. Dees, director of EML, will be in Saudi Arabia for three weeks to meet with the Minister of Information on a recently submitted proposal for a communications system. **Kal Diab**, a consultant for EML, has joined Dees for the conference.

Gail Kitchen, secretary to **Bob Shackelford**, is recuperating at home after surgery.

Jim Stratigos will be in San Francisco and Anchorage for one month to conduct tests of an EML radiometer designed for NASA airflight tests. **John Langley** accompanied Stratigos to set up the equipment and has returned to Atlanta.

EDL International Activities

Kay Powell will be in the Philippines for four weeks in March under Agency for International Development (AID) Small Industry Grant auspices. She will advise the Institute for Small-Scale Industries on operational procedures for its first industrial extension office, opened last May at Tacloban City on the island of Leyte, and will perform on-site technical assistance to small industries in the area.

Kay Auçiello will be in Guatemala March 13-20 to make arrangements for an AID/Georgia Tech mini-conference on small industry to be held there September 7-9 in cooperation with Tech's new counterpart, the Central American Research Institute for Industry (ICAITI).

Philip Potts spent 10 days in December and the last three weeks of January in Central America initiating on-site activities for field-testing the Battelle hand-operated water pump developed for rural use in developing countries. The pump will be tested in Costa Rica and Nicaragua, rather than in Africa as originally planned.

Ben James departed January 28 for a two-month stint providing technical assistance to the International Rice Research Institute's industrial extension office in Thailand in promoting the adaptation, manufacture and use of IRRI-designed medium-technology rice farming machinery. He was to receive some indoctrination at IRRI's headquarters in the Philippines before proceeding to Thailand, and there is a possibility that he may also work in Bangladesh.

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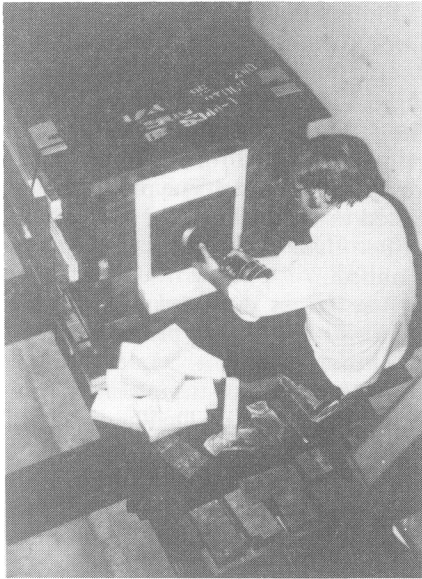
Reporting Channels

As part of a continuing effort to review and streamline administration within EES, all service groups will now report directly to **Dr. Grace**. For intermediate planning and for routine matters which do not require the director's personal attention, Accounting, Facilities, Instrumentation & Calibration, Mechanical Services, Publications & Information, and Supply Services should coordinate their activities through **Howard Dean**. Reports and Procedures (including all personnel functions) will be coordinated by **Dick Johnson**.

Service News

Tom Jones, attended a meeting of the Inner Service Committee on Technical Facilities in Melbourne, Fla. Jones, chairman of the organization's southeast division, was instrumental in obtaining a donation of lead shielding from ERDA's Oak Ridge facility. The lead will be used in neutrino research by EES scientist **T. P. Lang**.

Daryl Young, staff messenger, will now be working in the warehouse. Taking his place as messenger is **Bill Boyd**.



Sam Blankenship, research scientist, inserts a sodium iodide detector into a shield designed and fabricated by the Neutrino Physics Group.

Neutrino Research Continues at EES

EES is one of four major research institutes to study low-energy neutrino currents. **T. P. Lang**, head of the EES Neutrino Physics group, was recently awarded an 18-month NSF grant to continue to build, design and test a full-size neutrino detector.

Neutrino's are sub-nuclear particles with no mass which move at the speed of light. Lang has been involved in neutrino research since 1963, and has directed EES's research in this field since joining the Station in 1971. Assisting him in the project are: **Sam Blankenship, Jim House** and **Mary Wood**.

The project involves detecting neutral weak currents by observing low-energy antineutrino reactions.

The currents will be tested in a detector, currently under construction in the ground floor Baker Building laboratory. Thirty five tons of metal will be used to shield the detector for the final experiment, which, when completed, will be moved to a high power nuclear reactor center in the southeast for testing.

The tests will measure neutrino signatures — or electronic pulses — showing a precise sequence of pulses which have a particular size, time and space relation.

Lang's researchers will also design and fabricate a computer data center to provide readings on the pulses.

Directory of Minority-Owned Firms Compiled by EDL

EES has been awarded a contract to "List and Survey Minority-Owned Businesses in the State of Georgia With Paid Employees."

The \$23,000 contract was awarded to EDL and the project director is **Edward A. Bethea**.

The five-month project, sponsored by the U.S. Department of Commerce's Office of Minority Business Enterprises, will also study the progress of minority businesses from 1972 through 1976.

According to Bethea, the contract for the Georgia survey is one of several state-wide studies to be conducted.



News of EDL People

Ross Hammond was a panel participant at the Governor's Workshop on Education and Economic Development held in Montgomery, Ala., March 3-4. He will be in Durham, N.C., March 18 to participate in a symposium entitled "Strategies for Human and Technological Progress" on the Duke University campus, where he will make a slide presentation on appropriate technology. Hammond also recently was elected Chairman of the Board of Southern Federal Savings & Loan Assn. of Atlanta.

Don Lodge has been appointed Associate Chief of EDL's International Programs Division.

New head of the Augusta Area Office is **Raymond B. Junk**, replacing **R. L., Hughey, Jr.**, who resigned.

Nick Gibson has joined the staff of EDL's Industrial Development Division as a Research Scientist.

Philip Koos has resigned from EDL to assume the position of Executive Director of the Northern Tier Regional Planning & Development Commission in Towanda, Pa.

Another EDL "graduate" is **John Steinheimer**, who has entered a family appliance business.

Bill Howard is back at work after undergoing surgery in February.

Don Lodge leaves Atlanta March 11 for a three-week African trip, where he will interact with counterpart personnel in the Industrial Research and Development Unit at the University of Ife in Nigeria and the Technology Consultancy Centre at the University of Science and Technology in Ghana.

Martha Ann Stegar performed in the chorus of the Atlanta Lyric Opera Co.'s production of **Die Fledermaus** at the Fox Theatre January 14 and 16.

Beverly Norris is a new secretary in EDL's Industrial Development Division.

Vocational Program

A Marist High School senior, **Tony Valle**, is working with **Dr. Monte Davis** at the EES Nuclear Research Center for two weeks as part of a special vocational education program.

Tony, an active member of the Marist Science Club, will be attending Georgia Tech next fall to pursue a degree in nuclear physics.

Surgery and Injury Among EES Staff

Mary Lupton, secretary EES, has returned to work after major surgery.

Teddy Reed, our mail deliverer, has just returned to the EES warehouse after recovering from surgery. The day before he returned, warehouse employee **Marvin Mitchell** suffered a head injury when he fell from a truck. Tech student, Joe Mellow, gave critical first aid to Marvin at the scene of the accident.

PPC — Quality Service

The Photo Lab, under the direction of **Al Becker**, has recently been re-named the **Printing Photographic Center (PPC)**. It now includes some of the equipment and capabilities of the Georgia Tech Print Shop that was located in the Savant Building.

New employee, **Betty Shubert**, has replaced **Susy Sitton** in the PPC at the front desk.

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