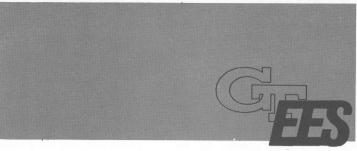
STATION NEWS



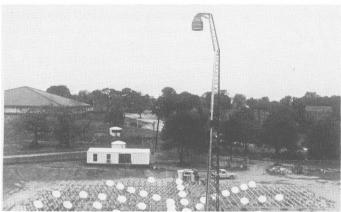
ENGINEERING EXPERIMENT STATION - GEORGIA TECH

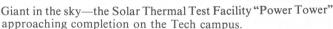
VOLUME 6

NUMBER 8

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Power Tower Shaping Up







The EES S.T.T.F. team in the mirror field—prior to installation of round reflectors.

Supplementary Funds For Foreign Travel

New Policy Approved

As part of a continuing effort to encourage the professional development of our research staff, the Professional Staff Development Committee has developed a policy to provide support for the professional research staff to travel to foreign countries. This policy has been approved and is another component of our overall Professional Staff Development Program.

The objective of this component is to provide foreign travel opportunities for the professional staff with the following purposes:

- To attend international conferences which would permit EES/Georgia Tech as well as the professional staff member,
- To pursue contract development activities, or

• To enhance research programs at EES or Georgia Tech.

Funds provided for this purpose are supplementary to funds available from other sources and are not intended to provide full support for foreign travel. Professional staff members and/or their organizational units requesting supplementary foreign travel funds are expected to contribute a substantial portion of the total cost. Funds available for foreign travel support are limited and each request will be carefully evaluated on an individual basis.

The following considerations should be kept in mind when submitting requests:

- In all cases, sources for support other than Supplementary Funds for Foreign Travel should be explored.
- Supplementary funds should not be requested to support the domestic portion of the travel.

- Supplementary funds are available only for projects and activities which will benefit EES as well as the professional staff member.
- These funds are intended to support a maximum of one foreign trip per staff member per year on a cost-sharing basis.

The provisions of the program are subject to change, depending on experience gained in operation of the program.

T&D Lab

Jim Knight attended the American Chemical Society—Fall National Meeting, Chicago—August 28th through September 2nd, at which time he presented a paper "Wood Oil from Pyrolysis of Pine Bark-Sawdust Mixture." Co-authors were D.R. Hurst and L. W. Elston. The Symposium was on "Fuels and Energy from Renewable Resources."

Station to Station

I've been here at EES a year now, and it's been a year of continuing to be better acquainted. There have been changes during this year, an occasional redirection of efforts and redirection of patterns for simple growth. As we continue to grow, problems continue to

plague us.

The better I become acquainted with individual people, the more I realize the very real accomplishments going on here. The more I talk to sponsors and to people who have continued contact with EES, the more I am impressed with the tradition of excellence, a camaraderie, a caring about integrity that is a hallmark of this institution. I have also during these twelve months experienced flexibility, resilience and an adventuresome spirit in our people as well as the not being afraid to take on a challenge for its own sake.

In future seasons, much attention will be addressed to short-range problems because they seem to cry out, but we must not lose sight of the long-range effects of short-range actions. For instance, we have to continue to emphasize the high quality of staff we hire. The young people will become the seniors and will be faced with an ever-increasing complexity of the world. We have to be prepared for significant changes in specific work areas, ways in which research is funded, disseminated and judged by the outside

In recent years we've seen a blending of economics, social sciences, physical sciences, environmental concerns and hard-headed technology. Around the horizon we can see a tremendous need for interaction between food and energy that will call us to expand the sphere beyond Tech to our sister institution in Athens and other organizations both domestic and foreign.

Surely, the Station is unusual in its intimate interaction with an academic institution, and while I'm sure we would all agree that the interaction can always be improved, we still must build on what we have already demonstrated to be valuable.

On the immediate horizon, our internal advisory committees' reports have been reviewed in the Station News, and it's time now to implement many of their recommendations. I intend to give that priority attention. We now have a Project Performance Committee and a Computer Committee and others are in formative stages.

Our 1977 Staff Register is printed, and it will give us a better chance to correlate names and faces outside our immediate areas so we can call each other by name more and more often.

It's a mixed blessing to be gone for six weeks and return to find everyone has kept everything going just fine. Certainly, it shows that none of us is irreplaceable. Also, it speaks well of the resourceful staff I have working with me.

I made calls on a number of European organizations, and in all of my discussions, I heard nothing but praise of the EES and Georgia Tech with a common theme being a desire for closer communication, interchange of documents and active enthusiasm for developing joint programs. It made me proud, and it ought to make you prouder because I was being told about you. I must have met half the citizens of Odiello, France, and they all knew about Georgia Tech.

Woneld J. Grece



Hank Rainwater and Jim Gallagher of EML checking radiometer heliostat at zenith on Baker Building roof.

Solid State Sciences Div.

Walter Cox attended the Cornell Conference on "Active Microwave Semiconductor Devices and Circuits" from August 15-18 in Ithaca, N.Y. He presented a paper at the conference entitled "Behavior of Series Connected Silicon and GaAs IMPATT Chips" which was co-authored by Charles Rucker, John Amoss and Gerald Hill.

Ed Scheibner and Walter Cox visited Washington in August for discussions with ERDA regarding solar photovoltaic device research.

Billy Livesay and Ed Scheibner made a trip to Huntsville, Alabama, August 9-10 for discussions on storage reliability of electronic and composite materials.

IPO Hosts International Conference in Guatemala

The Office of International Programs was co-sponsor of a Mini-Conference on Issues Related to Small Industries Appropriate Technologies September 6-10 in Guatemala City. Sessions were held at the facilities of the other sponsor, the Central American Research Institute for Industry. The conference was the third in a series held annually under the auspices of the Agency for International Development. Participants were limited to representatives of Georgia Tech and its 11 developing-country counterpart institutions, representatives of five Central American countries, and invited resource persons from AID and other international organizations.

Representing Georgia Tech were Pres. Joseph Pettit, EES Director Don Grace, Ross Hammond, Nelson Wall, Don Lodge and Phil Potts. Dr. Grace was master of ceremonies at the luncheon where Dr. Pettit spoke on "The Role of U.S. Engineering Colleges in Economic Development." A series of small group discussions were prefaced by issues papers presented by several IPO staff members. Dr. Pettit also was master of ceremonies at a dinner hosted by Georgia Tech at the Guat-

emala Club.

An Equal Education and Employment **Opportunity Institution**

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Project Performance Improvement Committee

A committee has been established to help EES upgrade its systems and procedures for conducting research on a project-type basis. The committee has been asked to recommend changes which will help achieve and maintain superior performance in both the technical functions and the administrative management functions of project operations. In performing its work, the committee will be organized into two groups corresponding to the two functions.

The initial assignments to the committee are: Committee Chairman, W.C. Ward; Administrative Management Subcommittee;

W. C. Ward, Chairman

D. W. Allen

B. H. Atcheson

J. L. Eaves

R. A. Moore

W. N. Cox

Technical Performance Subcommittee;

J. M. Schuchardt, Chairman

N. P. Cotten

J. D. Echard

G. W. Ewell

J. W. Ralls

The work outlined for this committee is a follow-up of the recommendations of the policy committee on management procedures that resulted from the visit of the External Advisory Council last November.

This action is also in recognition of several other factors: the need of review for changes in procedures to adjust to our growth situation; the assignments of responsibility to many relatively inexperienced project directors and "middle" managers; and the growing evidence of technical and administrative project performance problems.

"Peachtree Roost" Formed

At the 2 August meeting in Washington of the Board of Directors, the Association of Old Crows approved the charter of the Peachtree Roost, thereby establishing a local club serving the Atlanta area. The Old Crows are professional engineers, program managers, scien-

tists and operational personnel from all segments of the Department of Defense, as well as corporations of all sizes engaged in the various segments of the electronic warfare industries.

The organization's name evolved from the World War II era when flights involved in the early history of electronic warfare were identified by the term "Raven." This was later changed to "Old Crow" and so naturally enough the members of the profession were identified as "Old Crows."

There are now 32 members of the Peachtree Roost who either became members for the first time or transferred membership. Most of the charter members are from EES.



Bette Jaffe enjoys the best wishes of her ASL friends at a recent birthday coffee.

Systems Engineering Div

Dave Wilkins and Frank Gramling attended the International Association of Geomagnetism and Aeronomy/International Association of Meterology and Atmospheric Physics Third General Scientific Assembly in Seattle, Washington, the week of August 22 through 26.

George Fletcher attended the IEEE Conference of Intersociety Energy Conservation at Washington, D.C., the week of August 29 through September 2. Fletcher presented a paper entitled "Environmental, Economic, and Conservation Aspects of Integrated Energy Systems." The paper was co-authored by N.B. Hilsen, G.R. Fletcher and David Wilkins of SED, Jeffrey Tiller of ASL and Dr. C.C. Lee of the Environmental Protection Agency in Cincinnati.

On August 2nd and 3rd, Bob Zimmer, George Fletcher and D.L. Kelly visited ERDA Headquarters in Washington, D.C. While they were in Washington, they presented the final technical briefing on "Wind Energy Systems Application to Regional Utilities Study."

Larry Holland was in Calvert City, Kentucky, on 5 August to visit the Pennwalt Corporation's Chlor-Caustic plant where chlorine and caustic soda are produced from brine by electrolysis with a 124,000 amp current. EES is developing control algorithms and computer software for automatic control of the anode positions in the electrolysis process.

IPO News

Nelson Wall will be part of an AID team that will evaluate the performance of Guatemala-based ICAITI (Central American Research Institute for Industry), an AID grantee, during the latter half of September. ICAITI provides technological support to Guatemala, Honduras, Costa Rica, Nicaragua, and El Salvador.

Phillip Potts will be in Guatemala, Nicaragua, and Costa Rica August 30-September 26 under the AID water pump project to conduct a field survey of project progress, interact with ICAITI (project subcontractor), ascertain the validity of data being collected and to resolve problems which may have arisen in project implementation.

Ross Hammond was in Costa Rica August 31-September 5 in connection with project development ac-

tivity.

Indonesian Independence Day was celebrated in grand style August 17 at IPO. The 18 Indonesian participants in IPO's training program for information specialists hosted a dazzling reception and exhibit of handicrafts, art and artifacts from their island nation in the conference room on the 14th floor of the C&S Bank Tower. The items were of such high esthetic quality and were so beautifully displayed that arrangements are being made for another showing, this time for the entire campus community, in the art gallery at the Student Center sometime after the middle of September. Watch for it!

S and T Lab — On the Move

The Antennas and Countermeasures Division, S&TL, has moved from the Electronics Research Building to the first floor of the Baker Building.

Teamwork was the keynote of another move by the S&TL Laboratory. Deborah Frye, secretary of the XM-08 Program Office and Pat Toomey, Receptionist of ERB, were faced with the task of moving to another apartment about a block from where they presently lived. At lunchtime, a group from the Program Office and Systems Development Division descended en masse upon the apartment in their own cars and vans, and proceeded to gather up the girls' worldly goods and deposit them at their new abode. Not only was the move completed at the end of the hour, but some plastic bags of garbage, meant to be discarded, ended up safely at the new home!

S. A. Alford, manager of the XM Program Office, has announced the appointment of John A. Cribbs as the Associate Manager of the XM Program Office.

Economic Development Division

Ed Bethea is project director for "Technology Utilization and Commercialization Center." The grant from the U.S. Office of Minority Business Enterprise is to run for 12 months. The objective is to identify market needs and marketable technology products that can be matched with resources at a regional or national level aimed toward supporting minority firms which may become the suppliers of goods and services.

Bob Cassell reports that the contract with U.S. Department of Defense, Office of Economic Adjustment, has recently been extended to include southern Indiana. This leadership training program is entitled "Community Organization for Economic Development Programs."

Doris Willmer, and Grant Curtis have begun work on the "Energy Conservation and Management Program" for St. Joseph's Hospital, Savannah, and Sam Howell Memorial Hospital, Cartersville.

Ed Flynt Retires



Ed Flynt retires after 29 years.

After over 29 years at Georgia Tech and EES, Edward R. Flynt of RAIL retired on the first of the month.

Ed, who has been a Principal Research Engineer working in radar systems, radar reflectivity and electronic instrumentation, came to Tech from the Alabama Power Company in May, 1948. He had graduated from Georgia Tech in 1939 where he also received his M.S. in EE in 1953. He served in the U.S. Army as a Signal Corps officer during WW II and is a retired reserve Lt. Col.

While at EES, Ed was supervisor of the electronics laboratory, head of the Radar Branch and became known as "Mr. Radar." He has authored some twenty-four reports and publications on radar and electronics research and development.

He claims he has no immediate post-retirement plans other than to tend his yard at 1475 N. Amanda Circle, NE, perhaps do some consulting and carry on with his main interest and hobby: electronics in his home lab and workshop.

Ed and his wife, Carolyn, have two daughters; Joyce, 21, a recent graduate of Furman, is now teaching, and Alice, 19, is a junior at Furman.

All of Ed's friends and colleagues at EES will miss him and join in wishing him and his family a satisfying and happy retirement.

RAIL

The Experimental Branch has three new people: Carol Kelley, who has transferred from R&P to work as a secretary in RAIL, David Odom, an ARS, from Columbia, SC, and Richard Harris, an ARS, from Atlanta. The Development Branch has added: Timothy Vining, an RS from Dalton, GA, and Jean Stone, a former student assistant, is now an ARS. The Software Development Branch has hired Chuck Batterman as an ARE. Chuck is from Austin, MN. Patricia Mathiasmeir is working as a Publications Specialist in the Technology Development Area Office. She was born in Munich, Germany, but is now a citizen of the U.S.

Nick Currie, Tom Divine, Ralph Hoover, Jim Metcalf, Tom Morton, and Jimmy Woody visited Eglin AFB on 30 August to brief the Air Force on the results of the Adverse Weather Range Development results.

Marion and Lucien Bomar had a new baby boy on 17 August. The baby weighed 10 lbs.,10 oz. The baby was not included in this year's NFL draft.

Jim Scheer traveled to Eglin AFB on 16 August for discussions on the millimeter snow backscatter measurements.

P.J. and **Bob Trebits** have a new baby girl named Elana who arrived on 16 August.

Nick Currie and Darenda Rakestraw were married on 13 August and returned from their honeymoon on 20 August. They moved into their new house with their daughter Paige, two cats, and eight fish.

Bill Parks left RAIL in August. Bill has enrolled in law school starting in the fall. Fellow employees treated Bill to a lunch prior to his leaving.

EES Services

Betty Yarborough attended the 25th College Business Management Institute in Lexington, Kentucky, July 31-August 5.

Turn off electric equipment not in use