

STATION NEWS

ENGINEERING EXPERIMENT STATION • GEORGIA TECH



VOLUME 1 NUMBER 2

NOVEMBER, 1972

THE EES ON DALNEY STREET

The "New" Engineering Experiment Station building on Dalney Street, in the northwest corner of the Tech campus, is the nerve center of the EES. In addition to the Director's offices, the Office of Program Development and the Industrial Development Division, it houses the offices of the Assistant Director for Applied Sciences and elements of the Physical Sciences Division.

Two years in construction, it was completed July 1969, and has been fully occupied since July, 1972, when the IDD moved into the third floor. It was designed by Toombs, Amisano and Wells and constructed by J. A. Jones Construction Company at a cost of \$2,184,000. There are 250 rooms, offices and labs dividing up 59,430 square feet of space — all of which is being constantly tended by the cleaning crew of **Mattie Smith**, **Willie Glenn** and **Henry Love**.

Some additional unique facts and figures about the building are: the 8-foot wide halls, the three flights of 7-foot wide stairs and the one blower for the entire heating and air-conditioning system. Also an 18-foot, seven year old philodendron; 260 doors; the largest elevator in the city; an elaborate clean room facility; a 2½ ton magnet; and an open-heart surgery laboratory. From **Chart Bonham's** philodendron which covers one entire wall, to the brightly painted halls, to the many graphics added by IDD, the building is not the stereotyped engineering facility.

The single large elevator was designed to lift equipment to a third floor magnetics laboratory, but the lab was installed in the basement.

The object of many joking comments, the elevator measures 10 x 12 feet with an 80,000 pound lift capacity. Many employees have voiced a design for the spacious lift — a lounge with food and drink machines, a moving office, or one of the best ideas yet, has been to install a bulletin board for jokes, notices, and complaints to entertain the passengers while the big box makes its way slowly up and down the three floors.

Including administrative and service group offices as well as division offices, there are approximately 125 people working in the building, according to **Tom Jones** who serves as building manager.

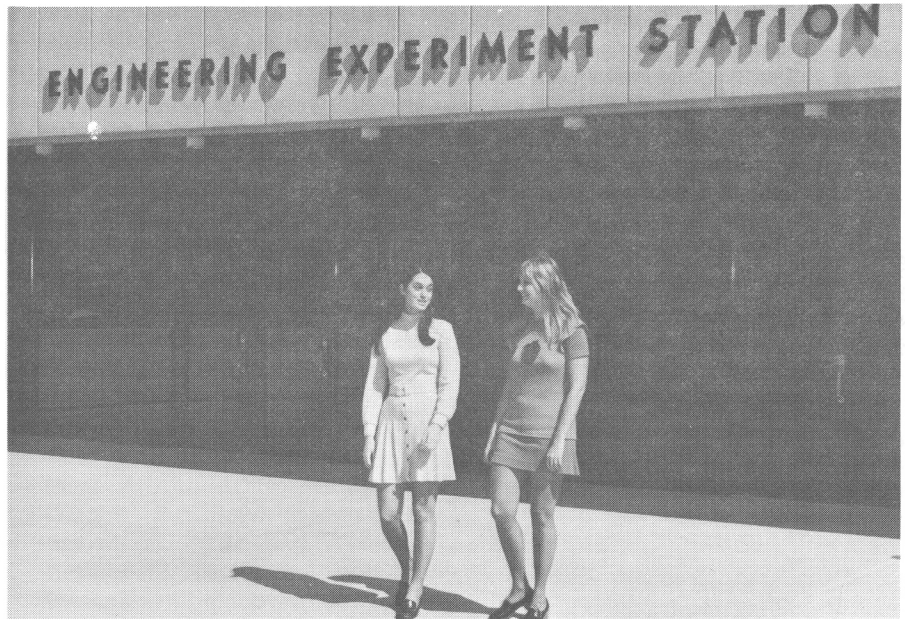
Until recently, the lobby contained

2,000 square feet of unused space. At a cost of \$30 per square foot, it was a \$60,000 open space. Now housed in the lobby are two offices: Supply Services and Jones' office which includes **Maggi** at the reception desk.

To detail the many research activities in the building is a voluminous task. Typical projects underway are development and improvement of surgical techniques, including open-heart surgery performed on animals, and Micro-electronic work conducted in the clean room, the largest in the South. These labs are constructed with horizontal and vertical laminar airflow and are Class 100 facilities.

A project involving diatoms, a form of algae and "indicators" of pollution in water is being carried out under the direction of **C. O. Pollard** and **Dr. R. A. Young** is continuing his ef-

Continued on next page



Eleanor Hancock and Ruth Bodnar leaving the New EES Building.

DIRECTOR'S OBSERVATIONS

The Title Structure

Our professional title structure was developed through experience with client-oriented contract research and it was approved in 1965 by the Board of Regents. The levels are **Assistant Research Scientist, Research Scientist, Senior Research Scientist, and Principal Research Scientist**. For brevity the word **Scientist** is used herein to indicate either **Engineer or Scientist**.

The title structure is patterned after national usage because EES depends on contracts obtained through competitive bids. Promotions for movement from one level to the next depend strongly on demonstrated competence in research and development, contract development, and program management. Promotion guidelines for the EES follow:

Assistant Research Scientist

1. Title normally used by beginning researchers who hold Baccalaureate degrees and who will be performing on a professional level.
2. May also be used in exceptional circumstances for non-degree personnel who, by virtue of their talents and experience, have demonstrated performance on a professional level.

Assistant Research Scientist to Research Scientist

1. A minimum of 4 years' experience or 3 years' experience and a Master's degree; for promotion to this title, at least 2 of these years must be at Georgia Tech.
2. Should be capable of being a project director of outside sponsored research or of making original and independent contributions to research efforts.
3. Has demonstrated potential in chosen profession as evaluated by immediate supervisor.

The Research Scientist level is used for a relatively inexperienced EES researcher who holds a doctorate.

Research Scientist to Senior Research Scientist

1. Minimum time in grade before being considered is 3 years, at least 2 of them at Georgia Tech; however, typically it takes 5 or more years in grade to demonstrate capabilities for promotion to Senior Research Scientist.
2. Superior performance of professional duties required, as demonstrated through (a) supervision of others' work by virtue of being a project director on sponsored research, or (b) having made distinguished technological contributions to several projects over a period of time, or (c) having shown a mastery of a complex and difficult field of spe-

cialization, or (d) having shown broad technical competence and having made substantial contributions in program development and supervision.

3. Normally will have been a principal author of several reports and papers. While emphasis should be given to papers which have been refereed, recognition must also be given to contributions to trade type journals and certain types of reports which often effect an excellent transfer of information in the area of application-oriented problems.

Senior Research Scientist to Principal Research Scientist

1. Minimum time in grade before being considered is 3 years, at least 2 of them at Georgia Tech; however, typically it takes 5 or more years in grade to demonstrate outstanding capabilities for promotion to Principal Research Scientist.
2. Must have demonstrated outstanding capabilities and must have made sustained contributions in some phase of research activities, such as (a) professional and/or scholarly accomplishments (e.g., national recognition in chosen field), (b) program development and supervision, or (c) technical administration.
3. Outstanding service to the Engineering Experiment Station through leadership in state or national projects and public relations.
4. At least three letters of recommendation should be obtained from qualified persons who are not employed by the Georgia Institute of Technology.

The sequence of steps for promotion is:

1. During December of each year Division Chiefs and other supervisors review personnel performance and prepare detailed recommendations that are forwarded through channels to the Director. There are generally divisional and/or departmental committee reviews before the recommendations are completed. Usually the Director must receive the recommendations by January 15.
2. The Director reviews these recommendations for completeness and forwards the papers to a committee for analysis and evaluation. The committee is formed to be representative of a number of research groups in order to provide Station-wide perspective.
3. The Director reviews all recommendations and this review generally involves several meetings with the Promotion Committee. Papers approved by the Director are forwarded by February 15 through channels to the President of Georgia Tech.
4. Recommendations approved by the President are forwarded for review at the University System level and final approval by the Board of Regents. Decisions regarding promotions are announced after the April meeting of the Board of Regents.

PHOTOGRAPHERS

The STATION NEWS can use candid photos of people and Station activities. Send us your prints. You will get a credit if your photo is used.

New EES Building continued efforts in research involving appetites and properties of human hard tissues.

The building is still new and continues to receive modifications and new tenants. Improvement in appearance outside and inside is a constant effort. There is a comprehensive landscaping plan and the New EES building promises to be one of the most productive and attractive buildings in the area.

EES PHOTO CONTEST

Submit entries by **15 December**. See **October issue Station News** for details.

EES to Join Chambers

In October the EES applied for membership in both the Atlanta and Georgia Chamber of Commerce with the intention of becoming more directly involved in civic affairs and activities related to development of science and industry in Georgia.

UNITED WAY REPORT. As of October 13, EES had a 28.7 percent participation and had given \$3,588.00.

IDDerS are learning that life in the EES Building has its ups and downs. For instance, who keeps making personal calls on the elevator phone? And whatever happened to the rusty bucket cigarette "urn" in the elevator?

The Deputy Regional Director of SBA, J. D. Sewell, recently notified Nelson Wall, International Development Branch - IDD, that he had been re-appointed to serve another two-year term on the SBA Georgia Advisory Council.

STATION NEWS

Vol. 1 No. 2 Nov. 1972
Published monthly for employees of the Engineering Experiment Station, Georgia Institute of Technology, Atlanta, Georgia 30332.

J. A. Donovan, Editor	3405
Johnnie Burt, Asst. Editor	3445
John Cuevas, Art Editor	3856
Ruth Bodnar, Asst. Art Editor	3856
Betty Yarborough, Assoc. Ed.	3445
Chart Bonham, III, Assoc. Ed.	3475
Betty Jaffe, Assoc. Ed.	3430
Ann Lewis, Assoc. Ed.	3516
M. A. Deadmore, Assoc. Ed.	3873
J. E. Garrett, Reproduction	3570

DEPARTMENT NEWS

J. L. Hubbard, PSD, has been elected Chairman-Elect of the Southeastern Electron Microscopy Society.

A scanning electron micrograph by **J. L. Brown**, PSD, will be shown at the Field Museum of Natural History at Chicago in their upcoming "Below Man's Vision" exhibit.

Ms. Mary Edna Anders, Head, Basic Data, IDD, was principal speaker at a luncheon hosted by Eastman Kodak Co. during National Microfilm Week, September 29.

Dr. Bob Ingols received the Award of Merit from the American Chemical Society in New York in recognition of service in water, air and waste chemistry.

The Bulletin of the American Association of Petroleum Geologists, has published an article on *Shaler's Line and Suwanee Strait* by **John Husted**.

J. L. Brown presented a paper at the 30th Annual Meeting of the Electron Microscopy Society of America at Los Angeles, August 14-18.

LETTERS TO THE EDITOR will be welcome by the *Station News*. Anonymous letters will be accepted as well as signed comments. Send your comments to Editor, Station News, EES Building by the 15th of the month.

Staff openings are available with the IDD Industrial Extension Service at Atlanta, Macon and Rome. Interested EES staff members should contact Ben James, X 3830.

B. R. Livesay attended National Conference on Crystal Growth, Princeton, N. J., July-August.

R. K. Hart attended 30th Annual Meeting of the Electron Microscopy Society of America and presented a paper, Los Angeles, Calif., August.

R. A. Young visited Laboratories in Tokyo (23-25 August) and Osaka, Japan; lectured at Japanese Ceramic Society in Tokyo, August-September in Kyoto, Japan.

P. E. Mackie attended 21st Annual X-Ray Analysis Conference, Denver, Colorado, August.

K. Sudarsanan returned 15 August from vacation in Trivandrum, India (first visit home in six years).



Betty Yarborough tending plants in her Reports and Procedures Office

GREENING OF EES

EES looks a little greener thanks to the plan masterminded by Tom Jones to give all the ladies of the Station potted plants as a token of appreciation for their efforts, loyalty and good looks. Thanks girls!

STRIKE! Knocking them down in a Tucker bowling league, Gordon Harrison recently had a 620 series.

Harold Bassett, S&T Dept., has returned to France with **J. D. Walton** and **Steve Bomar**, of HTMD, to complete tests at the French Solar Furnace in Odeillo. Mr. Bassett assembled microwave test equipment to determine the RF transmission properties of materials at very high temperatures. Mr. Walton and Dr. Bomar set up the necessary test equipment to determine the thermal properties of the materials.

Bill Spann, Spec. Tech. Div., attended the 8th International Symposium on Remote Sensing of Environment in Ann Arbor, Michigan, 2-6 October. Purpose of the Symposium was to discuss progress made in the field of remote sensing and, results from the Earth Resources Technology Satellite.

Bob Cassell, **Ila Benson**, **Ross Hammond** and **Jerry Lewis** attended the Annual Conference of the Southern Industrial Development Council (SIDC) in Corpus Christi, Texas, October 15-17. Bob, a former president of SIDC, and Ila perform the executive office functions for the organization, while Jerry edits the *SIDC News*. At the conference, Ross was elected director for Georgia, and three IDD reports won awards in the literature competition. The membership presented Bob with a color TV in thanks for his dedicated services to SIDC. Next year, the conference will be held in Atlanta.

Gaston Parets of IDD's International Development Branch has returned from a four-month leave of absence, during which time he participated in a research project in Indonesia. He was one of a five-man team sent there by the East-West Center in Honolulu, Hawaii, to participate in the planning and organization of an adaptive technology center.

Debbie Brown signed on as secretary for the Special Projects Branch in September.

Products Not Made in Georgia, a survey of 37 product groups which deserve further investigation as manufacturing possibilities for Georgia, is the latest major report published by IDD. **May Collins** is the author.

FOR YOUR INFORMATION

The State's contribution into the Georgia State Teacher's Retirement Fund is now 7.7% for each qualified individual.

The various group insurance programs available to all EES employees are now optional for individuals.

When new employees accept positions at EES they should do so in writing so that the Personnel Office will forward the packet of Georgia Tech orientation, parking, insurance and related administration information to the individual — and will set up his pay record.

Also confirmation of employment by EES to the new employee should be in writing with a copy to EES office of Reports and Procedures.

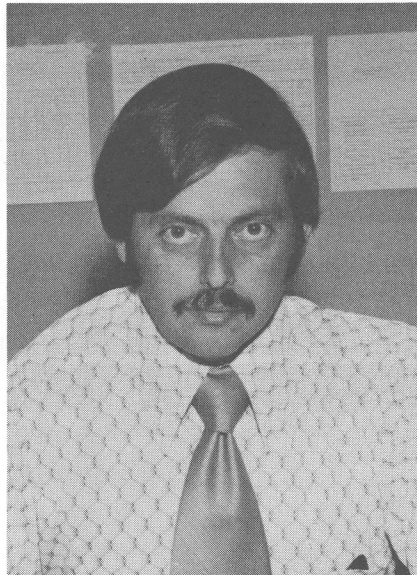
FRINGE BENEFITS

Working at EES includes a variety of fringe benefits which have evolved over the years as a result of affiliation with Georgia Tech and the Georgia State University System as well as progressive administration policies.

Your **Station News** plans to review, amplify and explain these benefits in coming months. Herewith is a comprehensive listing of the varied benefits of employment at EES:

Vacations — Holidays — Sick leave — Military leave — Life insurance options — Death benefits — Health insurance options — Dental insurance options — Long-term salary continuation options — Available tax sheltered annuities — Retirement — Graduate education opportunities — Opportunity to audit courses — Use of athletic facilities — Use of library — Use of student center — Use of bookstore — Discounts at some local retailers — Campus entertainment — Campus seminars/lectures — Football ticket discounts — Parking privileges — Use of some laboratories — Status of working at EES/Ga. Tech — Additional benefits will be identified and added to this list.

PERSONALITY



Bob Shackelford of Spec Tech

The man behind the graying mustache likes people. And it shows.

When his co-workers are asked to name one of the most outstanding attributes of **Bob Shackelford** they often first comment on his seemingly endless capacity to listen to not only their complaints but to their joys and adventures (or misadventures as is sometimes the case).

Bob, Associate Chief of Special Techniques and senior research scientist, has been with the Station 13 years. Now working on a PhD in Physics, he received his BSEE, Master's in EE and Master's in Physics from Tech. His major scientific interest is optical research, a relatively new field. One of his chief goals, Bob says, is to establish a facility for advanced optical research making EES one of the best in the country in that area. He is active in projects involving techniques in instrumentation in lasers and optical processing of data. Other than his research activities, Bob's time is spent assisting Special Technique's Chief, J. W. Dees, in developing contract potentials, writing and reviewing proposals (which Bob admits to sometimes be fun), and handling other administrative duties of the active department.

"One of the main changes I've seen in the Station in my years here is a great diversification," Bob observed. "Small groups having one or two contracts when I first came to EES now

have grown into divisions with a dozen or more contracts and a wide range of sponsors. The Station is now involved in a much broader spectrum of research."

If you want to find Bob around the noon hour, look on the nearest tennis court. He also enjoys other outdoor sports, especially hunting and fishing. Bob and his wife Judy have two daughters, 10-year-old Terri and six-year-old Christy. The Shackelfords are in the process of building a new home outside the city.

Johnnie Burt

NEW FIELD SITE

TEST SITE ACQUIRED FOR EES

On September 28 the Georgia Tech Research Institute completed the purchase of a 28.71 acre remote test site for EES use. The site is located in Cobb County, at the end of West Sandtown Road, just south of Macland Road, and lies approximately 16 miles from the Tech campus. It will be used primarily by the Systems and Techniques Department for contract research in radio direction finding and propagation studies.

This acquisition marked the end of several years of searching for a suitable location, free of electromagnetic interference. Various sites have been leased in the past; unfortunately an EES mobile van was recently burglarized at the current site, near Stone Mountain.

Hank Jenkins and **Richard Moss** of the Communications Division spearheaded the search for the site and **Milton Bennett** handled the arrangements for purchase by GTRI.

EES XMAS PARTY

The EES Christmas Party is tentatively scheduled for Friday afternoon, December 22, in the New EES auditorium on the third floor. Detailed plans will be announced.