

Open House

J. T. Kent, associate professor in the Department of Mathematics, talks with Frankie Lollar, Squadron 11 freshman, during the open house held for faculty members by the First and Second Wings last Friday night.

Three New Employees Added To Oceanography Department

Several new employees have joined the staff of the Department of Oceanography and Meteorology. They include John Antoine, Jesse Eckelcamp and Dr. Yasushi Kitano.

Mr. Antoine joined the staff of Project 24 research project sponsored by the Office of Naval Research) as a research scientist. He comes to A&M from Lamont Geological Observatory where he worked for five years on Marine Seismic programs (primarily in seismic refraction).

Mr. Eckelcamp is a research engineer and is working on the electronic analog computer now being designed for the U. S. Army Signal Corps, under the direction of Dr. William H. Clayton, research scientist, Department of Oceanography and Meteorology. He is a native of Willacy County, Texas. His undergraduate work was done

at Pan American College in Edinburg, Texas and at the University of Texas. He received his B.S. in electrical engineering in 1956 from the University of Texas. Graduate studies have been at Southern Methodist University.

Dr. Kitano has joined Dr. Donald W. Hood's staff in chemical oceanography as research scientist. He will work in the field of organochemistry, doing research in biogeochemistry on the Robert A. Welch Foundation grant, and will also do some postdoctorate studies. He received his B.S. degree at Hokkaido University in 1947 and was granted his Ph.D. from the same university in 1956, while a staff member in the Department of Chemistry. He then did research and taught in the Department of Chemistry of Kobe University.

A&M Prof's Invention Controls Environment

Mark Twain used to say that everyone discussed but did nothing about the weather. A&M, however, has a teacher-researcher who is doing something about the weather, even if it's on a small scale.

He is Dr. Morris Bloodworth, associate professor in the Department of Agronomy and the inventor of a weird looking arrangement of electrical measuring devices, fans, lights, a big glassed-in chamber and other paraphernalia collectively known as a Controlled Environment System.

Environmental Control
Just as the name implies, the system gives complete environmental control to enable Bloodworth to study a certain condition or conditions of either plant growth or soil physical properties.

All the usual climatic variables can be reproduced in the chamber. These are sunlight, day length, temperature, humidity and wind. Underneath the chamber, soil conditions also can be controlled, such as moisture, temperature, aeration and texture.

All these variables cannot be handled in a greenhouse and Dr. Bloodworth believes that his Controlled Environment System is the only setup of its kind in existence, which gives control both above and below ground.

Why go to all this trouble? Why not simply study plants and soils out in the open under natural conditions?

This is being done, of course, and valuable information is learned. But too often, a rain, dry

spell or some other weather quirk comes along and then hard-earned data go askew. The answer, then, is for man to corral weather and soil and make them do his bidding, such as the Bloodworth system provides.

Simulates Texas
One of the unique features of the Controlled Environment System is that it can simulate soil and atmospheric conditions anywhere in Texas.

"This chamber can reproduce climate and soil conditions found on the High Plains, for example. And then 15 minutes later, we can put you down on the Gulf Coast

or in East Texas," Bloodworth said.

Typical Projects
A typical project is the study of water use in cotton, Texas' main cash crop. In a case like this, such variables as wind, day length and light intensity are kept constant, preventing them from affecting data obtained. The only factors allowed to vary are water and air humidity, since these are the items under study.

Another example is the study of soil temperature. Again, variables are kept constant in order that temperature results will show up unscathed.

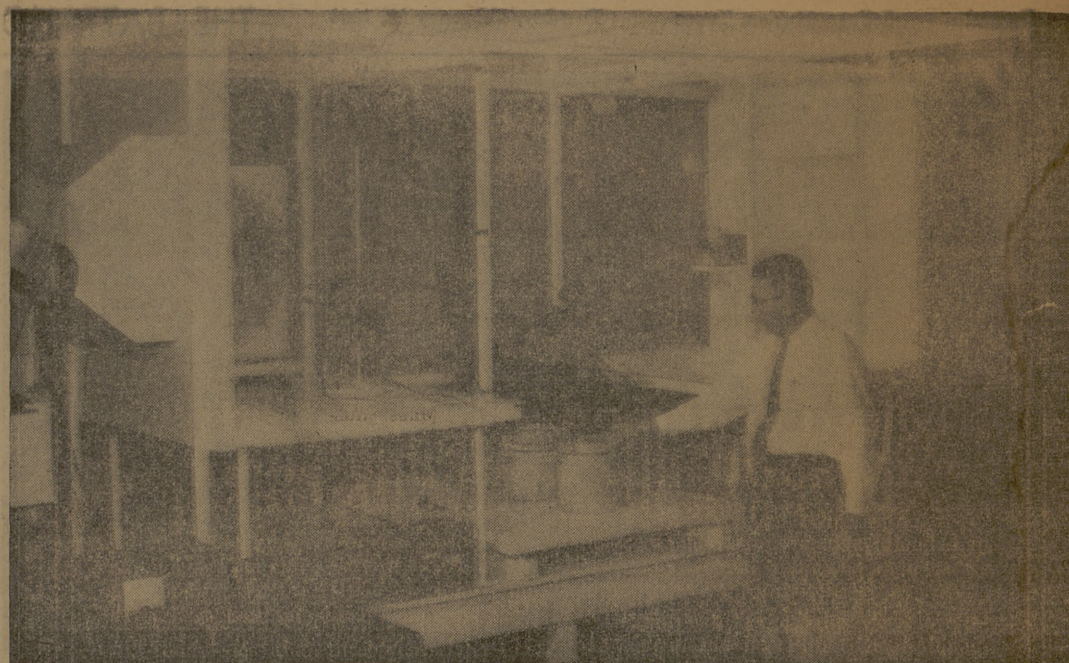
Field Research
Field research workers, harried by fickle weather and soil conditions, often call on Bloodworth and his Controlled Environment System for help in determining what certain crop plants or soils will do under a given set of conditions.

Summing up, the Controlled Environment System allows plants to become accurate indicators of their surroundings.

The chamber itself is an airtight, box affair four feet by four feet by 10 feet. Sides and top are plexiglass. At one end is an adjustable louvered opening through which various atmospheric conditions are simulated. These include cooler and dehumidifier, heat exchanger, humidifier and a blower fan. The fan can produce a gentle breeze on up to gale forces that can strip plants of their leaves.

"Sunlight" is provided by a battery of 64 fluorescent tubes, each eight feet long. The light intensity can be varied from that of darkly cloudy days to a sunny brilliance that irritates the eyes.

Although Bloodworth is primarily a research scientist, he teaches two agronomy courses. His Controlled Environment System was used as a thesis subject to obtain his doctorate degree.



Climate Control Chamber

Dr. Morris Bloodworth, associate professor in the A&M Department of Agronomy, places cotton plants in his Controlled Environment System, which he designed and built. A plexiglass enclosed chamber gives control of such weather variables as sun, day length, temperature, humidity and wind. Control of soil conditions—moisture, tem-

perature, aeration and texture—also are possible. Purpose of the system is to study plant growth and soil under a given set of conditions without interference from weather. Dr. Bloodworth says the setup is the only one of its kind in existence which provides controls of all these variables.

E. E. Burns Presents Talk At Conference

If everybody in the world sat down at one dinner table, with the diners sitting opposite each other and allowing 1 foot of space per person, the table would reach around the earth about 21 times at the Equator.

Dr. E. E. Burns, associate professor in the Department of Horticulture, presented this comparison to illustrate his talk on the future of food technology during a technical conference of the Texas Section of the Institute of Food Technologists held here Feb. 19-20.

He said the world's population is increasing so fast that it would require enough leaves to extend this table approximately 26 miles per day.

Providing food for the galloping rise in world population will become a problem, one which could drop in the laps of food technologists, he said.

Burns deplored the fact that the nation is producing only about 300 food technology graduates a year to serve the \$87 billion per year food industry in the United States. A mere dozen colleges and universities in this country are offering training in the new field and A&M is one of them.

Food technology is the application of science and engineering to production, processing, packaging, distribution, preparation and utilization of foods. Burns, who also is counselor of the Institute's Texas Section, said the science is an excellent bridge between agriculture and industry.

Students, Profs Attend Convention

Four students, majoring in dairy manufacturing, along with Dr. A. V. Moore, professor in the Department of Dairy Science, will attend the annual convention of the Dairy Products Institute of Texas in Dallas from Feb. 28 until March 1.

The students to attend the institute are James W. Bennett, Joel A. Gambrell, Jim C. Hagler, and Alvin L. Novosad.

Theme of the institute is "The Challenge of the Sixties."

This is mainly a meeting of commercial milk, ice cream, and cheese producers of the state. Annually they discuss various business conditions and study the outlook and general business trends of the dairy industry.

Fuzak To Address Teacher's Meeting

Dr. John A. Fuzak, chairman, Department of Industrial Arts, Michigan State University, will deliver a major address Friday at 7:30 p.m. in the MSC ballroom. Dr. Fuzak will address the Industrial Teacher Conference at A&M Feb. 26-27.

Watermelons were cultivated in the Nile Valley in Egypt thousands of years ago.

Navy Is Training Submarine Men

By The Associated Press
WASHINGTON—The Navy has about 4,000 men in training to man the nuclear submarines it is building or has ordered.

This is only the beginning of a training program expansion to meet the manpower demands arising out of the rapid upbuilding of the undersea service, including the new Polaris missile fleet, officials said today.

They are unable to predict now how many men and officers for A-powered submarines may be needed in the next half dozen years.

However, top Navy officials currently talk of an eventual fleet of 40 or more Polaris subs. In addition to these Fleet Ballistic Missile FBM submarines, the Navy will continue the steady replace-

ment of its conventionally powered, World War II design submarines with nuclear-driven submarines designed for the dual purpose of attack and anti submarine work.

These combined programs—the FBM's and the attack submarines—apparently could mean that between 15,000 and 20,000 officers and enlisted men might have to be trained for the highly specialized handling of atomic-powered submarines in the next five or six years.

The vastly increased technology demanded for nuclear submarines correspondingly complex. On the other hand, a substantial portion of those to be trained for A-sub duty will have had conventional submarine experience.

The population of The Netherlands is about 10 million persons

WESTINGHOUSE
REVOLVING AGITATOR LAUNDROMAT

- WASHES CLEANER
- RINSES BETTER
- CLEANS ITSELF

Terms: \$10.00 Down
\$10.00 Per Month

KRAFT FURNITURE CO.
Downtown Bryan

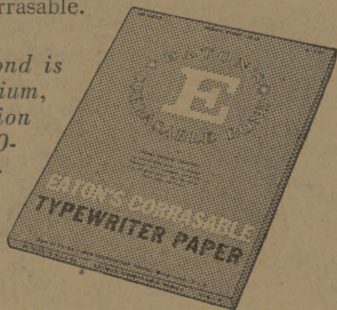


No telltale traces...

EATON'S CORRASABLE BOND Typewriter Paper

It's easy to flick off your mistakes on Eaton's Corrasable Bond. Make a pass with a pencil eraser and typing errors are gone—like magic—no error evidence left. Corrasable has an exceptional surface—erases without a trace. Once does it—there's no need to retype. Saves time; money, too. The perfect paper for perfection—erasable Corrasable.

Eaton's Corrasable Bond is available in light, medium, heavy weights and onion skin. In convenient 100-sheet packets and 500-sheet ream boxes. A Berkshire Typewriter Paper, backed by the famous Eaton name.



EATON'S CORRASABLE BOND
Made only by Eaton

EATON PAPER CORPORATION PITTSFIELD, MASSACHUSETTS

Purchase Your
EATON'S CORRASABLE BOND
Typewriter Paper

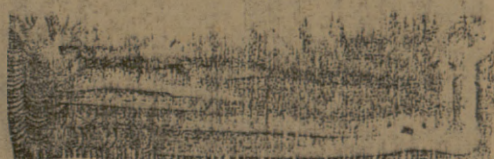
from

The Exchange Store
"Serving Texas Aggies"

BODIES IN MOTION 219-220
Advanced Pursuit of Females
Professor Stalk

Time & Motion Study. Study of time required to set dates in motion, (1) with ordinary hair tonics, (2) with 'Vaseline' Hair Tonic. Conclusive proof that latter more effective on men's hair and women's reactions. Special emphasis on common use of water on hair. Evaporation of same with dire consequences noted. Proof that 'Vaseline' Hair Tonic does not evaporate but replaces oil that water removes. Laboratory specimen: H. Ragmop, before and after 'Vaseline' Hair Tonic. Before, a walking hayloft. After, B.M.O.C. This course specially suited to Bachelors of Science, Bachelors of Art, and just plain bachelors.

Materials: one 4 oz. bottle 'Vaseline' Hair Tonic (full)
one little black book (empty)



it's clear,
it's clean,
it's
Vaseline®
HAIR TONIC

'Vaseline' is a registered trademark of Chesebrough-Pond's Inc.

Your Vaseline Hair Tonic May Be Purchased At

Ellison

**AGGIELAND
MAIN
RIDGECREST
HOSPITAL**

Pharmacy



A CAMPUS-TO-CAREER CASE HISTORY

"The telephone company really helps you grow with your job"

John T. Bell majored in History and Economics at the University of Georgia. On graduating in June, 1957, he joined the Southern Bell Telephone Company.

Today—less than three years later—he is a Public Office Manager for the company at Orlando, Florida. His office serves 50,000 telephone accounts and handles more than a million dollars' worth of revenue every month.

John says: "I chose a telephone career over a number of others because I was impressed by the company's Management Training Program and the opportunities offered for rapid advancement. It was the best decision I ever made."

John got his initial training at Jacksonville and Daytona Beach, where rotational assignments familiarized him with overall company operations. Then he transferred to Orlando, where he trained as a

business office representative, attended an instructor's school, and then taught classes himself for several months.

Dealing with people—his "first love"—is John's main job as Public Office Manager. Besides handling personnel and other administrative duties in his office, he makes many customer contacts in and out of the office. "I'm kept busy giving talks about the company at meetings of business and civic groups," he says. "Also, I work closely with leading citizens on various civic projects. It's mighty satisfying, and I feel it's making a better manager of me. The telephone company really helps you grow with your job."

Why not look into career opportunities for you in the Bell Telephone Companies? See the Bell interviewer when he visits your campus—and read the Bell Telephone booklet filed in your Placement Office.



At left, John Bell explains a telephone training device to Mrs. Carolyn Dent of the Orlando office. At right, he and banker William Dial discuss the local United Fund Drive, in which both were active.

BELL TELEPHONE COMPANIES

