

A&M Scientists To Reveal Complex Ocean Secrets

Texas A&M scientists will soon be using automation to electronically tabulate and reveal some of the ocean's most complex secrets.

Starting in September, investigators in the school's Department of Oceanography and Meteorology will begin a project known as "Environmental Studies Off Panama City, Florida."

That title is simple enough, but behind it is the goal of determining just what goes on in sea water and in the air immediately above.

More specifically, the study is an attempt to analyze the natural influences that affect the physical features of sea water, such as temperature, salinity, wave action, currents and internal waves.

Making these measurements is nothing new. It has been going on among oceanographers for some time, but progress has been hindered by slow, tedious manual procedures.

This is where automation comes in on the Panama City project. The entire operation, from data gathering to data processing, will be automated. Scientists won't do any of the actual measuring or computations. They'll just check the equipment now and then to see that no electronic fibs are being served up.

A&M's Oceanography Department will carry out the research under contract with the Office of Naval Research. Data will be gathered on an off-shore platform in the Panama City area.

Several hundred of these platforms can be found on coastal waters of the southern states. Nearly all the structures were built for oil exploration or production. But two were built off Panama City by the U. S. Navy Mine Defense Laboratory for underwater acoustics work. The Navy calls them Stage 1 and Stage 2.

The platform available for A&M's project is Stage 1, which is about 11 nautical miles offshore in 100 feet of water. Principal investigator is Roy Gaul, research scientist. Dr. Dale Leipper, head of the A&M Oceanography and Meteorology Department, is project supervisor. Other personnel include Mr. and Mrs. Dean Letzring, field scientist and assistant, respectively; A. D. Kirkan Jr., research scientist; and Charles Hodges, boat captain.

Gaul says this will be the first time that this type of study will be completely automated. More important, however, is the fact that the electronic equipment will allow the researchers to collect and analyze in one year the equivalent of several years of data obtained by the usual shipborne techniques. Considerable advantage is to be realized in this research by the ability to observe the natural environment for long periods of time at a fixed position.

He said the plan is to obtain water temperatures at five levels, water velocity and direction at three levels, and to measure waves. Above the water, measurements will be air temperature at three levels, wind velocity at two levels, and barometric pressure.

All this will be recorded automatically on the stage. There won't be a soul around. The only noises will be the gurgle of water at the base of the platform, as the electronic apparatus goes silently about its business. After the measurements are recorded by the equipment on the stage, the information is then automatically radioed across the 11 miles of water to shore station. The information is received by radio and then recorded automatically on magnetic tape.

The field party, permanently assigned at Panama City, will be on hand at the shore station to check the equipment once a day and make any needed adjustment. The tapes will be sent back to A&M, there to be thoroughly analyzed under the direction of the scientific staff in the school's new Data Processing Center.

"To do all this without electronic equipment would require tremendous amounts of manpower," Gaul said.

On the shore of the Lake at Pleasant Acres Boy Scout Troop 802 held a Court of Honor and Parents' Night recently, with Senior Patrol Leader David Maddox as M.C.

Fred Maddox received his Life Scout award and Bill Loveless attained First Class. Sixty-three merit badges were awarded to Carl Gough, David Holmgreen, David Maddox, Jim Amyx, John Perry, Ravid Riedel, Fred Maddox, and Bill Loveless. Many of these awards were earned by the boys at Camp Strake and El Rancho Cima in the preceding weeks.

Buzz Loveless answered questions concerning the 1600 mile bicycle trip he and David Gay made from Washington, D.C. to Bryan this summer. They rode 12 to 16 hours a day covering from 50 to 100 miles many days and wore out three tires and one bicycle chain. They camped out most nights and found people very helpful and interested in the trip all along the way.

Scoutmaster Sid Loveless gave a report on the activities of the Troop at Camp Strake and Assistant Scoutmaster Amyx explained the program followed by the group of older scouts who attended El Rancho Cima.

Camping each Monday at Pleasant Acres will be resumed next August 7 and a Scout Swimming Meet will be held in Sue Haswell Park on August 14th.

Tom Cartwright, Carl Gough, David Holmgreen, Tommy Hannigan and John Perry received the Director of Civil Defense Marksmanship Medals and Mark Riedel, David Riedel, John Perry and David Holmgreen also received their National Rifle Association Marksmanship Certificates.

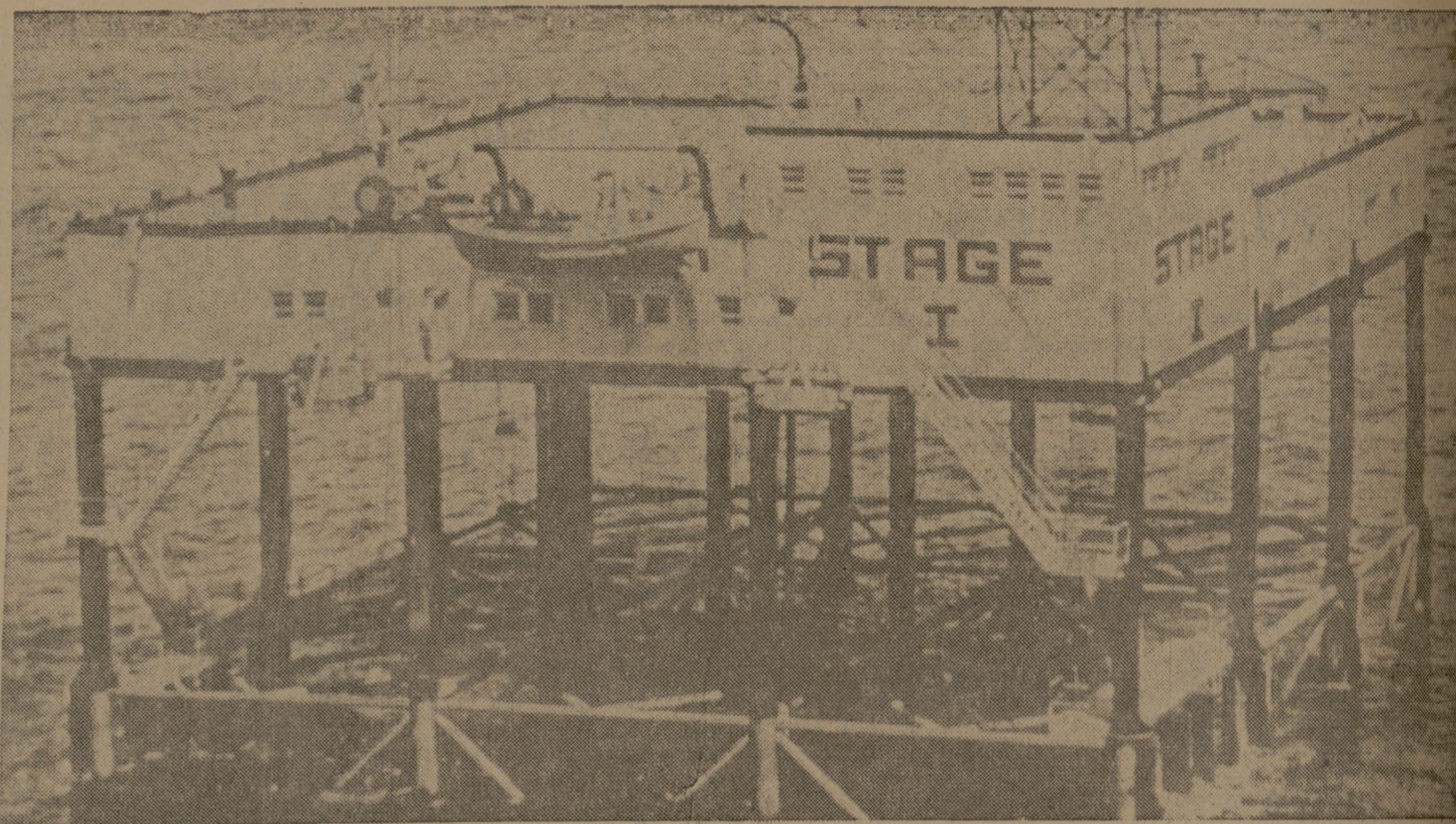
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Ocean Platform

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Ph. D. Language Examination Examinations for meeting the foreign language requirement for the Ph. D. degree will be given Wednesday, August 23, at 1:30 p. m. in Room 129, Academic Building. Students wishing to take this examination should leave the material over which they wish to be examined with the Secretary in the Department of Modern Languages not later than 5:00 p. m. Monday, August 21. J. J. Woolket, Head, Department of Modern Languages. 129t3

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