

Research Review

New Radio Telescope Used In Observing Energy of Sun

By CLAUDIA LEVY

Bursts of energy from the surface of the sun, generally identified with sun-spot regions, are being observed by researchers via the University's new radio telescope.

Information from the active areas of the sun is being related to activity on earth, John P. Hagen, professor of radio astronomy and director of telescope research, said. Hagen, a former National Aeronautics and Space Administration associate director, said that the telescope uses radio waves in the same manner an optic telescope uses light rays.

"ACTUALLY WE 'hear' signals from the sun more than we see them."

The radio astronomy program is now a part of the Ionosphere Research Laboratory in the Department of Electrical Engineering. The first objective of the pro-

gram will be to relate solar activity with changes in the ionosphere the transition zone between the earth's atmosphere and space and the governor of all long-range communications, Hagen said.

He defined solar astronomy, a large part of the research, as that branch of astronomy that deals with observing the sun and interpreting the outer envelope of the sun through analysis. This study gives insight into the nature of the interior of the sun and the search for the processes of energy from within the sun.

In the central regions of the sun, energy change is made by conversion of matter to energy, as in a nuclear reactor, he explained. On earth the conversion is one of fusion similar to energy created in a hydrogen bomb. The sun creates tremendous heat by connecting hydrogen to heavier elements, Hagen said. All these solar

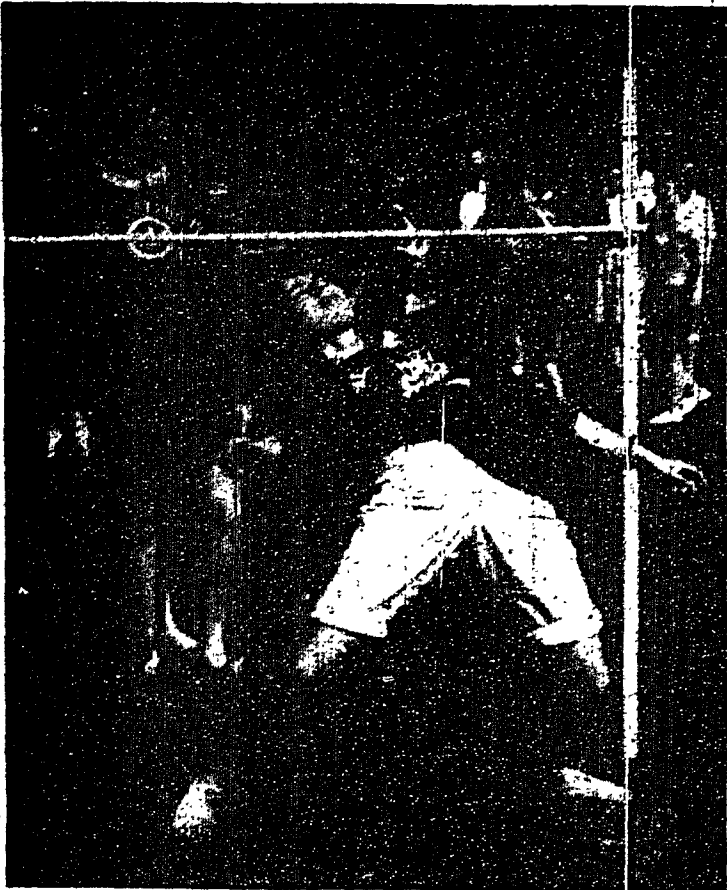
phenomena will be studied as they affect the path of signals passing through the ionosphere and as the signals reach the earth.

Changes in the galaxy will also be studied.

"The galaxy acts as a radio transmitter to receive signals passed through the ionosphere. If this changes conditions we can detect it by signaling in different frequency levels."

The radio astronomy work will expand in scope when the researchers start making observations of the moon and planets as well as other galaxian radiation from distant stars, Hagen said.

"RADIO ASTRONOMY is the newest active field in astronomy," he explained. "Questions asked in radio astronomy are directly related to the space program. The connection leads to a better understanding of the solar system as a whole as well as the ionosphere."



—Collegian Photo by Bill Goodman

DERBY DAY SKILLS: An unidentified coed attempts to maintain her composure while doing the "limbo" in the Sigma Chi-sponsored event. Other participants look on, awaiting their turns. Kappa Delta sorority took the honors in this event.

Derby Day Awards Presented


Theta Phi Alpha sorority was named the over-all winner of the Sigma Chi Derby Day at an awards ceremony Sunday evening. Awards presented included 10 plaques and a trophy.

Derby Day activities began Thursday with a derby snatch which lasted until Saturday night. On Sunday afternoon sororities competed in eight events on the Heitzel-Union lawn.

Winners of plaques were Alpha

Xi Delta, the pie-eating contest; Alpha Epsilon Phi, the milk-drinking contest; Alpha Delta Pi, the fire call contest and the flour contest; Kappa Delta, the limbo contest; and Delta Delta Delta, the broom and ball contest.

Theta Phi Alpha won the egg throw as well as the fish and egg contest. The sorority also captured the derby snatch with a total of 38 derbies. Kappa Kappa Gamma was awarded a plaque for the best spirit.

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Students Will Need Matric and Activity cards.
 If You Vote In Dining Hall, Will Need Meal Ticket.

POLL HOURS

HUB & MALL	9:30 a.m. - 5:30 p.m.
DINING AREA	11:30 a.m. - 1:00 p.m. 4:30 p.m. - 6:30 p.m.

Floating Polls will be starting at 6:30 p.m., Tuesday evening. Will cover Fraternity and T.I.M. area. Fraternity men must have fraternity pins or membership cards