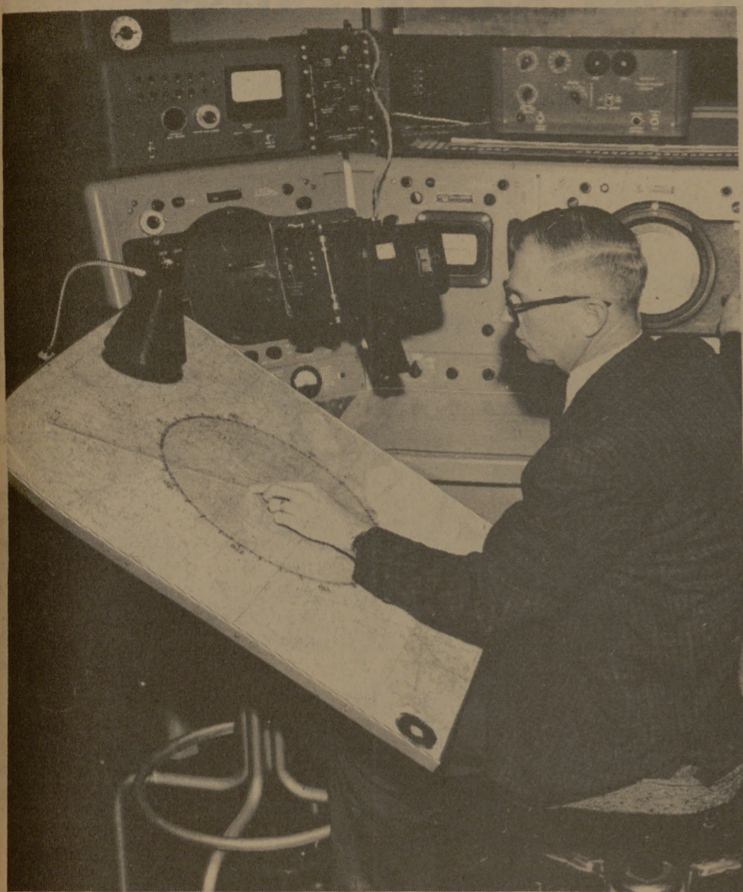


# 'Married' Radar Sets To Begin Operation Within Few Days



AT THE CONTROL PANEL ... Vance E. Moyer demonstrates 'married' radar sets.

A husband and wife never see things quite the same way, and so it is with newly "married" radar sets on the A&M campus.

Operational use of the unique matched radars—the only known operational dual-frequency system for weather use—will begin within a few days. The National Science Foundation granted \$18,900 for modifying two high-power radars already on the campus. Feasibility of this approach was determined in earlier studies here under an NSF grant of more than \$90,000. The earlier studies yielded material for graduate students' these professional journals and papers at national and international conferences.

Vance E. Moyer directs the program aimed at unlocking secrets of rain and other participation-yielding clouds. He hopes to develop a radar approach to estimating how much rain is within the clouds. Information yielded by this approach also may prove of value to rainmakers and hydrologists.

The newly "married" radars see differently because they emit beams of different wavelengths.

"The smaller the wavelength the greater the sensitivity to the smaller raindrops. This is the main difference," Dr. Moyer said as a radar meteorologist.

This difference in length of the radio waves causes a variable—attenuation is the technical term—in the scattering of the waves within the clouds. Heavy rainfall "soaks up" the 3.2-centimeter radar set beam. The 10.3-centimeter beam is large enough to penetrate storms composed of the largest raindrops.

"We intend to profit from this attenuation factor . . . by using our gadgetry, to make a quantitative evaluation of the precipitation cell itself," Moyer said.

Estimates of rainfall in clouds above the Riesel area 17 miles east of Waco will be checked against actual rainfall measured at the Blacklands Experimental Watershed. The watershed with "a rather dense network" of rain measuring stations on Brushy Creek is operated by the U. S. Department of Agriculture, Agricultural Research Service. Ralph Baird is in immediate charge.

A&M's Dr. Robert A. Clark will be concerned especially with developing the application of radar meteorology techniques to water resources uses. He is an assistant professor with hydrometeorology as his special field.

Knowledge that radar can be used to spot weather patterns dates from World War II when radar was newly developed. Dr. Moyer told of radar operators in India picking up unidentified objects. Eventual checking proved these to be the bluffs along the coast of Arabia as far away as 1700 miles. Layers of air with great contrast in temperatures and water vapor were bending the radar beams, allowing them "to see" for miles beyond normal limits.

"Very little" is being done by the Russians in the field of radar meteorology," Moyer said.



Check Up ... Project Research Engineer Jake Congelose checks antenna.

## CAMPUS BRIEFS

### Nero Ducats Go On Sale Monday

Tickets will go on sale Monday in the Student Programs Office of the Memorial Student Center for the April 2 Town Hall performance of the popular pianist, Peter Nero.

"Since this is an extra attraction in the Town Hall series, there will be no reserve seats. Season tickets and student activity cards are not acceptable," Robert L. Boone, Student Programs director, said.

All seats will be \$1. Tickets for "Ballet Folklorico of Mexico" scheduled April 13, will go on sale April 5. The performance is covered by season tickets and activity cards.

The "bonus" Town Hall performance has been scheduled for May 14 and will feature the "Dukes of Dixieland" with Comedian Louie Nye. Season tickets and student activity cards will be accepted for the show.

#### LATIN COFFEE

Latin American students attending Texas A&M University are invited to attend a coffee Saturday afternoon for Alcides Leal-Osorio, a Chilean agricultural leader.

The coffee, set for 5:15 p.m. in the Birch Room of the MSC is being arranged by the International Programs Office and the International Hospitality Committee.

Leal-Osorio is chief of the Community Development Section of the Department on Rural Welfare of the Institute for the Development of Cattle and Agriculture in Chile. He is also president of the Radical Youth Organization of the Chilean National Radical Party.

#### SPACE SYMPOSIUM

A symposium on reliability, space age analytical techniques in evaluating systems and components for many purposes opened Wednesday on campus. The classroom sessions continue through Friday afternoon.

As many as 80 persons, including A&M students are expected for some of the sessions at the MSC. Registration totaled 85 men from industry, the military and other campuses.

Five Texas sections of the American Society for Quality Control are listed as co-sponsors of the symposium with the Institute of Statistics and the Department of Industrial Engineering.

TRANSPORTATION CONFAB Students, faculty, and staff members will be admitted to all sessions of the Seventh Texas Transportation Conference, April 1 and 2, without having to pay the registration fee, according to an announcement by Maj. Gen. John P. Doyle, MacDonald Chair Professor of Transportation, the conference director.

The sessions will include such topics as Intra-State Transportation Requirements of Texas, Computerization of Tariffs, Objectives of De-regulation, Transportation Companies, Future of Highway Transport, and Vehicle Weights and Sizes. The conference is spon-

sored annually by the Texas Transportation Institute and its advisory committee.

## Transportation Institute Conducts Motor Carrier Survey

A&M researchers are conducting a continuous traffic study to provide statistically reliable estimates of the size and character of all motor carrier shipments handled by several hundred firms in the Southwest, according to Charles J. Keese, executive officer of the Texas Transportation Institute.

The Institute's transportation economics department headed by Charley V. Wootan is conducting the research for the Southwest

Motor Freight Bureau, an agency charged with publishing rates and providing tariffs for the 299 common motor carriers within the states of Texas, Oklahoma, Louisiana, and Arkansas, which handle almost 20 million separate shipments each year.

The project results from a recent hearing before the Interstate Commerce Commission which requested the SWMTFB to initiate a continuing traffic study for use in

its present investigation and other rate studies. The work began at the request of J. D. Huggett, general manager of SWMTFB, who initially requested the Texas Transportation Institute to develop a statistically reliable sampling procedure that would permit a minimum-cost continuing study.

The sampling procedure was developed by Hoy A. Richards of TTI, working in cooperation with Dr. H. O. Hartley, director of

A&M's Institute of Statistics. With acceptance of the sampling procedure the present project to provide data on shipments for rate studies was established with Richards serving as project supervisor and Hartley as statistical consultant. It will continue through 1965 at an estimated cost of \$17,500 and involve the processing of approximately 170,000 separate waybills through A&M's Data Processing Center, Richards said.



- Collard Greens —Bunch 2 for 25¢
- Rutabagas Fresh and Firm—Lb. 10¢
- Asparagus Serve with Cheese Sauce—Lb. 25¢
- Cantaloupes Serve for Breakfast Treat—Lb. 25¢

Michigan Peat 2 100-Lb. Bags \$3.50  
Perfect for those flower beds.

- Breakfast Gem
- Grade A Large Eggs . 2 Doz. 85¢
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- 1-Lb. Melrose Crackers . . . 19¢
- 1-Lb. Busy Baker
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## LETTUCE 2 for 25¢

★ Iceberg  
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The perfect Salad everytime.

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Indian River, Ruby Red. A good way to start the day—Lb.

## Onions 3 lb. 25¢

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FRESH AT SAFEWAY...

## Anjou Pears 19¢

Sweet and Juicy—Lb.

## Fresh Spinach 2 for 25¢

Good Source of Vitamin A—Bunch

## Green Onions 2 for 19¢

Wonderful in Salads—Bunch

## FRYERS Lb 25¢

Fancy Whole, Finest Grade Available, U.S.D.A. Grade A Inspected, Full-Meated, Tender and Delicious so many ways.  
(Manor House or Regular Cut-Up Fryers—Lb. 29¢)

- LOOK WHAT 29¢ WILL BUY!
- Pork Sausage 1-Lb. Pkg. **29¢**
  - Jumbo Bologna By the Chunk—Lb. **29¢**
  - Chicken Livers 8-oz. Pkg. **29¢**
  - Fryer Breasts or Pulley Bones—Lb. **59¢**
  - Canned Picnic Armour Star. 3 lb. Can **\$1.69**

## Airway Coffee 29¢

With \$2.50 or More Purchase (5¢ off label)—1-Lb. Bag [Nob Hill (5¢ off label)...29¢]

## Family Flour 10 lb. 79¢

Kitchen Craft Enriched

## Tomatoes 10¢

Gardenside or Standard Pack—No. 303 Can Limit 4

## Biscuits 5¢

Mrs. Wright's Sweetmilk or Buttermilk—8-oz. Can Limit 6

## Apple Sauce 25¢

Town House—25-oz. Glass

## Cocktail Juice 35¢

V-8 Vegetable—46-oz. Can

## New Potatoes 10¢

Highway, Whole—No. 300 Can

## Green Beans 8 for \$1

Gardenside Cut—No. 303 Can

## Welch's Grape Juice 35¢

24-oz. Bottle (Empress... 33¢)

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