

UNDERGROUND RADAR—Dr. Robert R. Unterberger and graduate student James Hluchanek adjust their radar used in salt mining operations. The device is able to "see" through solid salt deposits.

Salt Penetrator 'Saves Lives'

Radar Device Developed By A&M Prof

The radar screen indicates a target at 1500 feet. All activity ceases while the operator determines the source of the radar return.

This activity is not taking place on board a ship. It is happening thousands of feet below the earth in a salt mine. Dr. Robert R. Unterberger, professor of geophysics in A&M's Geosciences Department, has developed a radar system that can penetrate block salt and produce usable returns from as far as a mile away.

The device is the result of 10 years research by Dr. Unterberger, five at TAMU, that has been sponsored by the major salt companies in the United States, Canada and Europe.

"We are helping to save lives," Dr. Unterberger said. "Salt mining operations had always been

carried out not knowing what was ahead. With this system, it is possible to see if water-filled sink holes or pockets of sand are present. Knowing what is in front of them, the miners can decide whether or not to continue drilling."

Dr. Unterberger added that the device can map the size of a salt dome or deposit. He said they typically measure from two to four miles in diameter and up to seven miles deep.

"The salt companies backing the project know danger exists, and they have enough foresight to sponsor this work on their own without seeking governmental aid.

"We do not sit in a lab all day and take measurements and record data," he continued. "Most of our work is done in the salt mines where we solve the prob-

lems associated with salt mining on the spot."

Unterberger added that the expression "back to the salt mine" is a little misleading. He said a salt mine is an extremely pleasant place to work, and with a few exceptions, most of them are cool and clean.

He said he had the idea for using radar to "see through" salt about ten years ago while working for an oil company.

"The company wanted to know where the salt dome edges were," he explained. "They knew there was a good chance of finding oil near the edge of a dome, but did not have any way of finding where the salt stopped and the oil started.

"I suggested we drill a hole in an existing salt dome and lower a radar unit into it to map the size of the dome. They said it

couldn't be done, but after making some tests using pure salt blocks, I found that salt was a better conductor of electromagnetic waves than polyethylene or teflon, two common materials used to make radar waveguides," Unterberger said.

The device uses a radar altimeter with a self-contained power generator. It is mounted on a wheeled cart and is extremely portable. Dr. Unterberger and his graduate student assistant, James Hluchanek, have operated the device in several mines in Texas, Louisiana and other locations.

"As far as we know," Unterberger said, "we are the only ones in the world using radar to measure salt thickness. Everyone else thinks it is impossible, but we've proved it can be done."

Boycott Results Vary; Fish Sales Surge Higher

By THE ASSOCIATED PRESS
Farmers kept their cattle away from market and consumers kept their shopping carts away from the meat counter on Wednesday, the fourth day of the week-long meat boycott.

A U.S. Department of Agriculture spokesman in Memphis, Tenn., said receipts were "well below normal for hogs and cattle"; only half as many cattle were delivered to the Union Stock Yard in Portland, Ore., this Monday and Tuesday as were available the same days last week.

Retailers and wholesalers said business was down, but there was a clear picture of whether prices were lower.

A staff report of the Joint Economic Committee of Congress, predicted that grocery store prices would go up 10 per cent this year and possibly more under certain circumstances.

The study, released by Sen. Hubert H. Humphrey, D-Minn., disagreed with a report of the Nixon administration's Cost of Living Council which said the rate of increase in food prices may be near zero by the end of the year.

Kroger Stores in the Roanoke, Va., area advertised sirloin, T-bone and club steak at \$1.49 a pound, compared to \$1.89 in previous weeks, and ground beef at 89 cents compared to \$1.09 earlier.

A spokesman for the Virginia Citizens Consumer Council was optimistic about the long-range effect of the boycott. "We think the results will show that the boycott has been very effective," the spokesman said.

In contrast, however, Joseph B. Danzansky, president of Giant Food Stores, a Washington, D.C., retailer, said that although business in meat is down, prices won't necessarily be lowered.

A spokesman for Jewel Food Stores in Chicago said the chain's meat sales are down 15 per cent, but added: "Our concern right now is maintaining adequate sup-

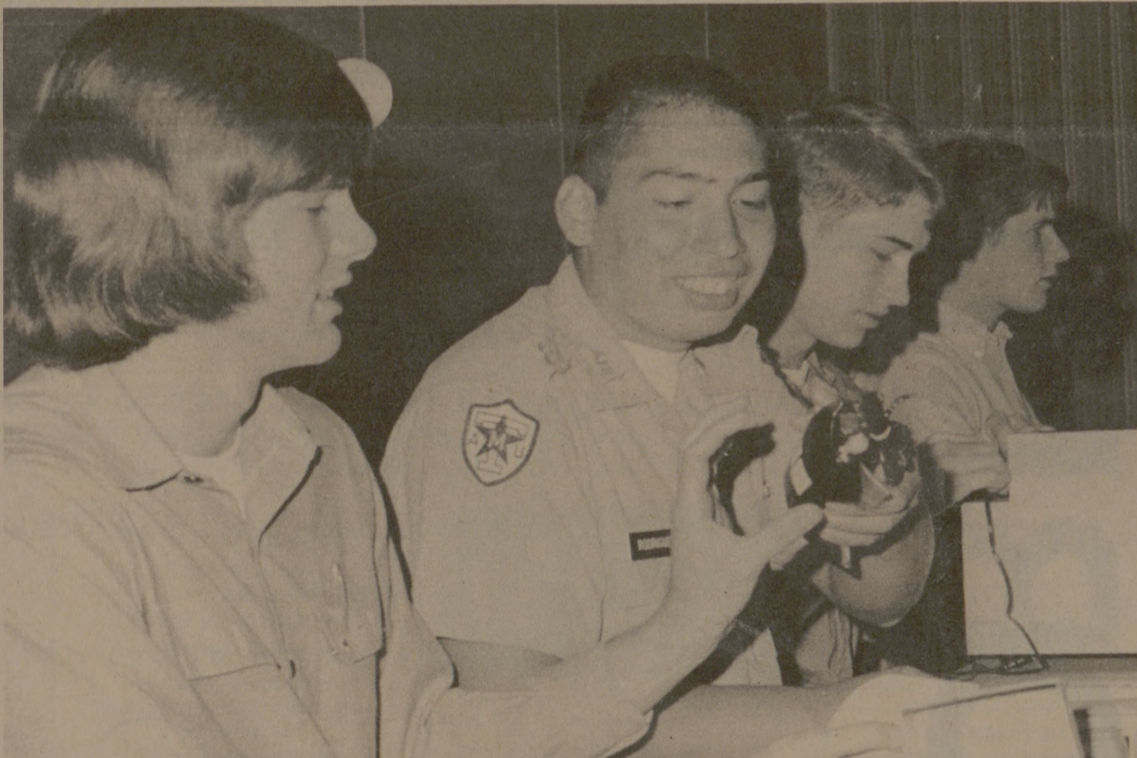
plies of meat because of reduced marketing by packers and farmers."

Several wholesalers and meat processors complained they were caught in the middle between the farmer and the consumer.

Arnold Rosen, president of the Greater New York Association of Meat and Poultry Dealers, said wholesalers "are being hurt fantastically." He said business was down 50 to 60 per cent.

Among the few retailers happy with the boycott were fish salesmen.

"We're going crazy down here," said John Tonneson, president of a fish wholesale firm in Portland, Maine. "We can't cut them fast enough. If we had the fish, we could sell 10 times as much."



AGGIE BLOOD DONORS set a spring semester record of nearly 800 units of blood Wednesday as the two-day Aggie Blood Drive ended on a David Night and Pete Rodriguez package donated blood in by Gary Baldasari)

Turf Management — Course For The Non-Agronomy Major

A new course in turfgrass management—designed for students of any background interested in home and recreational lawn care—will be offered in the fall semester, announced Dr. Richard L. Duple, associate professor of agronomy in the Soil and Crop Sciences Department.

Entitled Agronomy 302—"Recreational Turf," the course carries three credit hours and is open to non-agronomy majors with sophomore classification or above.

Dr. Duple said the course will be a valuable elective for students in landscape, recreation and parks, physical education and liberal arts and others who may be associated with turf facilities in their professions.

"This is a general-purpose course," he explained, "and is the first we have offered for the non-major. It will be a useful course, emphasizing the practical aspects of turfgrass culture.

"We will go into management practices for home lawn care, turf diseases, soil conditions for plant growth, and design and construction specifications for recreational grounds—including football, base-

ball and tennis facilities. We'll even study artificial turf," Dr. Duple said.

Recreational Turf is one of two new turfgrass courses approved by the Academic Council this week, and will not be included in the fall schedule of classes which has already gone to the printer. It is scheduled to meet Tuesdays and Thursdays from 9:30 to 10:45 a.m.

No Complaints On Letter, Says Election Board Head

Election board chairman Steve Vincent said Thursday that no complaints have been filed concerning the letter in Wednesday's Batt regarding allegedly forged signatures.

Vincent said his committee would not look into the matter until such time as a complaint was filed and said no one has indicated to him where the letter originated.

William Wade, whose signature was printed with the letter, said he had never signed a letter for Shariq Yosufzai and added that while talking to Larry McRoberts, a campaign aide for Yosufzai, McRoberts said Yosufzai had asked him to type the letter.

McRoberts told The Battalion he knows nothing about the letter.

Several other persons who allegedly signed the letter said they had never seen it, but had signed a letter for Yosufzai which he never submitted for print.

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The Battalion

Budget Decision Tonight

By VICKIE ASHWILL
Staff Writer

A verbal knock-down, drag-out fight is expected over Student Services fee allocations tonight in the Student Senate.

Lame duck senators are to consider four new plans for allocation of student money at 7:30 in Room 102 of the Zachry Engineering Center.

The primary proposal submitted by the Student Services Fee Allocations Committee includes a

basic \$15 fee per semester to be paid by students. This plan will allow \$100,000 to the athletic department with a two dollar user fee.

The user fee would be collected when a student purchased a ticket for each of the five home games. An option to this two dollar fee would be an \$8.50 season ticket sold during pre-registration.

This proposal would bring in a total of \$525,109.50 for the entire

year with \$24,109.50 in the reserve. The rest of the fees would be divided up as follows:

Intramurals would be allocated \$41,000, MSC-Student Program \$174,000, MSC-Facilities \$15,000, MSC-Great Issues \$14,000, MSC-Political Forum \$8,500, Shuttle Bus \$42,000, Student Publications \$45,000, Student Senate \$9,000, MSC-Town Hall \$32,500, Lawyer \$15,500 and Handbook \$4,500.

Adding to the confusion and length of the meeting are three other optional proposals. The first of these includes a \$16 Student Services fee with \$125,000 allocated to the athletic department. The proposal would have a one dollar user fee tacked to the athletic allocation to be paid in the same manner as the primary proposal.

Another plan would be an \$18.50 Student Service fee with \$170,000 allocated to the athletic department and no user fee. Last but not least, is a \$12 fee with no money given to the athletic department. In this case, season tickets for athletic events would cost around \$25.

Money will continue to be an issue concerning the development of a car care center. Senators will decide if they want to give \$12,938 for the establishment and annual funding for a center providing the tools and space to do one day auto repairs or tune-ups.

The center would be governed by a seven member board which would hire employees to run the center during operating hours.

An alternate proposal would be to provide a center similar to that at Hensel Park except without the dominate pollution factor. Hebsel grease racks were previously abolished by the University as a pollution hazard.

Part five of the University Rules and Regulations handbook revisions will be put before Senate vote in another action. Changes in this section include the official changing of the Civilian Student Council to the Resident Hall Association.

Another issue in this area will be revisions concerning student publications, the editors and the board and their rights.

Two resolutions will also be put before the Senators in their last meeting. The first of these is a recommendation that the University continue its efforts to acquire

a law school for A&M.

The second resolution concerns the establishment of a radio station in connection with Midwest Video Corporation by the Student Government. Midwest Video has agreed to furnish the equipment necessary at no extra cost to the Student Government.

A final by-law revision will be voted on by the Senators. In essence, this law requires that vacant and freshman positions, up until the time of their election, shall be excluded when calculating the size of the membership of the Senate for voting purposes.

Local Retarded Students Aim For Special Olympics

Area special education students will compete Saturday in the Special Olympics Track and Field Meet at A&M.

Composed of selected events, the meet provides mentally retarded children the chance to compete athletically and experience the thrill of winning.

Events begin at 8:30 a.m. on Kyle Field's astroturf and tartan track. Boys and girls will compete separately in five age groups. Participants will be eight years of age and older.

Events include a 50-yard dash, 300-yd run, standing long jump, 100-yd dash, softball throw, 440-yd relay and, for the first time this year, tug of war.

The Brazos Valley Shrine Club will assist TAMU's Department of Health and Physical Education and the Physical Education Majors Club in running the meet.

Dr. John M. Chevrette, coordinator in the department, said 300 to 400 youngsters are expected. Last year's Special Olympics involved students from New Caney, Livingston, Navasota, Montgomery and the Mexia State School, among others.

"We had a lot of favorable reaction," Chevrette said. TARS (Teens Aid the Retarded Student) will assist the meet under leadership of Mrs. Ruby Davis of the Brazos Valley Mental Health Center.

Participants in the area meet here Saturday become eligible for the Texas Special Olympics State Meet. It will be in Houston May 17-19.

Saturday Horse Show Features Western Events

An open intercollegiate horse show will attract state-wide participation April 14 at A&M.

It is sponsored by TAMU's Collegiate Horseman's Association.

English and Western events will include halter and performance events and jackpot cutting, roping and barrels, Mike Hedges, show chairman of Sudan, said.

The show will also be used to promote formation of show horse associations at other Texas institutions.

The TAMU horse show will take place at the Aggie Rodeo Arena on Wellborn Road south of the main campus. Activities begin at 8 a.m.

Entry fees are \$3 per class. Participation in jackpot cutting and roping costs \$15 per rider and jackpot barrels, \$10.

For more information and entries, interested horsemen should contact Hedges at Box 5474, College Station, 77840, or phone him at 846-0541.

"On the side of Texas A&M," University National Bank Adv.

House Passes \$\$ Lending

Senate OKs Budget Ceiling, Wants Nixon Powers Curbed

WASHINGTON (AP)—The Senate Wednesday approved a tough Democratic package to put a ceiling on the federal budget and to sharply curb the President's powers to impound money appropriated by Congress.

Sen. Sam Ervin's proposal limiting impoundments was approved 70 to 24 and his \$268-billion budget ceiling passed 88 to 6.

The twin actions came as amendments to the dollar-devaluation bill, which probably will be voted on later this week.

At the same time, the House dealt the administration still another setback by voting 317 to 92 to set up a complex new lending program to aid rural electric and phone systems.

The key vote came on an effort by the administration to substitute a measure giving President Nixon more flexibility to manage the money involved. It failed 244 to 162.

The House tacked on to the bill an anti-North Vietnam aid amendment that would bar use of the domestic funds outside the United

States.

The amendment, sponsored by Rep. John R. Rarick, D-La., was approved on a voice vote after House Republican Leader Gerald R. Ford of Michigan termed it "redundant, irrelevant and unnecessary."

Rarick said, however, he wanted to be sure no program money is used to promote rural electricity in North Vietnam.

The legislation would create insured and guaranteed loan programs and set up a rural electrification and telephone revolving fund composed of various assets and would require loans to the full extent possible.

The battle stems from Nixon's decision to kill a Rural Electrification Administration system of direct loans from tax funds at 2 per cent interest.

The Senate's vote on the impoundment measures came after it defeated two Republican attempts to kill and water them down by 2 to 1 margins.

After the vote, Ervin told a news conference he believes he has

the votes to override a presidential veto if senators "vote in the future as they did today."

And "it also proves Congress is just as anxious as the President or anyone else for the government to set its financial house in order," Ervin said.

The impoundment fight was only one of several amendments coming before the Senate on a bill which formally backs up the devaluation of the dollar which went into effect in February.

"This provides that Congress will retain the power of the purse," Ervin shouted to the Senate in defense of his impoundment amendment.

Republicans said, however, the Senate was taking away the White House's chief weapon to fight inflation without putting anything in its place.

Sen. John Tower, R-Tex., said the bill has the effect of changing "the chief executive to the chief clerk."

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